

City of Arts & Innovation

Transportation Board

TO: TRANSPORTATION BOARD **DATE: APRIL 2, 2025**

FROM: PUBLIC WORKS DEPARTMENT **WARDS: ALL**

SUBJECT: INITIATE COMMUNITY ENGAGEMENT FOR POTENTIAL TYLER STREET CIRCULATION PILOT

ISSUE:

Consider initiating community discussion of a potential 3-6 month pilot project to close the Tyler Street at-grade crossing with the BNSF railroad tracks.

RECOMMENDATION:

That the Transportation Board recommend that the Mobility and Infrastructure Committee approve city staff initiating community discussion for a potential 3-6 month pilot project to close the Tyler Street at-grade crossing with the BNSF railroad tracks.

BACKGROUND:

The Tyler Street at-grade crossing with the Burlington Northern Santa Fe (BNSF) railroad tracks is part of a complex stretch of roadway, situated approximately 200 feet away from Indiana Avenue and 400 feet away from the State Route 91 ramps. To the south, Tyler Street intersects the continued portion of Indiana Avenue less than 200 feet away from the tracks.

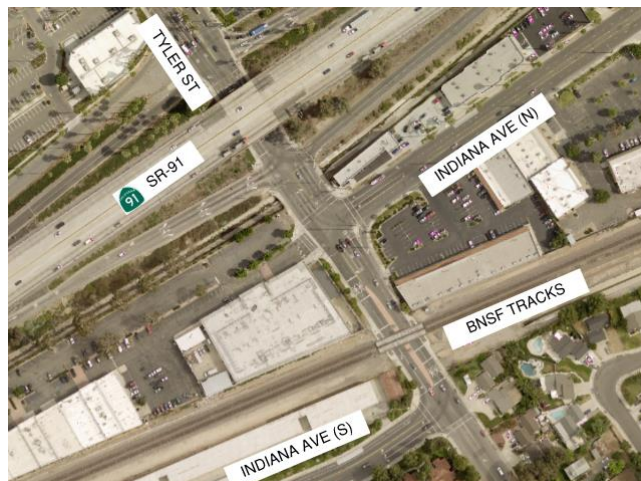


Figure 1: Tyler Street at BNSF Crossing

When trains cross a city roadway, vehicle and pedestrian traffic alike must wait for the train to cross. Railroad crossings are augmented with gate arms, lights, and audible alerts to raise awareness of an impending and ongoing train crossing. The crossing on Tyler Street is part of the City's "Quiet Zone" at which trains do not sound their horns. Quiet Zones require additional safety measures, which result in additional 'gate down' time and the extended preemption of adjacent traffic signals to facilitate advance warning time of an upcoming train.

The Tyler Street crossing is used by 90 trains per day on average, resulting in a typical gate down time of 145 minutes per day. Delays while the gates are down impact the 15,407 motorists crossing the tracks each day, along with the average 36 bicyclists and 79 daily pedestrians using the crossing. The crossing has experienced two fatal and one injury train related accidents in the past 10 years and ranks highly on the Riverside County Transportation Commission's priority list as a candidate for grade separation. A grade separation generally elevates or lowers an intersecting roadway to avoid any at-grade crossing with railroad tracks. The City is currently advancing a grade separation of Third Street, and has prioritized Spruce Street as its next grade separation project.

Tyler Street is intersected not only by nearby Indiana Avenue and the freeway ramps, but also major infrastructure including a gravity-controlled stormwater facility to the north. The tight spacing of perpendicular facilities means that a grade separation at the Tyler Street crossing would be more complex than other similar projects. The added complexity is anticipated to drive up project costs, and a potential grade separation would easily surpass \$100M in infrastructure expenditures.

DISCUSSION:

The 90 daily trains at the Tyler Street crossing result in a typical 145 minutes of daily gate down time. Each time the railroad gates are lowered, the nearby traffic signals are interrupted or 'preempted' and forced into special operations to help clear and keep motorists off the tracks. A total of five signalized intersections are impacted by train operations on Tyler Street from the Tyler Galleria entrance to Tyler Street's southern intersection with Indiana Avenue. After the train passes and the gates are raised, nearby traffic signals can take approximately two minutes to transition back to normal operations which can be equated to 180 minutes for the 90 daily train crossings. Total disruption caused by the railroad crossing is more than the 145-minute gate down time, and closer to 325 minutes, or 5.4 hours per day. Frequent impacts to traffic signal synchronization causes queues to accumulate and delays to propagate along this busy corridor, arguably extending the true footprint of disruption beyond this estimate.

Due to the close spacing with nearby intersections, railroad crossing delays on Tyler Street impact many more motorists beyond just those seeking to cross the tracks. Unfortunately, the same complexities causing severe delays on Tyler Street also contribute to the cost and challenge of a potential grade separation project.

To date, the City has taken the following measures to reduce delays:

- Partnered with Caltrans District 8 to install City compatible traffic signal controllers at the State Route 91 ramps, allowing the City to remotely monitor the traffic signals from its Traffic Management Center at City Hall,
- Partnered with Caltrans to restrict certain truck movements at the freeway ramps,
- Partnered with Caltrans to modify westbound offramp and onramp signal operations & phasing,
- Adjusted the signal configuration at Tyler Street at the Tyler Galleria Entrance,
- Refined traffic signal timing as part of the Quiet Zone rollout,
- Installed new traffic signal controllers at City-controlled intersections, and
- Deployed annual holiday timing to manage peak seasonal flows

These measures have helped but delays remain a challenge through the corridor. The Public Works Department would like to address delays by considering additional short-term and low-cost methods. Because disruption to the signal system is a key source of delays on Tyler Street, Public Works recommends that the City initiates community discussion of a 3-6 month pilot closure of the at-grade crossing.

During the pilot closure, motorists and bicyclists would be unable to cross the tracks but the sidewalk would remain accessible to pedestrians. Traffic barriers and signage would be installed throughout the pilot to sufficiently close the crossing. While the gate arms and lights would still trigger with each passing train, the nearby signalized intersections would no longer be 'preempted' by the trains. Traffic signal timing could be better refined without the continual preemption, and the reduction in vehicular traffic will further reduce delays. The City has previously closed the crossing at Tyler Street to facilitate short-term construction work, and the benefits to nearby intersections were immediately apparent.



Figure 2: Tyler Street Potential Pilot Closure

Next Steps

Closure of a railroad crossing on an arterial roadway, even on a temporary basis, is a significant endeavor. This report is intended only to initiate community discussion as to whether a temporary closure should be considered. I

Following review of the proposed pilot by the Mobility and Infrastructure Committee, City staff would begin community engagement to discuss the potential pilot. This engagement may take place as part of ongoing General Plan discussions and/or as part of separate community meetings. A survey would be distributed to help aggregate community sentiment. Staff anticipate that key topics of discussion may include the length of detours, impacts to nearby intersections on detour routes, and the potential for increased cut-through traffic on neighborhood streets south of the railroad crossing.

The use of electronic surveys was successfully implemented as part of considering the ongoing Redwood Drive pilot project.

Extensive discussions with the California Public Utilities Commission, BNSF, the Federal Rail Administration, and other City departments including our emergency services providers would also be necessary during the pilot development phase especially since the City intends to keep the sidewalk open during the pilot project as the pedestrian detours would be lengthy.

There is no set timeline to complete community discussions, in recognition of the need to fully explore the topic. Following community discussion, a recommendation as to whether to proceed with the pilot program would return to the Mobility and Infrastructure Committee.

STRATEGIC PLAN ALIGNMENT:

The Infrastructure, Mobility, and Connectivity strategic priority aims to ensure safe, reliable infrastructure that benefits the community and facilitates connection between people, places, and information. This project aligns with the goal below:

6.2 – Maintain, protect, and improve assets and infrastructure within the City’s built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.

Furthermore, this project aligns with each of the five Cross-Cutting Threads:

1. **Community Trust** – This report marks the potential onset of community discussion surrounding a pilot program. Recommendations to implement the pilot program will be brought to committee following community engagement.
2. **Equity** –The proposed pilot program seeks to reduce the impacts of train crossings along Tyler Street; however, community engagement is critical to discuss potential

neighborhood concerns.

3. **Fiscal Responsibility** – Pilot programs using semi-permanent materials are a cost-effective means to assess new design treatments at intersections. Often, these materials can be left in place for extended periods while maintaining their effectiveness.
4. **Innovation** – A pilot closure, while not set for approval at this time, would be an innovative approach to reduce delays along the Tyler Street corridor.
5. **Sustainability & Resiliency** – Reduction of rail-associated delays on Tyler Street would help to reduce idling and congestion at nearby intersections.

FISCAL IMPACT:

There is no fiscal impact associated with initiating community engagement for a potential pilot program at the Tyler Street at-grade crossing.

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Attachments:

1. Presentation