
Channelizing Devices

Design Manual
Chapter 9
Traffic Control

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Channelizing devices are used to warn motorists of unusual conditions created by construction or maintenance activities in or near the traveled way, and to guide motorists safely past the work area. Channelizing devices include cones, vertical panels, drums, barricades, and barriers. Part VI of the MUTCD¹ describes in detail the different types of channelizing devices and their uses.

Spacing of Channelizing Devices

The spacing of channelizing devices through merging and shifting tapers should be a distance in feet which is approximately equal to the regulatory speed limit in miles per hour for English units and approximately equal to the regulatory speed limit in miles per hour multiplied by 0.3048 and rounded up to the nearest meter for metric units. For example, if a taper is on a roadway with a speed limit of 55 mph, the devices should be spaced 55 feet apart (17 meters). For two-way traffic tapers, a minimum of four channelizing devices should be spaced 25 to 30 feet (7.5 to 9 meters) apart, regardless of the speed limit. See Section 9A-3 for more information on tapers.

Devices placed adjacent to the traveled way to keep traffic out of the activity area should be spaced so that it is apparent a portion of the roadway is closed to traffic. The extent and type of activity, the speed limit of the roadway, and the vertical and horizontal alignment of the roadway all affect how the proper spacing is determined. The designer should avoid gaps in traffic control which may falsely indicate to drivers that they have passed the work area. If the work area includes intermittent activity throughout a section of one mile or more, drivers should be reminded periodically that they are still in a work area. When the work zone exceeds 1/4 mile (400 meters), additional Type II barricades should be placed in the closed lane at 1000-foot (300-meter) intervals. Refer to pertinent Standard Road Plans for more details about the spacing of channelizing devices.

Use of Channelizing Devices

When traffic control zones are to be in place during nighttime hours, drums must be used on all merging tapers, onsite detours, and high-speed crossovers. Refer to the RS series of the *Standard Road Plans* and the 520 and 521 series of the *Road Design Details* for more information.

Cones may be used during daylight hours only, but only as indicated in the appropriate Standard Road Plans and Road Design Details.

¹ FHWA, *Manual on Uniform Traffic Control Devices*, Washington, D.C., U.S. Government Printing Office, 2000.