



CITY OF SAN MATEO

City Hall
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Administrative Report

Agenda Number: 2., Status: Study Session

File ID: 2018-674

TO: City Council
FROM: Larry A. Patterson, City Manager
PREPARED BY: Public Works Department
MEETING DATE: Monday, August 20, 2018
SUBJECT: Train Horn Noise Study Session

RECOMMENDATION

Receive a status update on efforts to minimize train horn noise impacts.

BACKGROUND

Train horn noise has been a source of resident complaints. Federal Railroad Administration (FRA) regulations require trains to sound horns when approaching an at-grade crossing, construction zones, and when trespassers are spotted in the right of way. San Mateo currently has 9 grade crossings, and the 25th Ave Grade Separation Project will eliminate one grade crossing upon completion, currently expected in 2020.

In 2009, the City requested that rail operators reduce train horn volumes when passing through San Mateo. In response, Caltrain relocated their horns beneath their trains to reduce the range of sound, but Union Pacific stated they could not make the same modification because their trains may be used in other regions with different sounding requirements. In 2013, the Public Works Department hired a consultant to perform a train horn noise assessment, which concluded that the sounding of train horns generally comply with federal guidelines.

Staff has investigated the possibility of establishing a "Quiet Zone" to restrict the sounding of train horns at grade crossings. Under FRA guidelines, any rail segment at least $\frac{1}{2}$ mile in length is eligible for Quiet Zone as long as it meets certain safety requirements. A segment can qualify if at least one Supplemental Safety Measure (SSM) is installed at each crossing. SSMs are FRA approved standardized safety improvements such as four-quadrant gates, medians or channelization devices, one-way street conversion, and temporary or permanent street closures. A segment can also qualify if enough SSMs are installed to mitigate the increased risk of collision resulting from restricting train horns, based on a collision risk assessment, but eligibility would be reassessed annually as the risk index may change based on changes to traffic volumes or in case of any collisions at the crossings. At this time, no grade crossings in San Mateo have qualifying SSMs under federal guidelines.

San Mateo can qualify for a Quiet Zone based on risk assessment if four-quadrant gates are installed in at least three crossings. Four-quadrant gates can cost up to \$3 million per crossing for design and construction costs, resulting in a total cost of at least \$9 million. Medians are generally not feasible due to the federal requirements to close all driveways and streets within 60 feet of the crossing. To avoid annual reassessment of risk, four-quadrant gates can be installed at all crossings for a total cost of \$24 million.

Staff is in discussion with Caltrain and CPUC regarding potential safety improvements at the 4th Ave and 5th

Ave crossings. Staff are also seeking potential sources of funding for safety improvements such as federal and state grants.

BUDGET IMPACT

No project expenditure is proposed at this time. Staff time is funded by project #462205.

ENVIRONMENTAL DETERMINATION

This item is presented for informational purposes only and is not a project subject to CEQA review.

NOTICE PROVIDED

All meeting noticing requirements were met.

ATTACHMENTS

None. Additional information will be provided in the staff presentation.

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