



# Broadband Wireless Communications Design

JPB Finance Committee  
September 23, 2019  
Agenda Item #8

The slide features a red background with a white and grey border. The Caltrain logo is in the top left. The title is centered in large black font. The date and agenda item are in the bottom right. A faint image of a train is visible in the background.



## Objective

Design a communication system for

1. Remote, real-time train diagnostics and other operational needs.
2. Provide on-board passenger WiFi service.

The slide features a white background with a red and grey border. The Caltrain logo is in the top left. The title 'Objective' is in large black font. Below it is the text 'Design a communication system for' followed by a numbered list of two items. A faint image of a train is visible in the background.



## Background

- Several attempts to deliver WiFi service to passengers on-board Caltrain in the past.
- Technical solutions were either too expensive or did not meet all of JPB's requirements.
- Leverage off the PTC fiber and EMU vehicles.



## Contract Scope of Work

1. Define requirements for the wireless communications system.
2. Develop a design to meet all the requirements.
3. Develop a construction cost and schedule estimate.

### Final Deliverable:

Comprehensive technical specifications and design to be included in a Request For Proposal to implement the Broadband Wireless Communication System.



## Future Steps

1. Have a design package ready for a Request For Proposal by the end of June 2020.
2. Select a contractor to install the on-board equipment and wayside equipment in 2021.



Questions?