

Approved by NCUTCD Council June 25, 2004

TECHNICAL COMMITTEE: Railroad and Light Rail Transit Technical Committee

DATE OF ACTION: June 25, 2004

TOPIC: Who determines preemption operation.

ORIGIN OF REQUEST: NCUTCD Railroad and Light Rail Transit Technical Committee

AFFECTED PORTIONS OF MUTCD: Section 8D.07 of the MUTCD

DISCUSSION: The RR&LRT TC recommend the following revised Guidance in 8D.07 to align with Section 8A.01 Introduction. 8A.01 Introduction includes the following wording:

The highway agency or authority with jurisdiction and the regulatory agency with statutory authority, if applicable, jointly determine the need and selection of devices at a highway-rail grade crossing.

In addition the RR&LRT TC felt the railroads neither had the expertise nor the authority to determine the preemption operation of the traffic signals. A Standard was also added to clarify that the timing parameters must be furnished by the jurisdiction so that the railroad will be able to design the train detection circuitry.

STATUS: Accepted by the National Committee

Section 8D.07 Traffic Control Signals at or Near Highway-Rail Grade Crossings

Option:

Traffic control signals may be used instead of flashing-light signals to control road users at industrial highway-rail grade crossings and other places where train movements are very slow, such as in switching operations.

Standard:

The appropriate provisions of Part 4 relating to traffic control signal design, installation, and operation shall be applicable where traffic control signals are used to control road users instead of flashing-light signals at highway-rail grade crossings.

Traffic control signals shall not be used instead of flashing-light signals to control road users at a mainline highway-rail grade crossing.

Guidance:

The highway agency or authority with jurisdiction, and the regulatory agency with statutory authority, if applicable, ~~and the railroad company~~ should jointly determine the preemption operation and timing of traffic

control signals interconnected with ~~at~~ highway-rail grade crossings adjacent to active traffic control systems ~~signalized highway intersections.~~

Standard:

The type of preemption and any related timing parameters shall be provided to the railroad to design the train detection circuitry.

Guidance:

If a highway-rail grade crossing is equipped with a flashing-light signal system and is located within 60 m (200 ft) of an intersection or mid-block location controlled by a traffic control signal, the traffic control signal should be provided with preemption in accordance with Section 4D.13.

Coordination with the flashing-light signal system, queue detection, or other alternatives should be considered for traffic control signals located farther than 60 m (200 ft) from the highway-rail grade crossing. Factors to be considered should include traffic volumes, vehicle mix, vehicle and train approach speeds, frequency of trains, and queue lengths.