Responding to Increasing Port-Related Freight Volumes: Lessons Learned

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Introduction

- Ports, trade and the regulatory environment
- Forces of change: growth in port-related trade and its impacts
- The Los Angeles region
  - Responses:
    - AB 2650
    - PierPass
  - Explaining outcomes
- Conclusions
The Regulatory Environment

- Favored status of ports, int’l trade interests
  - Engines of economic development
  - Ports as quasi-public authorities

- Globalization
  - Trade as function of global market dynamics

- Regulatory authority
  - Federal role – facilitate competition
  - Interstate commerce exempt from state, local regulations
  - Non-US carriers exempt from US regulation
Forces of change

- Rapid growth of international trade
- Local vs dispersed economic benefits
- Localized consequences
  - Traffic congestion
  - Air pollution

<table>
<thead>
<tr>
<th>Year</th>
<th>US Trade in Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>$889 B</td>
</tr>
<tr>
<td>2000</td>
<td>$2,000 B</td>
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<tr>
<td>2005</td>
<td>$2,579 B</td>
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Los Angeles Region
Pacific Coast Port Growth, TEUs

TEU (millions)

Los Angeles
Long Beach
Oakland
Tacoma
Seattle
Vancouver

Significant events

- 2000 -- SCAQMD MATES II Study
- 2000 – NRDC vs Port of LA
  - China Shipping Terminal
- 2001 – 9/11
- 2002 – Opening of Alameda Corridor
- 2002 – Port shutdown
- 2002 – I-710 Expansion study

*Public response*: growing resistance to expected trade growth, facility expansion to facilitate growth; political pressure to reduce local external costs
### Response: State legislative efforts

<table>
<thead>
<tr>
<th>Year</th>
<th>Bill Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>2000</td>
<td>AB 1775 passed</td>
<td>Cover coke piles and coke transport</td>
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<tr>
<td>2001</td>
<td>Karnette</td>
<td>First proposal for cargo fee</td>
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<td>2002</td>
<td>AB 2650 passed</td>
<td>Reduced queue time at terminal gates</td>
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<tr>
<td>2004</td>
<td>AB 2041 withdrawn</td>
<td>Establish port management congestion district</td>
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<tr>
<td>2004</td>
<td>AB 2042 not passed</td>
<td>Baseline for “no net increase”</td>
</tr>
<tr>
<td>2005</td>
<td>SB 760 not passed</td>
<td>$30/TEU mitigation fee in LA/LB</td>
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<tr>
<td>2005</td>
<td>SB 764 passed; suspended in 2006</td>
<td>Caps on port emissions</td>
</tr>
<tr>
<td>2005</td>
<td>AB 1101 not passed</td>
<td>Regulate ports, distribution centers as stationary sources</td>
</tr>
<tr>
<td>2006</td>
<td>SB 927 vetoed</td>
<td>$30/TEU mitigation fee in LA/LB</td>
</tr>
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AB 2650 provisions

- Took effect 7/1/02; in force 7/1/03
- Fines terminal operator $250 for each truck idling more than 30 minutes while in queue
- Terminals with extended gate hours (≥ 70 hrs/wk) exempt
- Enforced by local air district
AB 2650: Results summary

- **Enforcement**
  - No citations at LA/LB, 4 at Oakland
- **Gate hours not changed**
- **Appointment use limited at most terminals**
- **No evidence that queues or cargo process time reduced**
  - Truckers reported no change in wait times
  - No difference in transaction time, with or without appointments
- **Conclusion: No impact on emissions**
Winners and losers

- Terminal operators
  - No costly changes to operations, potential productivity gains

- Longshore labor
  - Working conditions not affected

- Ports, ocean carriers
  - No official responsibility

- Major retailers
  - Operate 24/7

- Drayage truckers
  - No improvement in turn times

- Warehousing, distribution, consignees
  - No improvement in delivery times

- General public
  - No reduction in congestion, emissions

- Elected officials
OFFPeak implementation

- A response to AB 2041
- MTOs get anti-trust exemption to cooperate and set prices
- PierPASS, Inc. non-profit to administer
- Implemented July 2005

Provisions
- $40/TEU for road cargo entering/exiting during peak hours ($50/TEU as of 4/06)
- Peak hours = M-F 3AM – 6 PM
- Exemptions
  - Empty returns, chassis returns, domestic freight, transshipments, cargo subject to ACTA fee
Off-peak cargo as share of eligible cargo

Note: Eligible cargo about 55% – 60% all cargo
I-710 ave weekday hourly share truck traffic
OFFPeak: Results summary

- Stated diversion targets reached
  - Immediate and continued shift of eligible cargo to off-peak period
  - Significant impact on local highway system
  - Offset much of past 2 year’s port growth

- Container fee and program structure
  - MTO collaboration limits competition, reduces financial risk
  - Proprietary financial records preclude public scrutiny
Winners and losers

- Terminal operators
  - Competition, risk, control

- Longshore labor
  - Premium pay

- Ports
  - Credit for making changes

- Major retailers
  - 24/7 structure in place

- General public
  - Reduced congestion, air emissions

- Elected officials

- Drayage trucking
  - Longer work hours, limited premium pay
  - No time savings

- Warehousing, distribution, smaller retailers
  - Adjust operations, absorb extra costs

- Consignees
  - Pay the OFFPeak fee
Conclusions from case studies

- Contrasting outcomes, winners and losers reflect institutional relationships, market and political power of entities within the international trade supply chain
Supply chain conceptual model

Dominant Actors
- Steamship lines
- Terminal operators
- Stevedore companies
- ILWU

Natural Allies
- Major retailers
- Ports

State, local governments

Import consumers

Warehouse & distribution

Secondary manufacturing

Freight forwarders

Weaker Actors

Rail

Critical Link

Export producers

Drayage Trucking

Price Taker
Lessons from the case studies

- Capacity of dominant actors to respond to pressures for environmental mitigation
  - Strategy: cooperation for mutual benefit; control responses and revenue streams
  - Goal: continue port growth

- Facilitating role of US regulatory policy
  - FMC discussion agreements allow MTOs to cooperate
  - Interstate commerce prohibits trucker cooperation
Is Los Angeles unique?

**YES**
- LA/LB size and west coast dominance (inelastic demand)
- Scale of congestion, pollution problems
- Frequency and scope of state regulatory efforts
- Effectiveness of environmental advocates

**NO**
- Growing congestion, air pollution problems in other metro areas
- Appointment systems proposed in NY/NJ, Seattle
- Extended gate hours in NY/NJ
- FMC discussion agreements
Closing Thoughts

- Changing trade dynamics impose more local costs, more dispersed benefits.
- Ports less able to influence trade flows, but seen as more responsible for local impacts.
  - Must respond if public infrastructure investments are to be made.
- Re internalizing externalities.
  - At what point do pollution charges, regulations affect competitiveness?
Thank you

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