## Federal Highway Administration 400 Seventh Street, SW Washington, DC 20590

**INFORMATION**: Pilot Project Train Whistle Ban

Shelley J. Row, P.E. Director, Office of Transportation Operations Rudolph M. Umbs, P.E. Chief of Safety Design Division

HOTO-1

Mr. John G. Leeds, Jr. Director, Office of Safety Analysis (RRS-20)

Thank you for the transmittal from Federal Railroad Administration (FRA), Office of Safety Analysis, Mr. Brian F. Gilleran. In his transmittal, he requested we review the project at three highway-rail grade crossings in the city of Coon Rapids, Minnesota. We were asked to review the project proposals for conformance with the Manual on Uniform Traffic Control Device (MUTCD) and other relevant highway safety principles. We appreciate FRA sending us information regarding the city s desire use supplemental safety measures to eliminate the need to sound a train horn at their three crossings. Below are our comments on the review of the pilot project. Please follow-up with the city of Coon Rapids on our requests outlined below.

- 1. On page 3 of the proposal, the start date for phase I is April 1999. According to the schedule of 4 months for each phase, this project has already been conducted and completed. We are curious why the Federal Highway Administration (FHWA) was not notified in advance of the beginning of the project and why FRA is seeking our comments at this point. In the future, we ask that FRA also work with the FHWA division office in any State where changes are anticipated to traffic control devices at highway-rail grade crossings whether or not these changes are deemed experimental. The FHWA Safety Engineers are our experts in the field on traffic control devices. They can make the determination as to whether the public agency responsible for the traffic control devices need to apply for experimentation to the FHWA s Office of Transportation Operations. The FHWA s Safety Engineer in our Minnesota Division Office is Mr. David Kopacz. His telephone number is 651-291-6126. Normally the city, county, or State will contact an FHWA division office; however, we would appreciate that FRA work with us to make sure we are involved at the conception of a project.
- 2. The TRAINS DO NOT SOUND HORNS word message warning sign is not designed properly. Warning signs shall be designed according to the spacing and letter height described in the *Standard Highway Signs Manual and the Standard Alphabets for Highway Signs*. The *Standard Highway Signs Manual* can be purchased from the

Government Printing Office (GPO), Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954. The *Standard Alphabets for Highway Signs* is available at no cost from us. The minimum sign size should be 48-inch x 48-inch as long as that size can accommodate a 6-inch letter height instead of the 3-inch height shown in the proposal. The reason for the increased letter height is that although the report states the vehicles crossing the tracks are driving at "relatively low vehicle speeds," the pictures attached seem to indicate roads with at least a speed limit of 40 mph. Please clarify the speed limits of the roads in question so we can be assured that a 6-inch height of the letters on the signs is sufficient. We encourage you to work with your State highway sign department to design this sign.

We have been informed that the TRAINS DO NOT SOUND HORNS sign is already installed with a 3-inch letter height. This sign is not in conformance with the MUTCD and should be removed.

The FHWA, in cooperation with FRA, developed a NO TRAIN HORN sign (W10-9) and has included it in the Millennium edition of the MUTCD. The language in the MUTCD reads, "A NO TRAIN HORN (W10-9) sign shall be installed at each highway-rail grade crossing where there is a Federal Railroad Administration authorization for trains to not sound a horn. The sign shall be mounted as a supplemental plaque below the Advance Warning (W10-1) sign." This is the standard sign that shall be used.

- 3. Given that the above changes are made to the TRAINS DO NOT SOUND HORNS word message sign, this does not constitute a situation where an MUTCD experimentation is required. Word message warning signs other than those included in the MUTCD are allowed by Section 2C.02.
- 4. Please clarify whether the delineators on top of the median island will be spaced 7 feet apart or 14 feet apart. The December 16, 1998, Pilot Project Train Whistle Ban report indicates 14 foot spacing. The July 1, 1998, letter from Ms. Jolene Molitoris indicates the FRA has been considering 7-foot intervals but the proposal will provide an opportunity to assess the 14-foot option. The FHWA is surprised to hear the FRA is in the business of designing traffic control devices on the highway right-of-way. We believe that determination should be left up to State, local, and FHWA traffic and geometric design engineers, with input from the FRA.

Unless you can show some extenuating circumstances from your review, we prefer the spacing used on the median-mounted delineators be 14 feet apart or at a spacing determined by the local jurisdiction. If the median-mounted delineators are too close together, there is a chance of restricting sight distance of trains and pedestrians for drivers in small cars, and an extra burden of cost for installing and maintaining these additional

delineators. We feel if a driver is going to drive over the median that the presence of delineators, no matter how closely they are spaced, will not deter them.

- 5. We support the recommendation in the FRA July 1, 1998, letter, where it is indicated the median lengths should be extended to at least 100 feet on both approaches to the 121<sup>st</sup> Street crossing. Often drivers exiting driveways, streets, or alleys are tempted to travel in opposing lanes to circumvent a median and the gate at the highway-rail grade crossing. The FHWA division offices can work with the cities and States on the numerous access issues associated with the use of medians at highway-rail grade crossings.
- 6. On page 3 of the Coon Rapids proposal, it states that the consultant will review violation data on a weekly basis and "if it is determined that the number of violations is increasing or safety is otherwise being compromised, the project <u>may</u> be terminated." Any time a traffic control device of other safety feature is compromising safety, the device or design shall be removed.

As stated in Title 23 Code of Federal Regulations, Part 655.603, "The MUTCD, approved by the Federal Highway Administrator, is the national standard for all traffic control devices installed on any street, highway, or bicycle trail open to public travel in accordance with Title 23, United States Code, Section 109(d) and 402(a)." Particularly over the past year, we have become aware of an increased number of incidents where the FRA has advised State and local agencies on issues associated with highway traffic control devices and infrastructure improvements. However, as cited above, the FHWA has this authority and we would appreciate closer coordination with not only our Office of Transportation Operations, but also the FHWA division offices.

Please feel free to contact Mrs. Louisa M. Ward at 202-366-4372 if you have additional questions about experimentations concerning supplemental safety measures, or need to know who to contact in our division offices for anticipated changes to traffic control devices at highway-rail grade crossings. For filing purposes, we have assigned your request the following official interpretation number and title "VIII-58(I) City of Coon Rapids, Minnesota Supplemental Safety Measures."