

# Advanced Signal System

FACT SHEET | November 2015



## PROJECT OVERVIEW

The Communications Based Overlay Signal System (CBOSS) Positive Train Control (PTC) Project, is an advanced signal system that will equip the corridor with federally-mandated safety technology by 2016 and will increase system capacity to help accommodate future increases in ridership demand. CBOSS PTC will be interoperable with all other rail systems that access the Caltrain corridor, including commuter rail; freight rail; and, in the future, high-speed rail.

CBOSS PTC is also a key component of the Caltrain Modernization Program. Over the last decade, Caltrain has experienced record-breaking ridership increases and further increases in ridership demand are anticipated as the Bay Area's population grows. The Caltrain Modernization Program, scheduled to be in operation by 2020, will electrify and upgrade the performance, operating efficiency, capacity, safety and reliability of Caltrain's commuter rail service, providing Peninsula communities with a modernized rail service that will help meet growing ridership demand between San Francisco and San Jose.

## GOALS & BENEFITS

### Improved Safety

The CBOSS PTC Project will monitor and, if necessary, control train movement in the event of human error. This will increase safety on the Caltrain corridor which has over 40 at-grade vehicular and pedestrian crossings by:

- Eliminating the risk of train-to-train collisions.
- Reducing risk of potential derailments by enforcing speed limits.
- Providing additional safety for railroad workers on the tracks.

### Increased Reliability and Operating Performance

More dependable passenger service and operating performance will be achieved through:

- Schedule Management – there will be better accountability and management of train schedules.
- Enforcement of Scheduled Station Stops – a train will no longer be able to overshoot a station stop or platform.
- Improved grade crossing performance – travelers crossing the tracks will benefit from reduced gate downtime and improved local traffic circulation.

### Capacity Benefits

A key factor in constraining the existing Caltrain capacity is the current wayside signal system, which forces train separation based on the poorest performing type of train. CBOSS PTC is smarter. It will minimize the separation of trains to match the safe braking needs of specific train types. Combining the CBOSS PTC Project with the operation of highperformance electric multiple unit (EMU trains), which is planned with Caltrain Electrification, will upgrade the system to provide faster and/or more frequent service to more stations and more riders.

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**FOR MORE INFORMATION / PARA MÁS INFORMACIÓN**

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