2013 California State Rail Plan
Freight Element

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Planning Horizons
July 10, 2013

Caltrans

Caltrans Rail Plan Team

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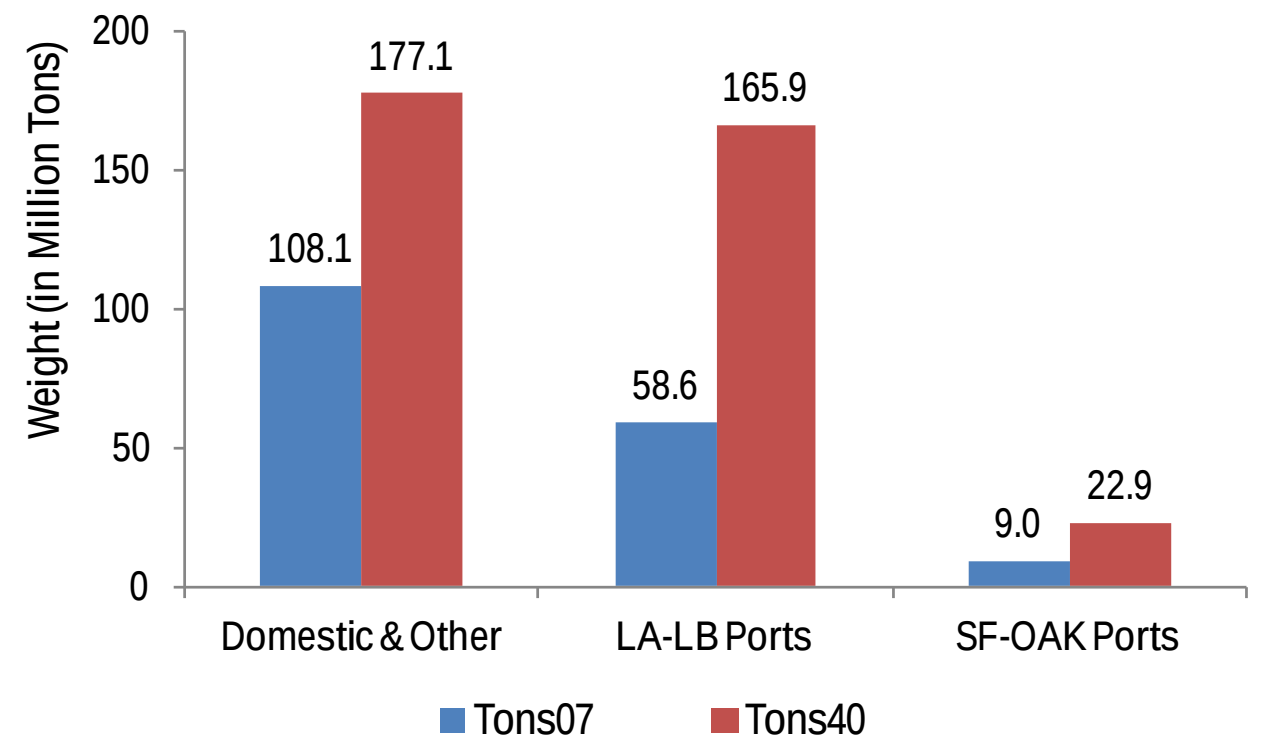
Current & Future Tonnage



California Rail Tonnage Distribution by Rail Market Type, 2007 and 2040

Caltrans

California Trade Regions

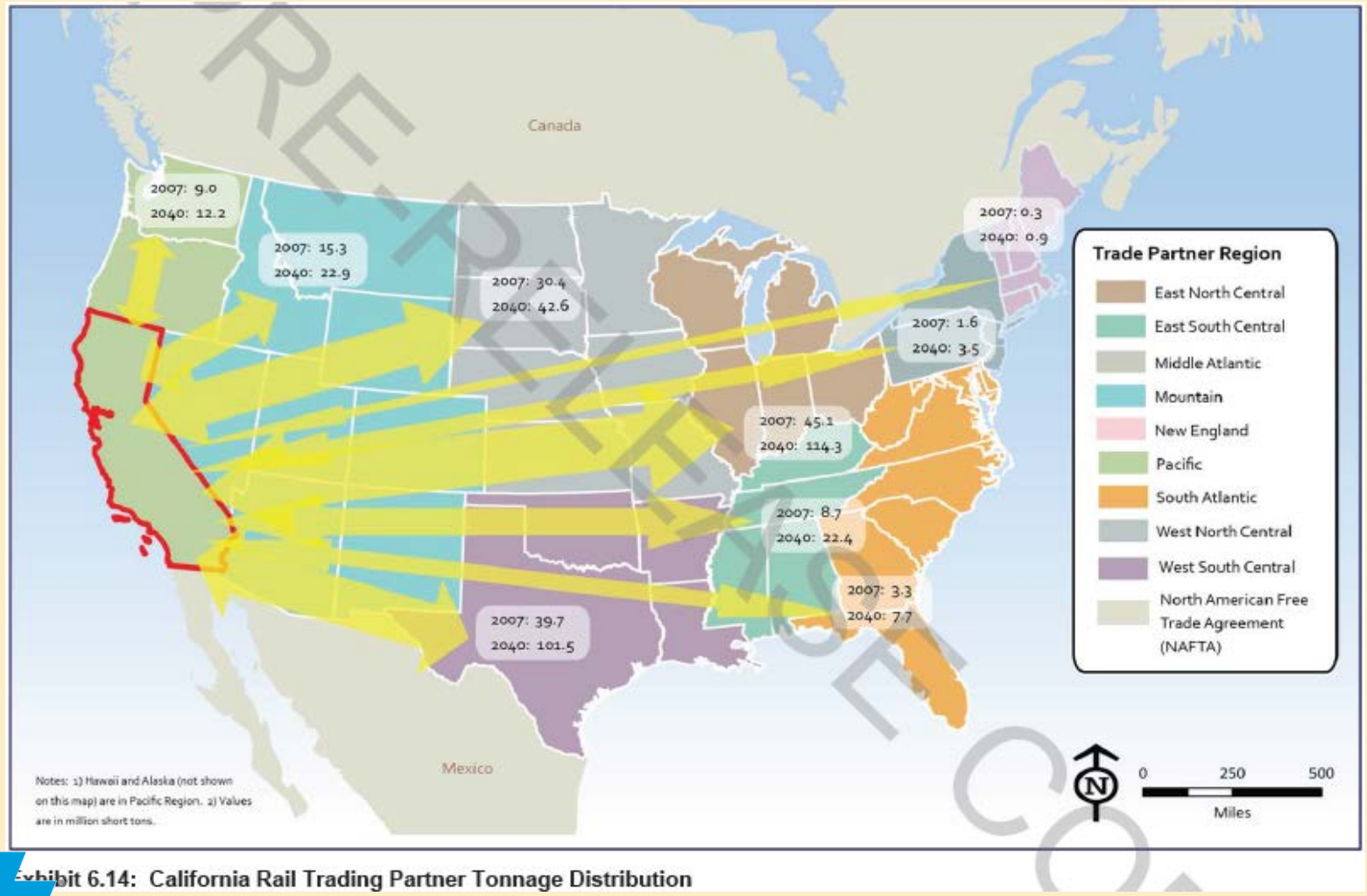


Exhibit 6.14: California Rail Trading Partner Tonnage Distribution


NORTH
Humboldt Bay
West Sacramento
Pacific Ocean
Stockton
Richmond
Oakland
San Francisco
Redwood City
Hueneme
Los Angeles
Long Beach
San Diego
California Association of Port Authorities

Caltrans

Caltrans

Transfer to Trucks

Caltrans

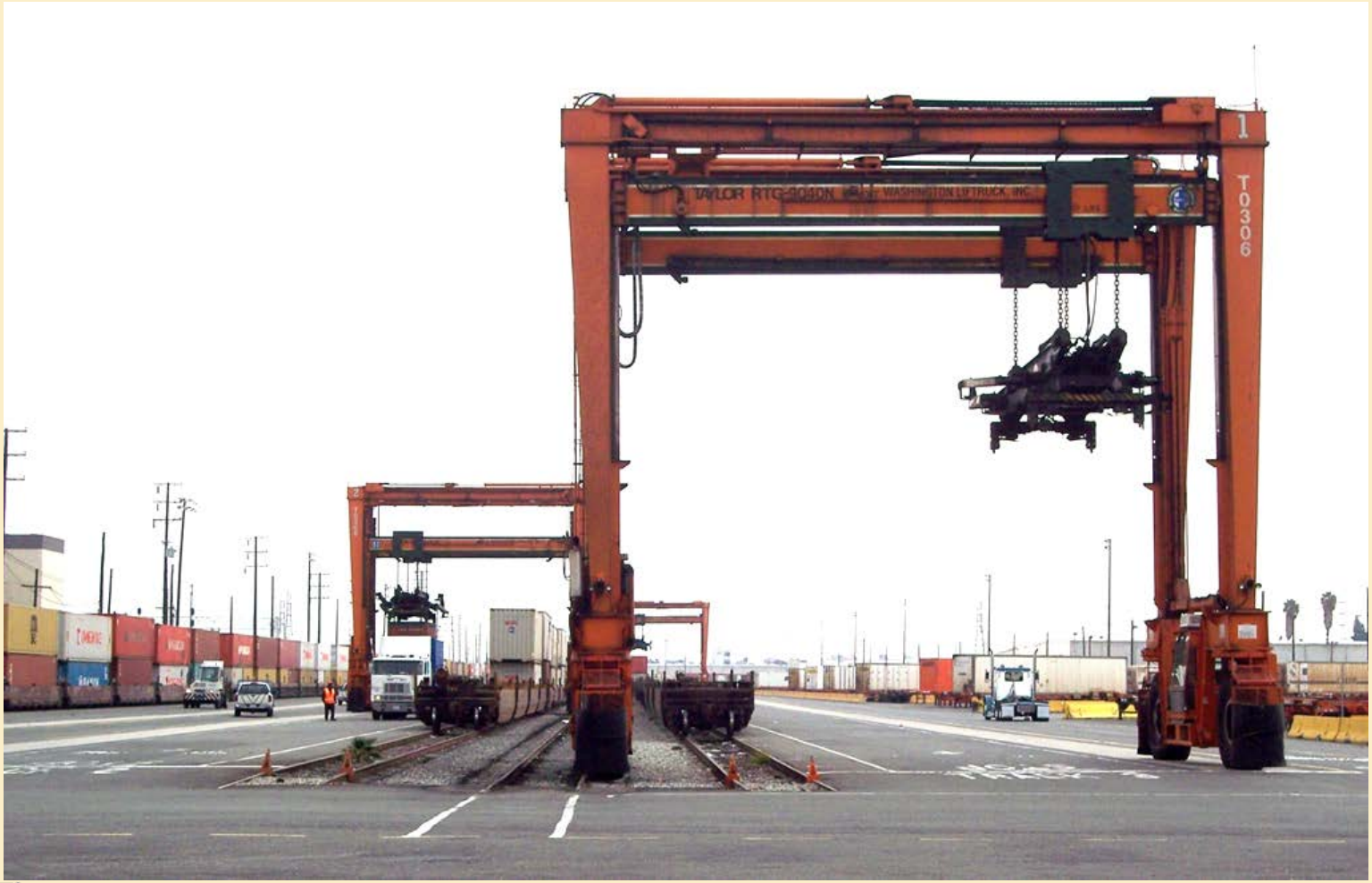
Port Gates

Caltrans

Highways to Intermodal & Transload

Caltrans

On-Dock Rail



Caltrans


01/01/2004

Caltrans

Trade Corridor Improvement Fund

Southern California Active Projects

Seaports
6 projects $1.374 billion

Railroad Mainlines
6 projects $515 million

Railroad Grade Separations
28 projects $2.324 billion

Highways
16 projects $2.240 billion

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- 110+ trains per day
- Partners: BNSF, UP, SanBAG, CTC, Caltrans
- $202 million total project
- Benefits: safety, air quality, noise, congestion reduction, operations efficiency

Caltrans


7974
7974
CP SP538

TONNAGE PER DAY ON KEY ROUTES

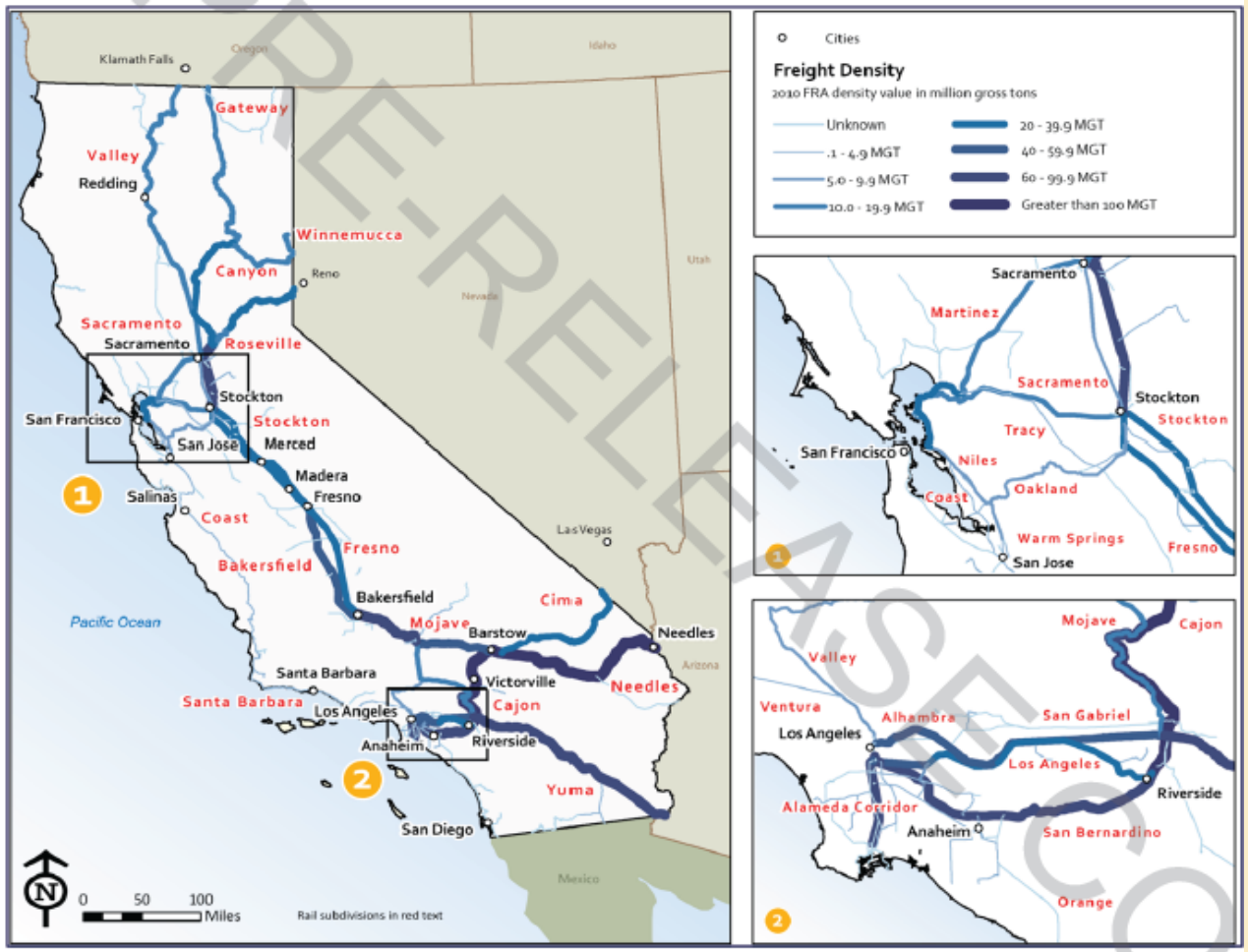

Exhibit 6.7: Class I Main Line FRA Density, 2006

MGTM = Million gross ton-miles.

MAP-21 State Freight Plans

- US DOT to encourage each state to develop a comprehensive state freight plan; pending Assembly Bill 14 requires such a plan.
- The plan can be developed independently of or incorporated into the statewide long-range transportation plan – doing both.
- A State Freight Plan is required in order to seek the higher federal share for freight projects.

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National Freight Network

- Primary network designated by the U.S. DOT (27,000 centerline highway miles), that is most critical to the movement of freight. This is happening now using Freight Analysis Framework (FAF) data.
- Portions of the Interstate System not designated as part of the primary freight network.
- Critical rural freight corridors designated by the states (3,000 centerline miles).
- Maximum national total of 30,000 centerline highway miles.

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Required Plan Elements

- Identify significant freight trends, needs, and issues.
- Description of freight policies, strategies and performance measures that will guide state investment decisions.
- Description of how plan will improve the ability of the state to meet national freight goals.

Caltrans

MORE REQUIRED PLAN ELEMENTS

- Consideration of innovative technologies and operational strategies, including ITS, that improve safety and efficiency.
- Description of improvements needed to reduce or impede deterioration on routes travelled by heavy vehicles.
- Inventory of facilities with freight mobility issues, such as truck bottlenecks and strategies state is employing to address freight mobility issues.

Caltrans


7529
7529
BNSF
7529
8592
8592
8592

FEDERAL REQUIREMENTS

- The Federal Passenger Rail Investment and Improvement Act of 2008 (PRIIA)
  - Requires State Rail Plans that include three elements
    - Conventional passenger rail
    - High speed passenger rail
    - Freight rail
  - Completed plans to be approved by the Secretary of the U.S. Department of Transportation
  - State Rail Plans to be updated every five years

STATE REQUIREMENTS

- The Department is required, under California Government Code Section 14036, to prepare a ten-year California State Rail Plan (CSRP) with separate passenger and freight elements. The Plan is required to be updated every two years.

- Pending Assembly Bill 528 would amend Section 14036 to adopt the Federal rail plan timeline so the next rail plan will be due March 2017 and every five years thereafter.

COMPLIANCE WITH FEDERAL & STATE LAWS

- FRA grants for State Rail Plan and SDPs
  - Comply with both California and federal law
  - Total of 4 grants totaling $4.5 million
  - $3.02 million consultant contract
    - $2,136,000 federal grant funds
    - $ 885,700 state matching funds
  - Two year contract - June 1, 2011 to May 31, 2013

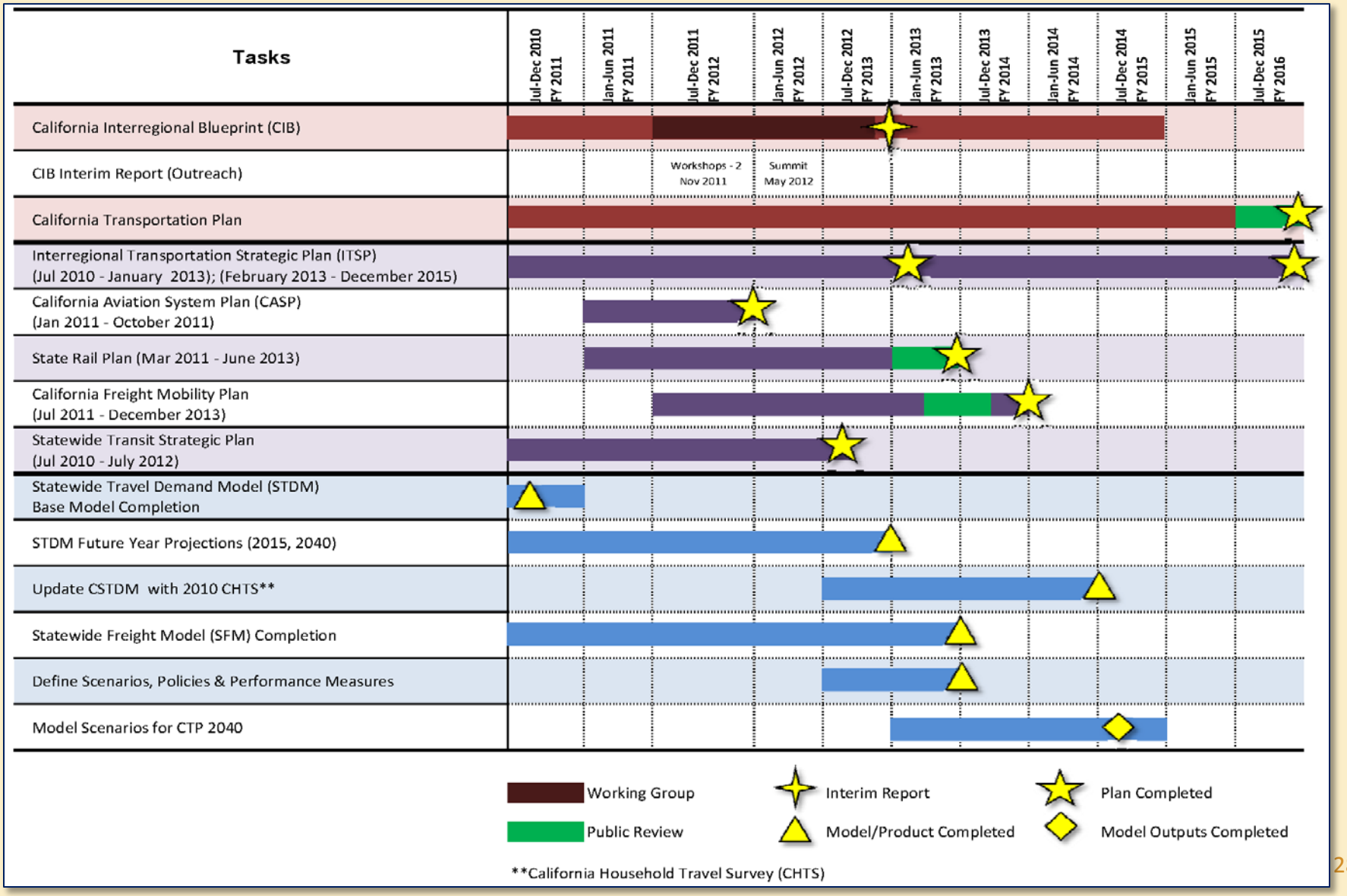
CSRP INTEGRATION AND COORDINATION

- CSRP Freight Element follows US DOT MAP 21 Significant Freight Provisions, including the National Freight Strategic Plan provision

- California Freight Mobility Plan (CFMP)
  - Will build from State Rail Plan
  - Address goods movement in more detail

- Freight Element informs the California Interregional Blueprint (CIB) and 2040 California Transportation Plan

2040 CALIFORNIA TRANSPORTATION PLAN



CSRP Chapters

1. Introduction
2. ***California Rail Transportation Context and Challenges***
3. Rail Vision Statement
4. Public Outreach
5. Existing Passenger Rail System
6. **Existing Freight Rail System**
7. ***Passenger and Freight Rail Integration***
8. Passenger Rail Improvements
9. **Freight Rail Improvements**
10. ***Rail Benefits and Next Steps***

CSRP
Freight Related Appendices

C. Rail Network Attributes and Base Year Data
D. Freight Demand Analysis and Positive Train Control (PTC)
E. Rail Capacity and Bottleneck Analysis
F. State and Federal Regulatory Bodies and Other Institutional Arrangements
K. Best Practices: Short Line Railroad Assistance Programs

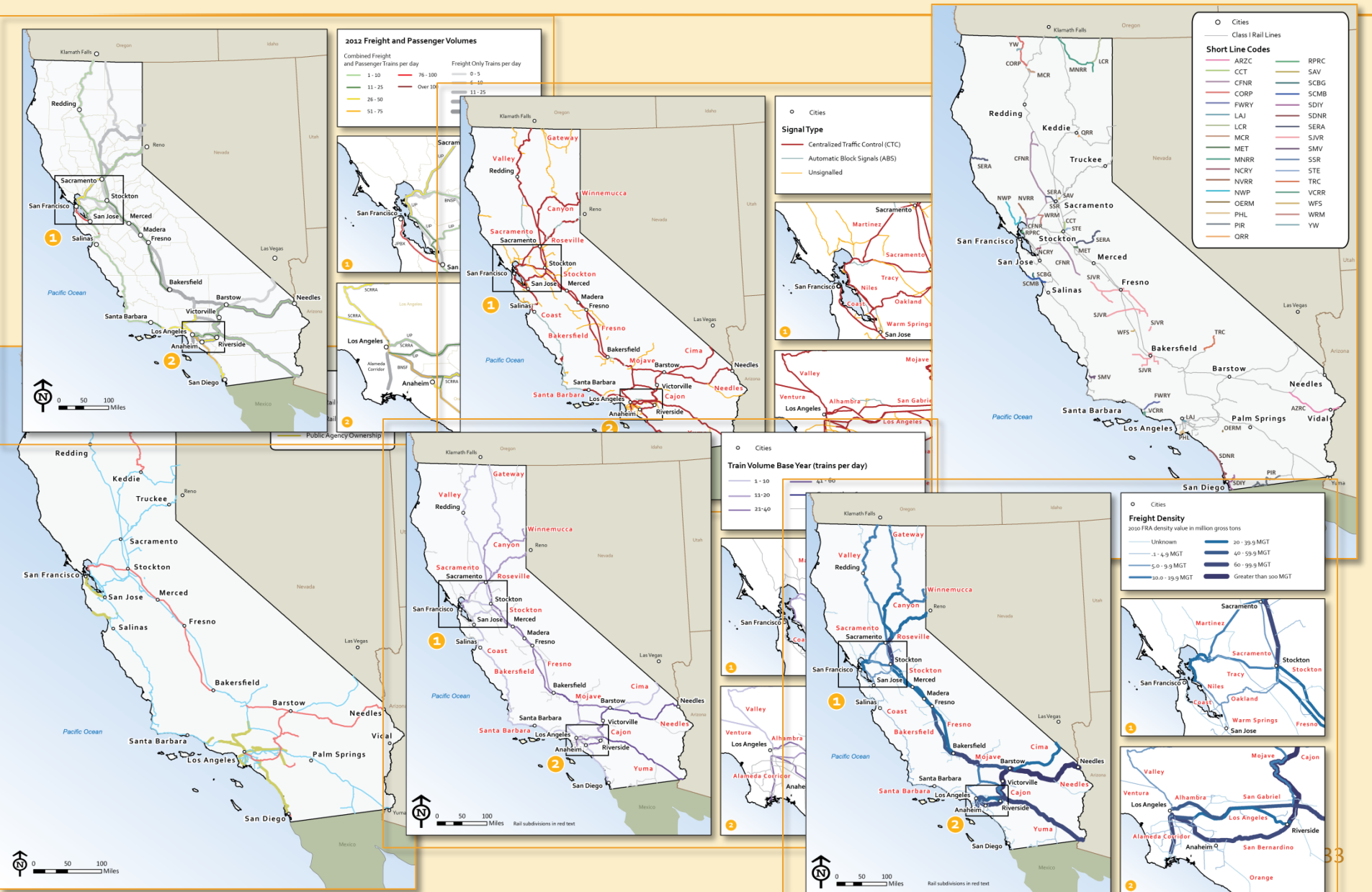
CSRP VALUE TO CALTRANS

- California freight rail network characteristics
- Trade and logistics issues and trends
- Bottleneck and capacity analysis
- Freight and passenger interaction
- Specific projects
- Prior and ongoing studies
- Direct input and feedback
  - Rail operators
  - Industry stakeholders
  - Public agencies

CSRP LIFE CYCLE

- Administrative Draft, December 2012
  - Advisory Committee review
  - District review
- Public Draft, February 2013
  - Statewide open houses and webinar
  - 216 comment documents with 929 individual comments
- Administrative Final, April 2013
- Final, May 2013
  - FRA accepted on May 31
  - Being submitted to Caltrans and the Transportation Agency
  - Public release after final approvals

GIS RESOURCES



CSRP FREIGHT RELATED REFERENCES

- Regional goods movement Studies
- Caltrans
  - Goods Movement Action Plan
  - Freight Mobility Plan
  - 2010 State Rail Plan
  - Rail corridor studies
  - TCIF
- CTC Statewide Transportation Needs Assessment
- Federal
  - Waybill Sample
  - Freight Analysis Framework
  - Oak Ridge National Laboratory
- Private
  - Industry interviews
  - Association of American Railroads
  - Moody's Analytics

CHAPTER 2
RAIL TRANSPORTATION SYSTEM CHALLENGES

- Demand Factors
  - Industrial output relative to socioeconomic growth
  - Directional flow
  - Intermodal traffic
  - Port-related traffic
- Positive Train Control
- State of Good Repair
  - Track
  - Structures
  - Control systems
  - Rolling stock

CHAPTER 6 OVERVIEW

- Current freight rail system
  - Class I railroads
  - Short lines
- Freight rail system usage
  - Demand
  - Commodity flow
  - Trends
- Bottlenecks and chokepoints
- Institutional issues
  - Oversight
  - Assistance programs
  - Safety and security
- Appendices

CHAPTER 6
RAIL LINE OWNERSHIP

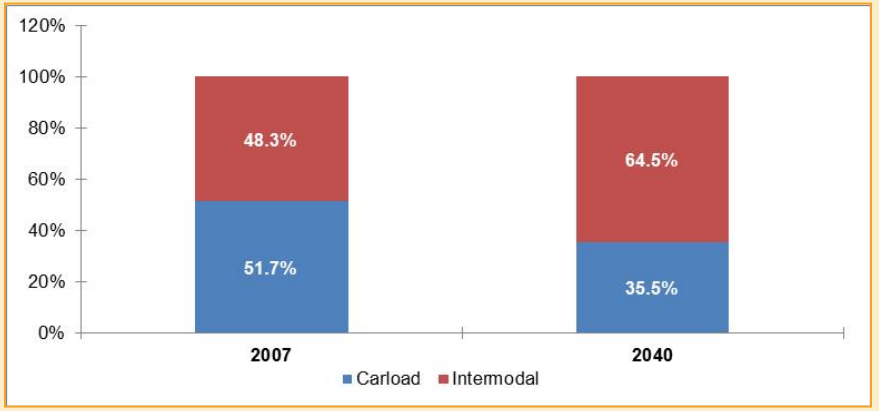
CHAPTER 6
SYSTEM CHARACTERISTICS

- Operating miles
- Usage
  - Carloads
  - Ton Miles
- Signals
- Terminals
- Abandoned Lines
- 26

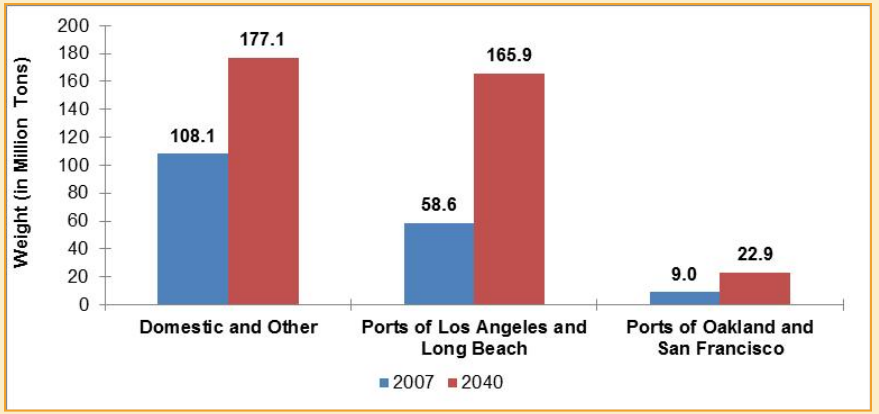
Name	Employees	Payroll (millions)	Track Miles Owned	Track Miles w/Trackage Rights	Total Miles Operated	Originating Carloads	Terminating Carloads
BNSF	2,983	$210	1,155	975	2,130	1,636,623	1,669,449
UPRR	4,741	$400	2,773	515	3,288	1,423,857	1,510,030

CHAPTER 6
DEMAND CHARACTERISTICS

- Drivers of demand
  - Freight rail commodities
  - Directional shipments
  - Domestic and port-related traffic
- Maps and charts illustrating trends



Tonnage by Rail Service Type



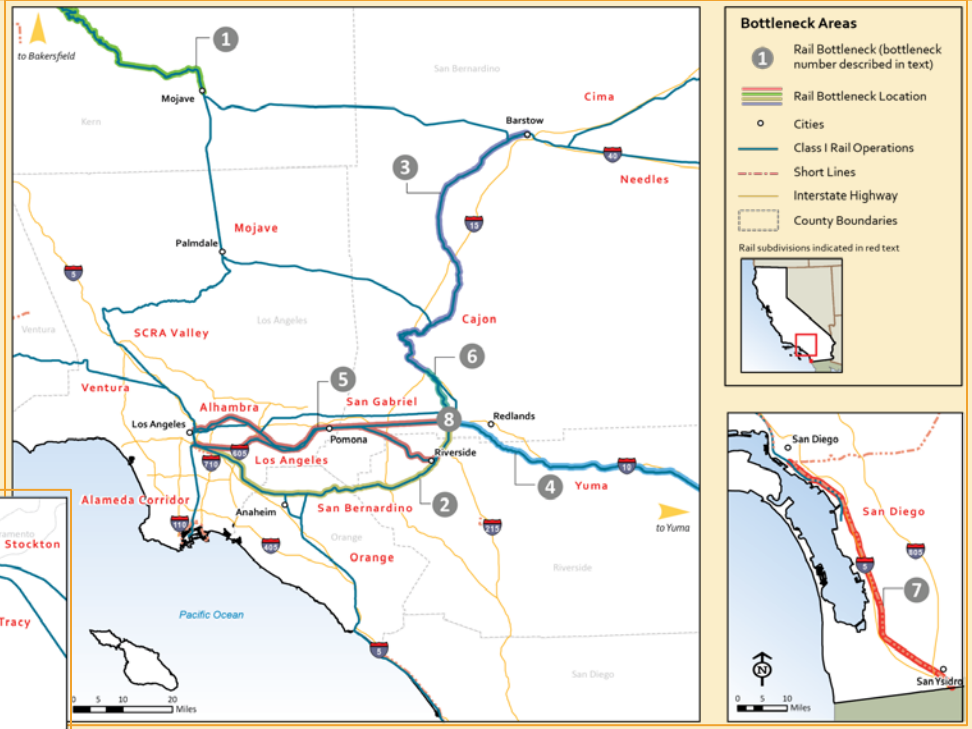
Tonnage by Rail Market Type

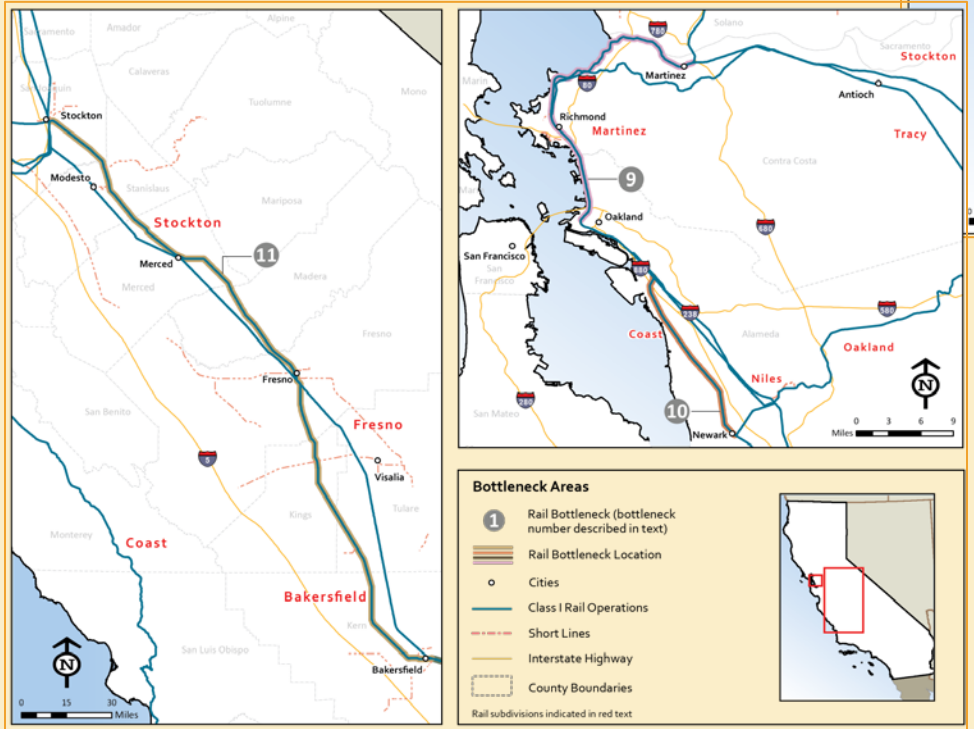
CHAPTER 6
TRENDS

- International trade
- Freight rail logistics, regulatory trends
- Issues for smaller railroads
- Positive train control

CHAPTER 6
FREIGHT RAIL BOTTLENECKS

- Location
- Segment characteristics
- Current and projected usage





- Analysis results
- Recent and planned projects
- Remaining needs

CHAPTER 6
FREIGHT RAIL PROGRAM

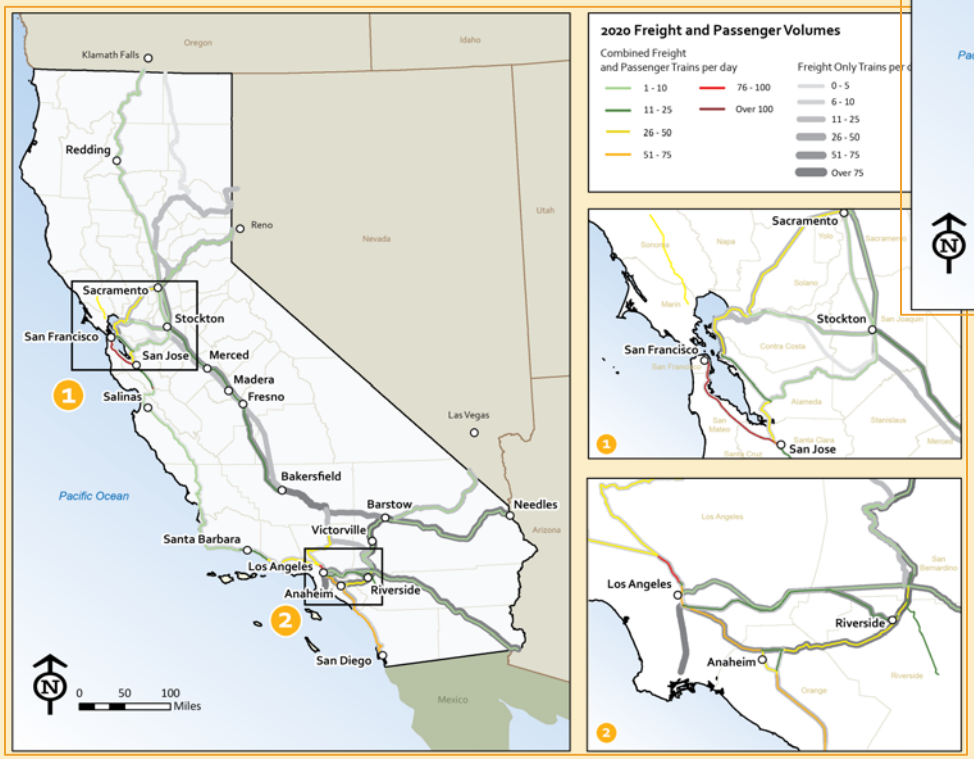
- Current requirements
- Best practices
- Options
- Topics addressed
  - State role and governance
    - Taxation
    - Safety
    - Highway-rail grade crossings
  - Project assistance
    - Funding
    - Partnerships

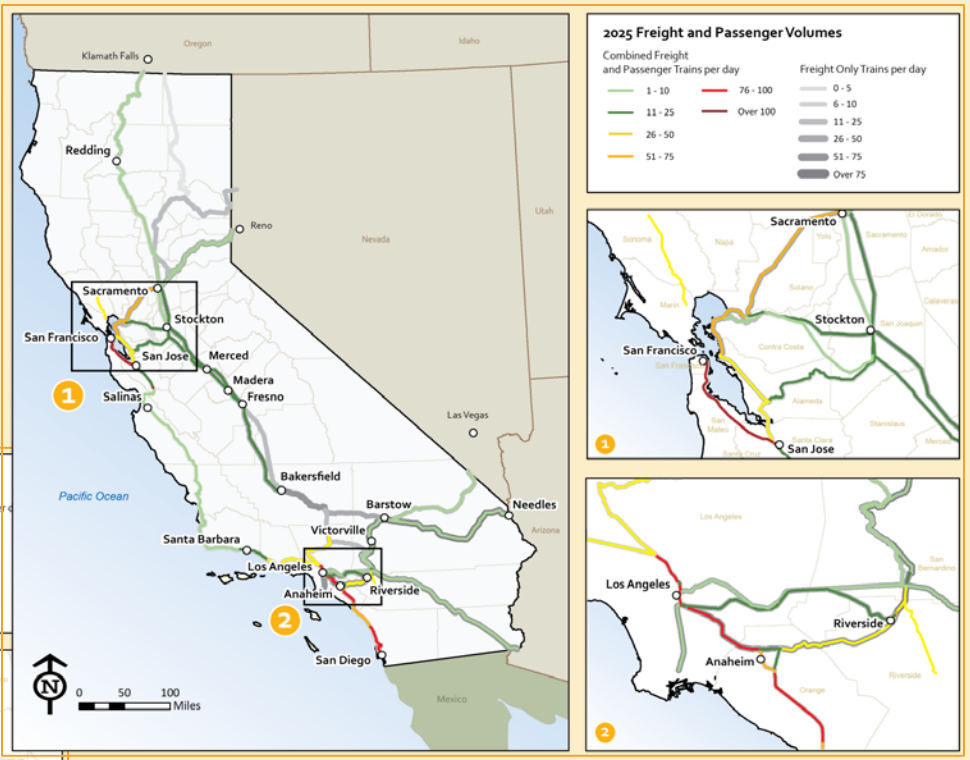
CHAPTER 7 OVERVIEW

- Shared use corridors
  - Shared track
  - Shared right-of-way
  - Shared corridor
- Future demand
- Conflicts and opportunities
  - Evaluation
  - Freight rail influences
  - Passenger rail influences

CHAPTER 7
DEMAND

- Total traffic
- Train mix
- Peaking





- Highest growth in Caltrain and ACE corridors
- Highest volumes in LOSSAN

CHAPTER 7
EVALUATION

- Criteria
  - 30 or more trains per day
  - 10 or more freight OR passenger trains
  - More than 30 percent commuter trains

CHAPTER 7
EVALUATION (CONTINUED)

- Key Corridors
  - Stockton to Martinez
  - Sacramento to Stockton to Bakersfield
  - Oakland to Sacramento to Roseville
  - San Rafael to Santa Rosa
  - Los Angeles to Downtown Burbank to Ventura
  - Los Angeles to Colton
  - Los Angeles to Riverside
  - Los Angeles to Fullerton and Laguna Niguel
  - Oceanside to San Diego

CHAPTER 9 OVERVIEW

- Project categories
  - Trade corridor
  - Short line
  - Community impact mitigation
- New investment needs
  - Clearance
  - Track upgrades
  - PTC
  - Grade crossings for lower volume lines
- Policy Issues
  - Performance monitoring
  - Maintaining local access
  - Economic development

CSRP BENEFITS TO YOU

- California freight rail network characteristics
- Trade and logistics issues and trends
- Bottleneck and capacity analysis
- Freight and passenger interaction
- Specific projects
- Prior and ongoing studies
- Direct input and feedback
- Updated GIS resources