

## How will the alternatives be evaluated?

The City Council adopted the below Criteria to be used to evaluate the alternatives.

*Facilitate movement across the corridor for all modes of transportation*

*Reduce delay and congestion for vehicular traffic at rail crossings*

*Provide clear, safe routes for pedestrians and cyclists crossing the rail corridor, separate from vehicles*

*Support continued rail operations and Caltrain service improvements*

*Finance with feasible funding sources (Order of magnitude cost)*

*Reduce rail noise and vibration*

*Minimize visual changes along the corridor*

*Maintain access to neighborhoods, parks, and schools along the corridor, while reducing regional traffic on neighborhood streets*

*Minimize right-of-way acquisition (Private property only)*

*Minimize disruption and duration of construction*



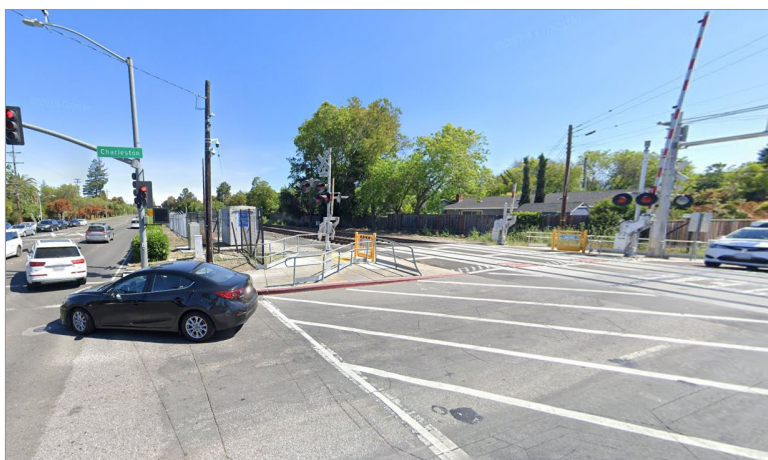
Churchill Avenue and Caltrain Tracks



Meadow Drive and Caltrain Tracks

## Who decides?

City Council is the final decision maker for this project for a preferred rail grade separation for Palo Alto's rail crossings. Council receives input from the community, from City staff, and from key stakeholders, and makes decisions based on this input. Council has already narrowed down the list of possible ideas from 37 to 7 alternatives. Council is expected to choose the preferred alternatives in Fall 2020.



Charleston Road and Caltrain Tracks

For an Evaluation Summary for each alternative based on the Criteria visit: <https://connectingpaloalto.com/fact sheets/>

## RAIL FACT SHEETS

# Connecting Palo Alto

### What is Connecting Palo Alto?

There are currently seven streets where people and vehicles can cross the railroad tracks in Palo Alto. Three of these intersections, called grade crossings, are already grade separated, but the other four cross the tracks at the same level. The four at-grade crossings are Palo Alto Avenue, Churchill Avenue, Meadow Drive, and Charleston Road. Traffic congestion is expected to increase at all four of these locations as Caltrain begins to run electric trains on a more frequent schedule and implement their 2040 Business Plan. Not building any improvements is always being evaluated, however, the City is actively studying alternatives to improve traffic circulation and increase public safety.

Connecting Palo Alto is a community-based process to address the increased traffic congestion expected. Community feedback and collaboration are a vital part of this decision-making process that will affect future generations to come.

### What happens if we do nothing?

A total gate down time of 9 minutes during peak hours is expected with electrification, which is 15% of the peak hour time. At the Alma Street/Churchill Avenue intersection, the average queue length of the northbound left-turn movement would be significantly impacted and extend to Rinconada Avenue during the AM Peak (7-9am). It would take approximately four to five signal cycles (10 to 12 minutes) for the northbound left-turn to clear. In the PM peak (4-6pm), eastbound Churchill Avenue is expected to back up onto El Camino Real. With implementation of the Caltrain's 2040 Business Plan and future growth of traffic, these queues will only get longer. There would be similar impacts to queue lengths at Meadow Drive and Charleston Road.



Alma Street and Churchill Avenue AM Peak Vehicular Queues



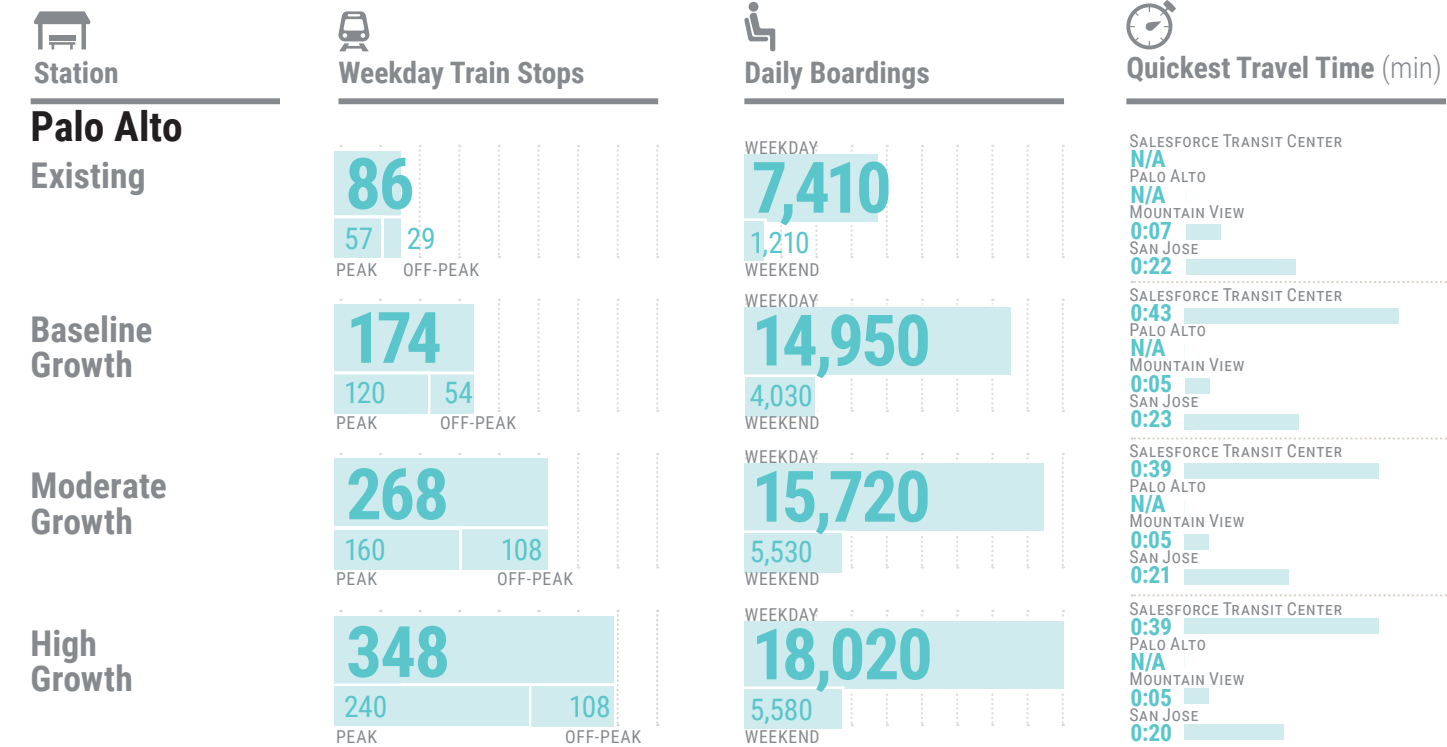
Alma Street and Churchill Avenue PM Peak Vehicular Queues

For more Rail Fact Sheets visit: <https://connectingpaloalto.com/fact sheets/>

## What is Caltrain planning?

As Caltrain begins to modernize by electrifying the tracks, it is expected that the number of trains will increase from 8 trains to 12 trains during both the AM and PM peak hours. In addition, Caltrain has developed a long range vision for the growth of Caltrain and has considered three service scenarios: baseline growth, moderate growth, and high growth. The moderate growth scenario has been selected by the Joint Powers Board as the preferred scenario moving forward. For Palo Alto, this means that daily boarding of passengers at stations is projected to more than double and gate down times to increase by 137% from what they are today, which will further impact queue lengths at grade crossing intersections.

### Service Concepts in Palo Alto

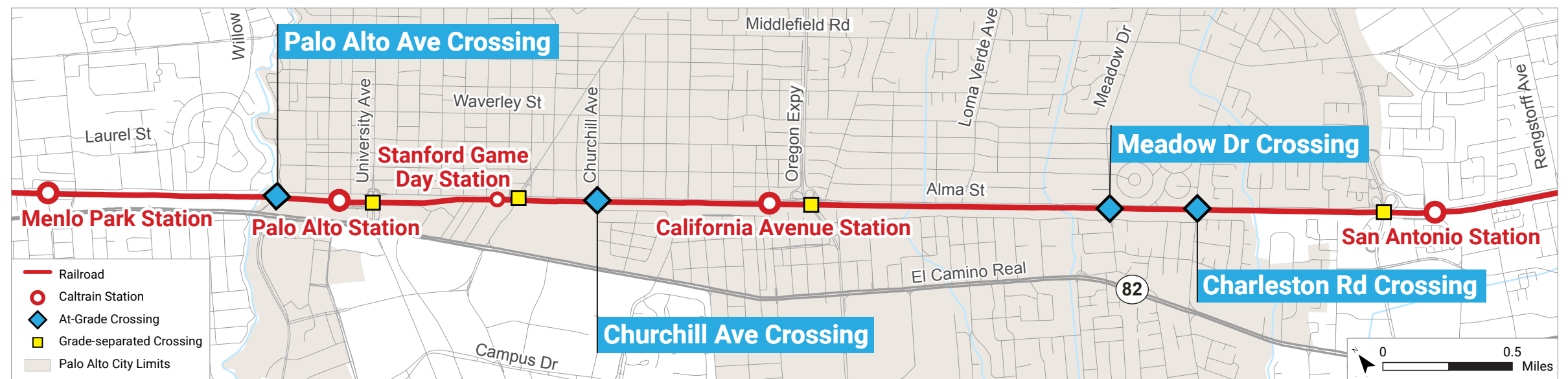


Source: CALTRAIN BUSINESS PLAN DEVELOPING A LONG-RANGE VISION FOR CALTRAIN CITY OF PALO ALTO BOOKLET, May 2019.

## What alternatives are still being considered?

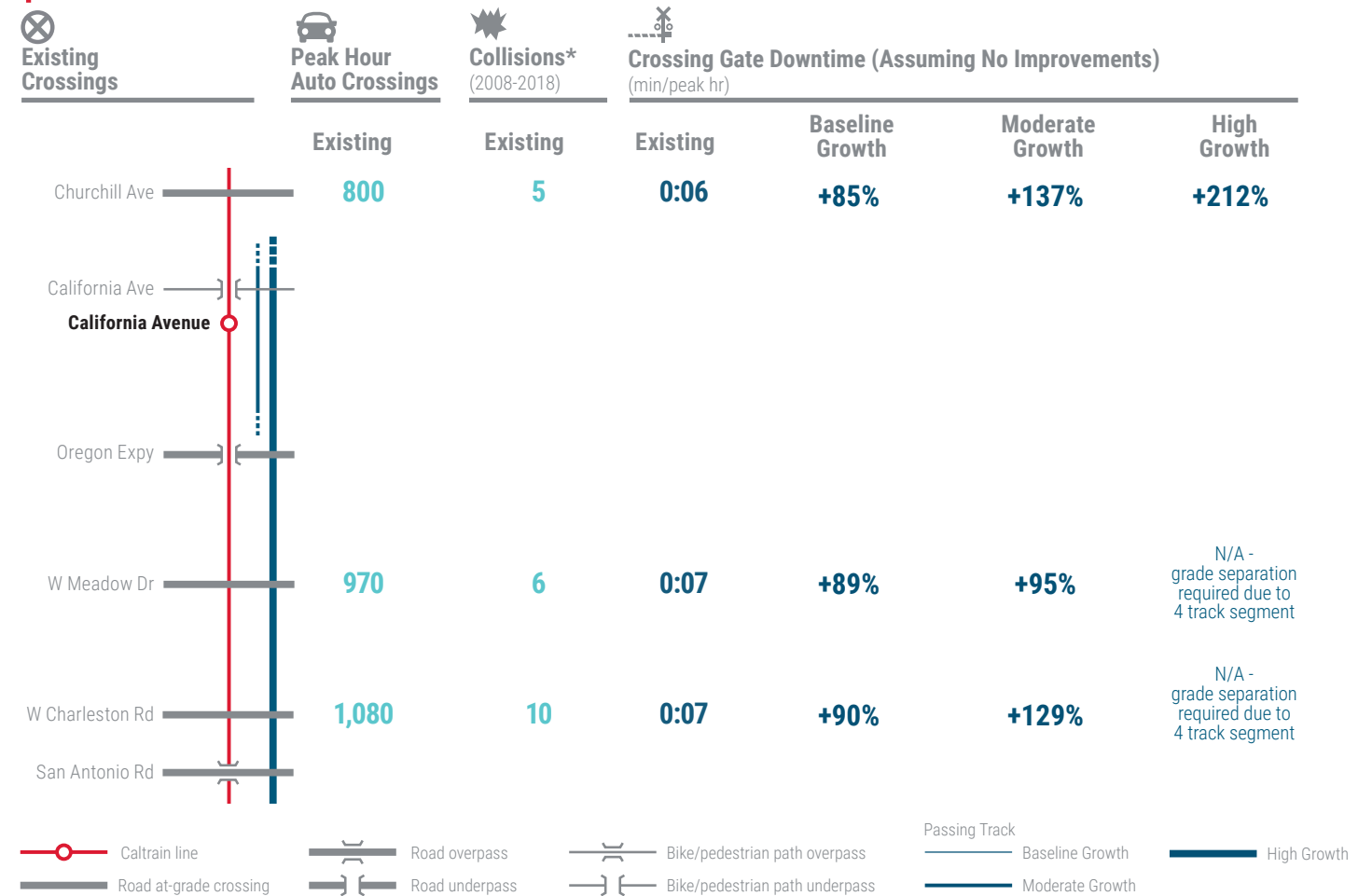
There are six alternatives being considering for Meadow Drive-Charleston Road and three alternatives for Churchill Avenue. Palo Alto Avenue, however, is going through a separate planning effort. As of January 22, 2019, the alternatives on the table are:

- Meadow-Charleston Trench
- Meadow-Charleston Viaduct
- Meadow-Charleston Hybrid
- Meadow-Charleston Underpass
- South Palo Alto Tunnel – Passenger and Freight
- South Palo Alto Tunnel with At-Grade Freight
- Churchill Closure
- Viaduct in the Vicinity of Churchill
- Churchill Partial Underpass



## Crossing the Tracks - Gate Down Times

Gate down times shown are indicative projections extrapolated from existing crossing performance. They are examples of "worst case" gate downtimes that could occur if no grade separations or grade crossing improvements were made. The financial component of the Caltrain Business Plan is planning for substantial investments in grade separation and crossing improvements across all scenarios.



Note: Conceptual 4 Track Segment to be refined through further analysis and community engagement.

\* Includes all accidents and incidents.

Source: CALTRAIN BUSINESS PLAN DEVELOPING A LONG-RANGE VISION FOR CALTRAIN CITY OF PALO ALTO BOOKLET, May 2019.