

conditions in the Chicago area or in Illinois generally.

First, FRA was told that four-quadrant gate systems were not permitted by the Illinois Commerce Commission. Since that testimony, the MUTCD, which is issued by the Federal Highway Administration and supported by a national committee of traffic control experts, has been amended to specify criteria for four-quadrant gates as a standard warning system at highway-rail crossings. This action signals the acceptance of this safety system by professional traffic safety experts. Further, the Illinois Department of Transportation has funded installation of a large number of four-quadrant gates at crossings on the designated high-speed rail corridor between Chicago and St. Louis via Springfield, with ICC participation. The ICC has also stepped forward to demonstrate a low-cost vehicle presence detection system for use with four-quadrant gates. FRA believes that the Illinois Commerce Commission will continue to respond appropriately to identified needs for four-quadrant gate systems.

Second, FRA was told that photo enforcement is not authorized under Illinois law at highway-rail crossings. Photo enforcement for red-light running (and to a lesser extent for excessive speed) is becoming standard practice in a growing number of jurisdictions nationwide. After some initial difficulties related to program design and judicial acceptance, a photo enforcement project in the Chicago Region is continuing with the promise of positive results. There are currently four crossings in the Chicago Region that are equipped with photo enforcement (Downers Grove, Naperville, Wood Dale and Winfield each have one crossing so equipped). The Naperville installation has been in effect since July 2000. There has been an 87 percent reduction in violations of the warning devices at the crossings, and there has been a 98.5 percent conviction rate of the citations issued. The Wood Dale installation, which has been in service since December 1999, showed a 47 percent reduction in violations as reported in September 2000. Both the Downers Grove and Winfield systems are relatively recent but the initial reports are favorable. The timetable set forth in this rule allows ample time for results of the current demonstration to be communicated to the legislature and for the legislature to authorize photo enforcement.

Third, FRA heard from many jurisdictions in the Chicago Region that median barriers would not work in their settings because of major roadways that

run parallel to rail lines, either on one side or on both sides of the rail line.

FRA has noted these circumstances in visits to the communities, and FRA concurs that median barriers as specified for supplementary safety measures in the NPRM will not work at many locations. FRA has responded by making the requirements for channelization more explicitly flexible in the appendix language describing alternative safety measures. FRA has made it clear, for instance, that channelization on one side of the rail line—or for a shorter distance than the 60–100 feet nominally desired—could qualify for a risk reduction credit. FRA has also recognized that at many locations channelization is not feasible, and this has been taken into consideration as the costs and benefits of the interim final rule have been assessed.

Finally, FRA has taken seriously the concerns expressed with respect to the cost associated with verifying risk reduction following implementation of public education and enforcement programs. FRA has joined forces with the ICC and local communities to implement the Public Education and Enforcement Research Study (PEERS) program. This education and outreach effort will be evaluated for effectiveness at the community level and, if successful, could have potential for application across the region. Although FRA cannot state specifically how this approach might be integrated into this rule until results are known, it does offer an additional possibility for achieving the safety goals of the rulemaking at relatively low cost.

#### *K. Costs*

Chicago respondents testified that the cost of installing Supplemental Safety Measures (SSMs) or implementing Alternative Safety Measures (ASMs) that will permit the creation of quiet zones far exceeds cost estimates developed by FRA and represents an unfunded Federal mandate. The City of Chicago, Department of Transportation commented the rule would force the installation of four-quadrant gates at 237 crossings in the City. The Chicago Area Transportation Study estimated that the cost to implement quiet zones in the CATS region would be \$200 million.

However, these arguments stem from the presumption that all crossings within a quiet zone will need to be equipped with four-quadrant gate systems. Other SSM's were dismissed by Chicago commenters as impractical for a variety of reasons. CATS Council of Mayors Executive Committee argued

that the proposed safety measures are unworkable.

To test these criticisms, FRA conducted a preliminary cost analysis associated with implementation of quiet zones in several Chicago-area communities. The site-specific analysis was conducted at 12 highway-rail grade crossings in the communities of LaGrange, Western Springs and Hinsdale, and in each instance employed a corridor approach.

The analysis revealed that in some cases, public education efforts and increased enforcement of existing highway-rail crossing laws can be used in place of engineering solutions. At crossings where engineering improvements would be the most practical approach, the study found the costs of implementing a variety of SSM's would be significantly less than Chicago commenters estimated. Based upon the earlier estimates for effects of no-whistle policies in the Chicago Region, it was estimated that by utilizing the corridor risk reduction approach and utilizing engineering improvements at selected crossings that the total construction cost for these corridors would be \$360,000 with an annual maintenance cost of \$37,000. This is much less than estimates received from some commenters who erroneously assumed that four-quadrant gates would be required at each crossing. Actual costs under this rule should be even lower, since on many corridors, the required risk reduction of 15 percent can be taken at a single crossing.

In light of the greater flexibility of the interim final rule with respect to existing whistle bans, and the menu of engineering options, costs to convert existing whistle bans into quiet zones, or even create New Quiet Zones will be significantly less than most Chicago commenters estimated in responding to the NPRM. In instances where an existing quiet zone falls below the Nationwide Significant Risk Threshold, the only costs that would be incurred would be for maintenance of the Inventory data and posting of "No Train Horn" signs at crossings.

FRA understands the concern of commenters that paying for SSMs or ASMs where necessary to preserve or create a quiet zone may pose some fiscal hardships for some communities. Although this rule will not cost in excess of \$100 million in any year, and thus is not subject to the assessment requirements of the Unfunded Mandates Reform Act of 1995, FRA has made every effort to limit the burdens that this rule imposes and to concentrate those