

**Board Report**

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**REVISED**  
**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE**  
**AUGUST 18, 2016**

**SUBJECT: METROLINK BNSF LOCOMOTIVE TRAIN HORNS AND QUIET ZONES****ACTION: RECEIVE AND FILE****RECOMMENDATION**

RECEIVE AND FILE a **comprehensive study of communities/cities impacted by the Burlington Northern Santa Fe (BNSF) locomotive train horns** as a response to the May 2016 Board directive.

**ISSUE**

At the May 19, 2016, System, Safety Security and Operations Committee meeting, Directors Najarian and Antonovich directed the CEO to create a comprehensive study of all communities/cities impacted by the BNSF locomotive train horns on the Metrolink commuter rail system and work with Southern California Regional Rail Authority (SCRRA) staff to prioritize those impacted cities most in need of quiet zones (refer to Attachment A).

**DISCUSSION****BNSF Trains Horns**

In late 2015, SCRRA began operating 40 leased locomotives provided by the BNSF, due to a safety concern. The locomotives emit a higher-decibel five-chime horn, which is noticeably louder than the lower Metrolink three-chime horn locomotives. SCRRA has received multiple complaints from residents in the San Gabriel Valley, in particular, about the noise from horns, and the impacts to residents' quality of life along the Metrolink San Bernardino Line.

SCRRA has conducted several community meetings and made presentations at city council meetings of affected cities in the San Gabriel Valley (see Attachment B). SCRRA has indicated that the increased train horn noise issues is a temporary condition, as the BNSF lease is for one year only, ending on November 1, 2016. SCRRA plans to return the locomotives to the BNSF as soon as possible in advance of November 1st. Additionally, SCRRA has changed some of the "push-pull" configuration of locomotives on some train sets, which has helped to reduce complaints regarding train horn noise.

### Quiet Zones

In 2005, the Federal Railroad Administration (FRA) issued the Train Horn Rule, which set the nation-wide standards for the sounding of train horns at public highway-rail grade crossings. In addition to establishing criteria for the sounding of train horns, the Train Horn Rule established a process for communities to obtain relief from the sound of train horns by providing criteria for the establishment of quiet zones. Only a public authority responsible for traffic control or law enforcement at the public highway-rail grade or pedestrian crossing (i.e. city) may establish a quiet zone. The quiet zone must be at least ½ mile in length and have at least one highway-rail grade crossing.

Generally, cities initiate the quiet zone process by conducting a comprehensive diagnostic assessment at each crossing. According to Federal requirements, diagnostic meetings are conducted and Supplementary Safety Measures (SSMs) are identified and recommended to meet quiet zone safety requirements. Some typical SSM improvements to the grade crossings include medians or channelization devices, a four-quadrant gate system to block all lanes of highway traffic, one-way streets with gates, and/or permanent crossing closures. The initial capital costs for quiet zone improvements can vary from \$500,000 per crossing up to \$3 million per crossing depending upon the type of existing improvements in place and the SSMs required.

The cities of Pomona and Industry have implemented quiet zones along the Union Pacific Railroad (UPRR) Alhambra and Los Angeles subdivisions. FRA data indicates that vehicle accidents at five grade crossings in the City of Pomona declined by more than 50% since quiet zones were implemented in 2007. The City of Glendale has completed quiet zone ready improvements at three crossings in the city, and intends to file a NOI with the FRA for a quiet zone in late 2016. The City of Burbank is making improvements to the Buena Vista/Vanowen crossing to make it quiet zone ready, and is pursuing a quiet zone. Additionally, several cities in the San Gabriel Valley such as Claremont, Baldwin Park and San Dimas including Glendale have recently expressed interest in pursuing quiet zones. The San Gabriel Valley Council of Governments has also indicated to SCRRRA a desire to work regionally towards quiet zone improvements in the San Gabriel Valley.

In 2010 and 2011, the Orange County Transportation Authority (OCTA) embarked on a comprehensive, countywide program to implement quiet zones throughout Orange County. At a total cost of \$85 million, 52 two crossings in eight cities such as Orange, Anaheim, Santa Ana, Tustin, San Juan Capistrano, Dana Point, San Clemente and Irvine along OCTA owned right-of-way were upgraded with SSM improvements and have received acceptance by the FRA as quiet zones. At the time, this was the largest grade crossing safety enhancement and quiet zone program in the United States.


### **ATTACHMENTS**

Attachment A - Motion #33 BNSF Locomotives Noise Factor

Attachment B - Los Angeles County Cities Impacted by BNSF Horn Issue and  
SCRRRA Community Outreach Efforts

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