

“Blended System” Grade Crossing & Traffic Analysis

Purpose and Summary Scope of Work

March 2012

Purpose

It is operationally viable to develop an electrified Blended System in the Caltrain right of way where Caltrain and High Speed Rail trains share a primarily two track system. As part of additional studies to begin identifying the infrastructure needs of a Blended System, this analysis is focused on defining what at-grade crossing upgrades are needed along the rail corridor. There are over 40 at-grade crossings between San Francisco and Tamien stations. Short of operating trains at speed of 125mph, there are no clear regulations that specify when grade separations are required. Blended system train speeds considered are up to 79mph and 110mph. The basis for the developed recommendations will be feedback from local cities and counties and consideration of regulations, policies and practices of Caltrain, California High-Speed Rail Authority (CHSRA), Federal Railroad Administration (FRA) and California Public Utility Commission (CPUC).

Consultants

Wilbur Smith Associates, CHS, LTK Engineering

Target Schedule

Summer 2012

Key Tasks

Task 1: Existing Conditions

- Obtain existing or collect new traffic count data
- Obtain existing gate down time data

Task 2: Future Conditions

- Define analysis scenarios (Time Period, Service Plans, Speeds)
- Identify future gate down time (based on CBOSS PTC and EMUs)
- Forecast future traffic conditions

Task 3: Evaluation Criteria and Analysis

- Develop evaluation criteria
- Develop recommendations for at grade crossing upgrades

Task 4: Recommendations

Task 5: Draft and Final Report

(Note: As an appendix to this study, horn noise implications will be addressed.)