"A PROJECT OF NATIONAL SIGNIFICANCE"

THE ALAMEDA CORRIDOR
Presentation Topics

The Alameda Corridor Project

Corridor Performance

Goods Movement Challenges
Ports of Los Angeles and Long Beach

- Largest port complex in the U.S.
- Fifth largest in the world
- Highest throughput per acre in U.S.
- $256B in trade annually
- Nearly 40% of all waterborne U.S. trade
- Nearly 60% of all Asian imports
- Over 60% of imports distributed to rest of Nation
## Top 10 U.S. Container Ports in 2006

<table>
<thead>
<tr>
<th>Port</th>
<th>Twenty-Foot Equivalent Units (TEU) (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOS ANGELES</td>
<td>8.47</td>
</tr>
<tr>
<td>LONG BEACH</td>
<td>7.29</td>
</tr>
<tr>
<td>New York</td>
<td>5.13</td>
</tr>
<tr>
<td>Oakland</td>
<td>2.39</td>
</tr>
<tr>
<td>Vancouver (Canada)</td>
<td>2.21</td>
</tr>
<tr>
<td>Savannah</td>
<td>2.16</td>
</tr>
<tr>
<td>Tacoma</td>
<td>2.07</td>
</tr>
<tr>
<td>Hampton Roads</td>
<td>2.05</td>
</tr>
<tr>
<td>Seattle</td>
<td>1.99</td>
</tr>
<tr>
<td>Charleston</td>
<td>1.97</td>
</tr>
</tbody>
</table>

### Twenty-Foot Equivalent Units (TEU) (millions)

Source: AAPA
Top 10 World Container Ports in 2006

- Singapore: 24.79 TEU
- Hong Kong: 23.23 TEU
- Shanghai: 21.71 TEU
- Shenzhen: 18.47 TEU
- Long Beach/Los Angeles: 15.76 TEU
- Pusan: 12.03 TEU
- Kaohsiung: 9.77 TEU
- Rotterdam: 9.60 TEU
- Dubai: 8.92 TEU
- Hamburg: 8.86 TEU

Source: Containerization International
San Pedro Bay Projected Container Growth

- **Original Est.**
- **Revised Est.**

In Million TEU’s

<table>
<thead>
<tr>
<th>Year</th>
<th>Original Est.</th>
<th>Revised Est.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>6.9</td>
<td>9.5</td>
</tr>
<tr>
<td>2005</td>
<td>9.0</td>
<td>13.2</td>
</tr>
<tr>
<td>2010</td>
<td>12.3</td>
<td>18.3</td>
</tr>
<tr>
<td>2015</td>
<td>17.2</td>
<td>25.5</td>
</tr>
<tr>
<td>2020</td>
<td>23.4</td>
<td>36.0</td>
</tr>
</tbody>
</table>
Intermodal Goods Movement

Note: Line thickness corresponds to intermodal volume
Value of Containerized Trade Through Los Angeles and Long Beach

Int’l Trade Total: $256 Billion

1. Southwest $82.0B, 32%
2. Great Lakes $53.7B, 21%
3. Southeast $37.7B, 15%
4. South Central $32.5B, 13%
5. Atlantic Seaboard $25.9B, 10%
6. Great Plains $19.3B, 8%
7. Northwest $3.2B, 1%

Note: AK/HI not shown
The Corridor

- An environmental mitigation project
- A capacity enhancement project
- 22-Mile – 40 m.p.h. Rail Corridor
- Consolidates 4 Branch Lines (10 m.p.h.)
- Reduced Conflicts at 200 Grade Crossings
- 10-Mile Trench Section
- 4 Million Cu. Yds. Excavation
- 50 Grade Separations and Bridges
- 2,000 Utility Interfaces
- Nearly 100 Miles of New Track with CTC
ACTA Construction Program

- $1.2B construction budget
- $785M Mid-Corridor Trench Design-Build Contract (39 Months)
Design-Build Results

- Saved 14-20 months
- Obtained quality construction
- Contractor-initiated changes less than 3%
- Achieved 22% DBE goal
- Achieved job training and local hire goals
- On time
- Under budget
- Open for business
  April 15, 2002
- 110 trains first 3 days
Post Corridor Completion Activities

- Pacific Coast Highway project
- Anaheim Street Pump Station project
- Additional railroad projects
- Federal loan refinancing
- Colton Crossing Feasibility Study
- SR-47 Environmental Documents
Alameda Corridor Transportation Authority

- California Joint Powers Authority
- Created by the Cities of Long Beach and Los Angeles in 1989
- A single purpose agency
- Governed by a seven-member board (Cities, Ports, LACMTA)
Sources of Funding
(in Millions)

- Revenue Bonds: $1,160 (48%)
- MTA Grants: $347 (14%)
- Federal Loan*: $400 (17%)
- Ports: $394 (16%)
- Other: $130 (5%)

* Federal Loan was Repaid on May 6, 2004 with $172 Million in Interest

Total Project Cost: $2.43 Billion
## Alameda Corridor Fees (per TEU)

<table>
<thead>
<tr>
<th>Type</th>
<th>Fee</th>
<th>% of Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterborne Full</td>
<td>$18.04</td>
<td>94%*</td>
</tr>
<tr>
<td>Waterborne Empty</td>
<td>$4.57</td>
<td>4.5%</td>
</tr>
<tr>
<td>Non-Waterborne Full or Empty</td>
<td>$4.57</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Other Loaded Railcars (per Car)</td>
<td>$9.13</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

* 64% Use Fee, 30% Container Charge
Annual Performance Comparison

Number of Trains

<table>
<thead>
<tr>
<th>CY '02</th>
<th>'03</th>
<th>'04</th>
<th>'05</th>
<th>'06</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,259</td>
<td>14,558</td>
<td>15,972</td>
<td>17,306</td>
<td>19,924</td>
</tr>
</tbody>
</table>

+15.1%

ACTA Revenue *

<table>
<thead>
<tr>
<th>CY '02</th>
<th>'03</th>
<th>'04</th>
<th>'05</th>
<th>'06</th>
</tr>
</thead>
<tbody>
<tr>
<td>$35.6</td>
<td>$42.7</td>
<td>$51.2</td>
<td>$68.8</td>
<td>$89.8</td>
</tr>
</tbody>
</table>

+25.9%

Containers *

(Containers = TEUs / 1.8)

<table>
<thead>
<tr>
<th>CY '02</th>
<th>'03</th>
<th>'04</th>
<th>'05</th>
<th>'06</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,434,972</td>
<td>1,842</td>
<td>2,189,110</td>
<td>2,494,715</td>
<td>2,777,919</td>
</tr>
</tbody>
</table>

+23.7%

Note: Numbers in ( ) = Daily Average for Year

* (Railroad Self Assessed)

Top: Trucked Around Corridor
Bottom: Uses Corridor
Environmental Performance

- Over 2,300 tons of NO\textsubscript{x} and PM removed
- For every ton removed by improved rail speed a $\frac{1}{2}$ ton is removed from idling vehicles at crossings
- Does not include truck emissions removed due to Corridor use
- One train is the equivalent of 250-280 trucks
- Rail is more energy efficient and less polluting on a ton-mile basis than trucks
### Annual Emissions Reductions (tons/year)

<table>
<thead>
<tr>
<th>Year</th>
<th>ROG</th>
<th>CO</th>
<th>NOx</th>
<th>PM10</th>
<th>SOx</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002*</td>
<td>85.8</td>
<td>822.4</td>
<td>324.7</td>
<td>13.2</td>
<td>5.5</td>
<td>1,251.6</td>
</tr>
<tr>
<td>2003</td>
<td>84.2</td>
<td>778.3</td>
<td>407.3</td>
<td>16.8</td>
<td>7.2</td>
<td>1,293.8</td>
</tr>
<tr>
<td>2004</td>
<td>83.9</td>
<td>771.2</td>
<td>438.2</td>
<td>18.4</td>
<td>7.7</td>
<td>1,319.4</td>
</tr>
<tr>
<td>2005</td>
<td>81.0</td>
<td>728.8</td>
<td>452.0</td>
<td>18.9</td>
<td>4.7</td>
<td>1,285.4</td>
</tr>
<tr>
<td>2006</td>
<td>91.0</td>
<td>750.2</td>
<td>631.1</td>
<td>23.1</td>
<td>0.7</td>
<td>1,496.1</td>
</tr>
<tr>
<td><strong>Cumulative</strong></td>
<td>425.9</td>
<td>3,850.9</td>
<td>2,253.3</td>
<td>90.4</td>
<td>25.8</td>
<td>6,646.3</td>
</tr>
</tbody>
</table>

* True benefits start in April 2002 with the new Corridor and are not annualized.
Other Environmental Benefits

- Grade crossing delays: Reduced 90%
- Train stops: Reduced 75%
- Locomotive hours: Reduced 30%
- Noise & vibration: Reduced 90%
- Aesthetics: Greatly improved

Before

After
Is the Corridor Running at Capacity?

- Corridor was built with excess capacity to meet port cargo demands of the future – 2020 and beyond
- Average number of trains per day for the year-to-date is 55 (train every 26 minutes)
- Corridor has practical “capacity” of over 150 daily train movements (train every 10 minutes)
Why Can’t All Trucks be Shifted to Rail?

- Rail only economical for trips over 800 miles
- Trucks are needed for all local and regional distribution
- Truck trips to downtown rail yards and inland distribution centers can possibly be shifted to rail
The Future of Goods Movement

- International trade and population are growing rapidly
- Existing infrastructure needs upgrading to keep pace
- New funding is limited to non-existent
- If funding was available, it would take years to plan and build projects
- Construction will cause added congestion
- In the interim, must optimize use of existing infrastructure
ACTA’s Expanded Mission

**Initiatives**
1. Extended Terminal Gate Hours
2. Increase Use of On-Dock Facilities
3. Shuttle Trains
4. New Near-Dock Rail Facility
5. SR-47 Project
6. Participate in Goods Movement Studies
7. Funding Options
8. Empty Container Storage Survey
9. Inland Truck Depots

*Optimizes use of existing infrastructure*
Regional Benefits of Trade Growth

- SCAG region dropped from 4th to 11th in average payroll per job (1991-2001)
- 550,000 existing logistics jobs have helped to replace lost manufacturing jobs
- These jobs do not require advanced schooling
- 1.3M more jobs, if projected trade growth can be accommodated
Growth Impediments

- Air quality issues
- Terminal capacity
- Labor availability
- Trucker availability
- Rail capacity and grade separations
- Freeway capacity