



ADMINISTRATIVE REPORT

Meeting Date: October 14, 2009

APPROVED BY:

Larry A. Patterson, Pub. Works Dir.

A handwritten signature of Larry A. Patterson in black ink, enclosed in a decorative oval border.

TO: PUBLIC WORKS COMMISSION

DATE: October 8, 2009

SUBMITTED BY: Susanna Chan Susanna Chan, Deputy Director (650) 522-7308

SUBJECT: **TRAIN HORN UPDATE**

RECOMMENDATION: That the Public Works Commission review the information related to train horn noise and provide staff direction on next steps.

BACKGROUND:

Caltrain Horn Noise

During a routine inspection in late July of this year, Caltrain discovered that their train horns located underneath the train were not producing the distinct, separate, sequential blasts required by federal laws. The horns were moved from top of the train to beneath the equipment in 2001 in response to community complaints about noise. To comply with the federal safety regulations, Caltrain immediately reconfigured the horns to the top of train. The move increased the volume and the range of the sound which generated many complaints from residents along the train corridor.

In response to residents' complaints, Caltrain initiated an interim project in August to install regulator valves that allowed the volume to be precisely set at the previous level of 98 decibels, the low end of decibel level required by the federal regulations. However, neighbors continued to complain about the noise as the horns are up higher on the trains, the sound is dispersed over a wide area; and engineers are performing the required sequential blast.

Caltrain recently began a project to restore the horns to underneath the trains. The project, once completed, will restore the ambient noise level of the horns to prior level and the horns will be in full compliance with all federal regulations. To date, more than a dozen trains have been restored and the project is expected to be completed by the end of November.

A Caltrain representative will attend the October 14th meeting to provide updates on the restoration project and be available to answer questions.

Union Pacific Railroad Train Horn Noise

In addition to complaints related to Caltrain horn noise, the City also received many complaints about freight train noise during the night hours. The freight trains are operated by the Union Pacific Railroad (UP) which is completely separate from Caltrain's operation. Caltrain owns the tracks and UP is allowed to operate between midnight and 5:00 am when Caltrain is not in service under a Cooperative Agreement between the two entities. According to UP, their train horns are always located on top of the train and they have not changed their operation recently.

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Quiet Zone

Many residents have inquired about Quiet Zones. Federal regulation allows the establishment of Quiet Zones where railroad horns are not sounded. A quiet zone has to be at least $\frac{1}{2}$ mile in length and only applies to soundings of train horns across railroad crossings. Soundings from trains departing the station and additional soundings at the engineer's discretion due to activity in the rail right-of-way would continue within a quiet zone.

The most direct way to establish a "quiet zone" is to implement Federal Railroad Administration (FRA) pre-approved Supplementary Safety Measures (SSM). Pre-approved SSM are: 1) installing a four-quadrant gate system; 2) installing gates with medians or channelization devices so that cars can't access other lanes to cross the track; 3) installing gates on one-way streets to block all approaching lanes to the track; 4) temporary closure of a crossing to traffic during designated quiet periods; or 5) permanently closing the crossing to traffic (including grade separation). Other methods including implementing modified safety measures that do not fully comply with the design standards of SSM or non-engineering measures such as crossing monitoring and traffic law enforcement program require FRA approval. The implementation of a "quiet zone" also requires a public comment and notice process.

There are a total of ten at-grade crossings within San Mateo. None of them are equipped with a four-quadrant gate. A few locations have gates with medians which may or may not meet FRA requirements. It will be a significant monetary investment to bring all the crossings within San Mateo to meet the safety standards for a quiet zone. Typically the safety improvements are funded by the local communities that request the quiet zone.

Some railroad companies may require cities to indemnify them for any claims arising out of the quiet zone implementation. It is likely that Caltrain will place the same requirement on cities that request quiet zones. Currently there is no quiet zone along the Caltrain corridor.

NEXT STEPS: It is anticipated that by the end of November the train horn volume will return to the level prior to Caltrain's horn relocation work in late July. If the Commission wishes to continue the quiet zone discussion, it is recommended the item be brought back to the Commission at the December meeting. Staff will continue to monitor the noise impact generated by train horns to the community.

NOTICING: A copy of this administrative report was sent to all homeowner associations, in addition to all individuals on the "Concerned Parties" list maintained in the Public Works Department.

c: All Homeowners Associations
 "Concerned Parties" list
 Project File
 Public Works A.R. Binder