

highway-rail crossings. However, the statute clearly contemplates that motorists will be given the additional, often final warning that the train horn provides (or that other safety measures will be instituted), even where warning systems employing flashing lights and gates are present. Further, as a matter of policy, FRA believes that it is appropriate to protect even the unwise from the consequences of their misdeeds where those consequences are especially severe—and where society as a whole may bear the burden of those consequences.

As noted elsewhere in this preamble, victims of collisions at highway-rail crossings are not limited to reckless or intoxicated drivers. Indeed, in many cases victims are innocent passengers who have had no control whatsoever over the driver's behavior.

Even though collisions at highway-rail crossings are far more severe in their consequences than the average highway accident, most victims survive. Many incur substantial medical bills and require extended rehabilitation. Costs are borne by the general public through health and disability insurance arrangements, and through higher costs of goods and services provided by employers who must extend sick leave and other benefits. In this regard, many costs associated with casualties that occur in whistle ban jurisdictions are in effect hidden taxes on persons outside those communities over which these costs are spread. From an economic standpoint, the community enjoys its quiet and, unless measures have been taken to compensate for the silencing of the horn, someone else pays for most of it.

Finally, there can be victims on the trains and in the general community, as well. Collisions between trucks and heavy trains can cause the injury or even death of train crew members. Some collisions at crossings cause trains to derail (the risk is significant when a heavy truck is involved), and cars containing hazardous materials are found in a high percentage of trains. Release of hazardous materials in a community can result in evacuations, property damage and even injury or death. When the collision involves a passenger train, the potential exists for harm to passengers, as well as crew members. Commenters were correct in noting that such events are rare, but the potential for catastrophic event is real; and an important role for safety regulation is to anticipate and mitigate these sorts of risks.

In summary, we all have a stake in preventing collisions at highway-rail crossings; and there is no practical way

to transfer all costs to the driver who fails to obey the law, even if that were a desirable thing.

In general, these principles appear to be accepted outside of whistle ban jurisdictions. Train horns continue to sound today at over 98 percent of public highway-rail crossings, and over 9 million Americans living and working along rail lines are incidentally exposed to the "noise" from this source. Most communities and residents appear to tolerate these interruptions reasonably well.

#### *B. Incompatibility of Horn Noise With Community Needs*

However, two general trends appear to have converged in a manner that is antithetical to community acceptance of train horn noise under certain conditions. First, as a Nation we are becoming more sensitive to disruptive sources of noise in our environment. This reflects success in building quieter communities and in engineering noise out of daily life (through zoning, building codes, better design of motor vehicles, etc.). Second, as a result of the consolidation of the national rail system since the 1970s, rail traffic has been concentrated on fewer lines, resulting in more train movements through those communities where main lines continue to be operated. Particularly when the train horn is sounded, the number of train movements is clearly a significant factor in the "noise load" imparted to the community.

For various reasons, there has been a growth in the number of ordinances and arrangements under which train horns are silenced ("whistle bans"). Further, in many communities where State law currently does not permit whistle bans, relief from the noise associated with train horns is being actively sought by residents and their elected representatives. Fear of losing existing bans, and the desire to silence train horns in some areas without existing bans, have combined to create significant public interest in this proceeding.

The situation of existing whistle ban communities is particularly vexing, because public and private planning decisions have been made with the assumption that horns will be banned. Commenters in the Chicago Region<sup>2</sup> also called attention to the conflict between sound urban planning, which promotes construction of high density housing near a commuter railroad stations, and very frequent use of the

train horn on the extremely active rail lines in that region.

Unfortunately, there is no known strategy for providing audible warning to motorists without also spreading unwanted noise into communities. (The wayside horn can reduce the amount of unwanted noise, but not eliminate it entirely.) Future research may permit refinement of the multi-frequency pattern of contemporary train horns, but FRA has no present information that suggests a means of providing a clearly identifiable and urgent signal in a motor vehicle using a sound that is pleasing to nearby residents.

#### *C. Crafting Exceptions to Use of the Train Horn*

The statute provides direction for adjusting the competing interests of safety and community quiet. Although the statute says unequivocally, "The Secretary of Transportation shall prescribe regulations requiring that a locomotive horn shall be sounded while each train is approaching and entering upon each public highway-rail grade crossing," most of the language of the statute has the effect of explaining how exceptions might be crafted. The statute continues:

(1) In issuing such regulations, the Secretary may except from the requirement to sound the locomotive horn any categories of rail operations or categories of highway-rail grade crossings (by train speed or other factors specified by regulation)—

(A) that the Secretary determines not to present a significant risk with respect to loss of life or serious personal injury;

(B) for which use of the locomotive horn as a warning measure is impractical; or

(C) for which, in the judgment of the Secretary, SSMs fully compensate for the absence of the warning provided by the locomotive horn.

The last of these exceptions—substitution of supplementary (or alternative) safety measures—was at the heart of the NPRM and remains the best means of reconciling safety and community quiet. As explained below, this interim final rule seeks to make the list of other safety measures as flexible and cost effective as possible.

The second exception, which refers to a determination of impracticability, is a criterion of limited application. It is impractical to provide effective warning by sounding the horn if it is necessary to back a mile-long train over a crossing (so the crossing needs to be flagged), and it is impractical to provide a warning of suitable duration prior to the train's arrival in the case of a 110 mph passenger train (so active warning

<sup>2</sup> The Chicago area, or Chicago Region, is comprised of 6 counties: Cook, DuPage, Lake, Kane, McHenry, and Will.