

EUGENE CITY COUNCIL

AGENDA ITEM SUMMARY



Work Session: Update on Railroad Quiet Zone

Meeting Date: March 9, 2015
Department: Public Works Maintenance
www.eugene-or.gov

Agenda Item Number: A
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ISSUE STATEMENT

City Council asked for an update on the status of a Downtown Railroad Quiet Zone. In October 2014, staff provided an update on regional Quiet Zone experience and was asked to provide a proposal. The purpose of the Quiet Zone (QZ) is to eliminate the routine sounding of train horns at 10 downtown railroad crossings to increase neighborhood livability and downtown redevelopment potential. Regional experience has demonstrated that a Quiet Zone is possible, that previous cost estimates are significantly less than actual construction and operations costs will be and that funding has come from local, not State or Federal sources.

BACKGROUND

In 2005, the Department of Transportation passed rules which codified the use of train horns at rail crossings and allowed for the creation of a Quiet Zone where horns would not be sounded based on alternative safety measures reducing the risk of crashes. The Federal Railroad Administration (FRA) Risk Index is a statistical calculation based on the existing conditions and crash history. The FRA Risk Calculator modifies the Risk Index based on proposed supplemental safety measures (SSM). FRA uses the term "Risk Index with horns" to reflect our current conditions in Eugene. FRA annually calculates a National Risk Threshold reflecting the nationwide crash experience with all at grade crossings.

There are three ways the City could add SSMs in order to obtain a Quiet Zone:

- Add SSMs at each crossing
- Add sufficient SSMs to reduce the Risk Index below the current Risk Index with horns
- Add sufficient SSMs to reduce the Risk Index below the National Risk Threshold

The first alternative must be recertified on a five-year cycle, the second alternative recertified on a two-to three-year cycle and the last alternative must be recertified annually. The existing Risk Index with horns and the National Risk Threshold vary as the crash or incident history, automobile crossing volume and train frequency changes. The National Threshold has fallen from 19,347 in 2007 to 14,347 this year. Locally, the Risk Index with Horns has increased from 14,849 in 2007 to a current value of 16,762.

The council held a Railroad Quiet Zone work session on October 8, 2014. The Agenda Item Summary is attached. Reference to three previous City Council work sessions was included in that 2014 update. Previous analysis was focused on specific supplemental safety measures (SSM) designed to reduce the statistical risk levels sufficiently to obtain a quiet zone designation from the Federal Rail Administration (FRA). Among the measures considered were closing streets, converting two-way streets to one-way, operation, constructing “quad” gates and installing other apparatus to warn people of approaching trains and/or keep them off the tracks. At the conclusion of the third meeting in February 2008, the council adopted a motion directing staff to pursue funding for a Quiet Zone based on a design using quad gates at all ten crossings. In 2008, the cost for quad gates was estimated by the Federal Railroad Administration at about \$400,000 each.

Regional QZ Experience

Since 2008, many jurisdictions have designed and funded the improvements necessary to obtain a Quiet Zone. Salem, Oregon is the closest city to Eugene to do so. The Salem QZ was obtained by using a number of what FRA considers lower cost SSMs. Salem funded its QZ as a specific project included in a large local street repair bond measure. No State or Federal funds were used.

Briefly recapping the Salem experience, the necessary safety improvements to 10 railroad crossings cost \$2.6 million, more than twice the original estimate. The SSMs did not include any quad gates. The American with Disabilities Act mandates enhancement of pedestrian facilities at rail crossings when other work is done, but the largest part of the increased cost is simply the difference between the FRA estimates and real world construction costs. Salem staff is currently working on expanding their Quiet Zone with a project using their first Quad gate. Salem recommends using \$1 million as a reasonable construction estimate for quad gate installation. Quad gates are maintained by the railroad at local road authority expense - currently \$9,000 per year for each crossing with quad gates.

Proposed RR Quiet Zone

A Quiet Zone requires the agreement of the Road Authority, ODOT Rail Division acting on behalf of the FRA and the affected railroad. Since the safest railroad crossings are grade separated or closed, eliminating the potential for a crash, the Secretary of Transportation has a goal of closing unnecessary or redundant crossings. The FRA has indicated that the six crossings in six blocks from Lincoln to Monroe constitute some level of redundant crossings. The railroads are also strong supporters of crossing closure.

Adding SSMs at crossings with the highest risk offer the greatest reduction in the local Risk Index. The three highest Risk Index crossings in Eugene are High at 5th, 8th/Hilyard and Monroe Street.

High Street at the crossing near 5th is a major collector street. It poses geometric issues in that median islands would require the complete severing of the connection of 5th Avenue to High Street. As the highest volume collector in the corridor, closure is not an option. Circulation issues make a one-way couplet with Pearl difficult if 5th is kept open. A quad gate is the SSM of choice at this crossing.

Re-location and reconstruction of the 8th/Hilyard railroad crossing and associated redevelopment of the EWEB site will increase the traffic using the crossing and increase the Risk Index of that crossing. While currently a local street, when the EWEB site is developed, 8th Avenue is likely to perform as a collector serving the site. A recent fatality at the crossing has already increased its Risk Index significantly. Medians, closure, and one way are not options. The proximity of Hilyard to the tracks and

the critical access to the EWEB site make a quad gate the SSM of choice. For railroad concurrence with this 'new' crossing, they will insist that three crossings be closed. Their position is supported by the FRA. One of the three is the existing Hilyard crossing. Two others are proposed later in this document. Relocation of the existing crossing will include demolition of the existing crossing and traffic signal and construction of a new signal, crossing and connecting roadway. Overall, the work involved at this crossing is estimated to cost about \$2.4 million.

Monroe is a local street, a bike boulevard and an important connector. While the average daily traffic is lower than most crossings in the corridor, a recent pedestrian fatality has increased the Risk Index. Closure is not a viable option. Medians would force closure of the sole access to businesses adjoining the tracks. There is not a logical one-way couplet. A quad gate is the SSM of choice.

The 4th highest Risk index is at the Washington Street crossing. Washington and Jefferson are classified as Major Collectors and form a logical one-way couplet. Washington is one-way northbound south of 5th. Jefferson is one-way southbound south of 6th. Extending the one-way couplet to north of the railroad tracks will have minimal impact on local circulation. One-way operation is the preferred SSM option for Washington and Jefferson.

Pearl Street has the next highest Risk Index. It is a Major Collector. Medians would close a business parking lot, closure or one-way operation would negatively impact local and business circulation. If an SSM is needed at Pearl, the preferred option would be quad gates. It may be possible to obtain a Quiet Zone without making changes to Pearl.

Van Buren serves the west end of the QZ corridor separate from nearby crossings, and should remain open. Median installation would require closure of business driveways, both north and south of the crossing. If an SSM is needed at Van Buren the preferred option would be quad gates. It may be possible to obtain a Quiet zone without making changes to Van Buren.

Lawrence Street could be considered for closure. It also represents a crossing where median islands could be installed. To protect circulation and choose the lower-cost option, median islands are the preferred SSM for Lawrence Street.

Lincoln Street is classified as a local street. Median installation would require closing business driveways and removal of the perpendicular on street parking for Imperial Floors, a business located north of the tracks. There is no logical one-way couplet. Lincoln Street is impacted by proximity to the Eugene Amtrak Station. Proposed enhancements at the Amtrak station in the City's long range plans for improving passenger rail service include a new siding for keeping passenger trains over night at the Eugene Station. The new RR crossover switch to serve the new siding will require the closure of the Lincoln Street crossing. In the past, the owner of Imperial Floors has expressed his opposition to Lincoln Street closure. In spite of expressed opposition, and in light of the City's long range plan to close Lincoln to facilitate passenger rail service, and the desire of ODOT Rail and the railroad to close crossings, the preferred SSM for Lincoln is closure.

Madison is a local street and has the lowest current Risk Index and the lowest average daily traffic volume. Median islands would require the closure of business driveways both north and south of the tracks. Quad gates and closure are possible. In previous conversations with Grain Millers, a significant business south of the crossing, they expressed support for closing the crossing. The preferred SSM at

Madison is closure. Closure will have minimum effect on local circulation. In addition, proposing a second crossing closure will provide support for negotiating with ODOT Rail and the railroad. The above proposal differs from past council discussion in three areas: converting Washington and Jefferson to a one-way couplet; proposing the closure of the crossings at Lincoln and Madison; and the use of medians at Lawrence.

Based on the Salem experience, Quad gates at 8th/Hilyard, High, Monroe, Pearl and Van Buren coupled with average-priced alternative SSMs at the five remaining crossings would cost about \$7,400,000 and require an annual railroad maintenance cost of \$45,000 for the quad gates. If alternate SSMs to quad gates can be made to work at Pearl and/or Van Buren, the capital cost could decrease by as much as \$1,000,000 each and the on-going maintenance cost decrease \$9,000 per year for each quad gate deleted.

Funding

In Eugene, no local funding source of sufficient magnitude to make all the improvements needed for a QZ has been identified or programmed. Potential sources of local funding include the General Fund, Community Development Block Grants, urban renewal funds, and assessments levied through a local improvement district. Staff is not aware of any non-local sources of funding that could pay for creation of a Quiet Zone.

Impact

Creating a Quiet Zone will have the immediate impact of enhancing neighborhood livability for those residential areas impacted by train noise. As the Lane Livability Consortium report notes, impacts from noise due to trains result in negative consequences for health and wellbeing. While the train horns are audible many miles from the tracks, those areas in closest proximity are hardest hit. A railroad Quiet Zone would benefit residents in these areas in a significant way, and enhance livability throughout the community.

Downtown development scenarios, particularly housing, are also negatively impacted by the sounding of rail horns. The noise from the horns is considered an environmental impediment for redevelopment, typically increasing the costs and impacting the type of use envisioned. The prospective developers of the EWEB riverfront property stated that a Quiet Zone is critical to their development scenarios, as have other developers of private property in the Fifth Street Market and northeast downtown areas. Since downtown development has a significant role in the implementation of Envision Eugene as well as the Regional Prosperity Plan, the importance of a Quiet Zone cannot be overstated.

At this time, the Federal Department of Housing & Urban Development (HUD) prohibits the development of affordable housing with HUD funds on parcels with unacceptable noise levels (above 75 decibels). The implementation of a Quiet Zone would reduce noise levels and make more sites suitable for affordable housing development in the downtown and riverfront areas.

RELATED CITY POLICIES

City Council Goals:

- Neighborhood Empowerment
- Redesign the neighborhood initiative to support the neighborhoods which includes public participation in the livability and protection of neighborhoods

- Sustainable Development
 - *Increased downtown development*

Adopted Growth Management Policies:

- Policy 1: Support the existing Eugene Urban Growth Boundary by taking actions to increase density and use existing vacant land and under-used land within the boundary more efficiently.

Envision Eugene Pillars:

- *Promote compact urban development and efficient transportation options.*
 - *Integrate new development and redevelopment in the downtown, in key transit corridors and in core commercial areas.*
 - *Meet the 20-year multi-family housing need within the existing Urban Growth Boundary.*
 - *Make compact urban development easier in the downtown, on key transit corridors, and in core commercial areas.*
- *Protect, repair, and enhance neighborhood livability.*

Regional Prosperity Economic Development Plan:

- *Strategy 5: Identify as a Place to Thrive - Priority Next Step - Urban Vitality*
 - *As a creative economy is fostered, dynamic urban centers are an important asset. Eugene, Springfield and many of the smaller communities in the region recognize the importance of supporting and enhancing vitality in their city centers. Building downtowns as places to live, work and play will support the retention and expansion of the existing business community and be a significant asset to attract new investment. The Cities of Eugene and Springfield will continue to enhance their efforts to promote downtown vitality through development and redevelopment.*

Eugene Climate & Energy Action Plan:

- *Increase density around the urban core and along high-capacity transit corridors*

Eugene Downtown Plan:

- *Facilitate dense development in the courthouse area and other sites between the core of downtown and the river.*
- *Stimulate multi-unit housing in the downtown core and on the edges of downtown for a variety of income levels and ownership opportunities.*
- *Downtown development shall support the urban qualities of density, vitality, livability and diversity to create a downtown, urban environment.*
- *Facilitate dense development in the courthouse area and other sites between the core of downtown and the river.*

COUNCIL OPTIONS

Staff has identified options for council to consider in providing direction on this issue:

- A. Direct staff to pursue FRA approval and local funding for a Quiet Zone as outlined above.
- B. Direct staff to evaluate alternative scenarios to the one proposed above.
- C. Continue to monitor Quiet Zone experience in other jurisdictions.

CITY MANAGER'S RECOMMENDATION

The City manager recommends that council direct staff to pursue FRA approval and local funding for a Downtown QZ, using one-way streets and crossing closure as Alternate SSMS.

SUGGESTED MOTION

I move that council direct staff to pursue a downtown Railroad Quiet Zone approval with the Federal Railroad Administration, using one-way streets and crossing closures as alternate Supplemental Safety Measures as needed and direct staff to pursue sources of local funding.

ATTACHMENTS

A. October 8, 2014, Agenda Item Summary and map of study area

FOR MORE INFORMATION

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