

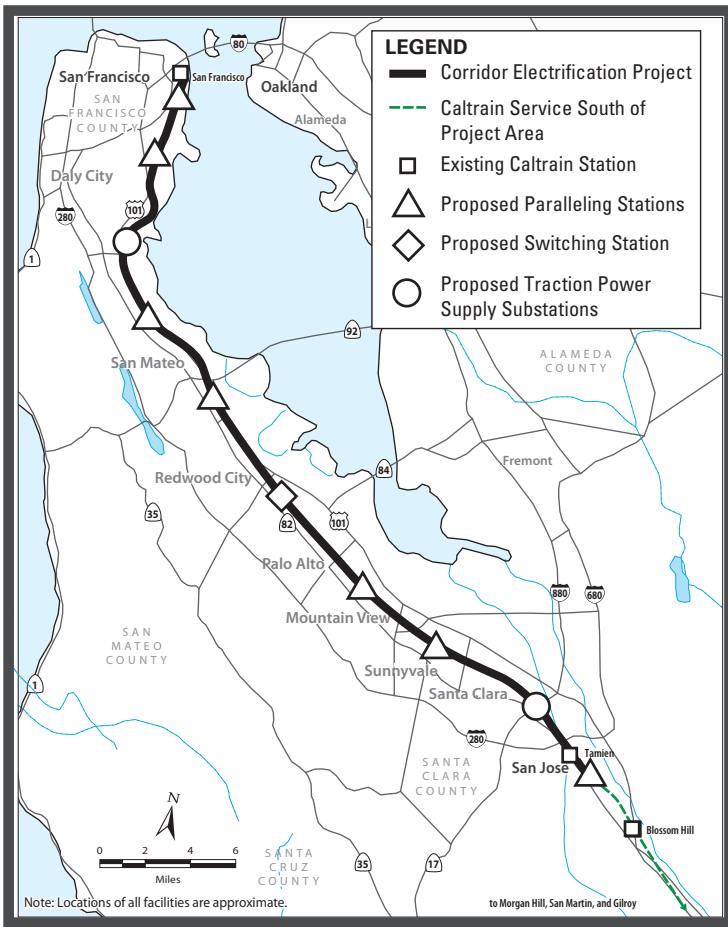
# Peninsula Corridor Electrification

## FACT SHEET | December 2014



### PROJECT OVERVIEW

Over the last decade, Caltrain has experienced a substantial increase in ridership and anticipates further increases in ridership demand as the Bay Area's population grows. The Caltrain Modernization Program, scheduled to be implemented by 2020-2021, will electrify and upgrade the performance, operating efficiency, capacity, safety and reliability of Caltrain's commuter rail service.



The Peninsula Corridor Electrification Project is a key component of the Caltrain Modernization Program and consists of converting Caltrain from diesel-hauled to Electric Multiple Unit (EMU) trains for services between the Fourth and King Street Station in San Francisco and the Tamien Station in San Jose. The project will entail the installation of new electrical infrastructure and the purchase of electrified vehicles. Caltrain will continue Gilroy service and support existing tenants.

### PROJECT BENEFITS

An electrified Caltrain will better address Peninsula commuters' vision of an environmentally-friendly, fast, reliable service. Electrification will modernize Caltrain and make it possible to increase service while offering several advantages in comparison with existing diesel power use, including:

- **Improved Train Performance, Increased Ridership Capacity and Increased Service:** Electrified trains can accelerate and decelerate more quickly than diesel-powered trains, allowing Caltrain to run more efficiently. In addition, because of their performance advantages, electrified trains will enable more frequent and/or faster train service to more riders.
- **Increased Revenue and Reduced Fuel Cost:** An electrified Caltrain will increase ridership and fare revenues while decreasing fuel costs.
- **Reduced Engine Noise Emanating from Trains:** Noise from electrified train engines is measurably less than diesel train engines. Train horns will continue to be required at grade crossings, consistent with safety regulations.
- **Improved Regional Air Quality and Reduced Greenhouse Gas Emissions.** Electrified trains will produce substantially less corridor air pollution compared with diesel trains, even when the indirect emissions from electrical power generation are included. Increased ridership will reduce automobile usage, resulting in additional air quality benefits. In addition, the reduction of greenhouse gas emissions is not only good for our regional air quality, but will also help meet the State's emission reduction goals.

### Provide High-Speed Rail (HSR) Compatible Electrical Infrastructure:

An electrified Caltrain system would set the stage for an enhanced, modern commuter rail service and for future blended HSR service. While this project will not include or study all infrastructure necessary to implement high-speed rail service on the corridor (such as HSR maintenance facilities, station improvements, or passing tracks), the electrical infrastructure (such as overhead wire systems) will be compatible with later blended service<sup>1</sup>.

<sup>1</sup> At a future date, the California High-Speed Rail Authority and the Federal Railroad Administration will conduct their own environmental review to approve running high-speed rail trains on the Caltrain corridor as part of blended service.

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## ENVIRONMENTAL REVIEW PROCESS

On January 31, 2013, Caltrain initiated environmental review to evaluate the environmental issues associated with proposed improvements included in the Peninsula Corridor Electrification Project. Caltrain previously evaluated corridor electrification in a prior Environmental Impact Report (EIR)<sup>2</sup>, but decided to prepare this new EIR for the corridor electrification to update existing conditions, the environmental analysis, and the cumulative analysis. Completion of a new EIR will also allow public agencies, stakeholders, the public and decision-makers the opportunity to review and comment on the project's environmental effects in light of current information and analyses.

The Peninsula Corridor Electrification Project will provide environmental approval for operation of up to 6 Caltrain trains per peak hour per direction (an increase from 5 currently) with operating speeds of up to 79 mph (same as today).

<sup>2</sup> The Federal Transit Administration completed environmental review under the National Environmental Policy Act (NEPA) in 2009 for the electrification project.

## KEY REGIONAL BENEFITS 2040

(ALL EMU + FUTURE PROPOSED EXTENSION TO SAN FRANCISCO TRANSBAY TERMINAL)

**GREENHOUSE GASES ANNUAL**

**176,000**  
METRIC TONS  
OF CO<sup>2</sup>



**DAILY TRAFFIC CONGESTION**

**619,000**  
VEHICLE MILES



**ENGINE NOISE**

**REDUCED**



UP TO  
**97%**

**CLEAN AIR DAILY**



**111,000**

**RIDERSHIP DAILY**



**MORE SERVICE**

**IMPROVED FREQUENCY / QUICKER TRIPS**



## FOR MORE INFORMATION

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