

Some States, and some railroads, are more aggressive than others in providing updated data for the Inventory. When FRA examined the Inventory in the summer of the year 2000, FRA found that the average age of the most recent Inventory updates for the State of Illinois was nine years. Except as noted below, FRA's attempts to elicit more recent information from State authorities during the pendency of this proceeding have been largely unsuccessful.

Until recently, the Inventory did not contain a field for the presence of a whistle ban, and FRA has not found notations in the current inventory to be sufficiently complete or reliable. The issue of which crossings have been subject to bans or exemptions during particular periods of time has been resolved through two means. First, in preparing the National Study relied upon in the NPRM, FRA relied to a significant extent upon a survey conducted by the AAR (survey information received in 1992) and on information received during outreach in anticipation of this rulemaking.

Second, FRA has asked commenters in this proceeding to provide the best information that they have available, including a direct request to AAR to update its earlier survey of crossings (response received in October of 2000).

Third, FRA has directly approached public authorities in the Chicago Region asking for information. Finally, in the case of some crossings for which the status was clearly questionable (both as to whistle ban status and other data elements), FRA has reviewed railroad documents and conducted site visits.

Given the discrepancies pointed out in the NPRM, FRA has sought to obtain updated Inventory and ban information from the City of Chicago, but that had not occurred more than two years after the requests were made and as this interim final rule was being completed. (Attempting to resolve this data problem has caused significant delay in this rulemaking, as FRA has endeavored to use the best available and most credible information in preparing this interim final rule. However, given the policy choices FRA has made in this interim final rule, a comprehensive resolution of the data problem has not proven necessary.)

Commenters on the NPRM questioned FRA's data, which FRA had characterized as finding a significant effect from silencing the train horn at gated crossings in the Chicago Region. Some of this criticism was direct (challenging the relevant FRA data on gated crossings), and other criticism was indirect (challenging data on passively

signed and flashers-only crossings that FRA had published to complete the public record but had noted might be unreliable).

Most Chicago-area commenters were convinced that the whistle ban grade crossing collision rate in Chicago is lower than the rate throughout the rest of the nation, and many contended that the train horn is wholly ineffective. In short, they doubted the conclusion stated in FRA's *Updated Analysis of Train Whistle Bans* (January 2000) that, on average, gated whistle ban crossings in the Chicago Region experienced 58 percent more collisions than gated crossings with similar predicted risk of a collision at which train horns sounded. Two studies by associations of local governments, discussed below, seemed to indicate different results.

As noted above in the discussion of the Westat reports, FRA initially responded to the comments and analysis by contracting with that statistical firm to regenerate the national study, using the best available information for the study period 1992–1996, to maintain comparability with the earlier work and to avoid what might be temporary effects from the extensive publicity associated with this rulemaking. FRA provided the best available information regarding the status of crossings in Chicago during the study period, along with other necessary data. Westat reviewed the prior FRA method (which it found useful and appropriate), made some improvements in the method, and computed national results which are reported above. With respect to gated crossings in the Chicago Region, Westat found as follows:

For grade crossings with gates, the estimated effect of a whistle ban depended on the comparison group in the Chicago area. * * * Using the Continental U.S., Florida and Chicago area excluded, as the comparison group, grade crossings with gates without a ban had a significantly lower accident rate than grade crossings with a ban, whereas using the Chicago area grade crossings with no ban for comparison, there was no statistically significant effect associated with a ban.

Zador, Paul L. at 6 (April 1, 2002).

Stated differently, during the study period Chicago Region gated whistle ban crossings experienced an average of 34 percent more accidents than similar crossings in the Nation where the train horn was sounded. The results were statistically significant but as noted above a further statistical test indicated poor model fit.

Accordingly, as FRA endeavored to bring together the various sources of information and analysis in preparation of this interim final rule, FRA made

further inquiry into the distribution of “no whistle crossings” with the conclusions recited above. FRA then provided the corrected set to Westat for further analysis. Recognizing that the current no-whistle status could not be assumed to be valid for the earlier period, during which substantial ICC and railroad decision making had no doubt resulted in major changes in status, FRA also provided a more recent accident data set (1997–2001).

As noted above, the result was that, for gated crossings (by far the largest component of the Chicago Region issue), it was determined that no-whistle policies resulted in an increase of 17.3 percent in accidents. This value was not supported by a very high level of statistical confidence. Accordingly, FRA was left with three options:

1. Elect to determine that the Chicago analysis was inconclusive, that the statute requires FRA to find that the train horn has been fully compensated for, and that the logical alternative was to employ national averages (with or without inclusion of the Chicago data).

2. Take note of the negative impact results yielded by the comparison of Chicago train horn and Chicago no-whistle crossings, and determine the impact of no-whistle policies in the Chicago Region to be zero, at least for pre-rule no-whistle crossings; or

3. Note the Westat finding that the Chicago crossings are in fact different in their characteristics and accept the most recent Westat estimate (17.3 percent) of the effect of whistle bans on accident rates at gated Chicago Region crossings, either for all quiet zones, or for Pre-Rule Quiet Zones only.

The first option of using national averages for the entire Nation, including Chicago, would have been employed by FRA if the Chicago Regional data were not available or their use inappropriate. FRA could have rationally decided that the limited significance of the Chicago Region statistical conclusions did not require reliance on those conclusions. This would have resulted in a fully functional and appropriate interim final rule consistent with the Act; a rule FRA would not have hesitated issuing. However acceptable this option was, it would have necessitated according little weight to a sizable body of testimony from the Chicago Region together with statistical analysis and qualitative knowledge of the Chicago Region's unique characteristics (discussed further below).

The second option would require FRA to ignore the reality of discretionary selection and the strong evidence based on other national data (memorialized in the statute giving rise to this rulemaking