



3rd METRANS National Urban Freight Conference

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Southeast Los Angeles County, CA Railroad and Goods Movement



Gateway Cities Council of Governments (GCCOG) Representing People in a Prime Goods Movement Area

- Sub-regional agency of Southeast Los Angeles County, CA representing 27 cities, unincorporated portions of Los Angeles County and the Port of Long Beach (2.2 million residents.)
- Located landside of the Ports of Long Beach and Los Angeles, the largest port complex in the U.S. (and 5th largest in the world.)
- About 40% of nations imports enter U.S. through these two ports – volumes could grow from 12-13M TEUs (current) to maximum of 43M (2035-2040)
- I-710 Freeway is primary port access route -- highest truck-related accident rates in the state and no permanent, operating truck inspection facilities in the GCCOG area.
- This area has the highest concentration of freight train, tracks and warehouse and distribution centers in the country.

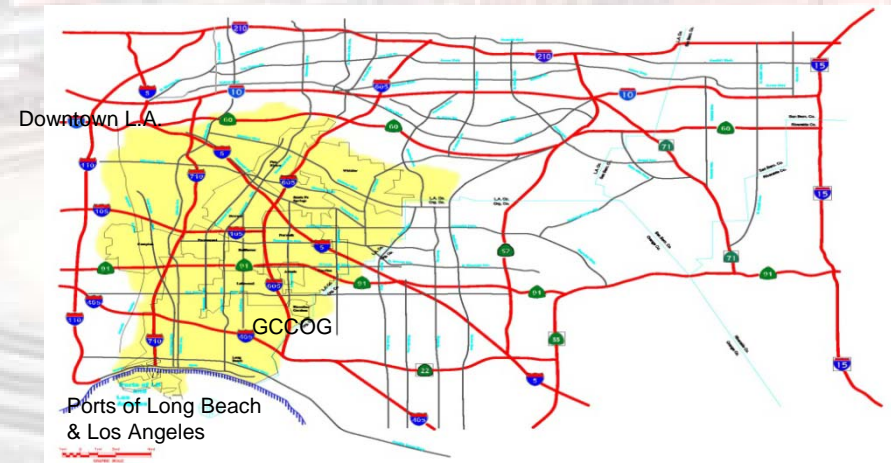
Southeast Los Angeles County, CA Railroad and Goods Movement



- GCCOG Boundaries and Cities



- Southeast & East L.A. County, CA



Economics

Analysis of Ports

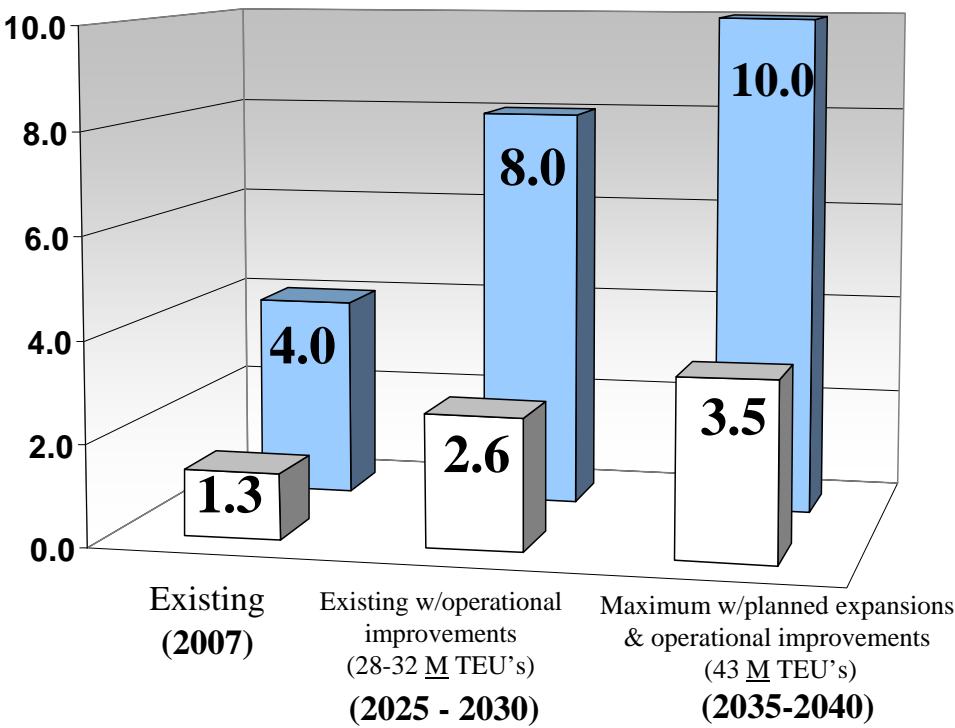
- The two ports handle 40-45% of the nation's imported goods (by some estimates, 25% to local markets and 75% for national distribution)
- Goods movement provides 1.3 M local jobs/year (4 M jobs nationally), and generates \$32 B in State and local taxes
- Half of the containerized cargo projected to move to destinations beyond California by rail (includes transloaded cargo)
- With planned expansions and operational improvements, the two ports are expected to reach their container volume capacity of 43 M TEU's per year by 2035 – landside access issues could also affect port growth

Economics

San Pedro Bay Ports Jobs Analysis (Logistics Industry)
(Imports and Exports)

**Nationwide Jobs
(Millions)**

**Local Jobs*
(Millions)**



* within one day's drive

GCCOG - Landside Improvements Needed for Health, Safety, and “Quality of Life” in Gateway Cities

- **Railroad System – potential tripling of train traffic**
 - Grade Separations at grade crossings
 - Large areas needed for additional rail yards
 - Significant mainline track additions
- **Freeways – more than doubling of truck traffic**
 - Major freeway improvements (modernization and expansions) for all the freeways in the GCCOG area.
 - Separate freight corridor is needed (at request of local communities) to separate passenger vehicles and trucks to greatest extent possible
- **Environmental/Air Quality**
 - Adverse air quality has resulted from port and logistic operations (especially diesel emissions)
 - Improving air quality is number one issue for GCCOG communities.

I-710 EIR/EIS

Including Analysis on Rail System's Ability to Move Goods

- The I-710 Environmental Impact Report/Environmental Impact Statement (EIR/EIS) now underway includes an analysis and understanding of the impacts of the spectrum of goods movement issues in the area, **including the rail system's potential to move an estimated 50% of the containers to and from the two ports.**
- This presentation is to present the analysis and results of the study of the railroad system serving the two ports that was undertaken for the I-710 EIR/EIS.

Cargo Scenarios Evaluated

“Worst Case” Forecast Adopted for Subsequent Studies

- I-710 Project Committee of elected officials asked for evaluation of three Cargo (Container) Forecast alternatives and adopted the “worst case” scenario with a high cargo demand forecast (43 M TEUs), high on-dock rail capacity, without new or expanded near-dock rail facilities.
- Even with the current economic condition and world trade projections of slower economic growth and cargo diversion to other ports, forecasts indicate that the freight movement demand will eventually exceed planned capacity for Southern California ports.
- The adopted cargo forecast represents maximum cargo growth with current expansion plans and allows for maximum environmental and community impact mitigations and analyses.

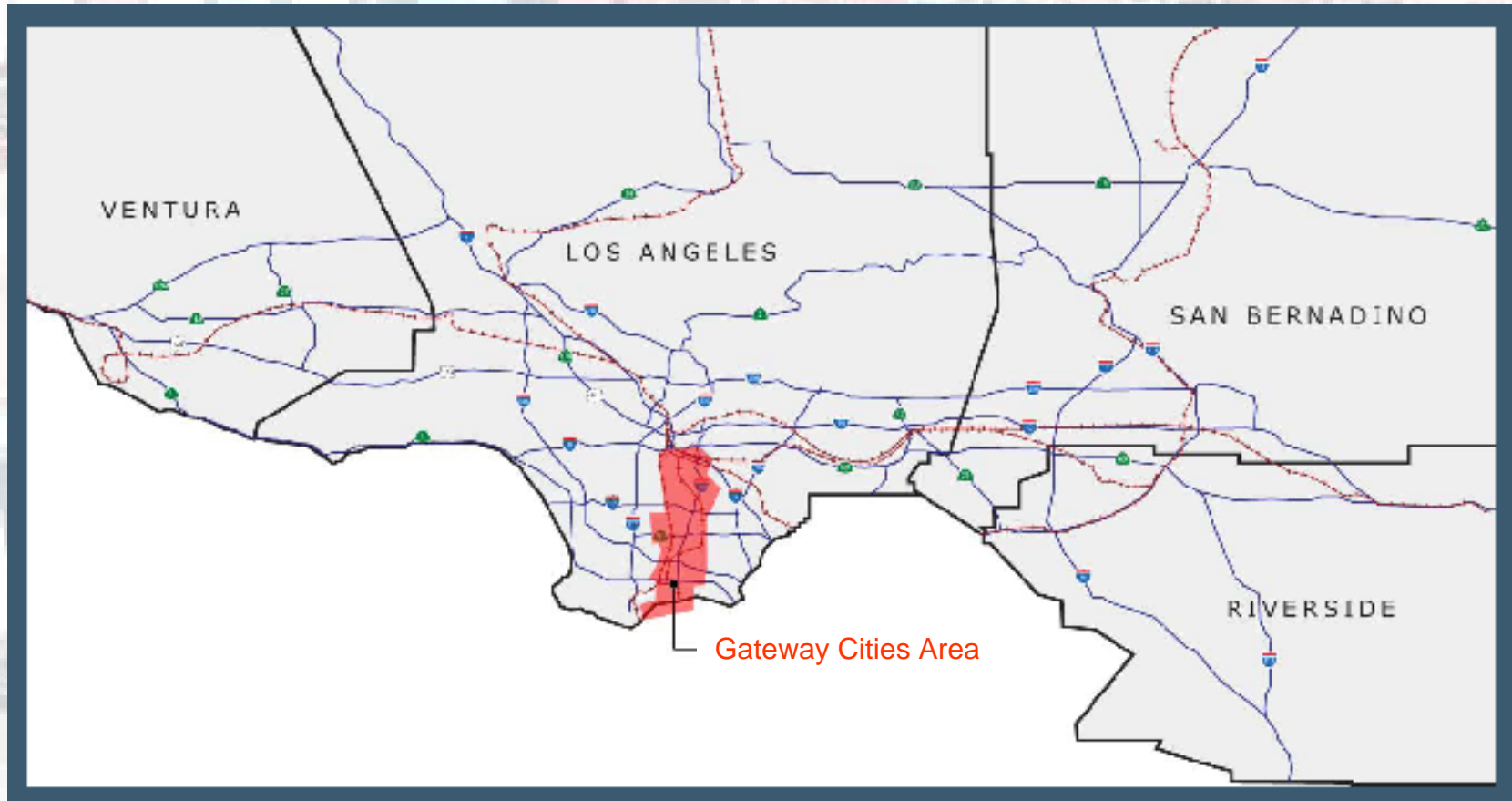
Railroad Goods Movement Study

Southern California Rail System Analysis

- Projections of railroad infrastructure requirements from others studies were used for mainline tracks, railyards, trucks, and warehouse and distribution centers
- Estimates were made of the number of freight trains generated by the existing and proposed rail yards and the two ports
- The existing approximately 40-50 freight trains per day are expected to grow to approximately 130 to 150 freight trains per day; significant expansion of rail yards is needed for this many additional trains

Rail System Regional Context

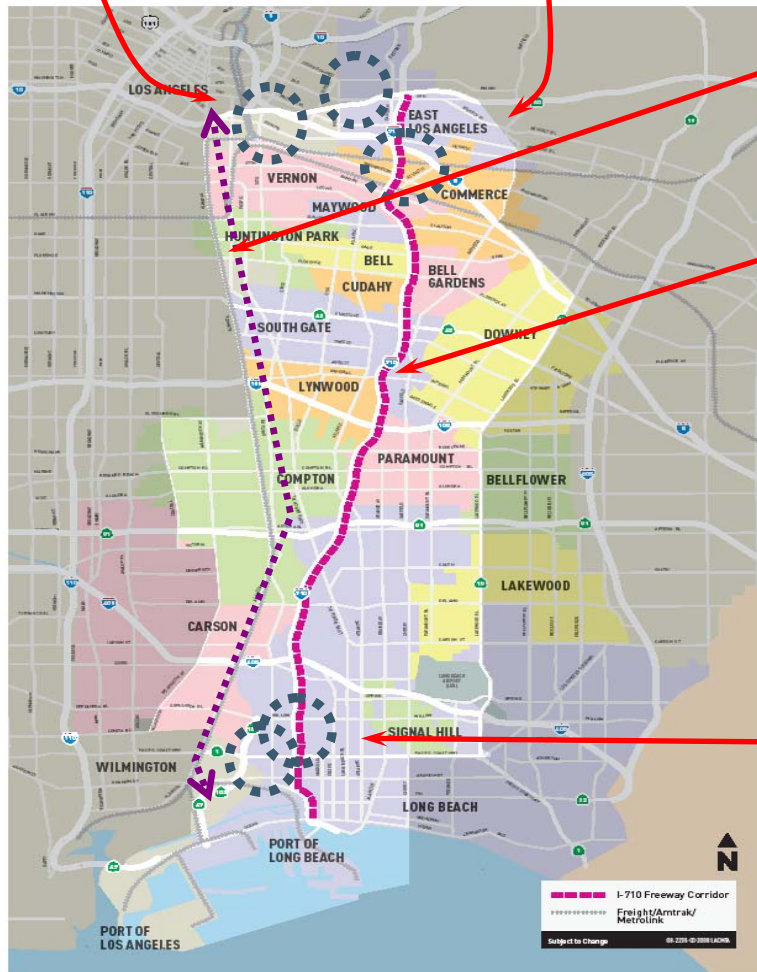
Study Area in Regional Context



Major Goods Transportation Routes For Containers To and From the Ports

Railyards
(typical)

I-710 EIR/EIS Corridor Study Area



Alameda Rail Corridor

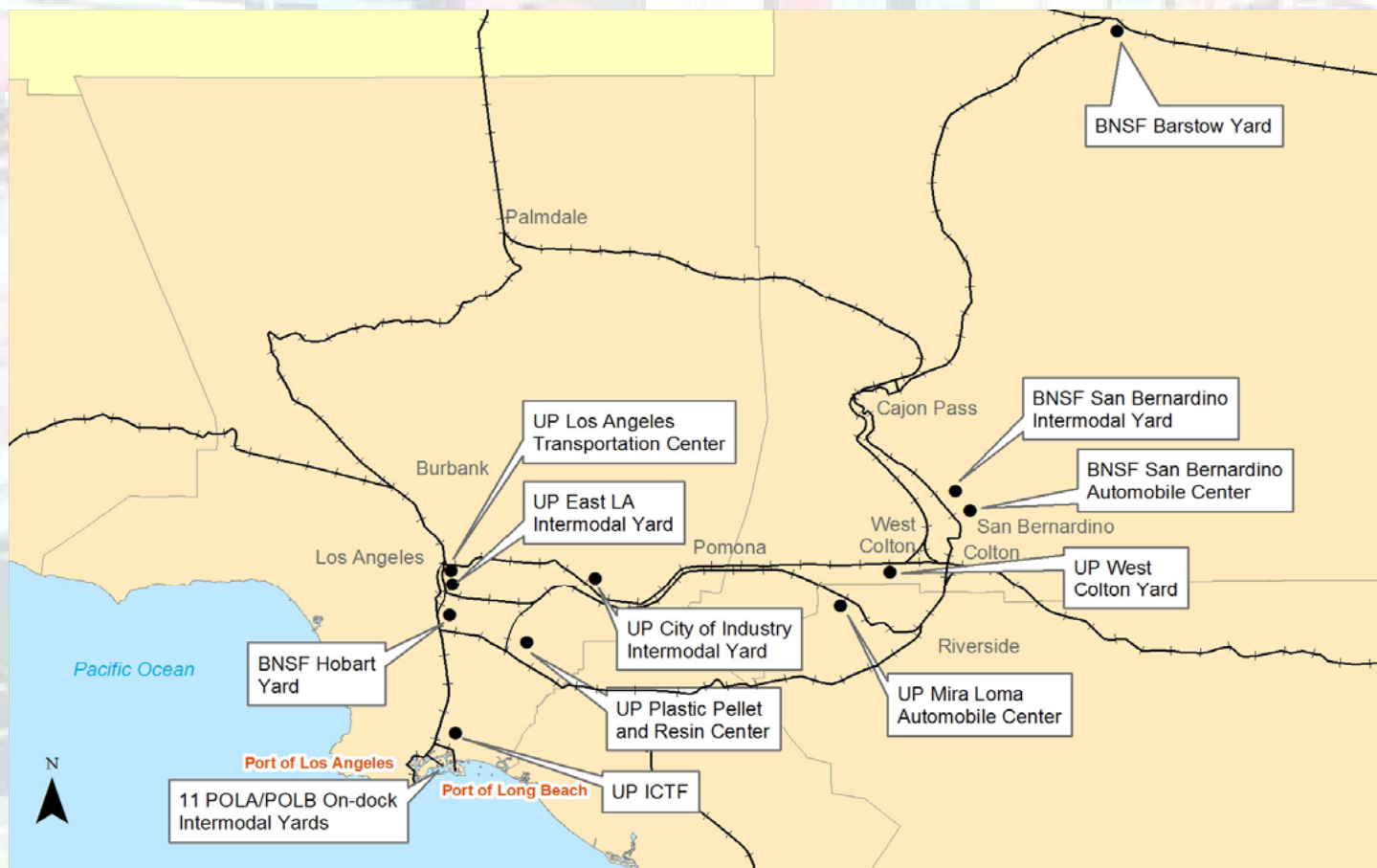
I-710 Freeway Corridor
(and beyond on Southern
California Freeways)

The majority of containers to and from the ports move by rail (via the Alameda Rail Corridor) or via trucks using the I-710 Freeway.

Railyards (typical)

Note: Off-dock railyards are not shown.

Major Rail Yards and Rail System in LA Basin

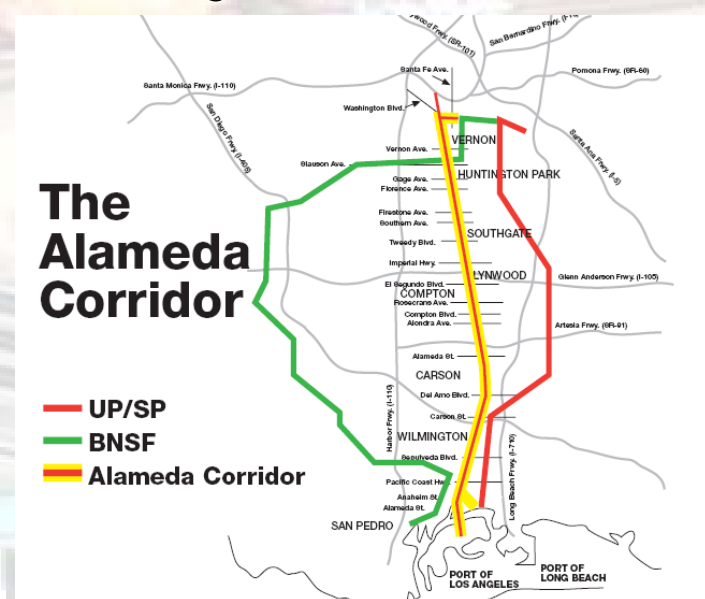


Source: Multi County Goods Movement Action Plan

Alameda Corridor

- Sufficient capacity to serve on- and near-dock growth

To/From	2035 Trains
On-Dock	72
Near-Dock	8
Other Carload Traffic	28
Total Trains	108
Number of Mainline Tracks	3
Sufficient Track Capacity?	Yes



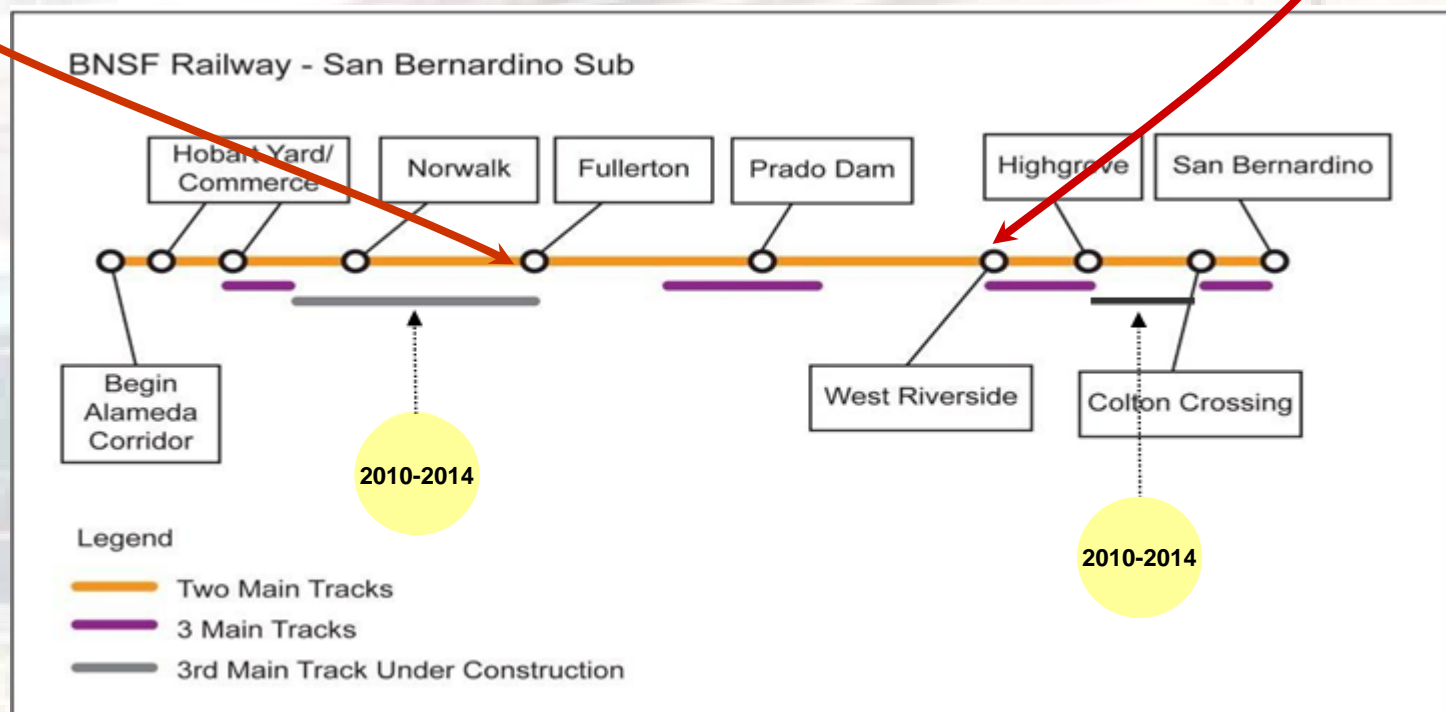
BNSF San Bernardino Sub

- Sufficient capacity at points shown
- Does not take into account passenger train growth

From Yard	2035 Trains			
	Norwalk	Prado Dam	High Grove	Colton Crossing
On-Dock	36	36	54	54
Near-Dock	-	-	4	4
Off-Dock	22	22	36	36
Other Carload Traffic	15	26	32	32
Metrolink	28	26	8	8
Amtrak Long Distance	2	2	2	2
Surfliner	22	0	0	0
Total Trains	125	112	132	132
Number of Mainline Tracks	3	3	3	3
Sufficient Track Capacity?	Yes	Yes	Yes	Yes

BNSF San Bernardino Sub

- Capacity constraints
 - between Fullerton and west of Prado Dam
 - between east of Prado Dam and West Riverside



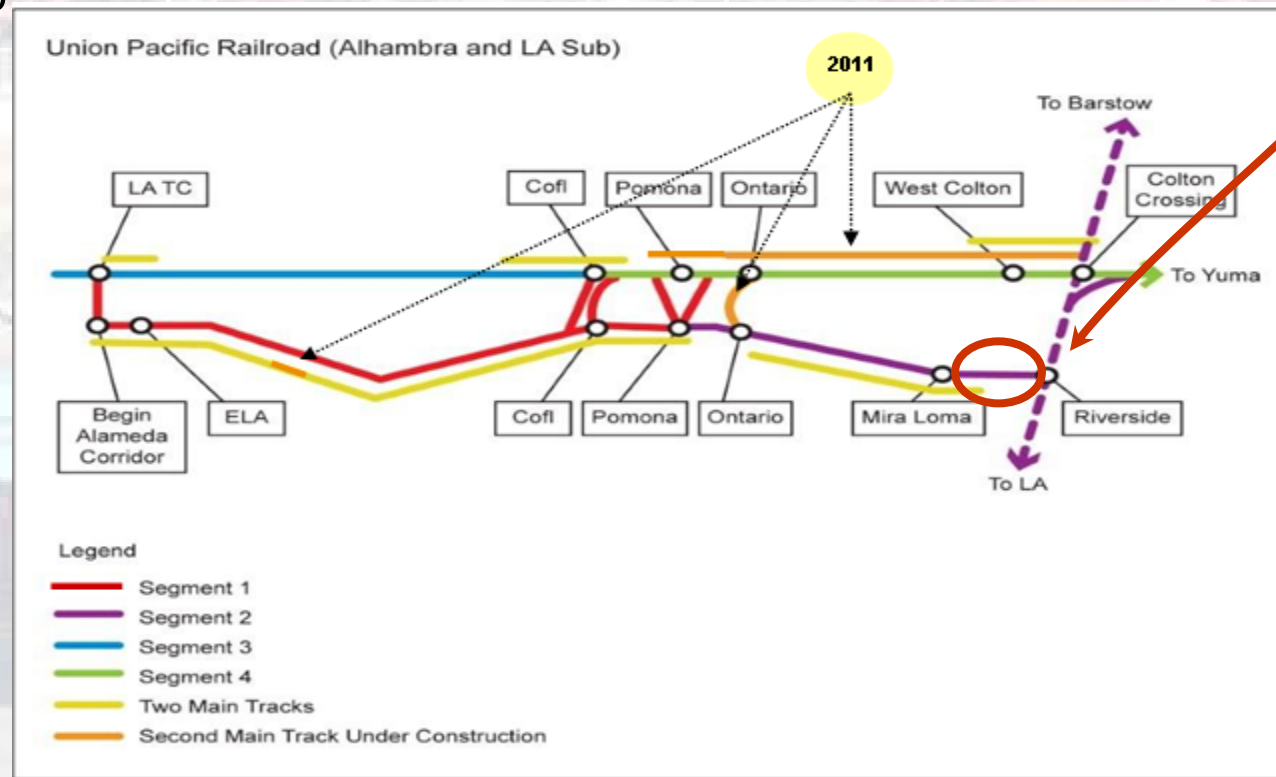
UP LA Sub & Alhambra Line

- Sufficient capacity at points shown
- Does not take into account passenger train growth

From Yard	2035 Trains			
	Segment 1 (LA Sub)	Segment 2 (LA Sub)	Segment 3 (Alhambra)	Segment 4 (Alhambra)
On-Dock	36	18		18
Near-Dock	8	4		4
Off-Dock	10	10	10	10
Other Carload Traffic	23	6	12	58
Metrolink	12	12		
Amtrak Long Distance			1	1
Total Trains	89	50	23	91
Number of Mainline Tracks	2	2 (partial)	1	2
Sufficient Track Capacity?	Yes	Yes	Yes	Yes

UP LA Sub & Alhambra Line

- Capacity constraints
 - Segment 2 between Mira Loma and Riverside



Railroad Goods Movement Study

Findings

- Freight railroads are nearing their existing, efficient capacity in the LA Basin (prior to the recession.)
- Beyond the Alameda Rail Corridor there are mainline rail capacity issues, including limited on-going track expansion projects, and feasibility of capacity enhancement through longer trains and improved signaling.
- On-Dock railyard expansion likely, but level of yard efficiency assumed may not be fully realized (resulting in more containers traveling to near- or off-dock facilities on area roadways via trucks.)
- Implementation of proposed Near-Dock expansion and construction will be a great challenge (with potential for more containers traveling to inland Off-Dock facilities on area roadways.)

Railroad Goods Movement Study

Findings (Cont'd)

- Even with On-Dock and Near-Dock expansion assumed, the projected International and Domestic intermodal needs will still not be met - 0.7M lift shortfall.
- The selected Port Cargo Growth assumption provides a “worst-case” picture of railroad mainline capacity but it does not account for any growth in passenger trains.
- To accommodate passenger trains additional mainline tracks will need to be constructed. In some cases ROW constraints may limit the addition of these tracks.

GCCOG Challenge

Railroad Goods Movement Study

- For the L.A. Basin, the challenge is to determine the “Ideal Balance” for the level of growth and investment in the Rail System. Some mitigating factors include:
 - Port TEU Growth?
 - Intermodal Facility Expansion?
 - Passenger Rail?
 - Economic Growth?
 - Community Acceptance?
 - Additional Track Capacity
 - °At-Grade Crossings have to be addressed

GCCOG Lessons Learned

I-710 Railroad and Goods Movement For the Two Ports

1. The Gateway Cities communities want the rail system to move the maximum number of containers as possible.
2. However, container movements by rail are complex and have significant landside infrastructure needs, requirements and impacts to Gateway Cities communities and to the rest of Los Angeles Basin.
3. The rail system can move about 50% of the containers from and to the two ports, but the rail system potentially has significant capacity constraints (both existing and proposed) which might limit “maximum” goods movement by rail.
4. Significant rail system improvements will be needed in the future.

MORE...

GCCOG Lessons Learned (Continued)

I-710 Railroad and Goods Movement For the Two Ports

5. The rail system improvements have to be monitored by Gateway Cities to understand them and determine impacts on communities, on future truck volumes on I-710 Freeway, and on passenger rail.
6. The environmental impacts of rail system improvements for the Gateway Cities communities, including significant pollution issues and grade separations, will need to be analyzed and understood.
7. The pollution impacts of the rail system will be analyzed as part of the Gateway Cities Sub Regional Air Quality Action Plan.

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