Heights and Lateral Locations of Traffic Signs

The Ohio Manual of Uniform Traffic Control Devices (OMUTCD) provides standards and guidelines for the use of traffic signs, pavement markings, traffic signals, and other traffic control devices in our state. The Manual applies to all roads open to public travel in Ohio.

This RON Technical Update highlights two of the important considerations for traffic signs: the mounting height, and the lateral offset.

**Source**

The source for this information is Part 2 of the OMUTCD:

- Section 2A.18 Mounting Height
- Section 2A.19 Lateral Offset

Figure 2A-2, reprinted on page 2 of this Update, provides examples of heights and lateral locations of sign installations. The text in Sections 2A.18 and 2A.19 describes the requirements in further detail for several different scenarios.

Listed below are portions of text from these OMUTCD Sections. Please refer to the complete text from the Manual for additional information.

**Mounting Height**

**Standard:**

The minimum height, measured vertically from the bottom of the sign to the elevation of the near edge of the pavement, of signs installed at the side of the road in rural areas shall be 5 feet (see Figure 2A-2).

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

**Option:**

The height to the bottom of a secondary sign mounted below another sign may be 1 foot less than the height specified in Paragraphs 4 and 5. [see the two bold-font paragraphs above]
Figure 2A-2. Examples of Heights and Lateral Locations of Sign Installations

A - ROADSIDE SIGN IN RURAL AREA

B - ROADSIDE SIGN IN RURAL AREA

C - ROADSIDE SIGN IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA

D - WARNING SIGN WITH ADVISORY SPEED PLAQUE IN RURAL AREA

*Where parking or pedestrian movements are likely to occur

E - ROADSIDE ASSEMBLY IN RURAL AREA

F - SIGN ON NOSE OF MEDIAN

G - FREEWAY OR EXPRESSWAY SIGN WITH SECONDARY SIGN

H - OVERHEAD SIGN

Note:
See Section 2A.19 for reduced lateral offset distances that may be used in areas where lateral offsets are limited, and in business, commercial, or residential areas where sidewalk width is limited or where existing poles are close to the curb.
Standard:
The minimum height, measured vertically from the bottom of the sign to the sidewalk, of signs installed above sidewalks shall be 7 feet.

If the bottom of a secondary sign that is mounted below another sign is mounted lower than 7 feet above a pedestrian sidewalk or pathway (see Section 6D.02), the secondary sign shall not project more than 4 inches into the pedestrian facility.

Standard:
Directional signs on freeways and expressways shall be installed with a minimum height of 7 feet measured vertically from the bottom of the sign to the elevation of the near edge of the pavement. All route signs, warning signs, and regulatory signs on freeways and expressways shall be installed with a minimum height of 7 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the pavement. If a secondary sign is mounted below another sign on a freeway or expressway, the major sign shall be installed with a minimum height of 8 feet and the secondary sign shall be installed with a minimum height of 5 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the pavement.

Where large signs having an area exceeding 50 square feet are installed on multiple breakaway posts, the clearance from the ground to the bottom of the sign shall be at least 7 feet.

Option:
A route sign assembly consisting of a route sign and auxiliary signs (see Section 2D.12) may be treated as a single sign for the purposes of this Section.

Lateral Offset
Standard:
For overhead sign supports, the minimum lateral offset from the edge of the shoulder (or if no shoulder exists, from the edge of the pavement) to the near edge of overhead sign supports (cantilever or sign bridges) shall be 6 feet. Overhead sign supports shall have a barrier or crash cushion to shield them if they are within the clear zone.

Post-mounted sign and object marker supports shall be crashworthy (breakaway, yielding, or shielded with a longitudinal barrier or crash cushion) if within the clear zone.

Guidance:
For post-mounted signs, the minimum lateral offset should be 12 feet from the edge of the traveled way. If a shoulder wider than 6 feet exists, the minimum lateral offset for post-mounted signs should be 6 feet from the edge of the shoulder.

Support:
The minimum lateral offset requirements for object markers are provided in Section 2C.65.

The minimum lateral offset is intended to keep trucks and cars that use the shoulders from striking the signs or supports.
Guidance:
All supports should be located as far as practical from the edge of the shoulder. Advantage should be taken to place signs behind existing roadside barriers, on over-crossing structures, or other locations that minimize the exposure of the traffic to sign supports.

Option:
Where permitted, signs may be placed on existing supports used for other purposes, such as highway traffic signal supports, highway lighting supports, and utility poles.

Standard:
If signs are placed on existing supports, they shall meet other placement criteria contained in this Manual.

Option:
Lesser lateral offsets may be used on connecting roadways or ramps at interchanges, but not less than 6 feet from the edge of the traveled way.

On conventional roads in areas where it is impractical to locate a sign with the lateral offset prescribed by this Section, a lateral offset of at least 2 feet may be used.

A lateral offset of at least 1 foot from the face of the curb may be used in business, commercial or residential areas where sidewalk width is limited or where existing poles are close to the curb.

Guidance:
Overhead sign supports and post-mounted sign and object marker supports should not intrude into the usable width of a sidewalk or other pedestrian facility.

Overhead Sign Installations
These types of installations are discussed in OMUTCD Section 2A.17.

Guidance:
Overhead signs should be used on freeways and expressways, at locations where some degree of lane-use control is desirable, and at locations where space is not available at the roadside.

Chevron Alignment Signs
Section 2C.09 discusses the use and location requirements for Chevron Alignment signs. The minimum height requirement is stated as follows: Chevron Alignment signs shall be installed at a minimum height of 4 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the traveled way.
Object Markers

Object markers are discussed in OMUTCD Sections 2C.63 through 2C.65. Section 2C.63 includes the following text.

Guidance:
When used for marking obstructions within the roadway or obstructions that are 8 feet or less from the shoulder or curb, the minimum mounting height, measured from the bottom of the object marker to the elevation of the near edge of the traveled way, should be 4 feet.

When used to mark objects more than 8 feet from the shoulder or curb, the clearance from the ground to the bottom of the object marker should be at least 4 feet.

Object markers should not present a vertical or horizontal clearance obstacle for pedestrians.

“Who can I call if I have questions?”
Questions about traffic signs may be directed to Jim Roth, P.E., Signing Engineer with ODOT’s Office of Traffic Operations, at (614) 752-0438. Assistance may also be available from Traffic Engineering staff at the ODOT District Office in your area, or from your County Engineer’s Office.

“How can I access the OMUTCD?”
The 2012 Edition of the OMUTCD is available online for viewing or downloading (free of charge), at: www.dot.state.oh.us/omutcd. Printed copies are also available. The Manual is provided free to government agencies, local jurisdictions, schools and public libraries; to others there will be a charge. The cost is $34.50 plus shipping and tax. Requests should be directed to ODOT’s Office of Contracts at 1-800-459-3778 or 614-466-3778.

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