

statistically meaningful results, and none were determined. FRA will apply the national estimates of ban-induced accident increases for passive crossings and flashers-only crossings to the Chicago Region.

Westat's calculations for the Chicago Region once again showed a negative effect from use of the train horn at gated crossings when only Chicago Region crossings were included in the analysis, but results were not statistically significant. For reasons more fully developed below, this result was

expected, since railroads in the Chicago Region have been free to select which exemptions to observe and which to ignore.

However, Chicago gated no-whistle crossings experienced 17.3 percent more accidents when compared with the national gated crossings where the train horn sounded. This result was not statistically significant at the conventional 5 percent level, but it is more likely than not that the value is positive ($P > |t| = 0.312$). Comparing this result with the national data, Westat

noted that "the ban effect in the Chicago Region is significantly different from the ban effect in the rest of the nation." Taking note of this finding and other information discussed below, FRA will apply a 17.3 percent estimate of ban-induced excess risk to gated crossings in Chicago Region Pre-Rule Quiet Zones. FRA will apply the national average for gated crossings (Chicago excluded) to New Quiet Zones in the Chicago Region. The rationale for this decision is more fully developed below.

BAN EFFECTS/TRAIN HORN EFFECTIVENESS [Summary Table]

Warning type ¹	Effect of ban (includ. no-whistle policy) on accident frequency (percent increase) ²	Reduction required from ban risk to retain Pre-Rule QZ (percent reduction and factor) ³	Comment
Nation (Except Florida East Coast Ry./and Chicago Region)			
Passive	74.9	43 (.43)	
Flashers only	30.9	27 (.27)	
Flashers with gates	66.8	40 (.40)	
Chicago Region			
Passive	74.9	43 (.43)	From national avg.
Flashers only	30.9	27 (.27)	From national avg.
Flashers with gates	17.3	15 (.15)	Regional estimate.
Florida East Coast Railway (FEC) ⁴			
Flashers with gates	To be determined	Not applicable	Regional estimate subject to review.

Table Notes:

¹ These are the primary warning device types. FRA is aware that a variety of arrangements are in place at individual crossings and will provide guidance for association of the various arrangements with these benchmark values.

² This is the amount by which accident frequency has been estimated to increase when the horn is silenced.

³ This is the reduction in collision frequency that must be achieved in order to restore crossings impacted by a ban to the level they would experience if the horn sounded. To simplify, if 10 accidents of equal severity were expected in a ban area with gated crossings, a reduction of .40 would be required—to a level of 6 accidents—in order to retain the Pre-Rule Quiet Zone (unless a smaller reduction in accidents would place the Quiet Zone Risk Index below the NSRT). As a matter of technical practice, the factor is applied to the crossing's risk index.

⁴ Crossings on the FEC are currently subject to Emergency Order No. 15. FRA had found an alarmingly large increase in the accident rate when nighttime bans were imposed at crossings with flashing lights and gates.

10. Funding

A number of commenters expressed concern that the NPRM was silent as to potential funding sources for implementation of the proposed rule. Generally, commenters indicated that without additional funding being made available, quiet zone implementation would be beyond the financial reach of many communities. Several commenters suggested that the Federal government should provide the funding necessary to implement quiet zones, while other commenters suggested that the operating railroads should provide the funding or that the costs should be shared among some or all interested parties (including Federal, State, and local governments, as well as railroads, shippers, and other users of the rail system).

Several individuals and local governments, citing local budget constraint concerns, suggested that if the Federal government is going to require additional safety measures at highway-rail crossings, then the Federal government should provide the funds for such measures. One individual representing a group of Massachusetts families suggested that the costs of safety at highway-rail crossings should not be the sole burden of communities abutting the railroad, because the general public uses highway-rail crossings. This individual suggested that the NPRM effectively proposes a tax on innocent citizens to protect those who willfully violate traffic laws by illegally proceeding around grade crossing safety devices in attempts to "beat the train." A few individuals suggested that the costs of implementing

quiet zones should be shared among the Federal government, railroads and local communities. One of these commenters further recommended that because the rail system is a national resource, the resulting noise impacts are a national issue. Accordingly, this commenter suggested that communities disproportionately affected by railroad noise should not have to provide a disproportionate amount of funding to solve the problem of railroad noise. This commenter recommended the development of a formula to effectively normalize the amount of funding communities would be required to contribute to the implementation of quiet zones within their jurisdictions, based on norms present throughout the United States.

Other individuals commented that because the impact necessitating the