

Gates With Medians or Channelization Devices

Install medians or channelization devices on both highway approaches to a public highway-rail grade crossing denying highway users the option of circumventing the approach lane gates by switching into the opposing (oncoming) traffic lane and driving around the lowered gates to cross the tracks.



REQUIREMENTS

1. Opposing traffic lanes on both highway approaches to the crossing must be separated by either: (1) medians bounded by non-traversable curbs or (2) channelization devices.

2. Medians or channelization devices must extend at least 100 feet from the gate arm, or if there is an intersection within 100 feet of the gate, the median or channelization device must

extend at least 60 feet from the gate arm.

3. Intersections of two or more streets, or a street and an alley, that are within 60 feet of the gate arm must be closed or relocated.

4. The railroad crossing must be equipped with Constant Warning Time Circuitry, a Power Out

Indicator, gates and flashing lights.

5. The gap between the lowered gate and the curb or channelization device must be one foot or less.

6. "Break-away" channelization devices must be frequently monitored to replace broken elements.

One Way Street with Gate(s)

Gate(s) must be installed such that all approaching highway lanes to the public crossing are completely blocked.

REQUIREMENTS

1. Gate arms on the approach side of the crossing should extend across the road to within one foot of the far edge of the pavement. If a gate is used on each side of the road, the gap between the ends of the gates, when both are in the lowered or down position, must not be more than two feet.
2. If only one gate is used, the edge of the road opposite the gate mechanism must be configured with a non-traversable curb extending at least 100 feet.
3. The railroad crossing must be equipped with Constant Warning Time Circuitry, a Power Out Indicator, gates and flashing lights.

Permanent Closure of a Public Crossing

Permanently close the crossing to traffic.

REQUIREMENTS

1. The closure system must completely block highway traffic from entering the grade crossing.
2. Barricades and signs used for closure of the roadway shall conform to the standards contained in the MUTCD.
3. The closure system must be tamper and vandal resistant.

Temporary Closures

Close the crossing to traffic during designated quiet periods. (This Supplemental Safety Measure can only be implemented within Partial Quiet Zones.)

REQUIREMENTS

1. The closure system must completely block highway traffic on all approach lanes to the crossing.
2. The closure system must completely block adjacent pedestrian crossings.
3. The crossing shall be closed from 10 p.m. until 7 a.m. every day.
4. Barricades and signs shall conform to the standards contained in the MUTCD.
5. Daily activation and deactivation of the system is the responsibility of the public authority.
6. The system must be tamper and vandal resistant
7. The closure system shall be equipped with a monitoring device that contains an indicator which is visible to the train crew prior to entering the crossing. The indicator shall illuminate whenever the closure device is deployed.



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Which Solution is Right For You?



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Treatment Options

One of the most important steps in creating a New Quiet Zone is determining which treatments will work best for your crossings. Engineering treatments to be considered are wayside horns, four-quadrant gates, raised medians, channelization devices, one-way streets, temporary and permanent closures.

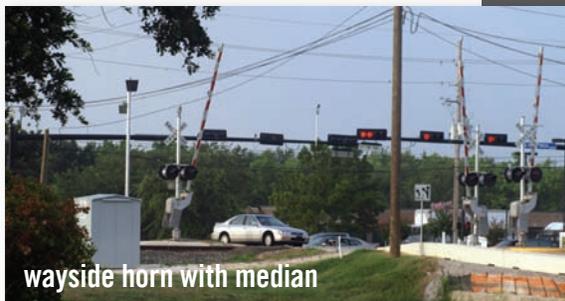


Wayside Horns

A stationary horn system activated by the crossing warning system, mounted at the crossing, rather than on the locomotive, that delivers an audible warning to motorists and pedestrians. Considered a one-for-one substitute for the train horn, can be used within a quiet zone or at individual crossings to eliminate the need for a train to sound its horn.

Considerations for use of Wayside Horns

Wayside Horns are best utilized if the installation of raised medians, channelization devices, permanent closures, temporary closures, one-way streets, or four-quadrant gates are either considered not feasible or are cost prohibitive.



REQUIREMENTS

1. The railroad crossing must be equipped with Constant Warning Time Circuitry, a Power Out Indicator, gates and flashing lights.
2. The crossing must have an indicator to notify the train crew of the status of the wayside horn system.
3. The railroad must adopt an operating rule, bulletin, or special instruction.
4. The horn system must provide a minimum sound level of 92 dB(A) when measured 100 feet from the center line of the nearest track.
5. The horn system must sound at a minimum of 15 seconds prior to the train's arrival at the crossing or simultaneously with the flashing lights or descent of the gate arm.
6. The horn shall be directed toward approaching vehicular traffic.

Four-Quadrant Gate System

Installation of gates at a crossing which is sufficient to fully block highway traffic from entering the crossing when the gates are lowered, including at least one gate for each direction of traffic on each approach to the crossing.



REQUIREMENTS

Four-quadrant gate systems conform to the standards for four-quadrant gates contained in the MUTCD and must also comply with the following:

1. When a train is approaching, all highway approach and exit lanes on both sides of the highway-rail crossing must be spanned by gates.
2. The railroad crossing must be equipped with Constant Warning Time Circuitry and Power Out Indicator.
3. If medians are not present, the gap between the ends of the entrance and exit gates (when the gates are lowered) must be less than two feet. If equipped with a median or a channelization device between the approach and exit lanes, the lowered gates must reach to within one foot of the median or channelization device.

