The Potential Impact of Trucker Demand and Supply Issues at U.S. East Coast and Gulf Coast Ports

AAPA

Maritime Economic Development/Public Relations Seminar

June 8-10, 2005

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Containerized Import Cargo Has Grown at an Average Annual Rate of 9.8% --Driven by Asian Imports



Southern California Ports Handle About 40% of All Imports



Source: US Maritime Administration

Southern California Ports Handle Nearly 60% of All Asian Imports, But Other Port Ranges Are Gaining Share



Source: US Maritime Administration

Shocks Have Occurred in the Current Logistics Patterns

- Consolidation of imports via San Pedro Bay Ports -mid 1990's
 - Distribution center growth
 - Cross-dock operations
 - Rail investments in S. Cal to Midwest routings
- But then.....
 - 9/11
 - West Coast Shutdown
 - Capacity Issues Land and labor shortages
 - Rail and truck shortages
 - Search for alternatives

9/11 and Security

- Security costs competing for infrastructure funding
- Optimal level of inspections and security measures -- commercial vs. security trade-off's
 - Terminal congestion increases with increased dwell time
- Impact on logistics systems:
 - Increasing inventories costly
 - Reduces turn time for truck cargo and number of trips per driver per day
 - Vessel time at dock increases
 - Impact on distribution strategies -decentralization vs. centralization

The West Coast Port Shutdown, September 29, 2002 -- 11 days

- 5-7 weeks of follow-on impacts
- \$15.6 billion cost to the economy
- 20,147 full-time jobs lost
- Diversification Strategies

Terminal Infrastructure is Strained

- Terminal capacity congestion appears with growing demand -- 8-10% annual growth in trade, particularly in the West Coast/Southern California port range
 - Productivity gains less than in U.S. manufacturing
 - Low density utilization of U.S. container ports, inefficient use of scarce land
 - Congestion issues at container terminals exacerbate productivity
 - Technology adaptations will hopefully lead to better capacity utilization

What Alternatives are Available in the Long-Term to San Pedro Bay -Other West Coast Ports

- Diversion to Oakland
 - Expansion can handle 700,000 to 800,000 TEU's (+)
 - Adequacy of rail infrastructure (?)
 - Local "outrage" due to truck traffic (-)
 - Five new Asian first-port-of calls in 2004 and one more in 2005 (+)
 - Inland DC's (+)
- Diversion to Seattle/Tacoma?
 - Proximity to China (+)
 - Local market size/current logistics of importers (-)
 - Rail Service (?)
 - Record growth 2004 Capacity expansion
 - 6 new Asia carrier services added to PNW in 2005
 - New Evergreen Terminal in Tacoma
 - Yang Ming announced new PNW service
 - Cosco new PNW string in partnership with Zim Integrated Shipping Services

What Alternatives are Available in the Long-Term to San Pedro Bay - Other West Coast Ports

- Diversion to Vancouver, BC ?
 - Seamless rail (+)
 - Limited space (-)
 - No Harbor Maintenance Tax (+)
- Development of Prince Rupert (?)
- Mexican Port Development (?)
 - Infrastructure needs (-)
 - Inland Intermodal locations (Tucson) (?)
 - No ILWU (?)

What Alternatives are Available – All Water Services

- Panama Canal -
 - Current size limitations (-)
 - New, bigger canal (+)
 - Transshipment centers (?)
 - Transit time issues (-)
 - Carriers can internalize rail revenue (+)
- Suez Canal
 - Accommodates larger vessels (+)
 - Better transit to SE Asia/India (+)
 - Political instability (-)
 - Transit time issue to Midwest (-)

What Alternatives are Available -East Coast and Gulf Coast Ports

- Transit time to Midwestern points (-)
- Rail infrastructure/service
 - Intermodal vs. bulks (-)
- Dredging issues (-)
- Terminal capacity and size (-)
- Common use vs. proprietary terminals (?)
- Terminal capacity planned (+)
 - Atlantic -- Norfolk/Portsmouth, Wilmington (NC), Savannah, Charleston, Philadelphia, Jacksonville (Dames Point)
 - Gulf -- Bayport, Texas City, Corpus Christi, Millennium Port

What Alternatives are Available? -All Water Service

- Existing distribution and logistics infrastructure
 - Domestic/import distribution centers S.Cal
 (-)
- Transit time issues for seasonal goods --
 - Too risky to use East Coast ports if competitors don't (-)
- Proximity to Pacific Rim (-)
- Port shutdown has caused a re-think (++)
- Changes in distribution center locations (++)
- Long-term change -- is it possible ??

Share of North Atlantic Container Imports From Asia



Share of South Atlantic Container Imports From Asia



15

Share of Gulf Container Imports From Asia



16

Asian Trade at Each N. Atlantic Port



---- BALTIMORE, MD. ---- BOSTON, MASS. ---- NEW YORK, N.Y. ---- PHILADELPHIA, PA. ---- WILMINGTON, DEL.

Asian Trade at Each S. Atlantic Port



Asian Trade at Each Gulf Coast Port



Distribution Center Activity Is Increasing At East and Gulf Coast Ports

- GPA has attracted 14 distribution centers and plans announced for:
 - Target
 - Bass Pro Shops
 - Pirelli Tires NA
 - Fed Exp
- Port of New York New Jersey Portfields Initiative
 - PONY&NJ and New Jersey Economic Development Agency committed \$1.8 million to identify 20 sites for distribution center development
 - Cooperation with developers to market and develop the sites
 - Focus on "near port" locations

Distribution Center Activity Is Increasing At East and Gulf Coast Ports

- Houston
 - Cedar Crossing area site of proposed 4 million sf distribution center for Wal-Mart
 - Home Depot potential development
 - 8,000 acres of land available for DC and industrial development
- Virginia Port Authority
 - Wal*Mart Distribution center 1 million sf initially and expanding to 3 million sf by end of summer
 - Target 1.5 million sf and expanding
 - Cost Plus expanded to 1.1 million sf
 - Dollar Tree
 - QVC
 - Home Depot at Front Royal
 - Family Dollar at Front Royal
- Baltimore
 - GM facility will become available

Demand for Truckers

- Growth in DC's will increase demand for truckers and equipment:
 - Short haul drays to DC's
 - Short to medium haul deliveries from the DC's
 - Increased number of chassis
 - Increased demand for 53 ft. trailers (with prices increasing due to steel prices)
 - Focus in NY for closer-in DC's to improve truck turns per driver

- 8,700 trucking firms ceased operations between 2000 and 2002
- Current growth in manufacturing increasing demand for trucking –
 - Trucking accounts for 68% of all tonnage nationwide
 - ATA projects truckload volume to increase by 2.5% annually in near term

- ATA estimates 82,000 new truckers needed per year to accommodate demand
 - Only 26,000 trucker jobs added through November 2004
- Key age group is 21-44 and this age group is declining:
 - 20-44 year age group projected to shrink by 53,700 people by 2007 (BB&T Capital Markets)
 - Causing a 12-15% shrinkage in truck drivers over this same time

- Strong growth in economic sectors that compete for truckers – construction
- 21 year age requirement impacts driver availability since often have jobs prior to age 21
- Truck driving is hard work away from home and at relatively low wages
- Hours of Service
 - One more hour of service on the road per day (11 hours)
 - But require more time off duty
 - Changes way on-duty time is computed
 - Increasing demand for more drivers

- Escalating costs:
 - Insurance
 - Fuel
 - Wages must increase (Schneider announced 9% increase in pay for 15,000 drivers)
 - Average pay \$32,000 for truckers compared to \$37,784 average for all workers in July 2003

Potential Impact at the Ports

- Increased congestion on docks:
 - Dwell time increases as less truckers available with growing demand
 - Increased demurrage costs
 - Increased time at dock for vessels
- Increased time of delivery for shippers
 - Inventory carrying costs
 - Production scheduling issues
- Increased trucking costs:
 - Operating costs of truckers
 - Increased delivery time
 - Increased demurrage
 - Increased vessel costs and potential impact on vessel rotations

What Can Be Done Industry Wide?

- Increase supply side of truckers:
 - Pay raises
 - Development of truck driving schools in economically depressed areas
 - Improve quality of life:
 - Taking spouses on trips
 - Development for regional routes for long haul carriers relay operations
 - Tuition reimbursements
 - Reduce age requirement for interstate transportation
 - Team driving slip seating

What Can Be Done – at the Port?

- Extended hours of gate operations labor costs become an issue
- Improved technologies for terminal retrieval
- Improved communications between shippers and truckers
- Reservation/appointments for truckers at the terminal
- Contracts and guarantees between DC's and local drayage firms to ensure supply
- Port involvement with local economic development groups to develop truck training schools
- Development of chassis pools