

LOCAL TECHNICAL ASSISTANCE PROGRAM

**MANUAL ON UNIFORM TRAFFIC
CONTROL DEVICES (MUTCD)
11TH EDITION**

FEBRUARY 19, 2026



pennsylvania

DEPARTMENT OF TRANSPORTATION

LOCAL TECHNICAL ASSISTANCE PROGRAM

SESSION BEING RECORDED

This session is being recorded.

By participating in this session, you are consenting to the recording, retention, and use of this session.

Additionally, as a reminder by asking a question verbally you are also consenting to the recording, retention, and use of your statements.

INSTRUCTOR INFORMATION

Presenters:

Patrick Wright

LTAP

pwright@pennoni.com

Jason Bewley

PA Department of Transportation

Bureau of Operations

jbewley@pa.gov



LTAP INTRODUCTION VIDEO



AGENDA

**Part 1: PA Adoption of the MUTCD
11th Edition**

Part 2: MUTCD Key Updates

PART 1: PENNDOT GUIDANCE



Part 1: PennDOT Adoption of the MUTCD 11th Edition

67 Pa Code §212.2 Adoption of Federal Standards

(a) General provisions.

“...Department hereby adopts the MUTCD, as published by the Federal Highway Administration. **The MUTCD is adopted in its totality except where this chapter clearly indicates that it is not being adopted,** or that additional warrants or criteria are being provided.”

PART 1: PA MUTCD ADOPTION

- | | |
|--------------------|--|
| Dec. 18, 2023: | FHWA Notice |
| Jan. 6, 2024: | Initial PA Bulletin – PA Adoption Pending |
| Jan. 18, 2024: | FHWA Final Rule – MUTCD Published |
| Jan 17, 2026: | <u>Final PA Bulletin – PA Adoption Effective</u> |
| Jan. 2028, 2032... | MUTCD v12, v13 to be issued |

PART 1: ACCESS MUTCD

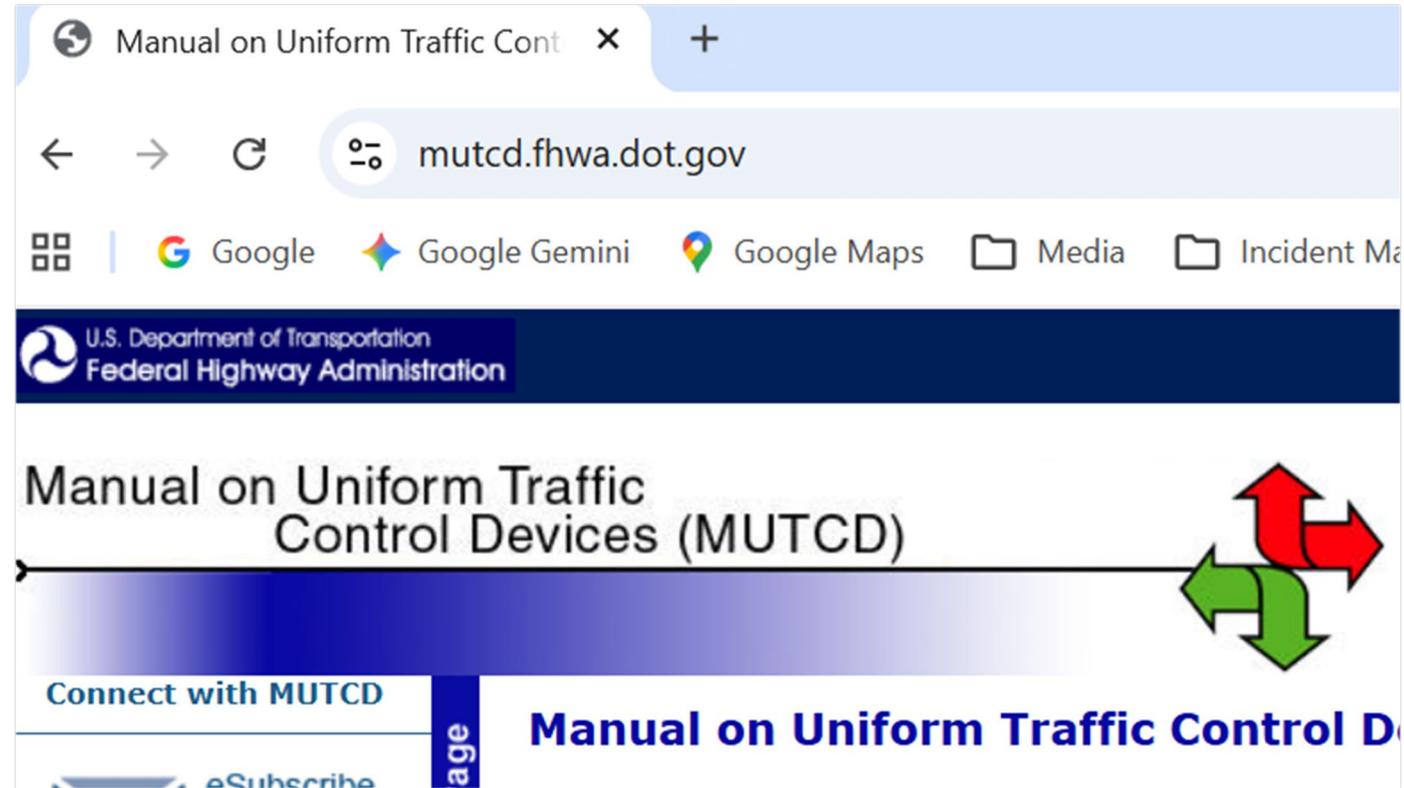
MUTCD.FHWA.GOV

Old and New Versions

Amendment History

Links, such as Sign Standards

Experimentations



PART 1: ACCESS PENNDOT PUBS

Traffic Signal Portal via PennDOT.PA.GOV

PA An Official Pennsylvania Government Website

PennDOT - Traffic Signal Portal

New edition of Publication 46, Traffic Engineering
Publication 46, Traffic Engineering
Pennsylvania's adoption of the Manual
through Clearance Transmittals T-2

Changes related to traffic signals in

- Incorporated several strike-off letters
 - 494-25-06, Traffic Signal
 - 494-25-05, Chapters 7
 - 494-25-01, Chapter 12
 - 494-21-03, Chapters 1
- Removes meanings of traffic signals from the MUTCD

Get direct updates and latest news

TSAMS Signal Maps TE-Forms Publications Strike-off Letters

<https://docs.penndot.pa.gov/Public/Bureaus/BOO/TSPortal/index.html>

PART 1: PA MUTCD SUPPLEMENT

OFFICIAL TRAFFIC CONTROL DEVICES

PennDOT Publication 212 Official Traffic Control Devices

Main body echoes 67 Pa. Code §212

Appendix is PA policy

PART 1: PA TRAFFIC PUBLICATIONS

- 13 Design Manual Part 2, Contextual Roadway Design
- 35 Approved Construction Materials
- 46 Traffic Engineering Manual
- 72 Roadway Construction Standards
- 111 Signing and Pavement Marking Standards
- 148M Traffic Signal Standard Drawings
- 149M Traffic Signal Design Handbook
- 191 Traffic Signal Maintenance Manual

(Continued)

PART 1: PA TRAFFIC PUBLICATIONS

(Continued)

212	Official Traffic Control Devices
213	Work Zone Traffic Control Guidelines
236	PA Handbook of Approved Signs
282	Highway Occupancy Permits Manual
408	Highway Specifications
638	Highway Safety Program Guide
850-855	TSMO Guidebook series
200	Changeable Message Sign (CMS) Operating Standards

PART 1: KEY PUBLICATION UPDATES

Pub. 46 Traffic Engineering Manual

- First major update since 2012

Pub. 111 Signing and Pavement Marking Standards

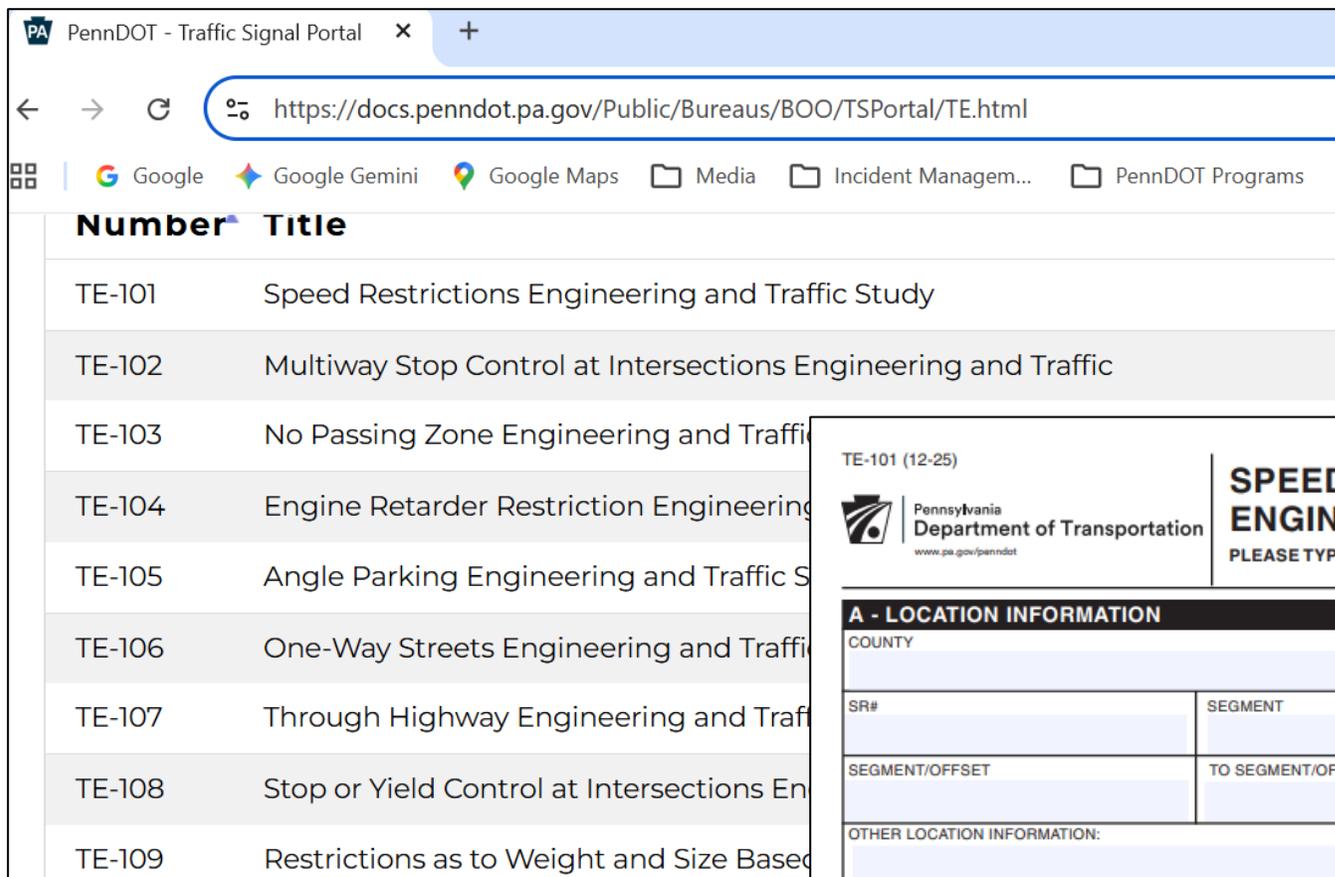
- Over 50 additions, deletions or consequential changes

Pub. 236 PA Handbook of Approved Signs

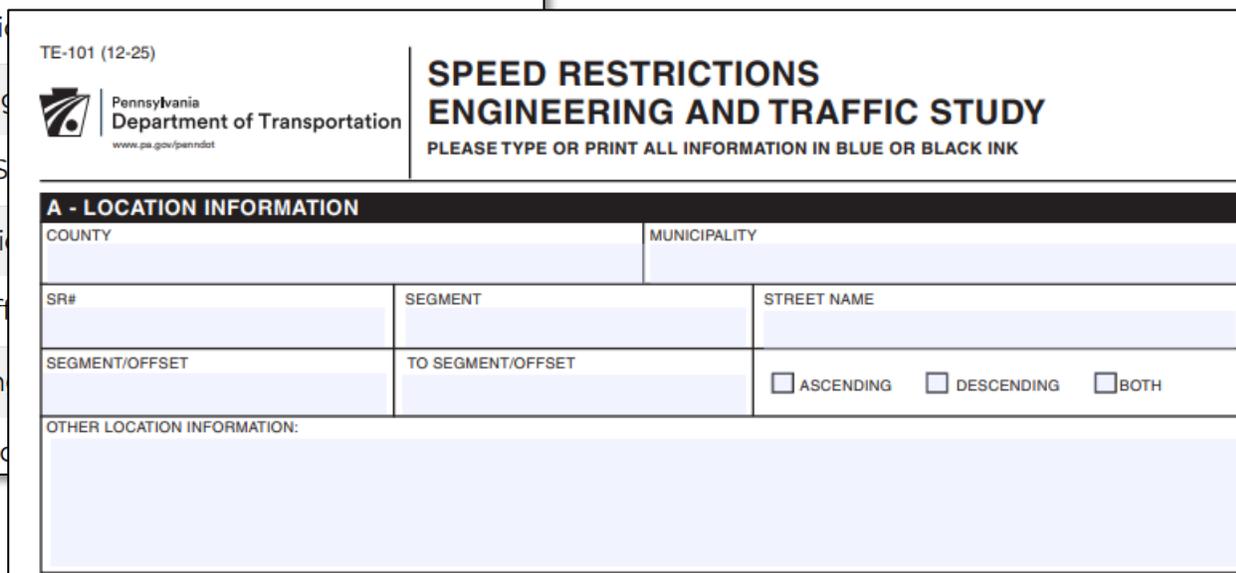
- Over 300 additions, deletions or consequential changes

PART 1: ACCESS PENNDOT FORMS

Traffic Signal Portal via PennDOT.PA.GOV



Number	Title
TE-101	Speed Restrictions Engineering and Traffic Study
TE-102	Multiway Stop Control at Intersections Engineering and Traffic
TE-103	No Passing Zone Engineering and Traffic
TE-104	Engine Retarder Restriction Engineering and Traffic
TE-105	Angle Parking Engineering and Traffic
TE-106	One-Way Streets Engineering and Traffic
TE-107	Through Highway Engineering and Traffic
TE-108	Stop or Yield Control at Intersections Engineering and Traffic
TE-109	Restrictions as to Weight and Size Based



TE-101 (12-25)

 Pennsylvania Department of Transportation
www.pa.gov/penndot

SPEED RESTRICTIONS ENGINEERING AND TRAFFIC STUDY
PLEASE TYPE OR PRINT ALL INFORMATION IN BLUE OR BLACK INK

A - LOCATION INFORMATION

COUNTY		MUNICIPALITY
SR#	SEGMENT	STREET NAME
SEGMENT/OFFSET	TO SEGMENT/OFFSET	<input type="checkbox"/> ASCENDING <input type="checkbox"/> DESCENDING <input type="checkbox"/> BOTH
OTHER LOCATION INFORMATION:		

PART 2: KEY UPDATES



PART 2: KEY UPDATES

Key Updates:

- Compliance Dates
- Traffic Signs
 - Stop Signs
 - Speed Limits
 - Curve Warning Signs
- Pavement Markings



PART 2: KEY UPDATES

Table 1B-1. Target Compliance Dates Established by the FHWA

MUTCD Section(s)	Subject Area	Specific Provision	Compliance Date
2B.64	Weight Limit Signs	Paragraph 14 - requirement for additional Weight Limit sign with the advisory distance or directional legend in advance of applicable section of highway or structure	5 years from the effective date of this edition of the MUTCD
2C.25	Low Clearance Signs (W12-2)	Paragraph 1 - Required posting of the Low Clearance Advance (W12-2) sign in advance of the structure	5 years from the effective date of this edition of the MUTCD
2C.25	Low Clearance Signs (W12-2a, W12-2b)	Paragraph 8 - Recommended posting of Low Clearance Overhead (W12-2a or 12-2b) signs on an arch or other structure under which the clearance varies greatly	5 years from the effective date of this edition of the MUTCD

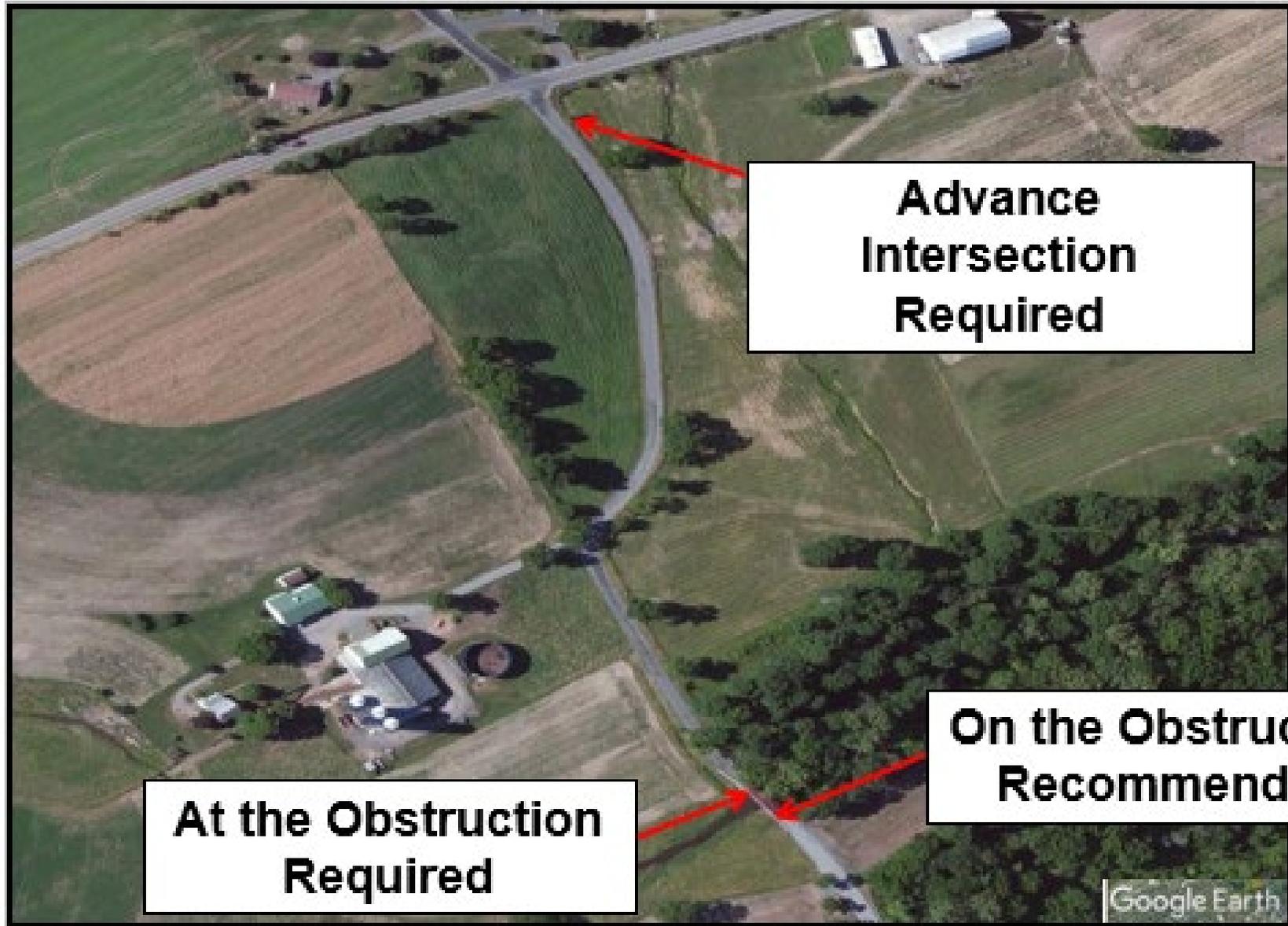


W12-2



W12-2b

PART 2: KEY UPDATES

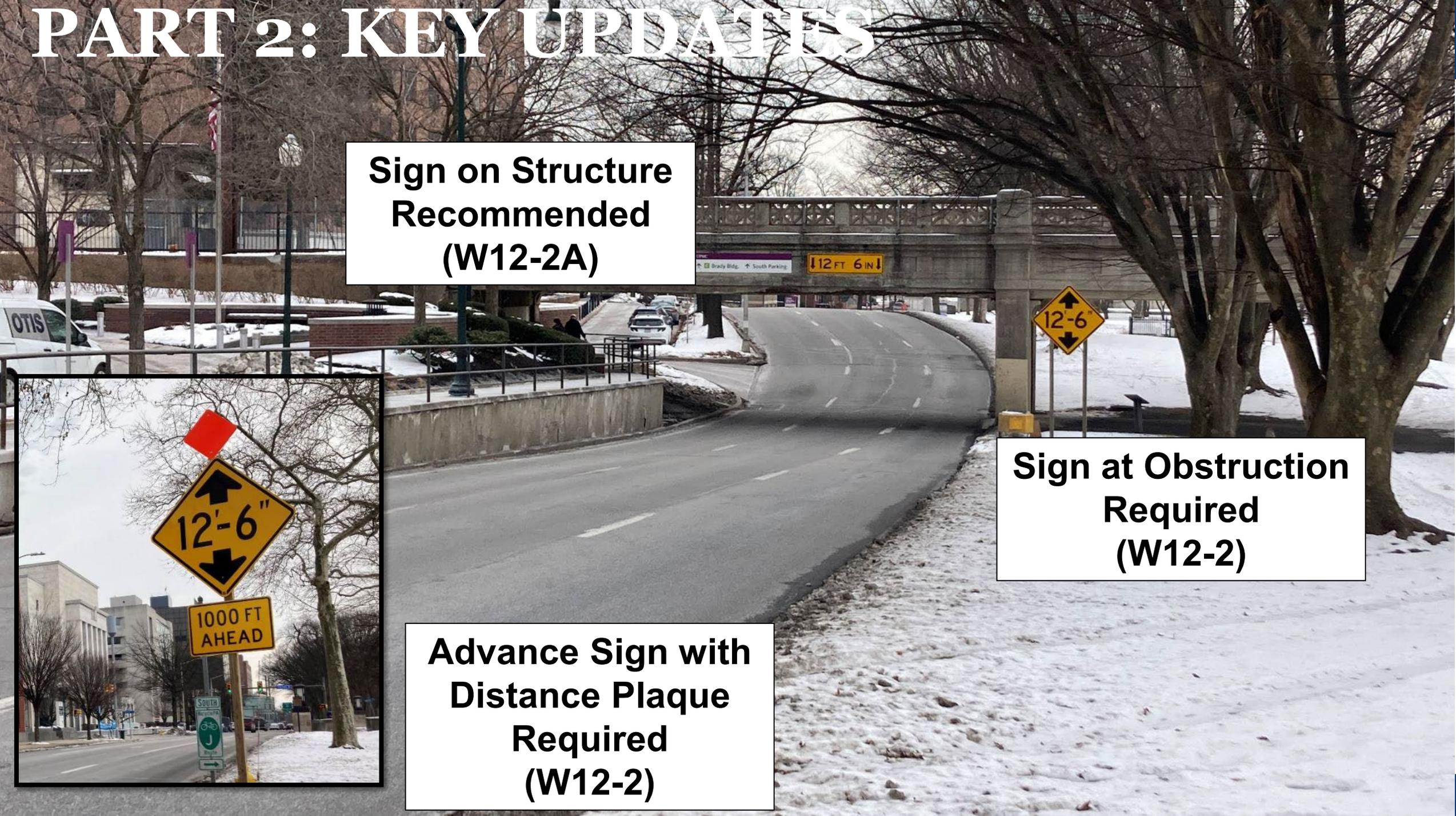


PART 2: KEY UPDATES

**Sign on Structure
Recommended
(W12-2A)**

**Sign at Obstruction
Required
(W12-2)**

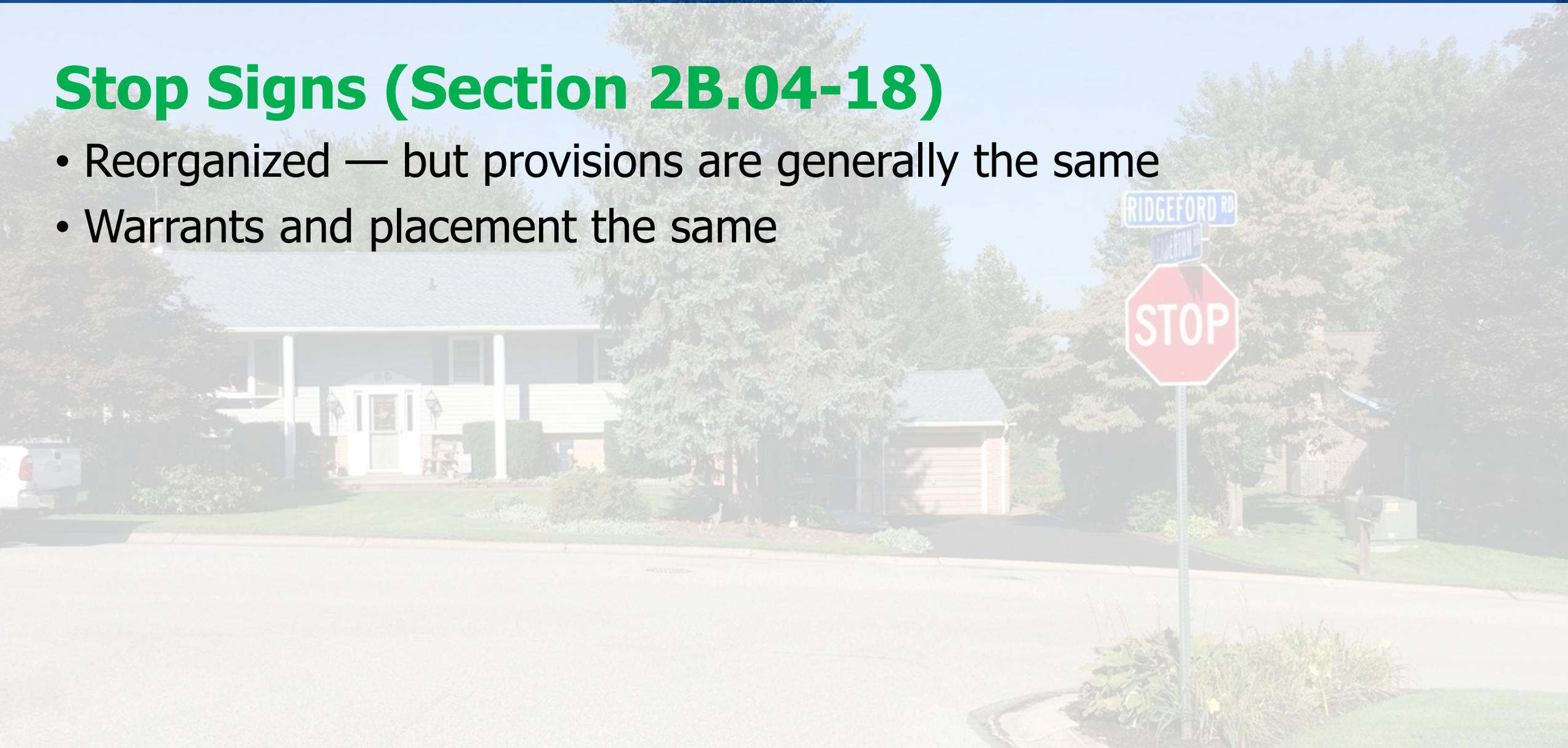
**Advance Sign with
Distance Plaque
Required
(W12-2)**



PART 2: KEY UPDATES

Stop Signs (Section 2B.04-18)

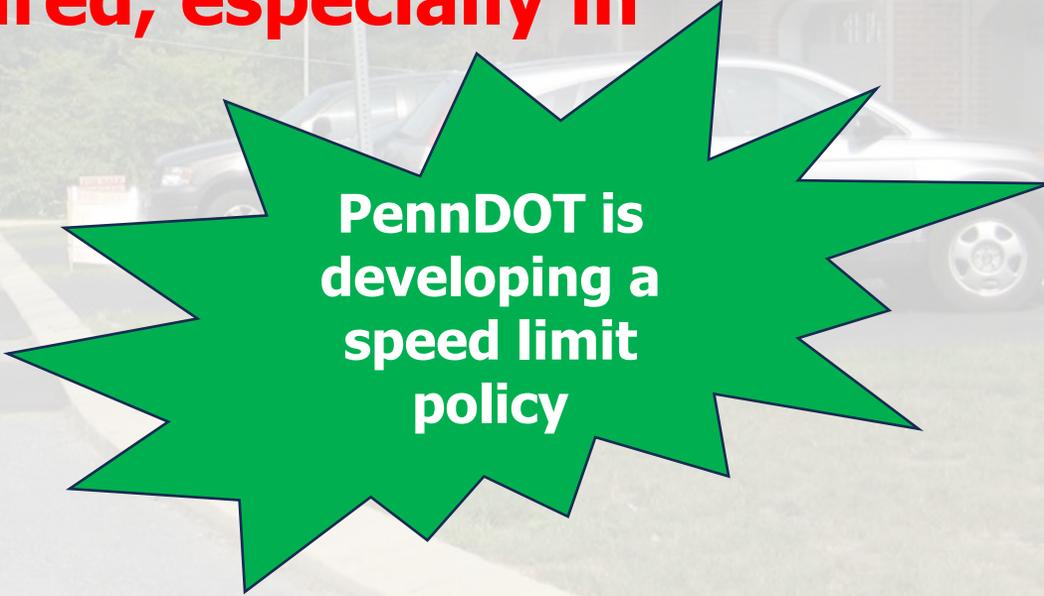
- Reorganized — but provisions are generally the same
- Warrants and placement the same



PART 2: KEY UPDATES

Speed Limits (Section 2B.21)

- New provisions apply to non-statutory speed limits only
- Emphasizes importance of the roadway context, type, and function
- Added a broad range of factors to consider
- Use of 85th percentile speed is **not required, especially in urban context**



PennDOT is
developing a
speed limit
policy

PART 2: KEY UPDATES

Curve Warning Signs (Sections 2C.05-07)

- Changes to the requirements for horizontal alignment signs
- Changes to selection of devices

Table 2C-4. Application of Traffic Control Devices for Changes in Horizontal Alignment

A - Determination of the Need for Devices for Changes in Horizontal Alignment¹

Roadway Type	AADT			
	Less than 1,000	1,000-2,999	3,000-3,999	Greater than 3,999
Freeways and Expressways	Required	Required	Required	Required
Arterial or Collector without Pavement Markings	Optional	Recommended	Required	Required
Arterial or Collector with Pavement Markings ²	Optional	Recommended	Recommended	Required
All other roadways	Optional	Optional	Optional	Optional

¹ If devices are determined to be needed, the selection of the device(s) is based on Chart B below.

² An arterial or collector is considered to have pavement markings when either a center line, edge lines, or both are present.

PART 2: KEY UPDATES

Curve Warning Signs (Section 2C.06)

B - Selection of Devices for Changes in Horizontal Alignment

Speed Differential ³	Devices for Change in Horizontal Alignment ³
5 mph	Pavement markings or advance horizontal alignment warning sign on paved roadways. Advance horizontal alignment warning sign on unpaved roadways. ⁴
10 mph	Advance horizontal alignment warning sign
15 mph	Delineators ⁵ and advance horizontal alignment warning sign
20 mph or more	Chevrons ⁵ and advance horizontal alignment warning sign

³ The provisions for the use of Horizontal Alignment warning signs and devices are contained in Section 2C.06. The need for devices is determined by Chart A above.

⁴ A roadway is considered to have pavement markings when either a center line, edge lines, or both are present.

⁵ Section 2C.06 contains information about the use of a One Direction Large Arrow (W1-6) sign in place of or to supplement delineators and chevrons.

PART 2: KEY UPDATES

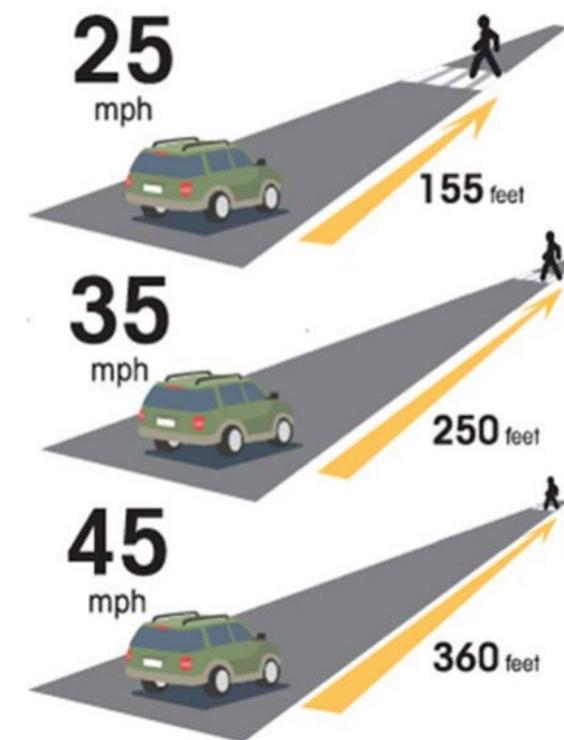
Warning Signs (Section 2C.04)

- Increases distance for advance placement of warning signs for a stop condition

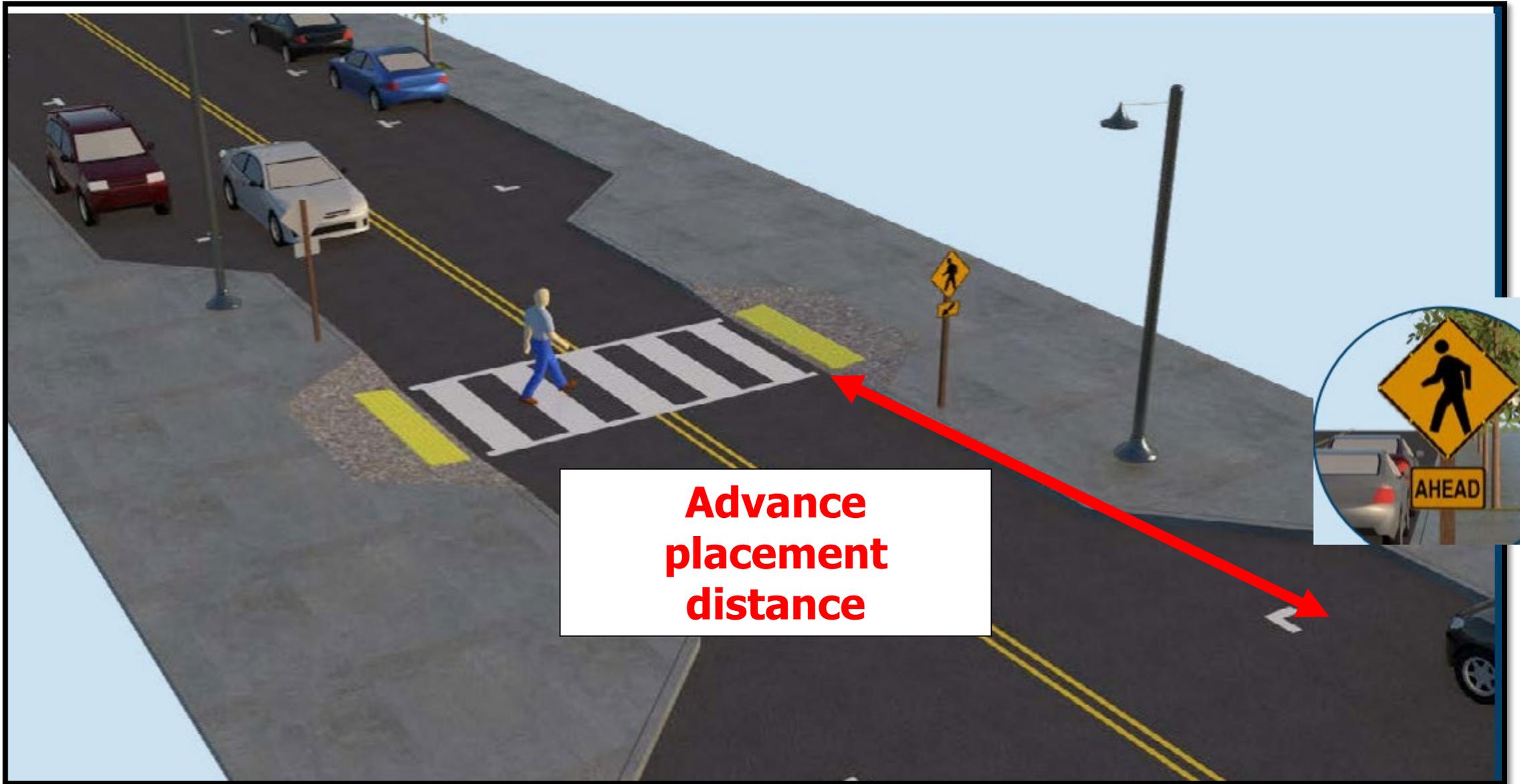
Table 2C-3. Guidelines for Advance Placement of Warning Signs

Posted or 85th-Percentile Speed	Advance Placement Distance ¹									
	Condition A: Speed reduction and lane changing in heavy traffic ²	Condition B: Deceleration to the listed advisory speed (mph) for the condition								
		0 ³	10 ⁴	20 ⁴	30 ⁴	40 ⁴	50 ⁴	60 ⁴	70 ⁴	80 ⁴
20 mph	225 ft	115 ft	N/A ⁵	—	—	—	—	—	—	—
25 mph	325 ft	155 ft	N/A ⁵	N/A ⁵	—	—	—	—	—	—
30 mph	460 ft	200 ft	N/A ⁵	N/A ⁵	—	—	—	—	—	—
35 mph	565 ft	250 ft	N/A ⁵	N/A ⁵	N/A ⁵	—	—	—	—	—
40 mph	670 ft	305 ft	100 ft ⁶	100 ft ⁶	N/A ⁵	—	—	—	—	—
45 mph	775 ft	360 ft	125 ft	100 ft ⁶	100 ft ⁶	N/A ⁵	—	—	—	—
50 mph	885 ft	425 ft	200 ft	175 ft	125 ft	100 ft ⁶	—	—	—	—
55 mph	990 ft	495 ft	275 ft	225 ft	200 ft	125 ft	N/A ⁵	—	—	—
60 mph	1,100 ft	570 ft	350 ft	325 ft	275 ft	200 ft	100 ft ⁶	—	—	—
65 mph	1,200 ft	645 ft	450 ft	400 ft	350 ft	275 ft	200 ft	100 ft ⁶	—	—
70 mph	1,250 ft	730 ft	525 ft	500 ft	450 ft	375 ft	275 ft	150 ft	—	—
75 mph	1,350 ft	820 ft	625 ft	600 ft	550 ft	475 ft	375 ft	250 ft	100 ft ⁶	—
80 mph	1,475 ft	910 ft	725 ft	700 ft	625 ft	550 ft	450 ft	350 ft	200 ft	—
85 mph	1,600 ft	1,010 ft	825 ft	800 ft	750 ft	675 ft	575 ft	450 ft	300 ft	150 ft

STOPPING SIGHT DISTANCE AT 25, 35, AND 45 MPH



PART 2: KEY UPDATES



**Advance
placement
distance**

PART 2: KEY UPDATES

Section 3A.05 Maintaining Minimum Pavement Marking Retroreflectivity

Standard:

- 01 **Except as provided in Paragraph 5 of this Section, a method designed to maintain retroreflectivity at or above 50 mcd/m²/lx under dry conditions shall be used for longitudinal markings on roadways with speed limits of 35 mph or greater.**

- Originally an update for the 2009 MUTCD
- Included in the 2023 MUTCD
- Compliance date of September 6th, 2026

PART 2: KEY UPDATES

Pavement Marking Retroreflectivity

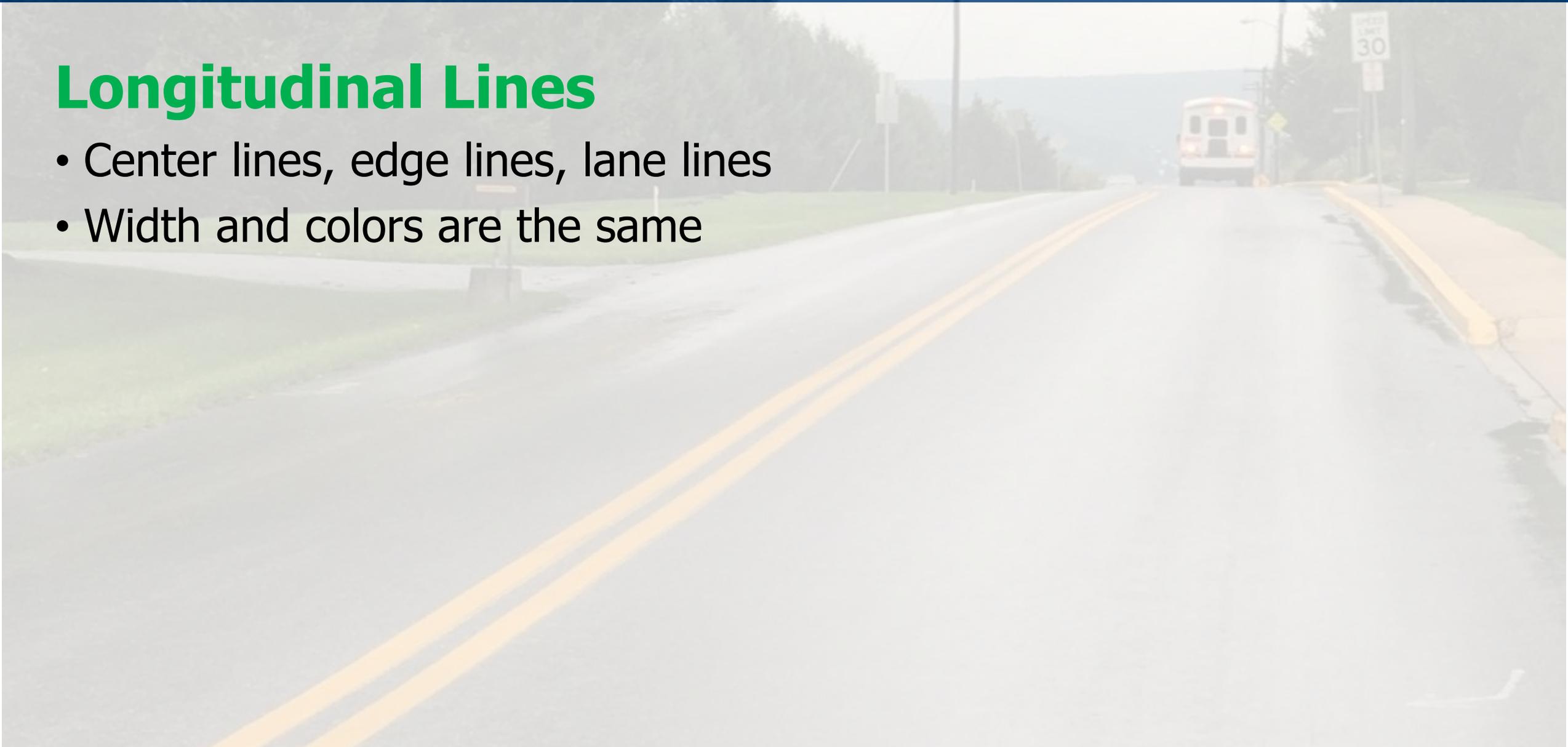
- Applies to roads with posted speed limits of 35 MPH and greater
- Exceptions:
 - Where roadway illumination is provided
 - Roads with less than 6,000 vehicles per day
 - Curb markings, parking space markings, symbols/legends crosswalks and other transverse markings excluded

**Most local
roads are
excluded**

PART 2: KEY UPDATES

Longitudinal Lines

- Center lines, edge lines, lane lines
- Width and colors are the same



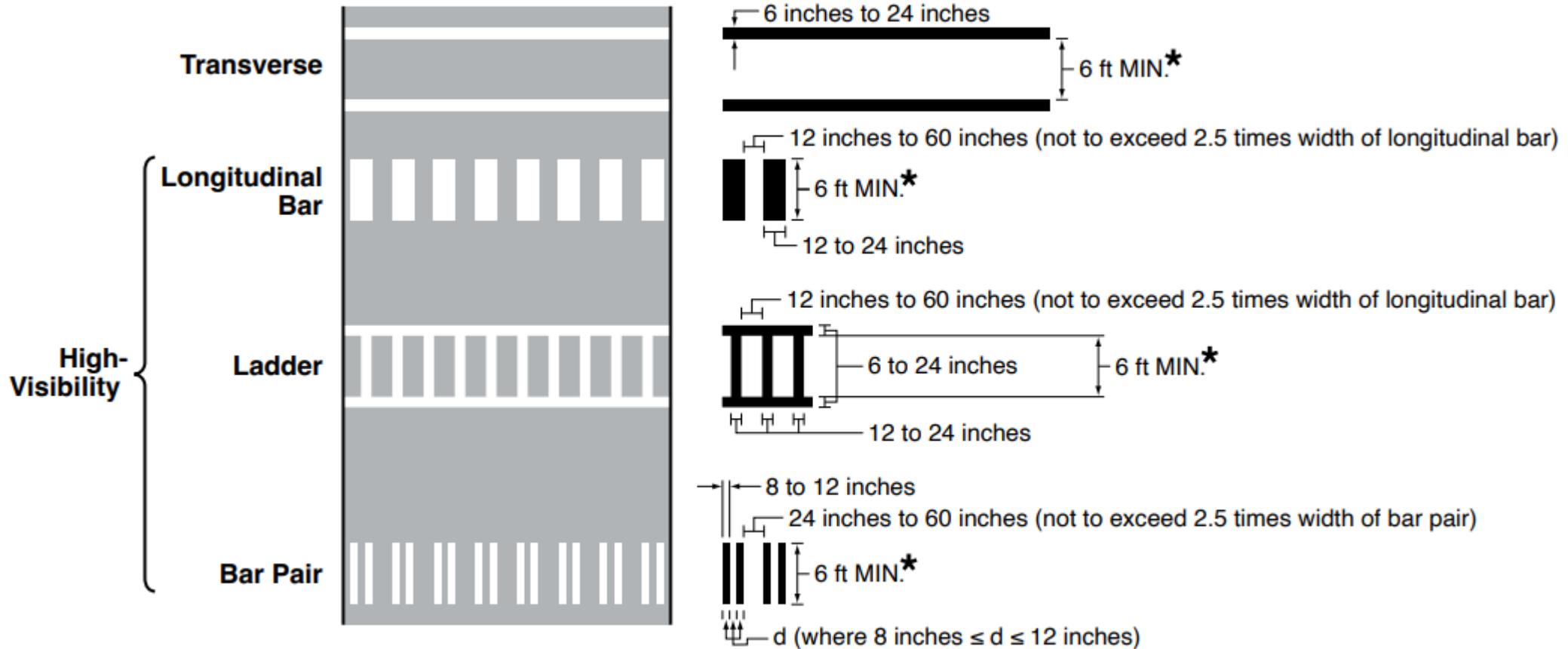
PART 2: KEY UPDATES

Crosswalks

- Significant updates and modifications
- Complete new Chapter 3C
- General emphasis in new MUTCD on vulnerable road user safety
- Study requirements clarified

PART 2: KEY UPDATES

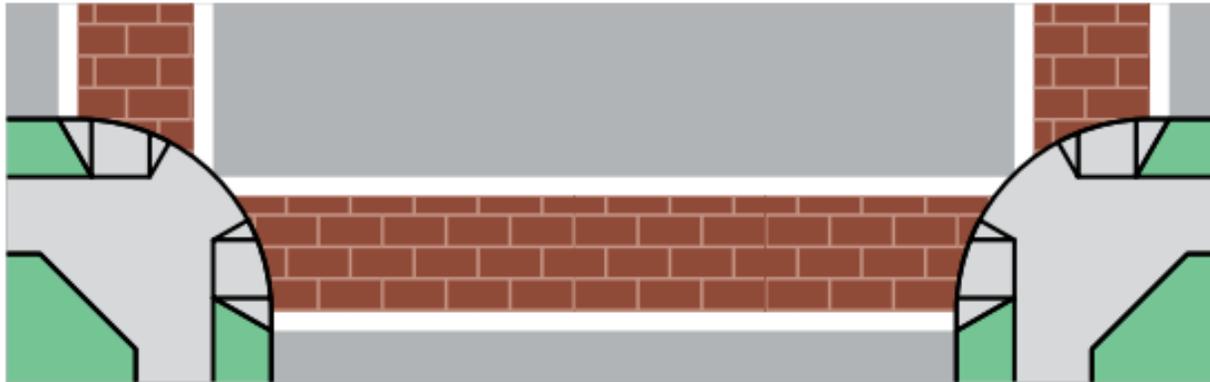
Figure 3C-1. Crosswalk Markings



* Minimum crosswalk width shall be 8 feet where the posted speed limit is 40 mph or greater at a non-intersection crosswalk.

PART 2: KEY UPDATES

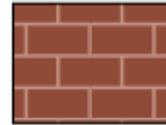
Figure 3H-1. Aesthetic Treatments for Transverse Crosswalks



Street art not compliant

Examples of:

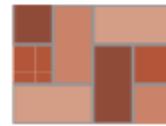
Material



Brick



Stone

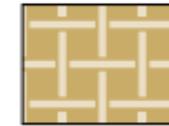


Paver

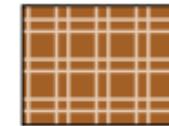
Geometry



Lattice



Mesh



Grid



Polygon

Color



Red



Brown



Tan



Clay

Sect. 3H.03 to 3H.04

PART 2: KEY UPDATES

Colored Pavement Markings

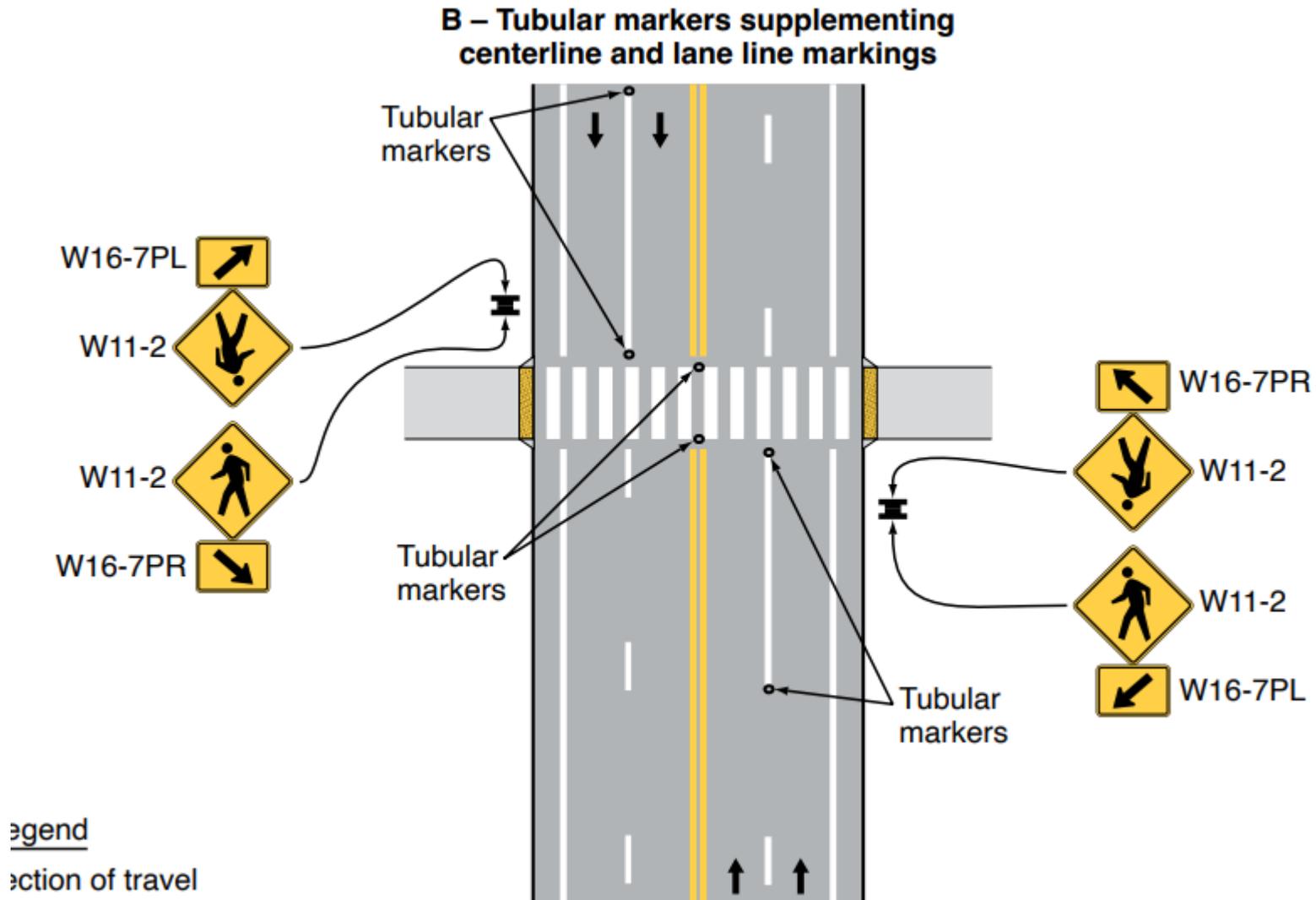
- Formally adopts green (bikes), red (buses), and purple lanes (toll lanes)

PART 2: KEY UPDATES

Channelization Devices used for Emphasis

- New Chapter 3I
- Cones, tubular markers, vertical panels, lane separators, drums and barricades may be used to supplement pavement markings
- Many innovative applications

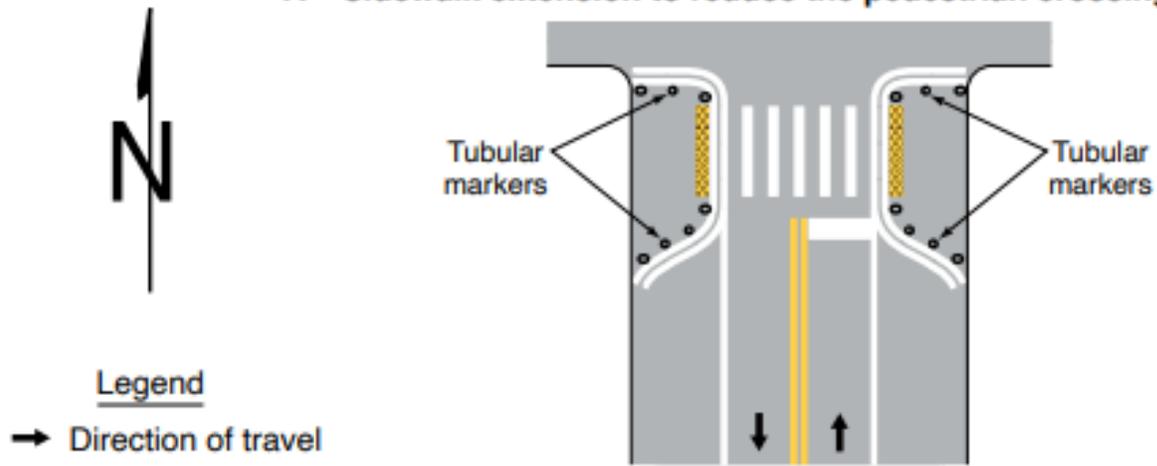
PART 2: KEY UPDATES



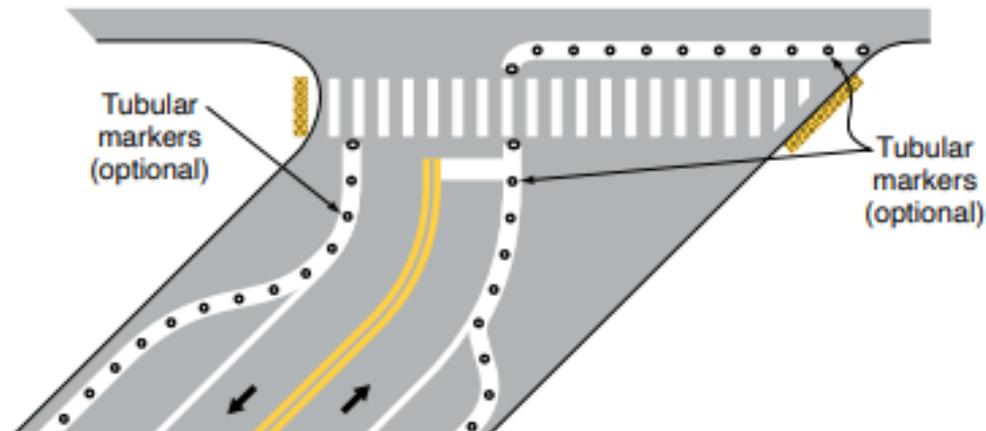
PART 2: KEY UPDATES

Figure 3J-6. Examples of Sidewalk Extensions Designated by Pavement Markings and Channelization

A – Sidewalk extension to reduce the pedestrian crossing distance



B – Channelizing for speed control and altered travel paths



SUMMARY

Practical Steps for YOU:

1. Familiarize yourself with the 2023 MUTCD
2. Update your standard details and specifications
3. Use PennDOT LTAP resources

**LTAP classes
listed on
website**

SUMMARY

- Compliance dates for:
 - Weight Limit signs,
 - Low Clearance signs (W12-2)
 - Low Clearance on structure signs (W12-2a/b)
- Other existing, compliant traffic control devices **do not need modified**
- For new traffic control devices, follow 2023 MUTCD and PennDOT Pubs.

SUMMARY

- Traffic studies are still critical
- Decisions to install a traffic control device should be based on a study
- Studies **REQUIRED** for most Regulatory signs
 - Study-Ordinance-Sign (SOS)
 - Use PennDOT TE Forms

CONTACT LTAP

Address : Pennsylvania Department of Transportation
Bureau of Planning and Research
400 North Street, 6th Floor
Harrisburg, PA 17120



Pennsylvania
Department of Transportation
Local Technical Assistance Program

Website: <https://gis.penndot.pa.gov/ltap/>

Phone: 1-800-FOR-LTAP

Fax: 717-783-9152

Email: ltap@pa.gov

Copyright © 2026 by the Commonwealth of Pennsylvania. All rights reserved.