San Clemente Quiet Zone / Wayside Horn Experience

Presentation to:

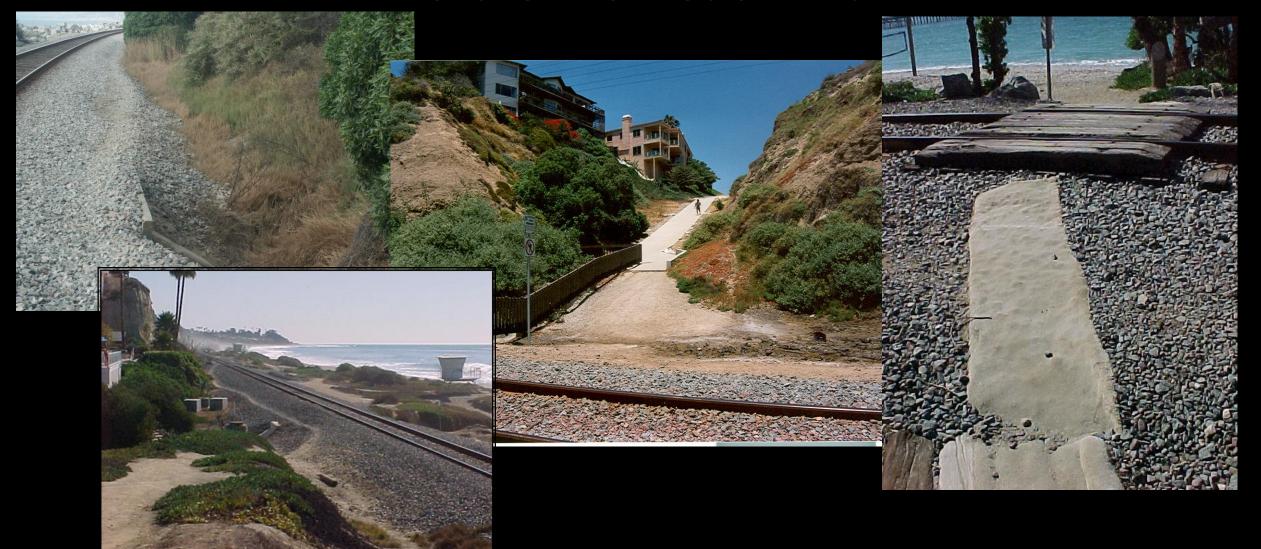
City of Encinitas Coastal Mobility and Livability Working Group

Tom Bonigut, Deputy Public Works Director City of San Clemente April 25, 2017

Coastal Rail Corridor Before the Beach Trail



Coastal Rail Corridor Before the Beach Trail



Typical RR Crossings – Before



Timeline

- 1998: Original Beach Trail design
- 1999: Public and Council rejected design
- 2000 2003: New design
- 2003: Council approves new design; OCTA approves lease for trail
- 2003: Protest Trail Application CPUC, BNSF, Caltrans Rail Division
- 2004: Settlement agreement with CPUC and BNSF; also Caltrans Rail Division
- 2004: Coastal Commission approval of Trail Plan
- 2005: Start Trail Phase I construction
- 2006: Finish Trail Phase I; FRA Train Horn Rule issued
- 2007: Start Trail Phase II construction
- 2008: Phase II trail complete
- 2011: OCTA completed initial at-grade crossing safety upgrades; AWS initial testing
- Dec 2011: QZ established at North Beach crossings
- April 2014: AWS and additional safety improvements completed
- August 2014: Submitted FRA waiver request
- April 2015: FRA conditionally approved AWS
- Early 2016: Additional fence completed
- June 2016: Activated AWS

Beach Trail





Beach Trail







Beach Trail





Beach Trail Fencing Options



Other Beach Trail Fencing

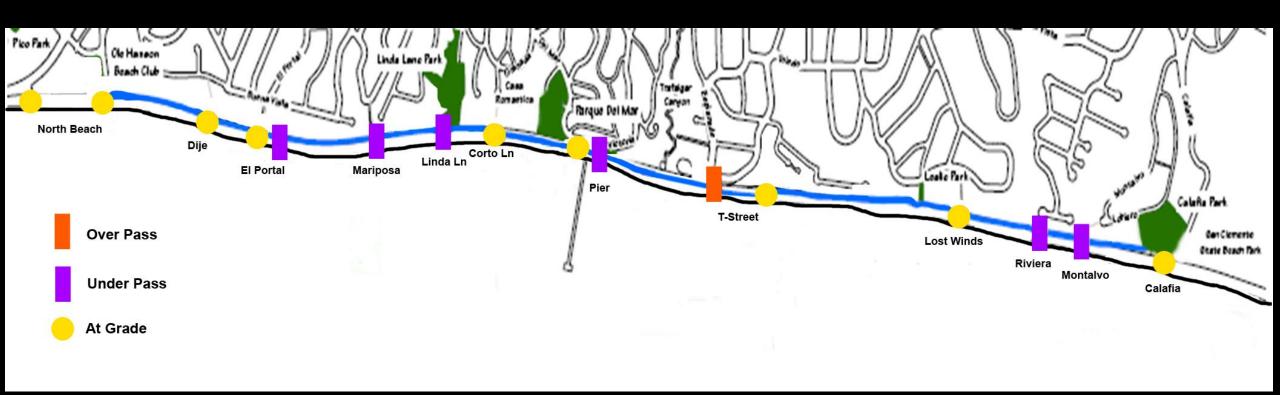




Beach Trail Area RR Crossings

- 16 total
- 9 CPUC approved at-grade

- 2 crossings QZ
- 7 crossings Wayside Horn



Federal Railroad Administration (FRA) 2006 "Train Horn Final Rule"

Purpose

- Improve Safety
- Allow Quiet Zones

Oversight

- Did not deal with "stand alone" pedestrian crossings
- Did not make connection between pedestrian crossings as solution to trespassing deaths

Result

• San Clemente caught in Federal/State bureaucratic snafu

Train Horn Noise!



Train Horn Noise!





Orange County Transportation Authority Rail Crossing Safety Program

- Improved over 50 rail crossings throughout OC
- Funded mostly by Measure M2 Half-Cent Countywide Sales Tax
 - 88% OCTA
 - 12% Local City Match



North Beach Quiet Zone



Potential Options to Obtain Quiet Zone for Other Crossings

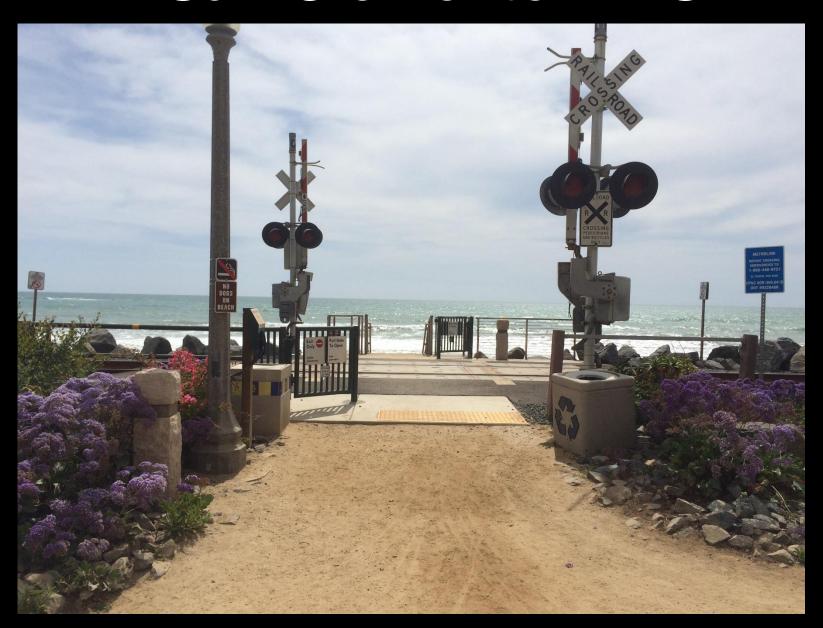
- "Bookend" at-grade crossings with two public vehicular crossings
- Designate Pier private crossing as public qualify most but not all at-grade crossings under a QZ
- State and/or Federal legislation to allow QZ at pedestrian crossings
- Then pursued AWS via CPUC, nullified by legal action

FRA Waiver Submittal Per FRA Rules of Practice 49 CFR Part 211

- Presented three options
 - 1. Redefine length of Quiet Zone
 - 2. Modified Wayside Horn (Audible Warning System AWS)
 - 3. Allow Quiet Zone w/o public vehicular crossing

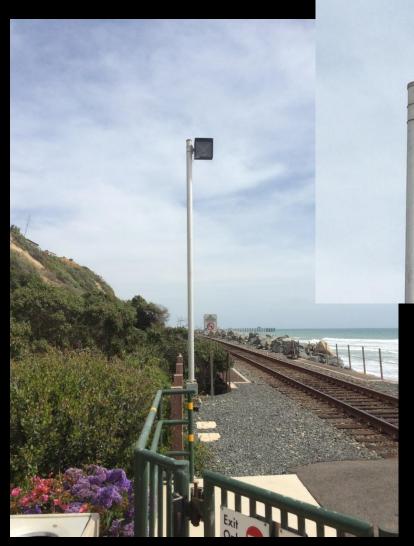
FRA approved Option 2 with conditions

San Clemente AWS



San Clemente AWS





San Clemente AWS







El Portal



FRA Required Fencing



FRA Required Fencing





FRA Required Fencing





TOTAL COST Almost \$23 million

- Beach Trail incl. crossings: \$15.2 million
- Initial at-grade safety upgrades: \$2.4 million
 - Two vehicle and one ped crossing
- Remainder at-grade safety upgrades, AWS and extra fencing: \$5 million
 - 7 ped crossings
- Ongoing insurance and O&M: \$75-80k