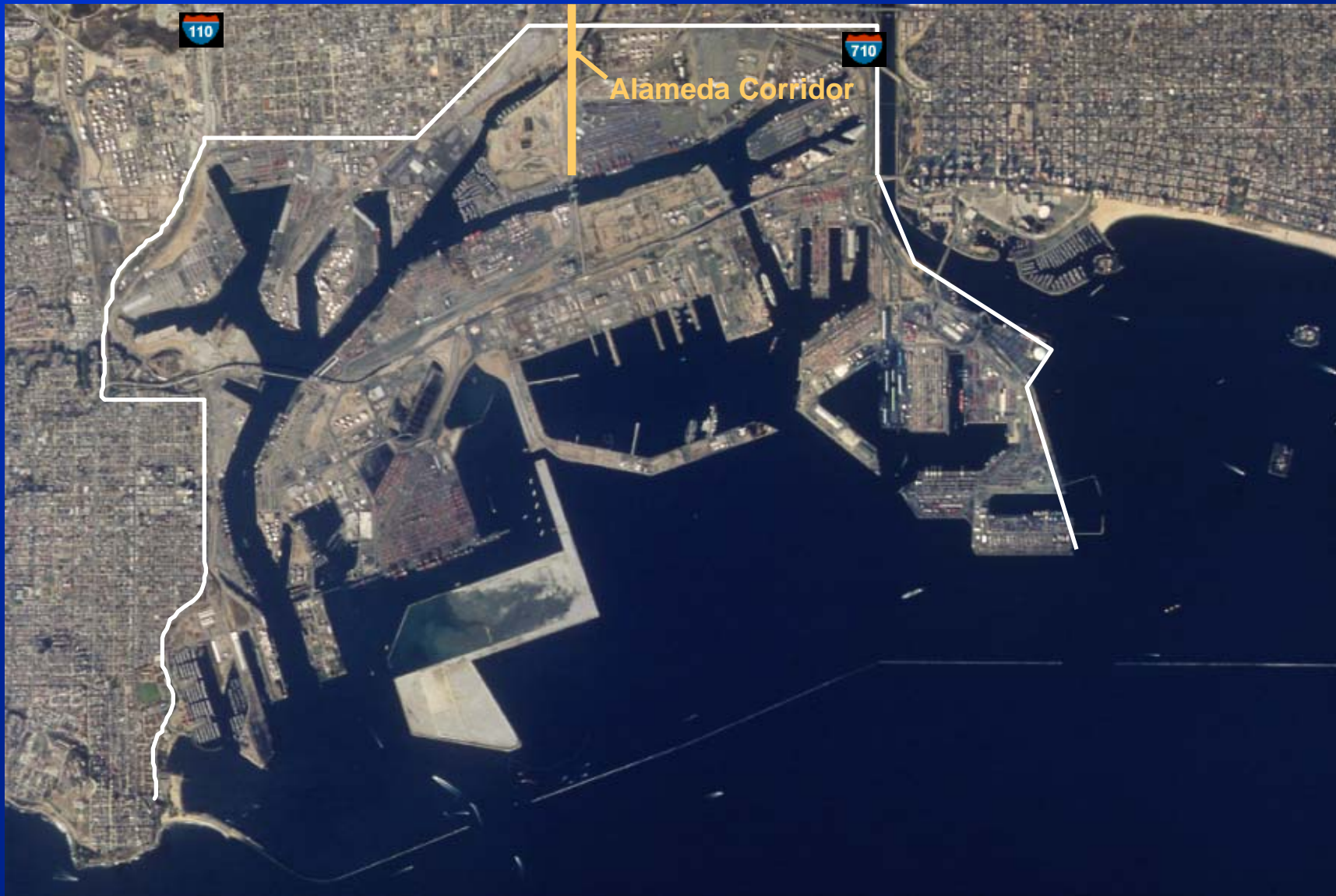


# Port Operations

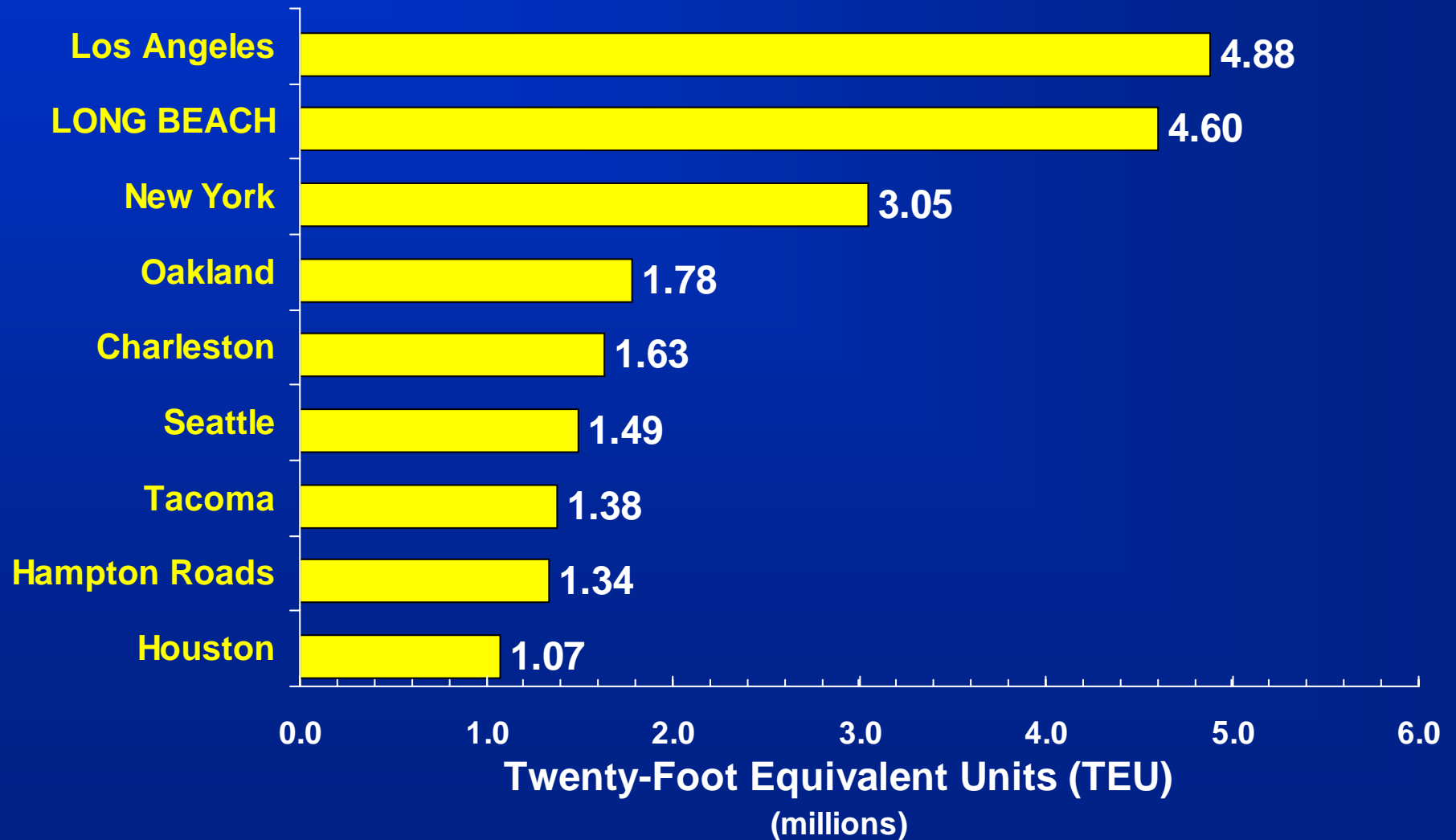
- Harbor Commissioners appointed by mayor; confirmed by City Council
- Commissioners set policy/Exec. Director administers
- Council approval required only for bonded indebtedness; annual budget.
- Port follows provisions of State tidelands law
- Landlord port
- Receive no tax revenue; revenue only from commerce, navigation, marine fisheries and marine recreation
- Spend money only on the same.

# Ports of Long Beach/Los Angeles



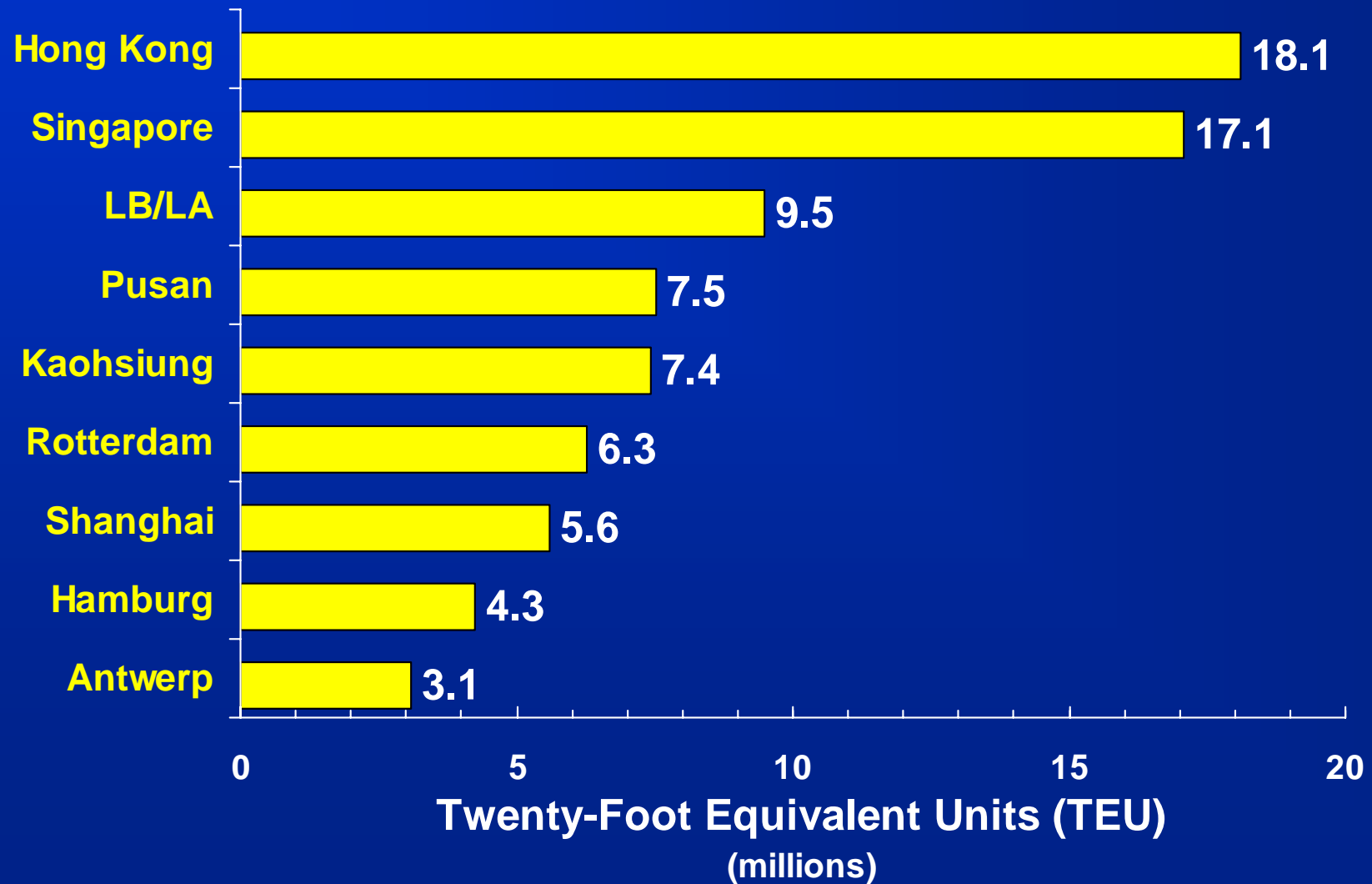
# Top U.S. Containerports

## Calendar Year 2000




# Top World Containerports

## Calendar Year 2000



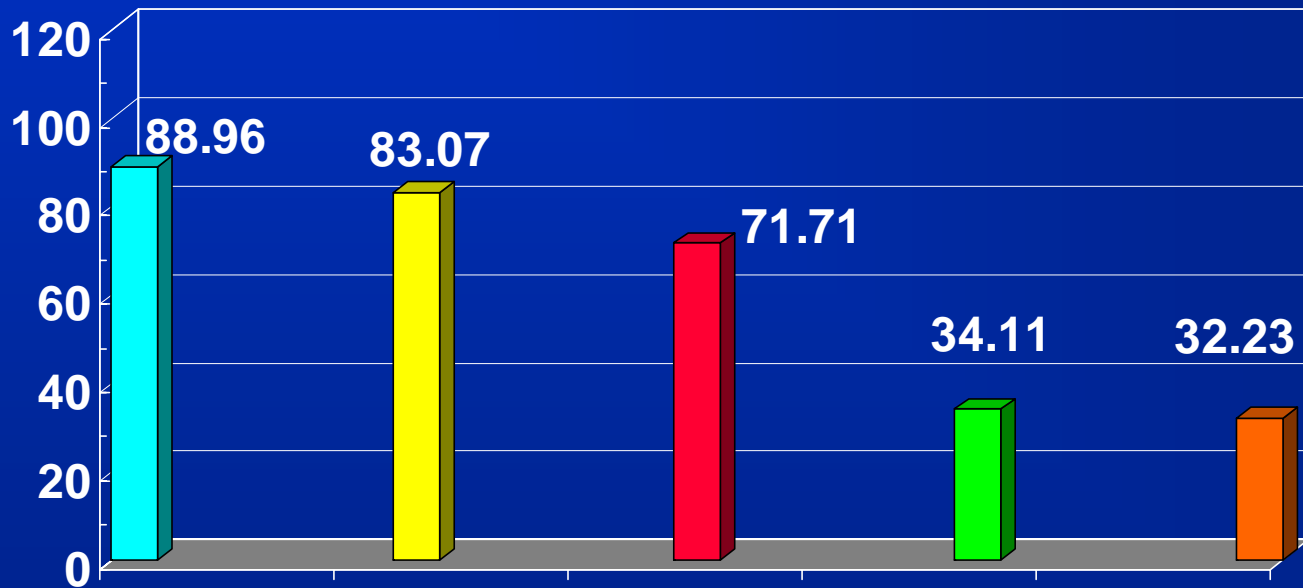
# **Ports of Long Beach/Los Angeles National Benefits**

An aerial photograph of the Port of Los Angeles and Long Beach, showing the harbor, piers, and surrounding urban areas. The image is semi-transparent, allowing text to be overlaid.

<b>Employment</b>	<b>2.5 Million</b>
<b>Customs Revenue</b>	<b>\$4 Billion</b>
<b>Fed. Income &amp; Bus. Taxes</b>	<b>\$14.2 Billion</b>
<b>State &amp; Local Taxes</b>	<b>\$5.4 Billion</b>
<b>500,000 regional jobs linked to Ports of LB/LA</b>	

# Value of Foreign Trade by U.S. Port (2000)

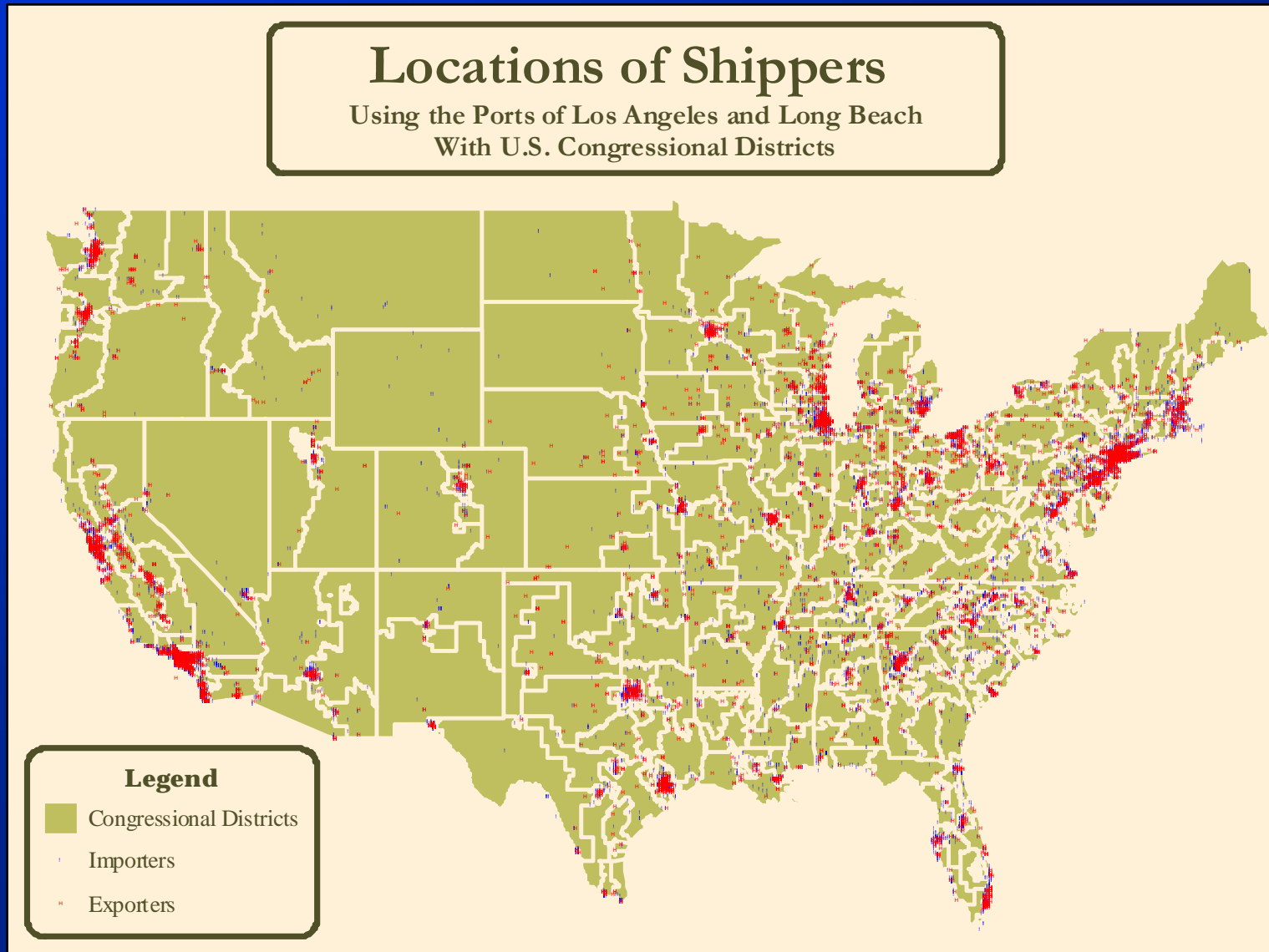
Billions of  
Dollars



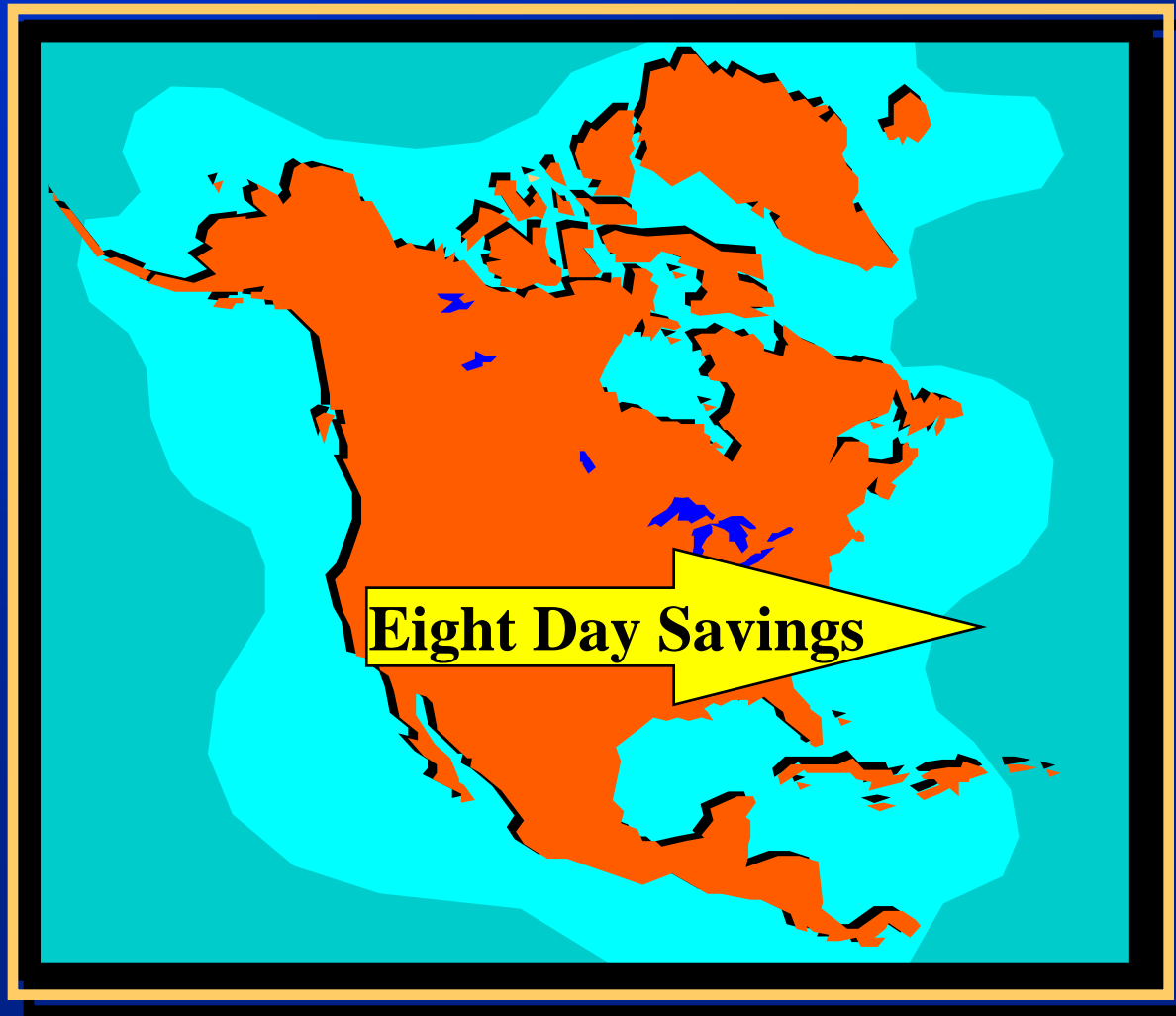
■ Long Beach ■ Los Angeles ■ N.Y./N.J. ■ Houston ■ Seattle



# National Significance of POLB/POLA



# The Intermodal Advantage



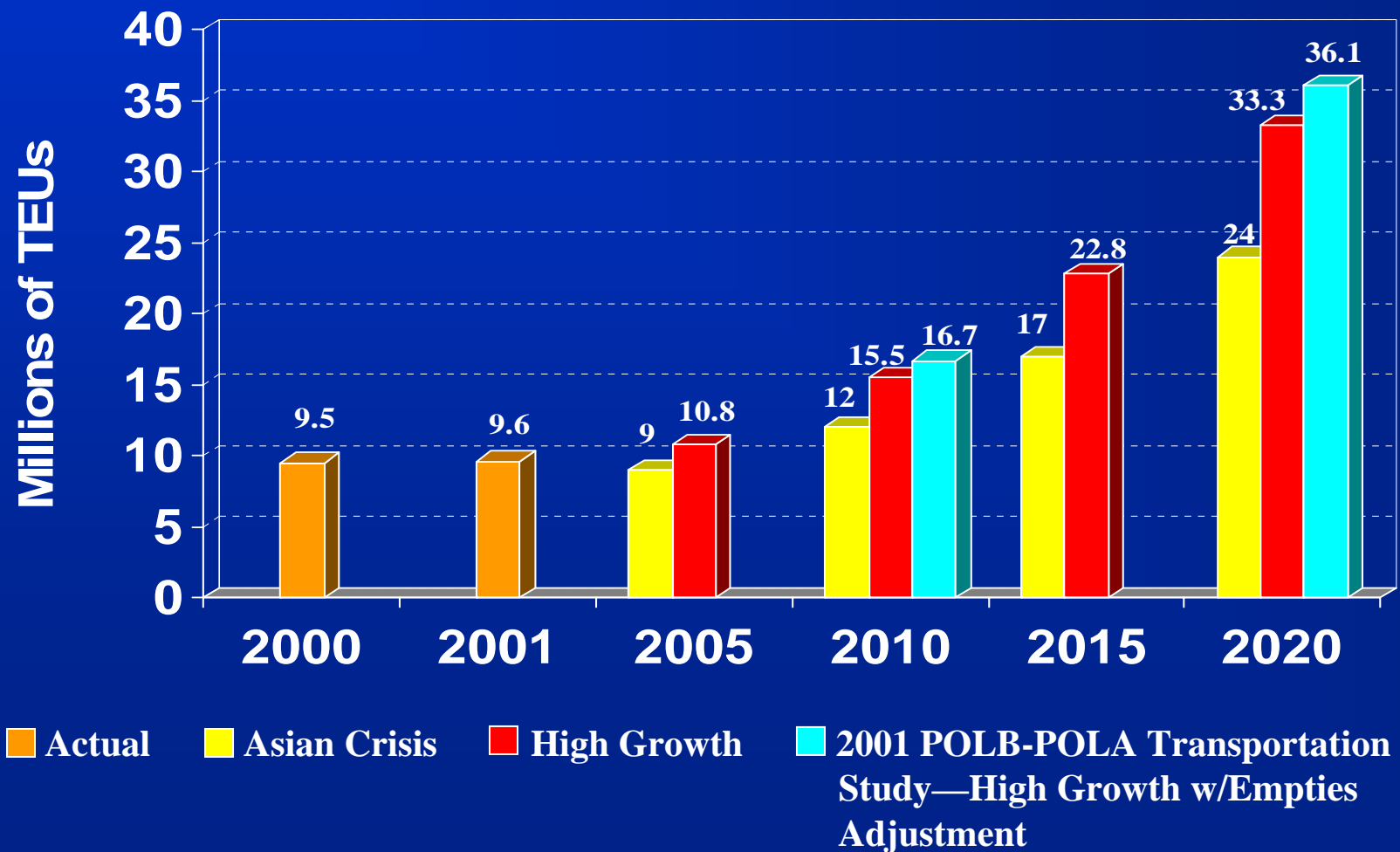


# Future Growth

## Port of Long Beach – Los Angeles

### Container Forecast

(1998 Mercer Management/DRI)



# Non-Container Terminal Trips (10% of total truck trips)



**liquid bulk**



**autos**



**dry bulk**



**lumber**

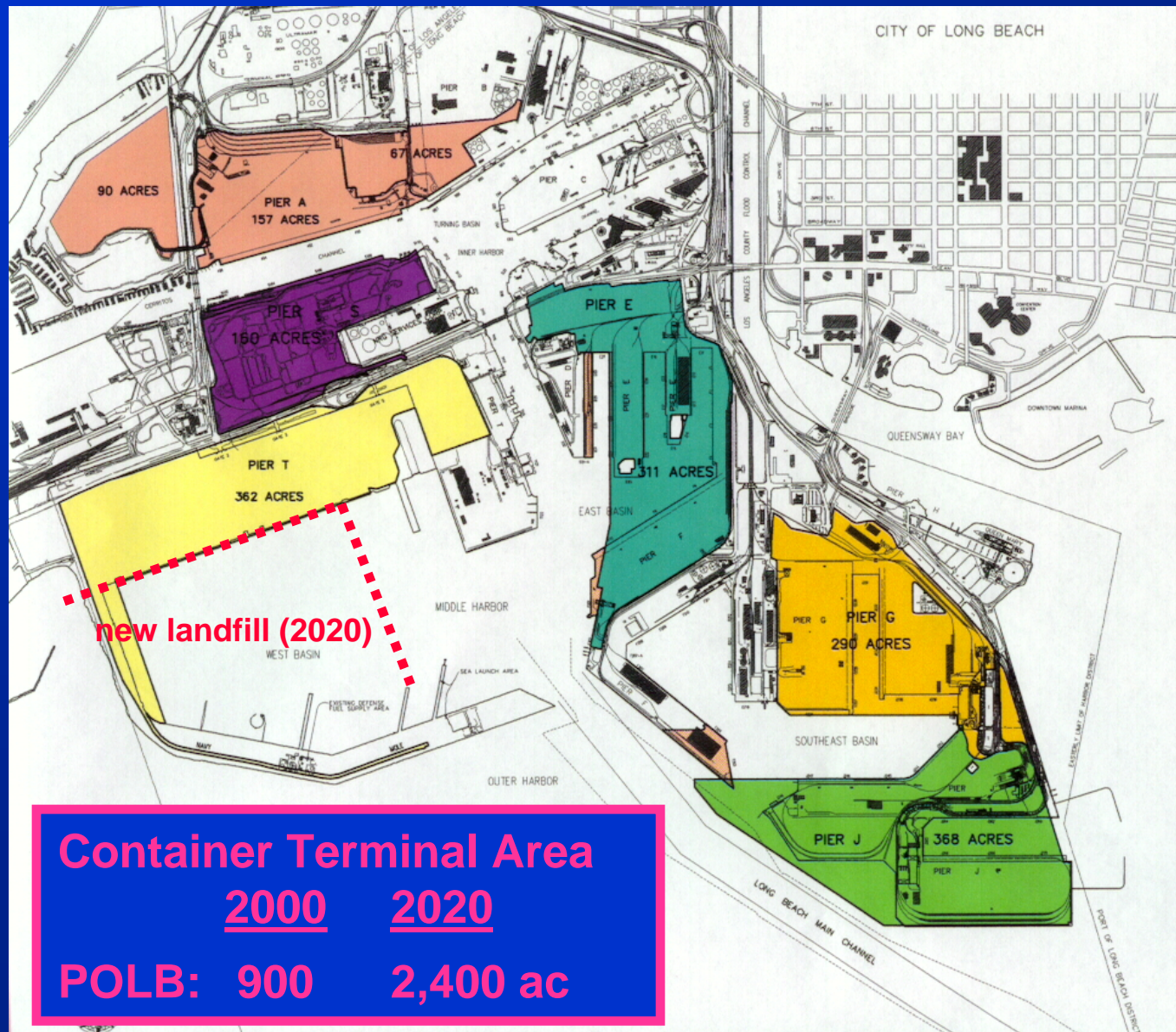


**steel**



# Accommodating Growth- Terminal Infrastructure

## Port of Long Beach Mega-Terminal Plan



# Accommodating Growth- Terminal Infrastructure

## Proposed Port of Los Angeles Growth



**Container Terminal Area**

2000

2020

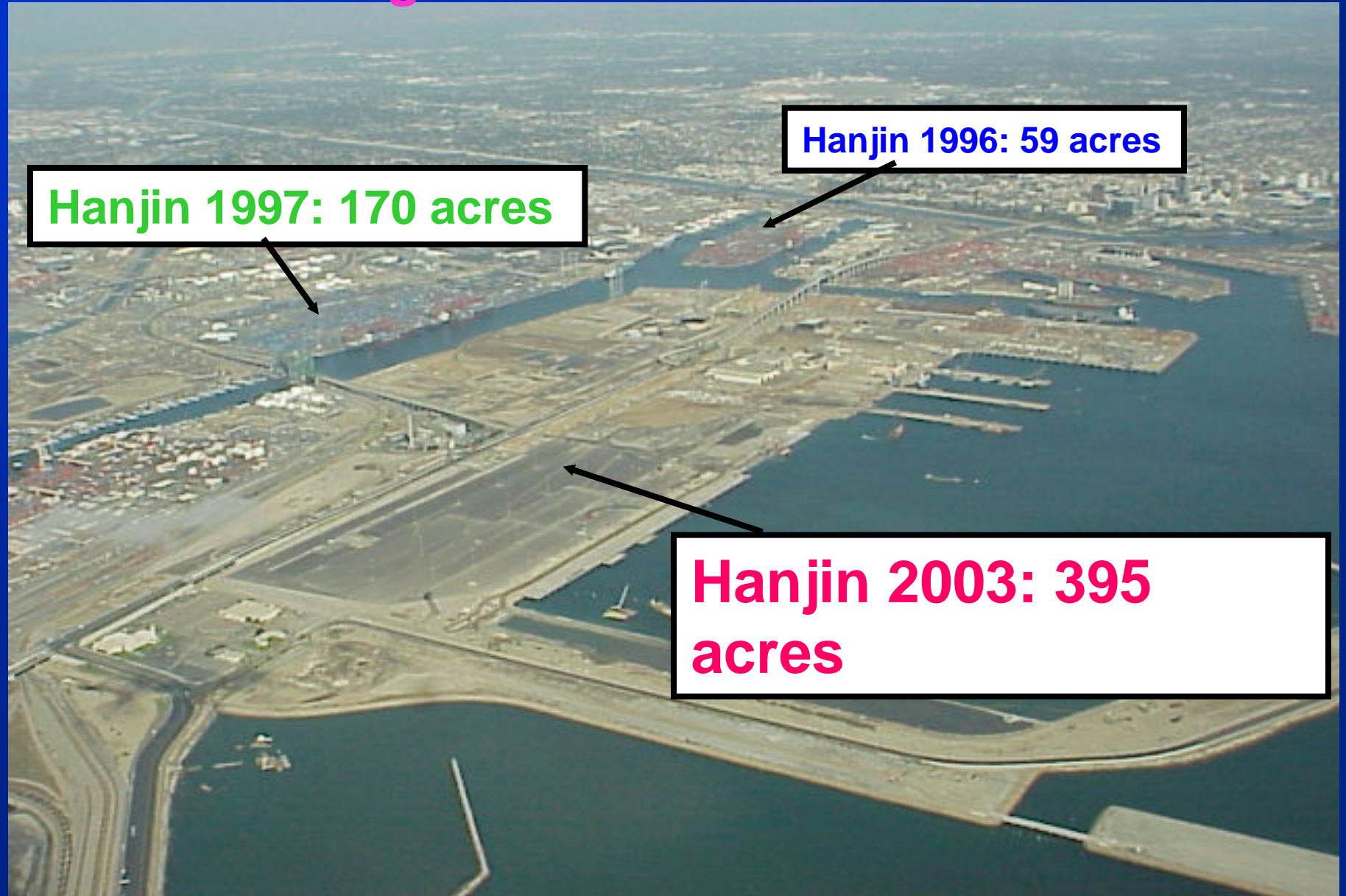
**POLA: 1,000**

**2,300 ac**



# Accommodating Growth- Terminal Infrastructure

## Cargo Growth-Carrier Needs



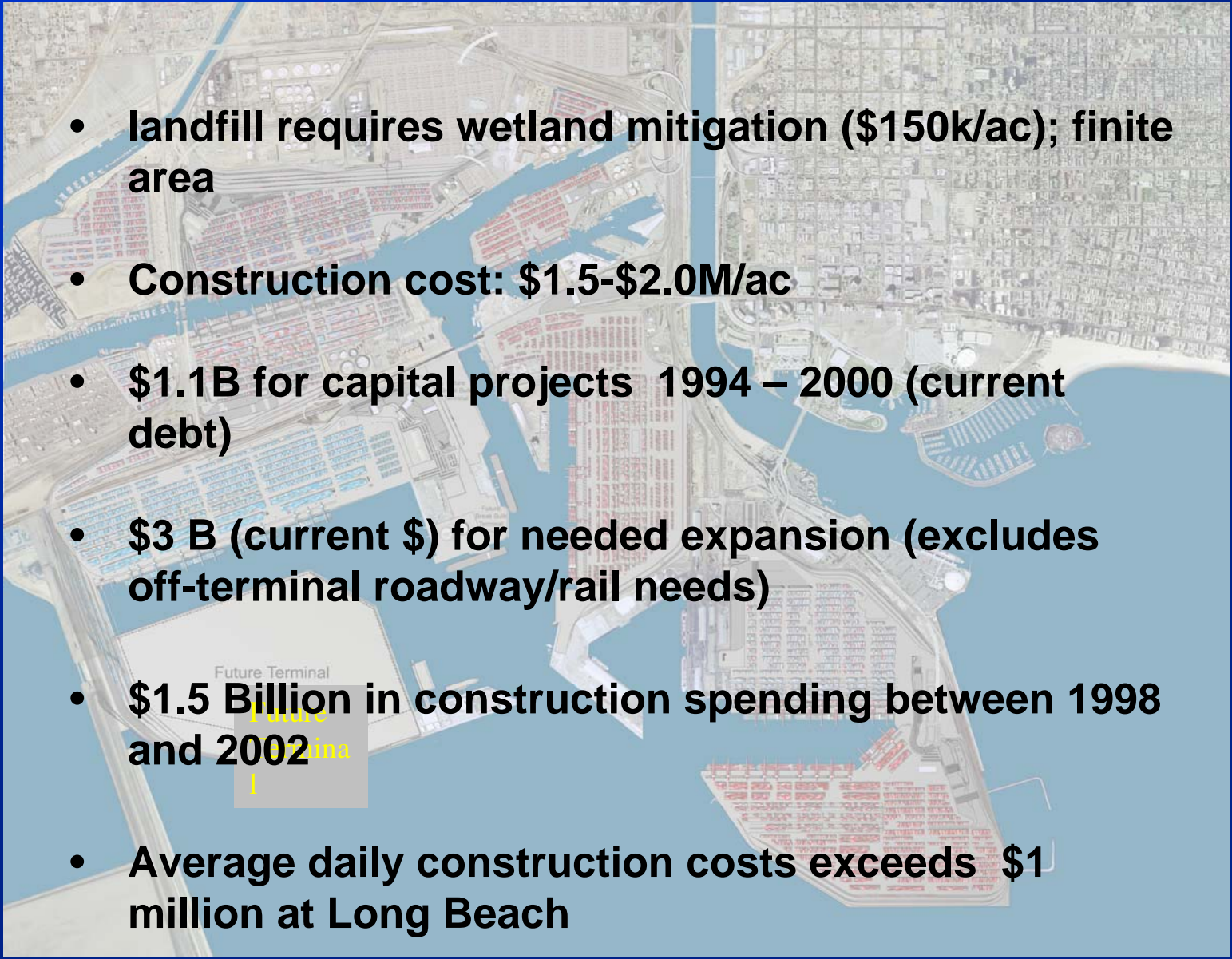
**Hanjin 1996: 59 acres**

**Hanjin 1997: 170 acres**

**Hanjin 2003: 395  
acres**

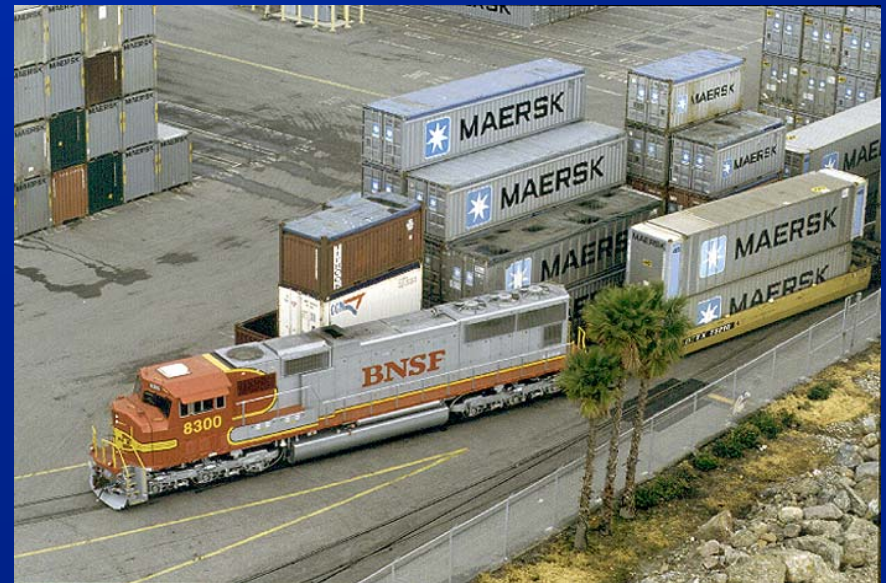
# Accommodating Growth- Terminal Infrastructure

\$\$\$\$\$\$

- 
- landfill requires wetland mitigation (\$150k/ac); finite area
  - Construction cost: \$1.5-\$2.0M/ac
  - \$1.1B for capital projects 1994 – 2000 (current debt)
  - \$3 B (current \$) for needed expansion (excludes off-terminal roadway/rail needs)
  - \$1.5 Billion in construction spending between 1998 and 2002
  - Average daily construction costs exceeds \$1 million at Long Beach



# Accommodating Growth Transportation System



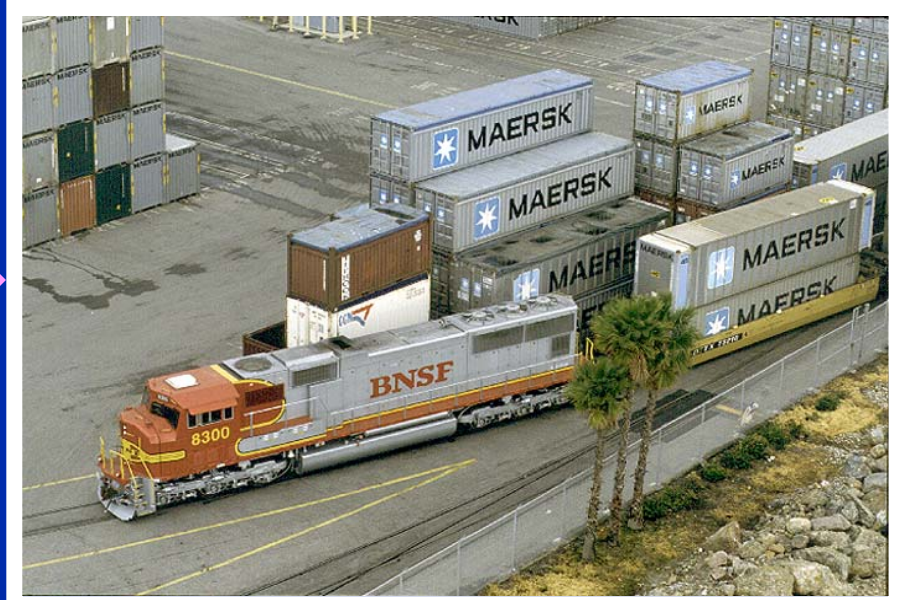


# Intermodalism (2002)

## Rail (50%)

On-Dock: 15% - 20%

Off-Dock: 30%- 35%



## Truck (80%- 85%)

Off-Dock: 30%-35%

Local: 50%



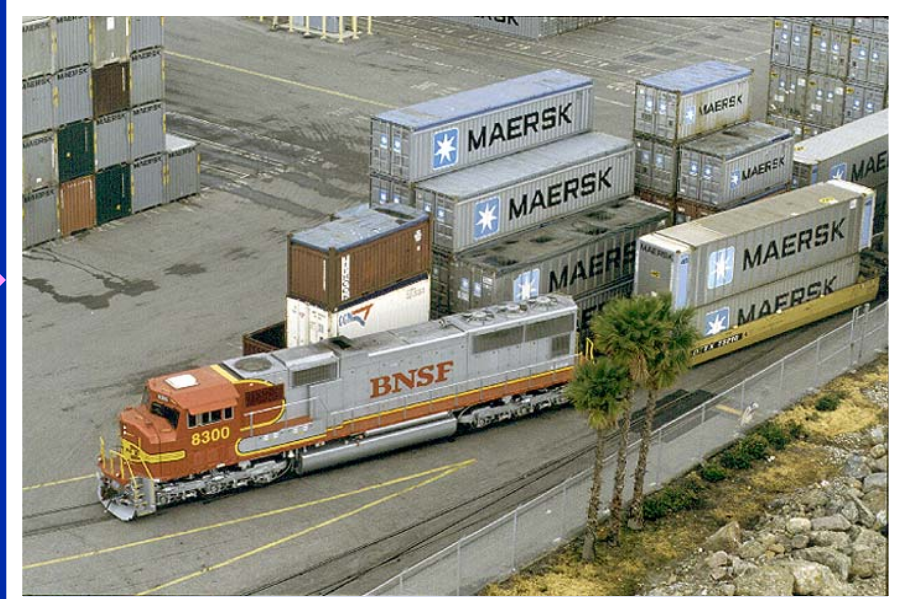
# Intermodalism (2020)

## Rail (50%)

On-Dock: 30% - 35% (capacity)

Off-Dock: 15%- 20%

- Currently only 12% capacity



## Truck (65%- 70%)

Off-dock: 15%-20%

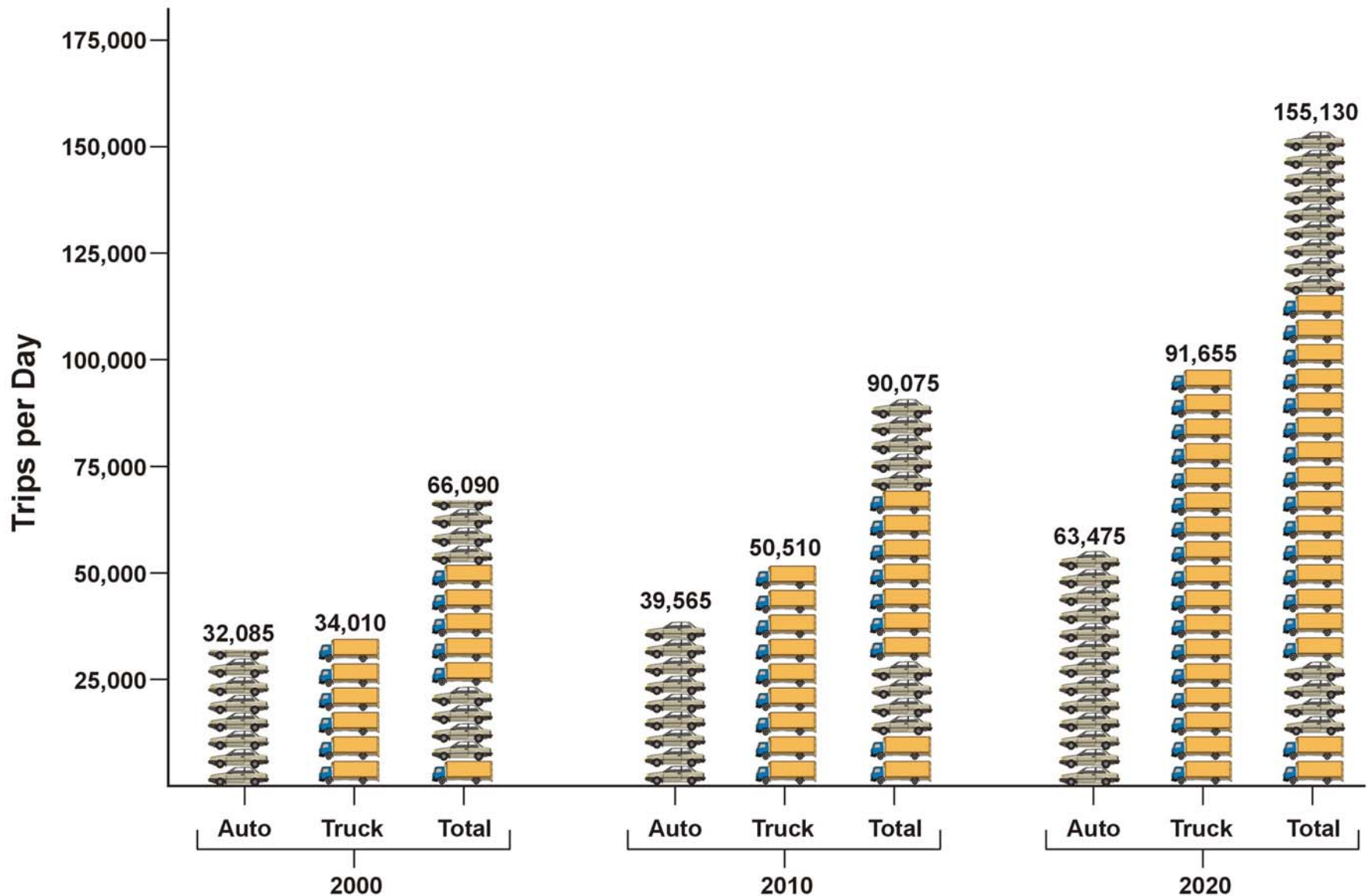
Local: 50%





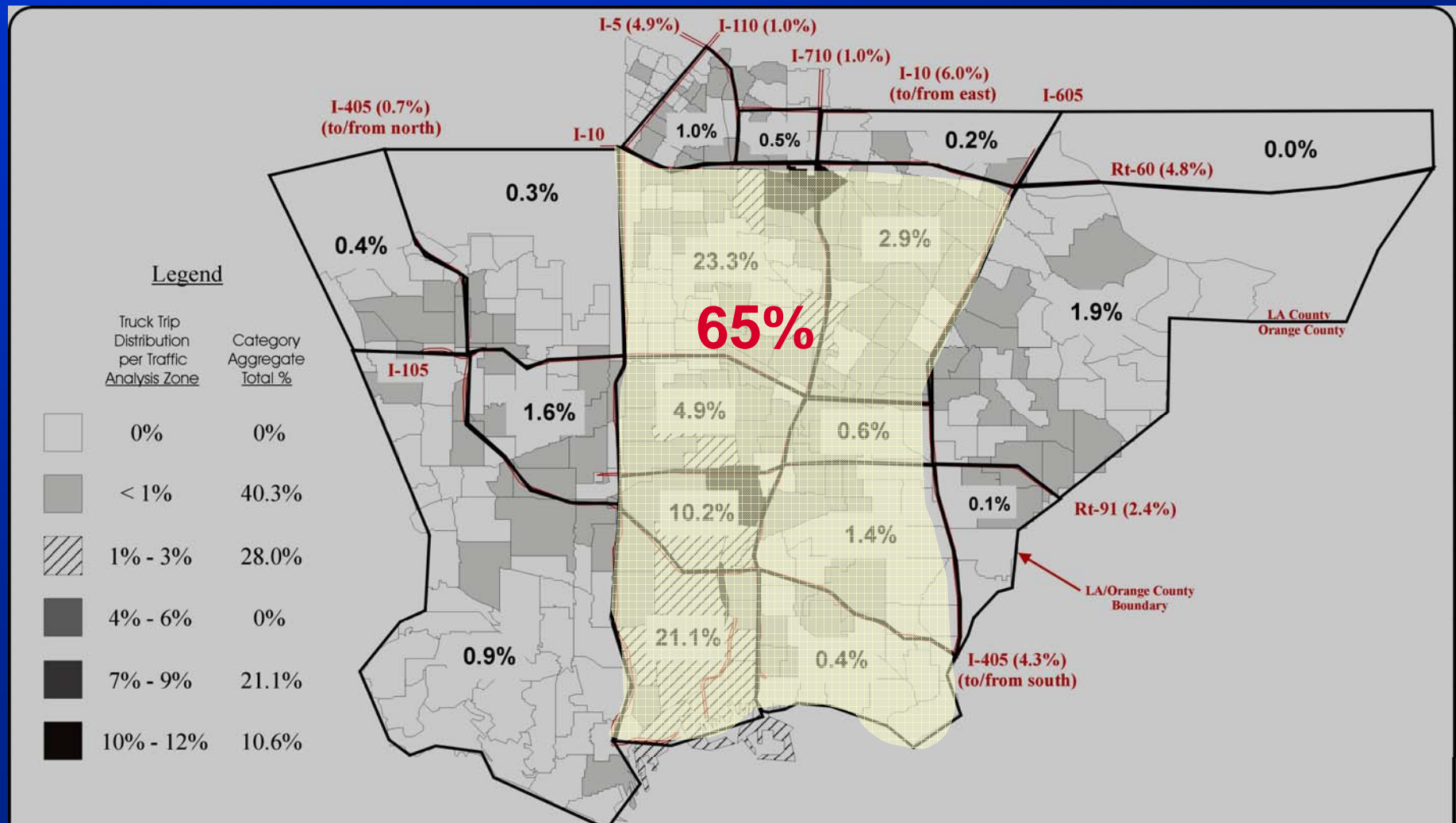
# Accommodating Growth

## POLB/POLA Daily Trips

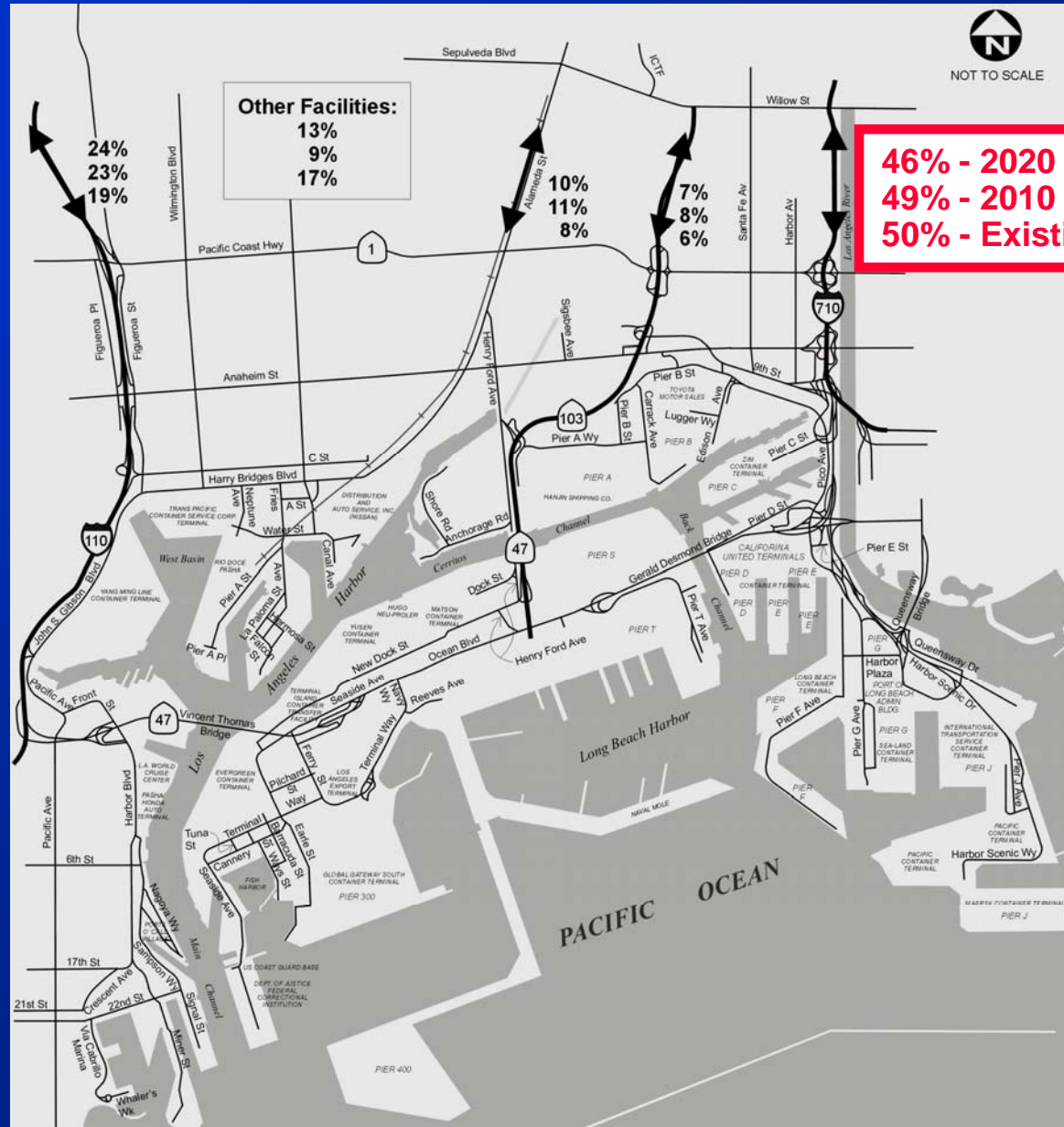


# Accommodating Growth

## Truck Trip Origin/Destinations

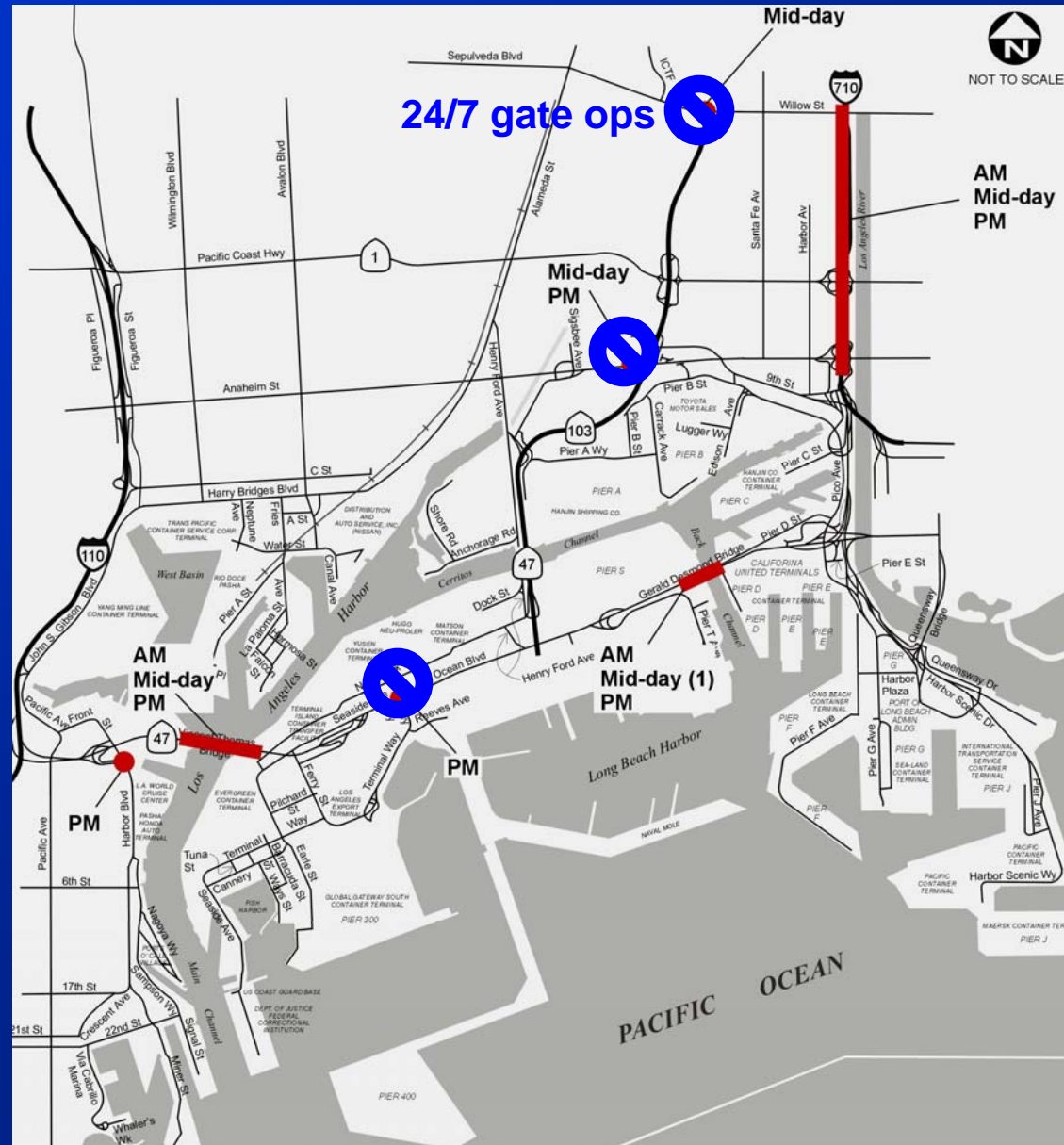


# Ports Truck Distribution – Key Routes



# YR 2010 Transportation System Deficiencies

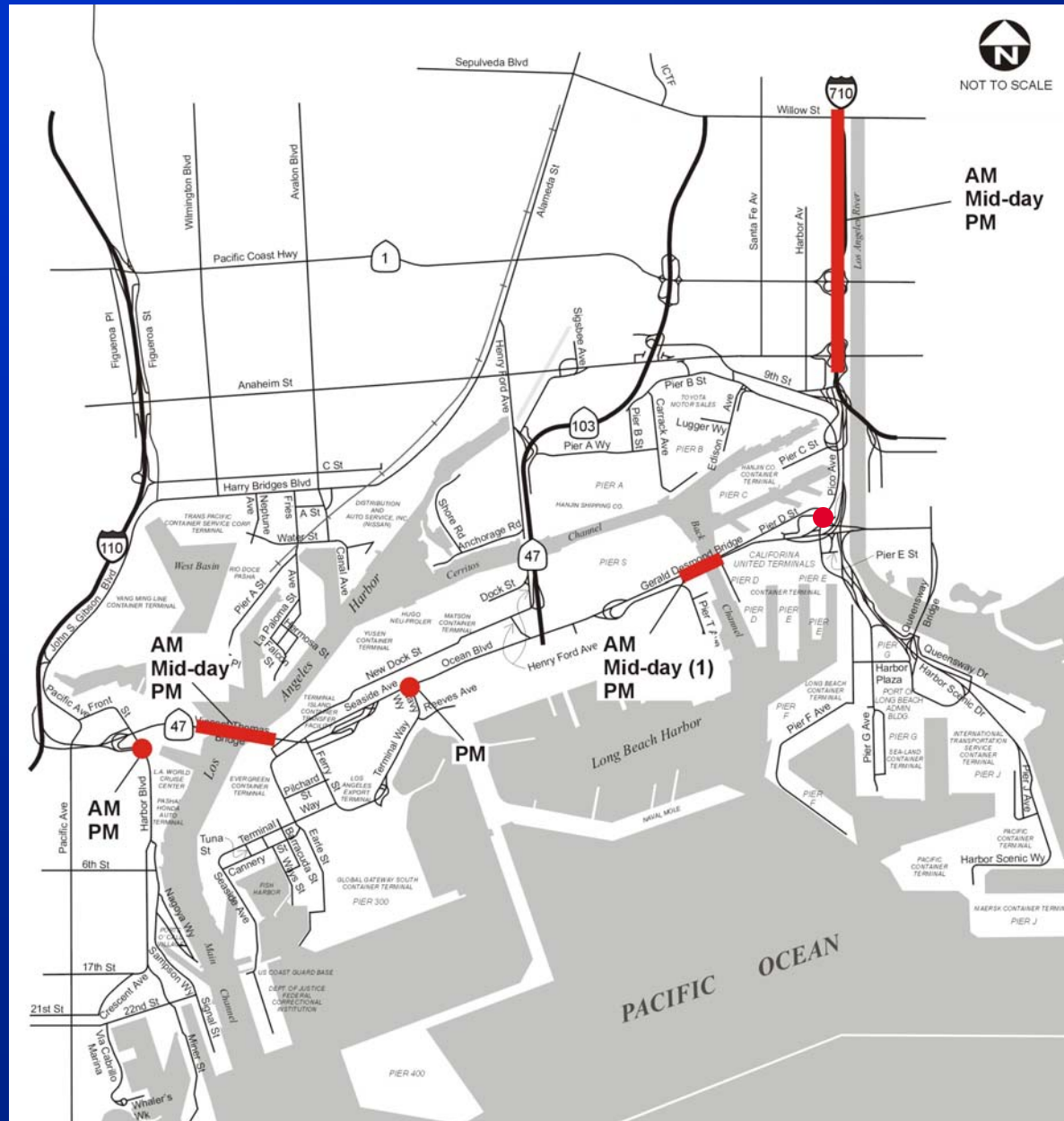
(20% gate movements outside day shift)





# YR 2020 Transportation System Deficiencies

(24/7 gate operations; 60% movements outside day shift)





# Accommodating Growth Transportation Solutions

## 1. Trip Reduction Measures

- increased on-dock rail (Ports/Industry)
- more near/off-dock rail capacity (UP/BNSF)
- empty container management (industry)

## 2. Transportation System Management

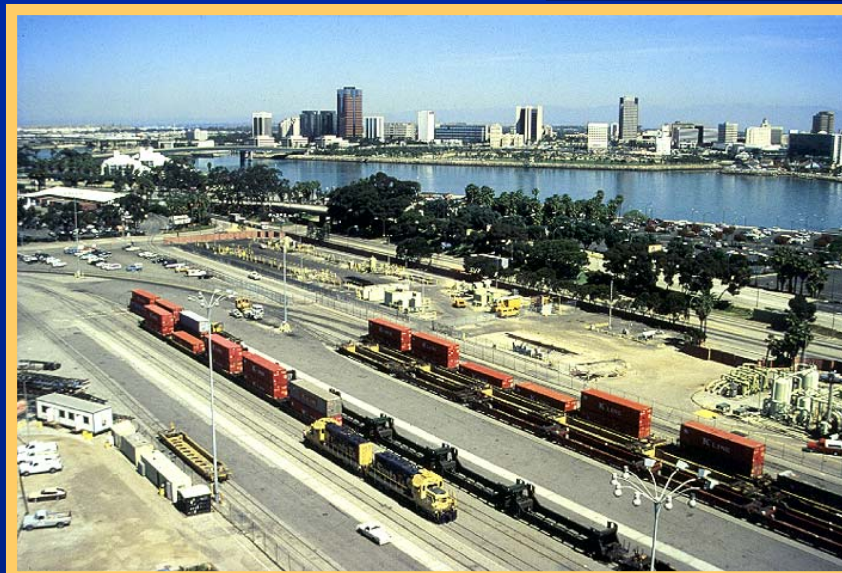
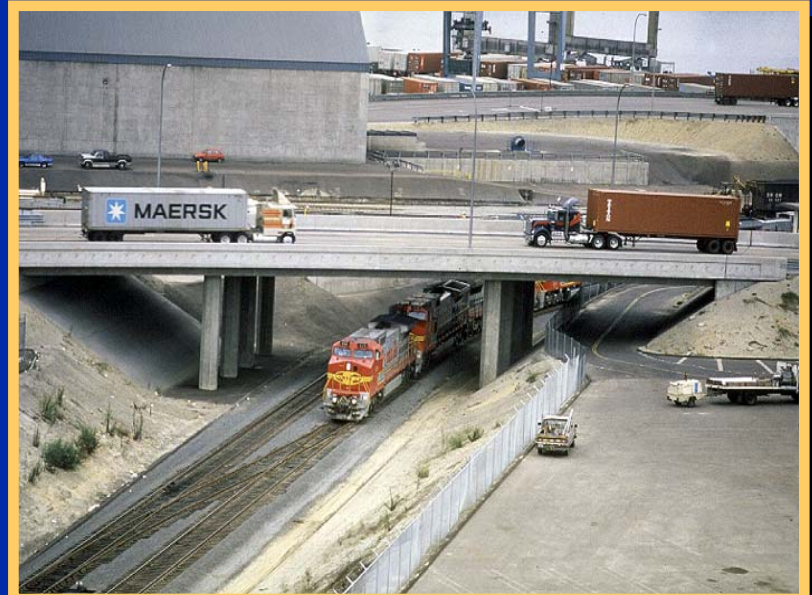
- Intelligent Transportation Systems (Ports/Industry)
- internet app't system (Industry)
- *hrs of operation of warehouses, terminals, etc.; requires cooperation of entire supply chain*

## 3. Physical Capacity Improvements

- ROW limited/funds scarce

# Port Transportation Projects

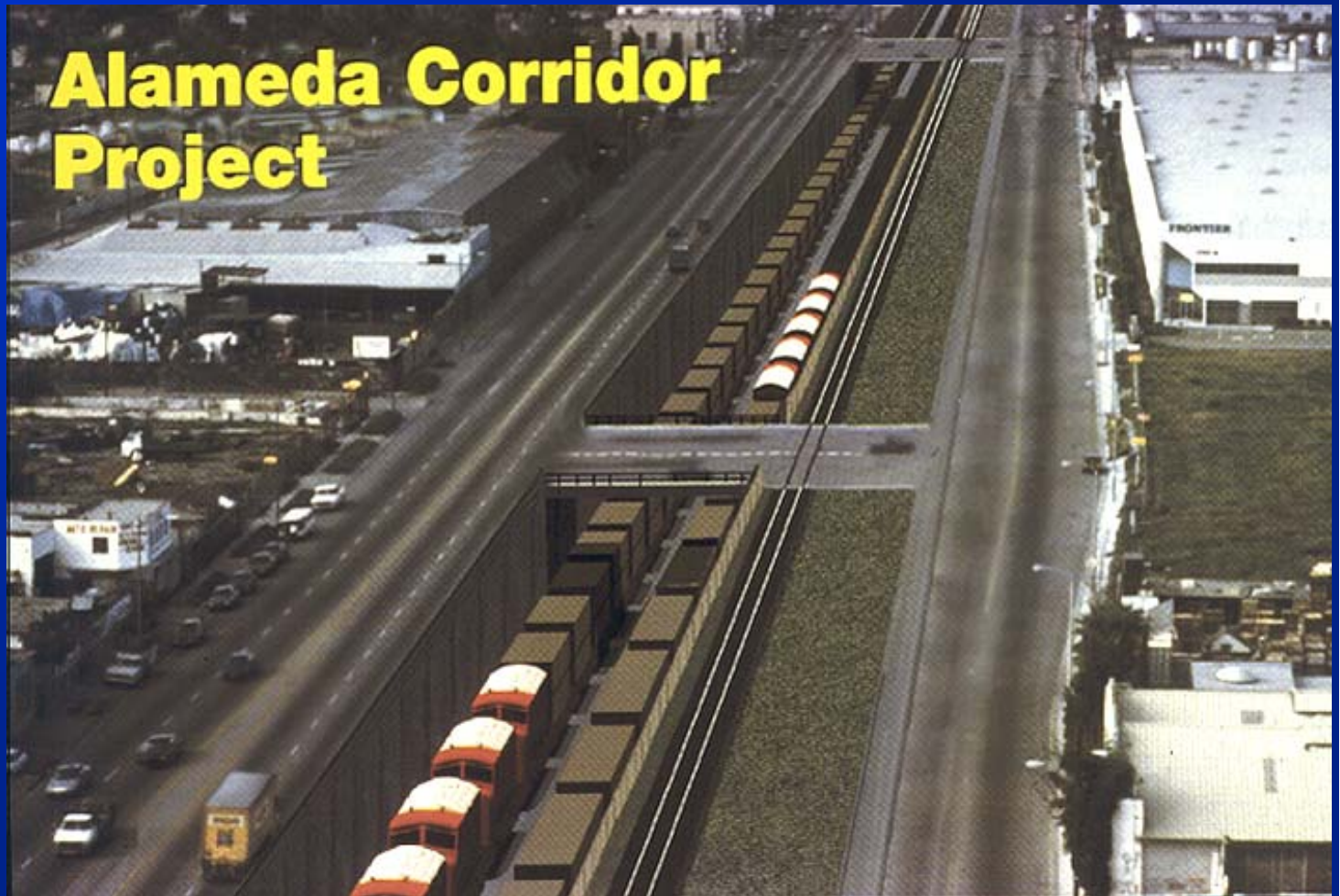
**\$370 million investment**





# Port Transportation Projects

- Trenched central segment
- 30 grade separations

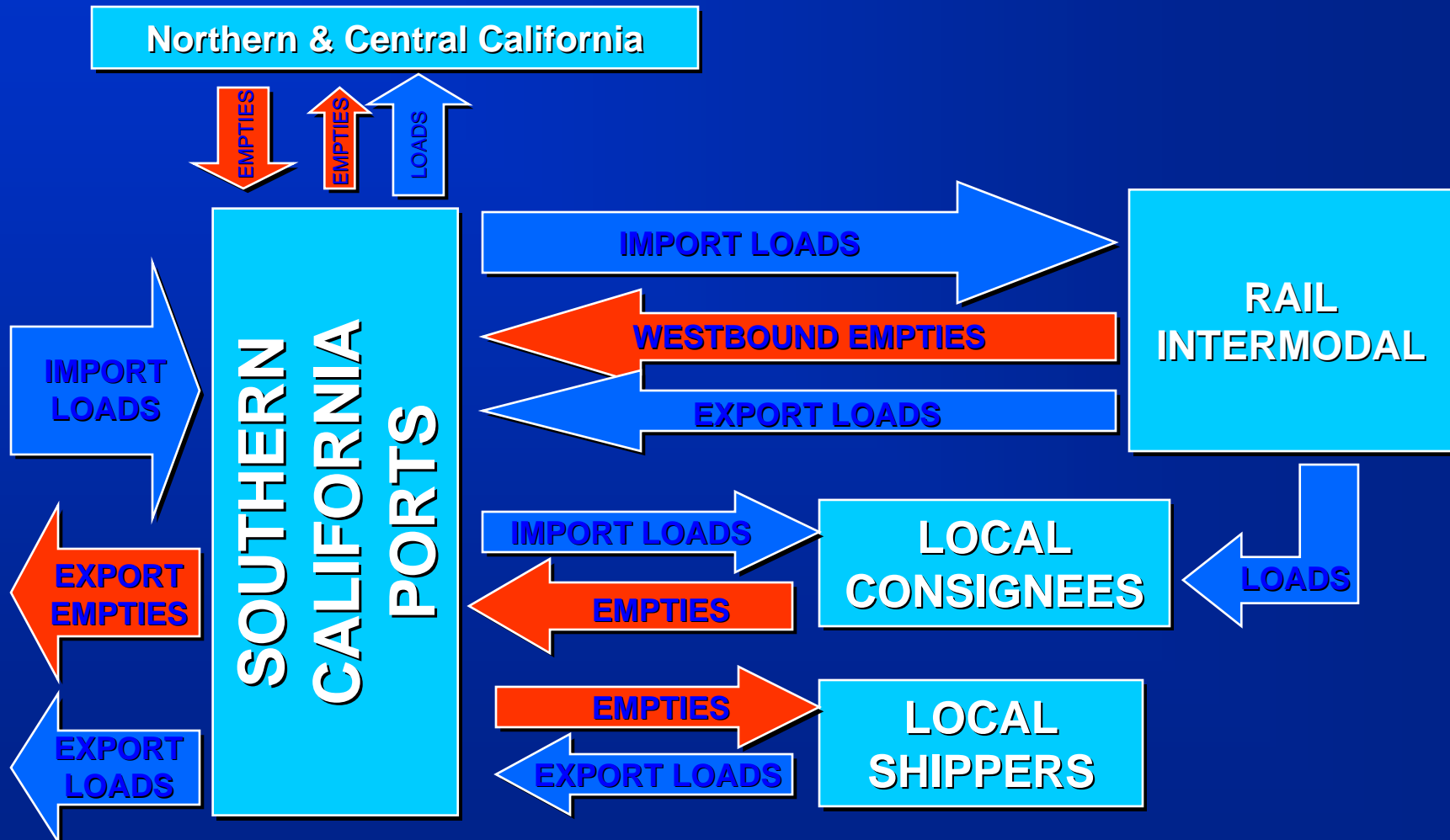




# ALAMEDA CORRIDOR



# Container Flows are Very Complex!





# Empty Container Management



## Concept

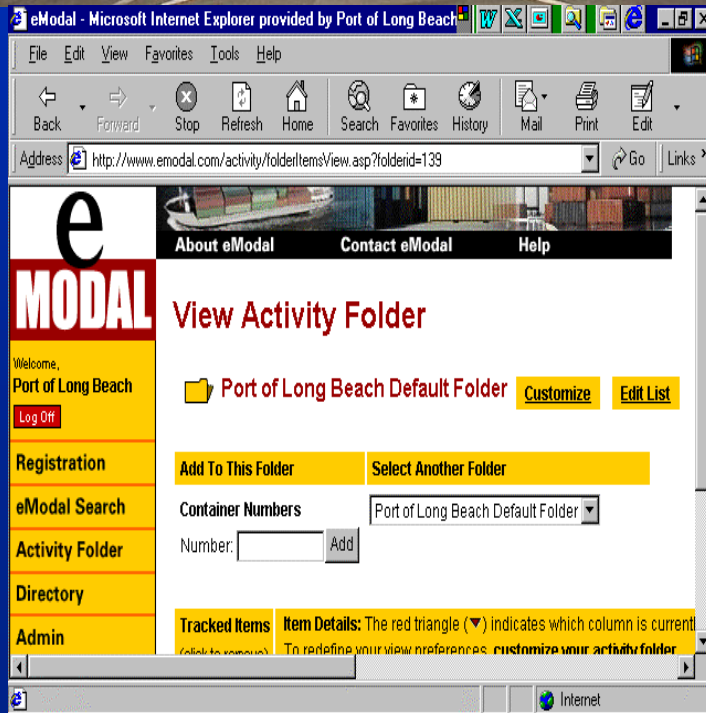
- virtual CY using internet system
  - direct interchange of MT between importers/exporters
- off-dock depot using internet system
  - indirect interchange

## eModal

- Website to improve intermodal logistics; provide container availability; bulletin board
- Appointments: ↓↓ peak period trips; queues
- MT Management: ↓↓ trips
- Integration with Port ITS project

## Study

- Gateway Cities COG Study



# Barriers to Container Reuse

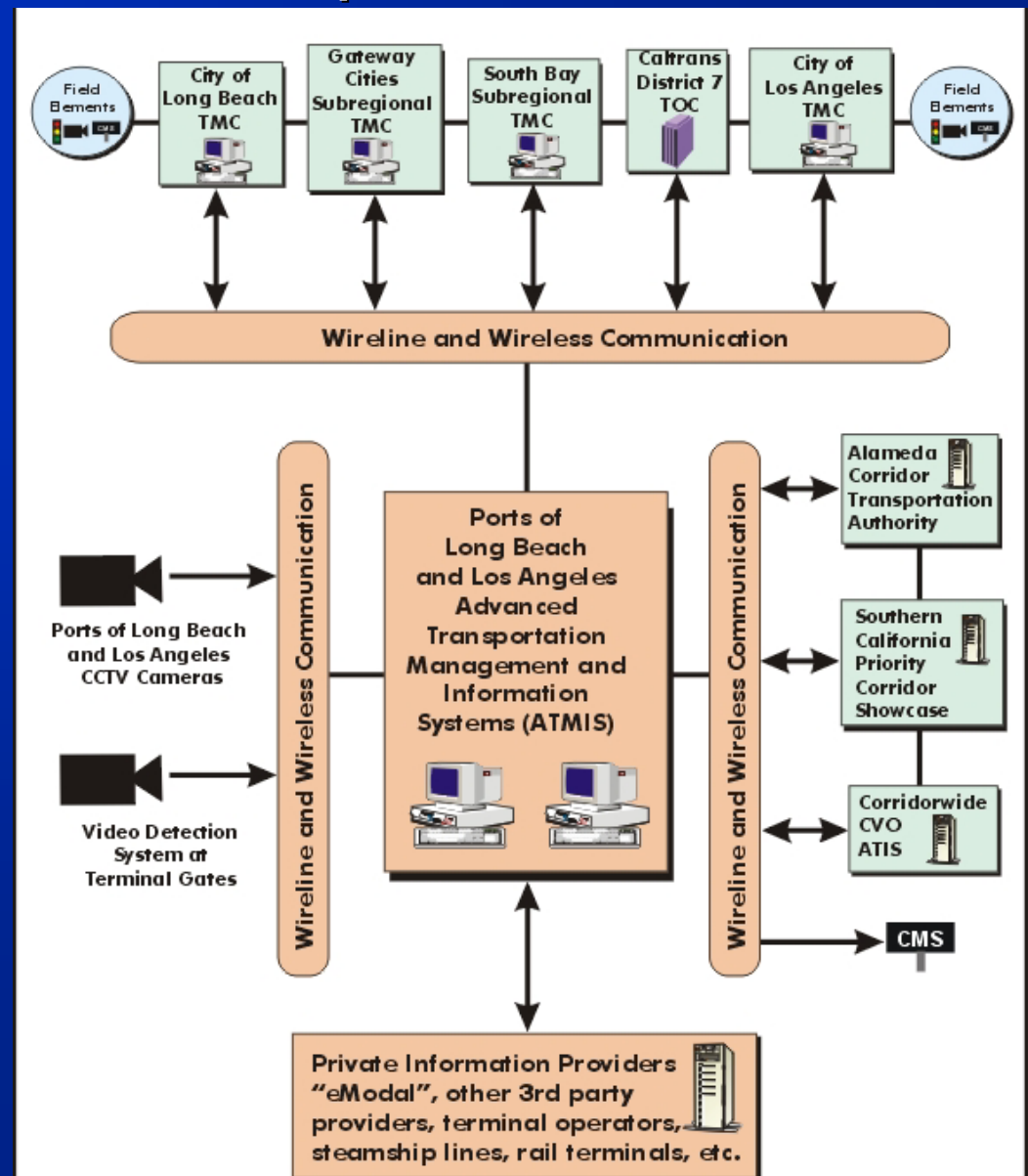
- Ownership mismatch (e.g. wrong steamship line)
- Type mismatch (e.g. wrong size, wrong type, or tri-axle chassis required for heavy exports)
- Different drayage company (steamship line does not control choice)
- Timing and detention cost
- Terminals used as warehouses for MTYs
- Difficulty of tracking per diem and M&R charges
- Steamship line contracts that do not allow interchange or make the first trucker responsible
- Skeptics foresee administrative headaches
- System has to be “good for everybody” to work, and benefits may not be apparent to all



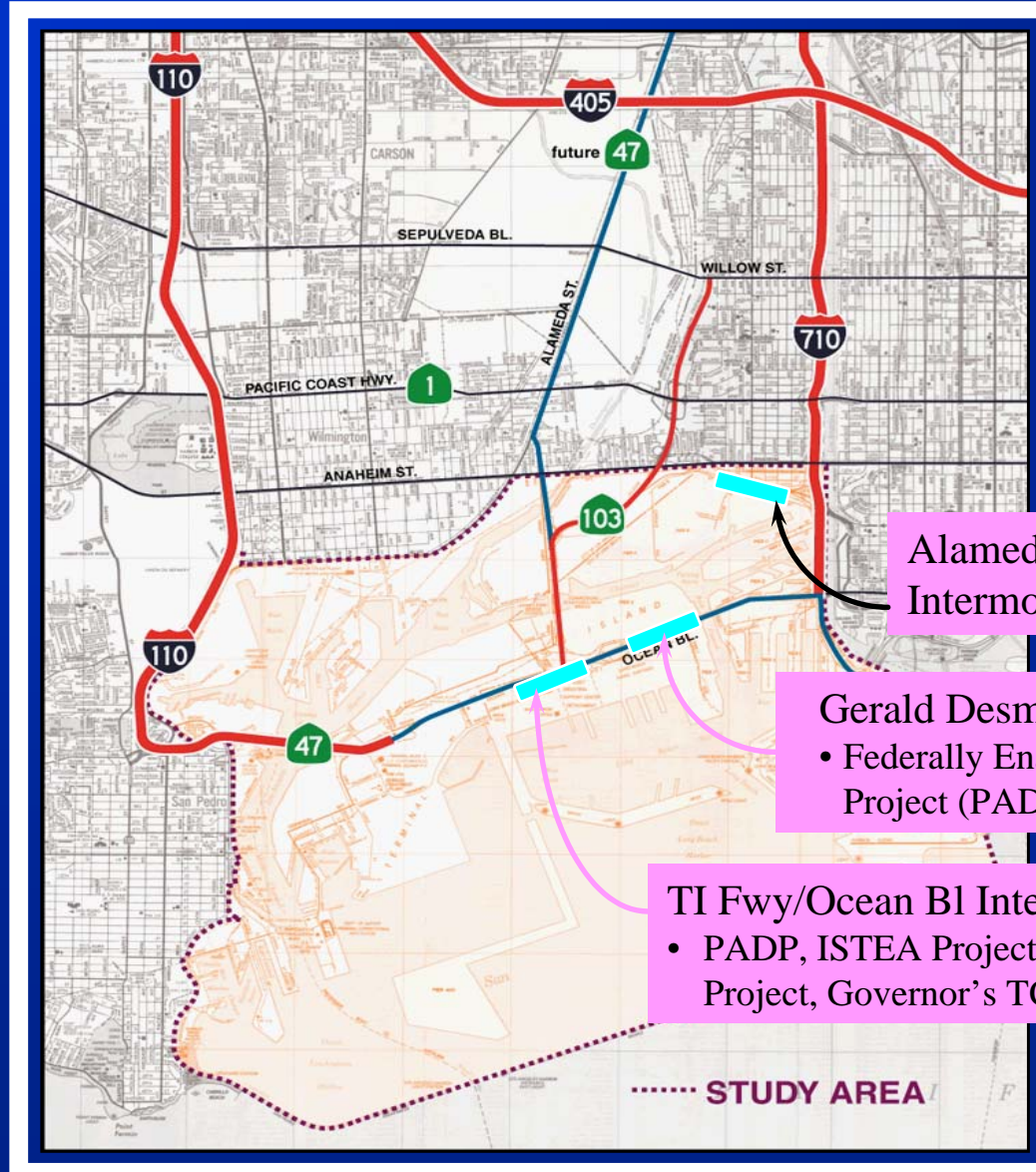
# POLB/POLA Intelligent Transportation Systems Project

## Conceptual Architecture

- Total cost: \$10.2M
- POLB, POLA, ACTA to provide \$3M in matching funds
- Awarded \$4.236 M from MTA (FY04/05)
- Awarded \$0.4 M FY02 Federal Appropriations Bill Earmark



# Planned Port Regional Projects



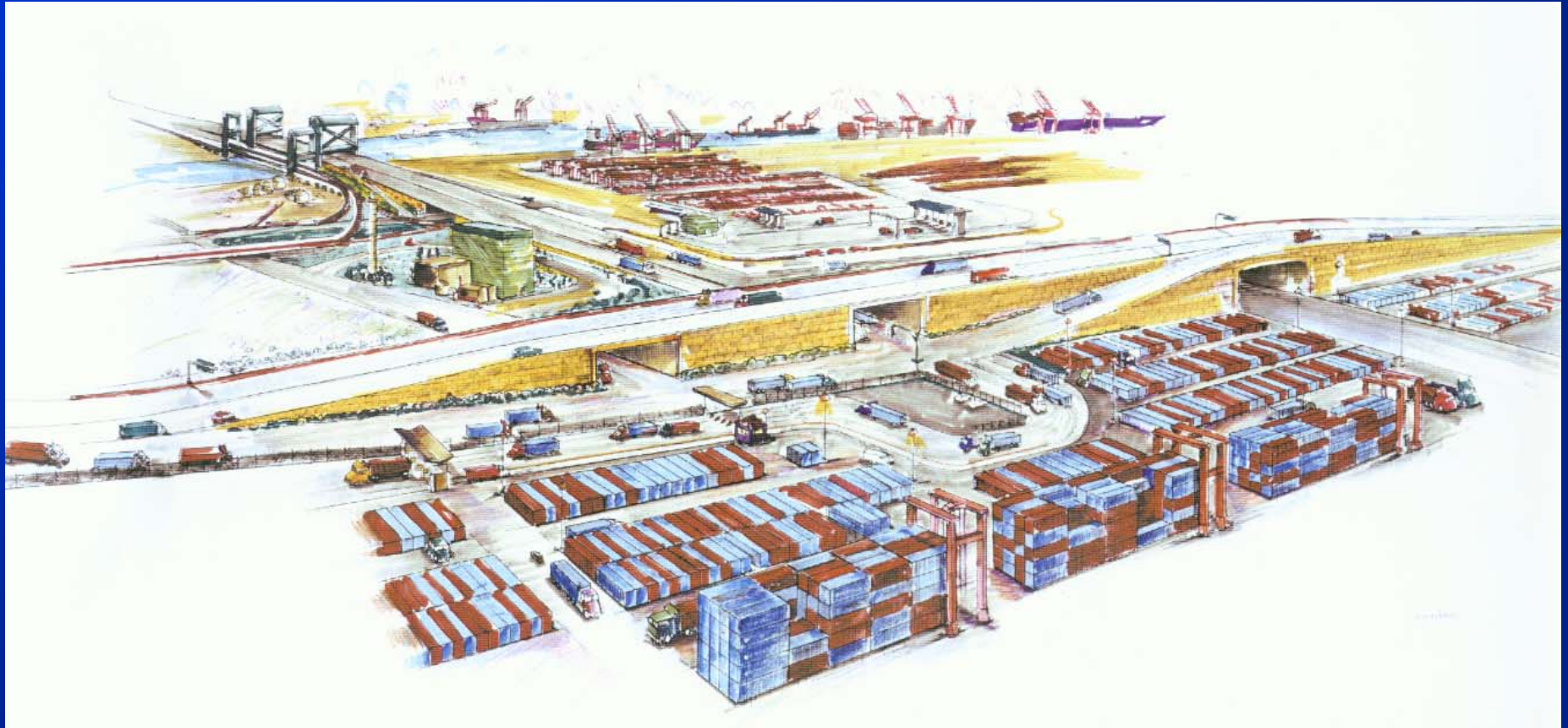
Alameda Corridor Terminus  
Intermodal Yard (\$60 M)

Gerald Desmond Bridge Widening  
• Federally Enacted Port Access Demo  
Project (PADP) (\$12 M)

TI Fwy/Ocean Bl Interchange  
• PADP, ISTEPA Project, TEA 21 “High Priority”  
Project, Governor’s TCRP Project (\$50 M)

..... STUDY AREA

# Terminal Island Fwy/Ocean Blvd. Interchange (\$50M)



- PADP, ISTEPA Project, TEA 21 “High Priority” Project, Governor’s TCRP Project

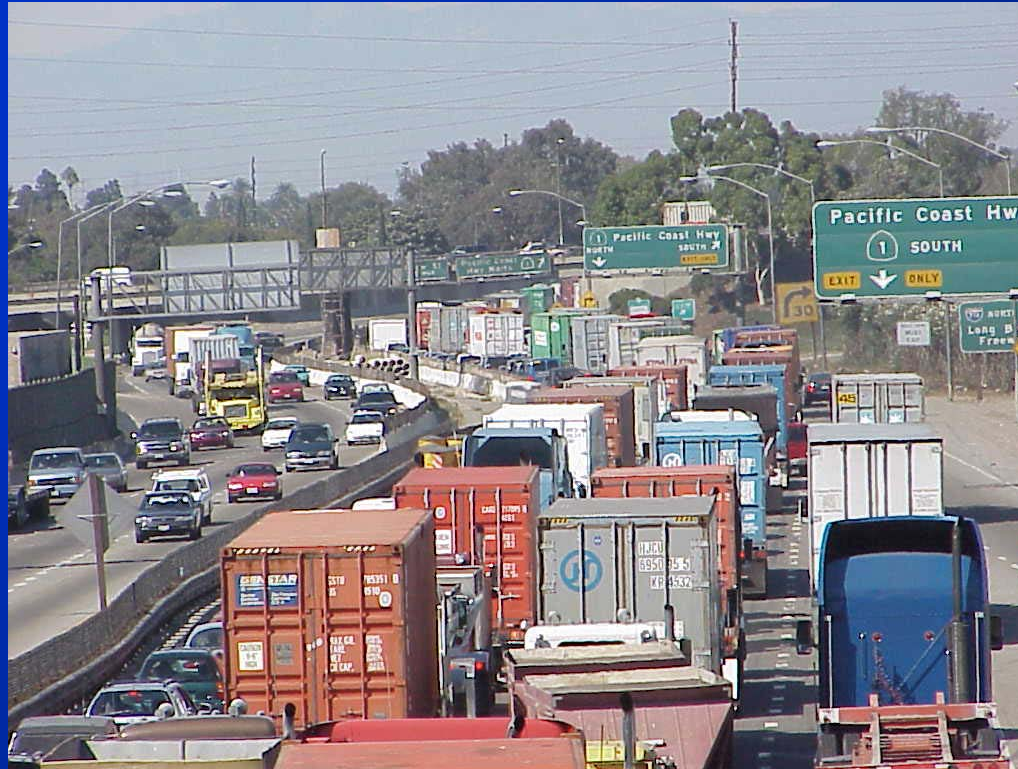


# Gerald Desmond Bridge Replacement



- **State DOT & Port agree bridge should be replaced**
  - Insufficient traffic capacity
  - Insufficient channel vertical clearance
  - Low Year 2000 “Sufficiency Rating” (54.3); replacement recommended at 50
- **\$50 million painting job abandoned – Port returned \$28 million federal/state funding**
- **Prelim. Eng begun** (6 to 8 lanes req’d)
- **Est. cost: \$370M**
  - can be built next to existing bridge, minimizing closure
- **Est. Schedule: 2006/07**

# I-710 Improvements



## By 2010

- 6 → 8 to 10 lanes (or truck lanes)

**PLUS**

- 24/7 gate operations (60% outside day shift)
- 30% -35% on-dock rail

# I-710 Major Corridor Study



- Part of Economic Recovery Program
- Intelligent Transportation Systems
- Truck lane alternative
- Interchanges
- Adjacent arterial streets
- Study Cost: \$3.9 million
- Improvement Costs: +\$4 billion??
- Study Completion: 2003
- Port on policy & technical committees
- ❖ Gateway Cities COG to seek TEA 21 Reauthorization Earmark Funds