



## VIRGINIA MUTCD IMPLEMENTATION AND ADOPTION

What YOU need to know!

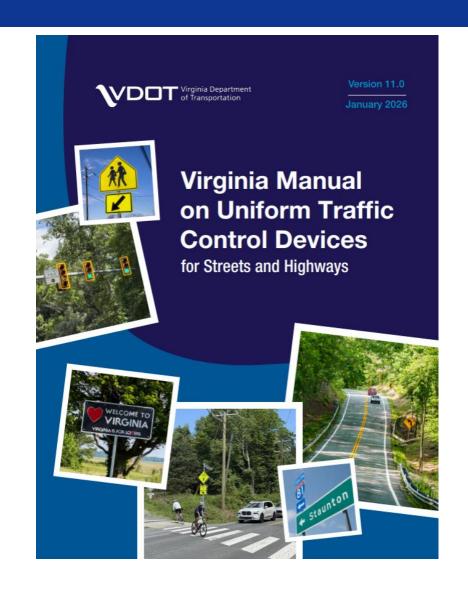
Robert Cochrane, P.E.

Rashmi Patel, P.E. PTOE Mike Tantillo

June 18, 2025

#### Agenda

- Icebreaker and Introduction
- Introducing the Virginia MUTCD
- Key Virginia MUTCD content





### Introduction



## QUIZ



### What is wrong with this picture?



New development in East Stroudsburg, PA



#### What is wrong with this picture? Quite a bit, actually!

- Stop Here <u>To</u> Peds (should be "For Peds")
- 2. Arrow pointing wrong way
- 3. R1-5 series not used at stop-controlled intersections
- 4. Mounted on same post as STOP sign
- 5. Bent crosswalk
- 6. R1-5a (Yield To) used in same development (This is in a "Yield To" state)



When in doubt, hire a traffic engineer, and read the MUTCD!



#### Why is the MUTCD Important?

- Safety through uniformity
- Road users' expectations and experiences are the same across jurisdictions
- Legal enforceability of motor vehicle laws depends on proper TCDs
- Tort liability minimized
- Efficient operation of transportation system
- Requirement to qualify for funding



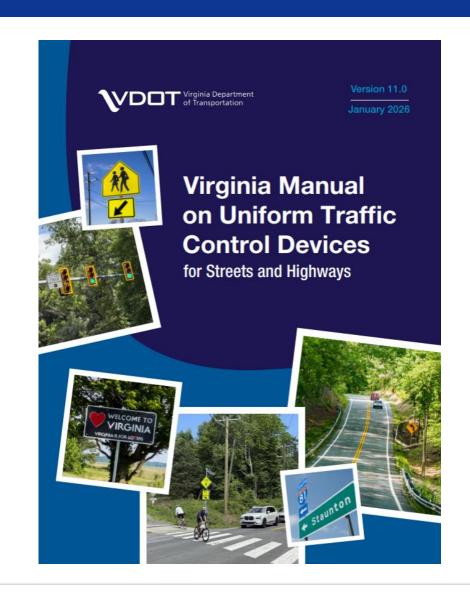


## Introducing the Virginia MUTCD



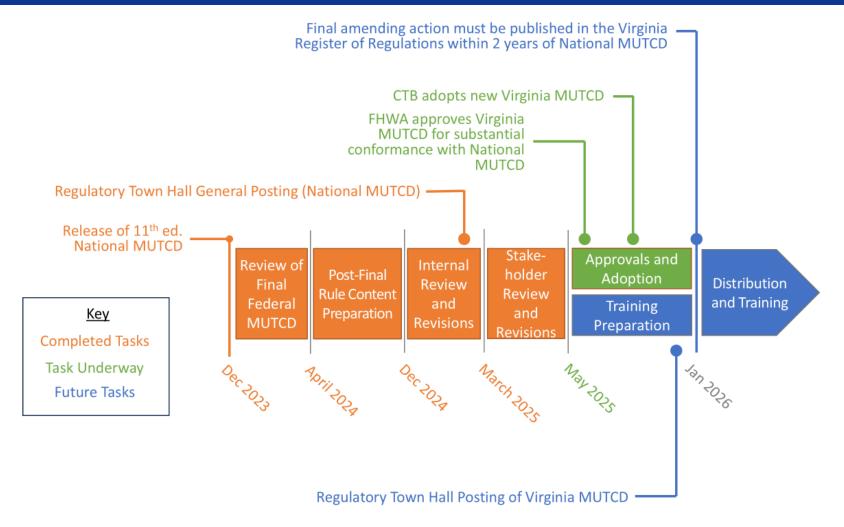
#### **Virginia MUTCD**

- The new Virginia MUTCD is here!
  - Version 11.0 same version as Federal
  - Effective date: January 2026
  - All-in-one document: Federal and Virginia content in one place!
- Preparing for formal adoption
  - Draft version posted on VDOT webpage
  - Projects advertised for construction on or after January 2026 must be in compliance





#### Virginia MUTCD Development and Adoption Timeline



Note: This is the anticipated schedule and is subject to change



### **Virginia MUTCD Adoption**

| Target Date             | Proposed - Implementation or Deadline   |  |  |
|-------------------------|---|--|--|
| June - July 2025        | CTB Workshop & Action   |  |  |
| October 1, <u>2025</u>  | <b>Design-Bid-Build Projects</b> – Advertised <u>submissions</u> submitted to Construction Division after this date shall comply with the 2026 Virginia MUTCD & <u>VWAPM.*</u>  |  |  |
|                         | <b>Design-Build Projects</b> - RFP Packages under development may begin using specific language requiring compliance with the 2026 Virginia MUTCD & VWAPM.  |  |  |
|                         | Land Use Projects – Locality plans, developer plans, and permit packages under development will begin using specific language requiring compliance with the 2026 Virginia MUTCD & VWAPM.  |  |  |
| January 1, <u>2026</u>  | Locally Administered Projects – Projects advertised after this date shall comply with the 2026 Virginia MUTCD & VWAPM.  |  |  |
|                         | New Maintenance Projects – maintenance and district-wide contracts advertised after this date shall follow the 2026 Virginia MUTCD & VWAPM.   |  |  |
|                         | Renewable Contracts - Contracts (Maintenance, IMO, etc.) that are up for renewal on or after this date may need to be updated or rebid to ensure applicable compliance with the 2026 Virginia MUTCD & VWAPM.  |  |  |
|                         | VDOT Crew Work Zone Traffic Control - shall be performed in accordance with the 2026 VWAPM.   |  |  |
|                         | New Traffic Control Devices - Traffic control devices replaced through maintenance activities or installed as new by VDOT maintenance shall be in conformance with the 2026 Virginia MUTCD, VWAPM, and 2026 Virginia Standard Highway Signs (SHS) book. |  |  |
|                         | Signs Manufacturing - All signs manufactured or ordered by VDOT shall comply with the 2026 Virginia MUTCD, VWAPM, and 2026 Virginia Standard Highway Signs (SHS) book.  |  |  |
| January 18, <u>2026</u> | FHWA Interpretation: Construction projects scheduled for advertisement on or after this date shall follow the 2026 Virginia MUTCD & VWAPM.  |  |  |

<sup>\*</sup>All 2026 Paving projects will comply with the 2009 MUTCD, 2011 Virginia Supplement to the MUTCD, and 2011 WAPM.



#### Virginia MUTCD Development Process

#### Review Committees

- Review of new MUTCD content
- Development of new Virginia MUTCD content
- Town Hall Process Part 1
  - Allowed general public to comment on adoption process for MUTCD
  - Received feedback about importance of adopting certain content
- Statewide Stakeholder Review
  - Draft content distributed through the Virginia transportation planning and engineering community, incorporated significant valuable feedback
- Draft Virginia MUTCD posted online
- THANK YOU!! Your review comments were very helpful!



#### Stakeholder Engagement

- Extensive engagement with:
  - VDOT, FHWA, Localities, Contractors, Consultants, Emergency Responders, and Advocacy Groups

|                      | Virginia MUTCD | VWAPM |
|----------------------|----------------|-------|
| Webinar Participants | 210+           | 250+  |
| Comments Received    | 680+           | 1500+ |



#### Virginia MUTCD: How to Use the Document

- Black text = Federal
- Blue text = Virginia
  - Look for \ and brackets

#### **Example Text:**

The EXCEPT ON SHOULDER (R9-19P) plaque may be used where such modes are allowed on a shoulder but not on the traveled way and placed at intersections with other roads and established paths or trails, where such vehicles or modes are expected to enter the highway.

#### Standard:

The AUTHORIZED VEHICLES ONLY (R5-11) sign shall be installed on controlled access highways at all non-chained crossovers may be used at median openings and other locations to prohibit vehicles from using the median opening or facility unless they have special permission (such as law enforcement vehicles or emergency vehicles) or are performing official business authorized by VDOT (such as highway agency vehicles).

#### Guidance:



The AUTHORIZED VEHICLES ONLY (R5-11) sign should be installed at non-chained crossovers on limited access highways when it has been determined that motorists frequently attempt to use the crossover.

#### Support:

The AUTHORIZED VEHICLES ONLY (R5-11) sign for non-chained crossovers is used in accordance with The Code of Virginia §46.2-808.1.

#### Option:

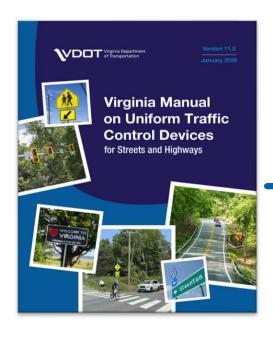
The AUTHORIZED VEHICLES ONLY (R5-11) sign may also be installed at maintenance driveways along controlled access highways.



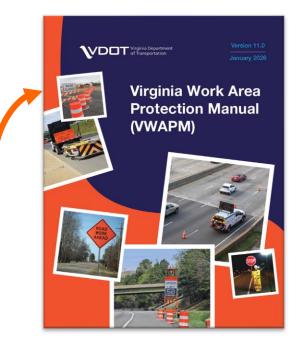
## **Key Content Changes**



#### The Virginia MUTCD v11.0



- Part 1 General
- Part 2 Signs
- Part 3 Markings
- Part 4 Signals
- Part 5 Automated Vehicles
- Part 6 Temporary Traffic Control
- Part 7 Schools
- Part 8 Railroad Crossings
- Part 9 Bicycles

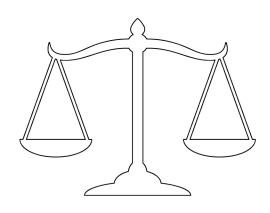


Virginia Work Area Protection Manual (VWPM)

The Virginia Work Area Protection Manual (VWAPM) serves as Part 6 of the Virginia MUTCD, but is physically published separately for ease of use

### **Key Content – Part 1: General**

- Legal basis of MUTCD in Virginia established
- Application of the MUTCD is by engineers or people working organizationally under an engineer
- Certain activities that require Central Office TOD involvement
- Virginia-specific definitions





Sign, sign

Everywhere a sign

Blockin' out the scenery

Breakin' my mind

Do this, don't do that

Can't you read the sign?

-Five Man Electrical Band, 1970

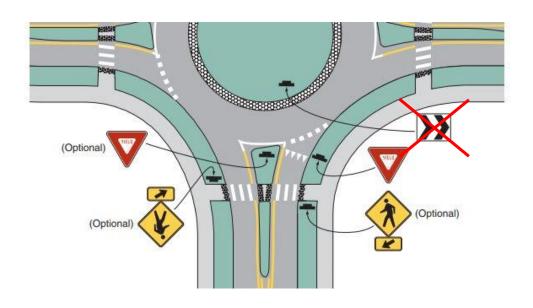


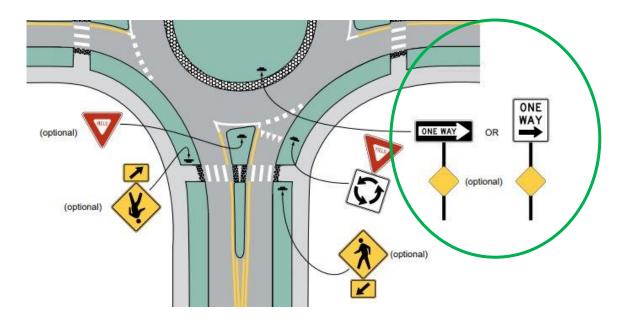






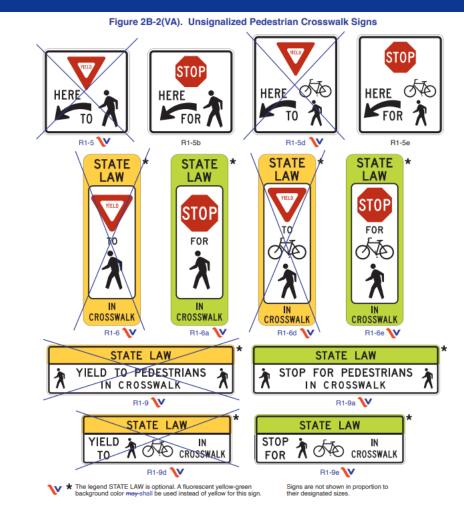
- Roundabouts
  - One Way signs used in place of roundabout chevron sign







- Pedestrian Signing
  - Use Stop For Pedestrians versions with FYG background color



ELIMINATES YIELD TO PEDESTRIAN SIGNS TO ALIGN WITH THE CODE OF VIRGINIA AND CHANGES THE BACKGROUND TO FLUORESCENT YELLOW-GREEN.



- New Speed Limit signs
- U-Turn Only lane signs



SIGN NOW REQUIRED (WAS AN OPTION)



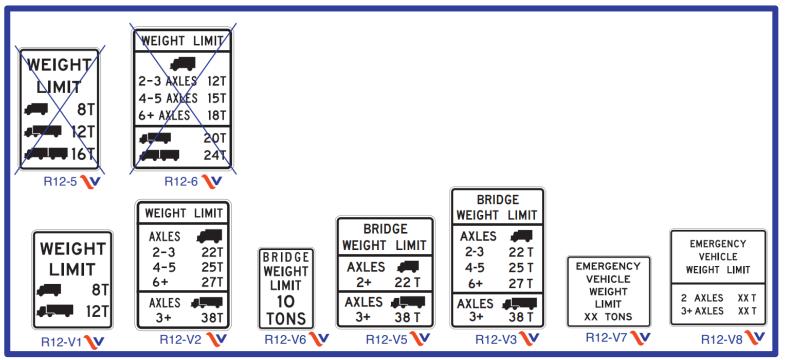
REQUIRED, WITH FLASHING BEACONS, BEFORE ANY PERMANENT VSL CORRIDOR CONTROLLED BY A DYNAMIC ALGORITHM.



REQUIRED AT THE BEGINNING OF ZONES WHERE AN ADDITIONAL \$200 FINE ON LOCAL RESIDENTIAL STREETS THAT COMPLY WITH VA CODE § 46.2-878.2



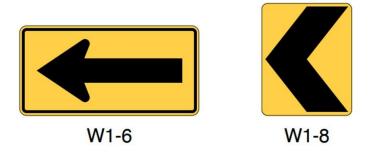
New Weight Limit signing content



ADDS VIRGINIA WEIGHT LIMIT SIGNS AND PROVISIONS FOR USE AT BRIDGES AND APPROACHING BRIDGES. REFERENCES RELEVANT CODE OF VIRGINIA.



- Horizontal Alignment Signing
  - Based on roadways types and AADT



Person with Disability Sign





## QUIZ



- Clearview Lettering
  - Only on Freeways / Expressways
  - Conventional roadways use FHWA Standard Alphabet

Virginia

Virginia



- Arrow placement on Guide Signs
  - Bottom: Ground Mounted
  - Right (or Left) Side: Overhead



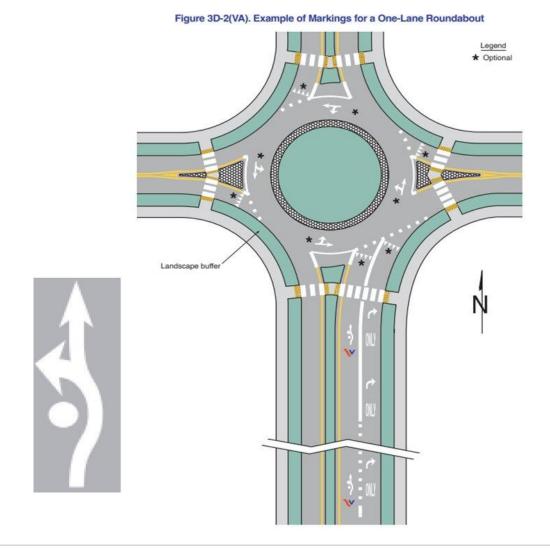




### **Key Content – Part 3: Markings**

#### Arrows

- Must use "fish-hook" (curved-stem) arrow for left-turn movements
- Pairing of "ONLY" with turn arrows





## QUIZ



### **Key Content – Part 3: Markings**

- Plastic Inlaid Markers (PIMs) replace SRPMs
  - New Guidelines for placement of PIMs

| Category | Example Changes  |
|----------|--|
| Standard | <ul> <li>Required when AADT &gt; 25,000 on limited access highways, roadways with posted speed limit ≥ 45 mph, and in gore areas.</li> <li>Exceptions: when roadway lighting or rumble strips are present.</li> <li>Spaced ≤ 80 ft when supplementing solid, broken, or double lines.</li> </ul> |
| Guidance | • 3-inch lateral spacing between PIM and solid line.   |
| Option   | <ul> <li>Higher-risk locations (based on engineering judgment)</li> <li>AADT 5,000-25,000 (based on engineering judgment)</li> </ul>   |



### **Key Content – Part 3: Markings**

- New Delineator Use
  - Buffered Bike Lanes
  - Curves
  - Managed Lanes

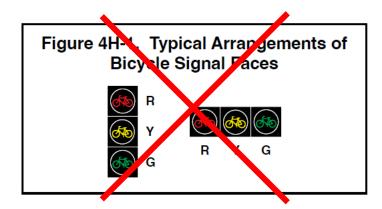
#### **Tubular Markers vs. Delineators**







- No Bicycle Signals
  - Not supported by Code of Virginia at this time
- Signals must be warranted and justified per IIM-TE-387 and future IIM-TOD-401
  - Warrants are still Standards in Virginia!





Don't just plop down a signal wherever you want...



#### **Key Content – Part 6: Work Zones**

- Address newer technologies, such as:
  - Digital speed limit signs
  - Vehicle speed feedback ("Your Speed XX") signs

 Work zone speed safety camera requirements to ensure compliance with § 46.2-882.1

 New FHWA requirements for pedestrians with disabilities at sidewalk closures









## QUIZ

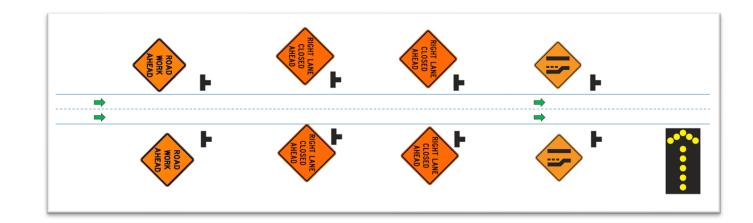


#### **Key Content – Part 6: Work Zones**

 Option for use of "Automated Flagger Assistance Devices" instead of stop/slow paddles

Updated sequence of signs for lane closures



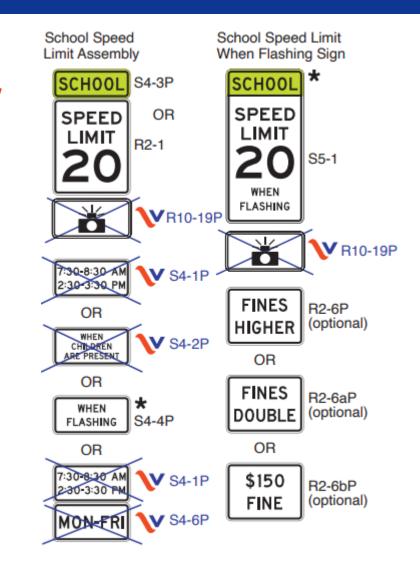




#### **Key Content – Part 7: Schools**

- Virginia-specific requirements for signing for school zones
  - Includes photo enforcement required signing

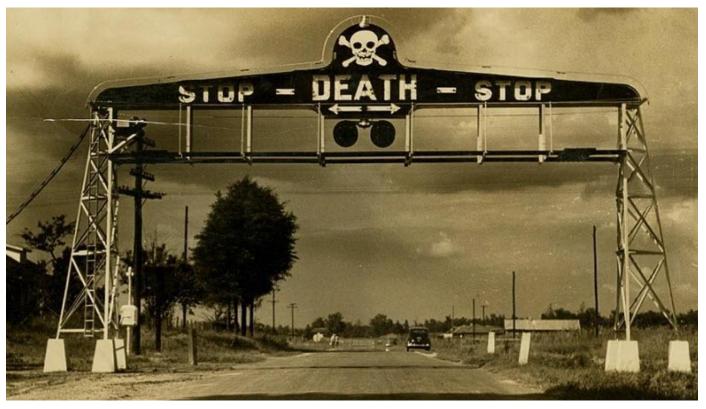






#### **Key Content – Part 8: Railroads**

 Key new Federal requirement for "Diagnostic Team" evaluation of new or changed railroad crossing TCDs



The diagnostic teams of yesteryear thought this might get the point across! Illinois Central Railroad at Mississippi Highway 7 – Grenada, MS – 1930s



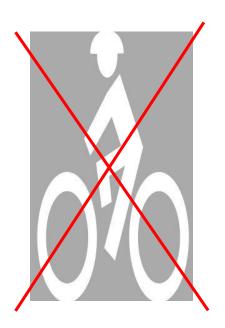
## QUIZ



#### **Key Content – Part 9: Bicycles**

Federal MUTCD
 eliminated helmeted
 bicycle symbol





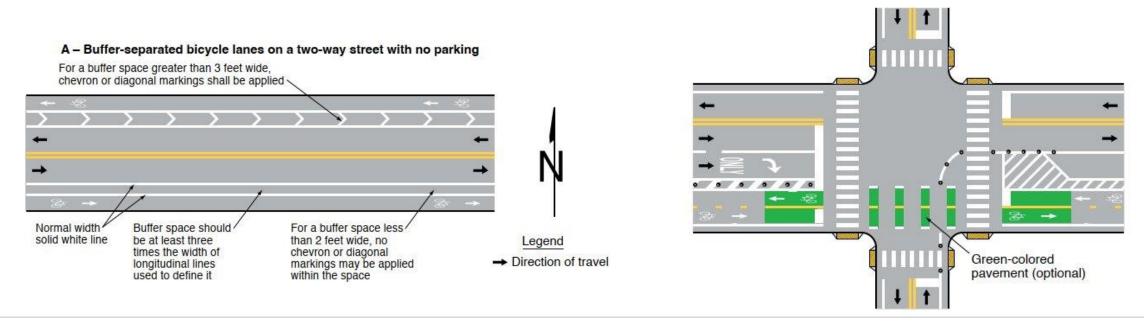
 Green colored pavement recommended for two-stage turn boxes





#### **Key Content – Part 9: Bicycles**

- Significantly expanded content for buffered bike lanes and cycle tracks
  - Design requirements "if used"





#### Closing

# Only <u>YOU</u> can prevent things like this from happening!



Private Development, New York State



Mystery State (not Virginia)!



#### Closing

### Thank you!

If anyone has additional input after this meeting and questions about the new Virginia MUTCD, please contact

Robert Cochrane & Rashmi Patel VirginiaMUTCD@vdot.virginia.gov

If anyone has additional input after this meeting and questions about the new Virginia WAPM, please contact

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