

8830.1650 TRAFFIC SIGNAL NEAR GRADE CROSSING.

Subpart 1. **Preemption by active warning device control.** When a grade crossing with an active warning device is within or near a roadway intersection controlled by a traffic signal, the control of the traffic signal must be preempted by the control of the active warning device upon the approach of trains to avoid conflicting aspects of the traffic signal and the active warning device. This preemption feature must establish and maintain the preempted condition while the active warning device is operating. The interconnection must be made to the traffic signals within 200 feet (61 meters) of the crossing.

At grade crossings where train movements are regulated or limited to the extent that active warning devices are not required, preemption of the adjacent signalized roadway intersections may still be desirable to permit nonconflicting roadway traffic to proceed during the time the grade crossing is blocked by a train. The responsible road authority shall determine which traffic signals will be preempted.

Subp. 2. **Preemption sequence.** When the preemption sequence begins, it must at once bring into effect a traffic signal display that will permit all vehicles to clear the tracks before the train reaches the grade crossing.

When the green light is preempted by train operation, a yellow change interval must be inserted in the traffic signal sequence for safety and consistency. The traffic signal must indicate a green light in order to clear traffic off the tracks and give a red light to stop traffic approaching the tracks. After the traffic clears the tracks, the traffic signal may be operated to permit vehicle movements that do not cross the tracks, but must prohibit movements over the tracks.

When the train clears the grade crossing, the traffic signal must return to its designated phase.

Subp. 2a. **Turn restrictions.** At a roadway intersection where the traffic signals are preempted by the approach of a train, the "no turn on red" sign, numbered R10-11a, may be used to prohibit turning movements toward the grade crossing. Use of this sign must comply with the MMUTCD.

Subp. 3. **Phasing and timing of traffic signals.** Where feasible, the location and the phasing and timing of traffic signals near grade crossings must be designed so that vehicles are not required to stop on the tracks, even if this increases the waiting time. The exact nature of the display and the location of the traffic signals to accomplish this will depend on the physical relationship of the tracks to the roadway intersection area.

Subp. 4. **Traffic signal not substituted for active warning device.** Traffic signals must not be used on mainline grade crossings in place of active warning devices. However, at industrial track crossings and other places where train movements are slow, as in

switching operations, traffic signals may be used instead of active warning devices to warn motorists of the approach or presence of a train.

Statutory Authority: *MS s 218.071; 219.073; 219.165; 219.17; 219.384; 222.50; 222.58; 222.63*

History: *23 SR 524*

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