

A black and white photograph of a large container ship being pushed by a tugboat in a harbor. The ship is heavily loaded with stacked containers. A crane is visible on the deck. The tugboat is in the foreground, pushing the larger ship. The background shows a harbor with other ships and buildings.

The ever changing supply chain *strategy*

Tom Scorsune
January 20, 2012

Domestic production – Circa 1950



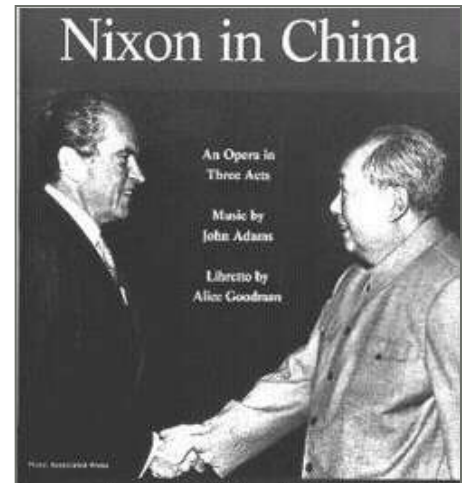
Domestic Production
Regional Distribution



Domestic production – Circa 1970



Containerization
New Markets
Domestic Labor



Global production – Circa 2011



Longer Supply Chains
Global Manufacturing
Integrated Supply Chain



Future Challenges

- Environmental
- Port Security
- Port and Rail Infrastructure
- Owner Operator Capacity



Future Considerations

- Lazero Cárdenas
- Prince Rupert
- Inland Ports
- Panama Canal Expansion



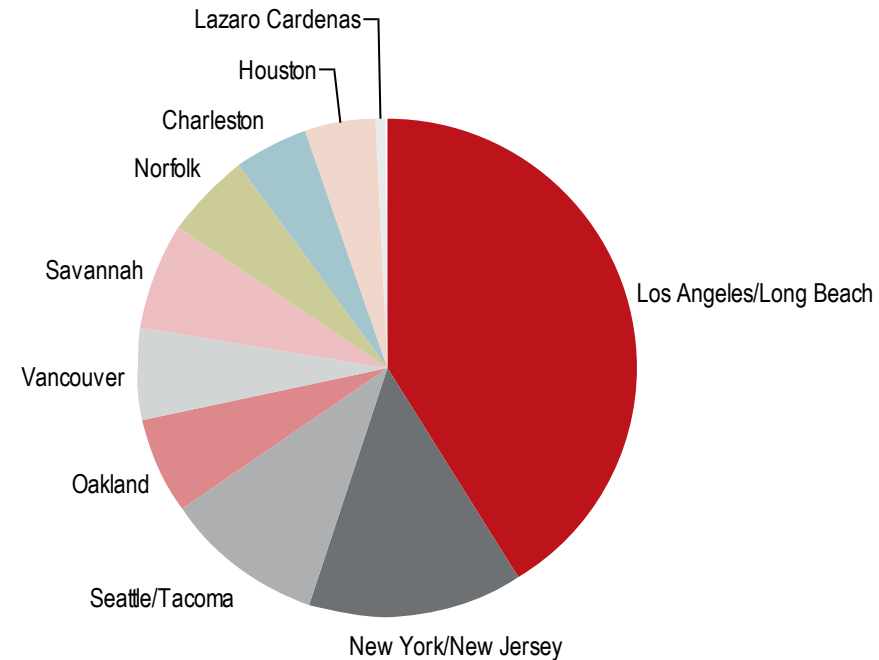
Future network (by 2015)



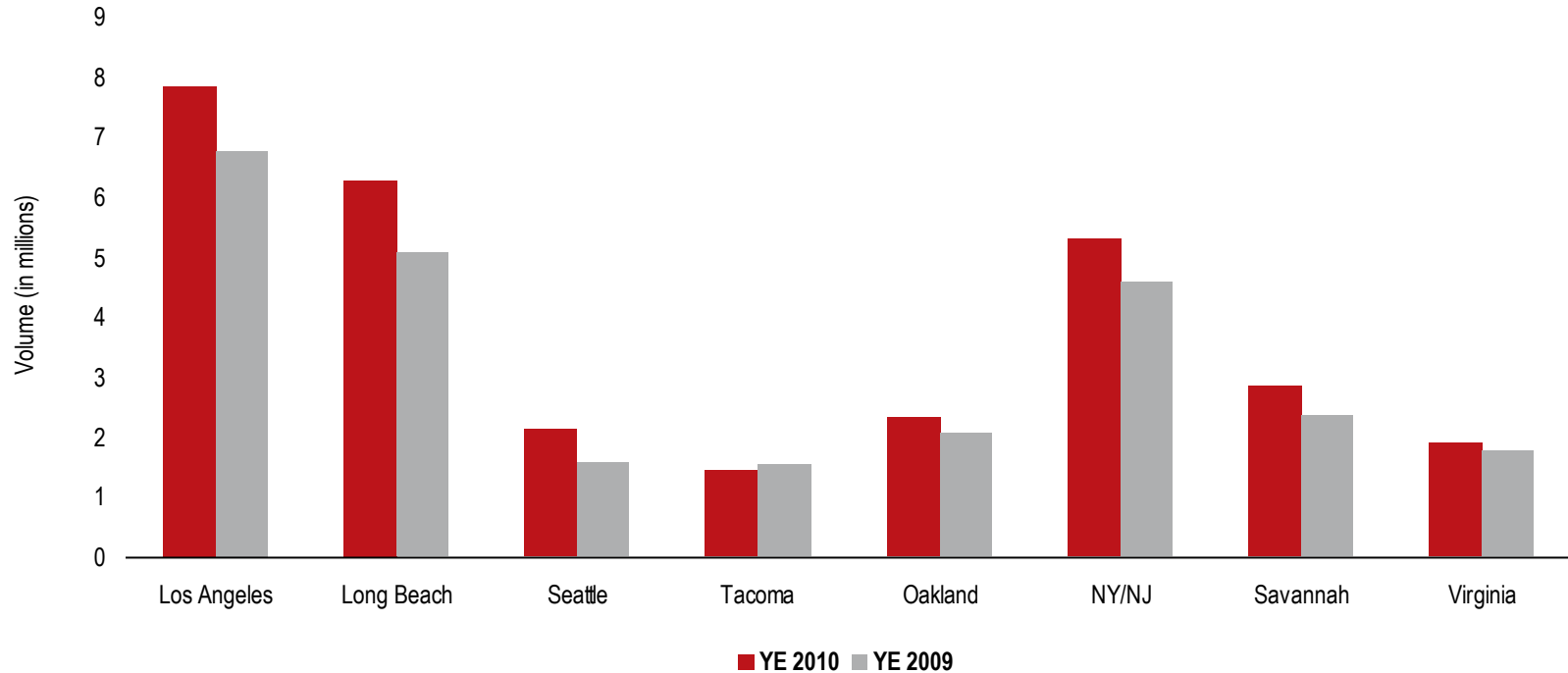
Major U.S. ports

Share of imports (in Millions of TEU's)

Containers Handled	2009	2010	2009-2010 Growth
Los Angeles/Long Beach	11,820	12,780	8.10%
New York/New Jersey	4,560	5,290	16.0%
Seattle/Tacoma	3,129	3,588	14.6%
Savannah	2,356	2,825	19.90%
Vancouver	2,150	2,510	16.7%
Oakland	2,050	2,330	13.6%
Norfolk	1,745	1,895	8.59%
Houston	1,797	1,812	0.83%
Charleston	1,181	1,364	15.4%
Lazaro Cardenas	600	800	33.3%



2010 container volume at top U.S. ports



Current State Summary

- The economic recession has slowed freight volumes worldwide
- Although not currently an issue, congestion at LA/Long Beach, combined with the geographic constraints for growth, have made alternative ports and trade routes more attractive.
- Container ships are increasing in size to take advantage of cost savings provided by economies of scale.
- Panama Canal is opening up to accommodate larger ships
- The east and gulf coast ports are making infrastructure improvements in anticipation of long-term growth



Future Supply Chain Trends and Potential Impact

- Transportation represents one of the largest cost buckets – important to have *efficient and effective inbound* and outbound transportation
- Intermodal / rail options increasingly more attractive
 - Sustainability/cost benefits
 - Resiliency – risk mitigation
- Expansion of Panama Canal driving interest in east and gulf coast port locations
 - Closer proximity to U.S. population centers
 - Availability of less expensive land/facilities
 - Aggressive business and economic incentives
- Port diversification strategies more prevalent
- Trend to shorten supply chain – “near sourcing” (e.g., Mexico vs. China)
- Inland ports expected to increase in importance – Kansas City, Columbus, Chicago, etc.
- Availability of business & economic incentives, as well as labor issues, drive businesses to the southeast U.S.
- Increasing fuel costs will drive interest in “more/smaller” versus “fewer/larger”

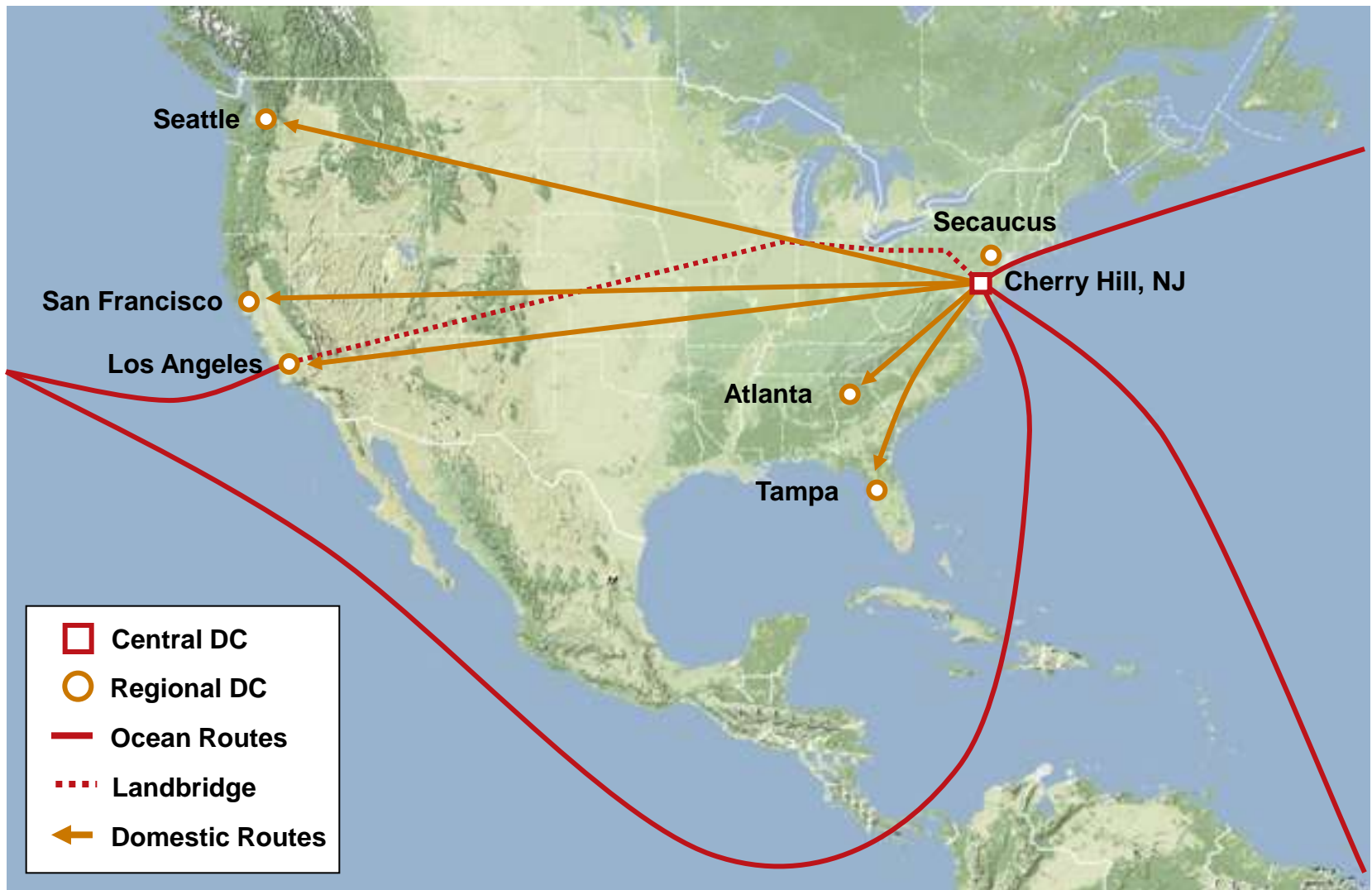
The One Thing That Is Constant Is Change

- Supply chains are increasingly global and complex
- Historically focused on cost reduction, but leveraged as a competitive differentiator by companies such as Wal-Mart, P&G, Toyota
- Supply chain security and risk are rising sharply
- Supply chain management is increasingly viewed as a core competency (versus a “necessary evil”)
- Supply chain “network” must be evaluated on a regular basis

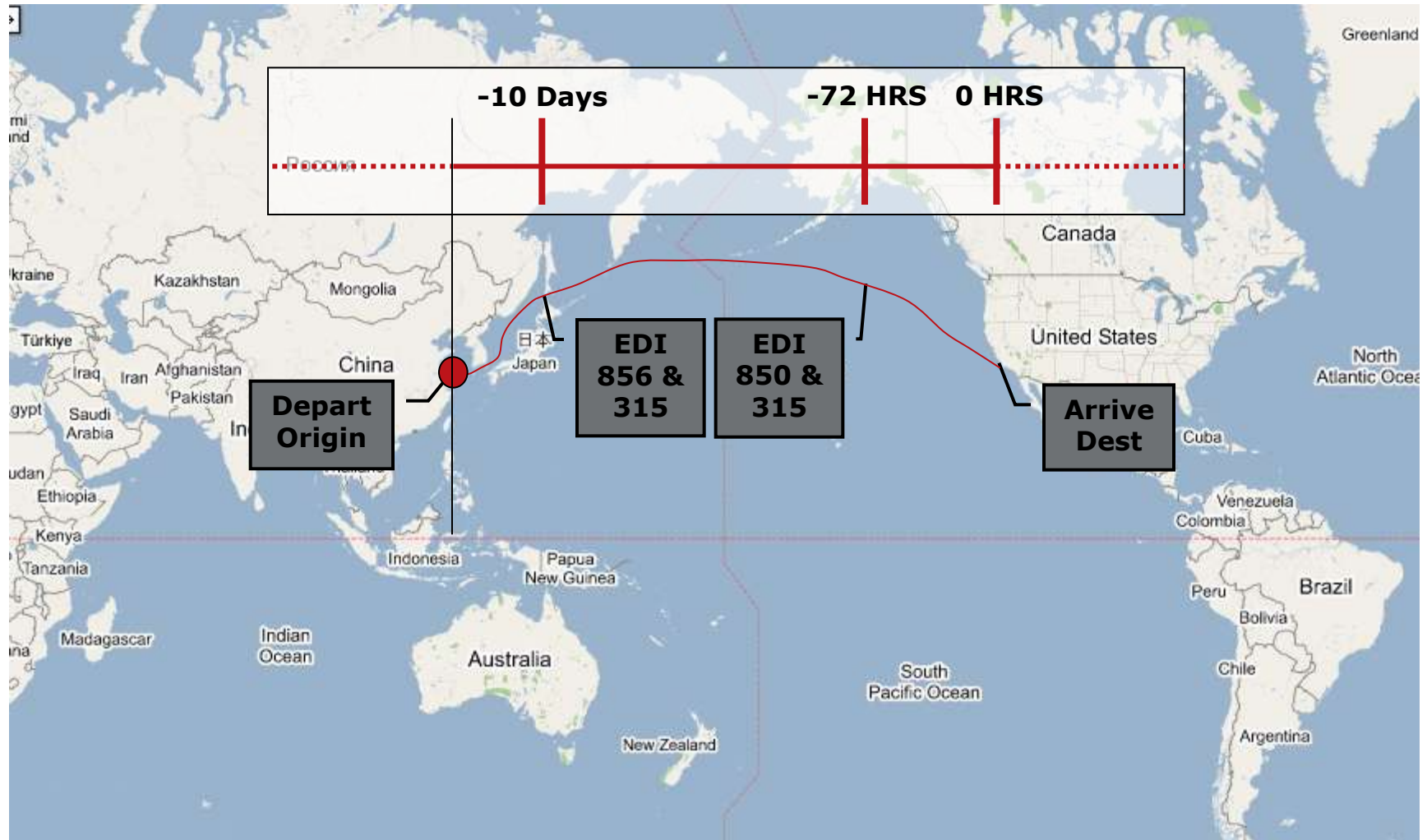


Case Study: Global Corporate Client

Original Supply Chain network



Post-Distribution Concept



Post-distribution objectives

- Improve On-Time Efficiency from 46%
- Provide Floor Ready Distribution
- Replace Manual Process with Automated Transload Facility
- Provide Post Distribution Capability
- Track Shipments by Containers vs. Purchase Orders
- Maintain Flexibility to Provide Pre-Pack Distribution
- Provide UCC 128 Labels to the Store Level with ASN Capability



Post-Distribution Results

- On-time performance improved from 46% to 99%
- Audit accuracy greater than 99.9%
- Reduced lead time by 14 days
- Eliminated a DC resulting in \$11M annual cost reductions
- Less obsolete stock
- Domestic time saving from store-ready products
- Ability to leverage cost savings of inter-modal versus over the road

Replenishment – Hybrid Concept

- Point of Sale Replenishment
- 3 Year Forecast, \$300M USD Sales Increase
- Capital Investment of \$300M USD
- Weekly Order Cycle
- Core Items - Expansion of Program to 40 Vendors
- RF Environment
- EDI Capabilities
- Random Reserve Storage Locations
- Zone Picking Efficiency
- Transload Process Integration
- Full Shipment Audit Functionality

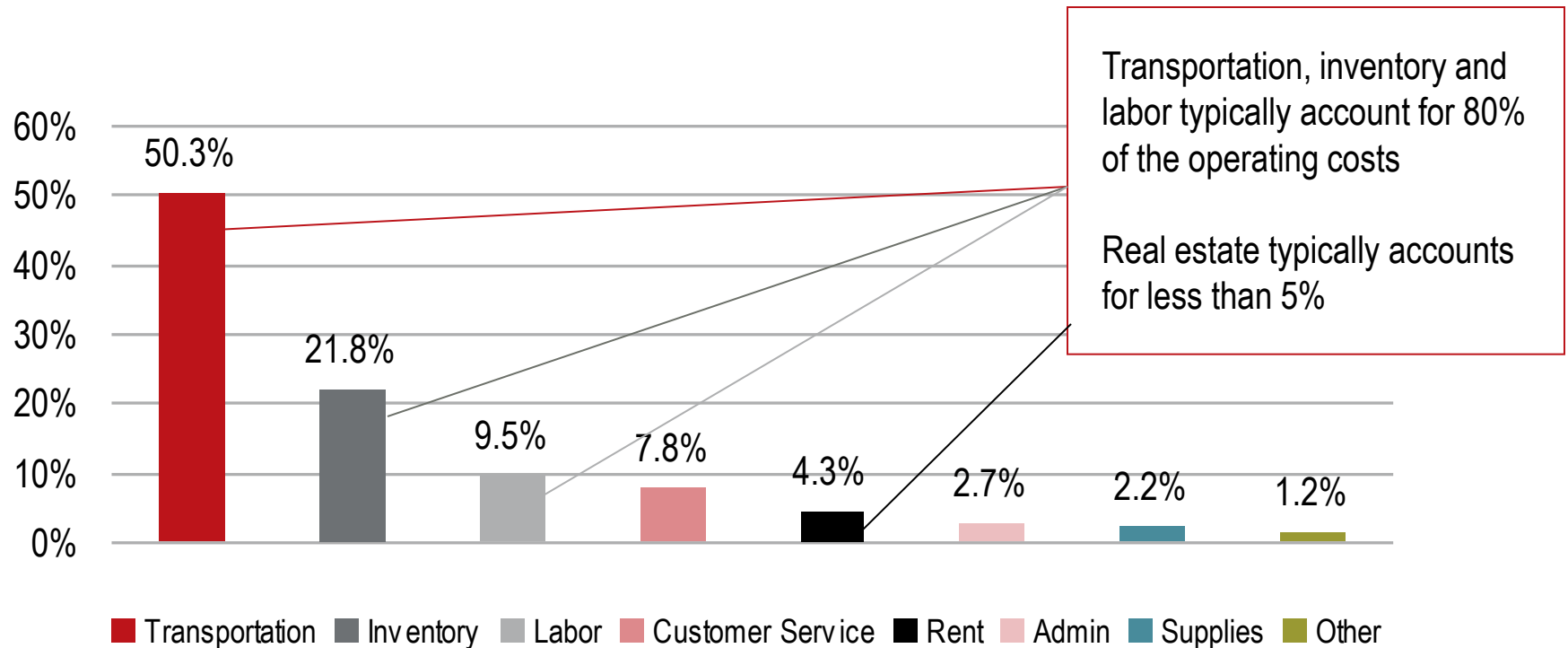


Transload Calculator

Transload Calculator																				
					Current					Future										
Assumed CBM per 53' van																				
DC Location	Container Size	Container Volume	CBM Volume	53' Volume	IPI Rate	PRESENT TOTAL COSTS	Drag from Port to NYK + CTF	Transload Rate	Port Rate	odal OTR Rate	Drag from Ramp/OTR to DC	Drag from Port to NYK + CTF	Transload	Ocean port costs	Intermodal/ OTR	PROPOSED TOTAL COSTS	SAVINGS			
Mt. Vernon, IL	20'	400	9,200	102	\$3,225	\$1,290,000	\$185	\$5.25	\$1,500	\$1,725	\$0	\$74,000	\$48,300	\$600,000	\$176,333	\$898,633	\$391,367			
Mt. Vernon, IL	40'	200	10,200	113	\$3,225	\$645,000	\$185	\$5.25	\$1,500	\$1,725	\$0	\$37,000	\$53,550	\$300,000	\$195,500	\$586,050	\$58,950			
Mt. Vernon, IL	40'HC	300	18,900	210	\$3,225	\$967,500	\$185	\$5.25	\$1,500	\$1,725	\$0	\$55,500	\$99,225	\$450,000	\$362,250	\$966,975	\$525			
Mt. Vernon, IL	45'	500	35,500	394	\$3,225	\$1,612,500	\$185	\$5.25	\$1,500	\$1,725	\$0	\$92,500	\$186,375	\$750,000	\$680,417	\$1,709,292	-\$96,792			
Mt. Vernon, IL	1,400	73,800	820	\$3,225	\$4,515,000	\$185	\$5.25	\$1,725	\$259,000	\$387,450	\$2,100,000	\$1,414,500	\$4,160,950	\$354,050						
Harrisburg, PA	20'	150	3,450	38	\$3,400	\$510,000	\$185	\$5.25	\$1,500	\$1,700	\$0	\$27,750	\$18,113	\$225,000	\$65,167	\$336,029	\$173,971			
Harrisburg, PA	40'	280	14,280	159	\$3,400	\$952,000	\$185	\$5.25	\$1,500	\$1,700	\$0	\$51,800	\$74,970	\$420,000	\$269,733	\$816,503	\$135,497			
Harrisburg, PA	40'HC	300	18,900	210	\$3,400	\$1,020,000	\$185	\$5.25	\$1,500	\$1,700	\$0	\$55,500	\$99,225	\$450,000	\$357,000	\$961,725	\$58,275			
Harrisburg, PA	45'	200	14,200	158	\$3,400	\$680,000	\$185	\$5.25	\$1,500	\$1,700	\$0	\$37,000	\$74,550	\$300,000	\$268,222	\$679,772	\$228			
Harrisburg, PA	930	50,830	565	\$3,400	\$3,162,000	\$185	\$5.25	\$1,700	\$172,050	\$266,858	\$1,395,000	\$960,122	\$2,794,030	\$367,970						
Memphis, TN	20'	450	10,350	115	\$3,300	\$1,485,000	\$185	\$5.25	\$1,500	\$1,600	\$0	\$83,250	\$54,338	\$675,000	\$184,000	\$996,588	\$488,413			
Memphis, TN	40'	600	30,600	340	\$3,300	\$1,980,000	\$185	\$5.25	\$1,500	\$1,600	\$0	\$111,000	\$160,650	\$900,000	\$544,000	\$1,715,650	\$264,350			
Memphis, TN	40'HC	900	56,700	630	\$3,300	\$2,970,000	\$185	\$5.25	\$1,500	\$1,600	\$0	\$166,500	\$297,675	\$1,350,000	\$1,008,000	\$2,822,175	\$147,825			
Memphis, TN	45'	200	14,200	158	\$3,300	\$660,000	\$185	\$5.25	\$1,500	\$1,600	\$0	\$37,000	\$74,550	\$300,000	\$252,444	\$663,994	-\$3,994			
Memphis, TN	2,150	111,850	1,243	\$3,300	\$7,095,000	\$185	\$5.25	\$1,600	\$397,750	\$587,213	\$3,225,000	\$1,988,444	\$6,198,407	\$896,593						
		4,480	236,480	2,628														\$14,772,000	\$13,153,387	\$1,618,613

More than real estate...

...Understanding the *total operating cost* picture is critical to maximizing value



Thank You