

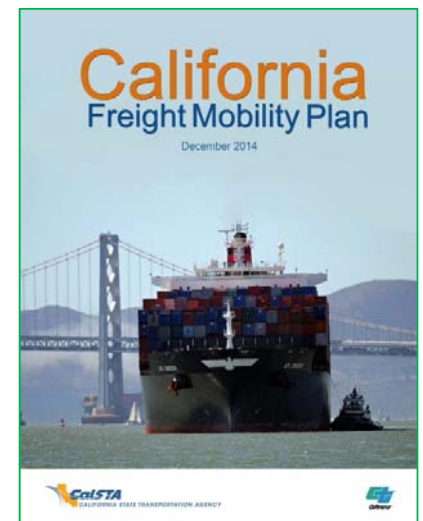
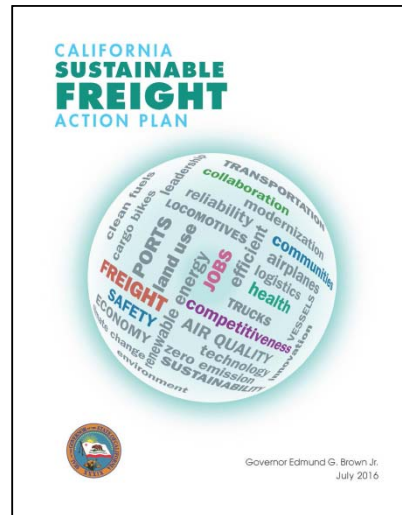
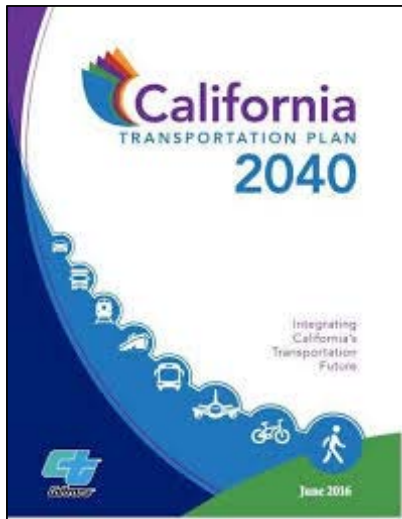
# 2018 California State Rail Plan California Freight Advisory Committee

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January 25, 2017



# 2018 CSRP – Coordination With Other Plans



## 2018 CSRP – Freight Vision Concepts

- Premier System
- Customer-Focus
- Integrated System
- Delivering People and Products
- Economic Growth and Competitiveness
- Improved Quality of Life



# Rail Plan – Rail Freight Element

- Characterize **freight corridors**
- Describe freight system **partnership opportunities**
- Develop a **freight-specific capital program**
- Establish a **Strategic Rail Vision**, including passenger and freight





# Freight Rail Vision

# Freight System Needs and Opportunities

Trade Corridor  
Improvements

Economic  
Development  
and Short Lines

Regional Equity  
for Grade  
Crossing  
Improvements

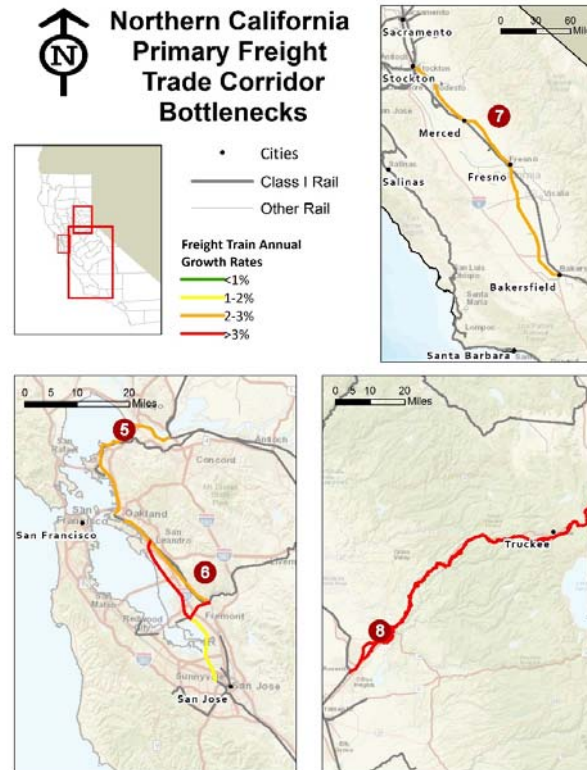
Terminal and  
Yard Capacity

Short Haul  
Shuttles

# Northern California Primary Trade Corridors

Map ID	Rail Subdivision	Bottleneck Issues
5	UPRR Martinez (Oakland to Martinez)	<ul style="list-style-type: none"> <li>Among the busiest lines in Northern California</li> <li>Expected to worsen with train volume growth projected at 36 – 50 daily freight trains in 2040</li> </ul>
6	Southern Oakland Route	<ul style="list-style-type: none"> <li>The Oakland Army Base redevelopment could result in about 15 daily trains in 2040</li> <li>Capacity constraints on Martinez Sub could impact this corridor</li> </ul>
7	BNSF Mainline Stockton to Bakersfield (San Joaquin Corridor)	<ul style="list-style-type: none"> <li>Capacity needs in this corridor are driven by both passenger and freight service expansion</li> <li>High growth in freight volumes are expected (54 – 58 daily freight trains in 2040)</li> </ul>
8	UP Roseville to Reno over Donner Pass	<ul style="list-style-type: none"> <li>Heavy freight rail growth is projected in this corridor – about 66 freight trains daily by 2040</li> <li>Additional intercity passenger service will require capacity investment</li> </ul>

- In Northern California, substantial growth is expected along three primary trade corridors, Bay Area to Central Valley, Central Valley, and Central Valley to Reno
- Primary trade corridors are also major intercity passenger rail corridors, and accommodating future train volumes will require additional capacity.
- The lack of a connection between the UP Oakland and Niles subdivisions at the Niles Junction currently precludes use of Niles Canyon for expanded freight service



# Southern California Primary Trade Corridors

Map ID	Rail Subdivision	Bottleneck Issues
1	BNSF San Bernardino	<ul style="list-style-type: none"> <li>One of the busiest mainline segments in the US with heavy freight and passenger traffic</li> <li>Projected to have significant freight growth through 2040, as many as 125 daily freight trains</li> </ul>
2	BNSF Cajon (Barstow to Keenbrook)	<ul style="list-style-type: none"> <li>High volume freight corridor expected to have as many as 167 daily freight trains in 2040</li> </ul>
3	UPRR Sunset Route (Yuma Subdivision)	<ul style="list-style-type: none"> <li>Double-tracking in California is incomplete,</li> <li>Heavy projected freight growth amounting to about 95 daily freight trains in 2040</li> <li>This growth will make accommodating new passenger service non-trivial</li> </ul>
4	UPRR Alhambra and Los Angeles	<ul style="list-style-type: none"> <li>Shared corridor with Metrolink</li> <li>Some segments are projected to carry as many as 110 freight trains daily, though most will carry 40 – 60 trains</li> </ul>

- Significant intermodal- and international-related growth is expected along key trade corridors throughout Southern California
- If projected train volumes materialize, accommodating passenger and freight rail will require additional capacity

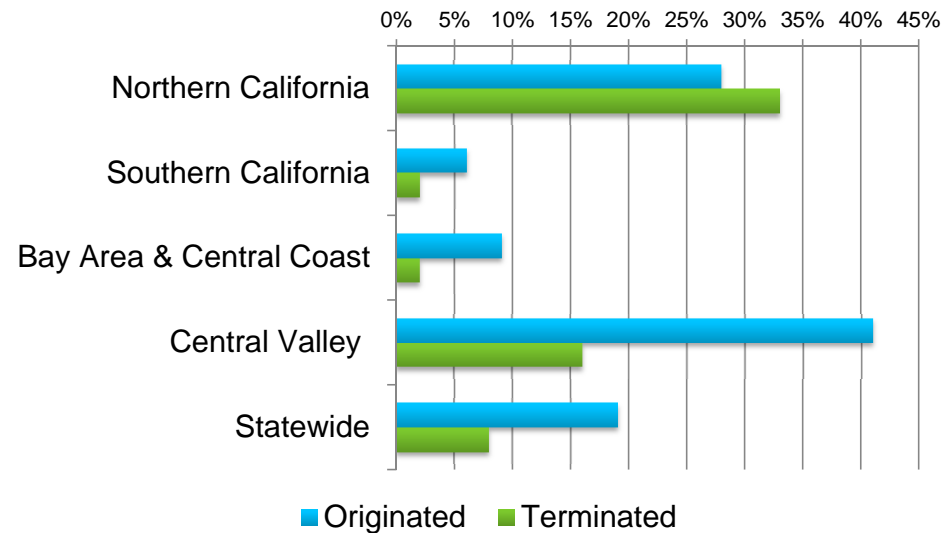




## Significance of California's Short Lines for Carload Traffic

- One in five shipments –start their trip on a short line
- One in twelve end their trip on a short line
- Commodities include agricultural products and supplies, chemicals, and building materials
- Public investments needed to support maintenance and upgrading short line track conditions

**Proportion of Carload Volume Associated with Small Railroads**



Source: 2013 STB Waybill Sample.

## Intermodal Terminal Capacity

	Current Terminal Capacity (Lifts)	Projected Future Capacity Needs (Lifts)	Projected Increase in Capacity Needs (Lifts)
<b>Bay Area</b>	750,000	1,150,000	400,000
<b>Central Valley</b>	570,000	1,030,000	460,000
<b>Southern California</b>	6,600,000	12,260,000	5,660,000
<b>TOTAL</b>	<b>7,920,000</b>	<b>14,440,000</b>	<b>6,520,000</b>

## Short Haul Services

- The Port of Long Beach has recently revisited the concept of **short haul rail to inland ports**. The service could potentially
  - Alleviate port and nearby highway congestion
  - Improve the velocity of cargo moving out of Southern California
  - Advance development of logistics centers at inland locations, where there is less traffic congestion and land and labor costs are lower
- While previously found to be uneconomical, drayage trucking costs have risen above short haul rail costs in recent years
  - Challenges include rail network capacity and institutional
- In the Bay Area, similar considerations have produced interest in short haul services between the Port of Oakland and the San Joaquin Valley or the expanding Reno-Sparks industrial center

## Bay Area/Sacramento Freight Investment Program Examples

INVESTMENT	FREIGHT	PASSENGER
<b>Trade Corridor</b>		
Capacity improvements UP Martinez Subdivision	✓	✓
Capacity improvements Southern route to/from Oakland (UP Niles, Coast, Oakland Subs)	✓	✓
Siding and access improvements at Benicia	✓	
<b>Economic Development and Short Lines</b>		
Freight spurs/sidings SMART/NWP (increase rail opportunities for North Bay shippers)	✓	✓
Evaluate rail-served industrial development infrastructure Northern Contra Costa Waterfront	✓	
<b>Regional Equity for Grade Crossings</b>		
Address community impacts as rail traffic grows/shifts Martinez/Niles, Corridor-based improvement plan	✓	✓
Bridge and crossing improvements on SMART	✓	✓

## Bay Area/Sacramento Freight Investment Program Examples

INVESTMENT	FREIGHT	PASSENGER
<b>Terminal and Yards</b>		
Ensure capacity and connectivity at Port of Oakland – 7th Street Grade Separation and North Lead	✓	
Potential battery assist switcher demonstration in Bay Area yards	✓	
<b>Short Haul</b>		
Re-assess short haul link between Oakland and Central Valley	✓	

## Central Valley Freight Investment Program Examples

INVESTMENT	FREIGHT	PASSENGER
<b>Trade Corridor</b>		
New connections to facilitate Northern California route alternatives (Stockton Wye)	✓	✓
Merced to Stockton improvements (BNSF Stockton Sub)	✓	✓
Track additions Bakersfield to Mojave	✓	
<b>Economic Development and Short Lines</b>		
Sidings, track upgrades, industrial spurs, and loaders for rail-served customers (SJVR, CCT, SERA)	✓	✓
<b>Regional Equity for Grade Crossings</b>		
Address rural grade crossing needs including along short lines (various locations)	✓	
Develop corridor improvement program along major highways	✓	✓

# Central Valley Freight Investment Program Examples

INVESTMENT	FREIGHT	PASSENGER
<b>Terminal and Yards</b>		
Planned intermodal expansion	✓	
Improvements and expansion at Port of Stockton	✓	
<b>Short Haul</b>		
Connectivity to Bay Area and Southern California ports	✓	
Potential Shafter terminal expansion	✓	



## Southern California Freight Investment Program Examples

INVESTMENT	FREIGHT	PASSENGER
<b>Trade Corridor</b>		
Track additions BNSF San Bernardino Subdivision	✓	✓
Complete UP Alhambra Subdivision double track	✓	
<b>Regional Equity for Grade Crossings</b>		
Address grade crossing needs of all counties	✓	✓
<b>Terminal and Yards</b>		
Intermodal terminal expansion to address growth – terminal access improvements for on-dock rail	✓	
Reduce yard and terminal emissions through implementation of ZE technologies (cargo handling and switching)	✓	
Realize truck/rail emission tradeoffs – on-dock and near-dock terminals	✓	
<b>Short Haul Services</b>		
Re-examine inland port concepts	✓	



## Rest of California Freight Service Program Examples

INVESTMENT	FREIGHT	PASSENGER
<b>Trade Corridor</b>		
Track additions, signal upgrades, and tunnel improvements (UP Donner Pass)	✓	
<b>Economic Development and Short lines</b>		
State of good repair and infrastructure upgrades to maintain and expand service (SERA, SMVRR)	✓	
Track and yard expansion (SMVRR)	✓	
<b>Regional Equity for Grade Crossings</b>		
Rural county grade crossing improvements	✓	✓

# Project Schedule

Project Milestones	Timeframe
Draft Vision Development & Technical Work	Fall 2015 – Dec 2016
Development of Administrative Draft	June 2016 - March 2017
<b>Release of Public Review Draft</b>	<b>March 2017</b>
Public Comment Period <b>Public Workshops on Draft CSRP</b>	March – April 2017
Revision of Draft	May – August 2017
CTC, FRA & CalSTA Reviews Submittal to Legislature	Sept 2017 – Winter Winter 2017/Early 2018

# Questions

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