

## Tehachapi Rail Improvement Project

Public Information Meeting  
August 11, 2011



**Project Description:**

- Currently nine (9) single-track segments paralleling State Route 58 through the Tehachapi Pass.
- Project would double track five segments of tracks
- Total distance between Bena to Marcel is 25+ miles
- Project segments total 8.21 miles

**Purpose:**  
Reduce freight train congestion through Tehachapi

**Objectives:**

- Reduce operational constraints
- Improve operational capacity
- Allow alternative mode transfer due to improve rail efficiency




**Current and Projected Train Use**

Year	Average operations	Capacity
Existing (2010)	40 Trains per day	38 Trains per day 48 BNSF / 16 Union Pacific / 16 BNSF
Priority 1: Wainio to Marcel (2012)	42 Trains/Day	32 Trains/Day
Priority 2: CDR Siding Extension (2012)	44 Trains/Day	33 Trains/Day
Priority 3: Rowen to Woodford (2017)	46 Trains/Day	35 Trains/Day
Priority 4: Caliente to Beaville (2016)	48 Trains/Day	61 Trains/Day
Priority 5: Bena to Lemoor (2020)	50 Trains/Day	65 Trains/Day (with Project) 48 BNSF / 16 Union Pacific



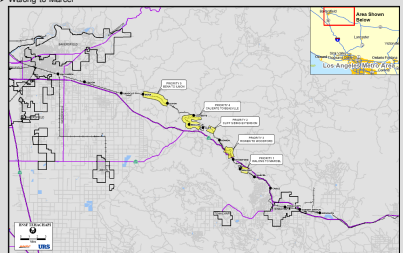

## Project Study Area




**Proposed Project Segments**

From west to east, the five segments proposed for double tracking are as follow:

- Bena-to-Iron
- Caliente-to-Beaville
- CDR Siding Extension
- Rowen-to-Woodford
- Wainio-to-Marcel



## Construction Timeline and Impacts



**Estimated Construction Schedule:**

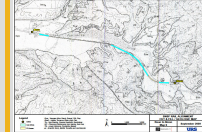

Segment	Priority of Construction	Start Date (year)	Completion Date (year)
Wainio to Marcel	1	2012	2013
CDR Siding	2	2014	2015
Rowen to Woodford	3	2015	2016
Caliente to Beaville	4	2017	2018
Bena to Iron	5	2019	2020

**Anticipated Cut and Fill During Construction:**


Segment	Cut	Fill	Balance
Bena to Iron	21,622	60,394	38,774
Caliente to Beaville	288,244	248,820	49,424
CDR Siding	250,491	22,115	227,376
Rowen to Woodford	81,027	67,964	13,063
Wainio to Marcel	100,133	61,464	38,669
Total	540,957	659,577	247,520


**Impacted Properties:**

- 14 Temporary affected area during construction
- 23 Permanent affected area
- Impacted area consist of primarily non-prime agricultural land
- Majority are privately owned, with minor land owned by County of Kern
- Acquisition of affected private lands outside of the Railroad Right-of-Way would occur

## Existing and Proposed Vegetation of the Caliente Fill Scope







Top: The existing visual conditions as seen from Caliente Roadfish Road  
Bottom: A visual simulation of the project showing conceptual revegetation of Caliente fill scope seen from View Point 2

Engineered and Re-vegetated Slope

## Existing and Proposed Work - Tunnel #2







Top: The existing visual conditions as seen from Tunnel #2  
Bottom: A visual simulation of the double track showing bypass of Tunnel #2

Existing Tunnel to remain

New Engineered Cut for new track

## Existing and Proposed Work - Tunnel #10






Top: The existing visual conditions as seen from Woodford-Tehachapi Road  
Bottom: A visual simulation of the project showing simulated view of Tunnel #10 and surrounding visual landscape

Existing Tunnel to Remain


New Engineered Cut for new track

## Pre-Historic Archaeology and Architectural History





### Pre-Historic Resources

- Records Search
  - 31 known cultural resources within 1 mile radius of the project area
- Phase I Archaeological Survey
  - 4 prehistoric archaeological sites and three prehistoric isolates.
  - bedrock milling features
  - isolated resources of lithic milling material debitage.
- None of the known resources within 1 mile radius contain significant archaeological sites




### Historic Resources

- Portions of historic Southern Pacific-Santa Fe Railroad surveyed
- Properties affected are not eligible for listing under the California Register of Historic Places

## Air and Noise Impacts



### Air



- Project is located in both Mojave Desert Air Basin and San Joaquin Valley Air Basin
- Short term and long-term air quality impacts evaluated
- Six (6) criteria pollutants evaluated
- Greenhouse Gas Emissions assessed

### Results


- Construction emissions would not exceed thresholds
- Operational emissions would not exceed thresholds
- Project would achieve 46% GHG emissions reduction compare to Business as Usual

### Noise

- Short term and long term noise readings taken
  - 57, 22 sites
  - 17, 6 sites
- Results
  - Up 1.3 dB with project
  - Considered less than significant by CEQA guideline
  - Rural nature of the project
  - Noise barriers unfeasible and unreasonable

## City of Tehachapi Circulation Issues




### Traffic

- Potential for delay is minimal with 10 additional 8,000 foot trains per day
- Average daily delay: 0.28 minutes per vehicle at the Demission Road Crossing in downtown Tehachapi


Existing Grade Crossing Delay Analysis				2020 Grade Crossing Delay Analysis			
Peak Hour Train Count	Existing Delay (min)	Proposed Delay (min)	Hourly Delay (min)	Peak Hour Train Count	Existing Delay (min)	Proposed Delay (min)	Hourly Delay (min)
8,000 Foot Trains	115	0.11	0.01	7,000 Foot Trains	214	0.25	0.01
8,000 Foot Trains	115	0.54	0.01	7,000 Foot Trains	214	0.71	0.01
8,000 Foot Trains	115	0.11	0.01	7,000 Foot Trains	214	0.36	0.01
8,000 Foot Trains	115	0.54	0.01	7,000 Foot Trains	214	0.71	0.01

### Transportation

- Four alternative grade separation locations at Mill St, Green St, Hayes St, and Demission St. were not feasible
- The location at Valley Boulevard/Goodrich Drive was further evaluated for a grade separation



## Natural and Water Resources Issues



### Hydraulic and Water Quality Issues

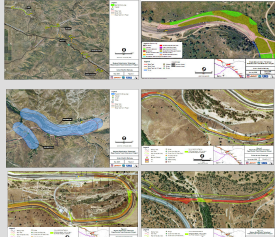
- Pre- and post-proposed 50- and 100-year storm flow rates and drainage – no change
- Extension of culverts and modification of bridges - Minimal change to soil condition, sediment yield, and overall watershed
- Non-jurisdictional waters - Minor – Cumulatively less than 2 acres
- National Pollution Discharge Elimination System Permit and Section 401 Water Quality Certification - Water quality compliance achieved

### Findings from the Jurisdictional Delineation Report


- Total of 55 aquatic features identified – non-jurisdictional

### Conclusions from the Natural Resources Report

- Natural Resources Focused surveys found No Presence
  - Least Bell's vireo,
  - southwestern willow flycatcher
  - special status plant species
- Vegetation Plan
  - Restore originally affected landscape
  - Impact to biological resources and habitats:
    - Limited to construction phase
    - Permanent disturbances not anticipated



## Comments



### How to Comment:

- Please Fill out a comment sheet
- Drop your comment in the comment box
- Provide verbal comments to Caltrans David Farris or Kirsten Helton at the public meeting
- Send email or written comments to:

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