

## Frequently Asked Questions

Connecting Palo Alto

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Q28: Under what conditions would Caltrain accept a grade variance from 1% to 2%, and what would the approval process be?

A28: Caltrain has a standard procedure for design variances. It outlines the approval process and required supporting documentation. The allowable maximum grade takes into consideration factors such as operational impacts, vehicle performance, proximity to stations, other site specific conditions, and maintenance impacts. A comprehensive study including operational simulations is required to support the design variance request. Additionally, the requestor is responsible for the costs to support the variance review/analysis.

Q29: Under what conditions would Caltrain accept a variance to the existing vertical clearance for poles and wires, and what would the approval process be?

A29: Caltrain minimum clearance to the pole and wires is established to meet California Public Utilities Commission requirements such as General Order 95 and SED 2. Union Pacific Railroad also requires minimum clearances.

Q30: How are grade separation design criteria and constraints likely to change in the future?

A30: The Caltrain Business Plan will help shape a long range vision for the corridor and will address how train service will grow over time and the kinds of supporting infrastructure that may be needed to support this growth. This work will include significant focus on the issue of grade-crossings and an effort to develop a corridor-wide strategy to support the funding and implementation of grade separations. Any changes to Caltrain's standards must be considered in a way that is careful, deliberate and fully and fairly weighs both benefits and consequences, and should be undertaken on a system-wide basis. We anticipate working with the City of Palo Alto and other corridor communities in the coming year to begin this discussion.

Q31: What should the City of Palo Alto assume regarding freight on the Caltrain right of way in the future?

A31: The City of Palo Alto should assume that freight will continue to operate diesel locomotives along the corridor, even after Caltrain electrifies the line. UPRR use of the Caltrain Corridor is governed by the Surface Transportation Board. Subsequently, Caltrain has a trackage rights agreement with UPRR that specifies the terms of freight operations. After the electrification of the Corridor, it is anticipated that a short-line freight operator will replace UPRR. In addition, the Caltrain Corridor is included in the STRACNET Corridor which specifies additional requirements to allow shipments of military equipment, if needed.

Q32: What level of funding support is needed to grade separate because of the PCEP can or could be expected from Caltrain?

A32: The Peninsula Corridor Electrification Project (PCEP) does not include any grade separations. As stated previously, the Business Plan will identify a long term service vision for the corridor and the infrastructure needed to support that service. The Plan will also include a strategy for funding these investments over time. It is anticipated that a variety of local, regional, state and federal funding sources will be needed to support these corridor-wide investments.

Q33: The cost of maintenance for grade separation alternatives vary greatly, what should the City of Palo Alto assume regarding who will pay for the cost of maintenance?

A33: Environmental and economic life-cycle assessments should be performed for all alternatives. For a traditional grade separation such as raising and/or lowering the track by embankment, viaduct and bridge, the City of Palo Alto may assume that Caltrain will take on the maintenance responsibility for such new infrastructure. However, the City of Palo Alto may assume it is responsible for the cost to maintain trench and/or tunnel alternatives as they are anticipated to be significantly more expensive to maintain. Additionally, a mixed operation with freight (diesel powered locomotive) and passenger trains in a tunnel is not desired and requires special attention by FRA under High-Speed Passenger Rail Operations. Ultimately, the specific terms of a maintenance agreement would need to be negotiated between Caltrain and the City.

Q34: What is Caltrain's criteria regarding shooflies that are likely needed for several grade separations during construction?

A34: In general, the shoofly track shall be designed for timetable speed for both passenger and freight trains per Caltrain standards and operating requirements. Except for approved construction windows during cut over operations, the proposed grade separation design shall keep all Caltrain tracks fully operational at all times and shall cause no interruption to train operations during construction. The construction of the grade separation shall not temporarily or permanently reduce the future demand on the Caltrain operating system and shall meet future Caltrain standards and requirements.