

**Virtual Townhall - Connecting Palo Alto
Rail Grade Separation Project
Q & A Session I – August 27th, 2020**

General Questions

1. Why isn't leaving the at-grade crossing as is being considered?

Caltrain is currently in the process of electrifying its trains as part of their effort to increase both frequency and capacity. This increase in trains will increase gate downtime and will cause more delays to all modes of transportation. With the electrification of the Caltrain Corridor, the gates will be down for 15% of peak hour times. Please review the Connecting Palo Alto Fact Sheet for more information. Traffic backups would also become excessive due to the increased gate downtime at all of the at-grade crossings in Palo Alto. Leaving the at-grade crossing as is (no build) will be considered and evaluated as part of the environmental process.

2. Since Caltrain ridership has decreased significantly, shouldn't we delay making a decision until ridership increases?

City staff believes the transit decrease associated with the Covid-19 and economic downturn is temporary. Caltrain and California High Speed Rail are moving forward with their plans for increased frequency in the Caltrain corridor. These are long term plans, and economic downturns are relatively shorter than the planning horizon for the grade separation project. The grade separation program will take several years to build.

3. Is Caltrain's corridor-wide grade separation study needed for background for the City to make a decision?

The Caltrain corridor-wide grade separation study will look at the Caltrain corridor, including all three counties and grade separations. The Caltrain study will provide additional information that we can build upon into our selected alternatives. However, these are completely independent efforts.

4. How have the economic/social consequences from the pandemic impacted the City Council's decision-making process with regard to the rail crossing agenda?

Projects such as grade separations are multiyear long-term projects and involve several steps. Typically, the economic/social impacts of the economic downturn are not as long-lasting as the project timelines. We are expecting that the pandemic related effects will be diminished in 2-5 years which is significantly shorter than the planning and construction horizon for such projects. We are cautiously proceeding with these alternatives while monitoring other regional transportation plans and efforts under consideration. Also, worth noting is that in previous recession, the Federal government enacted grant programs such as the American Recovery and Reinvestment Act, an infrastructure-related grant funding program. The City will be better prepared to avail of similar opportunities in the future if such grants are offered in the future for projects.

5. When will a decision be made?

The Expanded Community Advisory Panel, also known as XCAP, is tasked with reviewing the grade separation alternatives and provide recommendations. In addition, the feedback from the virtual townhall will be considered by the City Council. We are hoping to have the recommended alternative selected by the end of this year.

6. Who will pay to design and construct the grade separation alternative selected?

Typically, projects such as grade separation infrastructure projects will require a combination of funding sources to fund the construction. In Santa Clara County, voters have approved Sales Tax Measure B which has earmarked funding of approximately \$700 Million for grade separation projects. The four of the total eight grade separations on the Caltrain corridor are in the City of Palo Alto and therefore shall be eligible for such funding. The City will also explore other Federal, State, and Regional Funding available as grants for such projects. However, applying for Federal and State Grants can only begin after the project is defined.

7. Where are the cost and construction timelines for the various alternatives?

The construction timelines are summarized in Row J of the Evaluation Matrix and the order of magnitude costs are in the row just below that. This information is also included in the Fact Sheets for each alternative. For the Churchill alternatives, the construction timelines are approximately 2 years for the Closure with Mitigations and the Viaduct. The Partial Underpass is expected to take approximately 2.5- 3 years to construct. The closure is the least costly to construct at \$50M to \$65M. There are costs related to the closure because there are mitigations required at 4 intersections to accommodate the diversion of traffic. These improvements are shown in the tabletop map for the Churchill Closure. An animation was not developed for the closure alternative because there are no grade separation structures built for this alternative. The Partial Underpass costs \$160M to \$200M. The most expensive alternative is the Viaduct at approximately \$300M-\$400M.

Churchill Avenue Grade Separation Alternatives Questions

8. Why is it assumed that the Churchill Avenue at-grade crossing must close?

The traffic study prepared for the project and available on the Connecting Palo Alto website shows that queue lengths associated with traffic backups that would just about double during peak school hours (when traffic is heaviest on Churchill) due to the increased gate downtime. This means that it would take about 5 signal cycles to make a left turn from Alma Street toward the school in the morning, and the eastbound queue would extend on to El Camino Real. This condition could only be mitigated by constructing a grade separation or closing Churchill Avenue along with making other improvements at Embarcadero Road/Alma Street, Embarcadero Road/El Camino Real, Alma Street/Oregon Expressway, and El Camino Real/Oregon Expressway-Page Mill Road.

9. Have Stanford and PAUSD commented publicly on the proposed closure?

Palo Alto Unified School District (PAUSD) and Stanford have been outreached to and have received information about the project and the alternatives. Stanford has not provided any feedback as of yet. PAUSD has provided feedback but has not taken any formal position on any of the alternatives as of yet.

10. Has adequate analysis been done to evaluate how rerouting the traffic due to the Closure will impact other neighborhood streets?

Yes, the traffic study available on the Connecting Palo Alto website includes extensive analysis of the traffic currently using the Churchill railroad crossing and where that traffic would go if the crossing were partially or fully closed. The traffic would go to either the Embarcadero or the Page Mill underpasses. Traffic can get there by using Alma Street. The problem is that the Alma Street/Embarcadero Road interchange does not accommodate all movements without using local streets such as Lincoln Avenue and Emerson Street. Therefore, it would be necessary to modify that interchange in conjunction with closing the Churchill crossing. Details are in the traffic study that can be downloaded from both the Connecting Palo Alto Website and the Virtual Townhall website.

11. Has traffic analysis been done regarding traffic diversions that may impact the ped/bike route north of Embarcadero? (More traffic will flow down the 1100 block of Emerson that runs perpendicular to the bike/ped path.)

Yes, the traffic study includes an estimate of the additional traffic that would use Emerson Street unless changes are made to the interchange of Alma Street at Embarcadero Road. The additional traffic would not be workable; therefore, the alternative to close the Churchill crossing would include revisions to the Alma Street/Embarcadero Road interchange to provide new connections. With the new connections, traffic would not increase on Emerson Street. Revisions to the interchange would accommodate bicycles.

12. Will Embarcadero Road be modified going under Alma Street when the bridge is widened? (applies to the Closure and Partial Underpass)

Yes, the Embarcadero Road profile indicates that the widening of the bridge will require modification to the existing roadway to maintain adequate clearance for the bridge.

13. For the Closure Option 1, could an L-shaped ped/bike undercrossing be considered rather than a U-shape?

The configuration for Option 1, the goal was to provide the tunnel or separation under the tracks. The L-shaped configuration as requested can be done, however, the proposed L-shape would be a variance to Option 2. If L-shaped ped/bike were provided, it would begin on Kellogg Avenue similar to the Partial Underpass alternative.

14. How long will Churchill Avenue, Embarcadero Road and/or Alma Street be closed during construction for each alternative?

Details regarding the closure or reduction in lanes on roadways impacted during construction are noted in the Fact Sheets under "Neighborhood Considerations". For the Closure, Embarcadero Road, Alma Street and Churchill Avenue will be closed intermittently at night and on weekends. Similarly, for the Viaduct, Alma Street and Churchill Avenue will be closed intermittently at night and on weekends. Impacts to local streets during the construction of the Partial Underpass are more extensive. Churchill Avenue between Alma Street and Mariposa Avenue will likely be closed for the majority of construction (total construction duration is estimated at 2.5-3 years). In addition, Alma Street will be one-way northbound for approximately 6+ months.

15. What is the process for Caltrain to consider allowing a greater than 1% grade on the railroad alignment for the Viaduct?

A 1.6% grade for the railroad alignment is proposed for the Viaduct. Per Caltrain's design standards 1% is the maximum allowed. Caltrain has indicated that there is an established process for requesting a design variance and that the requestor is responsible for the cost to support the review and analysis of a request. Supporting documentation would need to be prepared to evaluate impacts to operations, vehicle performance, and maintenance. Other site-specific conditions, such as the proximity to stations would also need to be considered. The City would engage Caltrain in evaluating design variances once a preferred alternative is identified. See also "Caltrain Notices" on the Virtual Town Hall for documents and correspondence with Caltrain.

16. For the Partial Underpass, why is the ped/bike undercrossing at Kellogg Avenue? Could it be at Churchill Avenue?

For the Churchill Avenue Partial Underpass alternative, Alma Street will be lowered creating a T intersection; and therefore, lowering the pedestrian and bike pathway on Churchill Avenue is not feasible. Kellogg Avenue is the nearest opportunity for routing pedestrian and bicycle traffic to Churchill Avenue and therefore, it was considered as a bicycle and pedestrian crossing location. Furthermore, it provides the connection to the existing bicycle-pedestrian pathway on the west side of the railroad tracks adjacent to Palo Alto High School.

In addition to physical constraints, a separate bicycle and pedestrian crossing at a location other than Churchill Avenue will allow the construction of the ped/bike crossing to be performed ahead of the partial underpass grade separation construction at the intersection and therefore be available for bicycle and pedestrian traffic during Churchill Avenue grade separation construction. Other options like Seale Avenue can also be considered and evaluated for bicycle and pedestrian traffic movement alternatives.