



U.S. Department of Transportation
Federal Highway
Administration

Alaska Traffic Manual

Consisting of:

1. Manual on Uniform Traffic Control Devices, 2003 (separate document) with:
 - Revision No. 1 dated November 2004
2. Alaska Traffic Manual Supplement, 12/22/2005



Alaska Department of Transportation and Public Facilities

Alaska Traffic Manual Supplement

Effective 12/22/05

Supplementing the 2003 Edition of the MUTCD with:

- Revision No. 1 dated November 2004

INTRODUCTION

Support:

The ATM is intended to enhance road safety and operation by specifying uniform, understandable, and effective traffic control devices for Alaska roads.

Standard:

Traffic control devices installed on state roads shall conform to the Alaska Traffic Manual (ATM). Traffic control devices on roads under municipal jurisdiction shall conform, “as far as practicable,” to the ATM.

Support:

To promote uniformity and understandability of traffic control devices, private property owners should conform to the ATM when installing devices on roads on private property.

The ATM is comprised of the *2003 Alaska Traffic Manual Supplement (ATMS)* and the 2003 edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*, including revision No. 1 dated November 2004, published by the Federal Highway Administration.

Standard:

Devices installed or replaced after the publication date of the ATMS shall conform to the ATM upon installation. Unless noted otherwise, existing devices that do not conform to the current ATM shall be replaced at the end of their useful life.

Standard:

Both the ATMS and the MUTCD shall be consulted when researching traffic control issues.

Support:

How to Use the Alaska Traffic Manual Supplement

The ATMS parts, chapters and sections correlate to the MUTCD parts, chapters and sections in sequence, heading and numbering.

The two documents interact as follows:

- MUTCD sections, figures or tables not mentioned in the ATMS are adopted for Alaska without any changes or additions.
- Unless otherwise noted, language in the ATMS is added to the end of the referenced MUTCD section.
- In other cases, the MUTCD language is deleted and/or the ATMS language inserted as directed by the instructions in italics.

- Where no equivalent section, figure, or table exists in the MUTCD, the section, figure, or table in the ATMS is the standard. Alaska-unique sections begin with a .100 suffix (as in Section 2C.100). Similarly, Alaska-unique figures and tables begin with –100 suffixes (as in Figure 2C-100).

Obtaining the MUTCD

The MUTCD and revisions may be obtained from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954, Stock No. 650-001-00001-0. It may also be downloaded or purchased on the Web at <http://mutcd.fhwa.dot.gov/ser-pubs.htm>.

Other Related Documents

The following Department of Transportation & Public Facilities (DOT&PF) documents can be a useful reference when working on traffic control device design:

- Design details for signs and markers are not included in the ATMS. They are in the *Alaska Sign Design Specifications (ASDS)*.
- The Alaska Department of Transportation and Public Facilities (DOT&PF) *Alaska Preconstruction Manual* contains additional information on highway construction, street lighting, and supports for signs, streetlights, and traffic. It pertains only to DOT&PF construction projects.
- The DOT&PF *Standard Specifications for Highway Construction* contains descriptions, material requirements, and construction methods for traffic control devices and other items. It pertains only to DOT&PF construction projects.

Obtaining the Supplement and Other DOT&PF Documents

You can purchase the ATMS and the above referenced documents in hard copy from the Alaska Department of Transportation and Public Facilities, 3132 Channel Drive, Room 115, Juneau, Alaska 99801, (907) 465-2985. They can be downloaded for free at the DOT&PF Design and Construction Standards Web site at: <http://www.dot.state.ak.us/stwddes/dcspubs/manuals.shtml>.

The web site also provides information on the latest updates to the ATM.

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PART 1. GENERAL

CHAPTER 1A. GENERAL

Section 1A.03 Design of Traffic Control Devices

Delete the first paragraph in the first Standard subsection and insert the following:

All symbols shall be unmistakably similar to or mirror images of the adopted symbol signs, all of which are shown in the ASDS. Symbols and colors shall not be modified unless otherwise stated herein. All symbols and colors for signs not shown in the ASDS shall follow the procedures for experimentation and change described in Section 1A.10.

Section 1A.07 Responsibility for Traffic Control Devices

Insert the following at the end of the section:

Standard:

State Highways

Responsibility for traffic control devices on state highways in Alaska rests with the state and all its political subdivisions that have jurisdiction over highways. Alaska Statutes (Sec. 19.10.040 and Sec. 19.10.050) state:

“The Department of Transportation and Public Facilities shall classify, designate, and mark highways under its jurisdiction and shall provide a uniform system of marking and posting these highways. The system of marking and posting shall correlate with and shall, as far as possible, conform to the recommendations of the Manual on Uniform Traffic Control Devices as adopted by the American Association of State Highway and Transportation Officials.

The Department of Transportation and Public Facilities shall prescribe types of traffic control signals to regulate traffic on highways. These signals must correlate with and, as far as possible, conform to the recommendations of the Manual on Uniform Traffic Control Devices as adopted by the American Association of State Highway Officials. The department shall adopt uniform regulations for the placing and installation of traffic control signals.”

The required uniform system of marking and posting is defined in the ATM.

The DOT&PF determines the need for all traffic control devices on state highways, prepares designs, maintains records, and supervises their installation. These activities may be done by contract with others or by state forces. Traffic control devices that are not in conformance with this standard or that require specific approval for their installation shall not be installed without the approval of the state traffic and safety engineer.

As additional specific powers, the Department of Transportation and Public Facilities "may conduct investigations..." and "shall determine safe speed limits, with the assistance of the Department of Public Safety" (AS 19.10.070) and may designate through highways by erecting stop signs on side road approaches (AS 19.10.080). The Department is authorized to make policy for installing, maintaining, and performing all related functions pertaining to traffic control devices on state highways.

Other Highways

Alaska Statute 28.01.010, the Alaska Uniform Traffic Laws Act, states, in part, that a municipality is required to "erect necessary official traffic control devices on streets and highways within its jurisdiction that as far as practicable conform to the current edition of the *Alaska Traffic Manual* prepared by the Department of Transportation and Public Facilities."

Section 1A.08 Authority for Placement of Traffic Control Devices

Insert the following at the end of the first Standard subsection:

The DOT&PF is responsible for erecting and maintaining traffic control devices on state highways. Municipalities and other entities with highway authority are responsible for erecting and maintaining traffic control devices on their roads.

Section 1A.10 Interpretations, Experimentations, and Changes, and Interim Approvals

Insert the following after the first Standard subsection:

To promote the use of uniform, understandable, and effective traffic control devices; to avoid varying official interpretations, and to facilitate the orderly development of traffic control policy, the state traffic and safety engineer shall be the focal point for policy in all matters concerning the ATM.

- A. Official interpretations for purposes of Alaska Department of Transportation and Public Facilities' practice of these standards shall be made by the state traffic and safety engineer.
- B. Those who desire interpretation of a clause in this standard, a revision, or permission to experiment with or use a traffic control device not in the ASDS or in the Alaska Department of Transportation and Public Facilities' *Standard Drawings* shall submit a written request to the state traffic and safety engineer. The request should clearly identify the existing standard (if any), and the proposed standard including a complete statement as to how and when it is to be applied, the date, and the name and address of the person making the request.

If the request is one that can be approved at the state level, such as revisions to text-only signs, the state traffic and safety engineer will circulate requests for new

traffic control devices and significant changes in policy to the regional traffic engineers, the FHWA Alaska Division safety/traffic engineer, and the Anchorage traffic engineer for their input. Responses to the requestor will be sent within 60 days of receipt of the request.

If the request is one that requires interim or experimental approval from the FHWA, the requestor should send a letter to the state traffic and safety engineer that addresses the requirements listed in section 1A.10 of the MUTCD. Upon concurrence, the state traffic and safety engineer will send the request to the FHWA and distribute the response when received.

- C. Revisions to the MUTCD will not become part of the ATM until they have been reviewed by the state traffic and safety engineer, any necessary changes have been made to the ATMS, the FHWA has approved those changes, and the state traffic and safety engineer informs users of the adoption of the revised MUTCD.

Insert the following at the end of the first Support subsection:

The state has two years from date of final ruling to adopt or revise MUTCD revisions.

Section 1A.11 Relation to Other Documents

Insert the following at the end of the Standard subsection:

The ASDS and not the “*Standard Highway Signs*” book shall be the source document for all signs in the ATM.

Section 1A.12 Color Code

Delete Item F. of the Standard subsection and insert the following:

- F. **Fluorescent Yellow-Green school warning**

All school warning signs shall have fluorescent yellow-green backgrounds, except SCHOOL BUS STOP AHEAD signs (S3-1), see section 7B.07 of this ATMS.

Section 1A.13 Definitions of Words and Phrases in This Manual

Insert the following at the end of definition 91, Traveled Way:

On two-lane gravel roads or paved roads without striping, the traveled way is considered the 24-foot area centered between hinge points. If the distance between hinge points is 24 feet or less, the traveled way shall be considered 20 feet wide in placement of traffic control devices.

Insert the following definitions at the end of the section: Note numbers 96 through 199 are reserved for future MUTCD definitions.

200. **Alaska Sign Design Specifications:** The *Alaska Sign Design Specifications* (ASDS) contains drawings showing dimensions, shapes, colors, and other information necessary for laying out the signs that are used in Alaska. The ASDS is a supplement to the ATM.
201. **Alaska Traffic Manual:** The *Alaska Traffic Manual* (ATM) consists of the 2003 Edition of the *Manual on Uniform Traffic Control Devices* (MUTCD), including Revision No. 1 dated November 2004, and this *Alaska Traffic Manual Supplement* (ATMS).
202. **City Traffic Engineer:** An employee of a local government agency with road jurisdiction who is responsible for traffic control devices.
203. **Commissioner:** All references to the commissioner herein, not otherwise identified, shall refer to the commissioner of the Alaska Department of Transportation and Public Facilities; the commissioner's duly authorized agents, representatives, and assigns; and those who by nature of their regular duties or emergency situations are required to act in matters of policy concerning traffic control devices. "Duly authorized" in times of emergency does not relieve anyone of the responsibility of obtaining approvals and authority from the regular authority when the emergency has passed.
204. **Hinge Point:** The angle point where the top surface of a road intersects a foreslope, typically at the outside edge of the shoulder.
205. **Public Roadways:** All vehicular ways maintained by state, borough, municipal bodies, or other local government bodies, and under their respective jurisdictions.
206. **Regional Traffic and Safety Engineer (RTSE):** One of three DOT&PF employees with this title. There is one in the Northern Region (based in Fairbanks), another in the Central Region (based in Anchorage), and another in the Southeast Region (based in Juneau).
207. **Shoulder:** That portion of the roadway outside the traveled way. Left shoulders on divided roadways are considered part of the median. Shoulders should normally be considered refuge or emergency lanes rather than parking areas.
208. **State Highways:** All public vehicular ways designated as state highways in accordance with Title 19 of the Alaska Statutes.
209. **State-Maintained Roads:** The roads maintained by state forces or maintained by others at state expense.

210. **State Traffic and Safety Engineer (STSE):** The individual with this title is employed by the Design and Construction Standards Section of the Design and Engineering Services Division of DOT&PF in Juneau.

PART 2. SIGNS

CHAPTER 2A. GENERAL

Section 2A.06 Design of Signs

Delete the third paragraph under the first Support subsection.

Insert the following at the end of the Standard subsection:

Specific sign designs are provided in the *Alaska Sign Design Specifications (ASDS)*, latest edition. The material specifications for traffic control devices for use on state highways are specified in the *Alaska DOT&PF Standard Specifications for Highway Construction*, latest edition.

Signs not shown in the ASDS or specified in the ATM shall be used only after completing the process described under Section 1A.10, except for custom text-only signs for temporary traffic control zones, or in temporary emergency situations.

Section 2A.11 Sign Colors

Insert the following at the end of the Support subsection:

Delete the “X” under the Fluorescent Yellow-Green column for the Bicycle and Pedestrian rows of Table 2A-4 Common Uses of Sign Colors.

Section 2A.12 Dimensions

Delete the first Support and Standard subsections and insert the following:

Standard:

The sizes of signs to be used on all classes of highways in Alaska shall be as specified in the ASDS, latest edition, unless engineering judgment determines that other sizes are appropriate. 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 Manual. Where engineering judgment determines that sizes larger than prescribed dimensions are appropriate for use, standard shapes and colors shall be used and standard proportions shall be retained to the extent practical.

Roadway classes for purposes of sign size specification are shown in Table 2A-100 Roadway Classes.

Table 2A-100 Roadway Classes

Roadway Class	Definition
Bike	Signs intended for the exclusive use of bicyclists
Minimum	Local roads (as defined by AASHTO) with no more than one lane in each direction and speed limits of 25 mph or less
Conventional	Streets or highways other than freeways, expressways, and roads that fall under the Minimum class above
Expressway	Divided highways with partial control of access
Freeway	Divided highways with full control of access
Oversized	Where special emphasis is needed

Section 2A.13 Symbols

Delete the first sentence of the Standard subsection and insert the following:

Symbol designs shall in all cases be unmistakably similar to those shown in the ATM and in the ASDS.

Insert the following at the end of the section:

Guidance:

Whenever the ATM allows a choice of symbols or words to convey a sign message, the symbol should be used. As older signs are replaced under routine maintenance operations, symbol signs should be installed.

Section 2A.14 Word Messages

Delete the first paragraph of the first Standard subsection and insert the following:

Except as noted in Section 2A.06, all word messages shall use standard wording and letters as shown in the ATM and in the ASDS.

Delete the last Option subsection and insert the following:

Standard:

Unless otherwise shown in the ASDS, word messages on guide signs shall be composed of a combination of lower-case letters with an initial upper-case letter.

Section 2A.16 Standardization of Location

Insert the following after the first Guidance subsection:

Option:

Where it is impractical to install separate sign supports, lane-use signs intended for post-mounting may be mounted under STOP or YIELD signs on the same post.

Insert the following at the end of the third Support subsection:

Standard:

See Section 2A.100 of this ATMS, for order of priority for sign installation.

Section 2A.18 Mounting Height

Delete the first paragraph of the Standard subsection and insert the following:

Signs installed at the side of the road in rural districts shall be at least 7 feet, measured from the bottom of the sign to the near edge of the pavement.

Add the following to the end of the first Option subsection:

Signs may be mounted up to 6" below specified minimum heights when the edge of the sign is at least 2 feet away from a sidewalk or pathway.

Delete the first paragraph of the second Standard subsection and insert the following:

Overhead signs, not including signs on traffic signal mast arms, shall provide a vertical clearance of not less than 18.5 feet to the sign, light fixture, or sign bridge, over the entire width of the pavement and shoulders except when mounted on a structure with less clearance. Where clearance is restricted to less than 18.5 feet by the structure a sign is mounted on, the sign shall be mounted as low as is practical without further restricting clearance. Signs mounted on traffic signal mast arms shall provide a vertical clearance of not less than 17.5 feet.

Section 2A.20 Orientation

Insert the following paragraphs at the end of the Guidance subsection:

The face of all overhead signs should be tilted at least 3 degrees downward to reduce the amount of dirt, dust, snow, and bird droppings that would otherwise build up on the face of a sign.

Parking signs are excepted from being mounted at right angles to the direction of the traffic they serve.

Section 2A.100 Directional and Service Signing

This is a new section. There is no corresponding section in the MUTCD.

Section 2A.24 through 2A.99 are reserved for future MUTCD use.

Support:

Table 2A-101 of this ATMS provides a quick reference summary of the signs used in Alaska to direct travelers to roads, destinations, and services.

Standard:

When signs compete for roadside space, place those with the highest priority, as shown in Table 2A-101 of this ATMS, first.

Only permanent signs have been prioritized. Where possible, place Construction Warning signs where they do not interfere with permanent signs.

Reference the Alaska Administrative Code (AAC) for information about all signs that have an AAC reference listed under the “Regulation” column. Regulation information is not duplicated in this publication.

Table 2A-101 Summary of Directional / Service Signs

Sign Type	Sign No(s) from ASDS	Purpose	Color	Priority *	Applicable References			Allowed on Expwy or Fwy?	Permit Available ?	Remarks
					Regulation	ATM Supplement	MUTCD			
Guide, Conventional Roads	D1 to D11 excluding signs below	Direction to roads and destinations	White on Green	4	n/a	2D	2D	No	No	
Guide, Freeway & Expwy	E1 to E11	Direction to roads and destinations	White on Green	4	n/a	2E	2E	Yes	No	
General Service	D9-1 to D9-308	Direction to generic services	White on Blue	5	n/a	2D.44, 2E.51	2D.44, 2E.51	Expy OK Fwy No	No	
General Information	I-1 to I-181	Identification of roadside points of Interest	White on Blue	6	n/a	2D.47	2D.47	Yes	No	
RCIA	D7-1 to D7-105	Direction to recreational or cultural points of interest	White on Brown	7	17 AAC 60.201 to .215	n/a	2H	Yes	Yes	See regulation for permit requirements
Community Service	D9-204	Direction to communities and identification of services	White on Blue	8	n/a	2D-100a	n/a	Yes	No	May be installed where TODS, RCIA, or LOGO signs are too numerous
Specific Service – LOGO	LG-C1 to LG-G3	Direction to services identified by business symbol or name	White on Blue	9	17 AAC 60.101 to .120	n/a	2F	Yes	Yes	See regulation for permit requirements
Tourist-Oriented Directional Signs (TODS)	D9-205	Direction to businesses identified by business name	White on Blue	10	17 AAC 60.001 to .020	n/a	2G	No	Yes	See regulation for permit requirements
Traveler Information Kiosks (not traffic control devices)	n/a	Direction to community services (signs not visible from road)	No sign color specified	n/a	17 AAC 60.401 to .420	n/a	n/a	In turnouts only	Yes	See reg. for permit rqmts. May be installed where TODS, RCIA, or LOGO signs are too numerous.

* Priorities shown in the table begin with Priority #4 because regulatory, warning, and school signs (not shown in table) have the top three priorities, not necessarily in that order. Sign precedence for regulatory, warning, and school signs shall be determined based on the specifics of each case.

CHAPTER 2B. REGULATORY SIGNS

Section 2B.03 Size of Regulatory Signs

Delete the first sentence of the Standard subsection and insert the following:

The sizes for regulatory signs shall be as shown in ASDS.

Delete the last paragraph of the Option subsection and insert the following:

Signs larger than those shown in the ASDS may be used (see Section 2A.12).

Delete Table 2B-1. Regulatory Sign Sizes (Sheets 1 through 5).

Section 2B.12 In-Street Pedestrians Crossing Signs (R1-6, R1-6a)

Delete the second paragraph in the Standard subsection and insert the following:

The STOP FOR legend shall not be used in Alaska.

Section 2B.13 Speed Limit Sign (R2-1)

Insert the following to the start of the first Standard subsection:

Speed limits on state highways shall be set in accordance with DOT&PF Procedure 05.05.020 PDR.

Delete the second paragraph of the Option subsection and insert the following:

Two types of Speed Limit signs may be used: one to designate passenger car speeds, or minimum speed limits that might apply; and the other to show any special speed limits for trucks and other vehicles.

Section 2B.15 Night Speed Limit Sign (R2-3)

Delete the wording in this section and insert the following:

Standard:

Night Speed Limit signs shall not be used in Alaska.

Section 2B.17 FINES HIGHER Plaque (R2-6)

Insert the following to the end of the Standard subsection:

When fines are increased in temporary traffic control zones in accordance with 17 AAC 99.010, the signs described in Section 6F.14a of this ATMS shall be used.

Section 2B.18 Location of Speed Limit Signs

Insert the following after the Standard subsection:

Guidance:

On state highways, speed limit signs should be located and spaced in accordance with DOT&PF Procedure 05.05.020 PDR.

On multi-lane divided and multi-lane one-way roadways, speed limit signs should be installed on the left and right of traffic.

Section 2B.31 SLOWER TRAFFIC KEEP RIGHT Sign (R4-3)

Insert the following to the end of the Guidance subsection:

Signs and pavement markings for climbing and passing lanes should be installed as shown in Figure 2B-100 of this ATMS.

Section 2B.32 SLOW MOVING TRAFFIC LANE Signs (R4-5 and R4-6)

Insert the following at the end of the second Guidance subsection:

Signs and pavement markings for climbing and passing lanes should be installed as shown in Figure 2B-100 of this ATMS

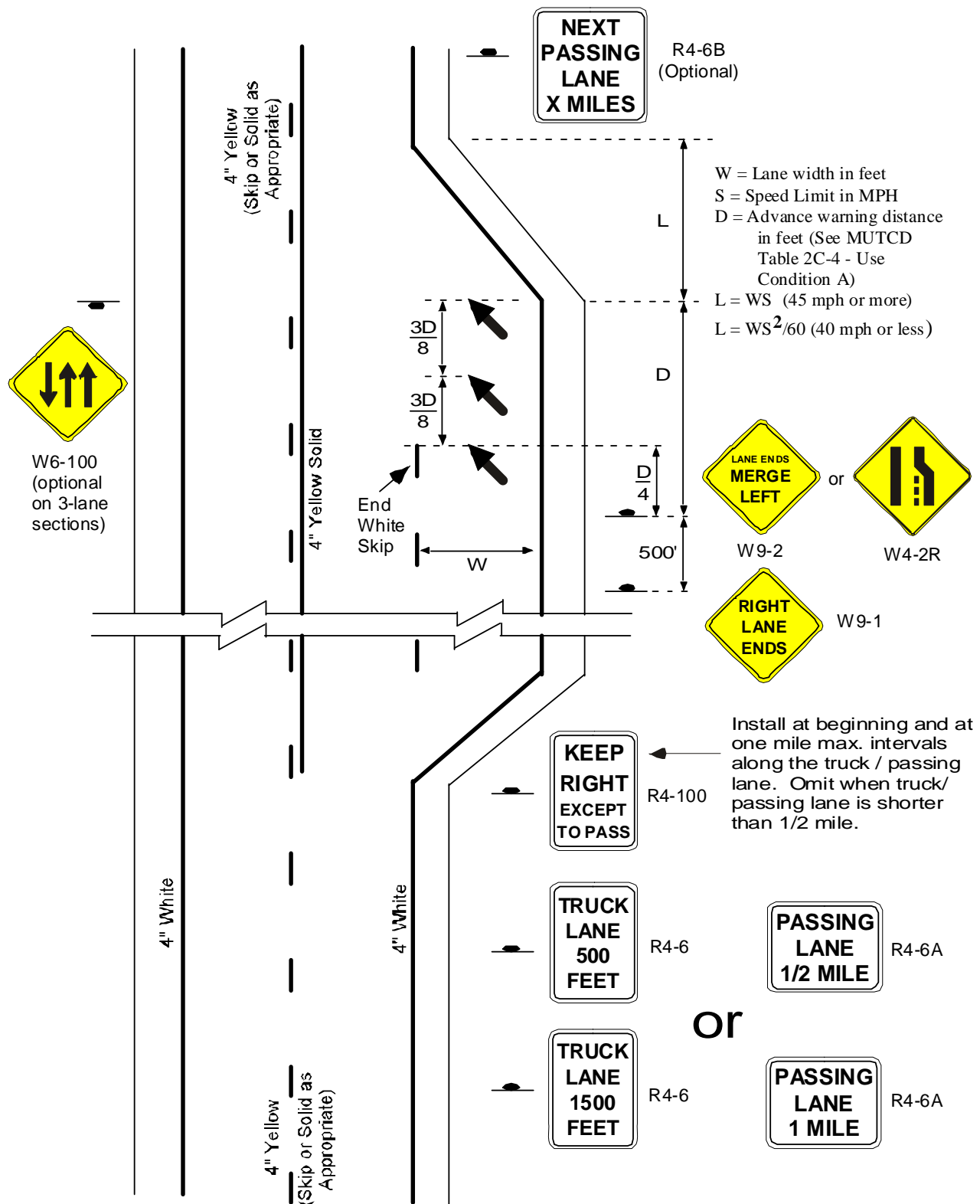


Figure 2B-100
Typical Signing/Striping
for Truck/Passing Lanes

Section 2B.36 Selective Exclusion Signs

Delete C. from the second Support subsection.

Delete the first paragraph of the second Option subsection.

Insert the following subsections at the end of the section:

Standard:

The COMMERCIAL VEHICLES EXCLUDED (R5-4) sign shall not be used in the State of Alaska.

Option:

When an R5-2 No Trucks symbol sign is used, it shall be installed in the far right position at the last intersection where trucks may turn to avoid the prohibited street. A supplemental R5-2 sign may be necessary on the left side of the restricted roadway if additional emphasis is needed.

Guidance:

A TRUCK ROUTE (R14-1 series) sign should be installed on the right, 500 feet or one-half block (whichever is less) in advance of the intersection where commercial vehicles must turn to avoid entering a restricted section of roadway. The R14-1 series signs should also be used in the same manner as trail markers to guide the trucker along the truck route unless other signing gives sufficient direction.

If used, the VEHICLES WITH LUGS PROHIBITED (R5-5) sign should be used to designate areas where pavement damage has occurred or is likely to occur due to vehicles with lugs traversing the pavement. Install the sign on the right where a vehicle with lugs can leave the roadway before arriving at the paved roadway.

Section 2B.39 Parking, Stopping, and Standing Signs (R7 AND R8 Series)

Insert the following at the end of the section:

Option:

R7-300 signs, "UNLESS YOU NEED VAN ACCESS PLEASE USE OTHER ACCESSIBLE SPACES FIRST", may be used to encourage drivers with disabilities not to use van accessible parking spaces unless they need them.

Section 2B.41 Placement of Parking, Stopping, and Standing Signs

Insert the following at the end of the section:

Guidance:

NO STOPPING (R7S series) signs shall not be used in combination with NO PARKING (R7 series) signs in the same zone. They should be used only where the full roadway is required for moving traffic and where there is no shoulder area for stopping outside the traffic stream.

Section 2B.45 Traffic Signal Signs (R10-1 through R10-21)

Delete the first sentence of the first Standard subsection and insert the following:

Traffic signal signs pertaining to pedestrian actuation, with the exception of the R10-101, shall be mounted immediately above or incorporated in pedestrian pushbutton units (see Section 4E.08).

Insert the following after third paragraph of the second Option subsection:

Guidance:

R10-100 signs [(left-turn arrow) ONLY YIELD ON GREEN (symbolic green ball)] should be installed on signal mast arms at intersections with exclusive left turn lanes and protected-permissive left turn phasing.

Option:

R10-12 signs [LEFT TURN YIELD ON GREEN (symbolic green ball)] may be installed on signal mast arms at intersections with shared left turn lanes and protected-permissive or permissive phasing.

A supplemental post-mounted R10-12 Sign [LEFT TURN YIELD ON GREEN (symbolic green ball)] may be installed adjacent to or above the far left signal display at intersections with protected-permissive phasing.

Insert the following to the end of the first Support subsection:

E. Meaning of Pedestrian Indications (R10-101)

Insert a new Guidance subsection after the first Support subsection:

Guidance:

When used, the R10-101, Meaning of Pedestrian Indications, sign or sticker should be placed above and centered between pedestrian pushbutton units.

Delete the last paragraph of the second Guidance subsection.

Delete the R10-17a RIGHT TURN ON RED ARROW AFTER STOP sign from Figure 2B-19 Traffic Signal Signs.

Section 2B.49 Weight Limit Signs (R12-1 through R12-5)

Insert the following at the beginning of the section:

Guidance:

Roadways, bridges, and other structures should be posted with signs R12-1 to R12-101 indicating the maximum safe sustainable loading to which they may be subjected if that loading is less than the maximum load allowed without a permit.

On state highways, bridge postings should be approved by the chief bridge engineer of the Alaska Department of Transportation and Public Facilities.

Section 2B.50 Weigh Station Signs (R13 Series)

Delete the Option subsection and insert the following:

Standard:

The standard color of the ALL TRUCKS/COMMERCIAL/VEHICLES/NEXT RIGHT (R13-1) sign shall be a white legend and border on a black background.

Section 2B.54 Other Regulatory Signs

Delete the first sentence in the Option subsection and insert the following:

Regulatory word message signs other than those classified and specified in this Manual and the ASDS may be developed to aid the enforcement of other laws or regulations. See Section 2A.06.

Insert the following subsections at the end of the section:

Section 2B.54a STUDED TIRES PROHIBITED (R5-100)

Standard:

The STUDED TIRES PROHIBITED (R5-100) sign shall be installed in conspicuous locations at major entrances to an area where a law, commissioner's order (AS 28.38.155), or local ordinance prohibits the use of studded tires.

Section 2B.54b NO STUDDED TIRES MAY 1 TO SEPT 15 (APRIL 15 TO SEPT 30) Sign (R12-103)

Option:

The NO STUDDED TIRES MAY 1 TO SEPT. 15 (APRIL 15 TO SEPT. 30) (R12-103) sign may be installed on all highways in conspicuous locations. Use “MAY 1 to SEPT. 15” north of 60°N latitude and “APRIL 15 TO SEPT. 30” south of 60°N latitude, as per AS 28.35.155.

Section 2B.54c NO ROAD MAINTENANCE AFTER (date) Sign (R11-100)

Guidance:

The NO ROAD MAINTENANCE AFTER (date) (R11-100) sign should be installed at the location where year-round maintenance ends.

Standard:

In locations where the R11-100 signs are not permanently installed, signs shall be posted at least one month before the effective date.

Option:

This sign may be installed on a Type III barricade in addition to being post-mounted on the right side of the roadway with the appropriate advance warning signs such as END MAINTENANCE 1000 FT. (W14-102) sign. An additional sign may be placed on the left where the roadway exceeds 40 feet in width.

Section 2B-54d LEGAL LIMIT (variable %) OF MAX AXLE LOAD Sign (R12-102)

Standard:

Temporary restriction signs reading LEGAL LIMIT (variable %) OF MAX. AXLE LOAD (R12-102) shall be posted on state highways during spring breakup or at any time when roadway conditions require restriction of weights. These signs shall be posted in conspicuous locations when so ordered by the regional director of operations after suitable public notice. These signs need not be posted on all the affected routes when the restrictions apply to an area.

Option:

An AXLE WEIGHT LIMIT 5 TONS (variable weight) (R12-2) sign may be mounted under an R12-102 sign.

Section 2B.54e \$1000 FINE FOR LITTERING Sign (R16-106)

Support:

Alaska Statutes, Section AS 46.06.100, state “The penalties for littering shall be posted along the public highways of the state, at visitor centers, at entrances to State Parks and recreational areas, at public beaches, and other publicly-owned areas that the Commissioner of Environmental Conservation determines necessary to accomplish the purposes of this chapter. The state agency or municipality responsible for litter removal from a public place shall post the notice required for this section.”

Standard:

The \$1000 FINE FOR LITTERING (R16-106) sign shall also be posted near the state boundary on each primary and secondary highway.

Section 2B.54f No Shooting Signs (R16-104, R16-105)

Option:

When used, the NO SHOOTING FROM ROADWAY (R16-104) sign or NO SHOOTING WITHIN 1/4 MILE OF THE ROADWAY (R16-105) sign may be posted adjacent to the roadway where shooting is likely to occur.

Section 2B.54g Chains Required Signs (R12-104 through R12-107)

Standard:

Signs requiring the use of chains shall not be used except where required by conditions and ordered by the commissioner. Ice or snow must be such that chains are necessary to prevent traffic congestion and accidents. Do not install the signs until the commissioner or the commissioner's designated representative certifies by means of an order (similar to a speed zone order) that vehicles without chains are not permitted to use the roadway.

The CHAINS REQUIRED ON ALL VEHICLES (R12-105) sign shall be installed where chains are required before a vehicle may proceed.

Install an END CHAIN AREA (R12-107) sign at the end of the designated roadway section.

Option:

The CHAINS REQUIRED AHEAD (R12-104) sign may be installed in advance of a location where chains may be installed and in advance of a road segment where chain use is required. Locate the sign at a distance in advance of the installation point as indicated in Section 2C.05, Table 2C-4, Condition B of the MUTCD and 0 mph as the speed at condition of concern. Greater distances may be advisable where ice and snow conditions on the roadway require longer stopping distances.

The INSTALL CHAINS HERE (Arrow) (R12-106) sign may be used to indicate a wide shoulder, pullout, rest area, or other parking area where a motorist may pull off the road to turn around or to install chains.

Section 2B.54h ALL VEHICLES STOP AT CUSTOMS Sign (R13-103)

Guidance:

The ALL VEHICLES STOP AT CUSTOMS (R13-103) sign should be installed between a D8-102 and a D8-103 sign in accordance with Section 2S.06 of this ATMS. The R13-103 sign should be in place only when the Customs Station is in operation. It should be removed or covered at all other times. It should be installed 4,000 feet in advance of the Customs Station or at the beginning of the deceleration lane, whichever distance is greater.

Section 2B.54i DELAY OF 5 VEHICLES ILLEGAL MUST USE TURNOUTS Sign (R16-103)

Guidance:

The DELAY OF 5 VEHICLES ILLEGAL MUST USE TURNOUTS (R16-103) sign should be used on two-lane, rural state highways at locations determined by the regional traffic engineer to alert drivers of slow moving vehicles to use turnouts to prevent delays in areas where passing is difficult. (See 13AAC 02.050)

These signs should only be placed on sections of highway where slow moving vehicle turnouts, meeting the requirements of Section 1120.6. of the DOT&PF *Alaska Preconstruction Manual*, are periodically available. Slow-moving vehicle turnouts should be signed in accordance with Section 2S.03 of this ATMS.

Section 2B 54j BUCKLE UP FOR SAFETY (Symbol) Sign (R16-1)

Guidance:

The BUCKLE UP FOR SAFETY (symbol) (R16-1) sign should be used near major state entry points to inform visitors of Alaska's mandatory safety belt law, and at other points to remind and encourage motorists to use their seat belts.

Section 2B.54k DRIVE WITH HEADLIGHTS ON AT ALL TIMES (R16-110)

Option:

The DRIVE WITH HEADLIGHTS ON AT ALL TIMES (R16-110) sign may be used to address safety concerns about head-on collisions on undivided highways, at approaches to tunnels, in construction or maintenance work areas where dust impairs visibility, and at other appropriate locations.

Section 2B.541 KEEP RIGHT EXCEPT TO PASS Sign (R4-100)

Guidance:

If a truck/passing lane has been provided for slow-moving traffic, a KEEP RIGHT EXCEPT TO PASS (R4-100) sign should be installed at the beginning of the lane and at intervals along the lane. See Figure 2B-100 of this ATMS. Omit the sign if the truck/passing lane is less than ½ mile long.

CHAPTER 2C. WARNING SIGNS

Section 2C.03 Design of Warning Signs

Delete the second sentence of the Standard subsection and insert the following:

Warning signs shall be designed in accordance with the sizes, shapes, colors, and legends contained in the ASDS. See Section 2A.06 for approval of signs not in the ASDS.

Delete the text of the Option subsection and insert the following:

School bus warning signs may have a black legend and border on a yellow or fluorescent yellow-green background.

Section 2C.04 Size of Warning Signs

Delete the first sentence of the first Standard subsection and insert the following:

The size of warning signs shall be as detailed in the ASDS for the various classifications of roads. See Section 2A.12 and Table 2A-100 of this ATMS.

Delete the first sentence of the second Standard subsection and insert the following:

The minimum size for supplemental warning plaques shall be as shown in the ASDS.

Delete the second Option subsection.

Delete Table 2C-2 Warning Sign Sizes and Table 2C-3 Minimum Size of Supplemental Warning Plaques.

Section 2C.05 Placement of Warning Signs

Insert the following at the end of the Guidance subsection:

On multi-lane one-way roadways, expressways and freeways, signs should be mounted on the left and right of traffic.

Section 2C.06 Horizontal Alignment Signs (W1-1 through W1-5, W1-11, W1-15)

Delete the first sentence of the second Option subsection.

Delete the first paragraph of the Standard subsection and insert the following:

W1-1 through W1-5, W1-10, W1-11 or W1-15 signs shall be used when the safe speed on the curve is 8 or more MPH below the posted speed limit.

An Advisory Speed (W13-1) plaque (see Section 2C.46 in this ATMS) shall be used to indicate the speed for the change in horizontal alignment. The speed shown on the plaque shall not be in excess of the posted speed limit.

Section 2C.07 Combination Horizontal Alignment/Advisory Speed Signs (W1-1a, W1-2a)

Insert the following to the Standard subsection:

The advisory speed for this sign shall be determined utilizing the information in Section 2C.46 of this ATMS. The speed shown shall not be in excess of the posted speed limit.

Section 2C.12 Hill Signs (W7-1, W7-1a, W7-1b)

Delete the first sentence of the Standard subsection and insert the following:

When the percent grade is shown, the message X% GRADE plaque shall be placed below the inclined ramp/truck symbol (W7-1) sign.

Delete the W7-1a sign from Figure 2C-2 Vertical Grade Signs.

Delete the first sentence of the Option subsection.

Section 2C.15 ROAD NARROWS Sign (W5-1)

Insert the following after the Guidance subsection:

Standard:

The ROAD NARROWS (W5-1) sign shall not be used to indicate a change in width of shoulders. See Section 2C.100q of this ATMS for the SHOULDER NARROWS sign.

Section 2C.18 Divided Highway (Road) Sign (W6-1)

Delete the Option subsection. Delete W6-1a and W6-1b signs from Figure 2C-3 Miscellaneous Warning Signs.

Section 2C.19 Divided Highway (Road) Ends Sign (W6-2)

Delete the second paragraph of the Option subsection. Delete W6-2a sign from Figure 2C-3 Miscellaneous Warning Signs.

Section 2C.22 Low Clearance Signs (W12-2, W12-2A, and W12-2P)

Insert the following subsection at the beginning of the section:

Support:

LOW CLEARANCE (W12-2 or W12-2P) signs are located on and in advance of low-clearance structures and indicate the clear height from the surface of the traveled way to the lowest point of the structure directly above.

Delete the first sentence of the Standard subsection and insert the following:

Low Clearance signs shall be installed when marked “Required” in Table 2C-100 below.

Table 2C-100 Low Clearance Sign Requirements

Minimum Clearance	Sign on Structure (W12-2A or W12-2P)	Advance W12-2 signs	
		At Advance Warning Distance	At 1st Upstream Intersection
17' or less	Required	--	--
16' or less	Required	Recommended	--
14' 6" or less	Required	Required	Recommended

Structure-mounted low clearance signs shall either be the W12-2A or W12-2P.

Delete the second and third paragraph of the Guidance subsection and insert the following after the first paragraph:

Low Clearance signs should be installed when marked “Recommended” in Table 2C-100 of this ATMS.

W12-2 signs to be installed at the “Advance Warning Distance” should be located at the distance in advance of the low-clearance structure indicated in Section 2C.05, Table 2C-4, Condition A of the MUTCD.

W12-2 signs to be installed at the “1st Upstream Intersection” should be located at the distance indicated in Section 2C.05, Table 2C-4, Condition B and 0 mph as the speed at condition of concern in advance of the last intersection where an alternate route may be taken. Additional signs should be installed beyond this intersection to identify the roadway with the clearance restriction.

When used, the distance indicated on the “X” MILE AHEAD (W12-100) distance plate should be the mileage (to the closest ¼ mile) between the sign and the clearance restriction.

Section 2C.28 BRIDGES ICE BEFORE ROAD Sign (W8-13)

Delete the text of this section in its entirety and insert the following:

Option:

A BRIDGE ICES BEFORE ROAD (W8-13) sign (see Figure 2C-4) or a BRIDGES MAY BE ICY (W8-113) sign may be used in advance of bridges to advise bridge users of winter weather conditions.

Guidance:

The BRIDGE ICES BEFORE ROAD (W8-13) sign (see Figure 2C-4) and BRIDGES MAY BE ICY (W8-113) signs should be removed or covered during seasons of the year when its message is not relevant.

Section 2C.29 Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4)

Delete the second paragraph of the first Option subsection.

Delete the asterisk footnote at the bottom of the Figure 2C-4 and the asterisk next to the sign code for W3-1, W3-2, and W3-3 signs.

Insert the following at the end of the last paragraph of the Section:

See Chapter 4Z. Active Advance Warning Flashers.

Section 2C.30 Speed Reduction Signs (W3-5, W3-5a)

Insert the following at the beginning of the section:

Standard:

The W3-5 and W3-5a signs shall not be used in Alaska.

Delete the first sentence of the Guidance subsection and insert the following:

A REDUCED SPEED AHEAD (R2-5a) or SPEED ZONE AHEAD (R2-5c) sign should be used to inform road users of a reduced speed zone when engineering judgment indicates the need for advance notice to comply with the posted speed limit ahead.

Delete the second sentence of the Standard subsection.

Delete the W3-5 and W3-5a signs from Figure 2C-5 Advisory Speed and Speed Reduction Signs.

Section 2C.31 Merge Signs (W4-1, W4-5)

Insert the following at the end of the Guidance subsection:

When installed at merging entrance ramps, the W4-1 sign should be installed 100 feet in advance of the beginning of the paved gore preceding the merge. If there is insufficient width at this point to install the sign with appropriate clearance from pavement edges, it should be moved further upstream until the desired width is obtained.

Section 2C.32 Added Lane Signs (W4-3, W4-6)

Delete the second paragraph of the Guidance subsection and insert the following:

When an added lane sign is to be installed on an entering roadway that curves before converging with a major roadway that has a tangent alignment at the point of convergence, the Entering Roadway Added Lane (W4-6) sign (see Figure 2C-6 of the MUTCD) should be used to better portray the actual geometric conditions to road users on the entering roadway.

When installed at added-lane entrance ramps, the W4-3 sign should be installed 100 feet in advance of the beginning of the paved gore preceding the lane-add. If there is insufficient width at this point to install the sign with appropriate clearance from pavement edges, it should be moved further upstream until the desired width is obtained.

Section 2C.33 Lane Ends Signs (W4-2, W9-1, W9-2)

Insert the following to the end of the first Guidance subsection:

On one-way streets or on divided highways where the width of the median will permit, two Lane Ends signs should be installed, one on the right side and the other on the left side of traffic.

Delete the second paragraph of the Option subsection.

Section 2C.36 Advisory Exit, Ramp, and Curve Speed Signs (W13-2, W13-3, W13-5)

Insert the following at the end of the Standard subsection:

Determine the safe speed at exits, ramps, and curves for the W13-2, W13-3, and W13-5 signs as indicated in Section 2C.46 of this ATMS.

Delete the second to last paragraphs of the Option subsection.

Section 2C.37 Intersection Warning Signs (W2-1 through W2-6)

Delete the last sentence of the first paragraph of the Option subsection and insert the following:

The Circular Intersection (W2-6) symbol sign accompanied by an educational plaque ROUNDABOUT (W2-6A) plaque may be installed in advance of a circular intersection.

Delete the TRAFFIC CIRCLE (W16-12p) sign in Figure 2C-8, Intersection Warning Signs.

Section 2C.39 Traffic Signal Signs (W25-1, W25-2)

Insert the following at the end of the section:

Guidance:

The “yellow trap” should be eliminated as soon as practicable, the use of the signs should be a temporary measure only.

Section 2C.40 Vehicular Traffic Signs (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12p, W11-14)

Insert the following at the end of the second Option subsection:

When used at the crossing, Vehicular signs may be supplemented with a diagonal downward pointing arrow (W16-7p) plaque (see Figure 2C-11) showing the location of the crossing.

Section 2C.41 Nonvehicular Signs (W11-2, W11-3, W11-4, W11-6, W11-7, W11-9)

Delete the second sentence of the third Option subsection.

Section 2C.42 Playground Sign (W15-1)

Delete the second sentence of the Option subsection.

Section 2C.45 Distance Plaques (W16-2 series, W16-3 series, W16-4, W7-3a)

Insert the following after the Option subsection:

Standard:

The Advisory Distance Plaque, NEXT “X” MILES (W7-3a) sign shall only be installed in conjunction with roadway condition signs: WINDING ROAD (W1-5), BUMPS (W8-1A), DIPS (W8-2A), SOFT SHOULDER (W8-4A), etc., where traffic, geometric, surface, materials, and other characteristics are similar throughout the indicated roadway

section. This sign is not a substitute for signs warning of any abrupt change of the roadway character.

When used, advisory distance plaques shall be installed on the same post directly below the primary warning sign. See Sections 2C.12 in the MUTCD and 2C.22 of this ATMS for use of advisory distance plaques to warn of steep hills and bridges with low clearance.

Section 2C.46 Advisory Speed Plaque (W13-1)

Insert the following to the Standard subsection:

The Advisory Speed plaque (W13-1) shall only be installed in conjunction with another appropriate warning sign to indicate the safe speed that may be used to traverse the condition indicated on the primary sign. It shall be installed on the same post directly below the primary warning sign. The speed shown shall not be in excess of the posted speed limit.

The safe speed for Turn and Curve signs shall be determined by the following procedures:

A. Existing Curves:

A mechanical or electronic Ball-Bank indicator shall be used to determine the advisory speed for curves.

Use Ball-Bank indicator readings from trial speed runs and Table 2C-101 of this ATMS.

**Table 2C-101
Safe Speed and Ball-Bank Readings**

Safe Speed (mph)	Reading (degrees)
0-20	15.0
25-30	12.5
35-65	10.0

B. Curves on Design Projects:

Use Figure 2C-100 of this ATMS.

Insert the following to the beginning of the Guidance subsection:

The posted advisory speed on curves should be the closest 5-mph increment to the speed determined using either the Ball-Bank method (preferred) or Figure 2C-100 of this ATMS.

In non-curve situations, the advisory speed will depend on engineering judgment. In order to prevent driver contempt, care should be taken to avoid posting advisory speeds too low.

Delete the second Option subsection.

Delete the text in the Support subsection and insert the following:

It is generally preferable to determine advisory speeds by ball-banking curves after construction instead of using Figure 2C-100 during the design process.

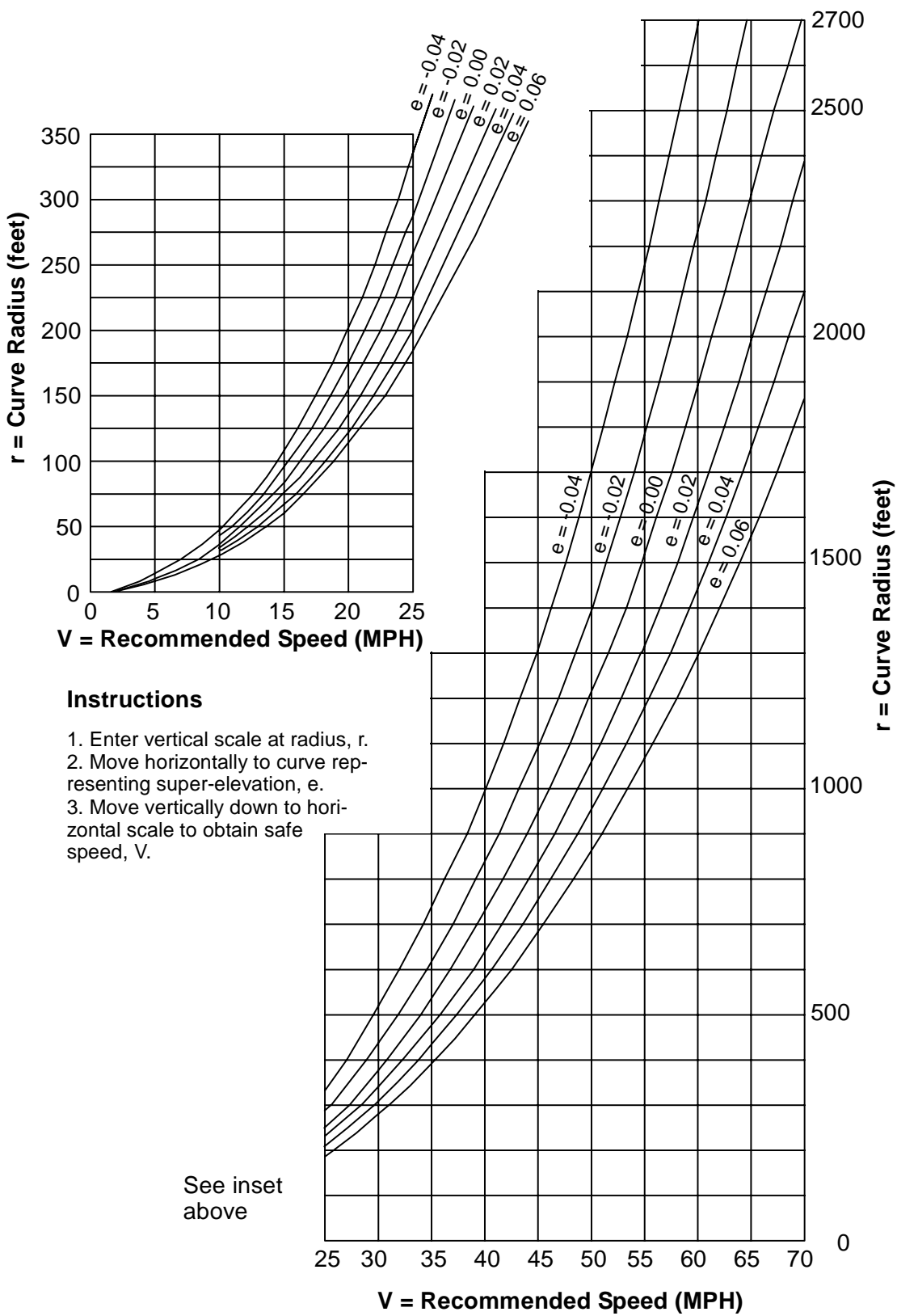


Figure 2C-100
Safe Speed on Horizontal Curves

Section 2C.100 Other Warning Signs

This is a new section. There is no corresponding section in the MUTCD.

Sections 2C.54 through 2C.99 are reserved for future MUTCD use.

Insert the following subsections:

Section 2C.100a One Lane Opposing Two Lane Sign (W6-100)

Option:

The One Lane Opposing Two Lane (W6-100) sign may be used on two-way roadways that have no median or divider but have two through lanes in one direction and one lane in the other direction.

Guidance:

If used, One Lane Opposing Two Lane (W6-100) signs should be posted near the beginning of the condition.

Option:

The One Lane Opposing Two Lane (W6-100) signs may be posted at intermediate points within the segment that has two through lanes in one direction and one lane in the other.

Section 2C.100b LOAD LIMIT WARNING Sign (W12-101)

Standard:

The LOAD LIMIT WARNING (W12-101) sign shall be used to indicate the presence of a bridge with a restricted load-carrying capacity as determined by an engineering investigation. Use only in conjunction with a W12-100 distance accessory plate indicating the distance from the sign to the condition of concern. The W12-101 sign shall be installed as indicated in Section 2C.05, Table 2C-4, Condition A of the MUTCD in advance of an intersection where a driver may make a decision to take an alternate route or where a large tractor/semi trailer can turn off the highway. WEIGHT LIMIT (R12 Series) signs shall be installed at the bridge before this sign is installed.

Section 2C.100c End Signs (W14-100, W14-101, and W14-102)

Support:

The END (W14-100) sign is used in the head-on position at the end of a public road.

Standard:

The END-OF-ROAD (OM-4) marker shall be mounted below the W14-100 sign.

The END ROAD 1000 FT (W14-101) sign shall be installed approximately 1,000 feet in advance of the END (W14-100) sign. In special situations where the distance is substantially less than 1000 feet, the distance on the sign shall be modified accordingly.

The END MAINTENANCE 1500 FT (variable distance) (W14-102) sign shall be installed in conjunction with the NO ROAD MAINTENANCE (R11-100) sign or STATE MAINTENANCE ENDS (I-181) sign to warn of the approach of a road section that will not be maintained. Install 500 to 1500 feet in advance of the R11-100 sign with the appropriate distance in the legend.

Option:

A second W14-101 sign with the appropriate distance may be installed between the initial W14-101 sign and the W14-100 sign when additional emphasis is needed.

Section 2C.100d Slide Area Signs (W16-100 and W16-101)

Support:

A slide area is defined as any section of roadway where rocks, snow (avalanches), or other natural debris may be expected to encroach on the roadway and create a condition that requires caution on the part of the motorist.

Guidance:

The SLIDE AREA (W16-100) sign should be installed an appropriate distance in advance of the beginning of a known slide area using Section 2C.05, Table 2C-4, Condition B of the MUTCD and 0 mph as the speed at condition of concern. The END SLIDE AREA (W16-101) sign should be installed on the right in the vicinity of the end of a slide area only where W16-100 signs have been installed at the beginning of the slide area. The SLIDE series signs should be removed if the slide condition ceases to exist. In some areas, this may require periodic installation and removal of the signs.

Section 2C.100e WATCH FOR ICE (W16-102)

Option:

The WATCH FOR ICE (W16-102) sign may be used to alert a motorist driving on ice-free pavement of an isolated condition that is not readily apparent. The sign is not intended to define a general, overall road condition. See also Section 2C. 28 of the MUTCD.

Section 2C.100f WATER OVER ROADWAY Sign (W16-103)

Standard:

When used, the WATER OVER ROADWAY (W16-103) sign shall be installed an appropriate distance in advance of the flooded section of roadway using Section 2C.05, Table 2C-4, of the MUTCD with Condition B and 0 mph as the speed at condition of concern.

Option:

The sign may be used to warn of temporary flooding or a low spot where the roadway is normally under water.

Standard:

When used to warn of temporary flooding, the signs shall be covered or removed when flooding ceases for more than 48 hours.

Section 2C.100g Avalanche Area Signs (W16-110 through W16-112)

Support:

An avalanche area is defined as any section of road where major snow slides (avalanches) may be expected to encroach on the roadway.

Standard:

The AVALANCHE AREA (W16-110) sign shall be installed an appropriate distance in advance of the avalanche area, using Section 2C.05, Table 2C-4, Condition B of the MUTCD and 0 mph as the speed at condition of concern. The W16-110 sign shall always be followed by an END AVALANCHE AREA (W16-111) sign. The signs shall be removed or covered after the avalanche danger has abated.

Option:

The AVALANCHE AREA NEXT X MILES DO NOT STOP (W6-112) sign may be used for additional emphasis.

Section 2C.100h WIND AREA Sign (W16-104)

Guidance:

WIND AREA (W16-104) sign should be used to indicate locations where winds regularly reach velocities that substantially affect the driving task. The signs should be removed or covered during those seasons of the year when high winds are unlikely.

Section 2C.100i ROCKS Sign (W16-105)

Guidance:

The ROCKS (W16-105) sign should only be installed in advance of rock cut areas where falling rocks or rocks on the road may be encountered by motorists.

Section 2C.100j END FREEWAY ½ MILE Sign (W16-107)

Guidance:

The END FREEWAY ½ MILE (W16-107) sign should be used to indicate the end of a multilane divided roadway facility with full access control and no at-grade intersections. Install it on the right and left approximately one-half mile in advance of the first access where through traffic may encounter cross-traffic and a definite change in the facility is obvious (entering two-lane facility or city street section). It should not ordinarily be used at transitions from freeways to expressways (multilane divided roadway with access control and at-grade intersections).

Section 2C.100k ROAD CLOSED AHEAD (W14-103) and BRIDGE CLOSED AHEAD (W14-104) Signs

Standard:

The ROAD CLOSED AHEAD (W14-103) and BRIDGE CLOSED AHEAD (W14-104) signs shall be installed using Section 2C.05, Table 2C-4, Condition B of the MUTCD and 0 mph as the speed at condition of concern, in advance of an intersection where a driver may take an alternate route. The Advisory Distance Plate (W12-100) shall be used in conjunction with the W14-103 or W14-104 signs.

Guidance:

Additional signs should be installed beyond this intersection to identify the roadway with the closure.

Section 2C.100l LOW FLYING AIRCRAFT Sign (W16-114)

Option:

The LOW FLYING AIRCRAFT (W16-114) sign may be used in those areas where low-flying aircraft are encountered, such as roadways near the end of an airfield.

Section 2C.100m AIRCRAFT CROSSING Sign (W16-106)

Guidance:

The AIRCRAFT CROSSING (W16-106) sign should be used in those areas where taxiing aircraft cross roadways.

Section 2C.100n JET BLAST AREA Signs (W16-108 and W16-109)

Guidance:

The JET BLAST AREA (W16-108) sign should be used in advance of a section of roadway, which is subject to high winds and the possibility of flying debris from aircraft exhausts. Use Section 2C.05, Table 2C-4, of the MUTCD and Condition B and 0 MPH as the speed at the condition of concern. This sign should be used in conjunction with NO STOPPING OR STANDING (R7S-) signs posted from boundary to boundary of the jet blast area.

Option:

The END JET BLAST AREA (W16-109) sign may be used where the limits of exposure are not immediately obvious.

Section 2C.100o SLOW MOVING VEHICLES Sign (W7-100)

Option:

The SLOW MOVING VEHICLES (W7-100) sign may be used on roadways where vehicles moving substantially slower than the established speed limit are common.

Section 2C.100p TRAVEL BEYOND THIS POINT NOT RECOMMENDED . . .Sign (W14-105)

Option:

The TRAVEL BEYOND THIS POINT NOT RECOMMENDED . . . (W14-105) sign may be used at the point of closure during winter road closures.

Guidance:

This sign should not be used alone. It should be used as a supplement to other signs notifying motorists that the road is not maintained beyond that point.

Section 2C.100q SHOULDER NARROWS Sign (W5-1a)

Option:

The SHOULDER NARROWS (W5-1a) sign may be used to indicate a reduction in shoulder width.

Section 2C-100r HIDDEN DRIVEWAY Sign (W7-102)

Option:

A HIDDEN DRIVEWAY (W7-102) sign may be used in advance of a driveway when sight distance is restricted by a hill or roadside sight obstruction.

A HIDDEN DRIVEWAY sign may be supplemented by an Advisory Speed (W13-1) plaque indicating the recommended speed based on available sight distance. It may also be supplemented with AHEAD (W16-9P), 500 FT (W16-2P), or NEXT XX MILES (W13-1A) plaques.

HIDDEN DRIVEWAY signs may be installed when available sight distance, measured in accordance with Figure 2C-101, Sight Distance Measurement for HIDDEN DRIVEWAY signs, is less than or equal to the values given in Table 2C-102, Minimum Sight Distance for HIDDEN DRIVEWAY signs in this ATMS.

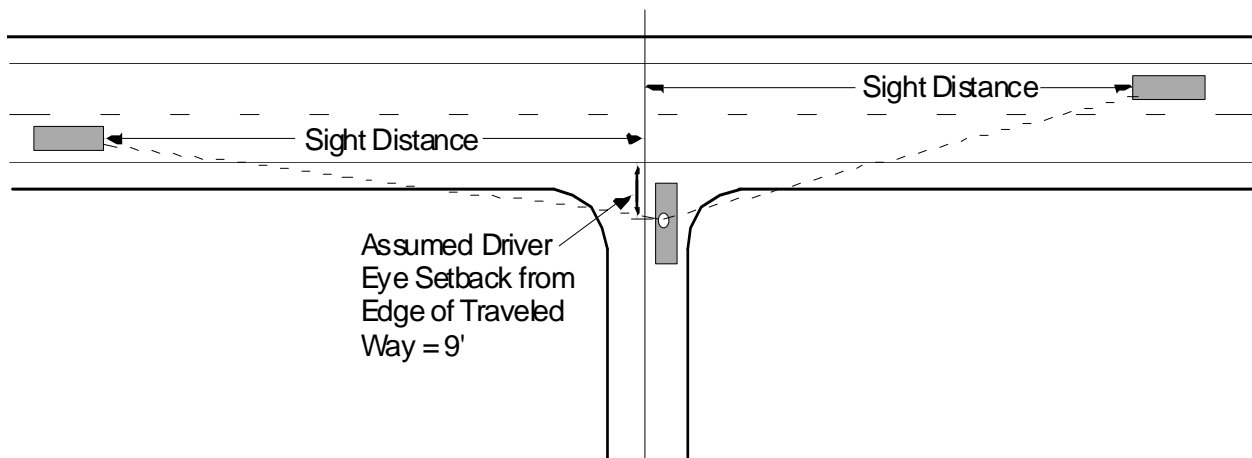


Figure 2C-101
Sight Distance Measurement for HIDDEN DRIVEWAY Signs

Table 2C-102
Minimum Sight Distance for HIDDEN DRIVEWAY Signs

Speed (mph)	Minimum Sight Distance (feet)
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570

Source: 2004 AASHTO "Green Book" Stopping Sight Distance

Guidance:

HIDDEN DRIVEWAY signs should not be used on residential or low-volume streets where the majority of the traffic is local to the area and driveways are expected.

Every effort should be made to obtain minimum sight distance before installing these signs.

Section 2C.100s THRU TRAFFIC MERGE LEFT (RIGHT) Sign (W4-100)

Option:

The THRU TRAFFIC MERGE LEFT (RIGHT) sign (W4-100) may be used to inform motorists that the outside or inside lane is being dropped at the next exit, and through traffic must merge into the adjacent lane. It may also be used to help through traffic avoid congestion at on-ramp entrances or other choke points.

Guidance:

The W4-1a sign should not be used to warn of lane reductions.

Section 2C.100t DOG TEAM CROSSING Sign (W11-108)

Option:

This sign may be used, at a trail crossing location, where dog teams cross regularly.

Guidance:

If used, it shall be installed in advance of the trail crossing using Section 2C.05, Table 2C-4, Condition B of the MUTCD and 0 mph as the speed at the condition of concern.

CHAPTER 2D. GUIDE SIGNS CONVENTIONAL ROADS

Section 2D.04 Size of Signs

Delete the last sentence in the Support subsection and insert the following:

However, for signs with standardized designs, such as route signs, it is practical to use the prescribed sizes that are given in the ASDS.

Section 2D.05 Lettering Style

Delete the first three paragraphs under the Standards subsection and insert the following:

Unless otherwise shown in the ASDS, word messages on guide signs shall be composed of a combination of lower-case letters with an initial upper-case letter.

The letters and the numerals used for principal legend shall be Series E(Mod) or “Clearview”.

Support:

Designs for upper-case, lower-case, and capital alphabets together with tables of recommended letter spacing for all sign fonts except Clearview are shown in the ASDS.

Section 2D.06 Size of Lettering

Delete the text of the Standard subsection and insert the following:

Design layouts for conventional road guide signing showing interline spacing, edge spacing, and other specification details shall be as shown in the ASDS.

The principal legend on guide signs for expressway and freeway destination and distance guide signs shall have legends of the size indicated in Section 2E.13 of the MUTCD. On major urban arterials without access control, the principal legend on D1, D2, and D3 Series guide signs shall be 8-inch uppercase/6-inch lowercase letters. On any road with a speed limit of 45 mph or higher, the principal legend on D1, D2, and D3 Series guide signs shall be 8-inch uppercase/6-inch lowercase letters. Other D1, D2, and D3 Series guide signs shall have a minimum principal legend of 6-inch uppercase/4.5-inch lowercase letters.

Section 2D.08 Arrows

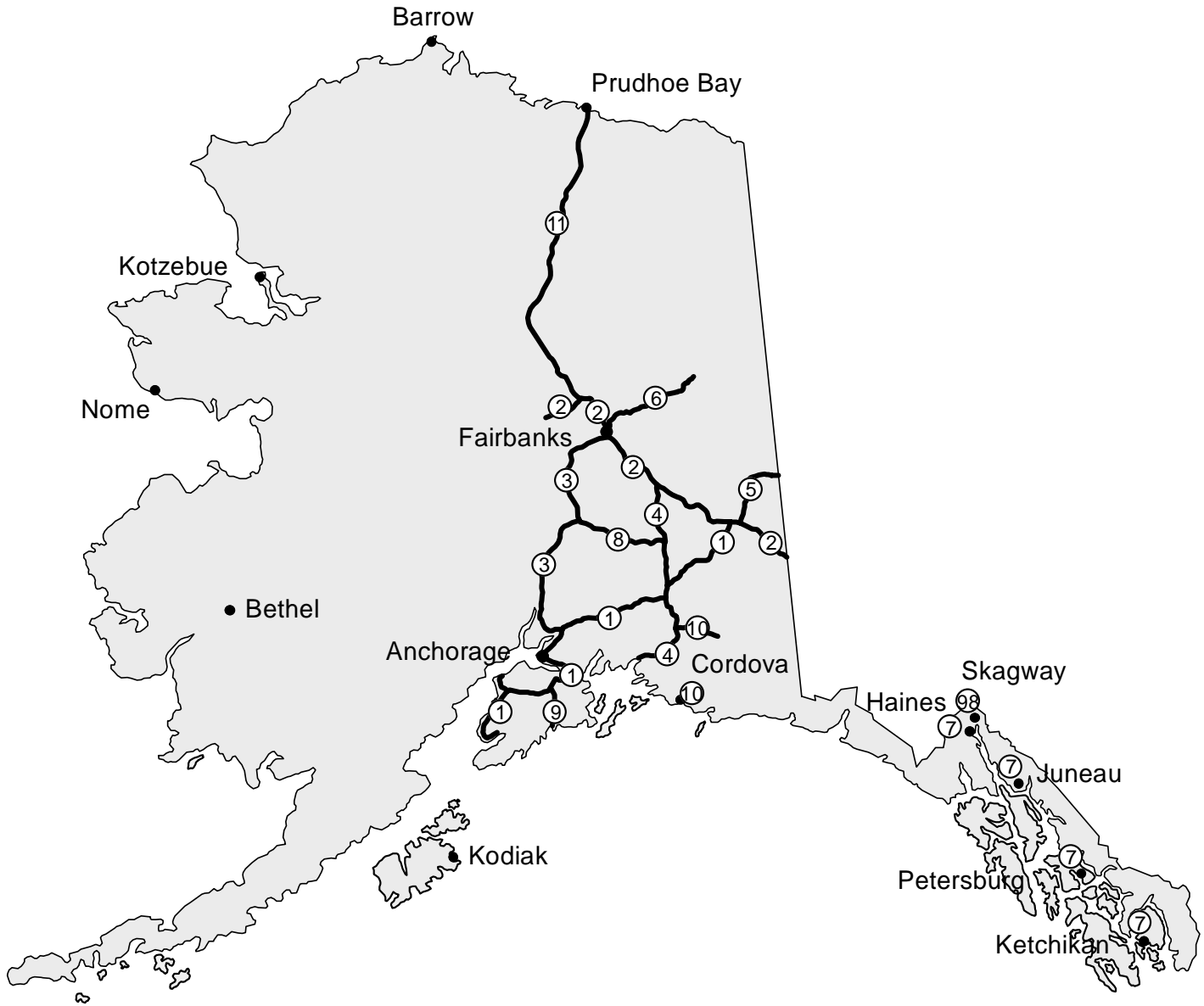
Delete the last sentence of the Support subsection and insert the following:

Detailed drawings of these arrows are shown in the ASDS.

Section 2D.09 Numbered Highway Systems

Insert the following at the end of the Standard subsection:

The route numbers shown on Figure 2D-100 shall be used on route markers.



**Figure 2D-100
Alaska Numbered Routes**

Description of Numbered Routes Shown on Figure 2D-100

AK-1: Homer to Tok, via:

Sterling Hwy, Homer to junction with Seward Hwy
Seward Hwy, junctions with Sterling Hwy to Anchorage
Glenn Hwy, Anchorage to Glennallen
Richardson Hwy, Glennallen to Gakona Junction
Tok Cutoff, Gakona Junction to Tok

AK-2: Canadian border to Manley Hot Springs, via:

Alaska Hwy, Border to Delta
Richardson Hwy, Delta to Fairbanks
Steese Hwy, Fairbanks to Junction with Elliott Hwy
Elliott Hwy, junction with Steese Hwy to Manley Hot Springs

AK-3: Parks-Glenn intersection to Fairbanks, via:

George Parks Hwy, junction with Glenn Hwy to junction with Mitchell Expy in Fairbanks
Mitchell Expy, junction with Parks Hwy to junction with Richardson Hwy

AK-4: Valdez to Delta Junction via Richardson Hwy

AK-5: Tetlin Junction to border via Taylor Hwy

AK-6: Elliott/Steese junction to Circle via Steese Hwy

AK-7: Major highways in Southeast, including:

South Tongass Hwy, North Tongass Hwy (Ketchikan)
Nordic Drive, Mitkoff Hwy (Petersburg)
Glacier Hwy, Egan Drive (Juneau)
Haines Hwy, Haines to Border

AK-8: Parks Hwy to Richardson Hwy via Denali Hwy

AK-9: Seward Hwy, Seward to Junction with Sterling Hwy

AK-10: Copper River Hwy, Cordova to Richardson/Edgerton Highway

Copper River Hwy, Cordova to end
Edgerton Hwy, Chitina to Junction with Richardson Hwy

AK-11: Elliott/Dalton junction to Prudhoe Bay via James Dalton Hwy

AK-98: Skagway to border via Klondike Hwy

Section 2D.11 Design of Route Signs

Delete the first sentence of the Standard paragraph and insert the following:

The ASDS shall be used for designing route signs.

Insert the following to the third paragraph of the third Standards subsection:

Route Markers for all Numbered State Highways shall be M1-5 signs as shown in the ASDS.

Section 2D.27 Route Sign Assemblies

Insert the following at the end of the Support subsection:

Under first NOTES paragraph in Figure 2D-6 (Sheet 1 through 3) change the word “may” to “shall” and delete the words “in all capital letters or”.

Section 2D.33 Destination and Distance Signs

Insert the following subsections:

Standard:

The control and intermediate destinations in Table 2D-100 of this ATMS shall be used for destination and distance signs.

Option:

In addition to control and intermediate destinations, hamlets and unincorporated communities may be shown on destination signs on state roads when allowed by the agency with road jurisdiction.

Table 2D-100 Destination Control Cities for Alaska Guide Signs

Road Segment	Route Number(s)	Control Destinations	Intermediate Destinations
Sterling Highway, Homer to Soldotna	1	Homer, Anchorage	Soldotna, Kenai
Sterling Highway, Soldotna to Seward "Y"	1	Homer, Anchorage, Seward	Soldotna, Kenai
Seward Highway, Seward to Seward "Y"	9	Seward, Homer, Anchorage	Kenai Fjords Nat. Park
Seward Highway, Seward "Y" to Anchorage	1	Homer, Seward, Anchorage	Girdwood, Hope Road Junction
Glenn Highway, Anchorage to Parks/Glenn junction	1	Anchorage, Fairbanks, Tok	Eagle River, Palmer
Parks Highway, Parks/Glenn junction to Fairbanks	3	Anchorage, Fairbanks	Wasilla, Cantwell, Denali Nat. Park, Healy, Nenana
Glenn Highway, Parks/Glenn junction to Glennallen	1	Anchorage, Valdez, Tok	Palmer, Glennallen
Tok Cutoff Highway, Gakona Junction to Tok	1	Anchorage, Tok	Glennallen
Richardson Highway, Valdez to Glennallen	4	Valdez, Fairbanks, Anchorage	Edgerton junction, Glennallen, Delta Jct.
Richardson Highway, Glennallen to Gakona Junction	4, 1	Valdez, Fairbanks, Anchorage	Edgerton junction, Glennallen, Delta Jct.
Richardson Highway, Gakona Junction to Delta Jct.	4	Valdez, Fairbanks, Anchorage	Edgerton junction, Glennallen, Delta Jct.
Alaska Highway, Border to Tok	2	Border, Fairbanks, Anchorage	Taylor Hwy Jct.
Alaska Highway, Tok to Delta Junction	2	Tok, Fairbanks	
Alaska Highway, Delta Jct. to Fairbanks	2	Tok, Fairbanks, Anchorage	Eielson AFB, North Pole
Steese/Elliott/Dalton, Fairbanks to Prudhoe Bay	2, 11	Fairbanks, Prudhoe Bay	Coldfoot

Section 2D.34 Destination Signs (D1 Series)

Insert the following before the first Standard subsection:

Guidance:

Destination signs should only be used where they will provide a significant service to motorists.

Support:

In addition to guidance by route markers, it is necessary to direct traffic to communities and other destinations on the route and on other roads intersecting the state route.

It is not feasible to place signs along highways listing all possible destinations that can be reached from the highway. Normally, a single community, facility, or other feature readily identifiable from a road map can be used to direct motorists to other destinations on the same route. Make every effort to correlate destination signs with features readily identifiable on conventional service station tourist maps.

Guidance:

The following criteria should be met before a directional sign can be considered. However, they are not warrants and do not guarantee placement of signs. On state highways, it is the responsibility of the regional traffic and safety engineer to consider other factors such as interference with higher-priority signing and other destinations that now or in the future will compete for sign space.

Signs can direct to the following places, consistent with the foregoing discussion:

- A. Incorporated cities
- B. Unincorporated cities
- C. Major parks or mountains
- D. Lakes and mountain passes in areas where there are no other places of greater importance
- E. Rivers, valleys, and other geographical points if they identify areas, and
- F. Sports arenas, fairgrounds, theaters, and other public or private attractions that are major driver attractions

Consider the following information when deciding whether to sign the following types of destinations:

- A. Military installations, churches, city parks, public buildings, businesses, subdivisions, clubs, shopping centers, courthouses, zoos, museums, and other local places normally will not be signed. Signing can be considered for a non-qualifying facility that is the principal destination from the interchange or cross road, and which cannot be identified with a road or community. To qualify, such a facility should be located where there is

no qualifying destination sign and motorists could not reasonably be expected to find their destination without signs, even with the aid of a map.

- B. Sign dams, reservoirs, mountain peaks, and other geographical features only when necessary to indicate direction or to identify areas; or if they are the principal destination served by a cross road, and cannot be identified with a road name or community.
- C. Airports that have regularly scheduled commercial air travel and mail pickup, or airports that are owned and operated by political subdivisions, can be signed from conventional highways and expressways. On freeways, sign only to those airports that have regularly scheduled air carrier and mail service, or where there is an off-ramp that serves the airport as either the only or the principal destination. Use AIRPORT (I-5) signs unless there are two or more airports with significant traffic within a municipality.

Delete the existing note in Figure 2D-7 and insert the following:

Note: Unless otherwise shown in the ASDS, word messages on guide signs shall be composed of a combination of lower-case letters with an initial upper-case letter.

Section 2D.35 Location of Destination Signs

Insert the following at the end of the section:

Guidance:

Signing in advance of major intersections on a state-numbered route in rural areas should consist of a non-mileage destination (D1-1, D1-2 or D1-3) sign, located up to 1,200 feet in advance of the intersection. Provide appropriate clearances from directional assemblies (see 2D.30) and advance warning signs (Sections 2C-29 and 2C-37).

A D1 series sign should be followed with a Distance Sign (D2-1, D2-2 or D2-3) beyond the intersection (see Section 2D.36 and 2D.37).

On minor state highways that are not through routes, with an ADT of 500 or less, only the mileage destination sign D1-1A, D1-2A, or D1-3A should be used.

Option:

A MILEAGE DESTINATION sign (D1-1A, D1-2A, or D1-3A) may be located either on the near-right quadrant of the intersection (adjacent to the R1-1 STOP sign), head-on at the intersection, or 200 feet in advance of it.

Either mileage or non-mileage destination signs may be used as needed on channelized intersections.

Because the Destination sign is of lesser importance than the Junction, Advance Route Turn, or Directional assemblies, the Destination sign may be eliminated when sign spacing is critical.

Section 2D.38 Street Name Signs (D3-1) [and D3-2B]

Insert the following at the start of the section:

Standard:

Overhead Street Name (D3-1B or D3-2B) signs shall be installed on all expressways and major arterials at signalized intersections to indicate the location and name of roadways. They shall be installed overhead and to the far right-hand side of the intersection on traffic signal poles or mast arms. When mounted on the mast arm, they shall be horizontal.

Delete the first paragraph of the first Guidance subsection and insert the following:

Overhead Street Name (D3-1B and D3-2B) signs should be installed at all signalized intersections that are not on expressways and major arterials to indicate the location and name of roadways. They should be installed overhead and to the far right-hand side of the intersection on traffic signal poles or mast arms. When mounted on the mast arm, they shall be horizontal.

Street Name (D3-1, or D3-1A, or D3-1D) signs should be installed at all intersections with public roads (rural and urban) to identify the cross street.

Delete the second sentence in the fourth Guidance paragraph and insert the following:

If overhead Street Name signs are used, the lettering should be as shown in Table 2D-101 of this ATMS. Smaller letters may be used when existing mastarms are not strong enough to support signs with larger lettering. However, letters should never be smaller than 6" 4.5".

**Table 2D-101
Letter Sizes for Overhead Street Name Signs**

Sign Code	Letter Size E _{mod} (Upper Case / Lower Case)			
	6/4.5	8/6	10.67/8	13.33/10
D3-1B (one-line)	Minimum	Speeds less than 45 mph	Speeds equal to or greater than 45 mph	Special
D3-2B (two-line)	Minimum	All speeds	-	-

Section 2D.39 Advance Street Name Signs (D3-2)

Insert the following after the second paragraph of the Guidance subsection:

Advance Street Name (D3-1C and D3-2) signs should be installed on major arterials and expressways in advance of major intersections. They should be installed at least 300 to 600 feet in advance of the intersection on rural roads and one-half block in advance of major intersections in urban areas, where the 300 to 600 feet distance can not be met.

When it may be unclear which street a sign refers to, supplemental information such as the distance to intersecting streets, messages such as NEXT SIGNAL, NEXT INTERSECTION, or directional arrow(s) should be shown in addition to the street name.

Delete the second paragraph of the second Standard paragraph and insert the following:

If shown, supplemental information shall be located below the street name.

Section 2D.40 Parking Area Sign (D4-1)

Insert the following at the end of the Standard subsection:

The PARKING AREA (D4-1) sign shall not be used on rural routes.

Section 2D.43 Scenic Area Signs (D6 Series)

Delete the first paragraph under Option subsection and insert the following:

Scenic areas may be marked by the SCENIC VIEW SYMBOL (D9-102) sign. Follow the guidelines for D9 series signs in Section 2D.45 of this ATMS.

Section 2D.45 General Service Signs (D9 Series)

Delete the text of the first Support subsection and insert the following:

Due to the sparse settlement of rural Alaska, it can be advantageous to place motorist service signs on conventional roads. General Service signing is usually not required in urban areas except for hospitals, law enforcement assistance, tourist information centers, and camping. General Service signs are installed for the benefit of the motorist, not to promote businesses.

Insert the following at the end of the first Support subsection:

Other signs for businesses are listed in Table 2A-101 of this ATMS.

Standard:

General Service (D9 series) signs (see Figure 2D-11 of the MUTCD) shall be installed only when the particular service is available within one mile of the intersection and the facility is not visible to the approaching motorist until they are within 800 feet of the turn off to that facility. An exception to the visibility requirement can be made for hospitals and Emergency Medical Service facilities.

The sign(s) shall be covered or removed when the service is no longer available, such as at a seasonal facility.

The particular service shall also meet all of the requirements listed below for that service.

- A. A camping area (D9-3 series, D9-4 series, or D9-100 sign) is typically located adjacent to a lake, creek, or river in an area with scenic, historic, or recreational interest such as a trailhead. It may include a firewood stock, shelters, a developed water supply, and sanitary dump facilities for campers or trailers. It must include a parking area, picnic tables, litter disposal facilities, toilets, and locations where campers may be parked and/or tents erected.
- B. A rest area (D5-2 and D5-102 signs) must have a parking area, picnic tables, litter disposal facilities, and toilets. (See Section 2D.42) Overnight camping facilities are generally not provided.
- C. A parking area (D9-105 sign) is generally more modest than a rest area and does not include toilets. It may include picnic tables, and must include litter disposal facilities and at least a 1,600-square-foot area separate from the highway for vehicles to park. The typical truck turnout created by widening the roadway is not considered a parking area since it is not separate from the roadway.
- D. A scenic viewpoint (D9-102 sign) is a turnout or parking area with a particularly attractive view of an identified feature.
- E. A food service facility (D9-6 sign) is a café, snack bar, or restaurant permitted by the Alaska Department of Environmental Conservation. As a minimum, it must provide hot food and beverages, modern sanitation facilities, and be open for business to the public at least 16 hours per day, seven days a week. Public telephones are desirable.
- F. Telephones (D9-1 series sign) qualify if they are readily accessible to the public for all types of calls 24 hours per day, seven days per week.
- G. Gas Stations (D9-7, D9-11 signs) may be identified if the facility sells both motor oil and gasoline in commercial quantities from pumps licensed by the Department of Transportation and Public Facilities Division of Measurement Standards and Commercial Vehicle Enforcement, at least 16 hours per day, seven days a week. The availability of diesel fuel, tires, electrical service, restrooms, an automobile hoist, and qualified service technician shall be considered in the case of competing facilities.
- H. Lodging (D9-9 sign) must consist of at least beds and bedding in a permanent, all-weather, heated building equipped with toilet and bathing facilities for at least 10 hours per night throughout the week. The facility should have at least six rooms available for guests.

- I. A hospital (D9-2 sign) is a permanent medical facility that serves the public with 24-hour emergency medical service and has a licensed physician readily available.**
- J. An Emergency Medical Service (Staff-of-Life Symbol) (D9-13 sign) facility must be staffed by emergency medical technicians certified by the Emergency Services Section, Alaska Department of Health and Social Services; and must be readily accessible and manned 24 hours a day. The signed location should be the dispatch point for the EMS, not necessarily the garage for the ambulance. The Emergency Medical Service symbol shall be supplemented by a sign identifying the type of service provided.**

The Pharmacy (D9-20 or D9-20a plaque) signs shall not be used in Alaska.

Option:

HOSPITAL (D9-2) signs and EMERGENCY MEDICAL SERVICE (D9-13) symbol signs may be installed within urban areas. Mark each turn from the adjacent major or through highway to the emergency service entrance to the facility with additional signs and appropriate directional arrows and/or distance plaques.

CAMPING [D9-3 series, D9-4 series, and the RV PARK (D9-100)], the SANITARY DUMP (D9-12), PUBLIC DUMPSTER (D9-230), and TOURIST INFORMATION (D9-10) signs may be used in urban areas, but should be kept to a minimum.

The D9 series signs may be supplemented with Arrow and/or Distance plaques on conventional highways and expressways in advance of the turn to the facility to aid the motorist.

Support:

Consider using 1 MILE (D9-306) as well as 1500 FT (D9-308) plaques mounted below the Camping (D9-3 series, D9-4 series, and D9-100) signs to allow motorists additional time to make the decision to use these facilities.

Guidance:

The NEXT SERVICES XX MILES (D9-210) sign, should be used only when next services are 50 miles or farther away.

Delete the first Option subsection.

Delete the third Standard subsection.

Delete the D9-20 sign from Figure 2D-11 General Service Signs.

Section 2D.46 **[Milepost] Signs (D10-1 through D10-3) and [Intermediate Milepost] Signs (D10-1a through D10-3a)**

Insert the following at the beginning of the Support subsection:

In this ATMS, “Reference Location Signs and Intermediate Reference Location Signs” (as the MUTCD refers to them) are called “Milepost and Intermediate Milepost Signs.”

Delete the fourth paragraph of the first Standard subsection and insert the following:

The design details for milepost and intermediate milepost signs shall be as shown in the ASDS.

Insert the following after the sixth paragraph of the first Standard subsection:

Where two routes become the same roadway, only the milepost or intermediate milepost signs for the lower number state route shall be installed. However, when the routes again diverge, the mileage for the higher numbered state route shall resume as if it had continued through the combined section.

Delete the text of the second Standard subsection and insert the following:

Except as provided in the option below, milepost and intermediate milepost signs shall be installed on the east side of the roadway on predominantly north-south routes and on the north side of the roadway on predominantly east-west routes.

On two-lane conventional roadways, milepost and intermediate milepost signs shall be installed on one side of the roadway only and shall be installed back-to-back with one legend visible from each direction of travel. Milepost and intermediate milepost signs shall be placed 15 to 30 feet from the edge of the traveled way.

Delete the second and third sentences of the second Option subsection.

Insert the following at the end of the section:

Support:

Because milepost and intermediate milepost signs are used as permanent location references on Alaska highways for residences, businesses, and topographical features, they are not ordinarily changed when a road segment is reconstructed or realigned, and therefore do not necessarily correspond to actual mileage along a route.

Guidance:

When a road is realigned in a manner that either shortens or lengthens the road, milepost locations should be interpolated between existing mileposts on either side of the realigned segment. Milepost and intermediate milepost signs before or beyond the realigned section should not be adjusted to reflect the change in route mileage.

Section 2D.48 General Information Signs (I Series)

Insert the following at the end of the section:

Standard:

The ENTERING (LEAVING) ALASKA TIME ZONE CHECK TIME AT CUSTOMS (D12-3A & B) sign shall be placed, where possible, between the border and customs station.

The signs shall not interfere with the sequence of D8-102 through D8-104 signs (see Section 2S.06, of this ATMS), or other traffic control devices.

Get approval from the Alaska DOT&PF Scenic Byway coordinator before installing Alaska Scenic Byway signs on state highways.

Support:

Alaska Scenic Byways signs (I-170 and I-171) may only be installed on officially designated Alaska Scenic Byways. When possible, exact sites for signs will be specified. Direct questions to Alaska DOT/PF Scenic Byways coordinator at 907-465-8769. A list of the officially designated Alaska Scenic Byways routes can be obtained from the Scenic Byway coordinator.

Guidance:

The Scenic Byway with legend (I-171) sign should be installed at both ends of each designated road segment facing entering traffic and on major side road approaches to the segment. Number of these signs required per byway is two plus the number of major side road approaches.

The Scenic Byway without legend (I-170) sign should be installed along the Scenic Byway at a spacing of approximately 15 miles. Desirably, they would be installed in advance of a scenic view in a location where they will not block that view. Putting the signs where they have a backdrop of trees, rock, or an embankment is preferable to putting them where they will be silhouetted by an open view.

The Scenic Byways signs should be installed at least 300 feet away from existing signs and should never block another sign from view. The signs should be located 500 to 1000 feet away from the last sign going away from an intersecting roadway.

Standard:

Adopt-a-Highway (I-150) signs on state roads shall be installed and maintained in accordance with DOT&PF Policy and Procedure 07.05.010.

No logos may be shown on Adopt-a-Highway signs.

Adopt-a-Bike Path (I-152) signs on state pathways shall be installed and maintained in accordance with pertinent parts of DOT&PF Policy and Procedure 07.05.010.

Section 2D.52 National Scenic Byways Signs (D6-4, D6-4a)

Guidance:

When a road is both an Alaska Scenic Byway and a National Scenic Byway, AMERICA'S BYWAYS (D6-4a) signs should be installed below each Alaska Scenic Byway sign (I-170 and I-171) on the same post.

Standard:

Get approval from the DOT&PF Alaska Scenic Byway coordinator before installing either Alaska or National Scenic Byway signs on state highways.

Section 2D.100 Other Directional Signs

This is a new section. There is no corresponding section in the MUTCD.

Sections 2D.53 through 2D.99 are reserved for future MUTCD use.

Insert the following subsections:

Section 2D.100a Community Service Sign (D9-204)

Option:

Community Services signs may be installed to provide direction to communities and to identify services available there. They are a single-sign alternative to multiple business-identifying (D9-205 TODS, LG-series LOGO, or general service D9 series) signs.

Standard:

Where Community Service signs are installed, existing TODS and LOGO signs shall be removed.

Community Service signs shall not contain logos that are included on nearby General Service Signs.

A Community Service sign shall not be installed unless there is an accepted community organization that will recommend which of the services available will be represented by icons on the sign.

Support:

Community boundaries may be marked with Community Service (D9-204) signs, General Service (D9-201 or similar) signs, WELCOME TO (I-101) signs, or with a landscaped sign outlined in plants etc. On state highways, a beautification permit is required to do the latter.

Guidance:

Community Service signs should not be installed for:

- A. Small communities with two or fewer businesses that offer food, gas, or lodging, or would qualify for Tourist Oriented Directional (D9-204) signs, or
- B. 1st class cities or other large communities that offer so many services that the icons on the Community Service sign would not adequately represent them.

Icons for police, emergency services, or hospitals should not be shown on Community Service signs. Where signing for these purposes is needed, separate signs should be used.

Section 2D.100b Day Medical Clinic signs (D9-206)

Standard:

On state highways, these signs shall be installed by permit only. The applicant shall pay all material and installation costs. To be eligible for a permit, a medical clinic shall:

- A. Be on the approved Alaska medical clinic list maintained by the Community Health and Emergency Services Section of the Alaska Department of Health and Social Services;**
- B. Be located at least ten miles away from any hospital;**
- C. Have at least one mid-level practitioner or physician on duty during all business hours;**
- D. Be open regular hours and at least 30 hours per week;**
- E. Be within 5 miles of the highway on which the sign is placed;**
- F. Not be visible to motorists before they are within 1250 feet of the driveway or road leading to the clinic;**
- G. Have no advertising signs that are either:**
 - a. visible to motorists before they are within 1250 feet of the driveway or road leading to the clinic or**
 - b. illegal;**
- H. Agree to post and maintain accurate business hours on the sign.**

No business names or icons shall be shown on the signs.

For safety reasons, these signs must display correct business hours. Change, remove, or cover signs immediately when hours become inaccurate. Medical clinics are responsible for ensuring the accuracy of posted business hours.

Option:

Time change revisions may be made by fastening a plate made of the same material as the original sign over the hours and days shown on the original sign.

CHAPTER 2E. GUIDE SIGNS – FREEWAYS AND EXPRESSWAYS

Section 2E.01 Scope of Freeway and Expressway Guide Sign Standards

Delete the second sentence of the second paragraph of the Support subsection and insert the following:

Guidelines for the design of guide signs for freeways and expressways are provided in the ASDS.

Section 2E.12 Designation of Destinations

Delete the first sentence of the Standard subsection and insert the following:

The direction of a freeway and the major destinations or control cities (see Section 2D.09 of this ATMS and Section 2D.34) along it shall be clearly identified through the use of appropriate destination legends.

Section 2E.13 Size and Style of Letters and Signs

Delete the second to last sentence of the Standard paragraph and insert the following:

The letters and the numerals used for principal legend shall be Series E(Mod) or “Clearview”.

Delete the last paragraph of the first Support subsection and insert the following:

Designs for upper-case, lower-case, and capital alphabets together with tables of recommended letter spacing for all sign fonts except Clearview are shown in the ASDS.

Section 2E.17 Symbols

Delete the first paragraph of Standard subsection and insert the following:

Symbol designs shall be essentially like those shown in this Manual and in the ASDS.

Section 2E.18 Arrows for Interchange Guide Signs

Delete the text of the Support subsection and insert the following:

Examples of arrows for use on guide signs are shown in Figure 2D-2. Detailed dimensions of arrows are provided in the ASDS.

Section 2E.25 Route Signs and Trailblazer Assemblies

Delete the second sentence of the second paragraph of the Guidance subsection and insert the following:

When used along the freeway or expressway, the Route signs should be enlarged as shown in the ASDS.

Section 2E.51 General Service Signs

Delete F. in the first Guidance subsection.

Delete the word Pharmacy from the third sentence of the third Standard subsection.

Delete the words “or the Pharmacy (D9-20) symbol” from the fourth sentence of the fourth Option subsection.

Delete the Pharmacy icon from the D9-18 sign and the word Pharmacy from the D9-18a sign on Figure 2E-42 Examples of General Service Signs (with Exit Numbering)

Section 2E.53 Tourist Information and Welcome Center Signs

Insert the following at the end of the section:

Option:

TOURIST INFORMATION CENTER (I-200) signs may be installed when the applicant meets the following criteria:

Standard:

- A. There shall be a minimum of 10 off-street parking spaces provided.**
- B. The tourist information center shall be located adjacent to the highway.**
- C. The tourist information center shall have information about the surrounding region as well as the area near the center.**

Applicants for these signs shall submit an official designation as a Tourist Information Center from the local city or borough government and letter of concurrence from the local Chamber of Commerce to the appropriate city or regional traffic and safety engineer. Applicants shall not fabricate or install signs until approval from the city or regional traffic engineer is obtained.

Only one center should be designated for communities located along a single major through route. Multiple visitor centers may be designated for larger communities with a network of several major through routes. These should be limited to no more than one for

each entry point to the community. Visitor/information centers shall be located within the community or region they serve.

The name of the operating agency, community, group, or enterprise shall not appear in the legend of the sign.

The operating agency shall purchase and install the original signs.

Section 2E.54 [Milepost] Signs and [Enhanced Milepost] Signs (D10-4, D10-5)

Insert the following at the beginning of the first Support subsection:

In this ATMS, “Reference Location Signs or Enhanced Reference Location Signs” (as the MUTCD refers to them) are called “Milepost and Enhanced Milepost Signs.”

Delete the first paragraph of the first Support subsection and insert the following:

Milepost (D10-1 through D10-3) signs and Intermediate Milepost (D10-1a through D10-3a) signs and their applications are described in Section 2D.46 of this ATMS.

Delete the first paragraph of the first Standard subsection and insert the following:

Except as provided in the option below, Milepost (D10-1 through D10-3) or Enhanced Milepost (D10-4, D10-5) signs shall be placed on all expressway facilities that are located on a route where there is milepost sign continuity and on all freeway facilities to assist road users in estimating their progress, to provide a means for identifying the location of emergency incidents and traffic crashes, and to aid in highway maintenance and servicing.

Delete the third paragraph in the second Standard subsection and insert the following:

The design details for the milepost and enhanced milepost signs shall be as shown in the ASDS.

Delete the text of the third Standard subsection and insert the following:

Except as provided in the option below, milepost and enhanced milepost signs shall be installed on the east side of the roadway on predominantly north-south routes and on the north side of the roadway on predominantly east-west routes.

On two-lane conventional roadways, milepost and enhanced milepost signs shall be installed on one side of the roadway only and shall be installed back-to-back with one legend visible from each direction of travel. Milepost and intermediate milepost signs shall be placed 15 to 30 feet from the edge of the traveled way.

Where two routes become the same roadway, only the milepost or enhanced milepost signs for the lower number state route shall be installed. However, when the routes again

diverge, the mileage for the lower numbered state route shall resume as if it had continued through the combined section.

Insert the following at the end of the section:

Support:

Because milepost and enhanced milepost signs are used as permanent location references on Alaska highways for residences, businesses and topographical features, they are not ordinarily changed when a road segment is reconstructed or realigned, and therefore do not necessarily correspond to actual mileage along a route.

Guidance:

When a road is realigned in a manner that either shortens or lengthens the road, milepost locations should be interpolated between existing mileposts on either side of the realigned segment. Milepost and enhance milepost signs before or beyond the realigned section should not be adjusted to reflect the change in route mileage.

Section 2E.58 Weigh Station Signing

Delete the text of the Support subsection and insert the following:

Weigh Station sign layouts for freeway and expressway applications are shown in the ASDS

CHAPTER 2F. SPECIFIC SERVICE SIGNS

Section 2F.01 Eligibility

Delete “and for eligible attractions” from the first sentence of the first Standard subsection.

Add the following to the first Standard subsection:

Specific Service signs shall only be used for motorist services in Alaska. They shall not be used for attractions or for pharmacies. They shall only be installed on freeways and expressways.

Delete the first Option subsection.

Delete the second and third paragraphs of the second Standard subsection.

Delete the third Guidance, second Option, fourth Guidance, and third Standard subsections.

Section 2F.02 Application

Delete the first paragraph of the first Standard subsection.

Delete the words “ATTRACTION, OR 24-HOUR PHARMACY,” from the first sentence of the second paragraph of the Standard subsection.

Section 2F.10 Signing Policy

Delete the Guidance subsection and insert the following:

Standard

Specific Service (LOGO) signs shall be permitted and installed in accordance with Alaska Administrative Code 17 AAC 60.101 through 17 AAC 60.120.

CHAPTER 2G. TOURIST-ORIENTED DIRECTIONAL SIGNS

Section 2G.03 Style and Size of Lettering

Delete the first paragraph of the Standard subsection and insert the following:

Design standards for upper-case letters, lower-case letters, numerals, and spacing shall be as provided in the ASDS.

Section 2G.06 Sign Locations

Insert the following at the beginning of the Guidance Subsection:

When placed on state highways, Tourist-Oriented Directional (D9-205) signs (TODS) should be located at the intersection of the road leading to the attraction and the nearest state highway with a classification of collector or arterial.

Insert the following at the end of the Standard Subsection:

When placed on state highways, Tourist-Oriented Directional (D9-205) signs shall not be installed farther than 1 mile in advance of the intersection identified in the Guidance statement above, or at a different intersection, without written permission of the regional traffic and safety engineer.

Section 2G.07 State Policy

Delete the last sentence of the Standard subsection and insert the following:

Tourist-Oriented Directional (D9-205) signs (TODS) shall be permitted and installed in accordance with Alaska Administrative Code 17 AAC 60.001 through 17 AAC 60.020.

Delete the text of the Guidance subsection and insert the following:

Tourist-Oriented Directional signs should not be allowed for businesses whose primary purpose is to sell alcohol, such as bars and liquor stores.

Option:

Trailblazing signs may be installed between a TODS and the attraction at intersections where a turn is required. Trailblazing signs on state roads require approval of the regional traffic and safety engineer.

Standard:

If used, trailblazing signs shall be General Service Plates (D9-1 to D9-15, D9-100 to D9-106) or signs of the same size and color with different icons. The icon on the signs shall be the same as the icon on the TODS. Use appropriate arrow and distance plates.

CHAPTER 2H. RECREATIONAL AND CULTURAL INTEREST AREA SIGNS

Section 2H.02 Application of Recreational and Cultural Interest Area Signs

Insert the following Standard subsection after the first Support subsection:

Standard:

Recreational and Cultural Interest Area signs shall be permitted and installed in accordance with Alaska Administrative Code 17 AAC 60.201 through 17 AAC 60.215.

Logos shall only be shown on RCIA signs when all of the following conditions are met:

- A. When the logo represents a public agency.**
- B. When the logo is installed on a sign in a rural area.**
- C. When the logo is readable from vehicles traveling at highway speeds day and night.**
- D. When logos are recognizable and meaningful to motorists as demonstrated by:**
 - 1. Inclusion of the logo in an Alaska or U.S. outreach campaign, or**
 - 2. Relation of the logo to other programs of use to motorists, such as parking pass programs or guide map symbols, or**
 - 3. Sufficient numbers of logos on signs around the state to become familiar to motorists.**

Logos shall not be used solely for the purpose of agency promotion and advertising.

Delete the first two sentences of the Guidance subsection.

Section 2H.04 General Design Requirements for Recreational and Cultural Interest Area Symbol Signs

Delete the second sentence of the first paragraph of the Standard subsection and insert the following:

The symbols shall be grouped into the following usage and series categories (see the ASDS for design details):

Delete the first paragraph of the Support subsection and insert the following:

Table 2H-1 contains a listing of the symbols within each series category. Drawings for these symbols are found in the ASDS.

Section 2H.09 Destination Guide Signs

Insert the following at the beginning of the second Standard section.

When placed on state highways, Recreational and Cultural Interest Area Directional signs shall not be installed farther than 1 mile in advance of the first intersection between the road to the attraction and a state collector or arterial, without written permission of the regional traffic and safety engineer.

The letters and the numerals used for upper/lower case principal legend shall be Series E(Mod) or “Clearview”

CHAPTER 2I. EMERGENCY MANAGEMENT SIGNING

Section 2I.03 EVACUATION ROUTE Sign (EM-1)

Insert the following at the end of the section:

Support:

TSUNAMI EVACUATION ROUTE (EM-100) signs guide people to safe ground when a tidal wave approaches.

Standard:

The signs shall be installed on state highways only after a regional traffic and safety engineer has approved a tsunami evacuation route plan done by the Alaska Division of Emergency Services (ADES). The plan must be done in accordance with the procedure transmitted in a memo from Robert E. Heavilin, ADES Director, to Michael Downing of the DOT&PF on March 16, 1998.

Guidance:

Communities desiring tsunami evacuation route signs should submit their requests to the ADES.

CHAPTER 2S. SPECIAL SIGNS

This is a new chapter. There is no corresponding chapter in the MUTCD.

Section 2S.01 Highway Fatality Memorial Signs (I-160 through I-164)

Support:

Highway Fatality Memorial Signs memorialize victims of fatal highway accidents.

Standard:

When a memorial sign is requested, sign and plate legends shall conform to the following table.

Conditions	Sign	Deceased Person being Memorialized	Plate
Caused by Legally Drunk Driver	PLEASE DON'T DRINK AND DRIVE (I-160)	Drunk Driver at fault in crash	Sponsored By (I-163)
		Not at Fault	In Memory Of (I-162)
Not Caused by Legally Drunk Driver, Deceased Not Wearing Seat Belt	PLEASE BUCKLE UP (I-164)	Driver at fault in crash	Sponsored By (I-163)
		Not at Fault (other than not wearing seat belt)	In Memory Of (I-162)
Not Caused by Legally Drunk Driver, Deceased Wearing Seat Belt	PLEASE DRIVE SAFELY (I-161)	Driver at fault in crash	Sponsored By (I-163)
		Not at Fault	In Memory Of (I-162)

If both IN MEMORY OF . . . (I-162) and SPONSORED BY . . . (I-163) plaques are requested at an accident site, they shall be installed on separate sign installations.

On I-162 plaques, “IN MEMORY OF” shall be followed by the name of the deceased. On I-163 plaques, “SPONSORED BY” shall be followed by the name of the family, family members, or friends who requested the memorial sign.

Month and year of installation shall be clearly marked on the back of each sign and plaque with long-lasting black paint.

Before installation on state highways, the DOT&PF regional office right-of-way chief or designee must approve the signs as conforming to the Highway Fatality Memorial Sign Program. Applicants for the signs must comply with program requirements.

Section 2S.02 State Maintenance Begins/Ends Signs (I-180 and I-181)

Option:

The STATE MAINTENANCE BEGINS (I-180) sign may be installed at the point on the roadway where maintenance becomes the responsibility of the Department of Transportation and Public Facilities.

The STATE MAINTENANCE ENDS (I-181) signs may be installed at the point on the roadway where maintenance becomes the responsibility of another agency or private party.

Standard:

The I-180 and I-181 signs shall be installed on the right at the maintenance area boundary.

Section 2S.03 Slow Vehicle Turnout Signs (I-120, I-121, and I-122)

Guidance:

The SLOW VEHICLE TURNOUT (I-121) and the SLOW VEHICLE TURNOUT XXX FT (I-122) signs should be used to indicate the location of turnouts provided primarily for slow-moving vehicles that impede traffic on two-lane rural highways.

The SLOW VEHICLES USE TURNOUTS NEXT XX MILES (I-120) should be used in addition to the other signs when multiple turnouts are available within a section of highway.

NO PARKING (R8-3) signs should be installed within the turnout unless it is wide enough to allow movement through the turnout unimpeded by parked cars.

Standard:

These signs shall only be used to indicate turnouts to the right.

Section 2S.04 Watchable Wildlife Sign (D7-RG-1000)

Option:

The WATCHABLE WILDLIFE (D7-RG-1000) sign may be used to direct motorists to watchable wildlife sites identified in Alaska Department of Fish and Game Watchable Wildlife Program wildlife viewing publications. These guides include the Alaska Wildlife Viewing Guide (1995, statewide), Anchorage Wildlife Viewing Hotspots (2004), Fairbanks Area Wildlife Viewing Guide (2005.), and Alaska Coastal Wildlife Viewing Trail: Inside Passage Route (fall 2005, marine/ferry-based) with related individual community brochures (fall 2005). Other guides are planned.

Standard:

On state highways, the regional traffic and safety engineer shall approve identified watchable wildlife sites before they are signed.

The signs shall not be mounted on the same post as regulatory or warning signs.

Guidance:

The WATCHABLE WILDLIFE signs should follow the guidelines for D9 series signs. See Section 2D.45 of this ATMS.

Option:

The WATCHABLE WILDLIFE signs may be installed on the same post as guide, recreational, general service, and similar signs.

Section 2S.05 Speedometer Check Station Signs (I-140, I-141B, I-141E and I-142)

Option:

Where appropriate, a measured distance (third order accuracy) may be signed on a generally straight roadway section to allow motorists to check odometer accuracy.

Guidance:

The measure section should be at least 5 miles in length. The SPEEDOMETER CHECK STATION AHEAD (I-140) sign should be located 1,500 feet in advance of the BEGIN CHECK MILE 0 sign (I-141B). The MILE 1 through MILE 4 (I-142) signs should be located at the 1 through 4-mile marks, followed by the END CHECK MILE 5 (I-141E) sign.

Section 2S.06 Customs Station Signing (D8-102, D8-103, D8-104, and R13-103)

Support:

The general concept for Customs Station signing is similar to weigh station signing (see Sections 2D.44 and 2B.54h of this ATMS).

Standard:

CUSTOMS (D8-102 through D8-104 and R13-103) signs shall take precedence over all service and information signing. The following four signs shall be installed in sequence toward the facility on all classes of highways:

- A. CUSTOMS 1 MILE (D8-102)
- B. ALL VEHICLES STOP AT CUSTOMS (R13-103)
- C. CUSTOMS 1000 FT OPEN/CLOSED (D8-103)
- D. CUSTOMS (Arrow) D8-104R or L

Section 2S.07 FIRE HYDRANT Sign (M12-1)

Option:

The FIRE HYDRANT (M12-1) sign may be used to mark hydrants that are hard to see. A number sequence as designated by the local fire department may be included on the sign.

PART 3. MARKINGS

CHAPTER 3B. PAVEMENT AND CURB MARKINGS

Section 3B.02 No-Passing Zone Pavement Markings and Warrants

Delete the first Guidance subsection.

Insert the following after the second Standard subsection:

Option:

A one-way no-passing marking may be placed on any approach to an intersection.

Guidance:

If used, no-passing zone markings should be placed on stopped approaches to intersections to prohibit passing for the last five seconds of travel distance at the 85th-percentile speed (when speed data is available), or the posted or statutory speed limit. See Table 3B-100 of this ATMS.

Insert the following after the first sentence of the second paragraph of the fourth Standard subsection:

No-passing zones for one direction of traffic shall be no shorter than 500 feet. Passing zones for one direction of traffic shall be no shorter than ten seconds travel distance at the 85th-percentile speed (when speed data is available), or the posted or statutory speed limit, whichever is higher.

Insert the following at the end of the last Support subsection:

Where placement depends on advance time of travel, Table 3B-100 of this ATMS gives equivalent distances. Distances are rounded to the nearest 5 feet.

**Table 3B-100
Distance Traveled (Feet)**

Speed (mph)	Time (sec.)	
	5	10
15	110	220
20	145	295
25	185	365
30	220	440
35	255	515
40	295	585
45	330	660
50	365	735
55	405	805
60	440	880
65	480	955
70	515	1030

*Note: See Table 3B-1 in the MUTCD for
Minimum Passing Sight Distances*

Section 3B.03 Other Yellow Longitudinal Pavement Markings

Insert the following at the end of the Guidance subsection:

Two-way left-turn lane markings should be broken at intersections with roads classified as collectors or arterials or with other high volume roads.

Section 3B.17 Crosswalk Markings

Insert the following at the beginning of the first Standard subsection:

Crosswalk markings shall be placed at the following locations:

- A. At officially designated school crossings**
- B. At intersections controlled by traffic signals where pedestrian phases are used**

Delete the second sentence of the Standards subsection and insert the following:

They shall be 24 inches wide.

Delete the first sentence of the first Guidance subsection and insert the following:

Marked crosswalks should not be less than 10 feet from inside edge to inside edge of border markings or from outside edge to outside edge of ladder markings.

Delete the third, fourth, and fifth paragraphs of the Guidance subsection and insert the following:

Where crosswalks are marked on approaches controlled by traffic signals or stop signs, border (transverse line) crosswalks should be used.

Where crosswalks are marked at uncontrolled locations, ladder crosswalks (using longitudinal lines) should be used.

Decisions to mark crosswalks at uncontrolled crossings should be made in accordance with Table 3B-101 of this ATMS.

Crosswalks at signalized intersections should be located as shown in Figure 3B-101 of this ATMS.

Table 3B-101 Recommended Practice for Crosswalk Marking at Uncontrolled Crossings

No of Lanes	Raised Median?	Vehicle ADT ≤9,000				Vehicle ADT >9,000 to 12000				Vehicle ADT >12,000 to 15,000			Vehicle ADT >15,000		
		Speed Limit (MPH)													
		≤30	35	40	≥45	≤30	35	40	≥45	≤30	35	≥40	≤30	35	≥40
2	No	C	C	M	N	C	C	M	N	C	C	N	C	M	N
3	No	C	C	M	N	C	M	M	N	M	M	N	M	N	N
≥4	Yes	C	C	M	N	C	M	N	N	M	M	N	N	N	N
≥4	No	C	M	N	N	M	M	N	N	N	N	N	N	N	N

C

Candidate sites for marked crosswalks. Before marking a crosswalk, the site should be studied to ensure it is suitable. The study may include a review of pedestrian volumes, available gaps, sight distance (see A below), vehicle mix, pedestrian mix, distance to adjacent crossings (see B below), etc. Crosswalks should not be installed at locations with fewer than 20 pedestrian crossings per peak hour (or 15 for elderly and/or child pedestrians).

M

Marginal candidate sites for marked crosswalks: Pedestrian accident risk may increase if crosswalks are marked. If pedestrian improvements are necessary, other options should be explored before marking crosswalks.

N

Crosswalks should not be installed at these locations.

Source: FHWA-RD-01-075, *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations*, 2002

- A. Marked crosswalks should not be installed at uncontrolled crossings where visibility distance of pedestrians or the crosswalk would be less than the “Stopping Sight Distance for Design” given in the latest version of the AASHTO *A Policy on Geometric Design of Highways and Streets*. Desirably, crosswalks would only be installed where there is sufficient sight distance to allow pedestrians to cross the road without conflicting with vehicles continuing at the 85th-percentile speed, assuming the pedestrian starts walking at the moment the vehicle comes into sight. Pedestrian crossing time should be computed in accordance with the procedure for determining adequate gaps given in the Institute of Transportation Engineers *Traffic Engineering Handbook* (page 78 in the 4th Edition).
- B. Crosswalks should not be installed at uncontrolled locations where they will encourage pedestrians to divert from nearby signalized or grade-separated pedestrian crossings.

At mid-block crossings, parking shall be prohibited for at least 40 feet in advance of the crosswalk and at least 20 feet beyond the crosswalk for each direction of approaching traffic. Prohibiting parking 100 feet in advance and 50 feet beyond the crosswalk is desirable. These provisions do not apply when the curb is extended across the parking lane to near the edge of the through lane at the crosswalk.

Delete the first Option subsection.

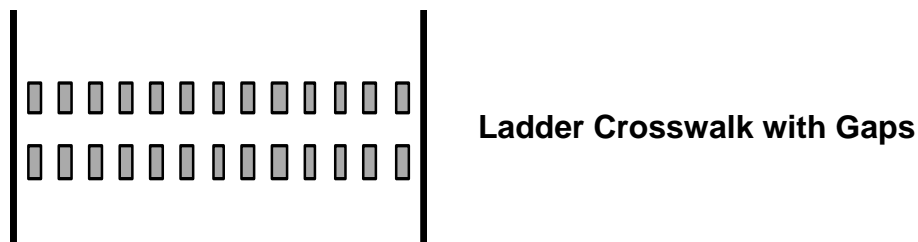
Delete the first and second sentences of the second Guidance subsection and insert the following:

If used, the “rungs” of ladder crosswalks should be 24 to 36 inches wide and spaced 24 to 36 inches apart. The spacing design should avoid wheel paths.

Insert the following at the beginning of the second Option subsection:

For added visibility, transverse crosswalk lines may be placed on the outside edge of the ladder markings.

Ladder crosswalks may be installed with gaps in the rungs, as shown below, to allow pedestrians to walk on an unpainted surface.



Delete the “diagonal markings” from Figure 3B-16 Examples of Crosswalk Markings

Section 3B.19 Pavement Word and Symbol Markings

In the 4th Option subsection insert the following to the end of the first paragraph:

These are for situations where ramp travel direction is not made obvious by the layout of the ramp intersection or merge.

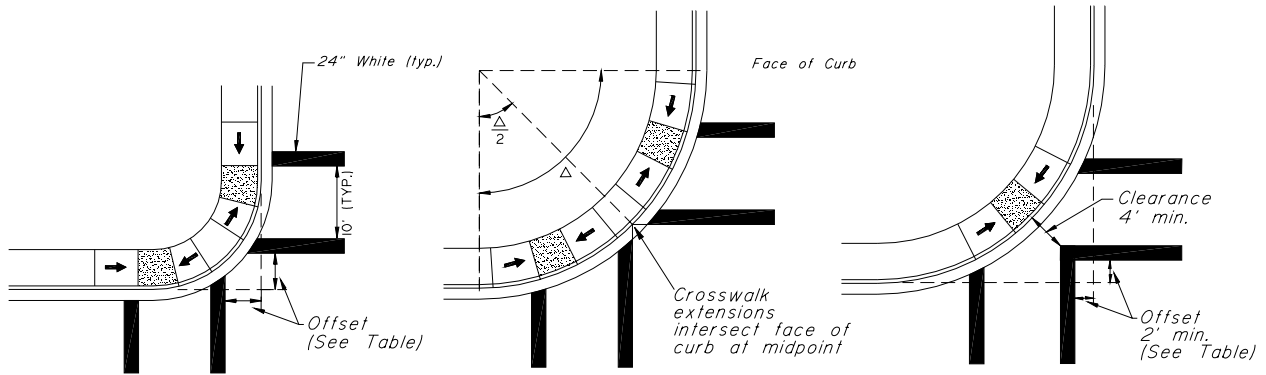
Section 3B.100 Markings for Climbing and Passing Lanes

This is a new section. There is no corresponding section in the MUTCD.

Sections 3B.28 through 3B.99 are reserved for future MUTCD use.

Support:

See Figure 2B-100 of this ATMS for pavement marking layout for climbing and passing lanes.



CASE 1
Dual Curb Ramps
Radius $\leq 25'$

CASE 2
Dual Curb Ramps
 $25' <$ Radius $\leq 50'$

CASE 3
Single Central Curb Ramp
 $25' \leq$ Radius $\leq 50'$
(Not Recommended)

CASE 1	
Crosswalk Offset From Face of Curb	
Radius (ft.)	Offset (ft.)
5	5
10	6
15	7
20	8
25	9

CASE 3	
Crosswalk Offset From Face of Curb	
Radius (ft)	Offset (ft)
25	2
30	3
35	5
40	6
45	8
50	9

NOTES:

1. The crosswalk locations shown assume a 90-degree intersection. Adjust as necessary on skewed intersections to ensure that crosswalk landings (for parallel curb ramps) or ramp runs (for perpendicular curb ramps) fall within the inner edges of crosswalk strips. If Case 3 (not recommended) is used, the layout should also be adjusted to provide at least the minimum clearance while maximizing the offset.
2. Although border (transverse line) crosswalks are shown, these details also apply to ladder (longitudinal line) crosswalks. When used, the outside of 10-foot wide ladder crosswalks should coincide with the inside of border crosswalks as shown here.
3. If only one crosswalk connects with a curb radius, locating it as if there were two connecting crosswalks will make it easier to accommodate a second crosswalk later.
4. Case 3, the layout for a single central curb ramp, should be used only when an engineering analysis determines that installing two ramps is not feasible. It should not be used for radii under 25 feet on roads where parking is not allowed.
5. Radius is measured to the face of curb.

Figure 3B-101
Crosswalk Location at Signalized Intersections

CHAPTER 3C. OBJECT MARKERS

Section 3C.02 Markings for Objects in the Roadway

Insert the following subsection after the first Standard subsection:

Guidance:

Type 1 Object Markers (OM-1) should be mounted directly below each R4-7 sign on the lead end of a median.

Insert the following at the end of the first Option subsection:

Type 1 Object Markers (OM-1) may be mounted directly below W1-6 and W1-7 Large Arrow signs and W12-1 Double Arrow signs.

Section 3C.03 Markings for Objects Adjacent to the Roadway

Insert the following to the start of the Guidance subsection:

Type 3 Object markers (OM-3) should be installed at bridges when any of the following conditions exist:

- A. Total road width (shoulders plus traveled way) on the bridge is narrower than the total road width of the approaching roadway.
- B. Total two-way road width is less than 18 feet.
- C. No guardrail is attached to the bridge end (this is not meant to imply that object markers are an adequate substitute for crashworthy treatment of bridge ends).

When used, object markers should be on the nearest guardrail post to bridge abutments when there is an approach guardrail. When there is no approach guardrail, they should be mounted on the end of the bridge rail or on a separate post.

CHAPTER 3D. DELINEATORS

Section 3D.03 Delineator Application

Insert the following at the end of the first Standard subsection:

Install delineators in accordance with Table 3D-100 of this ATMS. Delineators may also be used for applications not covered by the table, including safety emphasis areas.

See Section 3D of the MUTCD for additional guidance.

Insert the following at the end of the section:

Guidance:

When used, snow pole delineators should be constructed in accordance with Figure 3D-100 and Figure 3D-101 of this ATMS.

Option:

Snow poles may be installed in three layout patterns: Opposite, one-sided, or staggered.

- A. Opposite Layout (where poles are placed directly across from each other): The opposite layout is the most desirable because drivers just drive through the “gate” between poles in low-visibility conditions.
- B. One-sided Layout: The one-sided layout has the advantage of being less expensive than the opposite layout (at a given spacing) and of not confusing drivers as to whether they should drive to the left or right of a pole (as the staggered layout does).
- C. Staggered Layout: The staggered layout is the least desirable layout because drivers sometimes lose count when they can only see one delineator at a time and forget whether they should drive to the left or right of delineators.

**Table 3D-100
Delineator Application**

Application	Required/ Optional	Delineator Type	Spacing		Offset from Edge of Pvmt	Post Material	Notes
			Tangent	Curves <40 MPH			
Right side of Freeways and Expressways, and one side of interchange ramps	Required except when exempting conditions of MUTCD Section 3D.03 are met	See MUTCD Section 3D.02	See MUTCD Section 3D.04	See MUTCD Section 3D.04	8'	Crash-worthy support (NCHRP-350)	Red reflectors should be placed on the back of delineators on one-way roads.
Along acceleration or deceleration lanes and at median cross-overs	Optional	See MUTCD Section 3D.02 (double height reflector)	See MUTCD Section 3D.04	See MUTCD Section 3D.04	2' – 8'	Crash-worthy support (NCHRP-350)	Delineators provide better guidance to motorists when they are placed close (2') to the edge of pavement. However, offsets nearer 8' make road maintenance easier. Maintenance workers should be consulted when determining delineator offsets.
Areas with poor winter visibility	Optional	Shoulder snow pole (see Figure 3D-100)	200' max.	100' max.	2' - 8'	Crash-worthy support (NCHRP-350)	offsets nearer 8' make road maintenance easier. Maintenance workers should be consulted when determining delineator offsets.
Areas with poor winter visibility and extremely heavy snow accumulations	Optional	Overhead snow pole (see Figure 3D-101)	200' max.	100' max.	12'	Steel pipe, concrete foundation, breakaway base	
Guardrail End Terminals (GETs)	Required On state highways	Terminal Marker Posts	On every GET	On every GET	At GET	Two flexible delineators, one at each end of GET	Each delineator should have at least a 3" x 6" area of reflective sheeting with color matching edgeline

3" x 12" Reflector on left side - white on two-way roads, yellow on one way roads (match the color of the adjacent shoulder stripe).

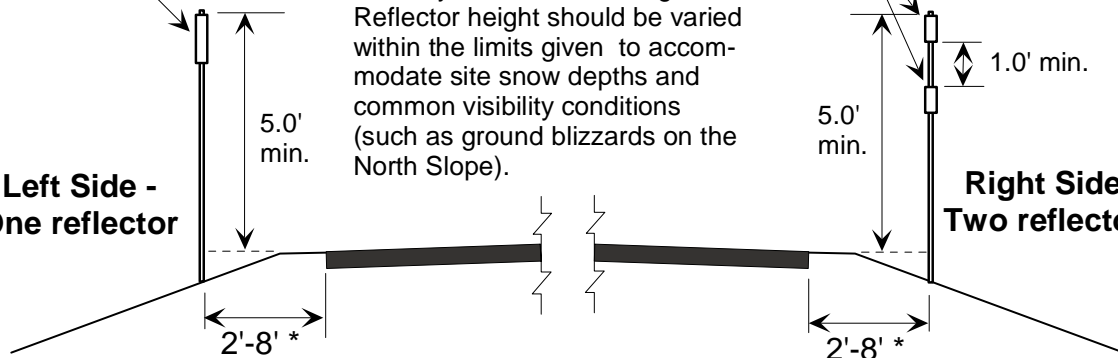
Mount delineators on crashworthy NCHRP-350 compliant supports.

Reflectors should use high-intensity reflective sheeting. Reflector height should be varied within the limits given to accommodate site snow depths and common visibility conditions (such as ground blizzards on the North Slope).

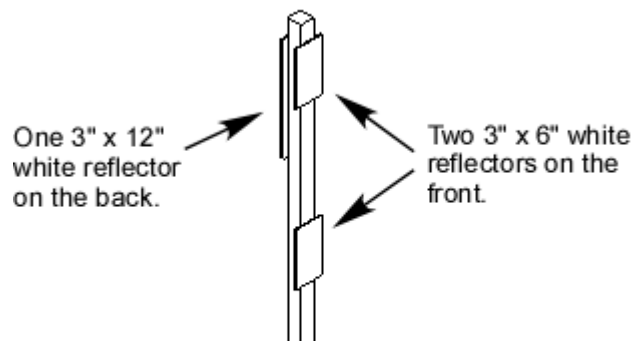
3" x 6" White Reflectors

Left Side - One reflector

Right Side - Two reflectors

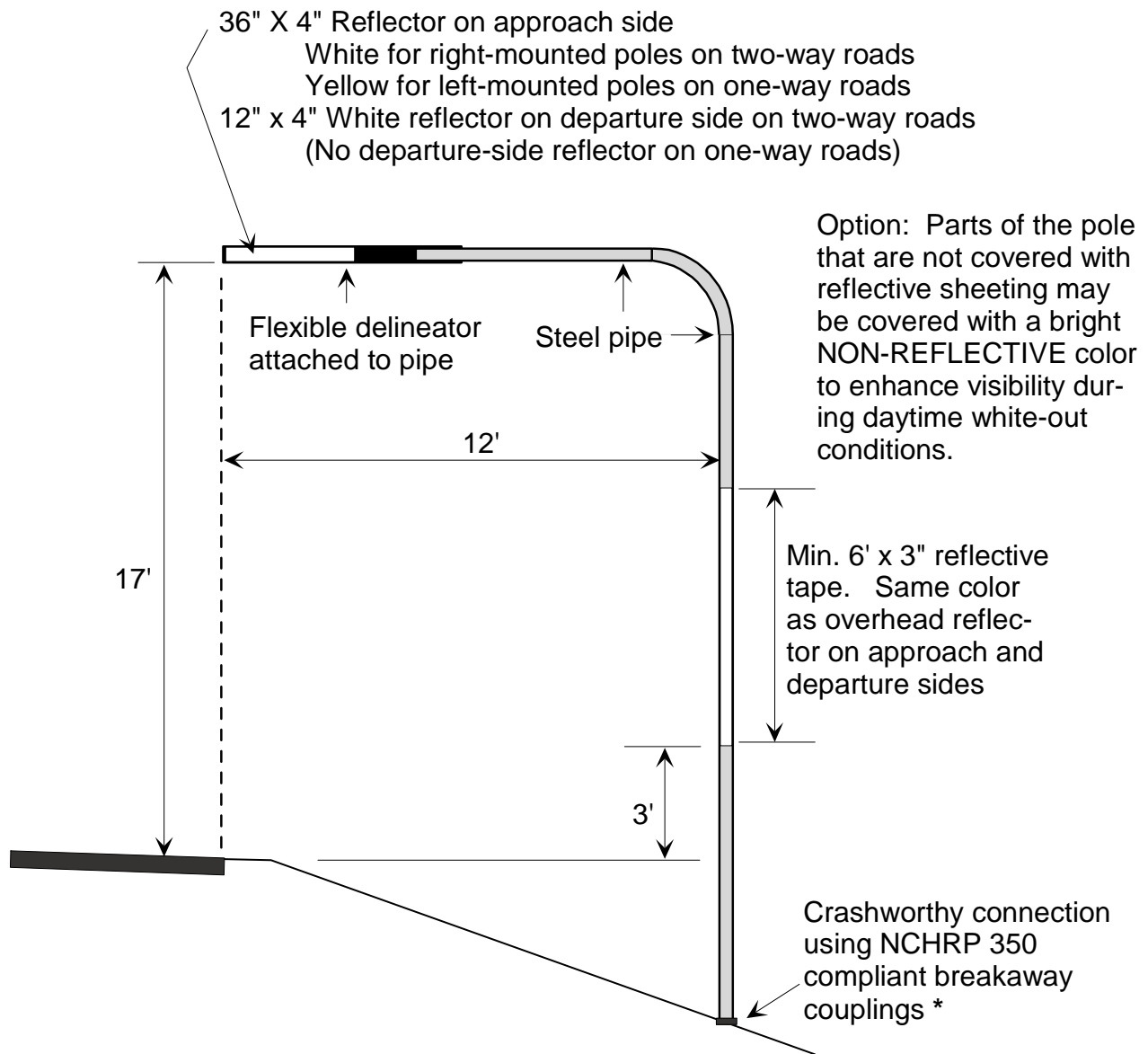


* Delineators provide better guidance to motorists when they are placed close (2') to the edge of pavement. However, offsets nearer 8' makes road maintenance easier. Maintenance workers should be consulted when determining delineator offsets.



Typical right-shoulder Installation on a two-lane, two-way road.

**Figure 3D-100
Shoulder Snow Pole**



* Where installed 4 feet or more behind the near edge of the nearest guardrail post and where it is not possible for a vehicle to penetrate a guardrail end terminal and strike the support, the breakaway couplings may be omitted.

Figure 3D-101
Overhead Snow Pole

CHAPTER 3G. ISLANDS

Section 3G.05 Island Object Markers

Insert the following at the end of Option subsections:

(see Section 3C.02 of this ATMS)

PART 4. HIGHWAY TRAFFIC SIGNALS

CHAPTER 4D. TRAFFIC CONTROL SIGNAL FEATURES

Section 4D.02 Responsibility for Operation and Maintenance

Insert the following to the Guidance subsection:

- I. Keep a signal record in each signal cabinet along with a phasing schematic and wiring diagrams. The signal record or log should contain the following:
 1. Current signal timing, unless the signals are connected to a central computer that can upload and download timings.
 2. Date and time of changes or maintenance operations.
 3. Initials of person changing timing or performing maintenance.
 4. Type of maintenance operation and characteristics of equipment failure or faulty operation evident before repair.

Section 4D.04 Meaning of Vehicular Signal Indications

Delete the last paragraph of C., 2. of the Standard subsection.

Section 4D.06 Application of Steady Signal Indications for Left Turns

Delete the first paragraph of the first Standard subsection C. Protected/Permissive Mode, 1., (d) and insert the following:

A supplementary sign shall not be required. If used, it shall be a LEFT TURN YIELD ON GREEN (symbolic green ball) sign (R10-12) or R10-100 Left Turn ONLY ON GREEN (symbolic green ball) sign.

Section 4D.15 Size, Number, and Location of Signal Faces by Approach

Insert the following at the end of the first Support subsection:

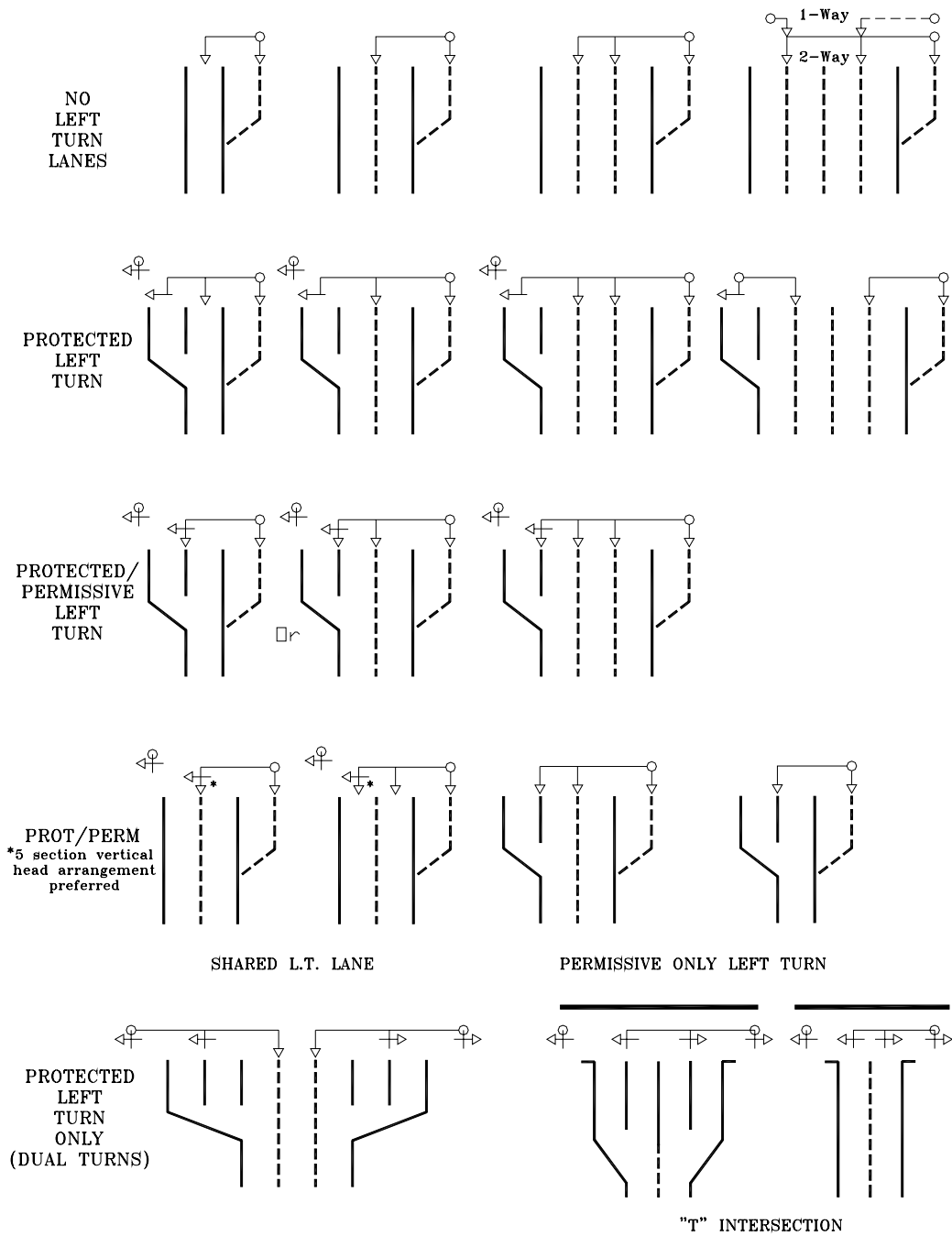


Table 4D-100 shows typical signal head locations at various intersections.

NOTE: Near-side heads (not shown) may be needed on wide intersections.

**Figure 4D-100
Typical Signal Head Locations**

Insert the following to the end of the second Guidance subsection:

Standard:

Vehicular signals shall consist of the following minimum configurations for each approaching direction:

- A. The primary indicator for through traffic at signal-controlled intersections shall be a side-mounted or post-mounted signal face on the far side of the cross street and to the right of traffic approaching the signal (far-right position). In urban centers and other locations where the far-right position signal would be obscured or outside of the cone of vision as shown in Figure 4D-2 of the MUTCD, an overhead signal face over through lanes may be substituted as the primary indicator.**
- B. The primary through traffic indicator shall be supplemented with no less than the number of through indicators required by Table 4D-100 of this ATMS. On a one-way street that is three or more lanes wide, an additional post-mounted signal face shall be installed on the far left side of the intersection.**

The primary indicator for turning traffic at intersections with separate turn phasing shall be a signal face with 12-inch diameter lenses with arrow(s) on the far side of the cross street and placed to be in conformance with the following:

- A. The primary indication for right-turn traffic with exclusive right-turn phasing which overlaps the through-traffic phase shall be a 12-inch diameter green arrow mounted on the far side below the primary indicator.**
- B. The primary indication for a protected left-turn phase shall be as close as possible to:
 - 1. The prolongation of the center of the lane on a single left-turn lane approach**
 - 2. The prolongation of the separating lane line on a dual left-turn approach****
- C. The primary indication for a protected/permissive left-turn phase shall be as close as possible to:
 - 1. The prolongation of the lane line separating the turn lane from the adjacent through lane, where an exclusive turn lane is provided**
 - 2. The prolongation of the center of the left-most lane or the prolongation of the lane line separating the left-most two lanes where an exclusive turn lane is not provided****

Guidance:

A supplemental far-side left-turn indicator should be provided where there is protected or protected-permissive left-turn phasing. The indicator shall consist of a three section head (all arrows) with protected phasing and a five section vertically arranged head with protected-permissive phasing.

Option:

Protected-permissive signal faces in these locations may be supplemented with the R10-12 sign adjacent to each signal face.

**Table 4D-100
Number of Through Overhead Signals**

NUMBER OF THROUGH APPROACH LANES	TYPE OF LEFT TURNING MOVEMENT			
	NONE OR COMPLETELY PROTECTED		PROTECTED/PERMISSIVE	
	HEADS ^A	SPACING ^B	HEADS	SPACING ^B
1-LANE	1	--	0 ^C	--
2-LANES	1	--	1	12
3-LANES	2	12	2	12
4&5-LANES	2	24	--	--

A. Number of heads centered over the through approach
 B. Approximate spacing between the overhead signals (based on 12' lane width)
 C. Overhead indication is provided by the protected/permissive signal head

Section 4D.17 Visibility, Shielding, and Positioning of Signal Faces

Delete the first sentence of the fourth paragraph of the Standard subsection and insert the following:

The bottom of the signal housing and any related attachments to a vehicular signal face located over a roadway shall be at least 17.5 feet above the roadway immediately below the signal.

In the sixth paragraph of the Standard subsection delete A. and B. and insert the following:

- A. Shall be at least 10 feet but not more than 19 feet above the sidewalk or, if there is no sidewalk, above the pavement grade at the center of the roadway**
- B. Shall be at least 7 feet but not more than 19 feet above the median island grade of a center medial island if located on the near side of the intersection**

In the seventh paragraph of the Standard subsection dealing with horizontally arranged signals delete A. and B. and insert the following:

- A. Shall be at least 10 feet but not more than 22 feet above the sidewalk or, if there is no sidewalk, above the pavement grade at the center of the roadway**
- B. Shall be at least 7 feet but not more than 22 feet above the median island grade of a center median island if located on the near side of the intersection**

Section 4D.18 Design, Illumination, and Color of Signal Sections

Insert the following to the end of the second Standard subsection:

All remaining ungalvanized surfaces shall be painted dark olive green.

CHAPTER 4E. PEDESTRIAN CONTROL FEATURES

Section 4E.02 Meaning of Pedestrian Signal Head Indications

Insert the following at the end of the Standard subsection:

At all locations with a pedestrian signal indication, THE MEANING OF PEDESTRIAN SIGNALS (R10-101) sign or sticker shall be installed on each pole, between and immediately above the push buttons. These signs or stickers need not be reflectorized.

CHAPTER 4K. FLASHING BEACONS

Section 4K.02 Intersection Control Beacon

Insert the following at the end of the section:

Support:

Consider installing intersection control beacons when an intersection has experienced 4 or more angle crashes in a 12-consecutive month period or 6 or more in a 24-consecutive month period.

Section 4K.03 Warning Beacon

Delete the second sentence of the second paragraph in the Standard subsection and insert the following:

The beacon shall not be included within the border of the sign.

Delete the last paragraph of the Standard subsection and insert the following:

If a warning beacon is suspended over the roadway, the clearance above the pavement shall comply with the requirements of Section 4D.17 of this ATMS.

CHAPTER 4Z. ACTIVE ADVANCE WARNING FLASHERS

This is a new chapter. There is no corresponding chapter in the MUTCD.

Section 4Z.01 Application of Active Advance Warning Flashers

Support:

Active Advance Warning Flashers (AAWFs) are a special type of highway traffic signal installed in advance of conventional traffic signals to provide advance notice of the onset of the yellow indication.

Guidance:

AAWFs should only be installed when all of the following conditions are met:

- A. High-speed (55 mph or higher) approaches
- B. At the first signalized intersection after 10 or more miles of uninterrupted highway
- C. Where sight distance to the conventional traffic signal indications meets or exceeds standards

Support:

AAWFs impact traffic in two ways:

- 1. They provide drivers advance notice of the onset of yellow
- 2. They prevent traffic signal electronics from providing “Dilemma Zone Protection”, which attempts to hold the onset of yellow until there are no cars within the “Dilemma Zone” (the area where it is difficult to decide whether to stop or go).

When both factors apply, consideration 1 generally has a bigger effect on operation than consideration 2. However, if AAWFs are only installed on one side of an intersection, and if the through traffic on the opposite side is terminated simultaneously with through traffic on the AAWF side, dilemma zone protection will be lost on the opposite side without the compensating advantage of advance notice of the onset of yellow. For this reason, installation of AAWFs on both sides of the intersection is recommended.

Section 4Z.02 Design of Active Advance Warning Flashers

Guidance:

AAWFs should be installed 500 feet in advance of the stop bar.

The AAWF sign and flashers should be designed to:

- A. Appear distinctively different than standard flashing signal ahead signs/beacons to alert drivers to its different meaning (impending yellow indication)

- B. Communicate at a glance that the warning refers to a signal, not construction activity, pedestrian crossing, etc.
- C. When the power goes out, it should not imply to drivers that they may proceed through the intersection, as a nonflashing “Prepare to Stop When Flashing” sign does.
- D. Be easily visible from all lanes on the approach

Figure 4Z-100 of this ATMS shows the recommended AAWF configuration.

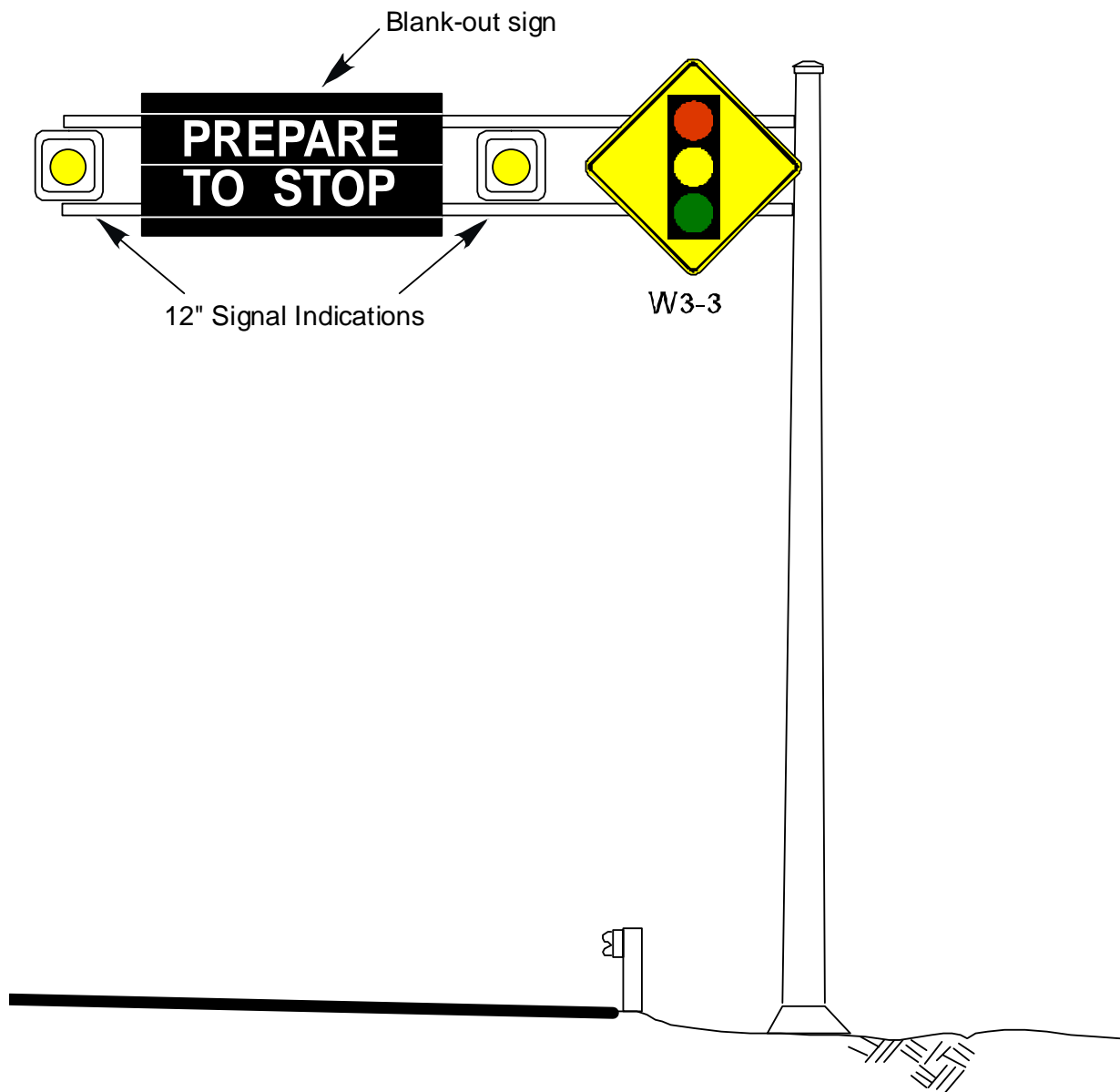


Figure 4Z-100
Active Advance Warning Flasher

PART 5. TRAFFIC CONTROL DEVICES FOR LOW-VOLUME ROADS

CHAPTER 5A. GENERAL

Section 5A.03 Design

Delete the second paragraph under the Standard subsection and insert the following:

The minimum sizes for signs installed on low-volume roads shall be as shown in the ASDS.

Delete Table 5A-1. Minimum Sign Sizes on Low-Volume Roads (Sheets 1 & 2).

Section 5A.04 Placement

Insert the following Support subsection after the Option subsection:

Support:

Investigate clearing the vegetation before locating signs as close to the edge of the road as 2 feet.

CHAPTER 5C. WARNING SIGNS

Section 5C.04 Stop Ahead and Yield Ahead Signs (W3-1, W3-2)

Delete the Option subsection.

Section 5C.07 Hill Sign (W7-1)

Delete the last paragraph of the Option subsection.

Section 5C.10 Advisory Speed Plaque (W13-1)

Insert the following to the end of the Option subsection:

See Section 2C.46 of this ATMS for additional information on the use of these signs.

Section 5C.12 NO TRAFFIC SIGNS Sign (W18-1)

Delete the Option subsection and insert the following:

Support:

See Subsection 5C.13a of this ATMS.

Delete the NO TRAFFIC SIGNS sign from Figure 5C-2 of the MUTCD.

Section 5C.13 Other Warning Signs

Insert the following new subsection at the end of the section:

Section 5C.13a PRIMITIVE ROAD NO WARNING SIGNS (W16-113)

Option:

The PRIMITIVE ROAD NO WARNING SIGNS sign (W16-113) may be used on low-volume roads with the following characteristics:

- A. AADT of less than 25, and
- B. Soil or gravel surface

In addition to installing this sign at the beginning of the no-warning sign area, additional signs may be installed at intermediate points within the area.

Standard:

The Advisory Distance Plaque (W7-3a) shall be installed below the W16-113 sign.

CHAPTER 5F. TRAFFIC CONTROL FOR HIGHWAY-RAIL GRADE CROSSINGS

Section 5F.02 Highway-Rail Grade Crossing (Crossbuck) Sign (R15-1, R15-2)

Delete the second and third paragraphs of the Standard subsection and insert the following:

A strip of high intensity or brighter retroreflective white material not less than 6 inches in width shall be mounted on the entire length of the back of each blade of each Crossbuck sign, at all highway-rail grade crossings, except those where Crossbuck signs have been installed back-to back.

A strip of high intensity or brighter retroreflective white material 2-inches in width shall be applied for the full length of each support from the Crossbuck sign or Number of Tracks sign to 2 feet above the edge of the roadway, except on the side of those supports where a STOP (R1-1) or YIELD (R1-2) sign or flashing lights have been installed or on the back side of supports for Crossbuck signs installed on one-way streets.

PART 6. TEMPORARY TRAFFIC CONTROL

CHAPTER 6A. GENERAL

Section 6A.01 General

Insert the following to the end of the section:

Standard:

DOT&PF Policy and Procedure DPDR 05.05.020 shall be followed when establishing speed limits for DOT&PF construction zones.

CHAPTER 6B. FUNDAMENTAL PRINCIPLES

Section 6B.01 Fundamental Principles of Temporary Traffic Control

Insert the following to end of the second Guidance subsection:

Generally, signs should not be posted on construction projects directing motorists to businesses. However, it may be necessary when one of the following conditions exist:

- A. When a business that was previously easily visible from the road is completely hidden by road construction activity.
- B. When the route to a business that was previously readily evident from the road is hidden by road construction activity.

Temporary business-identifying signs should be removed immediately when conditions A and B cease to exist.

Temporary business-identifying signs should be made from sign sheeting placed on an inexpensive substrate. They should be designed so they will not be confused with official construction, warning, directional, or regulatory signs.

Temporary business-identifying signs should not be installed for the purpose of advertising. They are only acceptable as mitigation for construction activities that hide the business or the route to it.

Standard:

Temporary business-identifying signs shall have black legends and borders on orange retroreflective backgrounds.

CHAPTER 6E. FLAGGER CONTROL

Section 6E.03 Hand-Signaling Devices

Delete the second sentence of the first Standard paragraph and insert the following:

STOP/SLOW paddles (CW23-100) shall be at least 18 inches wide with letters 6 inches high for local roads with speed limits less than or equal to 25 mph and shall be 24 inch wide with letters 8 inches high for all other roads. The STOP/SLOW paddle shall be fabricated from light semi-rigid material.

CHAPTER 6F. TEMPORARY TRAFFIC CONTROL ZONE DEVICES

Section 6F.02 General Characteristics of Signs

Delete the second sentence in the second Standard subsection and insert the following:

The sizes for Temporary Traffic Control signs shall be as shown in the ASDS.

Delete the third Support subsection and insert the following:

Sign design details are contained in the ASDS.

Insert the following at the end of the section:

Delete Table 6F-1 Sizes of Temporary Control Signs (Sheet 1 through 4).

Delete the W3-5 and W3-5a signs from Figure 6F-4 Warning Signs in Temporary Traffic Control Zones (Sheet 1 of 4).

Section 6F.03 Sign Placement

Delete the first sentence of the first Standard subsection and insert the following:

Post-mounted signs installed at the side of the road in rural areas shall be mounted at a height of at least 7 feet, measured from the bottom of the sign to the near edge of the pavement.

Section 6F.06 Regulatory Sign Design

Delete the text of the Standard subsection and insert the following:

Temporary Traffic Control regulatory signs shall conform to the Standards for regulatory signs presented in Part 2 of the ATM and in the ASDS.

Modify Figure 6F-1, Height and Lateral Location of Signs-Typical Installations, RURAL DISTRICT, as follows

Replace “Not less than 1.5m (5ft)” with “Not less than 7 ft.”

Section 6F.14 Special Regulatory Signs

Insert the following new subsection at the end of the section:

Section 6F.14a Double Fine in Work Zone Signs (R16-100, R16-101, R16-102, R2-100, CW20-102)

Support:

The WORK ZONE, BEGIN DOUBLE TRAFFIC FINES (R16-100) and END DOUBLE TRAFFIC FINES (R16-101) signs legally establish the beginning and end of double fine zones. See 13 AAC 40.010 and 17 AAC 99.010. See Section 2B.17 of this ATMS.

Standard:

On DOT&PF construction projects, the DOT&PF regional traffic and safety engineer shall identify projects to receive double fine signs. On DOT&PF maintenance projects, the regional maintenance and operations chief shall make that decision. All decisions shall be made in accordance with the information given in this section.

Guidance:

Double fine signs should be posted in designated double fine zones in all road construction, repair, maintenance, or utility work areas except for the following:

- A. Mobile operations, such as striping, grading, brush cutting, etc.
- B. Work on low-volume, low-speed roads
- C. Pilot car operations that extend the entire length of a project
- D. Work that will last less than 48 hours

Option:

Double fine signs may be omitted when work zones are shorter than one mile.

Standard:

Within the previously-described road work areas, roadway segments where one or more of the following conditions exist are designated double fine zones:

- A. **Active work areas: Areas where road workers and/or machinery are presently working on or adjacent to a road.**
- B. **Detours on new temporary roads built for that purpose; this does not include detours on existing streets.**
- C. **Sections of paved roads where pavement has been removed.**
- D. **Roads where unmatched asphalt lifts result in a vertical lip between lanes.**

Double fine signs shall be used only in designated double fine zones. They shall be removed or covered when work ceases for more than two days and conditions B through D of this Standard subsection do not exist.

Double fine signs shall be confined to areas where the above conditions exist, with the following exceptions:

Option:

- A. If the project is 2 miles or shorter in length, the entire project may be posted for double fines when the above conditions exist on any part of the project.
- B. When the above conditions exist at multiple locations separated by less than 2 miles, the locations and intervening segments may be posted as a single double fine zone.

Support:

“Work Zone Speed Limit Signs,” as used here, refer either to WORK ZONE SPEED LIMIT XX DOUBLE FINES (R2-100) signs or standard SPEED LIMIT (R2-1) signs with DOUBLE FINES (CW20-102) plaques mounted below them.

Standard:

The speed limit shown on Work Zone Speed Limit signs may be either the existing limit before work began or, if a work zone speed order has been approved in accordance with DOT&PF Procedure 05.05.020 PDR, a reduced limit.

Work Zone Speed Limit signs shall be posted at the beginning of every double fine zone, regardless of whether the speed limit has been reduced from the preconstruction limit.

The END DOUBLE FINES (R16-101) sign shall be posted at the end of every double fine zone.

The speed limit for the road beyond the construction zone shall be posted at the end of every double fine zone.

All existing regulatory speed limit signs within the double fines zone shall either be replaced with Work Zone Speed Limit (R2-100) signs or supplemented with CW20-102 plaques.

When a double fine zone is longer than 2 miles, Work Zone Speed Limit signs shall be posted at spacings not greater than 2 miles within the double fines zone.

Signs shall be installed at major intersections within the double fine zones, using one of the following methods to warn entering drivers of double fines:

- A. **Install work zone speed limit signs on the main street on either side of the intersection.**

B. Install Work Zone Begin Double Traffic Fines (R16-100) signs with CW1-7 Arrow Panels mounted below them on the side street(s). The use of this signing eliminates the need for Road Work Ahead (CW20-100) signs.

Option:

DOUBLE FINES WHERE POSTED (R16-102) signs may be posted at Alaska border entry points or at other locations where it is important to notify drivers of Alaska's double fines law.

Support:

The use of the double fines zone signs is not intended to be a reason for diminishing the number of warning signs that would normally be required in the work zone.

Overuse of the double fine signs will diminish respect for, and effectiveness of, the signs. It will also result in needlessly increased fines for traffic citations.

Section 6F.15 Warning Sign Function, Design, and Application

Insert the following after the first Support subsection:

Option:

All warning signs may be used in construction and maintenance operations if the background color is changed to construction orange. Reference to such signs will be designated with the prefix "C," denoting Construction, followed by the standard sign code. For example, the construction warning sign for a right-turn is a CW1-1R, which refers to a TURN sign with a construction-orange background.

Unless otherwise noted, locate construction warning signs in advance of the condition of concern by the distance given in Section 2C.05, Table 2C-4 of the MUTCD.

Delete the first sentence of the Standards subsection and insert the following:

Temporary Traffic Control warning signs shall conform to the Standards for warning signs presented in Part 2 of the ATM and in the ASDS.

Delete the first two paragraphs under the last Option subsection.

Section 6F.43 UNEVEN LANES Sign (W8-11) [ASDS CW8-11]

Delete the first sentence under the Guidance subsection and insert the following:

The UNEVEN LANES (CW8-11) sign should be used during operations that create a difference in elevation between adjacent lanes of 1.5 inches or greater.

Section 6F.46 Other Warning Signs

Insert the following new subsection at the end of the section.

Section 6F.46a NEW TRAFFIC PATTERN (CW3-100)

Guidance:

The NEW TRAFFIC PATTERN (CW3-100) sign should be used to notify motorists of signal phasing modifications, traffic re-routing, etc.

Section 6F.48 Advisory Speed Plaque (W13-1) [ASDS CW13-1]

Delete the third sentence of the first paragraph of the Standard subsection and insert the following:

The sign size shall be as called for in the ASDS.

Insert the following at the end of the Standard subsection:

Advisory speeds shall be determined using Section 2C.46 of this ATMS.

PART 7. TRAFFIC CONTROLS FOR SCHOOL AREAS

CHAPTER 7A. GENERAL

Section 7A.02 School Routes and Established School Crossings

Insert the following subsection at the beginning of the section:

Support:

Planning of student transportation to and from school is primarily a responsibility of the local school district.

Guidance:

Before school crossings and school zone speed limits are established, a team consisting of representatives of the local school district, local government, and the highway authority should convene to discuss student transportation issues, walking routes, reduced school speed limits, and designated road crossings for students. When a school route plan has been approved by the local school district and accepted by the highway authority, the regional traffic and safety engineer or city traffic engineer should select the appropriate traffic control devices in accordance with Sections 7A.100 and 7A.101 of this ATMS.

Section 7A.04 Scope

Insert the following to the Support subsection:

The urban and rural traffic control matrices presented in Table 7A-100 and Table 7A-101 of this ATMS apply only to roads abutting school property and nonabutting roads at designated school crossings.

Section 7A.08 Placement Authority

Insert the following Guidance subsection before the existing Support subsection:

Guidance:

On state roads, any significant deviation from the traffic control treatments shown in Tables 7A-100 and 7A-101 of this ATMS should be supported by written justification and approved by the regional director.

Delete the text of the Support subsection and insert the following:

Section 1A.08 of this ATMS contains information regarding placement authority for traffic control devices.

Section 7A.100 Rural School Zone Traffic Control Summary

This is a new section. There is no corresponding section in the MUTCD.

Sections 7A.11 through section 7A.99 are reserved for future MUTCD use.

Guidance:

Traffic control treatment of rural school zones should conform to Table 7A-100 of this ATMS.

School districts are responsible for policies that consider crossing guards where students in grades K-8 (K-4 in particular) are required to cross major streets.

Support:

For this application, “rural” is defined as a sparsely populated area where the majority of land is not subdivided.

Rural schools have different traffic control than urban schools because there are generally fewer students that must walk to school. Students are usually bused or driven because these areas are more sparsely settled and homes are farther away. Placing 20 mph zones on rural high speed roads where few student pedestrians are seen by drivers would generate disrespect for school speed zones in general, thereby making all school zones less safe.

Table 7A-100
Rural School Zone Traffic Control

Road Adjacent to School Grounds		Road Not Adjacent to School Grounds
Speed Limit ≤35 mph	Speed Limit ≥40 mph	School Zone traffic control devices should not be placed on roads that do not abut school grounds unless a crossing guard is present at the site. Any exceptions to this rule must be based on a site-specific engineering study.
Advance School Signs (S1-1)	Advance School Signs (S1-1) (beacon optional)	

Section 7A.101 Urban School Zone Traffic Control Summary

This is a new section. There is no corresponding section in the MUTCD.

Guidance:

Traffic control treatment of urban school zones should conform to Table 7A-101 of this ATMS.

**Table 7A-101
Urban School Zone Traffic Control**

Urban School Zone Traffic Control Guidelines												
<small>(Applies Only to Roads Abutting School Property and Non-Abutting Roads at Designated School Crossings)</small>												
Grade Level <small>(Lowest Grade Taught at School)</small>	Students Required to Cross Road At Grade										Students Not Required to Cross Road At Grade <small>(Could be grade-separated or just no crossing)</small>	
	Traffic Signal at Crossing		No Traffic Signal at Crossing									
			STOP Controlled Crossing	Crossing not STOP-Controlled						Grade Separation	Ped Signal (if warranted) (3)	Mid-Street Refuge Island (7)
				Sufficient Gaps (2)		Insufficient Gaps (2) <small>Address by re-routing students, busing students, or one of the following:</small>						
	Existing Speed Limit ≤20	Existing Speed Limit >20	Existing Speed Limit ≤20	Existing Speed Limit >20	Crossing Guard (5) (6)		Ex. Spd Limit ≤20	Ex. Spd Limit >20	Yes	No		
9-12	C <input type="checkbox"/>	C	C (major streets only) <input type="checkbox"/>	C	C	n/a					n/a	See Students Not Required to Cross Road At-Grade
5-8	C	CG?	C (major streets only) G? <input type="checkbox"/>	C	CG?	CG	CG	See Students Not Required to Cross Road At-Grade	See Students Required to Cross Road At-Grade / Traffic Signal at Crossing	If refuge provides sufficient gaps, See Cross At-Grade / No Signal/ No STOP/ Sufficient Gaps. If not, choose another solution	<input type="checkbox"/>	<input type="checkbox"/>
K-4	CG?	CG?	C (major streets only) G? <input type="checkbox"/>	CG?	CG?	CG	CG	See Students Not Required to Cross Road At-Grade	See Students Required to Cross Road At-Grade / Traffic Signal at Crossing	If refuge provides sufficient gaps, See Cross At-Grade / No Signal/ No STOP/ Sufficient Gaps. If not, choose another solution	<input type="checkbox"/>	<input type="checkbox"/>

LEGEND	
n/a	Does not apply - Crossing Guards should not be used for high school students
<input type="checkbox"/>	No School Signs
	Advance School Sign (S1-1 and W16-9p) Only
	Advance (S1-1 and W16-9p) and Crossing (S1-1 and W16-7p) School Signs - Overhead illuminated S1-1 sign optional
	Advance and Crossing School Signs + 20 MPH When Flashing (S5-1) with flasher, or 20 MPH School Speed Limit Assemblies (with S4-1, S4-2, S4-4 or S4-6 plates). Overhead illuminated S1-1 sign optional
C	Marked Crosswalk - install at nearest intersection, if within 400 ft. If there is already a crosswalk within 400 feet, use it as the school crosswalk. Use school crosswalk signs at mid-block locations if within a school zone.
G	Crossing Guard
G?	School districts should consider crossing guards at major street crossings

The following notes pertain to Table 7A-101.

- 1) "Completely fenced" means fencing that restricts all access from the street side of the school to the street.
- 2) See Section 7A.03 of the MUTCD for gap sufficiency determination: When gaps are insufficient for crossing, student re-routing, busing, or mid-street pedestrian refuge islands should be the first options considered. Guards or pedestrian signals should be viewed as last resorts.
- 3) Traffic signals may be installed (but are not mandated) for pedestrians when the Minimum Pedestrian Volume or School Crossing warrants defined in Sections 4C.05 and 4C.06 of the MUTCD are met. Although these signals may be installed mid-block, every effort should be made to install them at intersections and run them as conventional signals.
- 4) The "Overhead Signs with Flashers" referenced in the legend are S1-1 school crossing signs with flashing lights hung over the road at or near the crosswalk. The flashing lights may be either inside of an internally illuminated sign or external. If the site has advance school flashers, the overhead flashers shall flash when the school flashers flash.
- 5) Crossing guards are only a solution on streets with inadequate gaps when policy allows guards to create, rather than just extend, gaps in traffic.
- 6) Crossing guards should not be used when streets have more than three lanes.
- 7) Mid-street pedestrian refuges increase the number of gaps of sufficient duration for crossing by splitting the crossing into two parts, which:
 - a) Reduces gap duration necessary for crossing by reducing crossing distance, and
 - b) Increases gap frequency by reducing the conflicting traffic volume.

Pedestrian refuges should be at least 6 feet wide.

CHAPTER 7B. SIGNS

Section 7B.01 Size of School Signs

Delete the first three paragraphs of the Standard subsection and insert the following:

The size of signs and plaques to be used shall be as shown in the ASDS.

Delete Table 7B-1. Size of School Area Signs and Plaques.

Section 7B.06 Lettering

Delete the first sentence of the Support subsection and insert the following:

The ASDS contains information regarding sign lettering.

Section 7B.07 Sign Color for School Warning Signs

Delete the text of the Standard subsection and insert the following:

The following signs shall be black on fluorescent yellow-green background:

- A. **School Crossing Signs (S1-1)**
- B. **SCHOOL Plaque (S4-3)**
- C. **SCHOOL SPEED LIMIT Signs (S5-1) (not including the part of the sign with white background)**
- D. **XXX FEET plaque (W16-2 series), when used with an S1-1 sign**
- E. **AHEAD plaque (W16-9p), when used with an S1-1 sign**
- F. **Diagonal Arrow plaque (W16-7p), when used with an S1-1 sign**

Option:

SCHOOL BUS STOP AHEAD signs (S3-1) may have either a yellow or fluorescent yellow-green background.

Delete the Option subsection in its entirety.

Section 7B.08 School Advance Warning Assembly (S1-1 with Supplemental Plaque)

Delete the first and second paragraphs of the Standard subsection and insert the following:

The School Advance Warning assembly shall be used in advance of any installation of the School Crosswalk Warning assembly (see Figure 7B-100 b. of this ATMS), or in advance of the first installation of the School Speed Limit assembly (see Figure 7B-100 c. of this ATMS).

If used, the School Advance Warning sign shall be installed not less than 150 feet nor more than 700 feet in advance of the school grounds or school crossings; see Figure 7B-100 School Traffic Control of this ATMS.

Insert the following after the Standard subsection:

Support:

“School grounds” typically refer to school property. However, when school property frontage is lengthy, school grounds may be interpreted as the area where students frequently cross the road.

Section 7B.09 School Crosswalk Warning Assembly (S1-1 with Diagonal Arrow)

Delete Figure 7B-2 Example of Signing for School Crosswalk Warning Assembly and Figure 7B-3 Examples of Signing for School Area Traffic Control with School Speed Limits.

Delete the first paragraph under the Guidance subsection and insert the following:

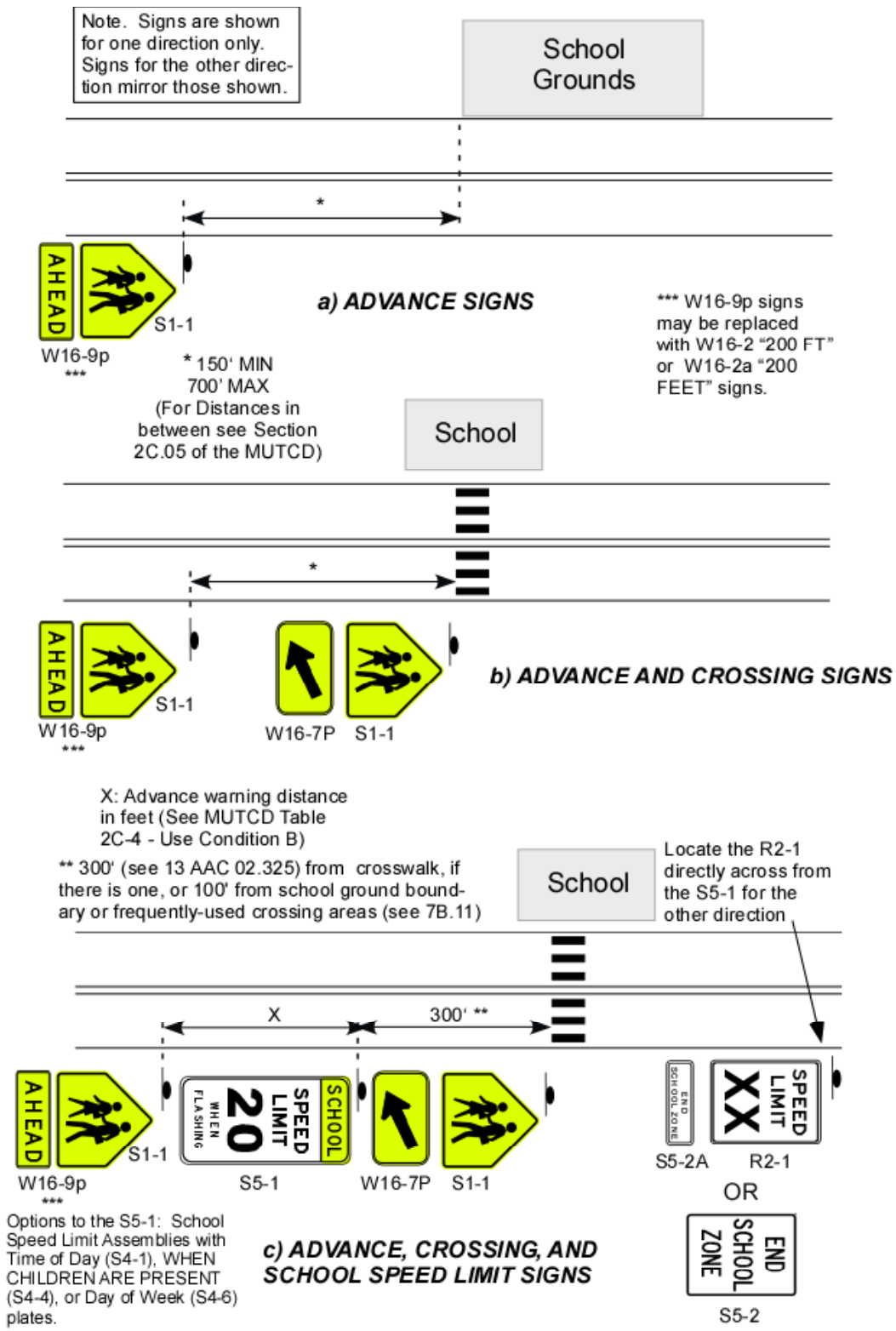
The School Crosswalk Warning assembly should be installed at marked crosswalk(s), including those at signalized locations, used by students going to and from school (see Figure 7B-100 School Traffic Control of this ATMS).

Section 7B.10 SCHOOL BUS STOP AHEAD Sign (S3-1)

Delete the first paragraph under the Guidance subsection and insert the following:

The SCHOOL BUS STOP AHEAD (S3-1) sign (see Figure 7B-1 of the MUTCD) should be installed in advance of locations where the top flashing lights of a school bus, when stopped to pick up or discharge passengers, are not visible to road users for a distance of 700 feet in advance, and where there is no opportunity to relocate the bus stop to provide 700 feet of visibility.

The SCHOOL BUS STOP AHEAD (S3-1) sign should be located using Section 2C.05, Table 2C-4, Condition B of the MUTCD and 0 mph as the speed at the condition of concern.



**Figure 7B-100
School Traffic Control**

Section 7B.11 School Speed Limit Assembly (S4-1, S4-2, S4-3, S4-4, S4-6, S5-1)

Insert the following at the end of the first Standard subsection:

The reduced school zone shall begin at a point 300 or more feet from the school crosswalk, if there is one.

Delete the first Guidance subsection and insert the following:

Guidance:

The reduced school zone should begin at a point 100 or more feet from the school property boundary, or if the school property frontage is lengthy, 100 or more feet from frequently-used student crossing areas.

Support:

Ideally, school speed zones should be kept short to enhance driver compliance. When school property frontage along the roadway is lengthy and/or fenced, consider focusing the school speed zone on frequently used crossing areas rather than the entire frontage.

Insert the following after the second Standard subsection:

Guidance:

The SCHOOL SPEED LIMIT 20 WHEN FLASHING (S5-1) sign should consist of three signal heads with 8-inch diameter yellow lenses. They should be mounted vertically directly above the S5-1 sign. The bottom two beacons should be illuminated alternately and face the oncoming traffic. The top flashing beacon should face the opposite direction to indicate when the signals are in operation.

Delete the second sentence of the fourth paragraph under the second Option subsection.

Section 7B.12 Reduced Speed School Zone Ahead Sign (S4-5, S4-5a)

Insert the following at the end of the section:

Guidance:

The Reduced Speed School Zone Ahead (S4-5, S4-5a) sign should only be used when the school zone speed limit is 20 MPH or more below the speed limit on the approaching road.

Section 7B.100 DRUG FREE SCHOOL ZONE Sign (S6-1)

This is a new section. There is no corresponding section in the MUTCD.

Standard:

Alaska Statute 28.01.010(d) states, “The municipality shall post a sign indicating that the school is a drug-free school zone at each location in which it has installed a sign identifying the location of a school.” Accordingly, signs conveying this message shall be placed below, or near, all School Advance Warning (S1-1) signs.

Support:

The posting of this sign is a municipal, not a state, responsibility.

Option:

The sign may be the S6-1 shown in the ASDS or another sign that conveys the required message. Sign colors may be either black legend on white background or black legend on fluorescent yellow-green background.

CHAPTER 7C. MARKINGS

Section 7C.03 Crosswalk Markings

Delete the text of the Standard subsection and insert the following:

Crosswalk markings shall be placed at officially designated school crossings.

School crosswalks shall be installed in accordance with the applicable provisions of Section 3B.17 of this ATMS.

Delete the first paragraph of the first Guidance subsection.

Delete the Option subsection.

Delete the second Guidance subsection.

CHAPTER 7E. CROSSING SUPERVISION

Section 7E.01 Types of Crossing Supervision

Insert the following subsection at the end of the section:

Standard:

School districts shall be responsible for deciding where to provide crossing guards and for compensating them.

CHAPTER 7F. GRADE-SEPARATED CROSSINGS

Section 7F.01 Function

Insert the following at the end of the Section.

Support:

See section 1130.7.1 Separation Structures for Pedestrian Crossings in the *Alaska Highway Preconstruction Manual* and the Institute of Transportation Engineer's publication, *School Trip Safety Program Guidelines* for additional information.

PART 8. TRAFFIC CONTROLS FOR HIGHWAY-RAIL GRADE CROSSINGS

CHAPTER 8A. GENERAL

Section 8A.02 Use of Standard Devices, Systems, and Practices

Delete the text of the first Guidance subsection and insert the following:

Before any improvement is made at a railroad-highway crossing, an engineering study involving both the highway authority and the railroad company should be conducted to determine what actions should be taken to enhance safety at the crossing. Actions may include the installation of traffic control systems or other improvements that have a demonstrated capacity to enhance safety and operations at the crossing.

With regard to traffic control systems, the following would apply:

- A. As a minimum, crossbucks, advance warning signs, and pavement markings as prescribed in Part 8 of the MUTCD shall be installed.
- B. The determination of the type of highway traffic control system, other than the minimum as required in A above, at a particular crossing is a two-step process.
 - 1. The first step is to calculate a hazard index (APV) or hazard level of the crossing in question. The APV would be expressed in accidents per year.

The Accident Prediction Value (APV) shall be calculated using the procedures from the *Rail-Highway Crossing Resource Allocation Procedure-User's Guide, Second Edition*. FHWA-IP-86-11.¹

Using the calculated APV and the existing type of highway traffic control system at the crossing, the calculated APV shall be compared to threshold values in Table 8A-100 of this ATMS to determine the type of traffic control system that should be installed.

- 2. The second step is to have the crossing evaluated by a diagnostic team as required by the *Alaska Policy on Railroad/Highway Crossings*.
- C. When a diagnostic team recommends the installation of a traffic control system different from that indicated by APV threshold values, or recommends another type of crossing improvement, the recommendation of the diagnostic team shall take precedence over the quantitative procedure.

¹ Available through the National Technical Information Service, Springfield Virginia, 22161.

**Table 8A-100
Qualitative Procedure**

EXISTING TRAFFIC CONTROL DEVICE	Calculated Accident Prediction Value, APV	RECOMMENDED ACTION FOR IMPROVEMENT
Passive	0.08 to 0.12 ² 0.12 to 0.15 0.15 to 0.23 0.23 to 12.4 12.4 to 18.5 Greater than 18.5	See note below. Flashing lights Flashing lights or gates and flashing lights Gates and flashing lights Gates and flashing lights or grade separation Grade separation
Flashing lights	0.12 to 0.18 ² 0.18 to 3.7 3.7 to 5.6 Greater than 5.6	See note below Gates and flashing lights Gates and flashing lights or grade separation Grade separation
Gates	1.32 to 1.98 ² Greater than 1.98	See note below Grade separation

²When the calculated hazard index falls within this range, the decision may be to do nothing, improve the existing traffic control system, install a different type of traffic control system, or make some other improvement at the crossing.

Support:

Other improvements that may be considered for enhancing crossing safety include:

- A. Improving sight distance to increase the visibility of the crossing and the train
- B. Closing the crossing
- C. Improving the approach alignment and/or grade of the roadway
- D. Instituting and enforcing railroad and/or highway operating regulations
- E. Improving the crossing surface
- F. Illuminating the crossing

The improvements shall also be in keeping with the Alaska Policy on Railroad/Highway Crossings.³

Delete the second paragraph under the Standard subsection.

³ Available through the Alaska Railroad Corporation, Pouch 7-2111 (RAR-34), Anchorage, Alaska 99510-7069.

CHAPTER 8B. SIGNS AND MARKINGS

Section 8B.02 Sizes of Grade Crossing Signs

Delete the text of the Standard subsection and insert the following:

The size of grade crossing signs shall be as shown in the ASDS.

Delete Table 8B-1 Sign Sizes for Grade Crossing Signs (Sheet 1 and 2).

Delete the Option subsection.

Section 8B.03 Highway-Rail Grade Crossing (Crossbuck) Sign (R15-1) and Number of Tracks Sign (R15-2)

Delete the second and third paragraphs of the second Standard subsection and insert the following:

A strip of high intensity or brighter retroreflective white material not less than 6 inches in width shall be mounted on the back of the entire length of each blade of each crossbuck sign, at all highway-rail grade crossings, except those where Crossbuck signs have been installed back-to back.

A strip of high intensity or brighter retroreflective white material 2-inches in width shall be applied on each support from the Crossbuck sign or Number of Tracks sign to within 2 feet above the edge of the roadway, except on the side of those supports where a STOP (R1-1) or YIELD (R1-2) sign or flashing lights have been installed or on the back side of supports for Crossbuck signs installed on one-way streets.

Section 8B.04 Highway-Rail Grade Crossing Advance Warning Signs (W10 Series)

Insert the following at the end of the first Standard subsection:

Guidance:

On divided highways and one-way streets, an additional W10-1 sign should also be installed on the left side of the roadway.

Delete the Option subsection.

Section 8B.07 DO NOT STOP ON TRACKS Sign (R8-8)

Delete the second Option paragraph and insert the following:

Guidance:

On divided highways and one-way streets, a second DO NOT STOP ON TRACKS sign should be placed on the near or far left side of the highway-rail grade crossing to further improve visibility of the sign.

Section 8B.20 Pavement Markings

Delete the last two paragraphs of the Standard subsection and insert the following:

Identical pavement markings shall be placed in each approach lane on all paved approaches to highway-rail grade crossings:

- A. Where signals or automatic gates are installed,**
- B. Where the posted or statutory highway speed is 40 MPH or greater, and**
- C. On all multi-lane roads**

Insert the following at the beginning of the Guidance subsection:

Identical pavement markings should be placed in each approach lane on all paved approaches to highway-rail grade crossings.

Section 8B.100 BICYCLES (skewed track crossing symbol) USE CAUTION (W10-100)

This is a new section. There is no corresponding section in the MUTCD.

Sections 8B.23 through 8B.99 are reserved for future MUTCD use.

Standard:

The BICYCLES (skewed track crossing symbol) USE CAUTION (W10-100) sign shall be used on all paved roadways and paths in advance of the railroad grade crossings that are skewed 15 degrees or more.

Guidance:

If used, the sign should be placed 65 feet in advance of the near rail of the skewed railroad crossing.

CHAPTER 8D. FLASHING-LIGHT SIGNALS, GATES, AND TRAFFIC CONTROL SIGNALS

Section 8D.02 Flashing-Light Signals, Post-Mounted

Delete the last sentence in the fourth paragraph of the second Standard subsection and insert the following:

Flashing-light units shall be 12-inch nominal diameter lenses.

In Figure 8D-1 Composite Drawing of Active Traffic Control Devices for Highway-Rail Grade Crossings Showing Clearances of the MUTCD, delete the 200 mm (8 in) dimension under the signal displays.

Delete Guidance subsection.

PART 9. TRAFFIC CONTROLS FOR BICYCLE FACILITIES

CHAPTER 9B. SIGNS

Section 9B.02 Design of Bicycle Signs

Delete the text of the Standard subsection and insert the following:

If the sign applies to both drivers and bicyclists, the size shall be as shown for motor vehicles in the ASDS.

The sign sizes for shared-use paths shall be those shown in the ASDS for bicycles, and shall be used only for signs installed exclusively for bicycle traffic applications.

Delete Table 9B-1. Minimum Sign Sizes for Bicycle Facilities (Sheet 1 & 2).

Section 9B.17 Bicycle Warning Sign (W11-1)

Delete the second Option subsection.

Delete the second Guidance subsection.

PART 10. TRAFFIC CONTROLS FOR HIGHWAY-LIGHT RAIL TRANSIT GRADE CROSSINGS

No modification to this part.