# PART 2. SIGNS

CHAPTER 2A.	GENERAL PAGE
Section 2A.01	Function and Purpose of Signs
Section 2A.02	Definitions
Section 2A.03	Standardization of Application
Section 2A.04	Excessive Use of Signs
Section 2A.05	Classification of Signs
Section 2A.06	Design of Signs2-1
Section 2A.07	Retroreflectivity and Illumination
Section 2A.08	Maintaining Minimum Retroreflectivity
Section 2A.09	Shapes
Section 2A.10	Sign Colors2-3
Section 2A.11	Dimensions2-5
Section 2A.12	Symbols
Section 2A.13	Word Messages2-6
Section 2A.14	Sign Borders
Section 2A.15	Enhanced Conspicuity for Standard Signs
Section 2A.16	Standardization of Location
Section 2A.17	Overhead Sign Installations
Section 2A.18	Mounting Height2-8
Section 2A.19	Lateral Offset
Section 2A.20	Orientation
Section 2A.21	Posts and Mountings
Section 2A.22	Maintenance
Section 2A.23	Median Opening Treatments for Divided Highways with Wide Medians
CHAPTER 2B.	REGULATORY SIGNS, BARRICADES, AND GATES PAGE
Section 2B.01	Application of Regulatory Signs
Section 2B.02	Design of Regulatory Signs
Section 2B.03	Size of Regulatory Signs
Section 2B.04	Right-of-Way at Intersections
Section 2B.05	STOP Sign (R1-1) and ALL WAY Plaque (R1-3P)
Section 2B.06	STOP Sign Applications
Section 2B.07	Multi-Way Stop Applications
Section 2B.08	YIELD Sign (R1-2)
Section 2B.09	YIELD Sign Applications

	Section 2B.10	STOP Sign or YIELD Sign Placement
	Section 2B.11	Yield Here To Pedestrians Signs and Stop Here For Pedestrians Signs (R1-5 Series)2-12
	Section 2B.12	In-Street and Overhead Pedestrian Crossing Signs (R1-6, R1-6a, R1-9, and R1-9a)
V	Section 2B.13	Speed Limit and End XX Mile Speed Signs (R2-1, R2-V2) 2-22
	Section 2B.14	Truck Speed Limit Plaque (R2-2P)
	Section 2B.15	Night Speed Limit Plaque (R2-3P)
	Section 2B.16	Minimum Speed Limit Plaque (R2-4P)
	Section 2B.17	Higher Fines Signs and Plaque (R2-6P, R2-10, and R2-11)
	Section 2B.18	Movement Prohibition Signs (R3-1 through R3-4, R3-18, and R3-27)
	Section 2B.19	Intersection Lane Control Signs (R3-5 through R3-8)
	Section 2B.20	Mandatory Movement Lane Control Signs (R3-5, R3-5a, R3-7, and R3-20)
V	Section 2B.21	Optional Movement Lane Control Sign (R3-6, R3-V1) 2-26
	Section 2B.22	Advance Intersection Lane Control Signs (R3-8 Series)
	Section 2B.23	RIGHT (LEFT) LANE MUST EXIT Sign (R3-33)
	Section 2B.24	Two-Way Left Turn Only Signs (R3-9a, R3-9b)
V	Section 2B.25	BEGIN and END Plaques (R3-9cP, R3-9cP (V), R3-9dP) 2-27
	Section 2B.26	Reversible Lane Control Signs (R3-9e through R3-9i)
	Section 2B.27	Jughandle Signs (R3-23, R3-24, R3-25, and R3-26 Series)
	Section 2B.28	DO NOT PASS Sign (R4-1)
	Section 2B.29	PASS WITH CARE Sign (R4-2)
	Section 2B.30	KEEP RIGHT EXCEPT TO PASS Sign (R4-16) and SLOWER TRAFFIC KEEP RIGHT Sign (R4-3)
	Section 2B.31	TRUCKS USE RIGHT LANE Sign (R4-5)
	Section 2B.32	Keep Right and Keep Left Signs (R4-7, R4-8)
	Section 2B.33	STAY IN LANE Sign (R4-9)
	Section 2B.34	RUNAWAY VEHICLES ONLY Sign (R4-10)
	Section 2B.35	Slow Vehicle Turn-Out Signs (R4-12, R4-13, and R4-14)
	Section 2B.36	DO NOT DRIVE ON SHOULDER Sign (R4-17) and DO NOT PASS ON SHOULDER Sign (R4-18)
	Section 2B.37	DO NOT ENTER Sign (R5-1)
	Section 2B.38	WRONG WAY Sign (R5-1a)
	Section 2B.39	Selective Exclusion Signs
	Section 2B.40	ONE WAY Signs (R6-1, R6-2)
	Section 2B.41	Wrong-Way Traffic Control at Interchange Ramps 2-30
	Section 2B.42	Divided Highway Crossing Signs (R6-3, R6-3a)
	Section 2B.43	Roundabout Directional Arrow Signs (R6-4, R6-4a, and R6-4b)

	Section 2B.44	Roundabout Circulation Plaque (R6-5P)	
	Section 2B.45	Examples of Roundabout Signing	
	Section 2B.46	Parking, Standing, and Stopping Signs (R7 and R8 Series)	2-33
	Section 2B.47	Design of Parking, Standing, and Stopping Signs	
	Section 2B.48	Placement of Parking, Stopping, and Standing Signs	
V	Section 2B.49	Emergency Restriction Signs (R8-4, R8-7, R8-8, R8-VP1)	2-37
	Section 2B.50	WALK ON LEFT FACING TRAFFIC and No Hitchhiking Signs (R9-1, R9-4, R9-4a)	2-38
	Section 2B.51	Pedestrian Crossing Signs (R9-2, R9-3)	
	Section 2B.52	Traffic Signal Pedestrian and Bicycle Actuation Signs (R10-1 through R10-4 and R10-24 through R10-26)	,
	Section 2B.53	Traffic Signal Signs (R10-5 through R10-30)	2-38
	Section 2B.54	No Turn on Red Signs (R10-11 Series, R10-17a, and R10-30)	
	Section 2B.55	Photo Enforced Signs and Plaques (R10-18, R10-19P, R10-19aP)	
	Section 2B.56	Ramp Metering Signs (R10-28 and R10-29)	
	Section 2B.57	KEEP OFF MEDIAN Sign (R11-1)	
	Section 2B.58	ROAD CLOSED Sign (R11-2) and LOCAL TRAFFIC ONLY Signs (R11-3 Series, F4)	₹11-
V	Section 2B.59	Weight Limit Signs (R12-1 through R12-4, R12-5, R12-V1, R12-VP1)	2-42
	Section 2B.60	Weigh Station Signs (R13 Series)	
	Section 2B.61	TRUCK ROUTE Sign (R14-1)	
	Section 2B.62	Hazardous Material Signs (R14-2, R14-3)	
	Section 2B.63	National Network Signs (R14-4, R14-5)	
	Section 2B.64	Headlight Use Signs (R16-5 through R16-11)	2-45
V	Section 2B.65	FENDER BENDER Sign (R16-4, R16-4 (V))	2-46
	Section 2B.66	Seat Belt Symbol Section	
	Section 2B.67	Barricades	
	Section 2B.68	Gates	
V	Section 2B.V1	Anti Littering Signs (R0-V1, R0-V2)	2-47
	Section 2B.V2	Radar and Speed Limit Enforcement Signs (R0-V3, R0-V4)	2-47
	Section 2B.V3	Highway Safety Corridor Signs (R0-V5, R0-V6, R0-9cP (V))	2-49
	Section 2B.V4	Rest Area Directional Sign (R0-V8)	2-50
	Section 2B.V5	TOWED VEHICLES Plaque (R2-VP1)	2-51
	Section 2B.V6	NO FISHING FROM BRIDGE Signs (R9-V1)	2-51
	Section 2B.V7	Commercial Vehicle Lane Restriction Signs (R4-V Series)	2-52
	Section 2B.V8	Pedestrian Swing Bridge Sign (R9-V2)	<b>2-53</b>

	CHAPTER 2C.	WARNING SIGNS AND OBJECT MARKERS PAGE
	Section 2C.01	Function of Warning Signs
	Section 2C.02	Application of Warning Signs
	Section 2C.03	Design of Warning Signs
	Section 2C.04	Size of Warning Signs
	Section 2C.05	Placement of Warning Signs
	Section 2C.06	Horizontal Alignment Warning Signs
	Section 2C.07	Horizontal Alignment Signs (W1-1 through W1-5, W1-11, W1-15)
	Section 2C.08	Advisory Speed Plaque (W13-1P)2-61
	Section 2C.09	Chevron Alignment Sign (W1-8)
	Section 2C.10	Combination Horizontal Alignment/Advisory Speed Signs (W1-1a, W1-2a) Section 2C.11 Combination Horizontal Alignment/Intersection Signs (W1-10 Series)
	Section 2C.12	One-Direction Large Arrow Sign (W1-6)
V	Section 2C.13	Truck Rollover Warning Sign (W1-13, W1-13 (V))
	Section 2C.14	Advisory Exit and Ramp Speed Signs (W13-2 and W13-3)
	Section 2C.15	Combination Horizontal Alignment/Advisory Exit and Ramp Speed Signs (W13-6 and W13-7)
	Section 2C.16	Hill Signs (W7-1, W7-1a)
	Section 2C.17	Truck Escape Ramp Signs (W7-4 Series)
	Section 2C.18	HILL BLOCKS VIEW Sign (W7-6)
	Section 2C.19	ROAD NARROWS Sign (W5-1)
	Section 2C.20	NARROW BRIDGE Sign (W5-2)
	Section 2C.21	ONE LANE BRIDGE Sign (W5-3)
	Section 2C.22	Divided Highway Sign (W6-1)
	Section 2C.23	Divided Highway Ends Sign (W6-2)
	Section 2C.24	Freeway or Expressway Ends Signs (W19 Series)
	Section 2C.25	Double Arrow Sign (W12-1)
	Section 2C.26	DEAD END/NO OUTLET Signs (W14-1, W14-1a, W14-2, W14-2a)
	Section 2C.27	Low Clearance Signs (W12-2 and W12-2a)
	Section 2C.28	BUMP and DIP Signs (W8-1, W8-2)
	Section 2C.29	SPEED HUMP Sign (W17-1)
	Section 2C.30	PAVEMENT ENDS Sign (W8-3)
	Section 2C.31	Shoulder Signs (W8-4, W8-9, W8-17, W8-23, and W8-25)
	Section 2C.32	Surface Condition Signs (W8-5, W8-7, W8-8, W8-11, W8-13, and W8-14)
V	Section 2C.33	Warning Signs and Plaques for Motorcyclists (W8-15, W8-15P, and W8-16, W8-V1, W8-V2, and W8-V3)2-66
	Section 2C.34	NO CENTER LINE Sign (W8-12)

	Section 2C.35	Weather Condition Signs (W8-18, W8-19, W8-21, and W8-22)
	Section 2C.36	Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4)
	Section 2C.37	Advance Ramp Control Signal Signs (W3-7 and W3-8)
	Section 2C.38	Reduced Speed Limit Ahead Signs (W3-5, W3-5a)
	Section 2C.39	DRAW BRIDGE Sign (W3-6)
	Section 2C.40	Merge Signs (W4-1, W4-5)
	Section 2C.41	Added Lane Signs (W4-3, W4-6)
	Section 2C.42	Lane Ends Signs (W4-2, W9-1, W9-2)
	Section 2C.43	RIGHT (LEFT) LANE EXIT ONLY AHEAD Sign (W9-7)
	Section 2C.44	Two-Way Traffic Sign (W6-3)
	Section 2C.45	NO PASSING ZONE Sign (W14-3)
	Section 2C.46	Intersection Warning Signs (W2-1 through W2-8)
	Section 2C.47	Two-Direction Large Arrow Sign (W1-7)
	Section 2C.48	Traffic Signal Signs (W25-1, W25-2)
•	Section 2C.49	Vehicular Traffic Warning Signs (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12P, W11-14, W11-15, and W11-15a, W11-V1, W11-V3)
	Section 2C.50	Non-Vehicular Warning Signs (W11-2, W11-3, W11-4, W11-6, W11-7,
	Section 20.50	W11-9, and W11-16 through W11-22)
	Section 2C.51	Playground Sign (W15-1)
	Section 2C.52	NEW TRAFFIC PATTERN AHEAD Sign (W23-2)
	Section 2C.53	Use of Supplemental Warning Plaques
	Section 2C.54	Design of Supplemental Warning Plaques
	Section 2C.55	Distance Plaques (W16-2 Series, W16-3 Series, W16-4P, W7-3aP)
	Section 2C.56	Supplemental Arrow Plaques (W16-5P, W16-6P)
	Section 2C.57	Hill-Related Plaques (W7-2 Series, W7-3 Series)
	Section 2C.58	Advance Street Name Plaque (W16-8P, W16-8aP)
	Section 2C.59	CROSS TRAFFIC DOES NOT STOP Plaque (W4-4P)
	Section 2C.60	SHARE THE ROAD Plaque (W16-1P)
	Section 2C.61	Photo Enforced Plaque (W16-10P)
	Section 2C.62	NEW Plaque (W16-15P)
	Section 2C.63	Object Marker Design and Placement Height 2-78
	Section 2C.64	Object Markers for Obstructions Within the Roadway
	Section 2C.65	Object Markers for Obstructions Adjacent to the Roadway
	Section 2C.66	Object Markers for Ends of Roadways
7	Section 2C.V1	Watch for Children (W15-V1)
	Section 2C.V2	STEEP GRADE AHEAD Plaque

CHAPTER 2D	GUIDE SIGNS—CONVENTIONAL ROADS	PAGE
Section 2D.01	Scope of Conventional Road Guide Sign Standards	
Section 2D.02	Application	
Section 2D.03	Color, Retroreflection, and Illumination	
Section 2D.04	Size of Signs	2-82
Section 2D.05	Lettering Style	2-85
Section 2D.06	Size of Lettering	
Section 2D.07	Amount of Legend	
Section 2D.08	Arrows	
Section 2D.09	Numbered Highway Systems	2-86
Section 2D.10	Route Signs and Auxiliary Signs	
Section 2D.11	Design of Route Signs	2-86
Section 2D.12	Design of Route Sign Auxiliaries	2-89
Section 2D.13	Junction Auxiliary Sign (M2-1)	
Section 2D.14	Combination Junction Sign (M2-2)	
Section 2D.15	Cardinal Direction Auxiliary Signs (M3-1 through M3-4)	
Section 2D.16	Auxiliary Signs for Alternative Routes (M4 Series)	
Section 2D.17	ALTERNATE Auxiliary Signs (M4-1, M4-1a)	
Section 2D.18	BY-PASS Auxiliary Sign (M4-2)	
Section 2D.19	BUSINESS Auxiliary Sign (M4-3)	
Section 2D.20	TRUCK Auxiliary Sign (M4-4)	
Section 2D.21	TO Auxiliary Sign (M4-5)	
Section 2D.22	END Auxiliary Sign (M4-6)	
Section 2D.23	BEGIN Auxiliary Sign (M4-14)	
Section 2D.24	TEMPORARY Auxiliary Signs (M4-7, M4-7a)	
Section 2D.25	Temporary Detour and Auxiliary Signs	
Section 2D.26	Advance Turn Arrow Auxiliary Signs (M5-1, M5-2, and M5-3)	
Section 2D.27	Lane Designation Auxiliary Signs (M5-4, M5-5, and M5-6)	
Section 2D.28	Directional Arrow Auxiliary Signs (M6 Series)	
Section 2D.29	Route Sign Assemblies	2-89
Section 2D.30	Junction Assembly	
Section 2D.31	Advance Route Turn Assembly	
Section 2D.32	Directional Assembly	
Section 2D.33	Combination Lane-Use/Destination Overhead Guide Sign (D15-1)	
Section 2D.34	Confirming or Reassurance Assemblies	
Section 2D.35	Trailblazer Assembly	
Section 2D.36	Destination and Distance Signs	

Section 2D	0.37	Destination Signs (D1 Series)	
Section 2D	0.38	Destination Signs at Circular Intersections	
Section 2D	0.39	Destination Signs at Jughandles	
Section 2D	0.40	Location of Destination Signs	
Section 2D	0.41	Distance Signs (D2 Series)	
Section 2D	0.42	Location of Distance Signs	2-95
Section 2D	0.43	Street Name Signs (D3-1, D3-1a, D3-V1, D3-V1a, D3-V1b, or D3-V3)	2-95
Section 2D	0.44	Advance Street Name Signs (D3-2 & D3-V2)	2-99
Section 2D	0.45	Signing on Conventional Roads on Approaches to Interchanges	
Section 2D	0.46	Freeway Entrance Signs (D13-3 and D13-3a)	
Section 2D	0.47	Parking Area Guide Sign (D4-1)	
Section 2D	0.48	PARK - RIDE Sign (D4-2)	
Section 2D	0.49	Weigh Station Signing (D8 Series)	
Section 2D	0.50	Community Wayfinding Signs	
Section 2D	0.51	Truck, Passing, or Climbing Lane Signs (D17-1 and D17-2)	
Section 2D	0.52	Slow Vehicle Turn-Out Sign (D17-7)	
Section 2D	0.53	Signing of Named Highways	2-101
Section 2D	0.54	Crossover Signs (D13-1 and D13-2)	
Section 2D	0.55	National Scenic Byways Signs (D6-4, D6-4a)	
Section 2D	D.V1	OLD Auxiliary Signs	2-102
Section 2D	D.V2	VIRGINIA BYWAY (D6-V1) Signs	2-102
CHAPTER	2E	GUIDE SIGNS—FREEWAYS AND EXPRESSWAYS	PAGE
Section 2E	E.01	Scope of Freeway and Expressway Guide Sign Standards	
Section 2E		Freeway and Expressway Signing Principles	
Section 2E	E.03	Guide Sign Classification	
Section 2E	E.04	General	
Section 2E	Ē.05	Color of Guide Signs	
Section 2E	€.06	Retroreflection or Illumination	
Section 2E	.07	Characteristics of Urban Signing	
Section 2E	E.08	Characteristics of Rural Signing	
Section 2E	E.09	Signing of Named Highways	
Section 2E	E.10	Amount of Legend on Guide Signs	
Section 2E	.11	Number of Signs at an Overhead Installation and Sign Spreading	
Section 2E	.12	Pull-Through Signs (E6-2, E6-2a)	
Section 2E	E.13	Designation of Destinations	
Section 2E	.14	Size and Style of Letters and Signs	2-104

Section 2E.15	Interline and Edge Spacing
Section 2E.16	Sign Borders
Section 2E.17	Abbreviations
Section 2E.18	Symbols
Section 2E.19	Arrows for Interchange Guide Signs
Section 2E.20	Signing for Option Lanes at Splits and Multi-Lane Exits
Section 2E.21	Design of Overhead Arrow-per-Lane Guide Signs for Option Lanes
Section 2E.22	Design of Freeway and Expressway Diagrammatic Guide Signs for Option Lanes
Section 2E.23	Signing for Intermediate and Minor Interchange Multi-Lane Exits with an Option Lane
Section 2E.24	Signing for Interchange Lane Drops
Section 2E.25	Overhead Sign Installations
Section 2E.26	Lateral Offset
Section 2E.27	Route Signs and Trailblazer Assemblies
Section 2E.28	Eisenhower Interstate System Signs (M1-10, M1-10a)
Section 2E.29	Signs for Intersections at Grade
Section 2E.30	Interchange Guide Signs
Section 2E.31	Interchange Exit Numbering
Section 2E.32	Interchange Classification
Section 2E.33	Advance Guide Signs
Section 2E.34	Next Exit Plaques
Section 2E.35	Other Supplemental Guide Signs
Section 2E.36	Exit Direction Signs
Section 2E.37	Exit Gore Signs (E5-1 Series)
Section 2E.38	Post-Interchange Signs
Section 2E.39	Post-Interchange Distance Signs
Section 2E.40	Interchange Sequence Signs
Section 2E.41	Community Interchanges Identification Signs
Section 2E.42	NEXT XX EXITS Sign
Section 2E.43	Signing by Type of Interchange
Section 2E.44	Freeway-to-Freeway Interchange
Section 2E.45	Cloverleaf Interchange
Section 2E.46	Cloverleaf Interchange with Collector-Distributor Roadways
Section 2E.47	Partial Cloverleaf Interchange
Section 2E.48	Diamond Interchange
Section 2E.49	Diamond Interchange in Urban Area
Section 2E.50	Closely-Spaced Interchanges
Section 2F.51	Minor Interchange

Section 2E.52

Wrong-Way Traffic Control at Interchange Ramps	
Weigh Station Signing	
OLL ROAD SIGNS	PAGE
Scope	
Sizes of Toll Road Signs	
Use of Purple Backgrounds and Underlay Panels with ETC Account Pictographs	
Size of ETC Pictographs	
Regulatory Signs for Toll Plazas	
Pay Toll Advance Warning Sign (W9-6)	
Pay Toll Advance Warning Plaque (W9-6P)	
Stop Ahead Pay Toll Warning Sign (W9-6a)	
Stop Ahead Pay Toll Warning Plaque (W9-6aP)	
LAST EXIT BEFORE TOLL Warning Plaque (W16-16P)	
TOLL Auxiliary Sign (M4-15)	
Electronic Toll Collection (ETC) Account-Only Auxiliary Signs (M4-16 and M4-20)	2-115
Toll Facility and Toll Plaza Guide Signs – General	
Advance Signs for Conventional Toll Plazas	
Advance Signs for Toll Plazas on Diverging Alignments from Open-Road ET Account-Only Lanes	·C
Toll Plaza Canopy Signs	
Guide Signs for Entrances to ETC Account-Only Facilities	
ETC Program Information Signs	
Toll Payment Regulatory Signs	2-116
GENERAL INFORMATION SIGNS	PAGE
Sizes of General Information Signs	
General Information Signs (I Series)	2-117
Traffic Signal Speed Sign (I1-1)	
Miscellaneous Information Signs	2-119
Reference Location Signs (D10-1 through D10-3) and Intermediate Refere Location Signs (D10-1a through D10-3a)	nce
Enhanced Reference Location Signs (D10-4, D10-5)	
Auto Tour Route Signs	
Acknowledgment Signs	2-122
	OLL ROAD SIGNS  Scope Sizes of Toll Road Signs Use of Purple Backgrounds and Underlay Panels with ETC Account Pictographs Size of ETC Pictographs Regulatory Signs for Toll Plazas Pay Toll Advance Warning Sign (W9-6) Pay Toll Advance Warning Plaque (W9-6P) Stop Ahead Pay Toll Warning Sign (W9-6a) Stop Ahead Pay Toll Warning Plaque (W9-6aP) LAST EXIT BEFORE TOLL Warning Plaque (W16-16P) TOLL Auxiliary Sign (M4-15) Electronic Toll Collection (ETC) Account-Only Auxiliary Signs (M4-16 and M4-20)

Signing on Conventional Road Approaches and Connecting Roadways



Section 2H.V1	Crossroad Identification (D10-V1) Signs
CHAPTER 2I	GENERAL SERVICE SIGNS PAGE
Section 2I.01	Sizes of General Service Signs
Section 2I.02	General Service Signs for Conventional Roads
Section 2I.03	General Service Signs for Freeways and Expressways
Section 2I.04	Interstate Oasis Signing
Section 2I.05	Rest Area and Other Roadside Area Signs
Section 2I.06	Brake Check Area Signs (D5-13 and D5-14)
Section 2I.07	Chain-Up Area Signs (D5-15 and D5-16)
Section 2I.08	Tourist Information and Welcome Center Signs
Section 21.09	Radio Information Signing
Section 2I.10	TRAVEL INFO CALL 511 Signs (D12-5 and D12-5a)
Section 2I.11	Carpool and Ridesharing Signing
CHAPTER 2M	RECREATIONAL AND CULTURAL INTEREST AREA SIGNS PAGE
Section 2M.01	Scope
Section 2M.02	Application of Recreational and Cultural Interest Area Signs
Section 2M.03	Regulatory and Warning Signs
Section 2M.04	General Design Requirements for Recreational and Cultural Interest Area Symbol
Section 2M.05	Symbol Sign Sizes
Section 2M.06	Use of Educational Plaques
Section 2M.07	Use of Prohibitive Circle and Diagonal Slash for Non-Road Applications
Section 2M.08	Placement of Recreational and Cultural Interest Area Symbol Signs 2-134
Section 2M.09	Destination Guide Signs
Section 2M.10	Memorial or Dedication Signing
Section 2M.V1	Advance Signing for Historical Markers (I-V11 signs) 2-147
Section 2M.V2	Signing for Waysides (I-V13 and I-V14 signs)

# PART 2

## **CHAPTER 2A. GENERAL**

# Section 2A.06 Design of Signs

### Support:

- This Manual shows many typical standard signs and object markers approved for use on streets, highways, bikeways, and pedestrian crossings.
- 102 In the specifications for individual signs and object markers, the general appearance of the legend, color, and size are shown in the accompanying tables and illustrations, and are not always detailed in the text.
- Detailed drawings of standard signs, object markers, alphabets, symbols, and arrows (see Figure 2D-2 in the MUTCD) are shown in the "Standard Highway Signs and Markings" book. Section 1A.11 of this Supplement contains information regarding how to obtain this publication.
- In addition, detailed drawings of standard signs used in Virginia are shown in the "Virginia Standard Highway Signs Book". Appendix A of this Supplement contains a link to this Virginia publication.
- The basic requirements of a sign are that it be legible to those for whom it is intended and that it be understandable in time to permit a proper response. Desirable attributes include:
  - A. High visibility by day and night; and
  - B. High legibility (adequately sized letters, symbols, or arrows, and a short legend for quick comprehension by a road user approaching a sign).
- Of Standardized colors and shapes are specified so that the several classes of traffic signs can be promptly recognized. Simplicity and uniformity in design, position, and application are important.

### Standard:

- The term legend shall include all word messages and symbol and arrow designs that are intended to convey specific meanings.
- Uniformity in design shall include shape, color, dimensions, legends, borders, and illumination or retroreflectivity.
- Standardization of these designs does not preclude further improvement by minor changes in the proportion or orientation of symbols, width of borders, or layout of word messages, but all shapes and colors shall be as indicated.



All symbols shall be unmistakably similar to, or mirror images of, the adopted symbol signs, all of which are shown in the "Standard Highway Signs and Markings" and the "Virginia Standard Highway Signs" book (see Section 1A.11 of this Supplement and Appendix A of this Supplement). Symbols and colors shall not be modified unless otherwise provided in this Manual. All symbols and colors for signs not shown in the "Standard Highway Signs and Markings" and the "Virginia Standard Highway Signs" book shall follow the procedures for experimentation and change described in Section 1A.10 of this Supplement.

### Option:

Although the standard design of symbol signs cannot be modified, the orientation of the symbol may be changed to better reflect the direction of travel, if appropriate.

### Standard:

- 12 Where a standard word message is applicable, the wording shall be as provided in the MUTCD or this Supplement.
- In situations where word messages are required other than those provided in the MUTCD or this Supplement, the signs shall be of the same shape and color as standard signs of the same functional type.



### Option:

State and local highway agencies may develop special word message signs in situations where roadway conditions make it necessary to provide road users with additional regulatory, warning, or guidance information, such as when road users need to be notified of special regulations or warned about a situation that might not be readily apparent. Unlike colors that have not been assigned or symbols that have not been approved for signs, new word message signs may be used without the need for experimentation.

### Standard:

Except as provided in Paragraph 18 and except for the Carpool Information (D12-2) sign (see Section 21.11 of the MUTCD), Internet addresses and e-mail addresses, including domain names and uniform resource locators (URL), shall not be displayed on any sign, supplemental plaque, sign panel (including logo sign panels on Specific Service signs), or changeable message sign.

### Guidance:

Unless otherwise provided in this Supplement or the MUTCD for a specific sign, and except as provided in Paragraph 18, telephone numbers of more than four characters should not be displayed on any sign, supplemental plaque, sign panel (including logo sign panels on specific service signs), or changeable message sign.

V

### Option:

Internet addresses, e-mail addresses, or telephone numbers with more than four characters may be displayed on signs, supplemental plaques, sign panels, and changeable message signs that are intended for viewing only by pedestrians, bicyclists, occupants of parked vehicles, or drivers of vehicles on low-speed roadways where engineering judgment indicates that an area is available for drivers to stop out of the traffic flow to read the message.

### Standard:

Pictographs (see definition in Section 1A.13 of this Supplement) shall not be displayed on signs except as specifically provided in this Supplement or in the MUTCD. Pictographs shall be simple, dignified, and devoid of any advertising. When used to represent a political jurisdiction (such as a State, county, or municipal corporation) the pictograph shall be the official designation adopted by the jurisdiction. When used to represent a college or university, the pictograph shall be the official seal adopted by the institution. Pictorial representations of university or college programs shall not be permitted to be displayed on a sign.

### **Section 2A.10 Sign Colors**

### Standard:

The colors to be used on standard signs and their specific use on these signs shall be as provided in the applicable Sections of the MUTCD or this Supplement. The color coordinates and values shall be as described in 23 CFR, Part 655, Subpart F, Appendix.

### Support:

- As a quick reference, common uses of sign colors are shown in Table 2A-5(VA) in this Supplement. Color schemes on specific signs are shown in the illustrations located in each appropriate Chapter of the MUTCD and this Supplement.
- Whenever white is specified as a color in this Supplement, the "Standard Highway Signs and Markings" book (see Section 1A.11 of this Supplement), or the "Virginia Standard Highway Signs" book (see Appendix A of this Supplement for link), it is understood to include silver-colored retroreflective coatings or elements that reflect white light.
- The colors coral and light blue are being reserved for uses that will be determined in the future by the Federal Highway Administration.
- Information regarding color coding of destinations on guide signs, including community wayfinding signs, is contained in Chapter 2D.

### Option:

The approved fluorescent version of the standard red, yellow, green, or orange color may be used as an alternative to the corresponding standard color.

# Table 2A-5(VA). Common Uses of Sign Colors

	Legend								Background										
Type of Sign	Black	Green	Red	White	Yellow	Orange	Fluorescent Yellow-Green	Fluorescent Pink	Black	Blue	Brown	Green	Orange*	Red*	White	Yellow*	Purple	Fluorescent Yellow-Green	Fluorescent Pink
Regulatory	Х		Х	Х					Х					Х	Х				
Prohibitive			Х	Х										Х	Х				
Permissive		Х													Х				
Warning	Х															Х			
Pedestrian	X																	X	
Bicycle	X																	X	
Guide				Х								Х							
Interstate Route				Х						Х				Х					
State Route	Х														Х				
U.S. Route	Х														Х				
County Route					Х					Х									
Forest Route				Х							Х								
Street Name				Х								Х							
Destination				Х								Х							
Reference Location				Х								Х							
Information				Х						Х		Х							
Evacuation Route				Х						Х									
Road User Service				Х						Х									
Recreational				Х							Х	Х							
Temporary Traffic Control	Х												Х						
Incident Management	Х												Х						Х
School	Х																	Х	
ETC-Account Only	Х																X****		
Changeable Message Signs																			
Regulatory			X***	Х					Х										
Warning					Х				Х										
Temporary Traffic Control					Х	Х			Χ										
Guide				Х					Х			X**							
Motorist Services				Χ					Χ	X**									
Incident Management					Х			Х	Х										
School, Pedestrian, Bicycle	X																	X	



<sup>\*</sup> Fluorescent versions of these background colors may also be used.

<sup>\*\*</sup> These alternative background colors would be provided by blue or green lighted pixels such that the entire CMS would be lighted, not just the legend.

<sup>\*\*\*</sup> Red is used only for the circle and slash or other red elements of a similar static regulatory sign.

<sup>\*\*\*\*</sup> The use of the color purple on signs is restricted per the provisions of Paragraph 1 of Section 2F.03 of the MUTCD.

## **Section 2A.11 Dimensions**

### Support:

The "Standard Highway Signs and Markings" and "Virginia Standard Highway Signs" book (see Appendix A and Section 1A.11 of this Supplement) prescribe design details for up to five different sizes depending on the type of traffic facility, including bikeways. Smaller sizes are designed to be used on bikeways and some other off-road applications. Larger sizes are designed for use on freeways and expressways, and can also be used to enhance road user safety and convenience on other facilities, especially on multi-lane divided highways and on undivided highways having five or more lanes of traffic and/or high speeds. The intermediate sizes are designed to be used on other highway types.

### Standard:

The sign dimensions prescribed in the sign size tables in the various Parts and Chapters in the MUTCD, this Supplement, the "Standard Highway Signs and Markings," and the "Virginia Standard Highway Signs" book (see Section 1A.11 and Appendix A of this Supplement) shall be used unless engineering judgment determines that other sizes are appropriate. Except as provided in Paragraph 3, where engineering judgment determines that sizes smaller than the prescribed dimensions are appropriate for use, the sign dimensions shall not be less than the minimum dimensions specified in the MUTCD or this Supplement. The sizes shown in the Minimum columns that are smaller than the sizes shown in the Conventional Road columns in the various sign size tables in the MUTCD or this Supplement shall only be used on low-speed roadways, alleys, and private roads open to public travel where the reduced legend size would be adequate for the regulation or warning or where physical conditions preclude the use of larger sizes.

### Option:

For alleys with restrictive physical conditions and vehicle usage that limits installation of the minimum size sign (or the Conventional Road size sign if no Minimum size is shown), both the sign height and the sign width may be decreased by up to 6 inches.

### Guidance:

- The sizes shown in the Freeway and Expressway columns in the various sign size tables in the MUTCD or this Supplement should be used on freeways and expressways, and for other higher-speed applications based upon engineering judgment, to provide larger signs for increased visibility and recognition.
- The sizes shown in the Oversized columns in the various sign size tables in the MUTCD or this Supplement size should be used for those special applications where speed, volume, or other factors result in conditions where increased emphasis, improved recognition, or increased legibility is needed, as determined by engineering judgment or study.
- Increases above the prescribed sizes should be used where greater legibility or emphasis is needed. If signs larger than the prescribed sizes are used, the overall sign dimensions should be increased in 6-inch increments.

#### Standard:

Where engineering judgment determines that sizes that are different than the prescribed dimensions are appropriate for use, standard shapes and colors shall be used and standard proportions shall be retained as much as practical.

### Guidance:

When supplemental plaques are installed with larger sized signs, a corresponding increase in the size of the plaque and its legend should also be made. The resulting plaque size should be approximately in the same relative proportion to the larger sized sign as the conventional sized plaque is to the conventional sized sign.

## **Section 2A.13 Word Messages**

### Standard:

Except as provided in Section 2A.06 of this Supplement, all word messages shall use standard wording and letters as shown in this Manual and in the "Standard Highway Signs and Markings" and "Virginia Standard Highway Signs" book(see Section 1A.11 and Appendix A of this Supplement).

### Guidance:

- Word messages should be as brief as possible and the lettering should be large enough to provide the necessary legibility distance. A minimum specific ratio of 1 inch of letter height per 30 feet of legibility distance should be used.
- 03 Abbreviations (see Section 1A.15 of the MUTCD) should be kept to a minimum.
- Word messages should not contain periods, apostrophes, question marks, ampersands, or other punctuation or characters that are not letters, numerals, or hyphens unless necessary to avoid confusion.
- The solidus (slanted line or forward slash) is intended to be used for fractions only and should not be used to separate words on the same line of legend. Instead, a hyphen should be used for this purpose, such as "TRUCKS BUSES."

### Standard:

of Fractions shall be displayed with the numerator and denominator diagonally arranged about the solidus (slanted line or forward slash). The overall height of the fraction is measured from the top of the numerator to the bottom of the denominator, each of which is vertically aligned with the upper and lower ends of the solidus. The overall height of the fraction shall be determined by the height of the numerals within the fraction, and shall be 1.5 times the height of an individual numeral within the fraction.

### Support:

The "Standard Highway Signs and Markings" book (see Section 1A.11 of this Supplement) contains details regarding the layouts of fractions on signs.

### Guidance:

- When initials are used to represent an abbreviation for separate words (such as "U S" for a United States route), the initials should be separated by a space of between 1/2 and 3/4 of the letter height of the initials.
- When an Interstate route is displayed in text form instead of using the route shield, a hyphen should be used for clarity, such as "I-50."

### Standard:

- All sign lettering shall be in upper-case letters as provided in the "Standard Highway Signs and Markings" and "Virginia Standard Highway Signs" book (see Section 1A.11 and Appendix A of this Supplement), unless otherwise provided in this Supplement or the MUTCD for a particular sign or type of message.
- The sign lettering for names of places, streets, and highways shall be composed of a combination of lower-case letters with initial upper-case letters.

### Support:

Letter height is expressed in terms of the height of an upper-case letter. For mixed-case legends (those composed of an initial upper-case letter followed by lower-case letters), the height of the lower-case letters is derived from the specified height of the initial upper-case letter based on a prescribed ratio. Letter heights for mixed-case legends might be expressed in terms of both the upper- and lower-case letters, or in terms of the initial upper-case letter alone. When the height of a lower-case letter is specified or determined from the prescribed ratio, the reference is to the nominal loop height of the letter. The term loop height refers to the portion of a lower-case letter that excludes any ascending or descending stems or tails of the letter, such as with the letters "d" or "q." The nominal loop height is equal to the actual height of a non-rounded lower-case letter whose form does not include ascending or descending stems or tails, such as the letter "x." The rounded portions of a lower-case letter extend slightly above and below the baselines projected from the top and bottom of such a non-rounded letter so that the appearance of a uniform letter height within a word is achieved. The actual loop height of a rounded lower-case letter is slightly greater than the nominal loop height and this additional height is excluded from the expression of the lower-case letter height.

### Standard:

- When a mixed-case legend is used, the height of the lower-case letters shall be 3/4 of the height of the initial upper-case letter.
- 14 The unique letter forms for each of the Standard Alphabet series shall not be stretched, compressed, warped, or otherwise manipulated.

### Support:

Section 2D.04 of this Supplement contains information regarding the acceptable methods of modifying the length of a word for a given letter height and series.



#### Standard:

- In accordance with Interim Approval IA-5, dated September 2, 2004 Interim Approval for Use of Clearview Font for Positive Contrast Legends on Guide Signs, positive contrast (e.g. white legend) guide signs shall be designed using Clearview font.
- 17 All other signs shall be designed using the Federal Standard Highway Signs Alphabet.

### Support:

A Clearview spacing table and guide for converting the Federal Standard Highway Signs (SHS) Alphabet to the Clearview font is shown in the "Virginia Standard Highway Signs" book (see Appendix A of this Supplement for link).

# **Section 2A.18 Mounting Height**

### Standard:

11 The provisions of this Section shall apply unless specifically stated otherwise for a particular sign or object marker elsewhere in the MUTCD or this Supplement.

### Support:

- 102 The mounting height requirements for object markers are provided in Chapter 2C.
- In addition to the provisions of this Section, information affecting the minimum mounting height of signs as a function of crash performance can be found in AASHTO's "Roadside Design Guide" (see Section 1A.11 of this Supplement).

### Standard:

- The minimum height, measured vertically from the bottom of the sign to the elevation of the near edge of the pavement, of signs installed at the side of the road in rural areas shall be 5 feet (see Figure 2A-2(VA) in this Supplement).
- The minimum height, measured vertically from the bottom of the sign to the top of the curb, or in the absence of curb, measured vertically from the bottom of the sign to the elevation of the near edge of the traveled way, of signs installed at the side of the road in business, commercial, or residential areas where parking or pedestrian movements are likely to occur, or where the view of the sign might be obstructed, shall be 7 feet (see Figure 2A-2(VA) in this Supplement).

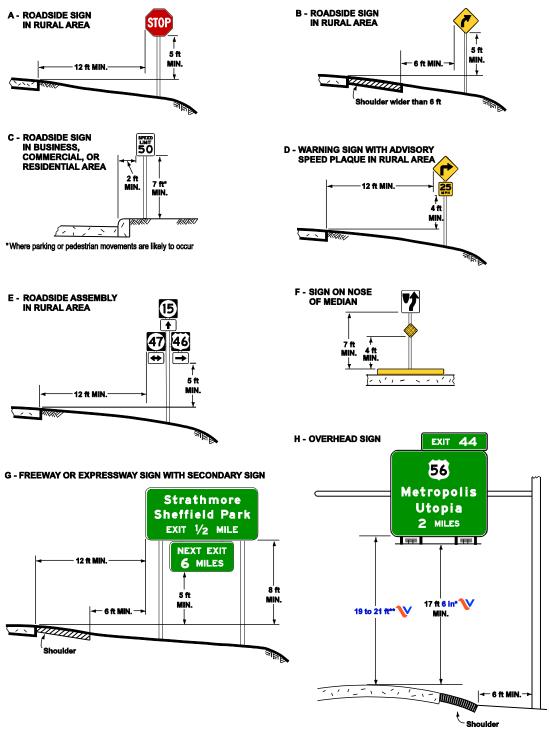
### Option:

The height to the bottom of a secondary sign mounted below another sign may be 1 foot less than the height specified in Paragraphs 4 and 5.

### **Standard:**

- The minimum height, measured vertically from the bottom of the sign to the sidewalk, of signs installed above sidewalks shall be 7 feet.
- If the bottom of a secondary sign that is mounted below another sign is mounted lower than 7 feet above a pedestrian sidewalk or pathway (see Section 6D.02 of the 2011 "Virginia Work Area Protection Manual"), the secondary sign shall not project more than 4 inches into the pedestrian facility.

# Figure 2A-2(VA). Examples of Heights and Lateral Locations of Sign Installations



See Section 2A.19 for reduced lateral offset distances that may be used in areas where lateral offsets are limited, and in business, commercial, or residential areas where sidewalk width is limited or where existing poles are close to the curb

Minimum required clearance to bottom of sign, sign bridge, or luminaire assembly. (See Section 2A.18) 19 to 21 feet of vertical clearance to bottom of lowest mounted sign panel should be provided. (See section 2A.18)

### Option:

OSIGNS that are placed 30 feet or more from the edge of the traveled way may be installed with a minimum height of 5 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the pavement.

### Standard:

- Directional signs on freeways and expressways shall be installed with a minimum height of 7 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the pavement. All route signs, warning signs, and regulatory signs on freeways and expressways shall be installed with a minimum height of 7 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the pavement. If a secondary sign is mounted below another sign on a freeway or expressway, the major sign shall be installed with a minimum height of 8 feet and the secondary sign shall be installed with a minimum height of 5 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the pavement.
- 11 Where large signs having an area exceeding 50 square feet are installed on multiple breakaway posts, the clearance from the ground to the bottom of the sign shall be at least 7 feet.

### Option:

- A route sign assembly consisting of a route sign and auxiliary signs (see Section 2D.31 of the MUTCD) may be treated as a single sign for the purposes of this Section.
- The mounting height may be adjusted when supports are located near the edge of the right-of-way on a steep backslope in order to avoid the sometimes less desirable alternative of placing the sign closer to the roadway.

### Guidance:

Vertical clearance for overhead sign structures should be no less than 19 feet and no more than 21 feet from the bottom of the lowest mounted sign panel to the crown of the roadway. Luminaire assemblies should have a vertical clearance of no less than 17 feet 6 inches from the bottom of the assembly to the crown of the roadway.

### Standard:

Overhead signs shall provide a vertical clearance of not less than 17 feet 6 inches to the sign, luminaire assembly, or sign bridge over the entire width of the pavement and shoulders except where the structure on which the overhead signs are to be mounted or other structures along the roadway near the sign structure have a lesser vertical clearance.

### Option:

- If the vertical clearance of other structures along the roadway near the sign structure is less than 16 feet, the vertical clearance to an overhead sign structure or support may be as low as 1 foot higher than the vertical clearance of the other structures in order to improve the visibility of the overhead signs.
- In special cases it may be necessary to reduce the clearance to overhead signs because of substandard dimensions in tunnels and other major structures such as double-deck bridges.



### Support:

Figure 2A-2(VA) in this Supplement illustrates some examples of the mounting height requirements contained in this Section.

# CHAPTER 2B. REGULATORY SIGNS, BARRICADES, AND GATES

# Section 2B.11 <u>Yield Here To Pedestrians Signs and Stop Here</u> <u>For Pedestrians Signs (R1-5 Series)</u>

## V

### Support:

The Code of Virginia § 46.2-924 requires that drivers at crosswalks yield the right-of-way to pedestrians crossing the highway. The Standard statement in Section 2B.11 of the National MUTCD permits the use of the Stop Here for Pedestrians (R1-5b and R1-5c) signs only if state law specifically requires the driver to stop for a pedestrian in a crosswalk. As The Code of Virginia does not require a driver to stop, the R1-5b and R1-5c signs are not used in Virginia.

### Standard:

Yield Here To Pedestrians (R1-5 or R1-5a) signs (see Figure 2B-2(VA) in this Supplement) shall be used if yield lines are used in advance of a marked crosswalk that crosses an uncontrolled multi-lane approach. The Stop Here for Pedestrians (R1-5b and R1-5c) signs shall not be used in Virginia. The legend STATE LAW may be displayed at the top of the R1-6 and R1-9 signs.

### Guidance:

- If yield lines and Yield Here To Pedestrians signs are used in advance of a crosswalk that crosses an uncontrolled multi-lane approach, they should be placed 20 to 50 feet in advance of the nearest crosswalk line (see Section 3B.16 and Figure 3B-17(VA) in this Supplement), and parking should be prohibited in the area between the yield (stop) line and the crosswalk.
- Yield lines and Yield Here To Pedestrians signs should not be used in advance of crosswalks that cross an approach to or departure from a roundabout.

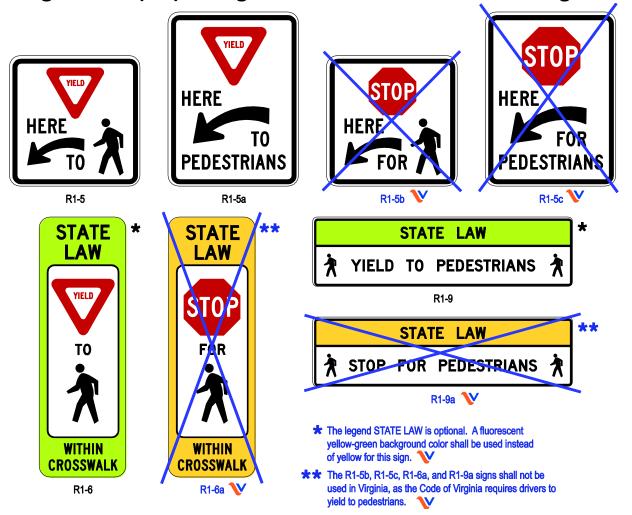
### Option:

- Vield Here to Pedestrians signs may be used in advance of a crosswalk that crosses an uncontrolled multi-lane approach to indicate to road users where to yield even if yield lines are not used.
- A Pedestrian Crossing (W11-2) warning sign may be placed overhead or may be post-mounted with a diagonal downward pointing arrow (W16-7P) plaque at the crosswalk location where Yield Here To Pedestrians signs have been installed in advance of the crosswalk.

### Standard:

07 If a W11-2 sign has been post-mounted at the crosswalk location where a Yield Here To Pedestrians sign is used on the approach, the Yield Here To Pedestrians sign shall not be placed on the same post as or block the road user's view of the W11-2 sign.

Figure 2B-2(VA). Unsignalized Pedestrian Crosswalk Signs



### Option:

- An advance Pedestrian Crossing (W11-2) warning sign with an AHEAD or a distance supplemental plaque may be used in conjunction with a Yield Here To Pedestrians sign on the approach to the same crosswalk.
- 19 In-Street Pedestrian Crossing signs and Yield Here To Pedestrians signs may be used together at the same crosswalk.

# Table 2B-1(VA). Regulatory Sign and Plaque Sizes

	Sign		Conventi	onal Road					
Sign or Plaque	Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized	
Stop	R1-1	2B.05	30 x 30*	36 x 36	36 x 36		30 x 30*	48 x 48	
Yield	R1-2	2B.08	36 x 36 x 36*	48 x 48 x 48	48 x 48 x 48	60 x 60 x 60	30 x 30 x 30*	_	
To Oncoming Traffic (plaque)	R1-2aP	2B.10	24 x 18	24 x 18	36 x 30	48 x 36	24 x 18	_	
All Way (plaque)	R1-3P	2B.05	18 x 6	18 x 6	_	_	_	30 x 12	
Yield Here to Peds	R1-5	2B.11	_	36 x 36	_	_	_	36 x 36	
Yield Here to Pedestrians	R1-5a	2B.11	_	36 x 48	_	_	_	36 x 48	
Stop Here for Peds	R1-5b	2B.11	_	36 x 36	_	_	_	<del>36 x 36</del>	
Stop Here for Pedestrians	<del>R1-5c</del>	2B.11	_	<del>36 x 48</del>	_	_	_	<del>36 x 48</del>	
In-Street Ped Crossing	R1-6, <del>6a</del>	2B.12	12 x 36	12 x 36	_	_	_	_	
Overhead Ped Crossing	R1-9, <del>9a</del>	2B.12	90 x 24	90 x 24	_	_	_	_	
Except Right Turn (plaque)	R1-10P	2B.05	24 x 18	24 x 18	_	_	_	_	
Speed Limit	R2-1	2B.13	24 x 30*	30 x 36	36 x 48	48 x 60	18 x 24*	30 x 36	
Truck Speed Limit (plaque)	R2-2P	2B.14	24 x 24	24 x 24	36 x 36	48 x 48	_	36 x 36	
Night Speed Limit (plaque)	R2-3P	2B.15	24 x 24	24 x 24	36 x 36	48 x 48	_	36 x 36	
Minimum Speed Limit (plaque)	R2-4P	2B.16	24 x 30	24 x 30	36 x 48	48 x 60	_	36 x 48	
Combined Speed Limit	R2-4a	2B.16	24 x 48	24 x 48	36 x 72	48 x 96	_	36 x 72	
Unless Otherwise Posted (plaque)	R2-5P	2B.13	24 x 18	24 x 18	_	_	_	_	
Citywide (plaque)	R2-5aP	2B.13	24 x 6	24 x 6	_	_	_	_	
Neighborhood (plaque)	R2-5bP	2B.13	24 x 6	24 x 6	_	_	_	_	
Residential (plaque)	R2-5cP	2B.13	24 x 6	24 x 6	_	_	_	_	
Fines Higher (plaque)	R2-6P	2B.17	24 x 18	24 x 18	36 x 24	48 x 36	_	36 x 24	
Fines Double (plaque)	R2-6aP	2B.17	24 x 18	24 x 18	36 x 24	48 x 36	_	36 x 24	
\$XX Fine (plaque)	R2-6bP	2B.17	24 x 18	24 x 18	36 x 24	48 x 36	_	36 x 24	
Begin Higher Fines Zone	R2-10	2B.17	24 x 30	24 x 30	36 x 48	48 x 60	_	36 x 48	
End Higher Fines Zone	R2-11	2B.17	24 x 30	24 x 30	36 x 48	48 x 60	_	36 x 48	
Movement Prohibition	R3- 1,2,3,4,18,27	2B.18	24 x 24*	36 x 36	36 x 36	_	_	48 x 48	
Mandatory Movement Lane Control	R3-5,5a	2B.20	30 x 36	30 x 36	_	_	_	_	
Left Lane (plaque)	R3-5bP	2B.20	30 x 12	30 x 12	_	_	_	_	
HOV 2+ (plaque)	R3-5cP	2B.20	24 x 12	24 x 12	_	_	_	_	
Taxi Lane (plaque)	R3-5dP	2B.20	30 x 12	30 x 12	_	_	_	_	
Center Lane (plaque)	R3-5eP	2B.20	30 x 12	30 x 12	_	_	_	_	

			Conventional Road					
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
Right Lane (plaque)	R3-5fP	2B.20	30 x 12	30 x 12	_	_	_	_
Bus Lane (plaque)	R3-5gP	2B.20	30 x 12	30 x 12		_	_	_
Optional Movement Lane Control	R3-6	2B.21	30 x 36	30 x 36	_	_	_	_
Right (Left) Lane Must Turn Right (Left)	R3-7	2B.20	30 x 30*	36 x 36	_	_	_	_
Advance Intersection Lane Control	R3-8,8a,8b	2B.22	Varies x 30	Varies x 30	_	_	_	Varies x 36
Two-Way Left Turn Only (overhead)	R3-9a	2B.24	30 x 36	30 x 36	_	_	_	_
Two-Way Left Turn Only (post-mounted)	R3-9b	2B.24	24 x 36	24 x 36	_	_	_	36 x 48
BEGIN	R3-9cP	2B.25	30 x 12	30 x 12	_	_	_	_
BEGIN	R3-9cP (V)	2B.V3	_	_	48 x 18	48 x 18	_	_
END	R3-9dP	2B.25	30 x 12	30 x 12	_	_	_	_
Reversible Lane Control (symbol)	R3-9e	2B.26	108 x 48	108 x 48	_	_	_	_
Reversible Lane Control (post- mounted)	R3-9f	2B.26	30 x 42*	36 x 54	_	_	_	_
Advance Reversible Lane Control Transition Signing	R3-9g,9h	2B.26	108 x 36	108 x 36	_	_	_	_
End Reverse Lane	R3-9i	2B.26	108 x 48	108 x 48	_	_	_	_
Begin Right (Left) Turn Lane	R3-20	2B.20	24 x 36	24 x 36	_	_	_	_
All Turns (U Turn) from Right Lane	R3-23,23a	2B.27	60 x 36	60 x 36	_	_	_	_
All Turns (U Turn) with arrow	R3-24,24b, 25,25b,26a	2B.27	72 x 18	72 x 18	_	_	_	_
U and Left Turns with arrow	R3- 24a,25a,26	2B.27	60 x 24	60 x 24		_	_	_
Right Lane Must Exit	R3-33	2B.23	_	_	78 x 36	78 x 36	_	_
Do Not Pass	R4-1	2B.28	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Pass With Care	R4-2	2B.29	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Slower Traffic Keep Right	R4-3	2B.30	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Trucks Use Right Lane	R4-5	2B.31	24 x 30	24 x 30	36 x 48	48 x 60	_	36 x 48
Keep Right	R4-7,7a,7b	2B.32	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Narrow Keep Right	R4-7c	2B.32	18 x 30	18 x 30	_	_	_	_
Keep Left	R4-8,8a,8b	2B.32	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Narrow Keep Left	R4-8c	2B.32	18 x 30	18 x 30				_
Stay in Lane	R4-9	2B.33	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Runaway Vehicles Only	R4-10	2B.34	48 x 48	48 x 48	_	_	_	_
Slow Vehicles with XX or More Following Vehicles Must Use Turn-Out	R4-12	2B.35	42 x 24	42 x 24	_	_	_	_
Slow Vehicles Must Use Turn- Out Ahead	R4-13	2B.35	42 x 24	42 x 24	_	_	_	_



			Conventi	onal Road			<u> </u>	
Sign or Plaque	Sign Designation	Section	Single	Multi-	Expressway	Freeway	Minimum	Oversized
Slow Vehicles Must Turn Out	R4-14	2B.35	30 x 42	30 x 42				
Keep Right Except to Pass	R4-14	2B.30	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Do Not Drive on Shoulder	R4-17	2B.36	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Do Not Pass on Shoulder	R4-18	2B.36	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Do Not Enter	R5-1	2B.37	30 x 30*	36 x 36	36 x 36	48 x 48	10 X Z 4	36 x 36
Wrong Way	R5-1a	2B.38	36 x 24*	42 x 30	36 x 24*	42 x 30	30 x 18*	42 x 30
No Trucks	R5-2,2a	2B.39	24 x 24	24 x 24	30 x 30	36 x 36		36 x 36
No Motor Vehicles	R5-3	2B.39	24 x 24	24 x 24			24 x 24	
No Commercial Vehicles	R5-4	2B.39	24 x 30	24 x 30	36 x 48	36 x 48	_	_
No Vehicles with Lugs	R5-5	2B.39	24 x 30	24 x 30	36 x 48	48 x 60	_	_
No Bicycles	R5-6	2B.39	24 x 24	24 x 24	30 x 30	36 x 36	24 x 24	48 x 48
No Non-Motorized Traffic	R5-7	2B.39	30 x 24	30 x 24	42 x 24	48 x 30	_	42 x 24
No Motor-Driven Cycles	R5-8	2B.39	30 x 24	30 x 24	42 x 24	48 x 30	_	42 x 24
No Pedestrians, Bicycles, Motor-Driven Cycles	R5-10a	2B.39	30 x 36	30 x 36	_	_	_	_
No Pedestrians or Bicycles	R5-10b	2B.39	30 x 18	30 x 18	_	_	_	_
No Pedestrians	R5-10c	2B.39	24 x 12	24 x 12	_		_	_
Authorized Vehicles Only	R5-11	2B.39	30 x 24	30 x 24	_	_	_	_
AUTHORIZED VEHICLES ONLY	R5-11 (V)	2B.39	36 x 24	36 x 24	36 x 24	36 x 24	_	_
One Way	R6-1	2B.40	36 x 12*	54 x 18	54 x 18	54 x 18	_	54 x 18
One Way	R6-2	2B.40	24 x 30*	30 x 36	36 x 48	48 x 60	18 x 24*	36 x 48
Divided Highway Crossing	R6-3,3a	2B.42	30 x 24	30 x 24	36 x 30	ı	ı	36 x 30
Roundabout Directional (2 chevrons)	R6-4	2B.43	30 x 24	30 x 24	_	1	1	1
Roundabout Directional (3 chevrons)	R6-4a	2B.43	48 x 24	48 x 24				
Roundabout Directional (4 chevrons)	R6-4b	2B.43	60 x 24	60 x 24	_	_	_	_
Roundabout Circulation (plaque)	R6-5P	2B.44	30 x 30	30 x 30	_	_	_	_
BEGIN ONE WAY	R6-6	2B.40	24 x 30	30 x 36	_	_	_	_
END ONE WAY	R6-7	2B.40	24 x 30	30 x 36	_	ı	ı	1
Parking Restrictions	R7- 1,2,2a,3,4,5, 6,7,8,21,21a, 22,23,23a,10 7,108	2B.46	12 x 18	12 x 18	_	_	_	_
Van Accessible (plaque)	R7-8P	2B.46	18 x 9	18 x 9	_	_	_	_
Fee Station	R7-20	2B.46	24 x 18	24 x 18	_	_	_	_
No Parking (with transit logo)	R7-107a	2B.46	12 x 30	12 x 30	_	1	_	-



	Oi aura		Conventional Road				<u> </u>	
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
No Parking/Restricted Parking (combined sign)	R7-200	2B.46	24 x 18	24 x 18	_	_	_	_
No Parking/Restricted Parking (combined sign)	R7-200a	2B.46	12 x 30	12 x 30	_	ı	_	1
Tow Away Zone (plaque)	R7- 201P,201aP	2B.46	12 x 6	12 x 6	_	I	_	
This Side of Sign (plaque)	R7-202P	2B.46	12 x 6	12 x 6	_	1	_	1
Emergency Snow Route	R7-203	2B.46	18 x 24	18 x 24			_	24 x 30
No Parking on Pavement	R8-1	2B.46	24 x 30	24 x 30	36 x 48	48 x 60	_	36 x 48
No Parking Except on Shoulder	R8-2	2B.46	24 x 30	24 x 30	36 x 48	48 x 60	_	36 x 48
No Parking (symbol)	R8-3	2B.46	24 x 24*	30 x 30	36 x 36	48 x 48	12 x 12*	36 x 36
No Parking	R8-3a	2B.46	24 x 30	24 x 30	36 x 36	48 x 48	18 x 24	36 x 36
Except Sundays and Holidays (plaque)	R8-3bP	2B.46	24 x 18	24 x 18	_	_	12 x 9	30 x 24
On Pavement (plaque)	R8-3cP	2B.46	24 x 18	24 x 18	_		12 x 9	30 x 24
On Bridge (plaque)	R8-3dP	2B.46	24 x 18	24 x 18	_	_	12 x 9	30 x 24
On Tracks (plaque)	R8-3eP	2B.46	12 x 9	12 x 9	_		_	30 x 24
Except on Shoulder (plaque)	R8-3fP	2B.46	24 x 18	24 x 18	_		12 x 9	30 x 24
Loading Zone (plaque)	R8-3gP	2B.46	24 x 18	24 x 18	_		12 x 9	30 x 24
Times of Day (plaque)	R8-3hP	2B.46	24 x 18	24 x 18	_	_	12 x 9	30 x 24
Emergency Parking Only	R8-4	2B.49	30 x 24	30 x 24	30 x 24	48 x 36	_	48 x 36
No Stopping on Pavement	R8-5	2B.46	24 x 30	24 x 30	36 x 48	48 x 60	_	36 x 48
No Stopping Except on Shoulder	R8-6	2B.46	24 x 30	24 x 30	36 x 48	48 x 60	_	36 x 48
Emergency Stopping Only	R8-7	2B.49	30 x 24	30 x 24	48 x 36	48 x 36	_	48 x 36
Walk on Left Facing Traffic	R9-1	2B.50	18 x 24	18 x 24	_	_	_	_
Cross Only at Crosswalks	R9-2	2B.51	12 x 18	12 x 18	_	_	_	_
No Pedestrian Crossing (symbol)	R9-3	2B.51	18 x 18	18 x 18	24 x 24	30 x 30	_	30 x 30
No Pedestrian Crossing	R9-3a	2B.51	12 x 18	12 x 18	_	_	_	_
Use Crosswalk (plaque)	R9-3bP	2B.51	18 x 12	18 x 12	_	_	_	_
No Hitchhiking (symbol)	R9-4	2B.50	18 x 18	18 x 18	_	_	_	24 x 24
No Hitchhiking	R9-4a	2B.50	18 x 24	18 x 24	_		12 x 18	_
No Skaters	R9-13	2B.39	18 x 18	18 x 18	24 x 24	30 x 30	_	30 x 30
No Equestrians	R9-14	2B.39	18 x 18	18 x 18	24 x 24	30 x 30	_	30 x 30
Cross Only On Green	R10-1	2B.52	12 x 18	12 x 18	_	_	_	_
Pedestrian Signs and Plaques	R10- 2,3,3b,3c,3d, 4	2B.52	9 x 12	9 x 12	_	_	_	_

	Cimus	-	Conventi	onal Road		-		<u> </u>
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
Pedestrian Signs	R10- 3a,3e,3f, 3g,3h,3i,4a	2B.52	9 x 15	9 x 15	_	ı	_	ı
Left on Green Arrow Only	R10-5	2B.53	30 x 36	30 x 36	48 x 60	_	24 x 30	48 x 60
Stop Here on Red	R10-6	2B.53	24 x 36	24 x 36	_	_	_	36 x 48
Stop Here on Red	R10-6a	2B.53	24 x 30	24 x 30	_	_	_	36 x 42
Do Not Block Intersection	R10-7	2B.53	24 x 30	24 x 30	_	_	_	_
Use Lane with Green Arrow	R10-8	2B.53	36 x 42	36 x 42	36 x 42	_	_	60 x 72
Left (Right) Turn Signal	R10-10	2B.53	30 x 36	30 x 36	_	_	_	_
No Turn on Red	R10-11	2B.54	24 x 30*	36 x 48	_	_	_	36 x 48
No Turn on Red	R10-11a	2B.54	30 x 36*	36 x 48	_	_	_	_
No Turn on Red	R10-11b	2B.54	36 x 36	36 x 36	_	_	_	_
No Turn on Red Except From Right Lane	R10-11c	2B.54	30 x 42	30 x 42	_	_	_	_
No Turn on Red From This Lane	R10-11d	2B.54	30 x 42	30 x 42	_	_	_	_
Left Turn Yield on Green	R10-12	2B.53	30 x 36	30 x 36	_	_	_	_
Emergency Signal	R10-13	2B.53	42 x 30	42 x 30	_	_	_	_
Emergency Signal - Stop on Flashing Red	R10-14	2B.53	36 x42	36 x42	_	_	_	_
Emergency Signal - Stop on Flashing Red (overhead)	R10-14a	2B.53	60 x 24	60 x 24	_	_	_	_
Stop Here on Flashing Red	R10-14b	2B.53	24 x 36	24 x 36	_	_	_	36 x 48
Turning Vehicles Yield to Peds	R10-15	2B.53	30 x 30	30 x 30	_	_	_	_
U-Turn Yield to Right Turn	R10-16	2B.53	30 x 36	30 x 36	_	_	_	_
Right on Red Arrow After Stop	R10-17a	2B.54	36 x 48	36 x 48	_	_	_	_
Traffic Laws Photo Enforced	R10-18	2B.55	36 x 24	36 x 24	48 x 30	54 x 36	_	54 x 36
Traffic Signal - PHOTO ENFORCED	R10-18a	2B.55	30 x 42	30 x 42	30 x 42	_	_	_
Photo Enforced (symbol plaque)	R10-19P	2B.55	24 x 12	24 x 12	36 x 18	48 x 24	_	48 x 24
Photo Enforced (plaque)	R10-19aP	2B.55	24 x 18	24 x 18	36 x 30	48 x 36	_	48 x 36
MON—FRI (and times) (3 lines) (plague)	R10-20aP	2B.53	24 x 24	24 x 24	_	_	_	_
SUNDAY (and times) (2 lines) (plaque)	R10-20aP	2B.53	24 x 18	24 x 18	_	_	_	_
Crosswalk, Stop on Red	R10-23	2B.53	24 x 30	24 x 30	_	_	_	_
Pedestrian Signs and Plaques	R10-25	2B.52	9 x 12	9 x 12	_	_	_	_
Left Turn Yield on Flashing Red Arrow After Stop	R10-27	2B.53	30 x 36	30 x 36	_	_	_	_
XX Vehicles Per Green	R10-28	2B.56	24 x 30	24 x 30	_	_	_	
XX Vehicles Per Green Each Lane	R10-29	2B.56	36 x 24	36 x 24	_	_	_	_



			Conventi	onal Road				<u> </u>
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
Right Turn on Red Must Yield to U-Turn	R10-30	2B.54	30 x 36	30 x 36	_	_	_	_
At Signal (plaque)	R10-31P	2B.53	24 x 9	24 x 9	_	_	_	_
Push Button for 2 Seconds for Extra Crossing Time	R10-32P	2B.52	9 x 12	9 x 12	_	-	_	-
Keep Off Median	R11-1	2B.57	24 x 30	24 x 30	_	_	_	_
Road Closed	R11-2	2B.58	48 x 30	48 x 30	_	_	_	_
Road Closed - Local Traffic Only	R11-3a,3b,4	2B.58	60 x 30	60 x 30	_	_	_	_
Weight Limit	R12-1,2	2B.59	24 x 30	24 x 30	36 x 48	_	_	36 x 48
Weight Limit	R12-3	2B.59	24 x 36	24 x 36	_	_	_	_
Weight Limit	R12-4	2B.59	36 x 24	36 x 24	_	_	_	_
Weight Limit	<del>R12-5</del>	2B.59	<del>24 x 36</del>	<del>24 x 36</del>	<del>36 x 48</del>	48 x 60	_	_
WEIGHT LIMIT Symbol	R12-V1	2B.59	24 x 30	30 x 36	36 x 42	48 x 54	_	_
Weigh Station	R13-1	2B.60	72 x 54	72 x 54	96 x 72	120 x 90	_	_
Truck Route	R14-1	2B.61	24 x 18	24 x 18	_	_	_	_
Hazardous Material	R14-2,3	2B.62	24 x 24	24 x 24	30 x 30	36 x 36	_	42 x 42
National Network	R14-4,5	2B.63	30 x 30	30 x 30	36 x 36	36 x 36	_	42 x 42
Fender Bender Move Vehicles	R16-4	2B.65	36 x 24	<del>36 x 24</del> 48 x 36	48 x 36 60 x 48	60 x 48	_	48 x 36
FENDER BENDER MOVE VEHICLES	R16-4 (V)	2B.65	_	_	_	120 x 60	_	_
Lights On When Using Wipers or Raining	R16-5, <del>6</del>	2B.64	24 x 30	24 x 30	36 x 48	48 x 60	_	36 x 48
Turn On Headlights Next XX Miles	R16-7	2B.64	48 x 15	48 x 15	72 x 24	96 x 30	_	72 x 24
Turn On, Check Headlights	R16-8,9	2B.64	30 x 15	30 x 15	48 x 24	60 x 30	_	48 x 24
Begin, End Daytime Headlight Section	R16-10,11	2B.64	48 x 15	48 x 15	72 x 24	96 x 30	_	72 x 24
V		,	Virginia Spe	cific Signs				
NO DUMPING	R0-V1	2B.V1	24 x 24	24 x 24	_	_	_	_
LITTERING IS ILLEGAL	R0-V2	2B.V1	30 x 30	36 x 36	48 x 48	48 x 48	_	_
SPEED CHECKED BY RADAR AND OTHER ELECTRICAL DEVICES	R0-V3	2B.V2	54 x 30	96 x 42	126 x 54	126 x 54	_	_
RADAR DETECTORS ILLEGAL	R0-V4	2B.V2	54 x 36	54 x 36	72 x 48	72 x 48	_	_
HIGHWAY SAFETY CORRIDOR FINES	R0-V5	2B.V3	120 x 48	120 x 48	180 x 72	180 x 72	_	_
END HIGHWAY SAFETY CORRIDOR	R0-V6	2B.V3	72 x 24	72 x 24	144 x 48	144 x 48	_	_
SPEED LIMIT ENFORCED BY AIRCRAFT	R0-V7	2B.V2	_	_	90 x 54	90 x 54	_	_
TRUCKS-BUSES ALL TOWED VEHICLES CARS ONLY Rest Area Sign	R0-V8	2B.V4	_	_	114 x 36	114 x 36	_	_

		0.1		Conventional Road				
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
END XX MILE SPEED	R2-V2	2B.13	24 x 30	30 x 36	_	_	_	_
TOWED VEHICLES Speed Limit (plaque)	R2-VP1	2B.V5	24 x 30	30 x 36	36 x 48	48 x 60	_	_
Optional U-Turn/Left Turn	R3-V1	2B.21	30 x 36	30 x 36	_	_	_	_
COMMERCIAL VEHICLES EXCEPT BUSES USE RIGHT LANE WHEN OPERATED XX MPH OR BELOW	R4-V1	2B.V7	_	144 x 84	144 x 84	144 x 84	_	
COMMERCIAL VEHICLES EXCEPT BUSES PROHIBITED IN LEFT LANE	R4-V2	2B.V7	_	90 x 48	144 x 72	144 x 72	_	_
COMMERCIAL VEHICLES EXCEPT BUSES PROHIBITED IN LEFT LANE (Reduced Width)	R4-V2a	2B.V7	_	60 x 54	108 x 84	108 x 84	_	_
END COMMERCIAL VEHICLE RESTRICTION	R4-V3	2B.V7	_	108 x 48	108 x 48	108 x 48	_	_
TRUCKS AND COMBINATION VEHICLES USE RIGHT LANE WHEN OPERATED BELOW XX MPH	R4-V4	2B.V7		144 x 84	144 x 84	144 x 84		-
NO PEDESTRIANS, BICYCLES, MOPEDS, ANIMALS, SELF-PROPELLED MACHINERY OR EQUIPMENT	R5-V2	2B.39	_	_	36 x 48	36 x 48	_	
STATE POLICE PARKING ONLY	R7-V1	2B.46	24 x 30	24 x 30	24 x 30	24 x 30	_	_
TOW-AWAY ZONE PENALTY \$100-\$500 FINE (plaque)	R7-VP1	2B.46	12 x 9	12 x 9		_	_	_
UNATTENDED VEHICLES SUBJECT TO TOWING AT OWNER'S EXPENSE (plaque)	R8-VP1	2B.49	48 x 24	48 x 24	48 x 24	48 x 24	_	_
NO FISHING FROM BRIDGE	R9-V1	2B.V6	18 x 24	18 x 24	_	_	_	_
Pedestrian Swing Bridge	R9-V2	2B.V8	_	_	_		12 x 18	_
BRIDGE (plaque)	R12-VP1	2B.59	24 x 12	30 x 15	36 x 18	36 x 18	_	_

<sup>\*</sup> See Table 9B-1(VA) in this Supplement for minimum size required for signs on bicycle facilities

### Notes:

<sup>1.</sup> Larger signs may be used when appropriate

<sup>2.</sup> Dimensions in inches are shown as width x height

# Section 2B.12 <u>In-Street and Overhead Pedestrian Crossing</u> Signs (R1-6, R1-6a, R1-9, and R1-9a)

### V

### Option:

The In-Street Pedestrian Crossing (R1-6) sign (see Figure 2B-2(VA) in this Supplement) or the Overhead Pedestrian Crossing (R1-9) sign (see Figure 2B-2(VA) in this Supplement) may be used to remind road users of laws regarding right-of-way at an unsignalized pedestrian crosswalk. The legend STATE LAW may be displayed at the top of the R1-6 and R1-9 signs.

### Support:

The Code of Virginia § 46.2-924 requires that drivers at crosswalks yield the right-of-way to pedestrians crossing the highway. The Standard statement in Section 2B.12 of the National MUTCD permits the use of the Stop for Pedestrians (R1-6a and R1-9a) signs only if state law specifically requires the driver to stop for a pedestrian in a crosswalk. As The Code of Virginia does not require a driver to stop, the R1-6a and R1-9a signs are not used in Virginia.

### Standard:

The Stop For Pedestrians In-Street Pedestrian Crossing (R1-6a) and Stop for Pedestrians Overhead Pedestrian Crossing (R1-9a) signs shall not be used in Virginia.

### Option:

- On the R1-6 sign, the legend YIELD may be used instead of the appropriate YIELD sign symbol.
- Highway agencies may develop and apply criteria for determining the applicability of In-Street Pedestrian Crossing signs.

### Standard:

- of If used, the In-Street Pedestrian Crossing sign shall be placed in the roadway at the crosswalk location on the center line, on a lane line, or on a median island. The In-Street Pedestrian Crossing sign shall not be post-mounted on the left-hand or right-hand side of the roadway.
- 17 If used, the Overhead Pedestrian Crossing sign shall be placed over the roadway at the crosswalk location.
- An In-Street or Overhead Pedestrian Crossing sign shall not be placed in advance of the crosswalk to educate road users about the State law prior to reaching the crosswalk, nor shall it be installed as an educational display that is not near any crosswalk.

### Guidance:

If an island (see Chapter 3I) is available, the In-Street Pedestrian Crossing sign, if used, should be placed on the island.

### Option:

If a Pedestrian Crossing (W11-2) warning sign is used in combination with an In-Street or an Overhead Pedestrian Crossing sign, the W11-2 sign with a diagonal downward

pointing arrow (W16-7P) plaque may be post-mounted on the right-hand side of the roadway at the crosswalk location.

### **Standard:**

11 The In-Street Pedestrian Crossing sign and the Overhead Pedestrian Crossing sign shall not be used at signalized locations.



- The In-Street Pedestrian Crossing sign shall have a black legend (except for the red YIELD sign symbols) and border on a white background, surrounded by an outer yellow-or fluorescent yellow-green background area (see Figure 2B-2(VA) in this Supplement). The Overhead Pedestrian Crossing sign shall have a black legend and border on a yellow-or fluorescent yellow-green background at the top of the sign and a black legend and border on a white background at the bottom of the sign (see Figure 2B-2(VA) in this Supplement).
- Unless the In-Street Pedestrian Crossing sign is placed on a physical island, the sign support shall be designed to bend over and then bounce back to its normal vertical position when struck by a vehicle.

### Support:

14 The Provisions of Section 2A.18 of this Supplement concerning mounting height are not applicable for the In-Street Pedestrian Crossing sign.

### Standard:

15 The top of an In-Street Pedestrian Crossing sign shall be a maximum of 4 feet above the pavement surface. The top of an In-Street Pedestrian Crossing sign placed in an island shall be a maximum of 4 feet above the island surface.

### Option:

The In-Street Pedestrian Crossing sign may be used seasonally to prevent damage in winter because of plowing operations, and may be removed at night if the pedestrian activity at night is minimal.



In-Street Pedestrian Crossing signs, Overhead Pedestrian Crossing signs, and Yield Here To Pedestrians signs may be used together at the same crosswalk.

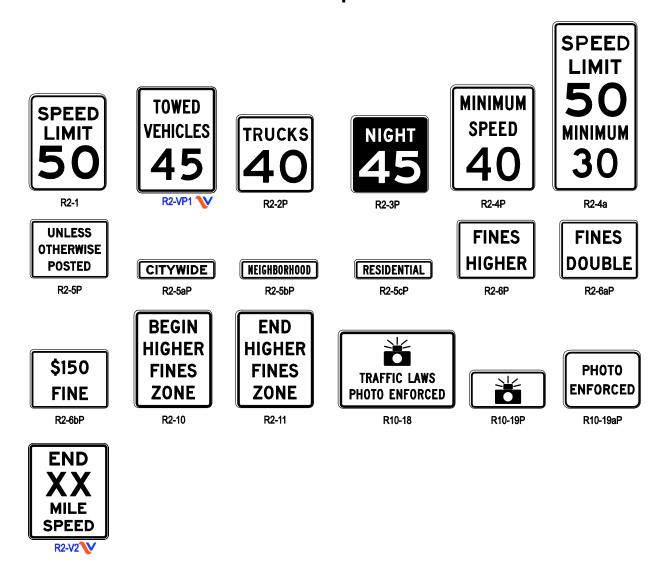


### Standard:

- Speed zones (other than statutory speed limits) shall only be established on the basis of an engineering study that has been performed in accordance with traffic engineering practices. The engineering study shall include an analysis of the current speed distribution of free-flowing vehicles.
- The Speed Limit (R2-1) sign (see Figure 2B-3(VA) in this Supplement) shall display the limit established by law, ordinance, regulation, or as adopted by the authorized agency based on the engineering study. The speed limits displayed shall be in multiples of 5 mph.

- OS Speed Limit (R2-1) signs, indicating speed limits for which posting is required by law, shall be located at the points of change from one speed limit to another.
- O4 At the downstream end of the section to which a speed limit applies, a Speed Limit sign showing the next speed limit shall be installed. Additional Speed Limit signs shall be installed beyond major intersections and at other locations where it is necessary to remind road users of the speed limit that is applicable.
- OF Speed Limit signs indicating the statutory speed limits shall be installed at entrances to the State and, where appropriate, at jurisdictional boundaries in urban areas.

# Figure 2B-3(VA). Speed Limit and Photo Enforcement Signs and Plaques



### Support:

- In general, the maximum speed limits applicable to rural and urban roads are established:
  - A. Statutorily a maximum speed limit applicable to a particular class of road, such as freeways or city streets, that is established by State law; or
  - B. As altered speed zones based on engineering studies.

### Option:

At the downstream end of a section to which a speed limit applies where the next section is governed by a statutorily established speed limit, the END XX MILE SPEED (R2-V2) sign (see Figure 2B-3(VA) in this Supplement) showing the previous speed limit may be installed.

### Support:

OS State statutory limits might restrict the maximum speed limit that can be established on a particular road, notwithstanding what an engineering study might indicate.

### Option:

19 If a jurisdiction has a policy of installing Speed Limit signs in accordance with statutory requirements only on the streets that enter a city, neighborhood, or residential area to indicate the speed limit that is applicable to the entire city, neighborhood, or residential area unless otherwise posted, a CITYWIDE (R2-5aP), NEIGHBORHOOD (R2-5bP), or RESIDENTIAL (R2-5cP) plaque may be mounted above the Speed Limit sign and an UNLESS OTHERWISE POSTED (R2-5P) plaque may be mounted below the Speed Limit sign (see Figure 2B-3(VA) in this Supplement).

### Guidance:

- A Reduced Speed Limit Ahead (W3-5 or W3-5a) sign (see Section 2C.38 of this Supplement) should be used to inform road users of a reduced speed zone where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates the need for advance notice to comply with the posted speed limit ahead.
- States and local agencies should conduct engineering studies to reevaluate nonstatutory speed limits on segments of their roadways that have undergone significant changes since the last review, such as the addition or elimination of parking or driveways, changes in the number of travel lanes, changes in the configuration of bicycle lanes, changes in traffic control signal coordination, or significant changes in traffic volumes.
- No more than three speed limits should be displayed on any one Speed Limit sign or assembly.
- When a speed limit within a speed zone is posted, it should be within 5 mph of the 85thpercentile speed of free-flowing traffic.
- Speed studies for signalized intersection approaches should be taken outside the influence area of the traffic control signal, which is generally considered to be approximately 1/2 mile, to avoid obtaining skewed results for the 85th-percentile speed.

### Support:

Advance warning signs and other traffic control devices to attract the motorist's attention to a signalized intersection are usually more effective than a reduced speed limit zone.

### Guidance:

An advisory speed plaque (see Section 2C.08 of this Supplement) mounted below a warning sign should be used to warn road users of an advisory speed for a roadway condition. A Speed Limit sign should not be used for this situation.

### Option:

- Other factors that may be considered when establishing or reevaluating speed limits are the following:
  - A. Road characteristics, shoulder condition, grade, alignment, and sight distance;
  - B. The pace;
  - C. Roadside development and environment;
  - D. Parking practices and pedestrian activity; and
  - E. Reported crash experience for at least a 12-month period.
- 18 Two types of Speed Limit signs may be used: one to designate passenger car speeds, including any nighttime information or minimum speed limit that might apply; and the other to show any special speed limits for trucks and other vehicles.
- A changeable message sign that changes the speed limit for traffic and ambient conditions may be installed provided that the appropriate speed limit is displayed at the proper times.
- A changeable message sign that displays to approaching drivers the speed at which they are traveling may be installed in conjunction with a Speed Limit sign.

### Guidance:

21 If a changeable message sign displaying approach speeds is installed, the legend YOUR SPEED XX MPH or such similar legend should be displayed. The color of the changeable message legend should be a yellow legend on a black background or the reverse of these colors.

### Support:

Advisory Speed signs and plaques are discussed in Section 2C.08 of this Supplement and Section 2C.14 of the MUTCD. Temporary Traffic Control Zone Speed signs are discussed in the "Virginia Work Area Protection Manual" (see Appendix A of this Supplement for link). The WORK ZONE (G20-5aP) plaque intended for installation above a Speed Limit sign is discussed in Section 6F.14 of the 2011 "Virginia Work Area Protection Manual." School Speed Limit signs are discussed in Section 7B.15 of the MUTCD.



# Section 2B.21 Optional Movement Lane Control Sign (R3-6,

## **R3-V1**

### Standard:

- O1 If used, the Optional Movement Lane Control (R3-6) sign (see Figure 2B-4(VA) in this Supplement) shall be used for two or more movements from a specific lane or to emphasize permitted movements. If used, the Optional Movement Lane Control sign shall be located in advance of the intersection, such as near the upstream end of an adjacent mandatory movement lane, and/or at the intersection where the regulation applies.
- 02 If used, the Optional Movement Lane Control sign shall indicate all permissible movements from specific lanes.
- Optional Movement Lane Control signs shall be used for two or more movements from a specific lane where a movement, not normally allowed, is permitted.
- 14 The Optional Movement Lane Control sign shall not be used alone to effect a turn prohibition.
- Where the number of lanes available to through traffic on an approach is three or more, an Optional Movement Lane Control (R3-6) sign, if used, shall be mounted overhead over the specific lane to which it applies (see Section 2B.19 of the MUTCD).

### Guidance:

16 If the Optional Movement Lane Control sign is post-mounted on an approach with two or fewer through lanes, a supplemental plaque (see Figure 2B-4(VA) in this Supplement), such as LEFT LANE (R3-5bP), HOV 2+ (R3-5cP), TAXI LANE (R3-5dP), CENTER LANE (R3-5eP), RIGHT LANE (R3-5fP), or BUS LANE (R3-5gP), should be added above the R3-6 sign to indicate the specific lane from which the optional movements can be made.

### Option:

The word message OK may be used within the border in combination with the arrow symbols of the R3-6 sign.

### Standard:

ONLY shall not be used on an Optional Movement Lane Control sign.

### Option:

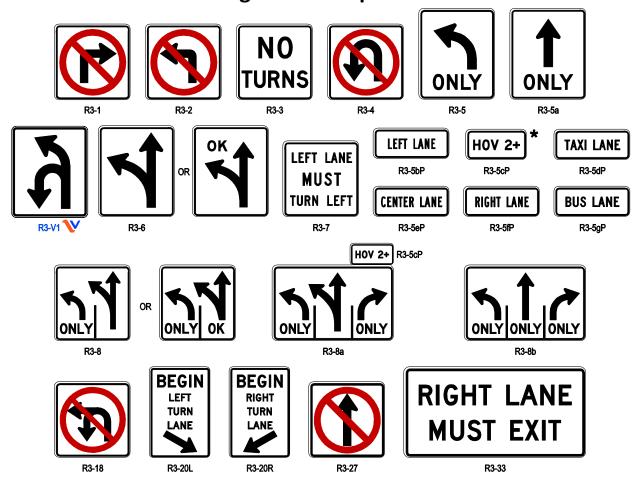


The Optional U-Turn/Left Turn (R3-V1) sign (see Figure 2B-4(VA) in this Supplement) may be used at signalized intersections where U-turns are allowed from an approach with multiple left-turn lanes.

### Guidance:

- 10 R3-V1 signs should be used only at intersections where there are known problems associated with motorists making U-turns from the right-most left turn lane(s).
- If used, R3-V1 signs should be mounted overhead and aligned with the center of the lane to which it applies.

# Figure 2B-4(VA). Movement Prohibition and Lane Control Signs and Plaques



The diamond symbol may be used instead of the "HOV" word message. The minimum vehicle occupancy level may vary, such as 2+, 3+, 4+. The words "LANE" or "ONLY" may be used with this sign when appropriate.

# Section 2B.25 <u>BEGIN and END Plaques (R3-9cP, R3-9cP (V)</u>, R3-9dP)

#### Option:

The BEGIN (R3-9cP, R3-9cP (V)) or END (R3-9dP) plaques (see Figure 2B-6 in the MUTCD) may be used to supplement a regulatory sign to inform road users of the location where a regulatory condition begins or ends.

#### Support:

The use of the BEGIN (R3-9cP (V)) plaque with the HIGHWAY SAFETY CORRIDOR FINES (R0-V5) sign is described in Section 2B.V3 of this Supplement.

#### Standard:

03 If used, the BEGIN or END plaque shall be mounted directly above a regulatory sign.

### **Section 2B.39 Selective Exclusion Signs**

#### Support:

O1 Selective Exclusion signs (see Figure 2B-11(VA) in this Supplement) give notice to road users that State or local statutes or ordinances exclude designated types of traffic from using particular roadways or facilities.

#### Standard:

If used, Selective Exclusion signs shall clearly indicate the type of traffic that is excluded.

#### Support:

- 03 Typical exclusion messages include:
  - A. No Trucks (R5-2),
  - B. NO MOTOR VEHICLES (R5-3),
  - C. NO COMMERCIAL VEHICLES (R5-4),
  - D. NO TRUCKS (VEHICLES) WITH LUGS (R5-5),
  - E. No Bicycles (R5-6),
  - F. NO NON-MOTORIZED TRAFFIC (R5-7),
  - G. NO MOTOR-DRIVEN CYCLES (R5-8),
  - H. No Pedestrians (R9-3),
  - I. No Skaters (R9-13),
  - J. No Equestrians (R9-14), and
  - K. No Hazardous Material (R14-3) (see Section 2B.62 of the MUTCD).

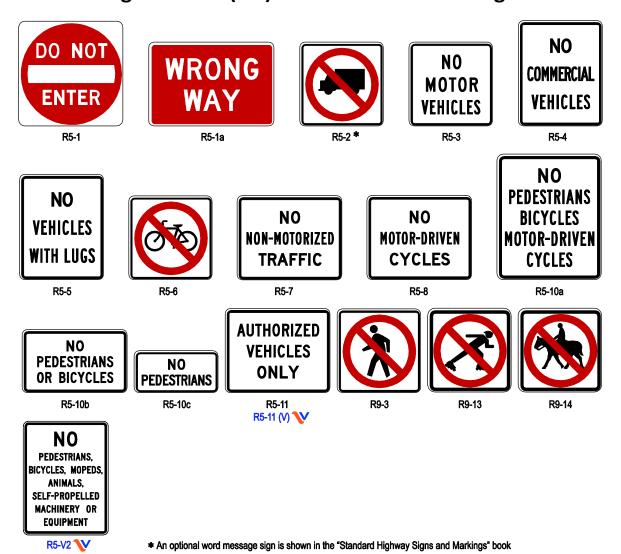
#### Option:

Appropriate combinations or groupings of these legends into a single sign, such as NO PEDESTRIANS BICYCLES MOTOR-DRIVEN CYCLES (R5-10a), or NO PEDESTRIANS OR BICYCLES (R5-10b) may be used.

#### Guidance:

- If an exclusion is governed by vehicle weight, a Weight Limit sign (see Section 2B.59 of this Supplement) should be used instead of a Selective Exclusion sign.
- If used on a freeway or expressway ramp, the NO PEDESTRIANS OR BICYCLES (R5-10b) sign should be installed in a location where it is clearly visible to any pedestrian or bicyclist attempting to enter the limited access facility from a street intersecting the exit ramp.
- The Selective Exclusion sign should be placed on the right-hand side of the roadway at an appropriate distance from the intersection so as to be clearly visible to all road users turning into the roadway that has the exclusion. The NO PEDESTRIANS (R5-10c) or No Pedestrian Crossing (R9-3) sign (see Section 2B.51 of the MUTCD) should be installed so as to be clearly visible to pedestrians who are at a location where an alternative route is available.

## Figure 2B-11(VA). Selective Exclusion Signs



#### Option:

- The NO PEDESTRIANS (R5-10c) or No Pedestrian Crossing (R9-3) sign may also be used at underpasses or elsewhere where pedestrian facilities are not provided.
- The NO TRUCKS (R5-2a) word message sign may be used as an alternate to the No Trucks (R5-2) symbol sign.

#### Standard:

The AUTHORIZED VEHICLES ONLY (R5-11 (V)) sign shall be installed on limited access highways at all non-chained crossovers not intended for public use, 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 highway business authorized by VDOT.

June 2011 Chapter 2B



#### Guidance:

11 The AUTHORIZED VEHICLES ONLY (R5-11 (V)) sign should be installed at non-chained crossovers not intended for public use when it has been determined that motorists frequently attempt to use the crossover.

#### Support:

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

#### Standard:

14 The NO PEDESTRIANS, BICYCLES, MOPEDS, ANIMALS, SELF-PROPELLED MACHINERY, OR EQUIPMENT (R5-V2) sign shall be used to mark the entrances to any section of limited access highway on which the Commonwealth Transportation Board has imposed such restriction.

#### Support:

- An entrance to a section of limited access highway can include locations where a nonlimited access facility turns into a limited access facility.
- The NO PEDESTRIANS, BICYCLES, MOPEDS, ANIMALS, SELF-PROPELLED MACHINERY, OR EQUIPMENT (R5-V2) sign is required in accordance with the Code of Virginia § 46.2-808.

# Section 2B.41 Wrong-Way Traffic Control at Interchange Ramps

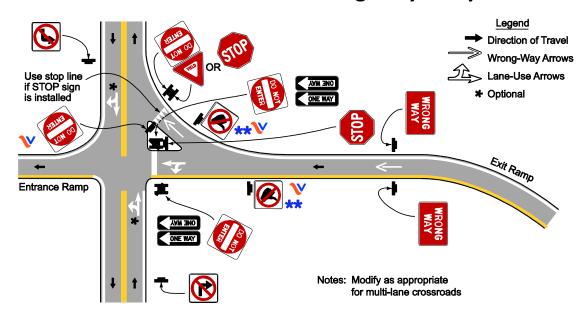
#### Standard:

- At interchange exit ramp terminals where the ramp intersects a crossroad in such a manner that wrong-way entry could inadvertently be made, the following signs shall be used (see Figure 2B-18(VA) in this Supplement):
  - A. Two ONE WAY signs for each direction of travel on the crossroad shall be placed where the exit ramp intersects the crossroad.
  - B. If an island exists on the ramp between the channelized right turn lane and the stop controlled lane(s), two ONE WAY signs for each direction of travel on the crossroad shall be placed in the island.
  - C. At least two DO NOT ENTER signs shall be conspicuously placed near the downstream end of the exit ramp in positions appropriate for full view of a road user starting to enter wrongly from the crossroad.
  - D. One DO NOT ENTER sign shall be conspicuously placed on the back of the STOP or YIELD sign controlling movements on the channelized right turn lane. See Section 2B.10 of the MUTCD for guidance related to signs mounted on the back of STOP or YIELD signs.



- E. Two WRONG WAY signs shall be placed on the exit ramp at least 250 feet from the crossroad facing a road user traveling in the wrong direction.
- F. A NO LEFT TURN and/or a NO RIGHT TURN sign shall be placed on the crossroad in advance of the intersection with the ramp.
- At interchange exit ramp terminals where the ramp intersects a crossroad in such a manner that wrong-way entry could inadvertently be made, the following pavement markings shall be used (see Figure 2B-18(VA) in this Supplement):
  - A. On two-lane paved crossroads at interchanges, double solid yellow lines shall be used as a center line for an adequate distance on both sides approaching the ramp intersections.
  - B. A lane-use arrow shall be placed in each lane of an exit ramp near the crossroad terminal where it will be clearly visible to a potential wrong-way road user and to indicate the permissive direction of flow.
  - C. Slender, elongated wrong-way arrow pavement markings (see Figure 3B-24) intended primarily to warn wrong-way road users that they are traveling in the wrong direction shall be placed upstream from the ramp terminus (see Figure 2B-18(VA) in this Supplement) to indicate the correct direction of traffic flow.
  - D. When channelized turn roadways exist, a wrong-way arrow shall be placed near the channelized turn roadway terminal.

# Figure 2B-18(VA). Example of Application of Regulatory Signing and Pavement Markings at an Exit Ramp Termination to Deter Wrong-Way Entry



\*\* The No Hitchhiking signs are shown for informational purposes (see Section 2B.50 of this Supplement for use of the sign)

#### Option:

- The following traffic control devices may be used to supplement the signs and pavement markings described in Paragraphs 1 and 2:
  - A. Additional ONE WAY signs may be placed, especially on two-lane rural crossroads, appropriately in advance of the ramp intersection to supplement the required ONE WAY sign(s).
  - B. Additional WRONG WAY signs may be used.
  - C. Additional wrong-way arrow pavement markings may also be placed on the exit ramp at appropriate locations to indicate wrong-way movement.
  - D. The additional wrong-way arrow markings may consist of pavement markings or a combination of pavement markings and bidirectional red-and-white raised pavement markers or other units that show red to wrong-way road users and white to other road users (see Figure 3B-24).
  - E. Lane-use arrow pavement markings may be placed on the crossroad near its intersection with the exit ramp to indicate the permissive direction of flow.
  - F. Freeway entrance signs (see Section 2D.46 of the MUTCD) may be used.

#### Standard:

- 04 If bidirectional red-and-white raised pavement markers are used according to the option in Section D of Paragraph 3, an engineering study shall be conducted to justify the use of the markers.
- On interchange entrance ramps where the ramp merges with the through roadway and the design of the interchange does not clearly make evident the direction of traffic on the separate roadways or ramps, a ONE WAY sign visible to traffic on the entrance ramp and through roadway shall be placed on each side of the through roadway near the entrance ramp merging point as illustrated in Figure 2B-19.

#### Option:

Of At locations where engineering judgment determines that a special need exists, other standard warning or prohibitive methods and devices may be used as a deterrent to the wrong-way movement.

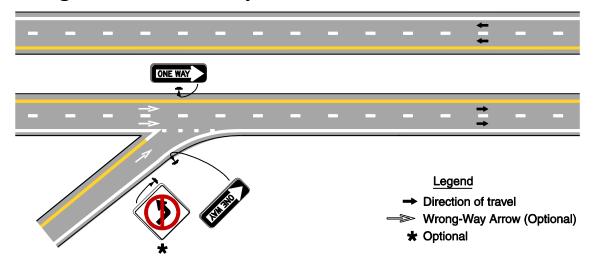
#### Standard:

- or Except for where DO NOT ENTER signs are attached to the back of a STOP or YIELD sign, ONE WAY signs shall be mounted below the DO NOT ENTER signs. See MUTCD Section 2B.10 for guidance related to signs mounted on the back of STOP or YIELD signs.
- DO NOT ENTER & ONE WAY sign assemblies (see Figure 2B-18(VA) in this Supplement) that are located along the exit ramp facing a road user who is traveling in the wrong direction shall be installed at a minimum mounting height of 3 feet, measured vertically from the bottom of the ONE WAY sign to the elevation of the near edge of the pavement.





# Figure 2B-19. Example of Application of Regulatory Signing and Pavement Markings at an Entrance Terminal Where the Design Does Not Clearly Indicate the Direction of Flow



#### Support:

Section 2B.42 of the MUTCD contains further information on signing to avoid wrongway movements at at-grade intersections on expressways.

# Section 2B.46 <u>Parking, Standing, and Stopping Signs (R7 and R8 Series)</u>

#### Support:

- Signs governing the parking, stopping, and standing of vehicles cover a wide variety of regulations, and only general guidance can be provided here. The word "standing" when used on the R7 and R8 series of signs refers to the practice of a driver keeping the vehicle in a stationary position while continuing to occupy the vehicle. Typical examples of parking, stopping, and standing signs and plaques (see Figures 2B-24(VA) and 2B-25(VA) in this Supplement) are as follows:
  - 1. NO PARKING ANY TIME (R7-1);
  - 2. NO PARKING X:XX AM TO X:XX PM (R7-2, R7-2a);
  - 3. NO PARKING EXCEPT SUNDAYS AND HOLIDAYS (R7-3);
  - 4. NO STANDING ANY TIME (R7-4);
  - 5. XX HOUR PARKING X:XX AM X:XX PM (R7-5);
  - 6. NO PARKING LOADING ZONE (R7-6);
  - 7. NO PARKING BUS STOP (R7-7, R7-107, R7-107a);
  - 8. RESERVED PARKING for persons with disabilities (R7-8);

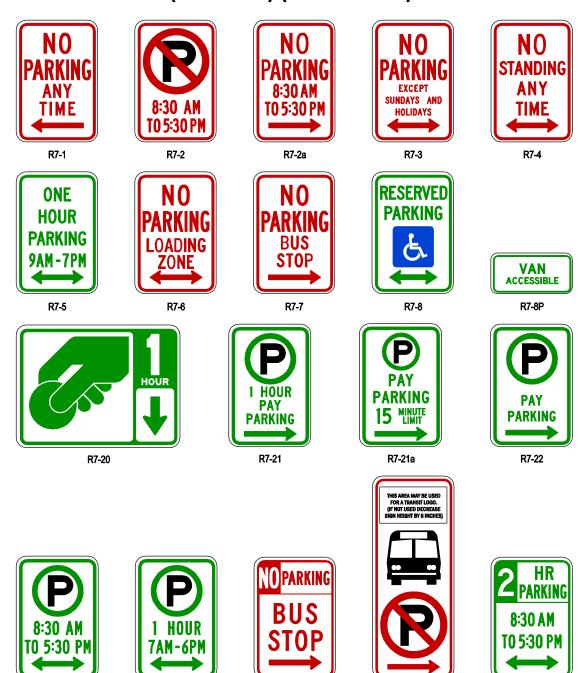
- 9. VAN ACCESSIBLE (R7-8P);
- 10. Pay Station (R7-20);
- 11. Pay Parking (R7-21, R7-21a, R7-22);
- 12. Parking Permitted X:XX AM TO X:XX PM (R7-23);
- 13. Parking Permitted XX HOUR(S) XX AM XX PM (R7-23a);
- 14. XX HR PARKING X:XX AM TO X:XX PM (R7-108);
- 15. NO PARKING ANYTIME/XX HOUR PARKING X:XX AM X:XX PM (R7-200, R7-200a);
- 16. TOW-AWAY ZONE (R7-201P, R7-201aP);
- 17. THIS SIDE OF SIGN (R7-202P);
- 18. EMERGENCY SNOW ROUTE NO PARKING IF OVER XX INCHES (R7-203);
- 19. NO PARKING ON PAVEMENT (R8-1);
- 20. NO PARKING EXCEPT ON SHOULDER (R8-2);
- 21. No Parking (R8-3, R8-3a);
- 22. EXCEPT SUNDAYS & HOLIDAYS (R8-3bP);
- 23. ON PAVEMENT (R8-3cP);
- 24. ON BRIDGE (R8-3dP);
- 25. ON TRACKS (R8-3eP);
- 26. EXCEPT ON SHOULDER (R8-3fP);
- 27. LOADING ZONE (R8-3gP);
- 28. X:XX AM TO X:XX PM (R8-3hP);
- 29. EMERGENCY PARKING ONLY (R8-4);
- 30. NO STOPPING ON PAVEMENT (R8-5);
- 31. NO STOPPING EXCEPT ON SHOULDER (R8-6);
- 32. EMERGENCY STOPPING ONLY (R8-7);
- 33. TOW-AWAY ZONE PENALTY \$100-\$500 FINE Plaque (R7-VP1);
- 34. STATE POLICE PARKING ONLY (R7-V1).



R7-23

R7-23a

Figure 2B-24(VA). Parking and Standing Signs and Plaques (R7 Series) (Sheet 1 of 2)



May 2011 Chapter 2B

R7-107

R7-107a

R7-108

Figure 2B-24(VA). Parking and Standing Signs and Plaques (R7 Series) (Sheet 2 of 2)



# Figure 2B-25(VA). Parking and Stopping Signs and Plaques (R8 Series)





# Section 2B.49 Emergency Restriction Signs (R8-4, R8-7, R8-8, R8-VP1)

#### Option:

- on The EMERGENCY PARKING ONLY (R8-4) sign or the EMERGENCY STOPPING ONLY (R8-7) sign (see Figure 2B-25(VA) in this Supplement) may be used to discourage or prohibit shoulder parking, particularly where scenic or other attractions create a tendency for road users to stop temporarily.
- The DO NOT STOP ON TRACKS (R8-8) sign (see Figure 8B-1 in the MUTCD) may be used to discourage or prohibit parking or stopping on railroad or light rail transit tracks (see Section 8B.09 of the MUTCD).

#### Standard:

os Emergency Restriction signs shall be rectangular and shall have a red or black legend and border on a white background.

#### Option:



At the request of the Virginia State Police, an UNATTENDED VEHICLES SUBJECT TO TOWING AT OWNERS EXPENSE (R8-VP1) plaque may be added to the EMERGENCY STOPPING ONLY (R8-7) sign (see Figure 2B-25(VA) in this Supplement).

# Section 2B.50 <u>WALK ON LEFT FACING TRAFFIC and No</u> <u>Hitchhiking Signs (R9-1, R9-4, R9-4a)</u>

#### Option:

of The WALK ON LEFT FACING TRAFFIC (R9-1) sign (see Figure 2B-26) may be used on highways where no sidewalks are provided.

#### Standard:

o2 If used, the WALK ON LEFT FACING TRAFFIC sign shall be installed on the right-hand side of the road where pedestrians walk on the pavement or shoulder in the absence of pedestrian pathways or sidewalks.

#### Option:



The No Hitchhiking (R9-4) sign (see Figure 2B-26) may be used to prohibit standing in or adjacent to the roadway for the purpose of soliciting a ride. The R9-4a word message sign (see Figure 2B-26) may be used as an alternate to the R9-4 symbol sign. Typical placement of the No Hitchhiking (R9-4) sign on a freeway interchange ramp is shown in Figure 2B-18(VA) in this Supplement.

#### Standard:

04 When used on a freeway interchange ramp, the No Hitchhiking (R9-4) sign shall be placed no less than 50 feet and no greater than 100 feet from the stop line pavement marking.

# Section 2B.53 Traffic Signal Signs (R10-5 through R10-30)

#### Option:

- To supplement traffic signal control, Traffic Signal signs R10-5 through R10-30 may be used to regulate road users.
- Traffic Signal signs (see Figure 2B-27(VA) in this Supplement) may be installed at certain locations to clarify signal control. Among the legends that may be used for this purpose are LEFT ON GREEN ARROW ONLY (R10-5), STOP HERE ON RED (R10-6 or R10-6a) for observance of stop lines, DO NOT BLOCK INTERSECTION (R10-7) for avoidance of traffic obstructions, USE LANE(S) WITH GREEN ARROW (R10-8) for obedience to lane-use control signals (see Chapter 4M), LEFT TURN YIELD ON GREEN (symbolic circular green) (R10-12), and LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP (R10-27).

Figure 2B-26 Pedestrian Signs and Plaques (Sheet 1 of 2)



## Figure 2B-26 Pedestrian Signs and Plaques (Sheet 2 of 2)









R10-25

#### R10-32P

#### Guidance:

If used, the LEFT ON GREEN ARROW ONLY (R10-5) sign, the LEFT TURN YIELD ON GREEN (symbolic circular green) (R10-12) sign, or the LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP (R10-27) sign should be located adjacent to the left-turn signal face.

#### Option:

- of If needed for additional emphasis, an additional LEFT TURN YIELD ON GREEN (symbolic circular green) (R10-12) sign with an AT SIGNAL (R10-31P) supplemental plaque (see Figure 2B-27(VA) in this Supplement) may be installed in advance of the intersection.
- In situations where traffic control signals are coordinated for progressive timing, the Traffic Signal Speed (I1-1) sign may be used (see Section 2H.03 of the MUTCD).

#### Standard:

- The CROSSWALK STOP ON RED (symbolic circular red) (R10-23) sign (see Figure 2B-27(VA) in this Supplement) shall only be used in conjunction with pedestrian hybrid beacons (see Section 4F.02 of the MUTCD).
- The EMERGENCY SIGNAL (R10-13) sign (see Figure 2B-27(VA) in this Supplement) shall be used in conjunction with emergency-vehicle traffic control signals (see Section 4G.02 of the MUTCD).
- The EMERGENCY SIGNAL—STOP ON FLASHING RED (R10-14 or R10-14a) sign (see Figure 2B-27(VA) in this Supplement) shall be used in conjunction with emergency-vehicle hybrid beacons (see Section 4G.04 of the MUTCD).

#### Option:

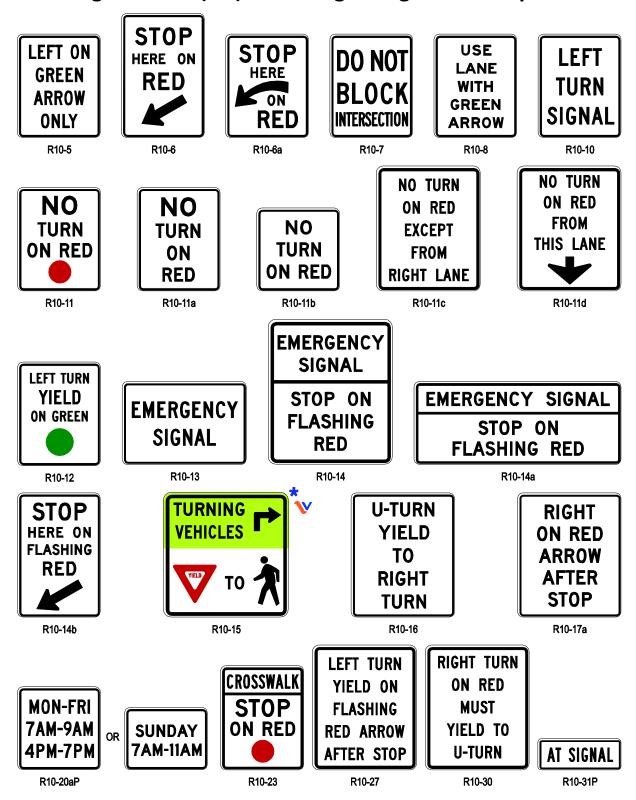
In order to remind drivers who are making turns to yield to pedestrians, a Turning Vehicles Yield to Pedestrians (R10-15) sign (see Figure 2B-27(VA) in this Supplement) may be used.

#### Standard:



10 If used, the TURNING VEHICLES YIELD TO PEDESTRIANS (R10-15) sign shall utilize a fluorescent yellow-green background (see Figure 2B-27(VA) in this Supplement).

# Figure 2B-27(VA) Traffic Signal Signs and Plaques



\* A fluorescent yellow-green background color may shall be used instead of yellow for this sign.

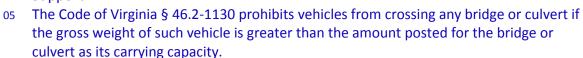
A U-TURN YIELD TO RIGHT TURN (R10-16) sign (see Figure 2B-27(VA) in this Supplement) may be installed near the left-turn signal face if U-turns are allowed on a protected left-turn movement on an approach from which a right-turn GREEN ARROW signal indication is simultaneously being displayed to drivers making a right turn from the conflicting approach to their left.

# Section 2B.59 Weight Limit Signs (R12-1 through R12-4, R12-5, R12-V1, R12-VP1)

#### Option:

- of The Weight Limit (R12-1) sign carrying the legend WEIGHT LIMIT XX TONS may be used to indicate vehicle weight restrictions including load.
- Where the restriction applies to axle weight rather than gross load, the legend may be AXLE WEIGHT LIMIT XX TONS or AXLE WEIGHT LIMIT XX LBS (R12-2).
- To restrict trucks of certain sizes by reference to empty weight in residential areas, the legend may be NO TRUCKS OVER XX TONS EMPTY WT or NO TRUCKS OVER XX LBS EMPTY WT (R12-3).
- In areas where multiple regulations of the type described in Paragraphs 1 through 3 are applicable, a sign combining the necessary messages on a single sign may be used, such as WEIGHT LIMIT XX TONS PER AXLE, XX TONS GROSS (R12-4).

#### Support:



#### Standard:

- In accordance with the Code of Virginia, Weight Limit symbol (R12-V1) signs (see Figure 2B-29(VA) in this Supplement) shall be installed near each end of bridges and culverts as described in Paragraph 5. Additionally, Weight Limit symbol signs shall be installed in advance of the last alternate route approaching the bridge. At the nearest junction upstream of the bridge, the R12-V1 sign shall also be installed in both directions of the cross streets so as to prevent turning traffic from approaching the bridge. Figure 2B-V1 in this Supplement shows an example of such signing.
- 07 The R12-5 Weight Limit sign from the MUTCD shall not be used.

#### Guidance:

- o8 If the weight restriction for a single unit truck is over 20 tons, the truck symbol should show tandem axles on the rear. If the weight restriction for a tractor-trailer combination is over 30 tons, the trailer symbol should show tandem axles.
- op Table 2C-4 should be used to determine the placement distance of the signs in advance of the last alternate route. One additional Weight Limit symbol (R12-V1) sign should be



installed a maximum of 150 feet beyond the last intersection on the approach road in advance of the bridge or culvert.

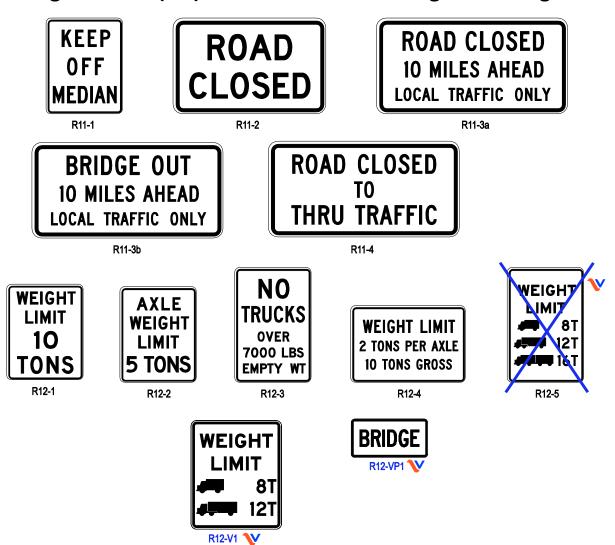
#### Option:

An advisory distance ahead plaque (see Section 2C.53 of the MUTCD) may be placed in advance of the last alternate route intersection.

#### Standard:

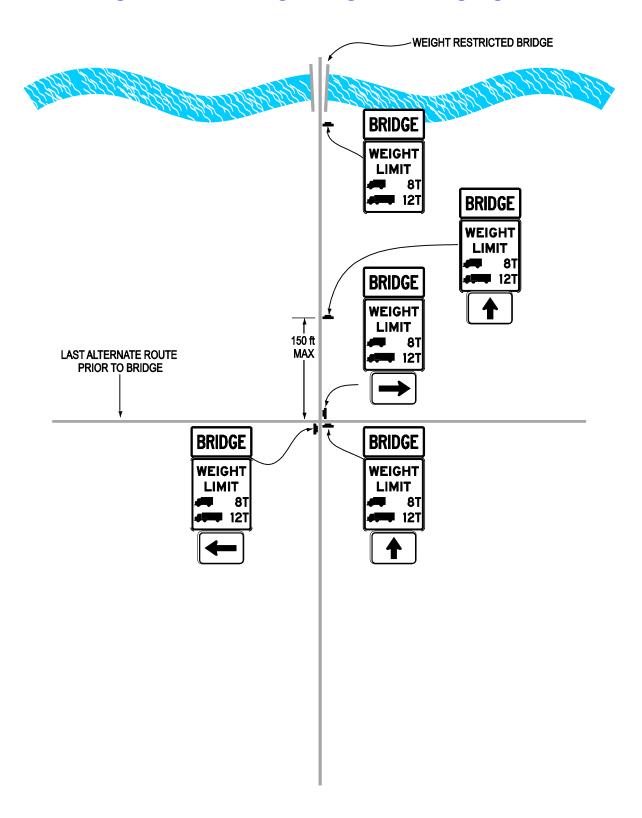
- Where a Weight Limit symbol (R12-V1) sign is installed because of a weight restriction on a bridge, the BRIDGE (R12-VP1) plaque shall be mounted above.
- When the advance signs are installed on the approach roads, a third sign consisting of the appropriate Directional Arrow Auxiliary (M6 Series) sign (see Section 2D.28 of the MUTCD) shall be included below the Weight Limit symbol sign to indicate the direction of the structure shall be installed (see Figure 2B-29(VA) in this Supplement).

### Figure 2B-29(VA). Road Closed and Weight Limit Signs





# Figure 2B-V1. Bridge Weight Limit Signage



#### Option:

Restricted structures on secondary routes may be signed using the R12-1 sign if engineering judgment determines that significant volumes of trucks carrying semitrailers are not present.

#### Guidance:

14 When using the Option described in Paragraph 13 above, advance signing should consist of the same signing as required in Paragraphs 6 through 12 above, with the R12-1 sign substituting for the R12-V1 sign.

#### Support:

The R12-V1 sign design is variable based on the weight restrictions determined for the truck classifications. Refer to the "Virginia Standard Highway Signs" book (see Appendix A of this Supplement for link) for design details.

## Section 2B.64 Headlight Use Signs (R16-5 through R16-11)

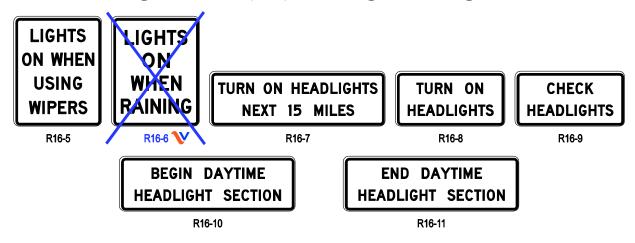
#### Support:

- Virginia requires road users to turn on their vehicle headlights under certain weather conditions, as a safety improvement measure on roadways experiencing high crash rates, or in special situations such as when driving through a tunnel.
- Figure 2B-31(VA) in this Supplement shows the various signs that can be used for informing motorists of these requirements.

#### Standard:

- 03 LIGHTS ON WHEN USING WIPERS (R16-5) signs shall be installed on Interstates and other major routes at or near the State boundary facing traffic entering Virginia.
- 04 The LIGHTS ON WHEN RAINING (R16-6) sign shall not be used in Virginia.

## Figure 2B-31(VA). Headlight Use Signs







#### Support:

In accordance with the Code of Virginia § 46.2-1030, drivers are required to turn on vehicle headlights when using wipers. The Code of Virginia does not require drivers to turn on vehicle headlights when raining if wipers are not being used; therefore the R16-6 sign is not used in Virginia.

#### Option:

These signs may also be installed at other locations within the State where engineering judgment determines they are necessary.

#### Guidance:

of If a particular section of roadway has been designated as a safety improvement zone within which headlight use is required, a TURN ON HEADLIGHTS NEXT XX MILES (R16-7) sign or a BEGIN DAYTIME HEADLIGHT SECTION (R16-10) sign should be installed at the upstream end of the section, and a END DAYTIME HEADLIGHT SECTION (R16-11) sign should be installed at the downstream end of the section.

#### Option:

A TURN ON HEADLIGHTS (R16-8) sign may be installed to require road users to turn on their headlights in special situations such as when driving through a tunnel. A CHECK HEADLIGHTS (R16-9) sign may be installed downstream from the special situation to inform drivers that the using their headlights is no longer required.



## Section 2B.65 FENDER BENDER Sign (R16-4, R16-4 (V))

#### Option:

01 A FENDER BENDER MOVE VEHICLES FROM TRAVEL LANES (R16-4, R16-4 (V)) sign (see Figure 2B-32(VA) in this Supplement) may be installed to require motorists to move their vehicle out of the travel lanes if they have been involved in a crash.

# Figure 2B-32(VA). Other Regulatory Signs and Symbols



R16-4 (V) V



June 2011 Chapter 2B



#### Guidance:

The R16-4 or R16-4(V) sign should be placed at locations with major highway construction, and at locations where traffic congestion is known to occur.

#### Support:

The sign placement guidelines described in Paragraph 02 are in accordance with 1999 House Joint Resolution 570.

#### Guidance:

O4 A CALL CELLULAR #77 FOR STATE POLICE (D12-V1) sign should be installed below a FENDER BENDER MOVE VEHICLES FROM TRAVEL LANES (R16-4, R16-4 (V)) sign (see Section 2I-09 of this Supplement). If used, the two signs should be the same width.

### V

### Section 2B.V1 Anti-Littering Signs (R0-V1, R0-V2)

#### Option:

- The following signs may be utilized where there is evidence of trash along the roadway or littering activity (see Figure 2B-V2 in this Supplement):
  - 1. NO DUMPING (R0-V1) signs;
  - 2. LITTERING IS ILLEGAL (RO-V2) signs.

# V

# Section 2B.V2 Radar and Speed Limit Enforcement Signs (R0-V3, R0-V4)

#### Support:

- The following messages are used to convey Virginia-specific laws pertaining to speed limit enforcement and the use of radar detectors (see Figure 2B-V3 in this Supplement):
  - SPEED CHECKED BY RADAR AND OTHER ELECTRICAL DEVICES (RO-V3)
  - RADAR DETECTORS ILLEGAL (R0-V4)



### Figure 2B-V2. Anti-Littering Signs





R0-V2



## Figure 2B-V3. Radar and Speed Limit Enforcement Signs

SPEED CHECKED BY RADAR AND OTHER ELECTRICAL DEVICES

R0-V3



SPEED LIMIT ENFORCED BY AIRCRAFT

R0-V7

R0-V4

#### Standard:

- In cooperation with the Virginia State Police (VSP), signs used to communicate speed limit enforcement and the use of radar detectors shall be installed on Interstate, U.S., and Primary routes at or near the State boundary facing traffic entering Virginia and at other locations determined by the VSP and engineering judgment.
- 03 Such signs shall have a white legend and border on a black background.
- The SPEED LIMIT ENFORCED BY AIRCRAFT (R0-V7) sign (see Figure 2B-V3 in this Supplement) shall only be installed on interstate highways. The sign shall be installed in conjunction with the speed measurement markings described in Section 3B.21 of this Supplement.

#### Support:

The Virginia General Assembly enacted legislation, effective July 1, 2000, amending § 46.2-882 of the Code of Virginia to allow the use of aircraft for enforcement of the speed limit on interstate highways. Speed measurement markings are used by the Virginia State Police with the Visual Average Speed Computer and Monitor (VASCAR) units within aircraft as a point of reference to determine the speed of vehicles.



# Section 2B.V3 <u>Highway Safety Corridor Signs (R0-V5, R0-V6, R0-9cP (V))</u>

#### Support:

- In accordance with the Code of Virginia §§ 33.1-223.2:8 and 46.2-947, Highway Safety Corridors are officially designated primary route segments with unusually high crash rates. Drivers committing traffic violations in these corridors are subject to higher fines than usual. Moving violation finds are no more than \$500, and criminal traffic offenses are no less than \$200.
- OZ HIGHWAY SAFETY CORRIDOR FINES (RO-V5) signs (see Figure 2B-V4 in this Supplement) are used to communicate the presence of an officially designated Highway Safety Corridor and the fines for violating one of Virginia's driving laws while driving within such an area.

#### Standard:

- O3 In accordance with the Code of Virginia, Highway Safety Corridors shall only be established on Virginia Primary and Interstate highways. Highway Safety Corridor signs shall only be installed on Virginia Primary and Interstate highways.
- 04 HIGHWAY SAFETY CORRIDOR FINES (R0-V5) signs shall be placed at the beginning of each officially designated Highway Safety Corridor and at other points throughout the corridor based on engineering judgment.

#### Guidance:

os Engineering judgment used in determining the location of HIGHWAY SAFETY CORRIDOR FINES (RO-V5) signs should take into consideration placement of these signs after entrance ramps to inform drivers that they are entering a Highway Safety Corridor.

#### Standard:

- A BEGIN (R3-9cP (V)) auxiliary plaque (see Section 2B.25 of this Supplement and Figure 2B-V4 in this Supplement) shall be placed above the R0-V5 sign denoting the beginning of the officially designated Highway Safety Corridor.
- O7 An END HIGHWAY SAFETY CORRIDOR (R0-V6) sign (see Figure 2B-V4 in this Supplement) shall be used to denote the end of the officially designated Highway Safety Corridor.

#### Support:

Additional information about the Highway Safety Corridor Program can be found on VDOT's web site (link provided in Appendix A of this Supplement).



## Figure 2B-V4. Highway Safety Corridor Signs



R3-9cP (V)

# HIGHWAY SAFETY CORRIDOR

FINES FOR MOVING VIOLATIONS

\$200 MIN - CRIMINAL OFFENSES

\$500 MAX - TRAFFIC INFRACTIONS

R0-V5

# END HIGHWAY SAFETY CORRIDOR

R0-V6



## Section 2B.V4 Rest Area Directional Sign (R0-V8)

#### Standard:

Rest Area Directional Signs (R0-V8) (see Figure 2B-V5 in this Supplement) shall be installed at the entrances to Rest Areas to direct traffic to the appropriate parking area.

#### Support:

The Rest Area Directional Sign is designed for the specific layout of the individual Rest Area. The exact location and layout of the sign will vary depending on the specific Rest

Area to which it applies. Typical lines of text used on Rest Area Directional Signs include:

- A. CARS ONLY
- B. TRUCKS-BUSES
- C. ALL TOWED VEHICLES

#### Guidance:

The placement and orientation of the arrows and the order of the lines of text should follow the guidelines in Section 2D.37 of the MUTCD.

# Section 2B.V5 TOWED VEHICLES Plaque (R2-VP1)

#### Support:

The Code of Virginia § 46.2-870 establishes a speed limit of 45 miles per hour for vehicles being used to tow a vehicle designed for self-propulsion, or a house trailer.

#### Guidance:

TOWED VEHICLES (R2-VP1) plaques (see Figure 2B-3(VA) in this Supplement) should be installed below SPEED LIMIT (R2-1) signs on roadways with a speed limit greater than 45 mph where there is a significant volume of towed vehicles.

# Section 2B.V6 NO FISHING FROM BRIDGE Signs (R9-V1)

#### Option:

of The NO FISHING FROM BRIDGE (R9-V1) sign (see Figure 2B-V6 in this Supplement) may be used at bridges from which fishing is prohibited.

#### Guidance:

12 If used, R9-V1 signs should be installed at both ends of the bridge to communicate this prohibition to bridge users approaching from either direction.



### Figure 2B-V5. Rest Area Directional Signs



R0-V8



### Figure 2B-V6. No Fishing From Bridge Signs



R9-V1



# Section 2B.V7 <u>Commercial Vehicle Lane Restriction Signs</u> (R4-V Series)

#### Support:

- o1 In accordance with the Code of Virginia §§ 46.2-803.1 and 46.2-804, signs for communicating lane restrictions for commercial vehicles are listed below (see Figure 2B-V7 in this Supplement):
  - 1. COMMERCIAL VEHICLES EXCEPT BUSES USE RIGHT LANE WHEN OPERATED AT XX MPH OR BELOW (R4-V1);
  - 2. STEEP GRADE AHEAD (W7-VP1) plaque (see Section 2C.V2 of this Supplement);
  - 3. COMMERCIAL VEHICLES EXCEPT BUSES PROHIBITED IN LEFT LANE (R4-V2);
  - 4. TRUCKS & COMBINATION VEHICLES USE RIGHT LANE WHEN OPERATED BELOW XX MPH (R4-V4); and
  - 5. END COMMERCIAL VEHICLE RESTRICTION (R4-V3).

#### **Standard:**

- 02 R4-V1 or R4-V2 signs shall be installed at the beginning of each roadway segment where a commercial vehicle lane restriction exists and at other points within the roadway segment where engineering judgment determines these signs are necessary.
- R4-V4 signs shall be installed at the beginning of each roadway segment where an engineering study justifies their use, taking into account factors such as grade and heavy vehicle volumes. The signs shall also be installed at other points within the roadway segment where engineering judgment determines these signs are necessary.

#### Option:

- A reduced width version of the R4-V2 sign (R4-V2a) may be used when a narrow left shoulder precludes the use of a full width R4-V2 sign.
- A STEEP GRADE AHEAD (W7-VP1) plaque (see Figure 2B-V7 in this Supplement) may be placed above an R4-V1 or R4-V4 sign (see Section 2C.V2 of this Supplement).

## Figure 2B-V7. Commercial Vehicle Lane Restriction Signs



# COMMERCIAL VEHICLES EXCEPT BUSES

USE RIGHT LANE WHEN OPERATED 65 MPH OR BELOW

R4-V1

# COMMERCIAL VEHICLES EXCEPT BUSES

PROHIBITED IN LEFT LANE

R4-V2

COMMERCIAL VEHICLES EXCEPT BUSES
PROHIBITED IN LEFT LANE

R4-V2a

# END COMMERCIAL VEHICLE RESTRICTION

R4-V3

# TRUCKS & COMBINATION VEHICLES

USE RIGHT LANE WHEN OPERATED BELOW 65 MPH

R4-V4

# STEEP GRADE AHEAD

W7-VP1

The END COMMERCIAL VEHICLE RESTRICTION (R4-V3) sign (see Figure 2B-V7 in this Supplement) shall be used at the end of the lane restrictions communicated by the R4-V1, R4-V2, and R4-V2a signs.

### V

## Section 2B.V8 Pedestrian Swing Bridge Sign (R9-V2)

#### Standard:

101 The Pedestrian Swing Bridge (R9-V2) sign (see Figure 2B-V8 in this Supplement) shall be installed at or within ten feet of each entry to pedestrian swing bridges.

#### Support:

For additional information pertaining to signing for pedestrian swing bridges, refer to the Maintenance Division's "Maintenance Division Best Practices Manual," the location of which is shown in Appendix A of this Supplement.



# Figure 2B-V8. Pedestrian Swing Bridge Sign



R9-V2

# CHAPTER 2C. WARNING SIGNS AND OBJECT MARKERS

### **Section 2C.02 Application of Warning Signs**

#### Standard:

11 The use of warning signs shall be based on an engineering study or on engineering judgment.

#### Guidance:

The use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs. In situations where the condition or activity is seasonal or temporary, the warning sign should be removed or covered when the condition or activity does not exist.

#### Option:

- Ossistent with the provisions of Chapter 2L, changeable message signs may be used to display a warning message.
- Consistent with the provisions of Chapter 4L, a Warning Beacon may be used in combination with a standard warning sign.

#### Support:

- The categories of warning signs are shown in Table 2C-1(VA) in this Supplement.
- Warning signs provided in this Supplement and the MUTCD cover most of the conditions that are likely to be encountered. Additional warning signs for low-volume roads (as defined in Section 5A.01 of the MUTCD), temporary traffic control zones, school areas, grade crossings, and bicycle facilities are discussed in Parts 5 through 9, respectively. For Part 6 refer to the latest edition of the "Virginia Work Area Protection Manual" (a link is provided in Appendix A of this Supplement).
- OF Section 1A.09 of this Supplement contains information regarding the assistance that is available to jurisdictions that do not have engineers on their staffs who are trained and/or experienced in traffic control devices.

# Table 2C-1(VA). Categories of Warning Signs and Plaques

Category	Group	Section	Signs or Plaques	Sign Designations
		2C.07	Turn, Curve, Reverse Turn, Reverse Curve, Winding Road, Hairpin Curve, 270-Degree Curve	W1-1,2,3,4,5,11,15
		2C.08	Advisory Speed	W13-1P
		2C.09	Chevron Alignment	W1-8
	Changes in	2C.10	Combination Horizontal Alignment/Advisory Speed	W1-1a,2a
	Horizontal	2C.11	Combination Horizontal Alignment/Intersection	W1-10,10a,10b,10c,10d
	Alignment	2C.12	Large Arrow (one direction)	W1-6
		2C.13	Truck Rollover	W1-13
		2C.14	Advisory Exit or Ramp Speed	W13-2,3
		2C.15	Combination Horizontal Alignment/Advisory Exit or Ramp Speed	W13-6,7
	Vertical	2C.16	Hill	W7- 1,1a,2P,2bP,3P,3aP,3bP
	Alignment	2C.17	Truck Escape Ramp	W7-4,4b,4c,4dP,4eP,4fP
Destaur		2C.18	Hill Blocks View	W7-6
Roadway Related	Cross Section	2C.19	Road Narrows	W5-1
		2C.20,21	Narrow Bridge, One Lane Bridge	W5-2,3
		2C.22,23,25	Divided Highway, Divided Highway Ends, Double Arrow	W6-1,2; W12-1
		2C.24	Freeway or Expressway Ends, All Traffic Must Exit	W19-1,2,3,4,5
		2C.26	Dead End, No Outlet	W14-1,1a,2,2a
		2C.27	Low Clearance	W12-2,2a
	Roadway Surface Condition	2C.28,29	Bump, Dip, Speed Hump	W8-1,2; W17-1
		2C.30	Pavement Ends	W8-3
		2C.31	Shoulder, Uneven Lanes	W8-4,9,11,17,17P,23,25
		2C.32	Slippery When Wet, Loose Gravel, Rough Road, Bridge Ices Before Road, Fallen Rocks	W8-5,7,8,13,14
		2C.33	Grooved Pavement, Metal Bridge Deck, Steel Grid Deck, Expansion Joints, Open Joints on Bridge	W8-15,15P, <del>16</del> , W8-V1, W8-V2, W8-V3
		2C.34	No Center Line	W8-12
	Weather	2C.35	Road May Flood, Flood Gauge, Gusty Winds Area, Fog Area	W8-18,19,21,22
	Advance Traffic Control	2C.36-39	Stop Ahead, Yield Ahead, Signal Ahead, Be Prepared To Stop, Speed Reduction, Drawbridge Ahead, Ramp Meter Ahead	W3-1,2,3,4,5,5a,6,7,8
Traffic	Traffic Flow	2C.40-45	Merge, No Merge Area, Lane Ends, Added Lane, Two- Way Traffic, Right Lane Exit Only Ahead, No Passing Zone	W4-1,2,3,5,5P,6; W6-3; W9-1,2,7; W14-3
Related	Internation	2C.46	Cross Road, Side Road, T, Y, Circular Intersection, Side Roads	W2-1,2,3,4,5,6,7,8; W16-12P,17P
	Intersections	2C.47	Large Arrow (two directions)	W1-7
		2C.48	Oncoming Extended Green	W25-1,2
	Vehicular Traffic	2C.49	Truck Crossing, Truck (symbol), Emergency Vehicle, Tractor, Bicycle, Golf Cart, Horse-Drawn Vehicle, Trail Crossing, Rescue Squad, Watch for Turning Vehicles	W8-6; W11-1,5,5a,8,10,1 12P,14,15,15P,15a; W16 13P, W11-V1, W11-V3





Category	Group	Section	Signs or Plaques	Sign Designations
	Non-Vehicular	2C.50,51, V1	Pedestrian, Deer, Cattle, Snowmobile, Equestrian, Wheelchair, Large Animals, Playground, Watch for Children	W11- 2,3,4,6,7,9,16,17,18,19, 20,21,22; W15-1; W16- 13P, W15-V1
	New	2C.52	New Traffic Pattern Ahead	W23-2
	Location	2C.53	Downward Diagonal Arrow, Ahead	W16-7P,9P
	Distance 2C.55 XX Feet, XX Miles, Next XX Feet, Next XX Miles		W7-3aP; W16-2P,2aP,3P,3aP,4P	
	Arrow	2C.56	Advance Arrow, Directional Arrow	W16-5P,6P
	Street Name Plaque	2C.58	Advance Street Name	W16-8P,8aP
Other	Intersection	2C.59	Cross Traffic Does Not Stop	W4-4P,4aP,4bP
Supplemental Plaques	Share The Road	2C.60	Share The Road	W16-1P
	HOV	2C.53	High-Occupancy Vehicle	W16-11P
	Photo Enforced	2C.61	Photo Enforced	W16-10P,10aP
	New	2C.62	New	W16-15P
	Commercial Vehicle Lane Restriction	2C.V2	Steep Grade Ahead (plaque)	W7-VP1



# Table 2C-2(VA). Warning Sign and Plaque Sizes

			Conventional Road					
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
Horizontal Alignment	W1-1,2,3,4,5	2C.07	30 x 30*	36 x 36	36 x 36	36 x 36	_	48 x 48
Combination Horizontal Alignment/Advisory Speed	W1-1a,2a	2C.10	36 x 36	36 x 36	48 x 48	48 x 48	_	48 x 48
One-Direction Large Arrow	W1-6	2C.12	48 x 24	48 x 24	60 x 30	60 x 30	_	60 x 30
Two-Direction Large Arrow	W1-7	2C.47	48 x 24	48 x 24	_	_	_	60 x 30
Chevron Alignment	W1-8	2C.09	18 x 24	18 x 24	30 x 36	36 x 48	_	24 x 30
Combination Horizontal Alignment/Intersection	W1-10,10a, 10b,10c,10d,10e	2C.11	36 x 36	36 x 36	36 x 36	48 x 48	_	_
Hairpin Curve	W1-11	2C.07	30 x 30	30 x 30	36 x 36	48 x 48	_	48 x 48
Truck Rollover	W1-13	2C.13	<del>36 x 36</del> 48 x 48	<del>36 x 36</del> 48 x 48	<del>36 x 36</del> 48 x 48	48 x 48	_	<del>48 x 48</del>
Truck Rollover	W1-13 (V)	2C.13	_	_	_	_	_	60 x 60
270-degree Loop	W1-15	2C.07	30 x 30	30 x 30	36 x 36	48 x 48	_	48 x 48
Intersection Warning	W2-1,2,3,4,5,6,7,8	2C.46	30 x 30	30 x 30	36 x 36	_	24 x 24	48 x 48
Advanced Traffic Control	W3-1,2,3	2C.36	30 x 30	30 x 30	48 x 48	48 x 48	30 x 30	_
Be Prepared to Stop	W3-4	2C.36	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30	_



	Sign Designation	Section	Conventional Road					
Sign or Plaque			Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
Reduced Speed Limit Ahead	W3-5	2C.38	36 x 36	36 x 36	48 x 48	48 x 48	_	_
XX MPH Speed Zone Ahead	W3-5a	2C.38	36 x 36	36 x 36	48 x 48	48 x 48	_	_
Draw Bridge	W3-6	2C.39	36 x 36	36 x 36	48 x 48		_	60 x 60
Ramp Meter Ahead	W3-7	2C.37	36 x 36	36 x 36		-	_	_
Ramp Metered When Flashing	W3-8	2C.37	36 x 36	36 x 36			_	_
Merge	W4-1	2C.40	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	_
Lane Ends	W4-2	2C.42	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	_
Added Lane	W4-3	2C.41	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	_
Cross Traffic Does Not Stop (plaque)	W4-4P	2C.59	24 x 12	24 x 12	36 x 18	_	_	48 x 24
Traffic From Left (Right) Does Not Stop (plaque)	W4-4aP	2C.59	24 x 12	24 x 12	36 x 18	_	_	48 x 24
Oncoming Traffic Does Not Stop (plaque)	W4-4bP	2C.59	24 x 12	24 x 12	36 x 18	_	_	48 x 24
Entering Roadway Merge	W4-5	2C.40	36 x 36	36 x 36	48 x 48	_	_	_
No Merge Area (plaque)	W4-5P	2C.40	18 x 24	18 x 24	24 x 30	_	_	_
Entering Roadway Added Lane	W4-6	2C.41	36 x 36	36 x 36	48 x 48		_	_
Road Narrows	W5-1	2C.19	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	_
Narrow Bridge	W5-2	2C.20	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	_
One Lane Bridge	W5-3	2C.21	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	_
Divided Highway	W6-1	2C.22	36 x 36	36 x 36	48 x 48	48 x 48	_	_
Divided Highway Ends	W6-2	2C.23	36 x 36	36 x 36	48 x 48	48 x 48	_	_
Two-Way Traffic	W6-3	2C.44	36 x 36	36 x 36	48 x 48	48 x 48	_	_
Hill	W7-1	2C.16	30 x 30*	36 x 36	36 x 36	36 x 36	24 x 24*	48 x 48
Hill with Grade	W7-1a	2C.16	30 x 30*	36 x 36	36 x 36	36 x 36	24 x 24*	48 x 48
Use Low Gear (plaque)	W7-2P	2C.57	24 x 18	24 x 18	_	_	_	_
Trucks Use Lower Gear (plaque)	W7-2bP	2C.57	24 x 18	24 x 18	_	_	_	_
XX% Grade (plaque)	W7-3P	2C.57	24 x 18	24 x 18			_	_
Next XX Miles (plaque)	W7-3aP	2C.55	24 x 18	24 x 18	_	_	_	_
XX% Grade, XX Miles (plaque)	W7-3bP	2C.57	24 x 18	24 x 18	_	_	_	_
Runaway Truck Ramp XX Miles	W7-4	2C.17	78 x 48	78 x 48	78 x 48	78 x 48	_	_
Runaway Truck Ramp (with arrow)	W7-4b	2C.17	78 x 60	78 x 60	78 x 60	78 x 60	_	_
Truck Escape Ramp	W7-4c	2C.17	78 x 60	78 x 60	78 x 60	78 x 60	_	_
Sand, Gravel, Paved (plaques)	W7-4dP,4eP,4fP	2C.17	24 x 12	24 x 12	24 x 12	24 x 12	_	_
Hill Blocks View	W7-6	2C.18	30 x 30*	36 x 36	36 x 36	_	_	48 x 48

		Section	Conventional Road					
Sign or Plaque	Sign Designation		Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
Bump or Dip	W8-1,2	2C.28	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Pavement Ends	W8-3	2C.30	36 x 36	36 x 36	48 x 48	_	30 x 30*	_
Soft Shoulder	W8-4	2C.31	36 x 36	36 x 36	48 x 48	48 x 48	24 x 24*	48 x 48
Slippery When Wet	W8-5	2C.32	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Road Condition (plaques)	W8-5P,5bP,5cP	2C.32	24 x 18	24 x 18	30 x 24	36 x 30	_	36 x 30
Ice	W8-5aP	2C.32	24 x 12	24 x 12	30 x 18	30 x 18	_	_
Truck Crossing	W8-6	2C.49	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Loose Gravel	W8-7	2C.32	36 x 36	36 x 36	36 x 36	_	24 x 24*	48 x 48
Rough Road	W8-8	2C.32	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Low Shoulder	W8-9	2C.31	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Uneven Lanes	W8-11	2C.32	36 x 36	36 x 36	36 x 36	48 x 48	_	48 x 48
No Center Line	W8-12	2C.34	36 x 36	36 x 36	36 x 36	48 x 48	_	_
Bridge Ices Before Road	W8-13	2C.32	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Fallen Rocks	W8-14	2C.32	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Grooved Pavement	W8-15	2C.33	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Motorcycle (plaque)	W8-15P	2C.33	24 x 18	24 x 18	30 x 24	36 x 30	_	36 x 30
Metal Bridge Deck	W8-16	2C.33	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Shoulder Drop Off (symbol)	W8-17	2C.31	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Shoulder Drop-Off (plaque)	W8-17P	2C.31	24 x 18	24 x 18	30 x 24	36 x 30	_	36 x 30
Road May Flood	W8-18	2C.35	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Flood Gauge	W8-19	2C.35	12 x 72	12 x 72	_	_	_	_
Gusty Winds Area	W8-21	2C.35	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Fog Area	W8-22	2C.35	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
No Shoulder	W8-23	2C.31	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Shoulder Ends	W8-25	2C.31	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Left (Right) Lane Ends	W9-1	2C.42	36 x 36	36 x 36	36 x 36	48 x 48	30 x 30*	48 x 48
Lane Ends Merge Left (Right)	W9-2	2C.42	36 x 36	36 x 36	36 x 36	48 x 48	30 x 30*	48 x 48
Right (Left) Lane Exit Only Ahead	W9-7	2C.43	132 x 72	132 x 72	132 x 72	132 x 72	_	_
Bicycle	W11-1	2C.49	30 x 30	30 x 30	36 x 36	_	24 x 24*	48 x 48
Pedestrian	W11-2	2C.50	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Large Animals	W11-3,4,16,17, 18,19,20,21,22	2C.50	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Farm Vehicle	W11-5,5a	2C.49	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Snowmobile	W11-6	2C.50	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Equestrian	W11-7	2C.50	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Emergency Vehicle	W11-8	2C.49	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Handicapped	W11-9	2C.50	30 x 30*	36 x 36	36 x 36	_	_	48 x 48
Truck	W11-10	2C.49	30 x 30*	36 x 36	36 x 36		24 x 24*	48 x 48
Golf Cart	W11-11	2C.49	30 x 30*	36 x 36	36 x 36		24 x 24*	48 x 48



			Conventional Road					
Sign or Plaque	Sign Designation	Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
Emergency Signal Ahead (plaque)	W11-12P	2C.49	36 x 30	36 x 30	36 x 30	_	_	_
Horse-Drawn Vehicle	W11-14	2C.49	30 x 30*	36 x 36	36 x 36	1	24 x 24*	48 x 48
Bicycle / Pedestrian	W11-15	2C.49	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Trail Crossing	W11-15a	2C.49	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Trail X-ing (plaque)	W11-15P	2C.49	24 x 18	24 x 18	30 x 24	_	_	36 x 30
Double Arrow	W12-1	2C.25	30 x 30*	36 x 36	36 x 36	_	_	_
Low Clearance (with arrows)	W12-2	2C.27	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	_
Low Clearance	W12-2a	2C.27	78 x 24	78 x 24	_	_	_	_
Advisory Speed (plaque)	W13-1P	2C.08	18 x 18	18 x 18	24 x 24	30 x 30	_	30 x 30
Advisory Exit or Ramp Speed	W13-2,3	2C.14	24 x 30	24 x 30	36 x 48	36 x 48	_	48 x 60
Combination Horizontal Alignment/ Advisory Exit or Ramp Speed	W13-6,7	2C.15	24 x 42	24 x 42	36 x 60	36 x 60	_	48 x 84
Dead End, No Outlet	W14-1,2	2C.26	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Dead End, No Outlet (with arrow)	W14-1a,2a	2C.26	36 x 8	36 x 8	_	_	_	_
No Passing Zone (pennant)	W14-3	2C.45	48 x 48 x 36	48 x 48 x 36	_	_	40 x 40 x 30	64 x 64 x 48
Playground	W15-1	2C.51	30 x 30*	36 x 36	36 x 36	_	24 x 24*	48 x 48
Share the Road (plaque)	W16-1P	2C.60	18 x 24	18 x 24	24 x 30	_	_	24 x 30
XX Feet	W16-2P	2C.55	24 x 18	24 x 18	_	_	_	30 x 24
XX Ft	W16-2aP	2C.55	24 x 12	24 x 12	_	_	_	30 x 18
XX Miles (2-line plaque)	W16-3P	2C.55	30 x 24	30 x 24	_	_	_	_
XX Miles (1-line plaque)	W16-3aP	2C.55	30 x 12	30 x 12	_	_	_	_
Next XX Feet (plaque)	W16-4P	2C.55	30 x 24	30 x 24	_	_	_	_
Supplemental Arrow (plaque)	W16-5P,6P	2C.56	24 x 18	24 x 18	_	_	_	_
Downward Diagonal Arrow (plaque)	W16-7P	2C.50	24 x 12	24 x 12	_	_	_	30 x 18
Advance Street Name (1- line plaque)	W16-8P	2C.58	Varies x 8	Varies x 8		ı	_	1
Advance Street Name (2- line plaque)	W16-8aP	2C.58	Varies x 15	Varies x 15	_	_	_	_
Ahead (plaque)	W16-9P	2C.50	24 x 12	24 x 12	30 x 18	_	_	
Photo Enforced (symbol plaque)	W16-10P	2C.61	24 x 12	24 x 12	36 x 18	_	_	48 x 24
Photo Enforced (plaque)	W16-10aP	2C.61	24 x 18	24 x 18	36 x 30	_	_	48 x 36
HOV (plaque)	W16-11P	2G.09	24 x 12	24 x 12	30 x 18		_	30 x 18
Traffic Circle (plaque)	W16-12P	2C.46	24 x 18	24 x 18	_		_	
When Flashing (plaque)	W16-13P	2C.50	24 x 18	24 x 18	_	_	_	
New (plaque)	W16-15P	2C.62	24 x 12	24 x 12	_	_	_	_

	Sign Designation		Conventional Road					
Sign or Plaque		Section	Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
Roundabout (plaque)	W16-17P	2C.46	24 x 12	24 x 12	_	_	_	_
NOTICE	W16-18P	2A.15	24 x 12	24 x 12	_	_	_	_
Speed Hump	W17-1	2C.29	30 x 30*	36 x 36	_	_	24 x 24*	48 x 48
Freeway Ends XX Miles	W19-1	2C.24	_	_	_	144 x 48	_	_
Expressway Ends XX Miles	W19-2	2C.24	_	_	144 x 48	_	_	_
Freeway Ends	W19-3	2C.24	_	_	_	48 x 48	_	_
Expressway Ends	W19-4	2C.24	_	_	48 x 48	_	_	_
All Traffic Must Exit	W19-5	2C.24	_	_	90 x 48	90 x 48	_	_
New Traffic Pattern Ahead	W23-2	2C.52	36 x 36	36 x 36	_	_	_	_
Traffic Signal Extended Green	W25-1,2	2C.48	24 x 30	24 x 30	_	_	_	_
V		Vii	rginia Speci	fic Signs				
STEEP GRADE AHEAD (plaque)	W7-VP1	2C.V2	_	144 x 18	144 x 18	144 x 18	_	_
STEEL GRID DECK	W8-V1	2C.33	36 x 36	48 x 48	60 x 60	60 x 60	_	_
EXPANSION JOINTS	W8-V2	2C.33	36 x 36	48 x 48	60 x 60	60 x 60	_	_
OPEN JOINTS ON BRIDGE	W8-V3	2C.33	36 x 36	48 x 48	60 x 60	60 x 60	_	_
RESCUE SQUAD	W11-V1	2C.49	30 x 30	36 x 36	_	_	_	48 x 48
WATCH FOR TURNING VEHICLES	W11-V3	2C.49	36 x 36	48 x 48	_	_	_	_
WATCH FOR CHILDREN	W15-V1	2C.V1	30 x 30	36 x 36	_	_	_	48 x 48
CLEANUP CREW WORKING**	W21-V6	2H.08	36 x 36	48 x 48	_	_	_	_

<sup>\*</sup> The minimum size required for diamond-shaped warning signs facing traffic on multi-lane conventional roads shall be 36" x 36" per Section 2C.04 of the MUTCD.

Notes

- 1. Larger signs may be used when appropriate
- 2. Dimensions in inches are shown as width x height

# Section 2C.08 Advisory Speed Plaque (W13-1P)

#### Option:

The Advisory Speed (W13-1P) plaque (see Figure 2C-1(VA) in this Supplement) may be used to supplement any warning sign to indicate the advisory speed for a condition.

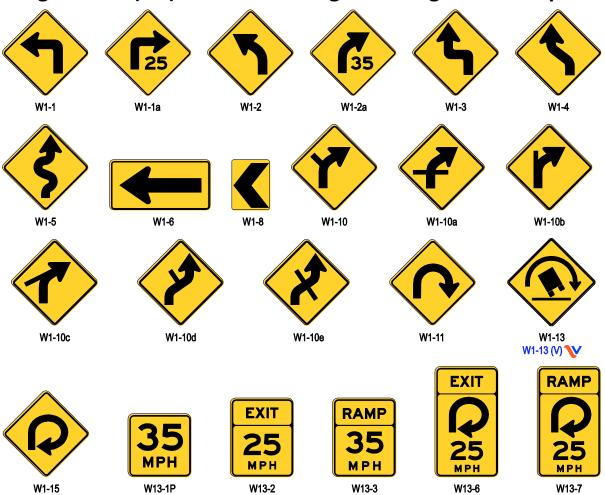
#### Standard:

The use of the Advisory Speed plaque for horizontal curves shall be in accordance with the information shown in Table 2C-5. The Advisory Speed plaque shall also be used

<sup>\*\*</sup> This sign may be cut into two pieces (along the horizontal centerline axis) and hinged such that it can be folded when cleanup crews are not working.

- where an engineering study indicates a need to advise road users of the advisory speed for other roadway conditions.
- os If used, the Advisory Speed plaque shall carry the message XX MPH. The speed displayed shall be a multiple of 5 mph.
- Except in emergencies or when the condition is temporary, an Advisory Speed plaque shall not be installed until the advisory speed has been determined by an engineering study.

# Figure 2C-1(VA). Horizontal Alignment Signs and Plaques



Note: Turn arrows and reverse turn arrows may be substituted for the curve arrows and reverse curve arrows on the W1-10 series signs where appropriate.

June 2011 Chapter 2C

### **Table 2C-5. Horizontal Alignment Sign Selection**

Type of	Difference Between Speed Limit and Advisory Speed							
Horizontal Alignment Sign	5 mph	10 mph	15 mph	20 mph	25 mph or more			
Turn (W1-1), Curve (W1-2), Reverse Turn (W1-3), Reverse Curve (W1-4), Winding Road (W1-5), and Combination Horizontal Alignment/Intersection (W1-10 series) (see Section 2C.07 to determine which sign to use)	Recommended	Required	Required	Required	Required			
Advisory Speed Plaque (W13-1P)	Recommended	Required	Required	Required	Required			
Chevrons (W1-8) and/or One Direction Large Arrow (W1-6)	Optional	Recommended	Required	Required	Required			
Exit Speed (W13-2) and Ramp Speed (W13-3) on exit ramp	Optional	Optional	Recommended	Required	Required			

Note: Required means that the sign and/or plaque shall be used, recommended means that the sign and/or plaque should be used, and optional means that the sign and/or plaque may be used.

See Section 2C.06 of the MUTCD for roadways with less than 1,000 AADT.

- 15 The Advisory Speed plaque shall only be used to supplement a warning sign and shall not be installed as a separate sign installation.
- The advisory speed shall be determined by an engineering study that follows established engineering practices.

### **Standard:**



- A traditional ball-bank indicator shall be used for determining the recommended advisory speed for a horizontal curve on an existing roadway (see Section 2C.06 of the MUTCD for application of Horizontal Alignment Warning Signs and Plaques).
- **The following criteria shall apply for ball-bank indicator readings:** 
  - A. 16 degrees of ball-bank for posted speeds of 20 mph or less
  - B. 14 degrees of ball-bank for posted speeds of 25 or 30 mph
  - C. 12 degrees of ball-bank for posted speeds of 35 mph to 45 mph
  - D. 10 degrees of ball-bank for posted speeds of 50 mph or greater

### Support:

The 16, 14, and 12 degrees of ball-bank criteria are comparable to the current AASHTO horizontal curve design guidance.

### Guidance:

- 10 The advisory speed should be determined based on free-flowing traffic conditions.
- Because changes in conditions, such as roadway geometrics, surface characteristics, or sight distance, might affect the advisory speed, each location should be evaluated periodically or when conditions change.



### Section 2C.13 <u>Truck Rollover Warning Sign (W1-13,</u>

### W1-13 (V)

### Option:

A Truck Rollover Warning (W1-13, W1-13 (V)) sign (see Figure 2C-1(VA) in this Supplement) may be used to warn drivers of vehicles with a high center of gravity, such as trucks, tankers, and recreational vehicles, of a curve or turn where geometric conditions might contribute to a loss of control and a rollover as determined by an engineering study.

### Support:

- Among the established engineering practices that are appropriate for the determination of the truck rollover potential of a horizontal curve are the following:
  - A. An accelerometer that provides a direct determination of side friction factors
  - B. A design speed equation
  - C. A traditional ball-bank indicator using 10 degrees of ball-bank

#### Standard:

O3 If a Truck Rollover Warning (W1-13, W1-13 (V)) sign is used, it shall be accompanied by an Advisory Speed (W13-1P) plaque indicating the recommended speed for vehicles with a higher center of gravity.

### Option:

The Truck Rollover Warning sign may be displayed as a static sign, as a static sign supplemented by a flashing warning beacon, or as a changeable message sign activated by the detection of an approaching vehicle with a high center of gravity that is traveling in excess of the recommended speed for the condition.

### Support:

The curved arrow on the Truck Rollover Warning sign shows the direction of roadway curvature. The truck tips in the opposite direction.

### Standard:



W1-13 signs shall be 48" x 48" in size at all locations except where engineering judgment determines that the oversized (60" x 60") W1-13 (V) sign panel is necessary. 36" x 36" W1-13 signs shall not be used.

O7 Advisory Speed (W13-1P) plaques shall be 30" x 30" when used with all W1-13 and W1-13 (V) signs.

### Section 2C.27 Low Clearance Signs (W12-2 and W12-2a)

### Standard:

o1 The Low Clearance (W12-2) sign (see Figure 2C-5) shall be used to warn road users of clearances less than 12 inches above the statutory maximum vehicle height.

### Support

V

The Low Clearance signs are required in accordance with The Code of Virginia § 46.2-1110.

### Guidance:

- 03 Where the clearance is less than the legal maximum vehicle height, the W12-2 sign with a supplemental distance plaque should be placed at the nearest intersecting road or wide point in the road at which a vehicle can detour or turn around.
- O4 In the case of an arch or other structure under which the clearance varies greatly, two or more signs should be used as necessary on the structure itself to give information as to the clearances over the entire roadway.
- Of Clearances should be evaluated periodically, particularly when resurfacing operations have occurred.

### Option:

The Low Clearance sign may be installed on or in advance of the structure. If a sign is placed on the structure, it may be a rectangular shape (W12-2a) with the appropriate legend (see Figure 2C-5).

### **Standard:**



107 Low Clearance signs shall be installed in accordance with Table 2C-V1. The vertical clearance posted on the signs shall be 3 inches less than the actual vertical clearance. Advance signs located on the alternate routes shall include the appropriate Supplemental Arrow (W16-6P) plaque (see Figure 2C-12) mounted below the W12-2 sign to indicate the direction of the structure.

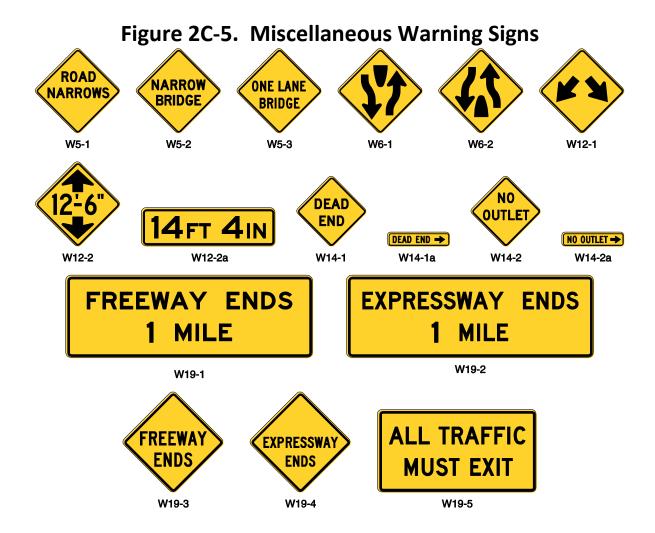
### Section 2C.28 BUMP and DIP Signs (W8-1, W8-2)

### Guidance:

BUMP (W8-1) and DIP (W8-2) signs (see Figure 2C-6(VA) in this Supplement) should be used to give warning of a sharp rise or depression in the profile of the road.

### Option:

These signs may be supplemented with an Advisory Speed plaque (see Section 2C.08 of this Supplement).



### Standard:

13 The DIP sign shall not be used at a short stretch of depressed alignment that might momentarily hide a vehicle.

### Guidance:

04 A short stretch of depressed alignment that might momentarily hide a vehicle should be treated as a no-passing zone when center line striping is provided on a two-lane or three-lane road (see Section 3B.02 of the MUTCD).



# Section 2C.33 Warning Signs and Plaques for Motorcyclists (W8-15, W8-15P, W8-16, W8-V1, W8-V2, and W8-V3)

### Support:

The signs and plaques described in this Section are intended to give motorcyclists advance notice of surface conditions that might adversely affect their ability to maintain control of their motorcycle under wet or dry conditions. The use of some of the advance surface condition warning signs described in Section 2C.32 of the MUTCD, such as

Slippery When Wet, LOOSE GRAVEL, or ROUGH ROAD, can also be helpful to motorcyclists if those conditions exist.



### Table 2C-V1. Minimum Signing for Vertical Clearances of Structures

	Sign Locations <sup>2</sup>						
Actual Vertical Clearance <sup>1</sup>	Sign at Structure <sup>3</sup>	Sign at Least 1500 Feet In Advance Of Structure	Sign in Advance of Last Alternate Route <sup>4, 5, 6, 7</sup>	Sign 150 Feet (Max) Past the Last Alternate Route <sup>8</sup>			
14'-4" to 14'-5"	X						
13'-6" to 14'-3"	X	X	0	0			
< 13'-6"	X	X	X	S			

- X Denotes signs shall be installed at that location
- S Denotes signs should be installed at that location
- O Denotes signs may be installed at that location

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> As measured to the nearest inch not exceeding the actual clearance.

<sup>&</sup>lt;sup>2</sup> Dual indication of signs may be needed on multi-lane roadways.

<sup>&</sup>lt;sup>3</sup> At arched structures or structures under which the clearance varies greatly, two or more signs should be used as necessary on the structure itself to give information as to the clearances over the entire roadway.

<sup>&</sup>lt;sup>4</sup> Placement distance of the signs in advance of the last alternate route shall be in accordance with Table 2C-4 in this Supplement.

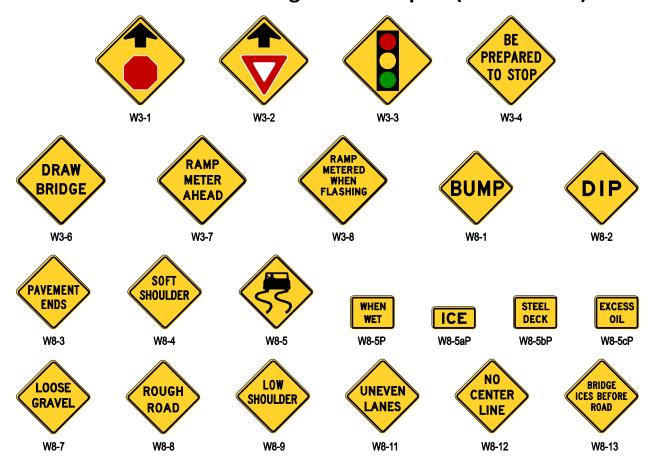
<sup>&</sup>lt;sup>5</sup> When signing in advance of the last alternate route is at least 1,500 feet in advance of the structure, this signing may suffice for the sign required 1,500 feet in advance of the structure.

<sup>&</sup>lt;sup>6</sup>Where the advance alternate route is between the structure and the sign placed at least 1,500 feet in advance of the structure, engineering judgment shall be used to determine if signs at the last alternate route are needed.

<sup>&</sup>lt;sup>7</sup>When other roadways exist between the last alternate route and the restricted structure, which may generate traffic that may exceed the height restrictions, consideration should be given to posting additional signs at those intersection locations.

<sup>&</sup>lt;sup>8</sup> Discretion should be used in determining the effective placement of this sign. It may be desirable in some instances to place signs on the intersecting route approaches in lieu of past the alternate route to assure the signs are effective in alerting drivers to the restriction. On highways where the intersection of the last alternate route is via an interchange, signs should be installed on the alternate route for both directions.

# Figure 2C-6(VA). Roadway and Weather Condition and Advance Traffic Control Signs and Plaques (Sheet 1 of 2)



### Option:

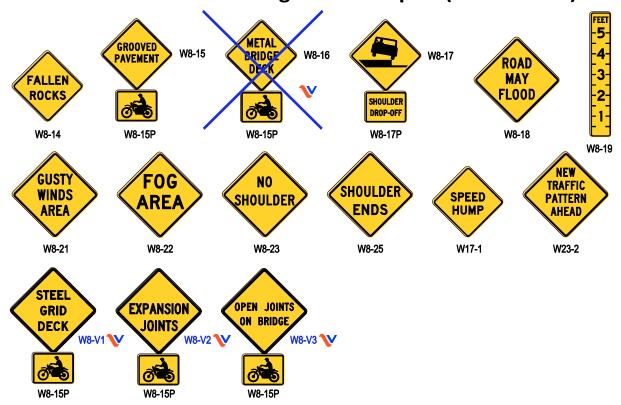
If a portion of a street or highway features a roadway pavement surface that is grooved or textured instead of smooth, such as a grooved skid resistance treatment for a horizontal curve or a brick pavement surface, a GROOVED PAVEMENT (W8-15) sign (see Figure 2C-6(VA) in this Supplement) may be used to provide advance warning of this condition to motorcyclists, bicyclists, and other road users. Alternate legends such as TEXTURED PAVEMENT or BRICK PAVEMENT may also be used on the W8-15 sign.

#### Standard:

- V 03 When i
  - When used, Warning Signs and Plaques for Motorcyclists shall be placed in advance of the condition (see Table 2C-4).
  - 04 If a portion of a bridge includes a grated surface or metal deck, a STEEL GRID DECK (W8-V1) sign (see Figure 2C-6(VA) in this Supplement) shall be installed in advance to provide warning of this condition to motorcyclists, bicyclists, and other road users.



# Figure 2C-6(VA). Roadway and Weather Condition and Advance Traffic Control Signs and Plaques (Sheet 2 of 2)



### Support:

15 If a bridge deck is composed entirely of a metal deck (i.e., not featuring a grated surface), a METAL BRIDGE DECK (W8-16) sign (see Figure 2C-6(VA) in this Supplement) should be installed in advance to provide warning of this condition to motorcyclists, bicyclists, and other road users.

#### Standard:

- An OPEN JOINTS ON BRIDGE (W8-V3) sign (see Figure 2C-6(VA) in this Supplement) shall be installed on all bridges where open longitudinal joints are in the travel lanes. These signs shall be installed for longitudinal joints that meet both of the following criteria:
  - 1. The longitudinal joint is parallel or no more than 30 degrees from parallel to the travel lane.
  - 2. The longitudinal joint width is equal to or greater than 1.5 inches.

### Option:

The OPEN JOINTS ON BRIDGE (W8-V3) sign may be used at locations only meeting Criterion 1 in Paragraph 6 above.

#### Guidance:

An OPEN JOINTS ON BRIDGE (W8-V3) sign should be installed if longitudinal joints create an unlevel riding surface during cold weather contraction.

#### Guidance:

An EXPANSION JOINTS (W8-V2) sign (see Figure 2C-6(VA) in this Supplement) should be installed in advance of a bridge to warn motorists of transverse expansion joints. A field review should be performed to evaluate the location, condition and size of the joints on the bridge to determine if there are adverse surface conditions.

#### Standard:

10 A Motorcycle (W8-15P) plaque (see Figure 2C-6(VA) in this Supplement) shall be mounted below a W8-15, W8-V1, W8-V2, or W8-V3 sign to emphasize the warning to motorcyclists.

# Section 2C.38 Reduced Speed Limit Ahead Signs (W3-5, W3-5a)

### Guidance:



A Reduced Speed Limit Ahead (W3-5) sign (see Figure 2C-7(VA) in this Supplement) should be used to inform road users of a reduced speed zone where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates the need for advance notice to comply with the posted speed limit ahead. If used, the symbolic Reduced Speed Limit Ahead (W3-5) sign should be used and the text Reduced Speed Limit Ahead sign (W3-5a) sign should not be used.

#### Standard:

- 12 If used, Reduced Speed Limit Ahead signs shall be followed by a Speed Limit (R2-1) sign installed at the beginning of the zone where the speed limit applies.
- 13 The speed limit displayed on the Reduced Speed Limit Ahead sign shall be identical to the speed limit displayed on the subsequent Speed Limit sign.

# Table 2C-4. Guidelines for Advance Placement of Warning Signs

	Advance Placement Distance <sup>1</sup>								
Posted or 85th- Percentile	Condition A: Speed reduction and	A: Condition B: Deceleration to the listed advisory Speed speed (mph) for the condition						sory	
Speed	lane changing in heavy traffic <sup>2</sup>	<b>0</b> <sup>3</sup>	10 <sup>4</sup>	20 4	30 <sup>4</sup>	40 <sup>4</sup>	50 <sup>4</sup>	60 <sup>4</sup>	70 <sup>4</sup>
20 mph	225 ft	100 ft <sup>6</sup>	N/A <sup>5</sup>	_	_	_	_	_	_
25 mph	325 ft	100 ft <sup>6</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>	_	_	_	_	_
30 mph	460 ft	100 ft <sup>6</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>	_	_	_	_	_
35 mph	565 ft	100 ft <sup>6</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>	N/A <sup>5</sup>	_	_	_	_
40 mph	670 ft	125 ft	100 ft <sup>6</sup>	100 ft <sup>6</sup>	N/A <sup>5</sup>	_	_	_	_
45 mph	775 ft	175 ft	125 ft	100 ft <sup>6</sup>	100 ft <sup>6</sup>	N/A <sup>5</sup>	_	_	_
50 mph	885 ft	250 ft	200 ft	175 ft	125 ft	100 ft <sup>6</sup>	_	_	_
55 mph	990 ft	325 ft	275 ft	225 ft	200 ft	125 ft	N/A <sup>5</sup>	_	_
60 mph	1,100 ft	400 ft	350 ft	325 ft	275 ft	200 ft	100 ft <sup>6</sup>	_	_
65 mph	1,200 ft	475 ft	450 ft	400 ft	350 ft	275 ft	200 ft	100 ft <sup>6</sup>	
70 mph	1,250 ft	550 ft	525 ft	500 ft	450 ft	375 ft	275 ft	150 ft	
75 mph	1,350 ft	650 ft	625 ft	600 ft	550 ft	475 ft	375 ft	250 ft	100 ft <sup>6</sup>

<sup>&</sup>lt;sup>1</sup> The distances are adjusted for a sign legibility distance of 180 feet for Condition A. The distances for Condition B have been adjusted for a sign legibility distance of 250 feet, which is appropriate for an alignment warning symbol sign. For Conditions A and B, warning signs with less than 6-inch legend or more than four words, a minimum of 100 feet should be added to the advance placement distance to provide adequate legibility of the warning sign.

<sup>&</sup>lt;sup>2</sup> Typical conditions are locations where the road user must use extra time to adjust speed and change lanes in heavy traffic because of a complex driving situation. Typical signs are Merge and Right Lane Ends. The distances are determined by providing the driver a PRT of 14.0 to 14.5 seconds for vehicle maneuvers (2004 AASHTO Policy, Exhibit 3-3, Decision Sight Distance, Avoidance Maneuver E) minus the legibility distance of 180 feet for the appropriate sign.

<sup>&</sup>lt;sup>3</sup> Typical condition is the warning of a potential stop situation. Typical signs are Stop Ahead, Yield Ahead, Signal Ahead, and Intersection Warning signs. The distances are based on the 2004 AASHTO Policy, Exhibit 3-1, Stopping Sight Distance, providing a PRT of 2.5 seconds, a deceleration rate of 11.2 feet/second<sup>2</sup>, minus the sign legibility distance of 180 feet.

<sup>&</sup>lt;sup>4</sup> Typical conditions are locations where the road user must decrease speed to maneuver through the warned condition. Typical signs are Turn, Curve, Reverse Turn, or Reverse Curve. The distance is determined by providing a 2.5 second PRT, a vehicle deceleration rate of 10 feet/second<sup>2</sup>, minus the sign legibility distance of 250 feet.

<sup>&</sup>lt;sup>5</sup> No suggested distances are provided for these speeds, as the placement location is dependent on site conditions and other signing. An alignment warning sign may be placed anywhere from the point of curvature up to 100 feet in advance of the curve. However, the alignment warning sign should be installed in advance of the curve and at least 100 feet from any other signs.

<sup>&</sup>lt;sup>6</sup> The minimum advance placement distance is listed as 100 feet to provide adequate spacing between signs.



# Section 2C.49 <u>Vehicular Traffic Warning Signs (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12P, W11-14, W11-15, and W11-15a, W11-V1, W11-V3)</u>



- Option:
- Vehicular Traffic Warning (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12P, W11-14, W11-15, W11-15a, W11-V1, and W11-V3) signs (see Figure 2C-10(VA) in this Supplement) may be used to alert road users to locations where unexpected entries into the roadway by trucks, bicyclists, farm vehicles, emergency vehicles, golf carts, horse-drawn vehicles, or other vehicles might occur. The TRUCK CROSSING (W8-6) word message sign may be used as an alternate to the Truck Crossing (W11-10) symbol sign.
- The WATCH FOR TURNING VEHICLES (W11-V3) sign (see Figure 2C-10(VA) in this Supplement) may be used in advance of intersections or driveways with a high daily turning volumes or conditions which justify advance warning.

### Standard:

13 The WATCH FOR TURNING VEHICLES (W11-V3) sign shall not be used on a controlled approach.

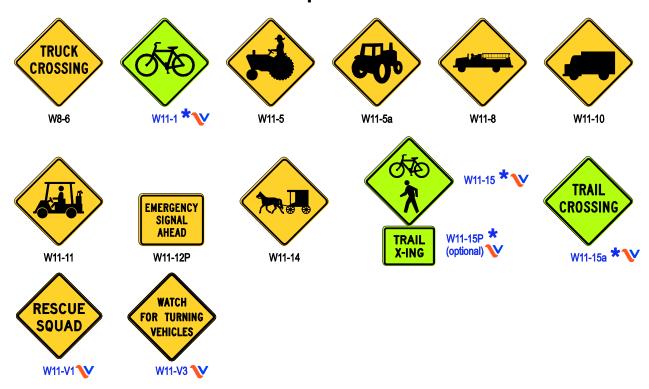
### Support:

These locations might be relatively confined or might occur randomly over a segment of roadway.

Figure 2C-7(VA). Reduced Speed Limit Ahead Signs



## Figure 2C-10(VA). Vehicular Traffic Warning Signs and Plaques



★ A fluorescent yellow-green background color shall be used for this sign or plaque. V



#### Guidance:

- Vehicular Traffic Warning signs should be used only at locations where the road user's sight distance is restricted, or the condition, activity, or entering/turning traffic would be unexpected.
- If the condition or activity is seasonal or temporary, the Vehicular Traffic Warning sign should be removed or covered when the condition or activity does not exist.



Vehicular traffic warning signs should not be used in place of intersection warning signs. At lower volume driveways or intersections, the appropriate intersection warning sign (W2-1 through W2-8) should be used, if necessary (see Section 2C.46 of the MUTCD).

### Option:

The combined Bicycle/Pedestrian (W11-15) sign may be used where both bicyclists and pedestrians might be crossing the roadway, such as at an intersection with a shared-use path. A TRAIL X-ING (W11-15P) supplemental plaque (see Figure 2C-10(VA) in this Supplement) may be mounted below the W11-15 sign. The TRAIL CROSSING (W11-15a) sign may be used to warn of shared-use path crossings where pedestrians, bicyclists, and other user groups might be crossing the roadway.



#### Standard:

OP The W11-1, W11-15, and W11-15a signs and their related supplemental plaques shall have a fluorescent yellow-green background with a black legend and border.

### Option:

Supplemental plaques (see Section 2C.53 of the MUTCD) with legends such as AHEAD, XX FEET, NEXT XX MILES, or SHARE THE ROAD may be mounted below Vehicular Traffic Warning signs to provide advance notice to road users of unexpected entries.

### Guidance:

If used in advance of a pedestrian and bicycle crossing, a W11-15 or W11-15a sign should be supplemented with an AHEAD or XX FEET plaque to inform road users that they are approaching a point where crossing activity might occur.

### Standard:

12 If a post-mounted W11-1, W11-11, W11-15, or W11-15a sign is placed at the location of the crossing point where golf carts, pedestrians, bicyclists, or other shared-use path users might be crossing the roadway, a diagonal downward pointing arrow (W16-7P) plaque (see Figure 2C-12) shall be mounted below the sign. If the W11-1, W11-11, W11-15, or W11-15a sign is mounted overhead, the W16-7P supplemental plaque shall not be used.

### Option:

The crossing location identified by a W11-1, W11-11, W11-15, or W11-15a sign may be defined with crosswalk markings (see Section 3B.18 of this Supplement).

### Standard:

The Emergency Vehicle (W11-8) sign (see Figure 2C-10(VA) in this Supplement) with the EMERGENCY SIGNAL AHEAD (W11-12P) supplemental plaque (see Figure 2C-10(VA) in this Supplement) shall be placed in advance of all emergency-vehicle traffic control signals (see Chapter 4G of the MUTCD).

### Option:



- The Emergency Vehicle (W11-8) symbol sign (see Figure 2C-10(VA) in this Supplement) may be used in advance of a fire station when no emergency-vehicle traffic control signal is present.
- The RESCUE SQUAD (W11-V1) word message sign (see Figure 2C-10(VA) in this Supplement) may be used in advance of a rescue station when no emergency-vehicle traffic control signal is present.

### Guidance:

17 The Emergency Vehicle (W11-8) symbol sign and RESCUE SQUAD (W11-V1) word message sign should not be installed on the same sign post to warn drivers of a single facility. The most appropriate sign for the facility should be chosen and installed independently.

### Option:

- A Warning Beacon (see Section 4L.03 of the MUTCD) may be used with any Vehicular Traffic Warning sign to indicate specific periods when the condition or activity is present or is likely to be present, or to provide enhanced sign conspicuity.
- A supplemental WHEN FLASHING (W16-13P) plaque (see Figure 2C-12) may be used with any Vehicular Traffic Warning sign that is supplemented with a Warning Beacon to indicate specific periods when the condition or activity is present or is likely to be present.

# Section 2C.50 Non-Vehicular Warning Signs (W11-2, W11-3, W11-4, W11-6, W11-7, W11-9, and W11-16 through W11-22

### Option:

Non-Vehicular Warning (W11-2, W11-3, W11-4, W11-6, W11-7, W11-9, and W11-16 through W11-22) signs (see Figure 2C-11(VA) in this Supplement) may be used to alert road users in advance of locations where unexpected entries into the roadway might occur or where shared use of the roadway by pedestrians, animals, or equestrians might occur.

### Support:

These conflicts might be relatively confined, or might occur randomly over a segment of roadway.

### Guidance:

If used in advance of a pedestrian, snowmobile, or equestrian crossing, the W11-2, W11-6, W11-7, and W11-9 signs should be supplemented with plaques (see Section 2C.55 of the MUTCD) with the legend AHEAD or XX FEET to inform road users that they are approaching a point where crossing activity might occur.

### Standard:

O4 If a post-mounted W11-2, W11-6, W11-7, or W11-9 sign is placed at the location of the crossing point where pedestrians, snowmobilers, or equestrians might be crossing the roadway, a diagonal downward pointing arrow (W16-7P) plaque (see Figure 2C-12) shall be mounted below the sign. If the W11-2, W11-6, W11-7, or W11-9 sign is mounted overhead, the W16-7P plaque shall not be used.

### Option:



A Pedestrian Crossing (W11-2) sign may be placed overhead or may be post-mounted with a diagonal downward pointing arrow (W16-7P) plaque at the crosswalk location where Yield Here To Pedestrians signs (see Section 2B.11 of this Supplement) have been installed in advance of the crosswalk.

### Figure 2C-11(VA). Non-Vehicular Warning Signs



<sup>\*</sup> A fluorescent yellow-green background color shall be used for this sign or plaque.

### Standard:

Of If a W11-2 sign has been post-mounted at the crosswalk location where a Yield Here To Pedestrians sign is used on the approach, the Yield Here To Pedestrians sign shall not be placed on the same post as or block the road user's view of the W11-2 sign.

### Option:

O7 An advance Pedestrian Crossing (W11-2) sign with an AHEAD or a distance supplemental plaque may be used in conjunction with a Yield Here To Pedestrians sign on the approach to the same crosswalk.

### Support:

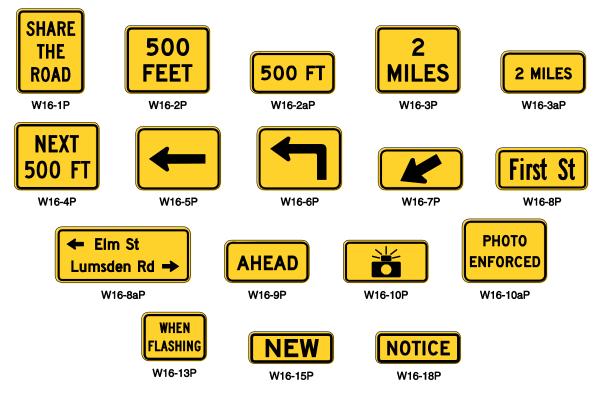
The Code of Virginia § 46.2-924 requires that drivers at crosswalks yield the right-of-way to pedestrians crossing the highway. The Standard statement in Section 2B.11 of the National MUTCD permits the use of the Stop Here for Pedestrians (R1-5b and R1-5c) signs only if state law specifically requires the driver to stop for a pedestrian in a crosswalk. As the Code of Virginia does not require a driver to stop, the R1-5b and R1-5c signs cannot be utilized.

### Option:

The crossing location identified by a W11-2, W11-6, W11-7, or W11-9 sign may be defined with crosswalk markings (see Section 3B.18 of this Supplement).



Figure 2C-12. Supplemental Warning Plaques



Note: The background color (yellow or fluorescent yellow-green) shall match the color of the warning sign that it supplements.



### Standard:

10 The W11-2 and W11-9 signs and their related supplemental plaques shall have a fluorescent yellow-green background with a black legend and border.

### **Guidance:**

11 When a fluorescent yellow-green background is used, a systematic approach featuring one background color within a zone or area should be used. The mixing of standard yellow and fluorescent yellow-green backgrounds within a selected site area should be avoided.

### Option:

- A Warning Beacon (see Section 4L.03 of the MUTCD) may be used with any Non-Vehicular Warning sign to indicate specific periods when the condition or activity is present or is likely to be present, or to provide enhanced sign conspicuity.
- A supplemental WHEN FLASHING (W16-13P) plaque (see Figure 2C-12) may be used with any Non-Vehicular Warning sign that is supplemented with a Warning Beacon to indicate specific periods when the condition or activity is present or is likely to be present.

### Section 2C.51 Playground Sign (W15-1)

### Option:

The Playground (W15-1) sign (see Figure 2C-11(VA) in this Supplement) may be used to give advance warning of a designated children's playground that is located adjacent to the road.

### Standard:

V

The Playground (W15-1) sign shall have a fluorescent yellow-green background with a black legend and border.

### Guidance:

15 If the access to the playground area requires a roadway crossing, the application of crosswalk pavement markings (see Section 3B.18 of this Supplement) and Non-Vehicular Warning signs (see Section 2C.50 of this Supplement) should be considered.

### Section 2C.63 Object Marker Design and Placement Height

### Support:

Type 1, 2, and 3 object markers are used to mark obstructions within or adjacent to the roadway. Type 4 object markers are used to mark the end of a roadway.

#### Standard:

When used, object markers (see Figure 2C-13) shall not have a border and shall consist of an arrangement of one or more of the following types:

Type 1—a diamond-shaped sign, at least 18 inches on a side, consisting of either a yellow (OM1-1) or black (OM1-2) sign with nine yellow retroreflective devices, each with a minimum diameter of 3 inches, mounted symmetrically on the sign, or an all-yellow retroreflective sign (OM1-3).

Type 2—either a marker (OM2-1V or OM2-1H) consisting of three yellow retroreflective devices, each with a minimum diameter of 3 inches, arranged either horizontally or vertically on a white sign measuring at least 6 x 12 inches; or an all-yellow horizontal or vertical retroreflective sign (OM2-2V or OM2-2H), measuring at least 6 x 12 inches.

Type 3—a striped marker, 12 x 36 inches, consisting of a vertical rectangle with alternating black and retroreflective yellow stripes sloping downward at an angle of 45 degrees toward the side of the obstruction on which traffic is to pass. The minimum width of the yellow and black stripes shall be 3 inches.

Type 4—a diamond-shaped sign, at least 18 inches on a side, consisting of either a red (OM4-1) or black (OM4-2) sign with nine red retroreflective devices, each with a minimum diameter of 3 inches, mounted symmetrically on the sign, or an all-red retroreflective sign (OM4-3).

### Support:

A better appearance can be achieved if the black stripes are wider than the yellow stripes.

Type 3 object markers with stripes that begin at the upper right side and slope downward to the lower left side are designated as right object markers (OM3-R). Object markers with stripes that begin at the upper left side and slope downward to the lower right side are designated as left object markers (OM3-L).

### Guidance:

- When used for marking obstructions within the roadway or obstructions that are 8 feet or less from the shoulder or curb, the minimum mounting height, measured from the bottom of the object marker to the elevation of the near edge of the traveled way, should be 4 feet.
- When used to mark obstructions more than 8 feet from the shoulder or curb, the clearance from the ground to the bottom of the object marker should be at least 4 feet.

### Option:

Larger and/or wider Type 3 Object Markers (OM3) may be utilized when engineering judgment determines a need for enhanced marking of an obstruction.

### Guidance

- 08 The larger OM3 Object Markers may be up to 30 inches wide and 30 inches tall.
- Object markers should not present a vertical or horizontal clearance obstacle for pedestrians.

### Option:

10 When object markers or markings are applied to an obstruction that by its nature requires a lower or higher mounting, the vertical mounting height may vary according to need.

### Support:

121Section 9B.26 of the MUTCD contains information regarding the use of object markers on shared-use paths.

### Section 2C.V1 Watch For Children (W15-V1)

### Support:

In accordance with the Code of Virginia § 33.1-201.2, a county may request that VDOT install and maintain the Watch for Children (W15-V1) sign (see Figure 2C-11(VA) in this Supplement). This sign can be used in residential areas on VDOT-maintained secondary routes to alert motorists that children may be at play in the vicinity.

### Standard:

- 102 The WATCH FOR CHILDREN (W15-V1) sign shall have a fluorescent yellow-green background with a black legend and border.
- os The WATCH FOR CHILDREN (W15-V1) sign shall only be installed through the established request process described below.

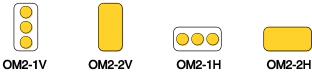


### **Figure 2C-13 Object Markers**

Type 1 Object Markers
(obstructions within the roadway)

OM1-1 OM1-2 OM1-3

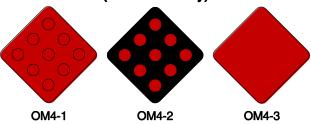
Type 2 Object Markers (obstructions adjacent to the roadway)



Type 3 Object Markers (obstructions adjacent to or within the roadway)



Type 4 Object Markers (end of roadway)



### Support:

O4 Procedures for requesting the Watch for Children (W15-V1) sign, funding guidelines, and engineering requirements are defined in Traffic Engineering Division Memorandum, "Watch for Children Signs" on the VDOT website (see Appendix A of this Supplement).



### **Section 2C.V2 STEEP GRADE AHEAD Plaque**

### Option:

A STEEP GRADE AHEAD (W7-VP1) plaque may be utilized in conjunction with the COMMERCIAL VEHICLES EXCEPT BUSES USE RIGHT LANE WHEN OPERATED AT XX MPH OR BELOW (R4-V1) sign or the TRUCKS AND COMBINATION VEHICLES USE RIGHT LANE WHEN OPERATED BELOW XX MPH (R4-V4) sign (see Section 2B.V7 of this Supplement) to warn drivers that an uphill grade may affect heavy vehicle speeds.

### Standard:

When used, a STEEP GRADE AHEAD (W7-VP1) plaque (see Figure 2B-V7 in this Supplement) shall be placed above an R4-V1 or R4-V4 sign.

# CHAPTER 2D. GUIDE SIGNS—CONVENTIONAL ROADS

### **Section 2D.04 Size of Signs**

### Standard:

Except as provided in Section 2A.11 of this Supplement, the sizes of conventional road guide signs that have standardized designs shall be as shown in Table 2D-1(VA) in this Supplement.

### Support:

Section 2A.11 of this Supplement contains information regarding the applicability of the various columns in Table 2D-1(VA) in this Supplement.

### Option:

O3 Signs larger than those shown in Table 2D-1(VA) in this Supplement may be used (see Section 2A.11 of this Supplement).

### Support:

For other guide signs, the legends are so variable that a standardized design or size is not appropriate. The sign size is determined primarily by the length of the message, and the size of lettering and spacing necessary for proper legibility.

### Option:

Reduced letter height, reduced interline spacing, and reduced edge spacing may be used on guide signs if sign size must be limited by factors such as lane width or vertical or lateral clearance.

### Guidance:

- Reduced spacing between the letters or words on a line of legend should not be used as a means of reducing the overall size of a guide sign, except where determined necessary by engineering judgment to meet unusual lateral space constraints. In such cases, the legibility distance of the sign legend should be the primary consideration in determining whether to reduce the spacing between the letters or the words or between the words and the sign border, or to reduce the letter height.
- When a reduction in the prescribed size is necessary, the design used should be as similar as possible to the design for the standard size.

### Table 2D-1(VA). Conventional Road Guide Sign Sizes

Sign	Sign Designation	Section	Conventional Road	Minimum	Oversized
Interstate Route Sign (1 or 2 digits)	M1-1	2D.11	24 x 24	24 x 24	36 x 36
Interstate Route Sign (3 digits)	M1-1	2D.11	30 x 24	30 x 24	45 x 36
Off-Interstate Route Sign (1 or 2 digits)	M1-2,3	2D.11	24 x 24	24 x 24	36 x 36
Off-Interstate Route Sign (3 digits)	M1-2,3	2D.11	30 x 24	30 x 24	45 x 36
U.S. Route Sign (1 or 2 digits)	M1-4	2D.11	24 x 24	24 x 24	36 x 36
U.S. Route Sign (3 digits)	M1-4	2D.11	30 x 24	30 x 24	45 x 36
State Route Sign (1 or 2 digits)	<del>M1-5</del>	<del>2D.11</del>	<del>24 x 24</del>	<del>24 x 24</del>	<del>36 x 36</del>
State Route Sign (3 digits)	M1-5	2D.11	<del>30 x 24</del>	<del>30 x 24</del>	45 x 36
Virginia Primary Route Sign (1 or 2 digits)	M1-V1a, V1b	2D.11 2E.27	36 x 36	24 x 24	48 x 48
Virginia Primary Route Sign (3 digits)	M1-V1c, V1d	2D.11 2E.27	45 x 36	30 x 24	60 x 48
Virginia Circular Secondary Route Sign (3 or more digits)	M1-V2a, V2b, V2c, V2d, V2e, V2f	2D.11 2E.27	36 x 36	24 x 24	48 x 48
County Route Sign (1, 2, or 3 digits)	M1-6	2D.11	24 x 24	24 x 24	36 x 36
Forest Route (1, 2, or 3 digits)	M1-7	2D.11	24 x 24	18 x 18	36 x 36
Junction	M2-1	2D.13	21 x 15	21 x 15	30 x 21
Combination Junction (2 route signs)	M2-2	2D.14	60 x 48*	_	_
Cardinal Direction	M3-1,2,3,4	2D.15	24 x 12	24 x 12	36 x 18
Alternate	M4-1,1a	2D.17	24 x 12	24 x 12	36 x 18
By-Pass	M4-2	2D.18	24 x 12	24 x 12	36 x 18
Business	M4-3	2D.19	24 x 12	24 x 12	36 x 18
Truck	M4-4	2D.20	24 x 12	24 x 12	36 x 18
То	M4-5	2D.21	24 x 12	24 x 12	36 x 18
End	M4-6	2D.22	24 x 12	24 x 12	36 x 18
Temporary	M4-7,7a	2D.24	24 x 12	24 x 12	36 x 18
Begin	M4-14	2D.23	24 x 12	24 x 12	36 x 18
Advance Turn Arrow	M5-1,2,3	2D.26	21 x 15	21 x 15	
Lane Designation	M5-4,5,6	2D.27	24 x 18	24 x 18	36 x 24
Directional Arrow	M6- 1,2,2a,3,4,5,6,7	2D.28	21 x 15	21 x 15	30 x 21
Destination (1 line)	D1-1	2D.37	Varies x 18	Varies x 18	_
Destination and Distance (1 line)	D1-1a	2D.37	Varies x 18	Varies x 18	
Circular Intersection Destination (1 line)	D1-1d	2D.38	Varies x 18	Varies x 18	_
Circular Intersection Departure Guide	D1-1e	2D.38	Varies x 42*	_	_
Destination (2 lines)	D1-2	2D.37	Varies x 30	Varies x 30	_
Destination and Distance (2 lines)	D1-2a	2D.37	Varies x 30	Varies x 30	
Circular Intersection Destination (2 lines)	D1-2d	2D.38	Varies x 30	Varies x 30	_



Sign	Sign Designation	Section	Conventional Road	Minimum	Oversized
Destination (3 lines)	D1-3	2D.37	Varies x 42	Varies x 42	_
Destination and Distance (3 lines)	D1-3a	2D.37	Varies x 42	Varies x 42	_
Circular Intersection Destination (3 lines)	D1-3d	2D.38	Varies x 42	Varies x 42	_
Distance (1 line)	D2-1	2D.41	Varies x 18	Varies x 18	_
Distance (2 lines)	D2-2	2D.41	Varies x 30	Varies x 30	_
Distance (3 lines)	D2-3	2D.41	Varies x 42	Varies x 42	_
Street Name (1 line)	D3-1,1a	2D.43	Varies x 12	Varies x 8	Varies x 18
Overhead Street Name Sign	D3-V1	2D.43	Varies x 24	_	_
Overhead Street Name Sign with Multiple Street Names	D3-V1a	2D.43	Varies x 42	-	
Overhead Street Name Sign with Block Numbers	D3-V1b	2D.43	Varies x 36	_	_
Advance Street Name (2 lines)	D3-2	2D.44	Varies x 30*	_	_
Advance Street Name Sign with Multiple Street Names	D3-V2	2D.44	Varies x 48*	_	_
Advance Street Name (3 lines)	D3-2	2D.44	Varies x 42*	_	_
Advance Street Name (4 lines)	D3-2	2D.44	Varies x 60*	_	_
Parking Area	D4-1	2D.47	30 x 24	18 x 15	_
Park - Ride	D4-2	2D.48	30 x 36	24 x 30	36 x 48
National Scenic Byways	D6-4	2D.55	24 x 24	24 x 24	_
National Scenic Byways	D6-4a	2D.55	24 x 12	24 x 12	_
Weigh Station XX Miles	D8-1	2D.49	78 x 60	60 x 48	96 x 72
Weigh Station Next Right	D8-2	2D.49	84 x 72	66 x 54	108 x 90
Weigh Station (with arrow)	D8-3	2D.49	66 x 60	48 x 42	84 x 78
Crossover	D13-1,2	2D.54	60 x 30	60 x 30	78 x 42
Freeway Entrance	D13-3	2D.46	48 x 30	48 x 30	_
Freeway Entrance (with arrow)	D13-3a	2D.46	48 x 42	48 x 42	_
Combination Lane Use / Destination	D15-1	2D.33	Varies x 96	Varies x 96	_
Next Truck Lane XX Miles	D17-1	2D.51	42 x 48	42 x 48	60 x 66
Truck Lane XX Miles	D17-2	2D.51	42 x 42	42 x 42	60 x 54
Slow Vehicle Turn-Out XX Miles	D17-7	2D.52	72 x 42	72 x 42	96 x 54
V	Virginia Sp	ecific Signs	5		
Virginia Rectangular Secondary Route Sign (3 digits) - Two Arrows	M1-V3aB	2D.11	24 x 9	_	_
Virginia Rectangular Secondary Route Sign (3 digits) - Left Arrow	M1-V3aL	2D.11	24 x 9	_	_
Virginia Rectangular Secondary Route Sign (3 digits) - Right Arrow	M1-V3aR	2D.11	24 x 9	_	_
Virginia Rectangular Secondary Route Sign (4 digits) - Two Arrows	M1-V3bB	2D.11	24 x 9	_	_
Virginia Rectangular Secondary Route Sign (4 digits) - Left Arrow	M1-V3bL	2D.11	24 x 9	_	_





Sign	Sign Designation	Section	Conventional Road	Minimum	Oversized
Virginia Rectangular Secondary Route Sign (4 digits) - Right Arrow	M1-V3bR	2D.11	24 x 9	-	_
Virginia Rectangular Secondary Route Sign (5 digits) - Two Arrows	M1-V3cB	2D.11	24 x 9	1	1
Virginia Rectangular Secondary Route Sign (5 digits) - Left Arrow	M1-V3cL	2D.11	24 x 9	-	_
Virginia Rectangular Secondary Route Sign (5 digits) - Right Arrow	M1-V3cR	2D.11	24 x 9	-	_
OLD	M4-V7	2D.V1	18 x 6	_	24 x 12
Through Route Block Numbers	D3-V3	2D.43	24 x 30	_	_
ENTERING (plaque)	D6-VP1	2D.V2	24 x 9	_	_
LEAVING (plaque)	D6-VP2	2D.V2	24 x 9	_	_
VIRGINIA BYWAY	D6-V1	2D.V2	24 X 24	_	_

<sup>\*</sup>The size shown is for a typical sign. The size should be determined based on the amount of legend required for the sign.

Notes: 1. Larger signs may be used when appropriate

### Section 2D.05 Lettering Style

#### Standard:

- The design of upper-case letters, lower-case letters, numerals, route shields, and spacing shall be as provided in the "Standard Highway Signs and Markings" book (see Section 1A.11 of this Supplement), and the "Virginia Standard Highway Signs" book (see Appendix A of this Supplement for link).
- The lettering for names of places, streets, and highways on conventional road guide signs shall be a combination of lower-case letters with initial upper-case letters (see Section 2A.13 of this Supplement). The nominal loop height of the lower-case letters shall be 3/4 the height of the initial upper-case letter. When a mixed-case legend letter height is specified referring only to the initial upper-case letter, the height of the lower-case letters that follow shall be determined by this proportion. When the height of a lower-case letter is referenced, the reference is made to the nominal loop height and the height of the initial upper-case letter shall also be determined by this proportion.
- 03 All other word legends on conventional road guide signs shall be in upper-case letters.
- The unique letter forms for each of the Standard Alphabet series shall not be stretched, compressed, warped, or otherwise manipulated. Modifications to the length of a word for a given letter height and series shall be accomplished only by the methods described in Section 2D.04 of this Supplement.

<sup>2.</sup> Dimensions in inches are shown as width x height

### **Section 2D.09 Numbered Highway Systems**

### Support:

- The purpose of numbering and signing highway systems is to identify routes and facilitate travel.
- The Interstate and United States (U.S.) highway systems are numbered by the American Association of State Highway and Transportation Officials (AASHTO) upon recommendations of the State highway organizations because the respective States own these systems. State and county road systems are numbered by the appropriate authorities.
- The basic policy for numbering the Interstate and U.S. highway systems is contained in the following Purpose and Policy statements published by AASHTO (see Page i of the MUTCD for AASHTO's address):
  - A. "Establishment and Development of United States Numbered Highways," and
  - B. "Establishment of a Marking System of the Routes Comprising the National System of Interstate and Defense Highways."

#### Guidance:

The principles of these policies should be followed in establishing the highway systems described in Paragraph 2 and any other systems, with effective coordination between adjacent jurisdictions. Care should be taken to avoid the use of numbers or other designations that have been assigned to Interstate, U.S., or State routes in the same geographic area. Overlapping numbered routes should be kept to a minimum.

### Standard:



Route systems shall be given preference in this order: Interstate, United States, Primary State, and Secondary State. The preference shall be given by installing the highest-priority legend on the top or the left of the sign.

### Support:

Section 2D.53 of this Supplement contains information regarding the signing of unnumbered highways to enhance route guidance and facilitate travel.

### **Section 2D.11 Design of Route Signs**

### Standard:



- The "Standard Highway Signs and Markings" book (see Section 1A.11 of this Supplement) shall be used for designing Interstate and U.S. route signs. Other route sign designs shall be established by the authority having jurisdiction.
- Interstate Route signs (see Figure 2D-3(VA) in this Supplement) shall consist of a cutout shield, with the route number in white letters on a blue background, the word INTERSTATE in white upper-case letters on a red background, and a white border. This sign shall be used on all Interstate routes and in connection with route sign assemblies on intersecting highways.

### Figure 2D-3(VA). Route Signs



Interstate Route Sign M1-1



Off-Interstate Business Route Sign M1-2 (Loop), M1-3 (Spur)



Virginia Primary Route Sign M1-V1a



Virginia Circular Secondary Route Sign (Four Digits) M1-V2c



Virginia Circular Secondary Route Sign (F & Four Digits) M1-V2e



U.S. Route Sign M1-4

LASSEN

**County Route Sign** 

M1-6





Forest Route Sign M1-7



M1-V3aB

Virginia Circular Secondary

Route Sign (Three Digits)

M1-V2a



- 03 Interstate Route signs shall not contain the State name.
- A 24 x 24-inch minimum sign size shall be used for Interstate route numbers with one or two digits, and a 30 x 24-inch minimum sign size shall be used for Interstate route numbers having three digits.
- Off-Interstate Business Route signs (see Figure 2D-3(VA) in this Supplement) shall consist of a cutout shield carrying the number of the connecting Interstate route and the words BUSINESS and either LOOP or SPUR in upper-case letters. The legend and border shall be white on a green background, and the shield shall be the same shape and dimensions as the Interstate Route sign. In no instance shall the word INTERSTATE appear on the Off-Interstate Business Route sign.

### Option:

- The Off-Interstate Business Route sign may be used on a major highway that is not a part of the Interstate system, but one that serves the business area of a city from an interchange on the system.
- When used on a green guide sign, a white square or rectangle may be placed behind the shield to improve contrast.

### Standard:

U.S. Route signs (see Figure 2D-3(VA) in this Supplement) shall consist of black numerals on a white shield surrounded by a rectangular black background without a

- border. This sign shall be used on all U.S. routes and in connection with route sign assemblies on intersecting highways.
- OP A 24 x 24-inch minimum sign size shall be used for U.S. route numbers with one or two digits, and a 30 x 24-inch minimum sign size shall be used for U.S. route numbers having three digits.
- 10 State Route signs shall be designed by the individual State highway agencies.

### **Standard:**

- Virginia Primary Route (M1-V1) and Virginia Circular Secondary Route (M1-V2) signs (see Figure 2D-3(VA) in this Supplement) shall be approximately the same size as the U.S. Route sign. Both signs shall also be similar to the U.S. Route sign by containing black numerals on a white area surrounded by a rectangular black background without a border.
- Where U.S. Route, Virginia Primary Route, or Virginia Circular Secondary Route signs are used as components of guide signs, only the distinctive shape of the shield itself and the route numerals within shall be used. The rectangular background upon which the distinctive shape of the shield is mounted, such as the black area around the outside of the shields on the M1-4, M1-V1, and M1-V2 signs, shall not be included on the guide sign. Where U.S. Route, Virginia Primary Route, or Virginia Circular Secondary Route signs are used as components of other signs of non-contrasting background colors, the rectangular background shall be used so that recognition of the distinctive shape of the shield can be maintained.
- 13 If county road authorities elect to establish and identify a special system of important county roads, a statewide policy for such signing shall be established that includes a uniform numbering system to uniquely identify each route. The County Route (M1-6) sign (see Figure 2D-3(VA) in this Supplement) shall consist of a pentagon shape with a yellow county name and route number and border on a blue background. County Route signs displaying two digits or the equivalent (letter and numeral, or two letters) shall be a minimum size of 18 x 18 inches; those carrying three digits or the equivalent shall be a minimum size of 24 x 24 inches.
- 14 If a jurisdiction uses letters instead of numbers to identify routes, all references to numbered routes in this Chapter shall be interpreted to also include lettered routes.

### Guidance:

If used with other route signs in common assemblies, the County Route sign should be of a size compatible with that of the other route signs.

### Option:

16 When used on a green guide sign, a yellow square or rectangle may be placed behind the County Route sign to improve contrast.

### Standard:

17 Route signs (see Figure 2D-3(VA) in this Supplement) for park and forest roads shall be designed with adequate distinctiveness and legibility and of a size compatible with other route signs used in common assemblies.



### **Section 2D.12 Design of Route Sign Auxiliaries**

#### Standard:

Route sign auxiliaries carrying word legends, except the JCT sign, shall have a standard size of 24 x 12 inches. Those carrying arrow symbols, or the JCT sign, shall have a standard size of 21 x 15 inches. All route sign auxiliaries shall match the color combination of the route sign that they supplement.

### Guidance:

- With route signs of larger heights, auxiliary signs should be suitably enlarged, but not such that they exceed the width of the route sign.
- The background, legend, and border of a route sign auxiliary should have the same colors as those of the route sign with which the auxiliary is mounted in a route sign assembly (see Section 2D.29 of this Supplement). For a route sign design that uses multiple background colors, such as the Interstate route sign, the background color of the corresponding auxiliary should be that of the background area on which the route number is placed on the route sign.

### Option:

O4 A route sign and any auxiliary signs used with it may be combined on a single sign as a guide sign.

### Guidance:



If a route sign and its auxiliary signs are combined to form a single guide sign, the background color of the sign should be green and the design should comply with the basic principles for the design of guide signs. Route signs and their auxiliary signs should not be combined on a single sign with a black background.

### Standard:

If a route sign and its auxiliary signs are combined on a single sign with a green background, the auxiliary messages shall be white legends placed directly on the green background. Auxiliary signs shall not be mounted directly to a guide sign or other type of sign.

### Support:

Of Chapter 2F contains information regarding auxiliary signs for toll highways.

### **Section 2D.29 Route Sign Assemblies**

### Standard:

- 01 A Route Sign assembly shall consist of a route sign and auxiliary signs that further identify the route and indicate the direction. Route Sign assemblies shall be installed on all approaches to numbered routes that intersect with other numbered routes.
- Where two or more routes follow the same section of highway, the route signs for Interstate, U.S., State, and county routes shall be mounted in that order from the left in horizontal arrangements and from the top in vertical arrangements. Subject to this

- order of precedence, route signs for lower-numbered routes shall be placed at the left or top.
- Within groups of assemblies, information for routes intersecting from the left shall be mounted at the left in horizontal arrangements and at the top or center of vertical arrangements. Similarly, information for routes intersecting from the right shall be at the right or bottom, and for straight-through routes at the center in horizontal arrangements or top in vertical arrangements.
- Noute Sign assemblies shall be mounted in accordance with the general specifications for signs (Chapter 2A), with the lowest sign in the assembly at the height prescribed for single signs.

### Guidance:

Assemblies for two or more routes, or for different directions on the same route, should be mounted in groups on a common support.

### Option:

- Route Sign assemblies may be installed on the approaches to numbered routes on unnumbered roads and streets that carry an appreciable amount of traffic destined for the numbered route.
- The diagrammatic route guide sign format, such as the D1-4 and D1-5 signs shown in Figure 2D-8 of the MUTCD, may be used on approaches to roundabouts.
- 18 If engineering judgment indicates that groups of assemblies that include overlapping routes or multiple turns might be confusing, route signs or auxiliary signs may be omitted or combined, provided that clear directions are given to road users.

### Support:

op Figure 2D-6(VA) in this Supplement shows typical placements of route signs.

### Guidance:

Virginia Circular Secondary Route (M1-V2a, M1-V2c, and M1-V2e) signs (see Figure 2D-3(VA) in this Supplement) should be installed on the more heavily traveled Secondary routes and on those of importance to through traffic. This sign should also be installed on Primary routes in advance of intersections with heavily traveled Secondary routes.

### Option:

On Secondary routes which are Frontage roads with a four digit route number, the letter "F" may appear above the route number within the M1-V2e sign (see Figure 2D-3(VA) in this Supplement).

### Standard:

12 Rectangular Secondary Route (M1-V3) signs (see Figure 2D-3(VA) in this Supplement) shall be installed at intersections between Secondary Routes or at intersections between a Primary Route and a Secondary Route where the M1-V2 sign is not needed.

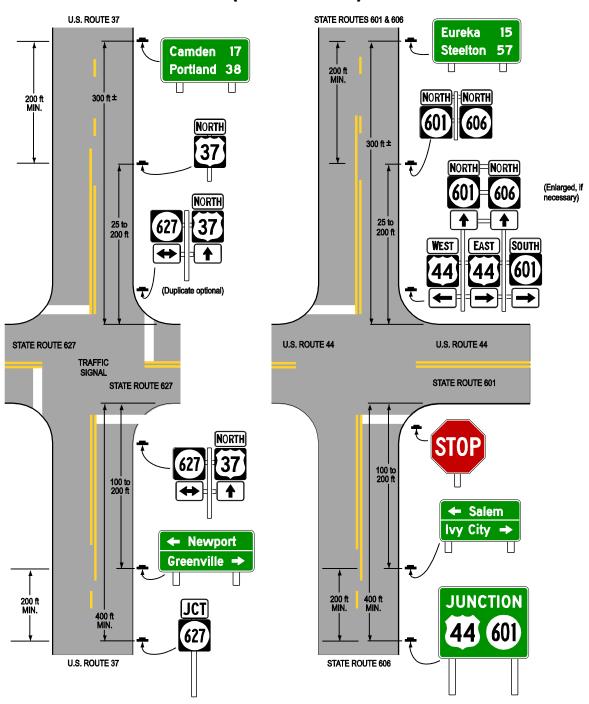
### Option:

Rectangular Secondary Route signs may be installed below a STOP (R1-1) or YIELD (R1-2) sign at a Secondary route intersection.



Figure 2D-6(VA). Illustration of Directional Assemblies and Other Route Signs (for One Direction of Travel Only)

(Sheet 1 of 4)

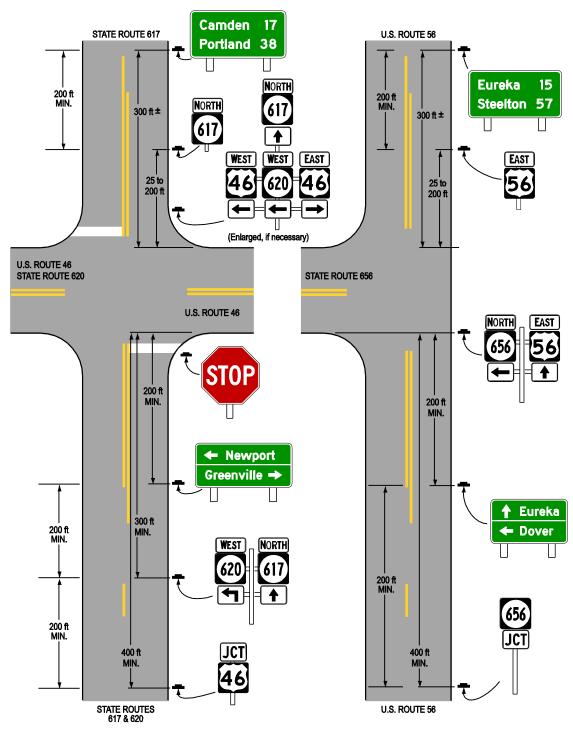


Note: The spacings shown on this figure are for rural intersections.

See Sections 2D.29, 2D.30, 2D.32, 2D.34, 2D.40, and 2D.42 for low-speed and/or urban conditions.

Figure 2D-6(VA). Illustration of Directional Assemblies and Other Route Signs (for One Direction of Travel Only)

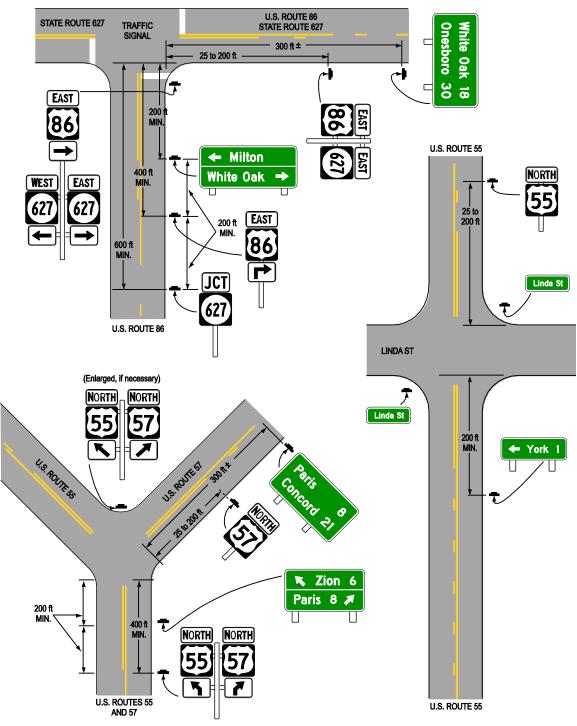
(Sheet 2 of 4)



Note: The spacings shown on this figure are for rural intersections. See Sections 2D.29, 2D.30, 2D.32, 2D.34, 2D.40, and 2D.42 for low-speed and/or urban conditions.

Figure 2D-6(VA). Illustration of Directional Assemblies and Other Route Signs (for One Direction of Travel Only)

(Sheet 3 of 4)

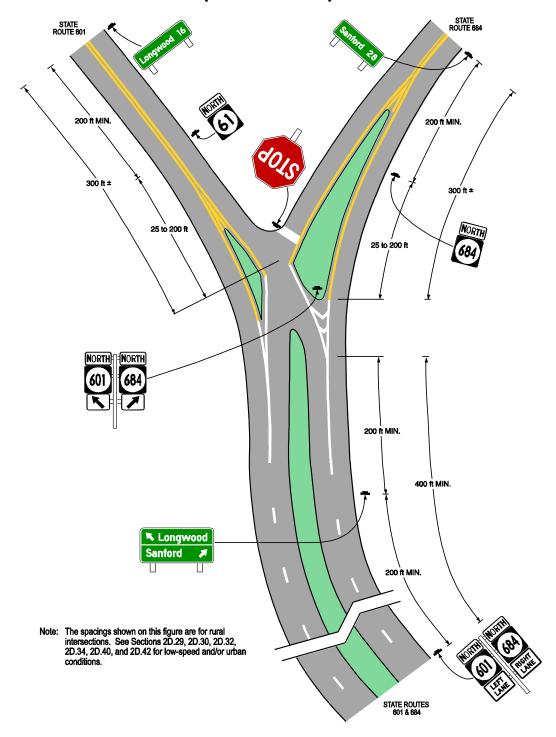


Note: The spacings shown on this figure are for rural intersections.

See Sections 2D.29, 2D.30, 2D.32, 2D.34, 2D.40, and 2D.42 for low-speed and/or urban conditions.

Figure 2D-6(VA). Illustration of Directional Assemblies and Other Route Signs (for One Direction of Travel Only)

(Sheet 4 of 4)



#### Standard:

14 Rectangular Secondary Route signs shall not be used to substitute for U.S. and Primary Route shields.

### **Section 2D.42 Location of Distance Signs**

### Standard:



- Distance signs shall be installed on Primary routes at locations meeting one of three criteria:
  - A. Leaving municipalities
  - B. Just beyond interchanges and intersections with Interstates and other Primary routes in rural areas
  - C. In rural areas where Criteria A and B do not apply at intervals of not less than 10 miles.

### Guidance:

- Distance signs should be placed just outside the municipal limits or at the edge of the built-up area if it extends beyond the limits.
- Where overlapping routes separate a short distance from the municipal limits, the Distance sign at the municipal limits should be omitted. The Distance sign should be installed approximately 300 feet beyond the separation of the two routes.
- Where, just outside of an incorporated municipality, two routes are concurrent and continue concurrently to the next incorporated municipality, the top name on the Distance sign should be that of the place where the routes separate; the bottom name should be that of the city to which the greater part of the through traffic is destined.

### Support:

of Figure 2D-6(VA) in this Supplement shows typical placements of Distance signs.

### V

# Section 2D.43 <u>Street Name Signs (D3-1, D3-1a, D3-V1, D3-V1a, D3-V1b, or D3-V3)</u>

### Guidance:

Street Name (D3-1 or D3-1a, D3-V1, D3-V1a, D3-V1b) signs (see Figure 2D-10(VA) in this Supplement) should be installed in urban areas at all street intersections regardless of other route signs that might be present and should be installed in rural areas to identify important roads that are not otherwise signed.

### Option:

For streets that are part of a U.S., State, or county numbered route, a D3-1a post-mounted Street Name sign (see Figure 2D-10(VA) in this Supplement) that incorporates a route shield may be used to assist road users who might not otherwise be able to associate the name of the street with the route number.

### Figure 2D-10 (VA). Street Name and Parking Signs



### Standard:

- 13 The lettering for names of streets and highways on Street Name signs shall be composed of a combination of lower-case letters with initial upper-case letters (see Section 2A.13 of this Supplement).
- Except as provided in Paragraph 6 below, lettering on post-mounted Street Name signs shall be composed of initial upper-case letters at least 6 inches in height and lower-case letters at least 4.5 inches in height.
- On multi-lane streets with speed limits greater than 40 mph, the lettering on postmounted Street Name signs shall be composed of initial upper-case letters at least 8 inches in height and lower-case letters at least 6 inches in height.

### Option:

For local roads with speed limits of 25 mph or less, the lettering on post-mounted Street Name signs may be composed of initial upper-case letters at least 4 inches in height and lower-case letters at least 3 inches in height.



#### Guidance:

of If overhead Street Name signs (D3-V1, D3-V1a, D3-V1b) are used, the lettering should be composed of initial upper-case letters at least 12 inches in height and lower-case letters at least 9 inches in height.

### Support:

The minimum letter heights for Street Name signs are summarized in Table 2D-2 (VA) in this Supplement.

### Option:

- O9 Supplementary lettering to indicate the type of street (such as Street, Avenue, or Road) or the section of the city (such as NW) on the D3-1 and D3-1a post-mounted street name signs may be in smaller lettering, composed of initial upper-case letters at least 3 inches in height and lower-case letters at least 2.25 inches in height. Conventional abbreviations (see Section 1A.15 of the MUTCD) may be used except for the street name itself.
- A pictograph (see definition in Section 1A.13 of this Supplement) may be used on a D3-1 post-mounted street name sign.
- Block numbers may be used on street name signs to guide motorists to specific points along a route.

#### **Standard:**

12 If used on overhead street name signs (D3-V1b), block numbers and arrows shall appear on a line below the street name.

### Option:

13 Through Route Block Number (D3-V3) signs (see Figure 2D-10(VA) in this Supplement) may be used at signalized intersections displaying the block number of the through route immediately beyond the signalized intersection.

### Standard:

- Pictographs shall not be displayed on D3-1a post-mounted street name sign or Advance Street Name (D3-2 or D3-V2) signs (see Section 2D.44 of this Supplement).
- 15 If a pictograph is used on a D3-1 post-mounted street name sign, the height and width of the pictograph shall not exceed the upper-case letter height of the principal legend of the sign.

#### Guidance:

16 The pictograph should be positioned to the left of the street name.

#### Standard:

17 The Street Name sign shall be retroreflective or illuminated to show the same shape and similar color both day and night. The color of the legend (and border, if used) shall contrast with the background color of the sign.

#### Option:

18 The border may be omitted from a Street Name sign.



## Table 2D-2(VA). Recommended Minimum Letter Heights on Street Name Signs

Type of Mounting	Type of Street or	Speed Limit	Recommended Minimum Letter Height		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Highway		Initial Upper-Case	Lower-Case	
Overhead	All types	All speed limits	12 inches	9 inches	
Post-mounted	Multi-lane	More than 40 mph	8 inches	6 inches	
Post-mounted	Multi-lane	40 mph or less	6 inches	4.5 inches	
Post-mounted	2-lane	All speed limits	6 inches*	4.5 inches*	

<sup>\*</sup> On local two-lane streets with speed limits of 25 mph or less, 4-inch initial upper-case letters with 3-inch lower-case letters may be used.



### Guidance:

19 The background color for street name signs should be green.

### Option:

An alternative background color other than the normal guide sign color of green may be used for post-mounted Street Name (D3-1 or D3-1a) or overhead Street Name (D3-V1, D3-V1a, D3-V1b) signs where the highway agency determines this is necessary to assist road users in determining jurisdictional authority for roads.

### Standard:

Alternative background colors shall not be used for Advance Street Name (D3-2 or D3-V2) signs (see Section 2D.44 of this Supplement).



The only acceptable alternative background colors for post-mounted Street Name (D3-1 or D3-1a) or overhead street name (D3-V1, D3-V1a, D3-V1b) signs shall be blue, brown, or white. Regardless of whether green, blue, or brown is used as the background color for post-mounted Street Name (D3-1 or D3-1a) signs, the legend (and border, if used) shall be white. For Street Name signs that use a white background, the legend (and border, if used) shall be black.

### Guidance:

- An alternative background color for Street Name signs, if used, should be applied to the post-mounted Street Name (D3-1 or D3-1a) signs and overhead street name (D3-V1, D3-V1a, D3-V1b) signs on all roadways within a particular jurisdiction.
- 24 If a white background color is used, the sign legend should be black series E modified font.
- In business or commercial areas and on principal arterials, Street Name signs should be placed at least on diagonally opposite corners. In residential areas, at least one Street Name sign should be mounted at each intersection. Signs naming both streets should be installed at each intersection. They should be mounted with their faces parallel to the streets they name.

## V

#### Option:

Post-mounted Street Name signs (D3-1 or D3-1a) may also be placed above a regulatory or STOP or YIELD sign with no required vertical separation.

#### Guidance:

In urban or suburban areas, especially where Advance Street Name signs for signalized and other major intersections are not used, the use of overhead Street Name signs (D3-V1, D3-V1a, D3-V1b) should be strongly considered.

#### Option:

At intersection crossroads where the same road has two different street names for each direction of travel, both street names may be displayed on the same sign along with directional arrows.

#### Support:

Information regarding the use of street names on supplemental plaques for use with intersection-related warning signs is contained in Section 2C.58 of the MUTCD.

#### Standard:



- Overhead (D3-V1, D3-V1a, D3-V1b) or post-mounted (D3-1, D3-1a) street name signs shall be used at all signalized intersections.
- Except as provided in Paragraphs 32 and 33 below, overhead street name signs (D3-V1, D3-V1a, D3-V1b) shall be installed at all signalized intersections with mast arms.
- If physical restrictions prohibit the use of overhead street name signs (D3-V1, D3-V1a, D3-V1b), then street name signs shall be installed on the signal pole. In such instances, the size of the sign shall be equivalent to an overhead street name sign.

#### Guidance:

If the crossing street is the entrance to a shopping center that has no official street name, it should be signed with a generic message such as "Shopping Center Entrance."

### V

## Section 2D.44 Advance Street Name Signs (D3-2 & D3-V2)

#### Support:

Advance Street Name (D3-2 and D3-V2) signs (see Figure 2D-10(VA) in this Supplement) identify an upcoming intersection. Although this is often the next intersection, it could also be several intersections away in cases where the next signalized intersection is referenced.

#### Standard:

Advance Street Name (D3-2 and D3-V2) signs, if used, shall supplement rather than be used instead of the Street Name (D3-1) signs at the intersection.

#### Option:

Advance Street Name (D3-2 and D3-V2) signs may be installed in advance of signalized or unsignalized intersections to provide road users with advance information to identify the name(s) of the next intersecting street to prepare for crossing traffic and to facilitate timely deceleration and/or lane changing in preparation for a turn.

#### Guidance:

On arterial highways in rural areas, Advance Street Name signs should be used in advance of all signalized intersections and in advance of all intersections with exclusive turn lanes.



In urban and suburban areas, Advance Street Name signs should be used in advance of all signalized intersections on principal arterials (see FHWA functional classification, link provided in Appendix A of this Supplement). At a minimum, Advance Street Name signs should be used on streets with three or more approach lanes and posted speed limit of 45 mph or greater.

#### Option:

- In both cases, Advance Street Name Signs may be omitted where signalized intersections are so closely spaced that advance placement of the signs is impractical.
- The heights of the letters on Advance Street Name signs should be the same as those used for the Street Name signs at the intersection requiring advance signing (see Section 2D.43 of this Supplement).

#### Standard:

- If used, Advance Street Name signs shall have a white legend and border on a green background.
- If used, Advance Street Name signs shall provide the name(s) of the intersecting street(s) on the top line(s) of the legend and the distance to the intersecting streets or messages such as NEXT SIGNAL, NEXT INTERSECTION, NEXT ROUNDABOUT, or directional arrow(s) on the bottom line of the legend.
- 10 Pictographs shall not be displayed on Advance Street Name signs.

#### Option:

- Directional arrow(s) may be placed to the right or left of the street name or message such as NEXT SIGNAL, as appropriate, rather than on the bottom line of the legend. Curved-stem arrows may be used on Advance Street Name signs on approaches to circular intersections.
- For intersecting crossroads where the same road has a different street name for each direction of travel, the different street names may be displayed on the same Advance Street Name sign along with directional arrows.
- In advance of two closely-spaced intersections where it is not practical to install separate Advance Street Name signs, the Advance Street Name sign may include the street names for both intersections along with appropriate supplemental legends for both street names, such as NEXT INTERSECTION, 2ND INTERSECTION, or NEXT LEFT and NEXT RIGHT, or directional arrows.

#### Guidance:

- If two street names are used on the Advance Street Name sign, the street names should be displayed in the following order:
  - A. For a single intersection where the same road has a different street name for each direction of travel, the name of the street to the left should be displayed above the



- name of the street to the right. The two road names should not be divided by a horizontal line (see Figure 2D-10(VA) in this Supplement); or
- B. For two closely-spaced intersections, the name of the first street encountered should be displayed above the name of the second street encountered, and the arrow associated with the second street encountered should be an advance arrow, such as the arrow shown on the W16-6P arrow plaque (see Figure 2C-12).

#### Option:

An Advance Street Name (W16-8P or W16-8aP) plaque (see Section 2C.58 of the MUTCD) with black legend on a yellow background, installed supplemental to an Intersection (W2 series) or Advance Traffic Control (W3 series) warning sign may be used instead of an Advance Street Name guide sign.

## **Section 2D.53 Signing of Named Highways**

#### Option:

Guide signs may contain street or highway names if the purpose is to enhance driver communication and guidance; however, they are to be considered as supplemental information to route numbers.

#### Standard:

- 02 Highway names shall not replace official numeral designations.
- Memorial names (see Section 2M.10 of this Supplement) shall not appear on supplemental signs or on any other information sign on or along the highway or its intersecting routes.
- The use of route signs shall be restricted to signs officially used for guidance of traffic in accordance with this Manual and the "Purpose and Policy" statement of the American Association of State Highway and Transportation Officials that applies to Interstate and U.S. numbered routes (see Page I of the MUTCD for AASHTO's address).

#### Option:

Unnumbered routes having major importance to proper guidance of traffic may be signed if carried out in accordance with the aforementioned policies. For unnumbered highways, a name to enhance route guidance may be used where the name is applied consistently throughout its length.

#### Guidance:

Only one name should be used to identify any highway, whether numbered or unnumbered.

#### **Standard:**



OF Signs for named highways shall be consistent in design with signs for memorial highways and facilities (see Section 2M.10 of this Supplement).



## **Section 2D.V1 OLD Auxiliary Signs**

#### Option:

The OLD (M4-V1) auxiliary sign (see Figure 2D-4(VA) in this Supplement) may be used where a route has been transferred from its original number and/or system.

#### Standard:

12 If used, the OLD auxiliary sign shall be used in combination with the old and new route numbers for a period of one year.

## V

## Section 2D.V2 VIRGINIA BYWAY (D6-V1) Signs

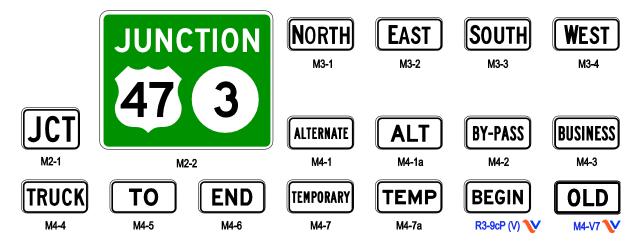
#### Support:

- The Virginia Byway program identifies road corridors containing aesthetic or cultural value near areas of historical, natural or recreational significance. The Commonwealth Transportation Board (CTB) designates select roadway corridors as Virginia Byways, and signs are installed at various points along these corridors (see Figure 2D-V1 in this Supplement).
- Additional information about the Virginia Byway program can be accessed at VDOT's web site, see the Appendix of this Supplement for the web address.

#### Standard:

- os VIRGINIA BYWAY (D6-V1) signs (see Figure 2D-V1 in this Supplement) shall be installed at the termini of a route or sections thereof which have been designated as Virginia Byways by the CTB. Additionally, Virginia Byway signs shall be installed between the termini at intervals of approximately 5 miles.
- 04 ENTERING (D6-VP1) and LEAVING (D6-VP2) plaques shall be placed above the VIRGINIA BYWAY signs at the beginning and end, respectively, of the designated Virginia Byway route or segment.

## Figure 2D-4(VA). Route Sign Auxiliaries





## Figure 2D-V1. Virginia Byway Signs



D6-V1



D6-VP1

LEAVING

D6-VP2

## CHAPTER 2E. GUIDE SIGNS—FREEWAYS AND EXPRESSWAYS

### **Section 2E.14 Size and Style of Letters and Signs**

#### Standard:

Except as provided in Section 2A.11 of this Supplement, the sizes of freeway and expressway guide signs that have standardized designs shall be as shown in Table 2E-1(VA) in this Supplement.

#### Support:

Section 2A.11 of this Supplement contains information regarding the applicability of the various columns in Table 2E-1(VA) in this Supplement.

#### Option:

O3 Signs larger than those shown in Table 2E-1(VA) in this Supplement may be used (see Section 2A.11 of this Supplement).

#### Standard:



- For all freeway and expressway signs that do not have a standardized design, the message dimensions shall be determined first, and the outside sign dimensions secondarily. Word messages in the legend of expressway guide signs shall be in letters at least 8 inches high. Larger lettering shall be used for major guide signs at or in advance of interchanges and for all overhead signs. Minimum numeral and letter sizes for expressway guide signs according to interchange classification, type of sign, and component of sign legend shall be as shown in Tables 2E-2 and 2E-3. Minimum numeral and letter sizes for freeway guide signs according to interchange classification, type of sign, and component of sign legend shall be as shown in Tables 2E-4 and 2E-5. All names of places, streets, and highways on freeway and expressway guide signs shall be composed of lower-case letters with initial upper-case letters. The letters and the numerals used shall be Clearview 5-W or 5-W-R (see Section 2A.13 of this Supplement). The nominal loop height of the lower-case letters shall be 3/4 of the height of the initial upper-case letter (see Paragraph 2 of Section 2D.05 of this Supplement for additional information on the specification of letter heights). Other word legends shall be composed of upper-case letters. Interline and edge spacing shall be as provided in Section 2E.15 of the MUTCD.
- Lettering size on freeway and expressway signs shall be the same for both rural and urban conditions.

#### Support:

Sign size is determined primarily in terms of the length of the message and the size of the lettering necessary for proper legibility. Letter style and height, and arrow design have been standardized for freeway and expressway signs to assure uniform and effective application.

## Table 2E-1(VA). Freeway or Expressway Guide Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Minimum Size
Exit Number (plaque)			
1-, 2-Digit Exit Number	E1-5P	2E.31	114 x 30
3-Digit Exit Number	E1-5P	2E.31	132 x 30
1-, 2-Digit Exit Number (with single letter suffix)	E1-5P	2E.31	138 x 30
3-Digit Exit Number (with single letter suffix)	E1-5P	2E.31	156 x 30
1-, 2-Digit Exit Number (with dual letter suffix)	E1-5P	2E.31	168 x 30
3-Digit Exit Number (with dual letter suffix)	E1-5P	2E.31	186 x 30
Left (plaque)	E1-5aP	2E.33	72 x 30
Left Exit Number (plaque)			
1-, 2-Digit Exit Number	E1-5bP	2E.31	114 x 54
3-Digit Exit Number	E1-5bP	2E.31	132 x 54
1-, 2-Digit Exit Number (with single letter suffix)	E1-5bP	2E.31	138 x 54
3-Digit Exit Number (with single letter suffix)	E1-5bP	2E.31	156 x 54
1-, 2-Digit Exit Number (with dual letter suffix)	E1-5bP	2E.31	168 x 54
3-Digit Exit Number (with dual letter suffix)	E1-5bP	2E.31	186 x 54
Next Exit XX Miles (1 line)	_	2E.34	Varies x 24
Next Exit XX Miles (2 lines)	_	2E.34	Varies x 36
Exit Gore (no exit number)	E5-1	2E.37	72 x 60
Exit Gore (with exit number)			
1-, 2-Digit Exit Number	E5-1a	2E.37	78 x 60
3-Digit Exit Number	E5-1a	2E.37	96 x 60
1-Digit Exit Number (with single letter suffix)	E5-1a	2E.37	90 x 60
2-Digit Exit Number (with single letter suffix)	E5-1a	2E.37	108 x 60
3-Digit Exit Number (with single letter suffix)	E5-1a	2E.37	126 x 60
1-Digit Exit Number (with dual letter suffix)	E5-1a	2E.37	120 x 60
2-Digit Exit Number (with dual letter suffix)	E5-1a	2E.37	138 x 60
3-Digit Exit Number (with dual letter suffix)	E5-1a	2E.37	156 x 60
Exit Number (plaque)			
1-, 2-Digit Exit Number	E5-1bP	2E.37	42 x 30
3-Digit Exit Number	E5-1bP	2E.37	60 x 30
1-Digit Exit Number (with single letter suffix)	E5-1bP	2E.37	48 x 30
1-Digit Exit Number (with dual letter suffix)	E5-1bP	2E.37	72 x 30
2-Digit Exit Number (with single or dual letter suffix)	E5-1bP	2E.37	72 x 30
3-Digit Exit Number (with single or dual letter suffix)	E5-1bP	2E.37	72 x 30
Narrow Exit Gore	E5-1c	2E.37	60 x 90*
Pull-Through	E6-2	2E.12	Varies x 120*
Pull-Through	E6-2a	2E.12	Varies x 90*
Exit Only (with arrow)	E11-1,1d	2E.24	174** x 36
Exit	E11-1a	2E.24	66 x 18

Sign or Plaque	Sign Designation	Section	Minimum Size
Only	E11-1b	2E.24	66 x 18
Exit Only	E11-1c	2E.24	120 x 18
Exit Only (with two arrows)	E11-1e,1f	2E.24	222** x 36
Left	E11-2	2E.40	60 x 18
Exit Gore Advisory Speed (plaque)	E13-1P	2E.37	72 x 24
Exit Direction Advisory Speed	E13-2	2E.36	162 x 24
Interstate Route Sign (1 or 2 digits)	M1-1	2E.27	36 x 36
Interstate Route Sign (3 digits)	M1-1	2E.27	45 x 36
Off-Interstate Route Sign (1 or 2 digits)	M1-2,3	2E.27	36 x 36
Off-Interstate Route Sign (3 digits)	M1-2,3	2E.27	45 x 36
U.S. Route Sign (1 or 2 digits)	M1-4	2E.27	36 x 36
U.S. Route Sign (3 digits)	M1-4	2E.27	45 x 36
State Route Sign (1 or 2 digits)	M1-5	2D.11	<del>36 x 36</del>
State Route Sign (3 digits)	<del>M1-5</del>	<del>2D.11</del>	45 x 36
Virginia Primary Route Sign (1 or 2 digits)	M1-V1a, V1b	2D.11	36 x 36
Virginia Primary Route Sign (3 digits)	M1-V1c, V1d	2D.11	45 x 36
Virginia Circular Secondary Route Sign (3 or more digits)	M1-V2a, V2b, V2c, V2d, V2e, V2f	2D.11	36 x 36
County Route Sign (1, 2, or 3 digits)	M1-6	2D.11	36 x 36
Forest Route (1, 2, or 3 digits)	M1-7	2D.11	36 x 36
Eisenhower Interstate System	M1-10,10a	2E.28	36 x 36
Junction	M2-1	2D.13	30 x 21
Combination Junction (2 route signs)	M2-2	2D.14	60 x 48*
Cardinal Direction	M3-1,2,3,4	2D.15	36 x 18
Alternate	M4-1,1a	2D.17	36 x 18
By-Pass	M4-2	2D.18	36 x 18
Business	M4-3	2D.19	36 x 18
Truck	M4-4	2D.20	36 x 18
То	M4-5	2D.21	36 x 18
End	M4-6	2D.22	36 x 18
Temporary	M4-7,7a	2D.24	36 x 18
Begin	M4-14	2D.23	36 x 18
Advance Turn Arrow	M5-1,2,3	2D.26	30 x 21
Lane Designation	M5-4,5,6	2D.27	36 x 24
Directional Arrow	M6-1,2, 2a,3,4,5,6,7	2D.28	30 x 21
Destination (1 line)	D1-1	2D.37	Varies x 30
Destination and Distance (1 line)	D1-1a	2D.37	Varies x 30
Destination (2 lines)	D1-2	2D.37	Varies x 54
Destination and Distance (2 lines)	D1-2a	2D.37	Varies x 54
Destination (3 lines)	D1-3	2D.37	Varies x 72
Destination and Distance (3 lines)	D1-3a	2D.37	Varies x 72
Distance (1 line)	D2-1	2D.41	Varies x 30



Sign or Plaque	Sign Designation	Section	Minimum Size
Distance (2 lines)	D2-2	2D.41	Varies x 54
Distance (3 lines)	D2-3	2D.41	Varies x 72
Street Name	D3-1,1a	2D.43	Varies x 18
Advance Street Name (2 lines)	D3-2	2D.44	Varies x 42*
Advance Street Name (3 lines)	D3-2	2D.44	Varies x 66*
Advance Street Name (4 lines)	D3-2	2D.44	Varies x 84*
Park - Ride	D4-2	2D.48	36 x 48
National Scenic Byways	D6-4	2D.55	24 x 24
National Scenic Byways	D6-4a	2D.55	24 x 12
Weigh Station XX Miles	D8-1	2E.54	96 x 72 (F) 78 x 60 (E)
Weigh Station Next Right	D8-2	2E.54	108 x 90 (F) 84 x 72 (E)
Weigh Station (with arrow)	D8-3	2E.54	84 x 78 (F) 66 x 60 (E)
Crossover	D13-1,2	2D.54	78 x 42
Freeway Entrance	D13-3	2D.46	48 x 30
Freeway Entrance (with arrow)	D13-3a	2D.46	48 x 42
Combination Lane Use / Destination	D15-1	2D.33	Varies x 96
Next Truck Lane XX Miles	D17-1	2D.51	60 x 66
Truck Lane XX Miles	D17-2	2D.51	60 x 54
Slow Vehicle Turn-Out XX Miles	D17-7	2D.52	96 x 54

<sup>\*</sup> The size shown is for a typical sign as illustrated in the figures in Chapters 2D and 2E. The size should be determined based on the amount of legend required for the sign.

Notes: 1. Larger signs may be used when appropriate

- 2. Dimensions in inches are shown as width x height
- 3. Where two sizes are shown, the larger size is for freeways (F) and the smaller size is for expressways (E)

<sup>\*\*</sup> The width shown represents the minimum dimension. The width shall be increased as appropriate to match the width of the guide sign.

Table 2E-2. Minimum Letter and Numeral Sizes for Expressway Guide Signs According to Interchange Classification

	Type of Ir					
Type of Sign	Ma	ijor			Overhead	
	Category a	Category b	Intermediate	Minor		
A. Advance Guide, Exit Direction, and Overhead Guide Signs						
Exit Number Plaques						
Words	10	10	10	8	10	
Numerals & Letters	15	15	15	12	15	
Interstate Route Signs						
Numerals	18	_	_		18	
1- or 2-Digit Shields	36 x 36	_	_	_	36 x 36	
3-Digit Shields	45 x 36	_	_	_	45 x 36	
U.S. or State Route Signs						
Numerals	18	18	18	12	18	
1- or 2-Digit Shields	36 x 36	36 x 36	36 x 36	24 x 24	36 x 36	
3-Digit Shields	45 x 36	45 x 36	45 x 36	30 x 24	45 x 36	
U.S. or State Route Text Identifi	cation (Example:	US 56)				
Numerals & Letters	18	15	15	12	15	
Cardinal Directions						
First Letters	18	15	12	10	15	
Rest of Words	15	12	10	8	12	
Auxiliary and Alternative Route	Legends (Examp	les: JCT, TO, AL	T, BUSINESS)			
Words	15	12	10	8	12	
Names of Destinations						
	Type of Ir	terchange (see	Section 2E.32 of th	e MUTCD)		
Type of Sign	Ма	ijor				
	Category a	Category b	Intermediate	Minor		
Upper-Case Letters	20	16	13.33	10.67	16	
Lower-Case Letters	15	12	10	8	12	
Distance Numbers	18	15	12	10	15	
Distance Fraction Numerals	12	10	10	8	10	
Distance Words	12	10	10	8	10	
Action Message Words	10	10	10	8	10	
B. Gore Signs						
Words	10	10	10	8	_	
Numerals & Letters	12	12	12	10	_	

Note: Sizes are shown in inches and where applicable are shown as width x height

Table 2E-3. Minimum Letter and Numeral Sizes for Expressway Guide Signs According to Sign Type

Type of Sign	Minimum Size
A. Pull-Through Signs	
Destinations — Upper-Case Letters	13.33
Destinations — Lower-Case Letters	10
Route Signs	
1- or 2-Digit Shields	36 x 36
3-Digit Shields	45 x 36
Cardinal Directions — First Letters	12
Cardinal Directions — Rest of Word	10
B. Supplemental Guide Signs	
Exit Number — Words	8
Exit Number — Numerals and Letters	12
Place Names — Upper-Case Letters	10.67
Place Names — Lower-Case Letters	8
Action Messages	8
Route Signs	
Numerals	12
1- or 2-Digit Shield	24 x 24
3-Digit Shield	30 x 24
C. Interchange Sequence or Community Interchanges Identification Signs	<b>y</b>
Words — Upper-Case Letters	10.67
Words — Lower-Case Letters	8
Numerals	10.67
Fraction Numerals	8
Route Signs	
Numerals	12
1- or 2-Digit Shield	24 x 24
3-Digit Shield	30 x 24
D. Next XX Exits Sign	
Place Names — Upper-Case Letters	10.67
Place Names — Lower-Case Letters	8
NEXT XX EXITS — Words	8
NEXT XX EXITS — Number	12
Type of Sign	Minimum Size

ccording to sign Type	
E. Distance Signs	
Words — Upper-Case Letters	8
Words — Lower-Case Letters	6
Numerals	8
Route Signs	
Numerals	9
1- or 2-Digit Shield	18 x 18
3-Digit Shield	22.5 x 18
F. General Services Signs (see Chapte	r 2I)
Exit Number — Words	8
Exit Number — Numerals and Letters	12
Services	8
G. Rest Area, Scenic Area, and Roadsic Signs (see Chapter 2I)	de Area
Words	10
Distance Numerals	12
Distance Fraction Numerals	8
Distance Words	8
Action Message Words	10
H. Reference Location Signs (see Chap	oter 2H)
Words	4
Numerals	10
I. Boundary and Orientation Signs (see 2H)	e Chapter
Words — Upper-Case Letters	8
Words — Lower-Case Letters	6
J. Next Exit and Next Services Signs	
Words and Numerals	8
K. Exit Only Signs	
Words	12
L. Overhead Arrow-Per-Lane and Diagr Signs	ammatic
See Table 2E-5	

Note: Sizes are shown in inches and where applicable are shown as width x height

Table 2E-4. Minimum Letter and Numeral Sizes for Freeway Guide Signs According to Interchange Classification

	Type of In	terchange (see	Section 2E.32 of th	e MUTCD)		
Type of Sign	Ma	jor			Overhead	
	Category a	Category b	Intermediate	Minor		
A. Advance Guide, Exit Direction, and Overhead Guide Signs						
Exit Number Plaques						
Words	10	10	10	10	10	
Numerals & Letters	15	15	15	15	15	
Interstate Route Signs						
Numerals	24/18	_	_	_	18	
1- or 2-Digit Shields	48 x 48/ 36 x 36	_	_	_	36 x 36	
3-Digit Shields	60 x 48/ 45 x 36		_	_	45 x 36	
U.S. or State Route Signs						
Numerals	24/18	18	18	12	18	
1- or 2-Digit Shields	48 x 48/ 36 x 36	36 x 36	36 x 36	24 x 24	36 x 36	
3-Digit Shields	60 x 48/ 45 x 36	45 x 36	45 x 36	30 x 24	45 x 36	
U.S. or State Route Text I	dentification (Exa	mple: US 56)				
Numerals & Letters	18	18/15	15	12	15	
Cardinal Directions						
First Letters	18	15	15	10	15	
Rest of Words	15	12	12	8	12	
Auxiliary and Alternative R	Route Legends (E	xamples: JCT, T	O, ALT, BUSINESS)			
	Type of In	terchange (see	Section 2E.32 of th	e MUTCD)		
Type of Sign	Ма	jor			Overhead	
	Category a	Category b	Intermediate	Minor		
Words	15	12	12	8	12	
Names of Destinations	II					
Upper-Case Letters	20	20	16	13.33	16	
Lower-Case Letters	15	15	12	10	12	
Distance Numbers	18	18/15	15	12	15	
Distance Fraction Numerals	12	12/10	10	8	10	
Distance Words	12	12/10	10	8	10	
Action Message Words	12	12/10	10	8	10	
B. Gore Signs						
Words	12	12	12	8	_	
Numeral & Letters	18	18	18	12	_	

Notes: 1. Sizes are shown in inches and where applicable are shown as width x height

2. Slanted line (/) signifies separation of desirable and minimum sizes

Chapter 2E May 2011

## Table 2E-5. Minimum Letter and Numeral Sizes for Freeway Guide Signs According to Sign Type

Type of Sign	Minimum Size
A. Pull-Through Signs	
Destinations — Upper-Case Letters	16
Destinations — Lower-Case Letters	12
Route Signs	
1- or 2-Digit Shields	36 x 36
3-Digit Shields	45 x 36
Cardinal Directions — First Letter	15
Cardinal Directions — Rest of Word	12
B. Supplemental Guide Signs	
Exit Number Words	10
Exit Number Numerals and Letters	15
Place Names — Upper-Case Letters	13.33
Place Names — Lower-Case Letters	10
Action Messages	8
Route Signs	
Numerals	12
1- or 2-Digit Shield	24 x 24
3-Digit Shield	30 x 24
C. Interchange Sequence or Community Interchanges Identification Signs	•
Words — Upper-Case Letters	13.33
Words — Lower-Case Letters	10
Numerals	13.33
Fraction Numerals	10
Route Signs	
Numerals	12
1- or 2-Digit Shield	24 x 24
3-Digit Shield	30 x 24
D. Next X Exits Sign	
Place Names — Upper-Case Letters	13.33
Place Names — Lower-Case Letters	10
NEXT X EXITS — Words	10
NEXT X EXITS — Number	15
E. Distance Signs	
Words — Upper-Case Letters	8
Words — Lower-Case Letters	6
Numerals	8
Route Signs	
Numerals	9
1- or 2-Digit Shield	18 x 18
3-Digit Shield	22.5 x 18
F. General Services Signs (see Chapter	21)
Exit Number Words	10
Exit Number Numerals and Letters	15
Services	10

Type of Sign	Minimum Size
G. Rest Area, Scenic Area, and Roadside	e Area
Signs (see Chapter 2I)	
Words	12
Distance Numerals	15
Distance Fraction Numerals	10
Distance Words	10
Action Message Words	12
H. Reference Location Signs (see Chapt	er 2H)
Words	4
Numerals	10
I. Boundary and Orientation Signs (see 2H)	Chapter
Words — Upper-Case Letters	8
Words — Lower-Case Letters	6
J. Next Exit and Next Services Signs	
Words and Numerals	8
K. Exit Only Signs	
Words	12
L. Overhead Arrow-Per-Lane Signs	
Arrowhead (Type D Directional Arrow)	21.625
Arrow Shaft Width	8
Arrow Height	
Through	72
Left Only	48
Right Only	48
Optional-Diverge (Through with Left or Right)	72
Optional-Split (Left and Right)	66
Vertical Separator Width	2
Vertical Space between Vertical	8
Separator and Top of Nearest Arrow	0
Horizontal Space between Vertical	
Separator and Top of Nearest Through	15
Arrow	
Horizontal Space between Arrow Shaft	10
and EXIT and ONLY plaques	
EXIT and ONLY Panels	60 x 18
M. Diagrammatic Signs	
Arrowhead (Type D Directional Arrow)	13.5*
Lane Widths	5
Lane Line Segments	1 x 6
Spacing between Lane Line Segments	6
Stem Height to Upper Point of Departure	30
Horizontal Space between Arrowhead	12
and Route Shield or Destination	12

<sup>\*</sup> The size shown is the arrowhead width per lane depicted on the corresponding arrow shaft

Note: Sizes are shown in inches and where applicable are shown as width x height

Chapter 2E May 2011

Designs for upper-case and lower-case alphabets together with tables of recommended letter spacing, are shown in the "Standard Highway Signs and Markings" book (see Section 1A.11 of this Supplement).

#### Guidance:

- Freeway lettering sizes (see Tables 2E-4 and 2E-5) should be used when expressway geometric design is comparable to freeway standards.
- Other sign letter size requirements not specifically identified elsewhere in this Manual should be guided by these specifications. Abbreviations (see Section 2E.17 of the MUTCD) should be kept to a minimum.

#### Support:

10 A sign mounted over a particular roadway lane to which it applies might have to be limited in horizontal dimension to the width of the lane, so that another sign can be placed over an adjacent lane. The necessity to maintain proper vertical clearance might also place a further limitation on the size of the overhead sign and the legend that can be accommodated.

### **Section 2E.27 Route Signs and Trailblazer Assemblies**

#### Standard:

The official Route sign for the Interstate Highway System shall be the red, white, and blue retroreflective distinctive shield adopted by the American Association of State Highway and Transportation Officials (see Section 2D.11 of this Supplement).

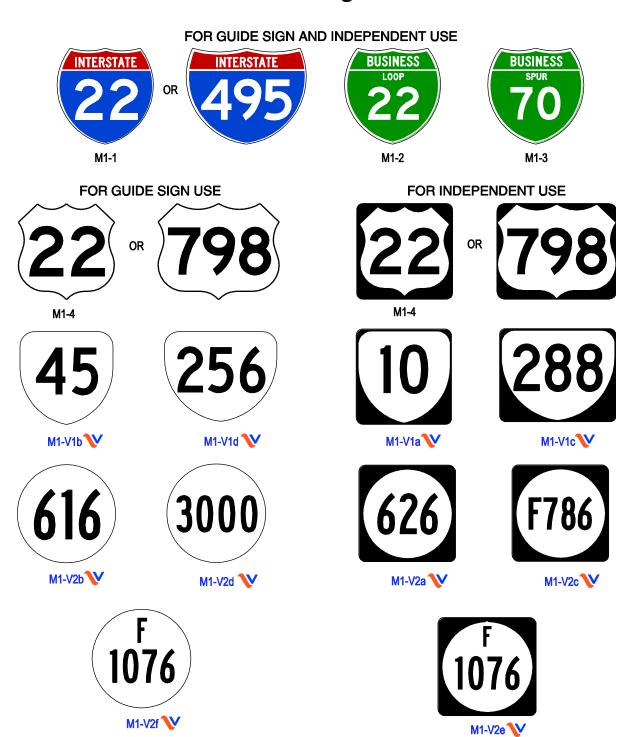
#### Guidance:

- 02 Route signs (see Figure 2E-17 in this Supplement) should be incorporated as cut-out shields or other distinctive shapes on large directional guide signs. Where the Interstate shield is displayed in an assembly or on the face of a guide sign with U.S. or Virginia Primary Route signs, the Interstate numeral should be at least equal in size to the numerals on the other Route signs. The use of independent Route signs should be limited primarily to route confirmation assemblies.
- Route signs and auxiliary signs showing junctions and turns should be used for quidance on approach roads, for route confirmation just beyond entrances and exits, and for reassurance along the freeway or expressway. When used along the freeway or expressway, the Route signs should be enlarged to a 36 x 36-inch minimum size for US and Virginia Primary routes with one or two digits, to a 45 x 36-inch minimum size for US and Virginia Primary routes with three digits, or to a 36 x 36-inch minimum size for Virginia Secondary routes, as shown in the "Standard Highway Signs and Markings" book and "Virginia Standard Highway Signs" book (see Section 1A.11 of this Supplement). When independently mounted Route signs are used in place of Pull-Through signs, they should be located just beyond the exit.



## V

# Figure 2E-17(VA) Interstate, Off-Interstate, U.S. Route, Virginia Primary Route, and Virginia Circular Secondary Route Signs



#### Option:

The standard Trailblazer Assembly (see Section 2D.35 of the MUTCD) may be used on roads leading to the freeway or expressway. Component messages of the Trailblazer Assembly may be included on a single sign in accordance with the provisions of Section 2D.12 of this Supplement. Independently mounted Route signs may be used instead of Pull-Through signs (see Section 2E.12 of the MUTCD) as confirmation information.

#### Support:

Section 2H.07 of the MUTCD contains information regarding the design of signs for Auto Tour Routes.

#### Option:

- The commonly used name or trailblazer route sign for a toll highway (see Chapter 2F) may be displayed on non-toll sections of the Interstate Highway System at:
  - A. The last exit before entering a toll section of the Interstate Highway System;
  - B. The interchange or connection with a toll highway, whether or not the toll highway is a part of the Interstate Highway System; and
  - C. Other locations within a reasonable approach distance of toll highways when the name or trailblazer symbol for the toll highway would provide better guidance to road users unfamiliar with the area than would place names and route numbers.
- The toll highway name or route sign may be included as a part of the guide sign installations on intersecting highways and approach roads to indicate the interchange with a toll section of an Interstate route. Where needed for the proper direction of traffic, a trailblazer for a toll highway that is part of the Interstate Highway System may be displayed with the Interstate Trailblazer Assembly.

#### Support:

08 Chapter 2F contains additional information regarding signing for toll highways.

### **CHAPTER 2F: TOLL ROAD SIGNS**

## Section 2F.12 <u>Electronic Toll Collection (ETC) Account-Only</u> Auxiliary Signs (M4-16 and M4-20)

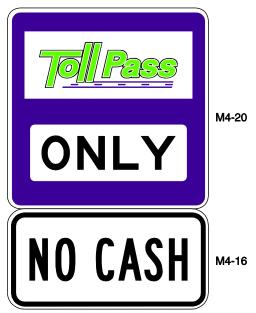
#### Standard:

In any route sign assembly providing directions from a non-toll highway to a toll facility, or to a tolled segment of a highway, where electronic toll collection (ETC) is the only payment method accepted and all vehicles are required to have a registered ETC account, the ETC Account-Only (M4-20) auxiliary sign (see Figure 2F-4) shall be mounted directly below the route sign of the numbered or named toll facility. The M4-20 auxiliary sign shall have a white border and purple background and incorporate the pictograph adopted by the toll facility's ETC payment system and the word ONLY in black letters on a white panel set on the purple background of the sign.

#### Guidance:

15 If used, the NO CASH (M4-16) auxiliary sign and/or other auxiliary sign listing payment restrictions, or allowable payment methods, should be used in a route sign assembly directly below the M4-20 auxiliary sign.

## Figure 2F-4. ETC Account-Only Auxiliary Signs for Use in Route Sign Assemblies



NOTE: The ETC pictograph shown is an example only. The pictograph for the toll facility's adopted ETC system shall be used.



Assembly

## V

## **Section 2F.V1 Toll Payment Regulatory Signs**

#### Guidance:

Payment restrictions, or allowable payment methods, should be listed prior to the entrance to the toll facility. An auxiliary sign with a black legend and border on a white background should be used to list payment restrictions or allowable payment methods.

#### Support:

Advance notice of being required to pay a toll and notification of being required to pay with exact change is necessary to allow enforcement of the Code of Virginia § 46.2-819.

#### Option:

os If engineering judgment determines that the payment restrictions cannot be listed on an auxiliary sign in the route sign assembly, a supplemental sign listing the payment restrictions may be used.

#### Support:

Examples of payment restrictions that can be used on the auxiliary sign or supplemental sign include, but are not limited to, "Credit Cards Only", "Exact Change Only", or signs restricting payment type during certain times, e.g. "Exact Change Only 9:00 PM to 5:30 AM."

## **CHAPTER 2H. GENERAL INFORMATION SIGNS**

## **Section 2H.02 General Information Signs (I Series)**

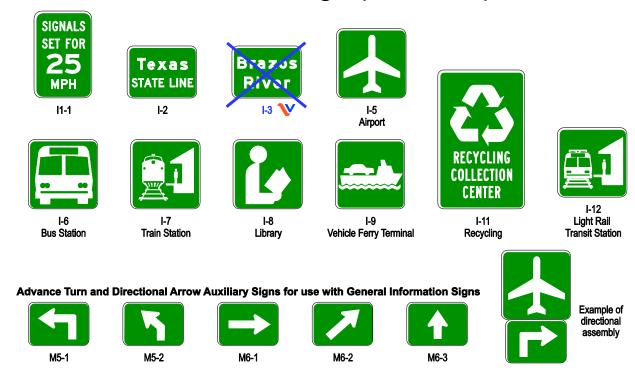
#### Support:

Of interest to the traveler, though not directly necessary for guidance, are numerous kinds of information that can properly be conveyed by General Information signs (see Figure 2H-1(VA) in this Supplement) or miscellaneous information signs (see Section 2H.04 of this Supplement). They include such items as State lines, city limits, other political boundaries, time zones, stream names, elevations, landmarks, and similar items of geographical interest, and safety and transportation-related messages. Chapter 2M contains recreational and cultural interest area symbol signs that are sometimes used in combination with General Information signs.

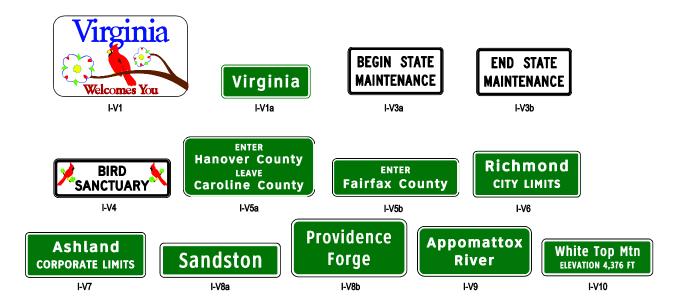
#### Guidance:

O2 General Information signs should not be installed within a series of guide signs or at other equally critical locations, unless there are specific reasons for orienting the road user or identifying control points for activities that are clearly in the public interest. On all such signs, the designs should be simple and dignified, devoid of any advertising, and in general compliance with other guide signing.

## Figure 2H-1(VA). General Information and Miscellaneous Information Signs (sheet 1 of 2)



## Figure 2H-1(VA). General Information and Miscellaneous Information Signs (sheet 2 of 2)



#### Standard:

Except for political boundary signs, General Information signs shall have white legends and borders on green rectangular-shaped backgrounds.

#### Option:

- An information symbol sign (I-5 through I-9) may be used to identify a route leading to a transportation or general information facility, or to provide additional guidance to the facility. The symbol sign may be supplemented by an educational plaque where necessary; also, the name of the facility may be used if needed to distinguish between similar facilities.
- The Advance Turn (M5 series) or Directional Arrow (M6 series) auxiliary signs shown in Figure2H-1(VA) in this Supplement with white arrows on green backgrounds may be used with General Information symbol signs to create a General Information Directional Assembly.
- Guide signs for commercial service airports and non-carrier airports may be provided from the nearest Interstate, other freeway, or conventional highway intersection directly to the airport, normally not to exceed 15 miles. The Airport (I-5) symbol sign along with a supplemental plaque may be used to indicate the specific name of the airport. An Airport symbol sign, with or without a supplemental name plaque or the word AIRPORT, and an arrow may be used as a trailblazer.

#### Standard:

OF Adequate trailblazer signs shall be in place prior to installing the airport guide signs.

#### Support:

Location and placement of all airport guide signs depends upon the availability of longitudinal spacing on highways.

#### Option:

The Recycling Collection Center (I-11) symbol sign may be used to direct road users to recycling collection centers.

#### Guidance:

10 The Recycling Collection Center symbol sign should not be used on freeways and expressways.

#### Standard:

- If used on freeways or expressways, the Recycling Collection Center symbol sign shall be considered one of the supplemental sign destinations.
- 12 When a sign is used to display a safety or transportation-related message, the display format shall not be of a type that would be considered similar to advertising displays. Messages and symbols that resemble any official traffic control device shall not be used on safety or transportation-related message signs.

#### Option:

The pictograph of a political jurisdiction (such as a State, county, or municipal corporation) may be displayed on a political boundary General Information sign.

#### Standard:

- If used, the height of a pictograph on a political boundary General Information sign shall not exceed two times the height of the upper-case letters of the principal legend on the sign. The pictograph shall comply with the provisions of Section 2A.06 of this Supplement.
- The Virginia Welcomes You (I-V1) sign shall be installed on Interstates, U.S., and Primary routes at the State line in the direction entering the State.

#### Option:

The Virginia Welcomes You (I-V1) sign may also be installed at Rest Areas and Welcome Centers, and on roadways near major airports and seaports.

#### Guidance:

17 The smaller version of the I-V1 sign (I-V1a), bearing only the text "Virginia," should be installed on Secondary routes at the State line in the direction entering the State.

### **Section 2H.04 Miscellaneous Information Signs**

#### Support:

Miscellaneous information are used to point out geographical features, such as rivers and summits, and other jurisdictional boundaries (see Section 2H.02 of this Supplement). Figure 2H-1(VA) in this Supplement shows examples of miscellaneous information signs.



## Table 2H-1(VA). General Information Sign Sizes

Sign	Sign Designation	Section	Conventional Road	Freeway or Expressway
Reference Location (1 digit)	D10-1	2H.05	10 x 18	12 x 24
Intermediate Reference Location (2 digits)	D10-1a	2H.05	10 x 27	12 x 36
Reference Location (2 digits)	D10-2	2H.05	10 x 27	12 x 36
Intermediate Reference Location (3 digits)	D10-2a	2H.05	10 x 36	12 x 48
Reference Location (3 digits)	D10-3	2H.05	10 x 36	12 x 48
Intermediate Reference Location (4 digits)	D10-3a	2H.05	10 x 48	12 x 60
Enhanced Reference Location	D10-4	2H.06	18 x 54	18 x 54
Intermediate Enhanced Reference Location	D10-5	2H.06	18 x 60	18 x 60
Acknowledgement	D14-1	2H.08	36 x 30*	72 x 48*
ADOPT A HIGHWAY	D14-V1	2H.08	36 x 24	_
Acknowledgement	D14-2	2H.08	36 x 30*	72 x 48*
Acknowledgement	D14-3	2H.08	42 x 24*	<del>96 x 36*</del>
Signals Set for XX MPH	I1-1	2H.03	24 x 36	_
Jurisdictional Boundary	I-2	2H.04	Varies x 18**	Varies x 36**
Geographical Features	1-3	2H.04	Varies x 18**	Varies x 36**
Airport	I-5	2H.02	24 x 24	30 x 30
Bus Station	I-6	2H.02	24 x 24	30 x 30
Train Station	I-7	2H.02	24 x 24	30 x 30
Library	I-8	2H.02	24 x 24	30 x 30
Vehicle Ferry Terminal	I-9	2H.02	24 x 24	30 x 30
Recycling Collection Center	I-11	2H.02	30 x 48	
Light Rail Transit Station	I-12	2H.02	24 x 24	



#### Virginia Specific Signs

Sign or Plaque	Sign Designation	Section	Conventional Road	Freeway or Expressway
Grade Separated Cross Road ID	D10-V1	2H.V1	Var. x 24	Var. x 24
Virginia Welcomes You	I-V1	2H.02	120 x 72***	156 x 96
Virginia	I-V1a	2H.02	48 x 18	_
BEGIN STATE MAINTENANCE	I-V3a	2H.04	36 x 18	36 x 18
END STATE MAINTENANCE	I-V3b	2H.04	36 x 18	36 x 18
BIRD SANCTUARY	I-V4	2H.04	36 x 12	_
ENTER (Jurisdiction) - LEAVE (Jurisdiction)	I-V5a	2H.04	Var. x 36****	Var. x 60
ENTER (Jurisdiction)	I-V5b	2H.04	Var. x 18****	Var. x 36
CITY LIMITS	I-V6	2H.04	Var. x 18	Var. x 36
CORPORATE LIMITS	I-V7	2H.04	Var. x 18	Var. x 36
UNINCORPORATED PLACE (One Line)	I-V8a	2H.04	Var. x 12	_
UNINCORPORATED PLACE (Two Lines)	I-V8b	2H.04	Var. x 24	_
Named Waterway	I-V9	2H.04	Var. x 18	Var. x 42
MOUNTAIN CROSSING	I-V10	2H.04	Var. x 12	_

The size shown is the maximum size for the corresponding roadway classification. The size of the sign and





acknowledgement logo should be appropriately reduced where shorter legends are used.

The size shown is for the typical sign illustrated in the figure. The size should be determined based on the amount of legend required for the sign.

<sup>78</sup> x 48 sign size may be used on two-lane, two-way conventional primary roadways.

<sup>\*\*\*\*</sup> Var. x 24 sign size may be used on two-lane, two-way conventional primary roadways.

<sup>\*\*\*\*\*</sup> Var. x 12 sign size may be used on two-lane, two-way conventional primary roadways.

Notes: 1. Larger signs may be used when appropriate, except for the D14 series signs

<sup>2.</sup> Dimensions in inches are shown as width x height

#### Option:

Miscellaneous information signs may be used if they do not interfere with signing for interchanges or other critical points.

#### Guidance:

Miscellaneous information signs should not be installed unless there are specific reasons for orienting the road users or identifying control points for activities that are clearly in the public interest. If miscellaneous information signs are to be of value to the road user, they should be consistent with other guide signs in design and legibility. On all such signs, the design should be simple and dignified, devoid of any tendency toward flamboyant advertising, and in general compliance with other signing.

#### Guidance:

V

When a roadway changes between VDOT maintained and non-VDOT maintained sections, END STATE MAINTENANCE (I-V3b) signs (see Figure 2H-1(VA) in this Supplement) should be installed at the end of those sections of routes maintained by VDOT.

#### Option:

- When a roadway changes between VDOT maintained and non-VDOT maintained sections, BEGIN STATE MAINTENANCE (I-V3a) signs (see Figure 2H-1(VA) in this Supplement) may be installed at the beginning of those sections of routes maintained by VDOT.
- of BIRD SANCTUARY (I-V4) signs (see Figure 2H-1(VA) in this Supplement) may be installed at locations that have been officially designated as Bird Sanctuaries.

#### Support:

of Bird Sanctuaries are designated by resolution of local governing bodies.

#### Standard:

Except as provided in Paragraphs 10 and 11, ENTER/LEAVE boundary (I-V5a) signs (see Figure 2H-1(VA) in this Supplement) shall be installed as near as possible to the jurisdictional line between two counties, between a county and a city, or between two cities.

#### Guidance:

op ENTER boundary (I-V5b) signs (see Figure 2H-1(VA) in this Supplement) should be installed at the State line to inform traffic entering Virginia of the name of the local jurisdiction. Signs should be placed 350 to 500 feet downstream from the I-V1 or I-V1a signs.

#### Option:

- 10 CITY LIMITS (I-V6) signs (see Figure 2H-1(VA) in this Supplement) may be installed on Interstates, U.S., and Primary routes entering a city, as near as possible to the city limits, instead of the ENTER/LEAVE boundary signs (I-V5a).
- 11 CORPORATE LIMITS (I-V7) signs (see Figure 2H-1(VA) in this Supplement) may be installed on Interstates, U.S., and Primary routes entering an incorporated town, as near as possible to the limits of incorporated towns.

- Signs indicating the name of unincorporated places (I-V8) may be installed based on engineering judgment (see Figure 2H-1(VA) in this Supplement).
- Mountaintop Location (I-V10) signs (see Figure 2H-1(VA) in this Supplement) may be installed at the crest of a mountain crossing to identify the mountain and its elevation.

#### Standard:

Named Waterway (I-V9) signs (see Figure 2H-1(VA) in this Supplement) shall be installed at the approach end of all bridges over waterways.

#### Option:

"A Scenic River" legend may be added to signs indicating that the waterway is a Virginia Scenic River. Legend may also be added to signs indicating that the waterway is part of a particular Watershed.

#### Support:

For further information regarding Scenic River and Watershed signing, refer to the VDOT Integrated Directional Signing Program on the VDOT website (address provided in Appendix A of this Supplement).

### **Section 2H.08 Acknowledgment Signs**

#### Support:

Acknowledgment signs are a way of recognizing a company, business, or volunteer group that provides a highway-related service. Acknowledgment signs include sponsorship signs for adopt-a-highway litter removal programs, maintenance of a parkway or interchange, and other highway maintenance or beautification sponsorship programs.

#### Guidance:

A State or local highway agency that elects to have an acknowledgment sign program should develop an acknowledgment sign policy. The policy should require that eligible sponsoring organizations comply with State laws prohibiting discrimination based on race, religion, color, age, sex, national origin, and other applicable laws. The acknowledgment sign policy should include all of the provisions regarding sign placement and sign design that are described in this Section.

#### Standard:

- Because regulatory, warning, and guide signs have a higher priority, acknowledgment signs shall only be installed where adequate spacing is available between the acknowledgment sign and other higher priority signs. Acknowledgment signs shall not be installed in a position where they would obscure the road users' view of other traffic control devices.
- 04 Acknowledgment signs shall not be installed at any of the following locations:
  - A. On the front or back of, adjacent to, or around any other traffic control device, including traffic signs, highway traffic signals, and changeable message signs;

- B. On the front or back of, adjacent to, or around the supports or structures of other traffic control devices, or bridge piers; or
- C. At key decision points where a road user's attention is more appropriately focused on other traffic control devices, roadway geometry, or traffic conditions, including exit and entrance ramps, intersections, grade crossings, toll plazas, temporary traffic control zones, and areas of limited sight distance.

#### Guidance:

- The minimum spacing between acknowledgment signs and any other traffic control signs, except parking regulation signs, should be:
  - A. 150 feet on roadways with speed limits of less than 30 mph,
  - B. 200 feet on roadways with speed limits of 30 to 45 mph, and
  - C. 500 feet on roadways with speed limits greater than 45 mph.
- If the placement of a newly-installed higher-priority traffic control device, such as a higher-priority sign, a highway traffic signal, or a temporary traffic control device, conflicts with an existing acknowledgment sign, the acknowledgment sign should be relocated, covered, or removed.

#### Option:

O7 State or local highway agencies may develop their own acknowledgment sign designs and may also use their own pictograph (see definition in Section 1A.13 of this Supplement) and/or a brief jurisdiction-wide program slogan as part of any portion of the acknowledgment sign, provided that the signs comply with the provisions for shape, color, and lettering style in this Chapter and in Chapter 2A.

#### Support:



VDOT's Adopt-A-Highway program provides an opportunity for citizens, businesses, or civic groups to clean up litter from the sides of VDOT-maintained roadways. Additional program and contact information can be found at VDOT's website (see link in Appendix A of this Supplement) or by calling 1-800-PRIDE-VA.

#### Standard:

ADOPT A HIGHWAY (D14-V1) signs and CLEANUP CREW WORKING (W21-V6) signs (see Figure 2H-5(VA) in this Supplement) shall be installed in accordance with program guidelines.

#### Option:

10 The CLEANUP CREW WORKING (W21-V6) sign may be cut into two pieces (along the horizontal centerline axis) and hinged such that it can be folded when cleanup crews are not working.

#### Guidance:

Acknowledgment signs should clearly indicate the type of highway services provided by the sponsor.

Figure 2H-5(VA). Examples of Acknowledgement Sign Designs



★ Sign specifically for use with Adopt-A-Highway Program

#### **Standard:**

- In addition to the general provisions for signs described in Chapter 2A and the sign design principles covered in the "Standard Highway Signs and Markings" book (see Section 1A.11 of this Supplement), acknowledgment sign designs developed by State or local highway agencies shall comply with the following provisions:
  - A. Neither the sign design nor the sponsor acknowledgment logo shall contain any contact information, directions, slogans (other than a brief jurisdiction-wide program slogan, if used), telephone numbers, or Internet addresses, including domain names and uniform resource locators (URL);
  - B. Except for the lettering, if any, on the sponsor acknowledgment logo, all of the lettering shall be in upper-case letters as provided in the "Standard Highway Signs and Markings" book (see Section 1A.11 of this Supplement);
  - C. In order to keep the main focus on the highway-related service and not on the sponsor acknowledgment logo, the area reserved for the sponsor

- acknowledgment logo shall not exceed 1/3 of the total area of the sign and shall be a maximum of 8 square feet, and shall not be located at the top of the sign;
- D. The entire sign display area shall not exceed 24 square feet;
- E. The sign shall not contain any messages, lights, symbols, or trademarks that resemble any official traffic control devices;
- F. The sign shall not contain any external or internal illumination, light-emitting diodes, luminous tubing, fiber optics, luminescent panels, or other flashing, moving, or animated features; and
- G. The sign shall not distract from official traffic control messages such as regulatory, warning, or guidance messages.

#### Support:

Examples of acknowledgment sign designs are shown in Figure 2H-5(VA) in this Supplement.



## Section 2H.V1 Crossroad Identification (D10-V1) Signs

#### Standard:

- Orossroad Identification (D10-V1) signs (see Figure 2H-V1 in this Supplement) shall be installed in both directions of travel on limited access roadways identifying the route number and the street name of grade-separated roadways.
- Where roadways cross over or under a limited access roadway without direct access to the limited access roadway, one set of crossroad identification signs shall be installed on the limited access roadway.
- Except as provided in Paragraphs 4 and 5 below, crossroad identification signs shall be installed at underpasses, attached to the bridge that crosses the roadway. Signs shall be centered over the travel lanes.
- Where there are existing bridge mounted signs over the roadway, crossroad identification signs shall be installed on the bridge over the right shoulder.
- of If it is not possible to install the sign on the bridge because of bridge design characteristics, a ground mounted sign shall be installed on the right side of the roadway as close as practical to the approach side of the structure.
- Of At limited access roadway overpasses, ground mounted signs shall be installed on the right side of the roadway near the approach end of the bridge.



## Figure 2H-V1. Crossroad Identification Sign

Route 640 - Main St

D10-V1

### **CHAPTER 21. GENERAL SERVICE SIGNS**

### **Section 21.05 Rest Area and Other Roadside Area Signs**

#### Standard:

- Rest Area signs (see Figure 2I-5(VA) in this Supplement) shall have a retroreflective white legend and border on a blue background.
- OZ Signs that include the legend REST AREA shall be used only where parking and restroom facilities are available.

#### Guidance:

- A roadside area that does not contain restroom facilities should be signed to indicate the major road user service that is provided. For example, the sign legends for an area with only parking should use the words PARKING AREA instead of REST AREA. The sign legends for an area with only picnic tables and parking should use words such as PICNIC AREA, ROADSIDE TABLE, or ROADSIDE PARK instead of REST AREA.
- Rest areas that have tourist information and welcome centers should be signed as discussed in Section 21.08 of the MUTCD.
- Scenic area signing should be consistent with that provided for rest areas, except that the legends should use words such as SCENIC AREA, SCENIC VIEW, or SCENIC OVERLOOK instead of REST AREA.
- If a rest area or other roadside area is provided on a conventional road, a D5-1 and/or D5-1b sign should be installed in advance of the rest area or other roadside area to permit the driver to reduce speed in preparation for leaving the highway. A D5-5 sign (or a D5-2 sign if an exit ramp is provided) should be installed at the turnoff point where the driver needs to leave the highway to access the rest area or other roadside area.

## Figure 2I-5(VA). Rest Area and Other Road Side Area Signs



If a rest area or other roadside area is provided on a freeway or expressway, a D5-1 sign should be placed 1 mile and/or 2 miles in advance of the rest area.

#### Standard:

A D5-2 sign shall be placed at the rest area or other roadside area exit gore.

#### Option:

A D5-1a sign may be placed between the D5-1 sign and the exit gore on a freeway or expressway. A second D5-1 sign may be used in place of the D5-1a sign with a distance to the nearest 1/2 or 1/4 mile displayed as a fraction rather than a decimal for distances of less than 1 mile.

#### Standard:

- 10 To provide the road user with information on the location of succeeding rest areas, a NEXT REST AREA XX MILES (D5-6) sign (see Figure 2I-5(VA) in this Supplement) shall be installed if there is a succeeding rest area on that roadway that is open to passenger vehicles, whether the succeeding rest area is in Virginia or another state. If the roadway ends and no additional rest areas are present, the NEXT REST AREA XX MILES (D5-6) shall not be required.
- 11 NEXT REST AREA XX MILES (D5-6) signs shall be installed on the approaches to all rest areas on the Interstate system between the Rest Area advance sign and the ramp to the rest area.

#### Guidance:

12 D5-6 signs should be located following the Rest Area advance sign.

#### Standard:

13 All signs on freeways and expressways for rest and other roadside areas shall have letter and numeral sizes that comply with the minimum requirements of Tables 2E-2 through 2E-5. The sizes for General Service signs that have standardized designs shall be as shown in Table 2I-1(VA) in this Supplement.

#### Option:

- 14 If the rest area has facilities for the physically impaired (see Section 21.02 of the MUTCD), the International Symbol of Accessibility for the Handicapped (D9-6) sign (see Figure 2I-1) may be placed with or beneath the REST AREA advance guide sign.
- 15 If telecommunication devices for the deaf (TDD) are available at the rest area, the TDD (D9-21) symbol sign (see Figure 2I-1) may be used to supplement the advance guide signs for the rest area.
- If wireless Internet services are available at the rest area, the Wi-Fi (D9-22) symbol sign (see Figure 2I-1) may be used to supplement the advance guide signs for the rest area.

#### Standard:

17 "REST AREA PATROLLED BY STATE POLICE" (D0-V1) signs (see Figure 2I-5(VA) in this Supplement) shall be installed at each rest area and welcome center to promote security at each location. Signs shall be installed within the rest area and not on the ramps or freeway mainline.

May 2011 Chapter 21





Table 2I-1(VA). General Service Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road	Freeway or Expressway
Rest Area XX Miles	D5-1	21.05	66 x 36*	96 x 54*
Rest Area Next Right	D5-1a	21.05	78 x 36*	120 x 60* (F) 114 x 48* (E)
Rest Area (with arrow)	D5-2	21.05	66 x 36*	96 x 54*
Rest Area Gore	D5-2a	21.05	42 x 48*	78 x 78* (F) 66 x 72* (E)
Rest Area (with horizontal arrow)	D5-5	21.05	42 x 48*	
Next Rest Area XX Miles	D5-6	21.05	60 x 48*	90 x 72*
Rest Area Tourist Info Center XX Miles	D5-7	21.08	90 x 72*	144 x 102* (F) 132 x 96* (E)
Rest Area Tourist Info Center (with arrow)	D5-8	21.08	84 x 72*	120 x 102* (F) 120 x 96* (E)
Rest Area Tourist Info Center Next Right	D5-11	21.08	90 x 72*	144 x 102* (F) 132 x 96* (E)
Interstate Oasis	D5-12	21.04		156 x 78
Interstate Oasis (plaque)	D5-12P	21.04	_	114 x 48
Brake Check Area XX Miles	D5-13	21.06	84 x 48	126 x 72
Brake Check Area (with arrow)	D5-14	21.06	78 x 60	96 x 72
Chain-Up Area XX Miles	D5-15	21.07	66 x 48	96 x 72
Chain-Up Area (with arrow)	D5-16	21.07	72 x 54	96 x 66
Telephone	D9-1	21.02	24 x 24	30 x 30
Hospital	D9-2	21.02	24 x 24	30 x 30
Camping	D9-3	21.02	24 x 24	30 x 30
Trailer Camping	D9-3a	21.02	24 x 24	30 x 30
Litter Container	D9-4	21.02	24 x 30	36 x 48
Handicapped	D9-6	21.02	24 x 24	30 x 30
Van Accessible (plaque)	D9-6P	21.02	18 x 9	_
Gas	D9-7	21.02	24 x 24	30 x 30
Food	D9-8	21.02	24 x 24	30 x 30
Lodging	D9-9	21.02	24 x 24	30 x 30
Tourist Information	D9-10	21.02	24 x 24	30 x 30
Diesel Fuel	D9-11	21.02	24 x 24	30 x 30
Alternative Fuel - Compressed Natural Gas	D9-11a	21.02	24 x 24	30 x 30
Electric Vehicle Charging	D9-11b	21.02	24 x 24	30 x 30
Electric Vehicle Charging (plaque)	D9-11bP	21.02	24 x 18	30 x 24
Alternative Fuel - Ethanol	D9-11c	21.02	24 x 24	30 x 30
RV Sanitary Station	D9-12	21.02	24 x 24	30 x 30
Emergency Medical Services	D9-13	21.02	24 x 24	30 x 30
Hospital (plaque)	D9-13aP	21.02	24 x 12	30 x 12
Ambulance Station (plaque)	D9-13bP	21.02	24 x 12	30 x 15
Emergency Medical Care (plaque)	D9-13cP	21.02	24 x 18	30 x 24

Sign or Plaque	Sign Designation	Section	Conventional Road	Freeway or Expressway
Trauma Center (plaque)	D9-13dP	21.02	24 x 12	30 x 15
Police	D9-14	21.02	24 x 24	30 x 30
Propane Gas	D9-15	21.02	24 x 24	30 x 30
Truck Parking	D9-16	21.02	24 x 24	30 x 30
Next Services XX Miles (plaque)	D9-17P	21.02	102 x 24	156 x 30
General Services (up to 6 symbols)	D9-18	21.03	_	96 x 60
General Services	D9-18a	21.03	_	96 x 60
General Services (up to 6 symbols) with Action or Exit Information	D9-18b	21.03	108 x 84	132 x 114 (F) 132 x 108 (E)
General Services with Action or Exit Information	D9-18c	21.03	72 x 60**	132 x 108** (F) 108 x 84** (E)
Pharmacy	D9-20	21.02	24 x 24	30 x 30
24-Hour (plaque)	D9-20aP	21.02	24 x 12	30 x 12
Telecommunication Device for the Deaf	D9-21	21.05	24 x 24	30 x 30
Wireless Internet	D9-22	21.05	24 x 24	30 x 30
Weather Information	D12-1	21.09	84 x 48	132 x 84
Carpool Information	D12-2	21.11	60 x 42	96 x 66
Channel 9 Monitored	D12-3	21.09	84 x 48	132 x 84
Emergency Call 911	D12-4	21.09	66 x 30	96 x 48
Travel Info Call 511 (pictograph)	D12-5	21.10	42 x 60	66 x 78
Travel Info Call 511	D12-5a	21.10	48 x 36	66 x 48
Virginia Specific Signs				
REST AREA PATROLLED BY STATE POLICE	D0-V1	21.05	48 x 36***	
CALL CELLULAR #77 FOR STATE POLICE	D12-V1	21.09	36 x 24	60 x 36**** (F) 48 x 30 (E)

<sup>\*</sup> The size shown is for a sign with a REST AREA and/or TOURIST INFO CENTER legend. The size should be appropriately adjusted if an alternate legend is used.

#### Notes

- 1. Larger signs may be used when appropriate.
- 2. Dimensions in inches are shown as width x height
- 3. Where two sizes are shown, the larger size is for freeways (F) and the smaller size is for expressways (E)

<sup>\*\*</sup> The size shown is for a sign with four lines of services. The size should be appropriately adjusted depending on the amount of legend displayed.

<sup>\*\*\*</sup> This sign shall only be installed within a Rest Area.

<sup>\*\*\*\* 102</sup> x 54 sign size may be used in conjunction with R16-4 (V) FENDER BENDER MOVE VEHICLES SIGN.

## Figure 2I-1. General Service Signs and Plaques



Telephone



D9-2 Hospital



D9-3 Camping



D9-3a **Trailer Camping** 



D9-4 Litter Container



D9-6 Handicapped



D9-6P



D9-7 Gas



D9-8 Food



D9-9 Lodging



D9-10 **Tourist Information** 



D9-11 **Diesel Fuel** 



D9-11a Alternative Fuel-Compressed Natural Gas



D9-11b **Electric Vehicle** Charging



D9-11bP Electric Vehicle Charging



D9-11c Alternative Fuel-Ethanol



D9-12 **RV** Sanitary Station



Emergency Medical Services



D9-13aP Hospital



D9-13bP Ambulance Station



D9-13cP **Emergency Medical Care** 



D9-13dP Trauma Center



D9-14 **Police** 



D9-15 Propane Gas



D9-16 **Truck Parking** 



D9-20 **Pharmacy** 

D9-20aP

24-Hour



Telecommunication Device for the Deaf



D9-22 Wireless Internet

Advance Turn and Directional Arrow Auxiliary Signs for use with General Service Signs



M5-1



24

M5-2



M6-1



M6-2



M6-3



directional assembly

May 2011 Chapter 21 18 The phone numbers displayed on the sign shall be the State Police's Division Headquarters toll free number for the area where the rest area/welcome center is located and #77 for cellular phone users.

#### Support:

Further information about Safety Rest Areas and Welcome Centers in Virginia can be found on VDOT's web site (link provided in Appendix A of this Supplement).

### **Section 21.09 Radio Information Signing**

#### Option:

Radio-Weather Information (D12-1) signs (see Figure 2I-8(VA) in this Supplement) may be used in areas where difficult driving conditions commonly result from weather systems. Radio-Traffic Information signs may be used in conjunction with traffic management systems.

#### Standard:

- Radio-Weather and Radio-Traffic Information signs shall have a white legend and border on a blue background. Only the numerical indication of the radio frequency shall be used to identify a station broadcasting travel-related weather or traffic information. No more than three frequencies shall be displayed on each sign. Only radio stations whose signal will be of value to the road user and who agree to broadcast either of the following two items shall be identified on Radio-Weather and Radio-Traffic Information signs:
  - A. Periodic weather warnings at a rate of at least once every 15 minutes during periods of adverse weather; or
  - B. Driving condition information (affecting the roadway being traveled) at a rate of at least once every 15 minutes, or when required, during periods of adverse traffic conditions, and when supplied by an official agency having jurisdiction.
- If a station to be considered operates only on a seasonal basis, its signs shall be removed or covered during the off season.

#### Guidance:

The radio station should have a signal strength to adequately broadcast 70 miles along the route. Signs should be spaced as needed for each direction of travel at distances determined by an engineering study. The stations to be included on the signs should be selected in cooperation with the association(s) representing major broadcasting stations in the area to provide: (1) maximum coverage to all road users on both AM and FM frequencies; and (2) consideration of 24 hours per day, 7 days per week broadcast capability.

#### Option:

In roadway rest area locations, a smaller sign using a greater number of radio frequencies, but of the same general design, may be used.

## Figure 2I-8(VA). Radio, Telephone, and Carpool Information Signs

WEATHER INFO
TUNE RADIO TO
750 AM 1230 AM
96.3 FM

CAR POOL INFO CALL \*CAR

D12-1

D12-2

MICHIGAN
STATE POLICE
MONITORS
CB CHANNEL 9

EMERGENCY CALL 911

D12-4

D12-3



TRAVEL INFO CALL 511 CALL CELLULAR
#77
FOR STATE POLICE

D12-5a

D12-V1 **V** 

<sup>\*</sup> The pictograph of the transportation agency or the travel information service or program may be used in place of the 511 pictograph (see Section 2I.08 of the National MUTCD).

#### Standard:

Radio-Weather and Radio-Traffic Information signs installed in rest areas shall be positioned such that they are not visible from the main roadway.

#### Option:

O7 Channel 9 Monitored (D12-3) sign (see Figure 2I-8(VA) in this Supplement) may be installed as needed. Official public agencies or their designees may be displayed as the monitoring agency on the sign.

#### Standard:

Only official public agencies or their designee shall be displayed as the monitoring agency on the Channel 9 Monitored sign.

#### Option:

An Emergency CALL XX (D12-4) sign (see Figure 2I-8(VA) in this Supplement), along with the appropriate number to call, may be used for cellular phone communications.

#### Standard:

- 10 CALL CELLULAR #77 FOR STATE POLICE (D12-V1) signs (see Figure 2I-8(VA) in this Supplement) shall be installed on Interstate roadways near the State line or, if a roadway does not begin at the State line, near the beginning of the roadway.
- D12-V1 signs shall not be installed within the welcome centers and rest areas (refer to Section 2I.05 in this Supplement for appropriate signing).

#### Guidance:

2 Signs should be installed at 20-mile spacings for rural areas and at reduced spacing in urban areas. The reduced spacing in urban areas should be based on engineering judgment.

#### Support:

13 The location of signs is coordinated between VDOT and the Virginia State Police.

#### Guidance:

14 CALL CELLULAR # 77 FOR STATE POLICE (D12-V1) signs should be installed with FENDER BENDER MOVE VEHICLES FROM TRAVEL LANES (R16-4, R16-4(V)) signs (see Section 2B.65 of this Supplement). If used, the two signs should be the same width.



## CHAPTER 2M. RECREATIONAL AND CULTURAL INTEREST AREA SIGNS

## Section 2M.08 <u>Placement of Recreational and Cultural</u> Interest Area Symbol Signs

#### Standard:

- of If used, recreational and cultural interest area symbol signs shall be placed in accordance with the general requirements contained in Chapter 2A. The symbol(s) shall be placed as sign panels in the uppermost part of the sign and the directional information shall be placed below the symbol(s).
- Except as provided in Paragraph 3, if the name of the recreational or cultural interest area facility or activity is displayed on a destination guide sign (see Section 2M.09 of the MUTCD) and a symbol is used, the symbol shall be placed below the name (see Figure 2M-2).

#### Option:

- When the legend Wildlife Viewing Area is displayed with the RS-076 symbol on a destination guide sign, the symbol may be placed to the left or right of the legend and the arrow may be placed below the symbol (see Figure 2M-2).
- The symbols displayed with the facility or activity name may be placed below the destination guide sign as illustrated in Figure 2M-2 instead of as sign panels placed with the destination guide sign.
- Secondary symbols of a smaller size (18 x 18 inches) may be placed beneath the primary symbols (see Drawing A in Figure 2M-1 of the MUTCD), where needed.

#### Standard:

Recreational and cultural interest area symbols installed for non-road use shall be placed in accordance with the general sign position requirements of the authority having jurisdiction.

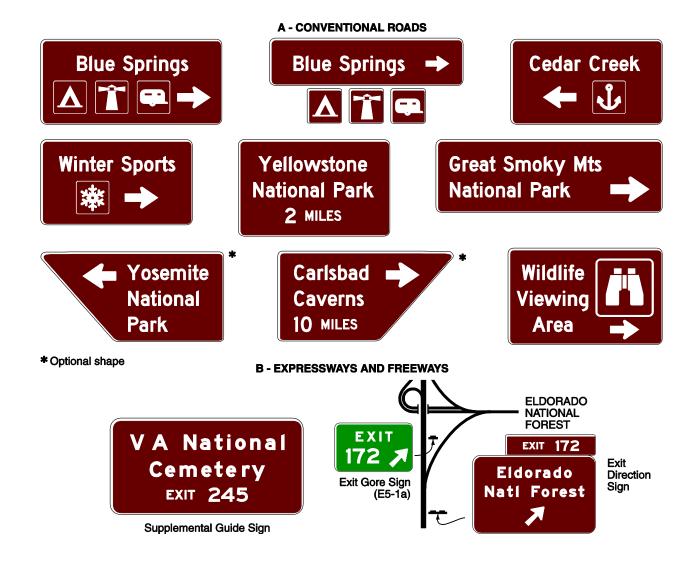
#### Support:

Figure 2M-3 illustrates typical height and lateral mounting positions. Figure 2M-4 illustrates some examples of the placement of symbol signs within a recreational or cultural interest area. Figures 2M-5 through 2M-10 illustrate some of the symbols that can be used.

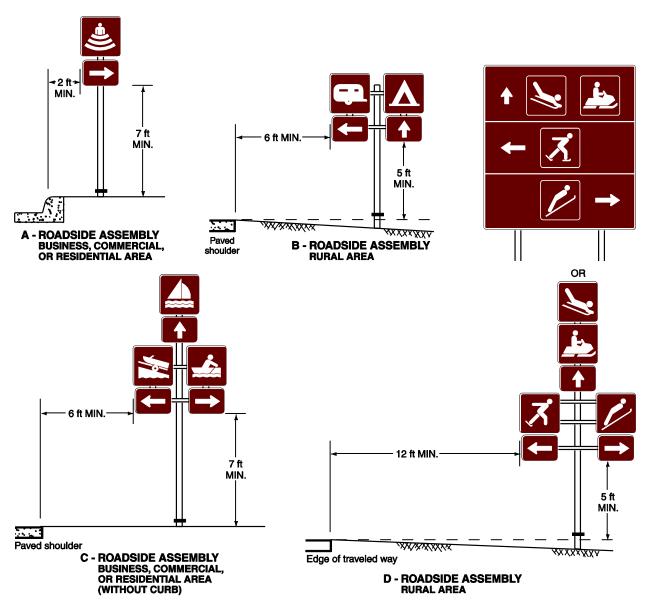
#### Guidance:

08 The number of symbols used in a single sign assembly should not exceed four.

### Figure 2M-2 Examples of Recreational and Cultural Interest Area Guide Signs

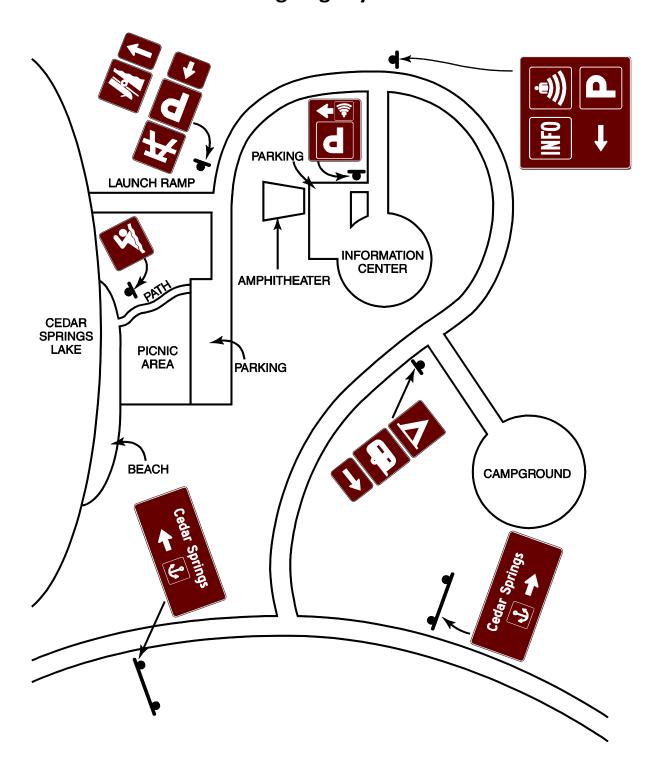


# Figure 2M-3 Arrangement, Height, and Lateral Position of Signs Located Within Recreational and Cultural Interest Areas



Note: See Section 2A.19 for reduced lateral offset distances that may be used in areas where lateral offsets are limited, and in urban areas where sidewalk width is limited or where existing poles are close to the curb.

Figure 2M-4 Examples of Symbol and Destination Guide Signing Layout



# Figure 2M-5 Recreational and Cultural Interest Area Symbol Signs for General Applications



RS-002 Smoking



RS-005 Tunnel



RS-006 Lookout Tower



RS-007 Lighthouse



RS-008 Falling Rocks



RS-009 Dam



RS-011 Deer Viewing Area



RS-012 Bear Viewing Area



RS-017 Pets on Leash



RS-031 Bus Stop



RS-036 Viewing Area



RS-042 Campfires



RS-080 Point of Interest



RS-090 Fire Extinguisher



RS-099 Rattlesnakes



RS-101 Cans or Bottles



RS-102 Snack Bar



RS-103 Radios



RS-111 Strollers



RS-115 Sea Plane



RS-120 Wood Gathering



RS-122 Walk on Boardwalk



RS-123 Stay on Trail



RS-140 Pick-up Trucks



RS-141 Nature Study Area



RS-142 Cultural Interest Area



RS-200 Recycling

# Figure 2M-6 Recreational and Cultural Interest Area Symbol Signs for Accommodations



RS-021 Men's Restroom

RS-040

**Trailer Site** 



RS-022 Restrooms



RS-023 Women's Restroom



RS-034 Parking



RS-037 Sleeping Shelter



RS-104 Recreational Vehicle Site



RS-137 Baby Changing Station (Men's Room)



RS-138 Baby Changing Station (Women's Room)



RS-148 Walk-In Camp

# Figure 2M-7 Recreational and Cultural Interest Area Symbol Signs for Services



RS-013 Drinking Water



RS-015 Ranger Station



RS-020 Grocery Store



RS-024 First Aid



RS-026 Post Office



RS-027 Mechanic



RS-030 Lockers/Storage



RS-035 Showers



RS-039 Picnic Shelter



RS-041 Sanitary Station



RS-043 Trail Shelter



RS-044 Picnic Site



RS-045 Kennel



RS-071 Tramway



RS-073 Stable



RS-085 Laundromat



RS-086 Litter Receptacle



RS-091 Trash Dumpster



RS-109 Theater



RS-112 Firewood Cutting



RS-114 Radiator Water



RS-150 Electrical Hook-Up

# Figure 2M-8 Recreational and Cultural Interest Area Symbol Signs for Land Recreation



RS-064 Horse Trail



RS-067 Off-Road Vehicle Trail



RS-068 Hiking Trail



RS-070 Amphitheater



RS-076 Wildlife Viewing



RS-081 Technical Rock Climbing



RS-082 Climbing



RS-083 Rock Collecting



RS-084 Spelunking/Caves



RS-095 All-Terrain Trail



RS-096 Baseball



RS-097 Exercise/Fitness



RS-098 Skateboarding



RS-113 Driving Tour



RS-114 Interpretive Trail



RS-116 Archery



RS-125 In-Line Skating



RS-126 Hang Gliding



RS-128 Golfing



RS-129 Tennis



RS-149 Corral

# Figure 2M-9 Recreational and Cultural Interest Area Symbol Signs for Water Recreation



RS-010 Fish Hatchery



RS-053 Marina



RS-054 Boat Ramp



RS-055 Motorboating



RS-056 Sailing



RS-057 Rowboating



RS-058 Waterskiing



RS-059 Surfing



RS-060 Scuba Diving



RS-061 Swimming



RS-062 Diving



RS-063 Fishing Area



RS-079 Canoeing



RS-087 Tour Boat



RS-088 Wading



RS-089 Fish Ladder



RS-093 Fish Cleaning



RS-094 Lifejackets



RS-106 Seal Viewing



RS-107 Whale Viewing



RS-108 Wind Surfing



RS-117 Hand Launch/ Small Boat Launch



RS-118 Kayaking



RS-119 Fishing Pier



RS-121 Jet Ski/Personal Watercraft



RS-145 Beach



RS-146 Rafting



RS-147 Boat Motor

### Figure 2M-10 Recreational and Cultural Interest Area **Symbol Signs for Winter Recreation**















RS-046 **Cross Country Skiing** 

**RS-047 Downhill Skiing** 

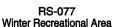
**RS-048** Ski Jumping

**RS-049** Sledding

RS-050 Ice Skating

RS-052 Snowmobiling







**RS-078** Snowshoeing



**RS-092** Ice Fishing



**RS-105** Chair Lift/Ski Lift



**RS-127** Snowboarding







**RS-144 Snow Tubing** 

#### Option:

The Advance Turn (M5 series) or Directional Arrow (M6 series) auxiliary signs with white arrows on brown backgrounds shown in Figure 2D-5 of the MUTCD may be used with Recreational and Cultural Area Interest symbol guide signs to create a Recreational and Cultural Interest Area Directional Assembly. The symbols may be used singularly, or in groups of two, three, or four on a single sign assembly (see Figures 2M-1 of the MUTCD and Figures 2M-3, and 2M-4).

#### Option:



Place of historical interest (I-V12) signs (see Figure 2M-V1 in this Supplement) may be installed within areas of historical interest.

#### Support:

- Refer to Section 2M.V1 of this Supplement for Historical Marker signing. 11
- Refer to Section 2H.04 of this Supplement for Unincorporated Place Name signing.



### Figure 2M-V1. Historical Marker, Place of Historical Interest, and Wayside Signs

HISTORICAL MARKER
LEFT 2500 FT

RIGHT 1000 FT

I-V11

Montpelier

I-V12a

Wilderness Battlefield

I-V12b

Robert E Lee Wayside LEFT 1 MI

RIGHT 2 ½ MI

I-V13

Montvale Wayside

I-V14

### **Section 2M.10 Memorial or Dedication Signing**

#### Support:



Virginia's General Assembly and Commonwealth Transportation Board have the authority to adopt an act or resolution memorializing or dedicating a highway, bridge, or other component of a highway. The purpose of the act or resolution is to honor persons or groups who have lost their lives while serving in the armed forces or as officers of the law; or to pay tribute to significant historical events/references. Memorial Facility (I-V2) signs (see Figure 2M-V2 in this Supplement) are installed as a result of such resolutions.

#### Guidance:

O2 Such memorial or dedication names should not appear on or along a highway, or be placed on bridges or other highway components. If a route, bridge, or highway component is officially designated as a memorial or dedication, and if notification of the memorial or dedication is to be made on the highway right-of-way, such notification should consist of installing a memorial or dedication marker in a rest area, scenic overlook, recreational area, or other appropriate location where parking is provided with the signing inconspicuously located relative to vehicle operations along the highway.

#### Option:

If the installation of a memorial or dedication marker off the main roadway is not practical, memorial or dedication signs may be installed on the mainline.

#### Guidance:

Memorial or dedication signs should have a white legend and border on a brown background.

#### Standard:

Where such memorial or dedication signs are installed on the mainline, (1) memorial or dedication names shall not appear on directional guide signs, (2) memorial or dedication signs shall not interfere with the placement of any other necessary signing, and (3) memorial or dedication signs shall not compromise the safety or efficiency of traffic flow. The memorial or dedication signing shall be limited to one sign at an appropriate location in each route direction, each as an independent sign installation.



### Figure 2M-V2. Memorial or Dedication Signing

Henry G Shirley
Memorial Highway

Trooper
Robin L Farmer
Memorial Bridge

I-V2a

- Memorial or dedication signs shall be rectangular in shape. The legend displayed on memorial or dedication signs shall be limited to the name of the person or entity being recognized and a simple message preceding or following the name, such as "Dedicated to" or "Memorial Parkway." Additional legend, such as biographical information, shall not be displayed on memorial or dedication signs. Decorative or graphical elements, pictographs, logos, or symbols shall not be displayed on memorial or dedication signs. All letters and numerals displayed on memorial or dedication signs shall be as provided in the "Standard Highway Signs and Markings" book (see Section 1A.11 of this Supplement). The route number or officially mapped name of the highway shall not be displayed on the memorial or dedication sign.
- 07 Memorial or dedication names shall not appear on supplemental signs or on any other information sign on or along the highway or its intersecting routes.

#### Option:

The lettering for the name of the person or entity being recognized may be composed of a combination of lower-case letters with initial upper-case letters.

#### Guidance:

op Freeways and expressways should not be signed as memorial or dedicated highways.

#### Support:

Named highways are officially designated and shown on official maps and serve the purpose of providing route guidance, primarily on unnumbered highways. A highway designated as a memorial or dedication is not considered to be a named highway. Section 2D.53 of this Supplement contains provisions for the signing of named highways.

#### **Standard:**



- Signs shall be kept to a maximum of three lines of text; with up to two lines of variable text and the last line designated for the facility type Bridge, Memorial Bridge, Highway, Memorial Highway, etc.
- On non-limited access conventional roadways, signs shall be no wider than 60 inches and no taller than 18 inches, unless approved by the State Traffic Engineer.
- On freeways and expressways, signs shall be no wider than 120 inches and no taller than 36 inches, unless approved by the State Traffic Engineer.
- 14 Legend context shall comply with Table 2M-V1 in this Supplement.
- Signs shall be posted only for direction of traffic on the facility and shall be limited to one sign at appropriate location in each direction of travel:
  - A. On the bridge for crossing, not on under-passing roads;
  - B. On the highway segments or highways, not on approaches/ramps to the named highway or segment.





### Table 2M-V1. Memorial, Recreational, and Cultural Interest Area Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road				_	
			Single Lane	Multi- Lane	Expressway	Freeway	Minimum	Oversized
Named Bridges, Highways & Highways Segments (One Line)	I-V2a	2M.10	Var.* x 12	Var.* x 12	Var.** x 30	Var.** x 30	_	_
Named Bridges, Highways & Highways Segments (Two Lines)	I-V2b	2M.10	Var.* x 18	Var.* x 18	Var.** x 36	Var.** x 36	_	_
HISTORICAL MARKER	I-V11	2M.V1	36 x 24	36 x 24	_	_	_	_
POINT OF HISTORICAL INTEREST (One Line)	I-V12a	2M.08	Var. x 12	Var. x 12	_	_	_	_
POINT OF HISTORICAL INTEREST (Two Lines)	I-V12b	2M.08	Var. x 18	Var. x 18	_	_	_	_
Advance Sign for Wayside	I-V13	2M.V2	Var. x 42	Var. x 42	_	_	_	_
Wayside Identification	I-V14	2M.V2	Var. x 36	Var. x 36	_	_	_	_

<sup>\*60</sup> inch maximium



### Section 2M.V1 <u>Advance Signing for Historical Markers (I-V11 signs)</u>

#### Support:

The Virginia Department of Historic Resources (DHR) oversees the Historical Marker program, which recognizes sites of historic significance. Information related to the program can be found at Virginia DHR's website. See the Appendix A of this Supplement for the web address.

#### Standard:

O2 Advance Historical Marker (I-V11) signs (see Figure 2M-V1 in this Supplement) shall be used in advance of Historical Markers where parking has been provided separate from the travelway.

#### Guidance:

O3 Distances on Advance Historical Marker (I-V11) signs should be a multiple of 500 feet.

<sup>\*\*120</sup> inch maximum

### V

### Section 2M.V2 Signing for Waysides (I-V13 and I-V14 signs)

#### Option:

- Wayside identification (I-V14) signs (see Figure 2M-V1 in this Supplement) may be installed at established waysides along a roadway.
- Advance Sign for Wayside (I-V13) signs (see Figure 2M-V1 in this Supplement) may be installed in advance of established waysides.

#### **Standard:**

103 The advance distance in the legend of Advance Sign for Wayside (I-V13) signs shall be a multiple of ½ mile, not exceeding 3 miles.