



## Request for City Council Committee Action From the Department of Public Works

Date: December 14, 2004  
To: Honorable Sandra Colvin Roy, Chair Transportation & Public Works Committee  
Referral to: None

**Subject: Railroad Quiet Zones**

**Recommendation:** Direct Public Works to Submit Engineering Report to Federal Railroad Administration

**Previous Directives:**

- 9/24/04 Receive & File – Interim Report on FRA Quiet Zone Requirements

**Prepared by:** John R. Hotvet, P.E., Traffic Operations Engineer, 673-2743

**Approved by:** \_\_\_\_\_  
Klara A. Fabry, P.E., City Engineer, Director of Public Works

**Presenters:** Jon Wertjes, P.E., Director of Traffic and Parking Services

**Financial Impact** (Check those that apply)

No financial impact - or - Action is within current department budget.  
(If checked, go directly to Background/Supporting Information)

Action requires an appropriation increase to the Capital Budget

Action requires an appropriation increase to the Operating Budget

Action provides increased revenue for appropriation increase

Action requires use of contingency or reserves

Other financial impact (Explain):

Request provided to the Budget Office when provided to the Committee Coordinator

### Background/Supporting Information

New Federal law (49 USC 20153) will require all trains under the jurisdiction of the Federal Railroad Administration (FRA) to sound the locomotive horns prior to arrival at all public grade crossings. The new federal law was to go into affect beginning on December 18, 2004. However, the FRA has extended the effective date for the new rule to April 1, 2005. This law will affect communities such as Minneapolis with whistle bans that prohibit the sounding of horns, especially during nighttime hours. As a means to silence locomotive horns the FRA allows for communities to conduct an engineering study to determine if public crossings can operate safely without locomotive horns. The study is then reviewed by the FRA and if approved the corridor created is called a "Quiet Zone".

To meet the requirements of this new Federal law, Public Works has been proactive to accomplish the three necessary steps:

- Step 1: Pre-Rule Quiet Zone Status
- Step 2: Long-Term Quiet Zone Plan
- Step 3: Railroad Crossing Improvements

### Step 1: Pre-Rule Quiet Zone Status

Federal law requires all communities with existing whistle bans (like Minneapolis) to complete a detailed engineering study and analysis of each public and private at-grade crossing in the City. This study must be submitted to the FRA, who has the sole authority to grant "Quiet Zone" status. Public Works is proposing to submit to the FRA in January 2005.

Public Works has contracted with a consultant to prepare the engineering study on the locomotive horn issue. The consultant has reviewed all the public and private railroad-street grade crossings in Minneapolis, doing a comprehensive risk-based assessment and engineering study, preparing a formal submittal to the FRA, and providing support for potential corridors that may be eligible for Pre-Rule Quiet Zone status. At this time the City of Minneapolis has 90 public and 27 private at-grade crossings.

The consultant has completed the analysis, and FRA and Public Works have met twice to discuss this matter. Based on the analysis, it appears that Minneapolis will qualify for approval of "Pre-Rule Quiet Zone Status" by the FRA for all rail corridors within the city. This will allow trains to continue to operate through the City without sounding horns at grade crossings until 2010. As a reminder, this applies only to commercial railroads and not LRT.

The "Pre-Rule" status is similar to a "Grandfather clause", such that the City is afforded time to bring all 90 public and 27 private at-grade crossings up to current FRA standards. Very few of the 117 grade crossings in the City are compliant with the new Federal law. Continuation of train operation without horns after 2010 will require some type of Supplemental Safety Measure (SSM) at nearly every grade crossing.

Public Works is requesting direction to submit a copy of the engineering study to the Federal Railroad Administration for their approval. A copy of the executive summary of this study is attached. The completed Quiet Zone submittal is approximately 300 hundred pages.

FRA Action Item Due: April 2005 submit Pre-Rule Quiet Zone documentation to FRA

### Step 2: Long-Term Quiet Zone Plan

The second step is to develop an improvement plan (within two years of the federal law action, April 2007) to address corridors that will need changes to retain the whistle ban. However, to effectively address the required railroad crossing improvements (step 3) and related long-term funding needs, Public Works will proceed promptly on step 2.

As part of the Capitol Improvement Program (CIP) process for 2005, Public Works will develop a five-year plan to address the whistle ban requirements. Alternatives (combination of upgrades and/or closures) and cost estimates will be developed for consideration by the City Council.

A detailed cost estimate for upgrading all the grade crossings cannot be developed until a detailed analysis of each grade crossing is completed. Permanent improvements could range from approximately \$200,000 to install a four-quadrant gate system at a crossing to something less if other mitigation methods can be used. An initial citywide cost estimate averaging \$50,000 for each grade crossing results in an overall total cost about \$4.5 million. Potential funds for improvements include safety funding if it's an existing safety issue, other federal funds such as TEA-21 and regional and local sources.

Public Works and the consultant will continue to work with the City, Federal Railroad Administration (FRA), MnDOT, Hennepin County, and all five railroad owner/operators within the City to prepare this plan with alternatives, cost estimates, and funding options.

FRA Action Item Due: April 2007 - Submit FINAL plan to FRA documenting City's intent to become compliant with long-term Quiet Zone status

### Step 3: Railroad Crossing Improvements

The last step will be to complete the required railroad crossing improvements to retain the whistle ban within five years of the federal law action (April 2010). Potential improvements include crossings upgraded with flashing lights, automatic gates, medians on the approaches, four quadrant gates, crossing closures, etc.

Lastly, Public Works will need to update the railroad crossing database on an annual basis and review accident records to ensure adequacy of warning devices to maintain Quiet Zone status.

FRA Action Item Due: April 2010 - Submit FRA documentation to retain long-term Quiet Zone status

#### Attachments:

Executive Summary, 12/3/04

10 Quiet Zone Maps, November 2004

Sample Pre-Rule Quiet Zone info (BNSF-Mpls-Midway-Wayzata), November 2004