

Congestion and the Retail Supply Chain: Impact and Response

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Retailers are a Huge Segment of the Shipping Community

Six of the Seven Largest Shippers are Retailers

(by 1,000 Twenty-Foot Equivalent Units in 2005)

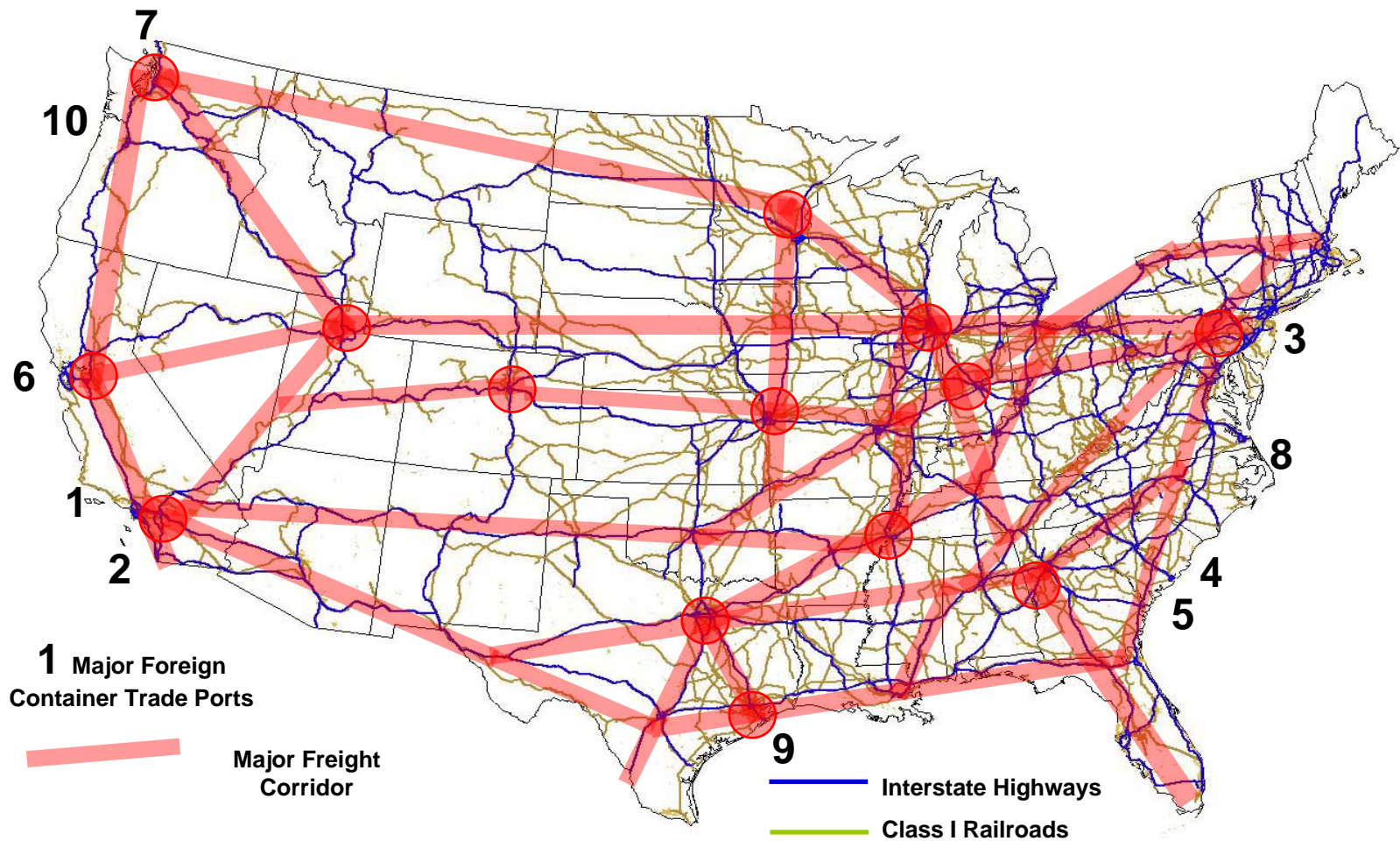
1. Walmart (696)
2. Target (371)
3. Home Depot (335)
4. Sears (240)
5. Dole (170)
6. Lowe's (163)
7. Costco (160)

Source: Journal of Commerce

Transportation Snapshot of the U.S. Retail Industry

- **Retailers have complex, just-in-time supply chains moving over \$1 trillion in goods from vendors around the world, most by intermodal cargo container.**
- **Asia is the main region and China the key country in supplying consumer products for U.S. retailers:**
 - Nearly half of all U.S. imports come from China.
 - Consumer goods comprise 80% of all imports from China.
- **Southern California is the primary entry point for retail supply chains:**
 - LA/Long Beach handle 60 percent of imports from China.
- **To move goods rapidly and efficiently through the supply chain from port of entry to store, retailers:**
 - Locate many distribution centers near ports.
 - Use entire intermodal transportation system (rail, truck).
 - Work closely with intermodal and other supply chain partners.

U.S. Intermodal Freight System



Ports Overview

- U.S. ports handled 41.9 million 20 foot equivalent units (TEUs) in 2005
 - 78% through ten ports (LA/LB, NY/NJ, Oakland, Seattle, Tacoma, Charleston, Norfolk, Savannah, and Houston)
 - 33% through LA/Long Beach
- Continued concern: rapid growth in trade challenging port capacity and efficiency
 - TEU handled by top ten US ports increased by 9% from 2004 to 2005; 14% in LA/LB; 17.6% in Seattle.
 - Larger 8,000 TEU+ vessels
 - Limited space to expand



Rail Overview

- **Consolidation after 1980s deregulation**
- **Biggest growth is intermodal, long-haul, high volume routes**
- **Cost competitive, service and productivity improving**
- **Continued concern:**
 - Capacity and infrastructure investment not keeping up with demand
 - Pac NW to SE service
 - East and West interchange (Chicago)



Short-Haul Trucking Overview

- **Efficiency concerns in marine terminals**
 - Work rules
 - Grounding containers delay trucker turn times
 - Chassis management
 - Driver shortages
 - Impact on rail service
- **Political backlash to environmental and congestion problems, particularly in SoCal**



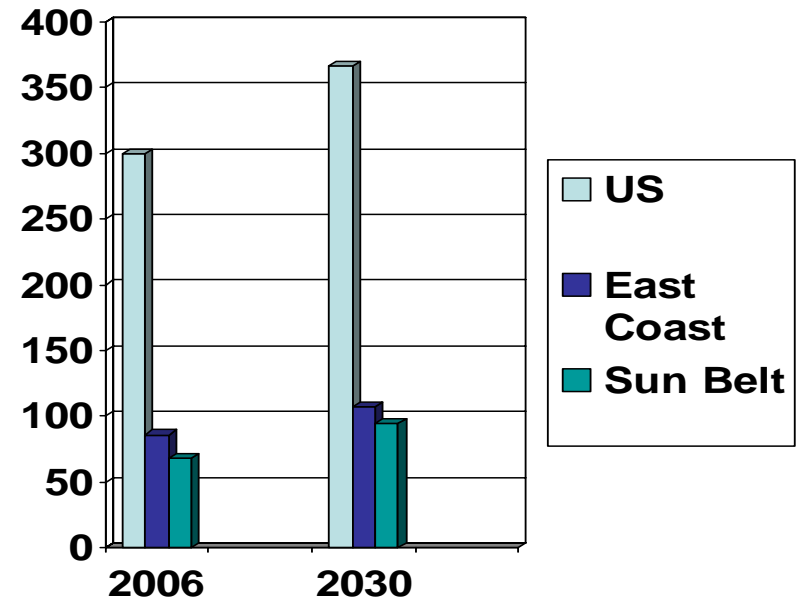
Long-Haul Trucking Overview

- **Capacity up, demand down, rates soft**
- **Continued concern:**
 - Aging highway network (roads and bridges) creating congestion, impacting efficiency
 - Funding infrastructure investment through gas tax



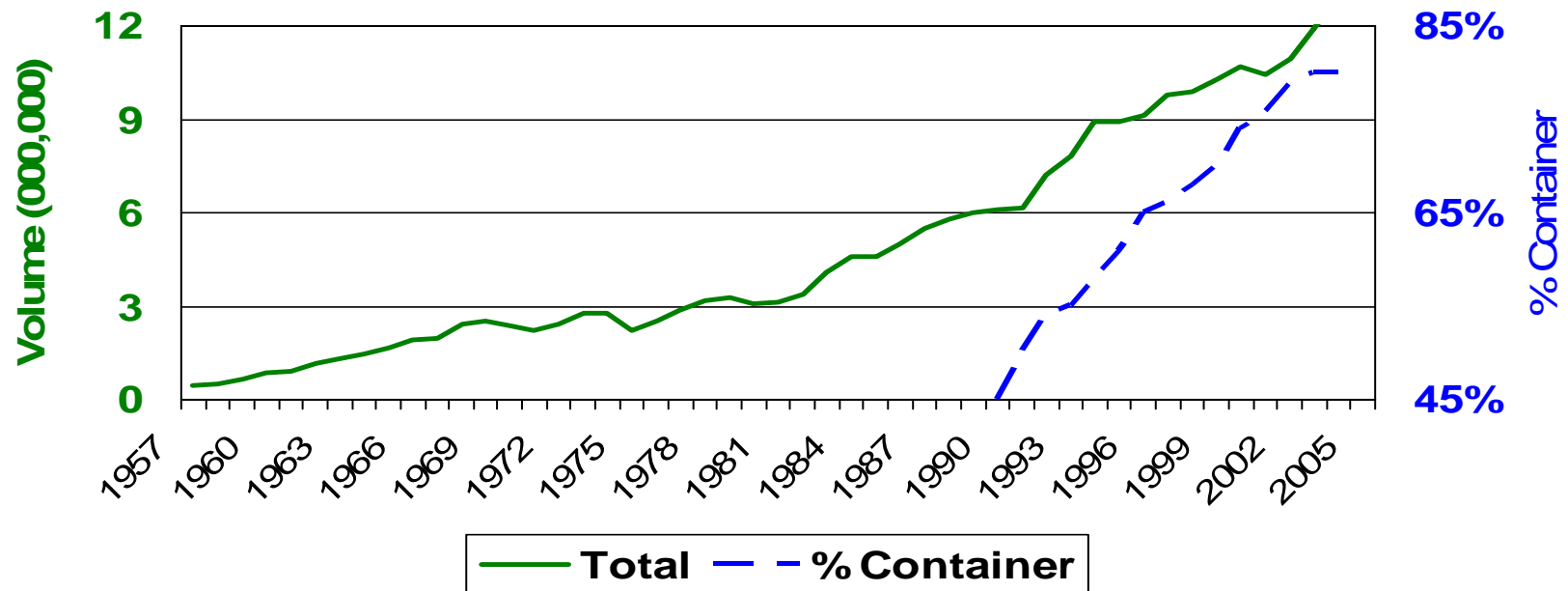
Outlook: U.S. Population Trends 2030

- 66 million more consumers
- One-third of growth will be on East Coast
- Even more rapid growth in Sun Belt



Current Trends Project Doubling of Intermodal Freight by 2025

Intermodal Growth



Challenges for Retailers

Maintain supply chain efficiency/velocity in face of increasing risk and unpredictability due to:

- Increasing congestion as trade grows much more rapidly than port and intermodal capacity
- Unforeseen or uncontrollable shocks to system – natural disasters, labor strife and shortages, terrorism
- Increasing costs – inventory, demurrage, fuel, traffic mitigation fees (e.g., PierPass), possible container fees, security

Public Policy Challenges

- **Traditional (public) sources of infrastructure funding cannot handle the demand for new investments**
 - Requires new funding models
- **Improving freight infrastructure capacity through:**
 - New investment in projects where capacity is actually needed (ports, rail, highways)
 - Identifying and prioritizing projects of national significance
 - Greater private-sector involvement in investment and funding decisions, including public/private partnerships for specific projects
- **Achieving consensus on a national goods movement policy that recognizes the importance of the freight transportation system to U.S. global competitiveness.**

Shorter Term Congestion Solutions (Retailers)

Employ better business practices:

- Improved forecasting and information sharing
- Working with supply chain partners to identify and address problems
- Use information technology effectively

Shorter Term Congestion Solutions (Intermodal)

- **Port diversification and all-water routes**
 - Seattle/Tacoma, Oakland, Gulf, East Coast
 - Mexico & Canada.
 - Panama and Suez Canals
- **Enhance port efficiency**
 - Spread out vessel sailings and arrivals
 - Alternate Asia-West Coast Gateways
 - Additional first-call sailings
- **Improve terminal efficiency and intermodal throughput**
 - More container-handling equipment
 - Managing free time
 - Off-hours operations and appointment system
 - Chassis system
 - Improved surface (rail, road) transportation infrastructure
 - Better deployment of labor

Longer-Term Congestion Solutions

(Ports)

- **New and larger marine terminals (Norfolk; Charleston; Savannah; Houston)**
- **On- and near-dock rail yards (LA/LB; NY/NJ)**
- **Improved highway access**
- **Dredging to handle larger vessels (NY/NJ; Oakland)**
- **New port capacity – Prince Rupert, British Columbia; Lazaro Cardenas, Manzanilla, and Punta Colonet, Mexico**
- **Expand Panama Canal**

Longer-Term Congestion Solutions (Rail)

Expand investment in intermodal rail

- Tax incentives
- Alternate gateways & corridors projects (e.g., Virginia to Ohio Heartland Project)
- Better East-West rail interchanges (e.g., Chicago CREATE Project)
- Improve rail service from Pacific NW to Southeast
- Double/triple tracking on main rail corridors

Longer-Term Congestion Solutions

(Truck)

- **Grants, incentives for trucker investment in more efficient, cleaner equipment.**
- **Identification of and investment in “last mile” port connector projects.**
- **Truck-only lane projects.**
- **Increase limitations on truck length and/or weight.**
- **Increase container size (45', 48', 53').**
- **Improved Interface between truck and rail.**

Conclusion

- **Containerized freight system is essential to the health and growth of the retail industry and the U.S. economy.**
- **Short term, retailers are managing congestion problems by changing business practices and working with business partners to maintain supply chain efficiency.**
- **Long term, retailers are addressing congestion problems by working with supply chain partners and other stakeholders to:**
 - Identify critical infrastructure priorities.
 - Advocate for and develop a National Goods Movement Policy.
 - Seek more effective and fair funding mechanisms, including public/private partnerships.