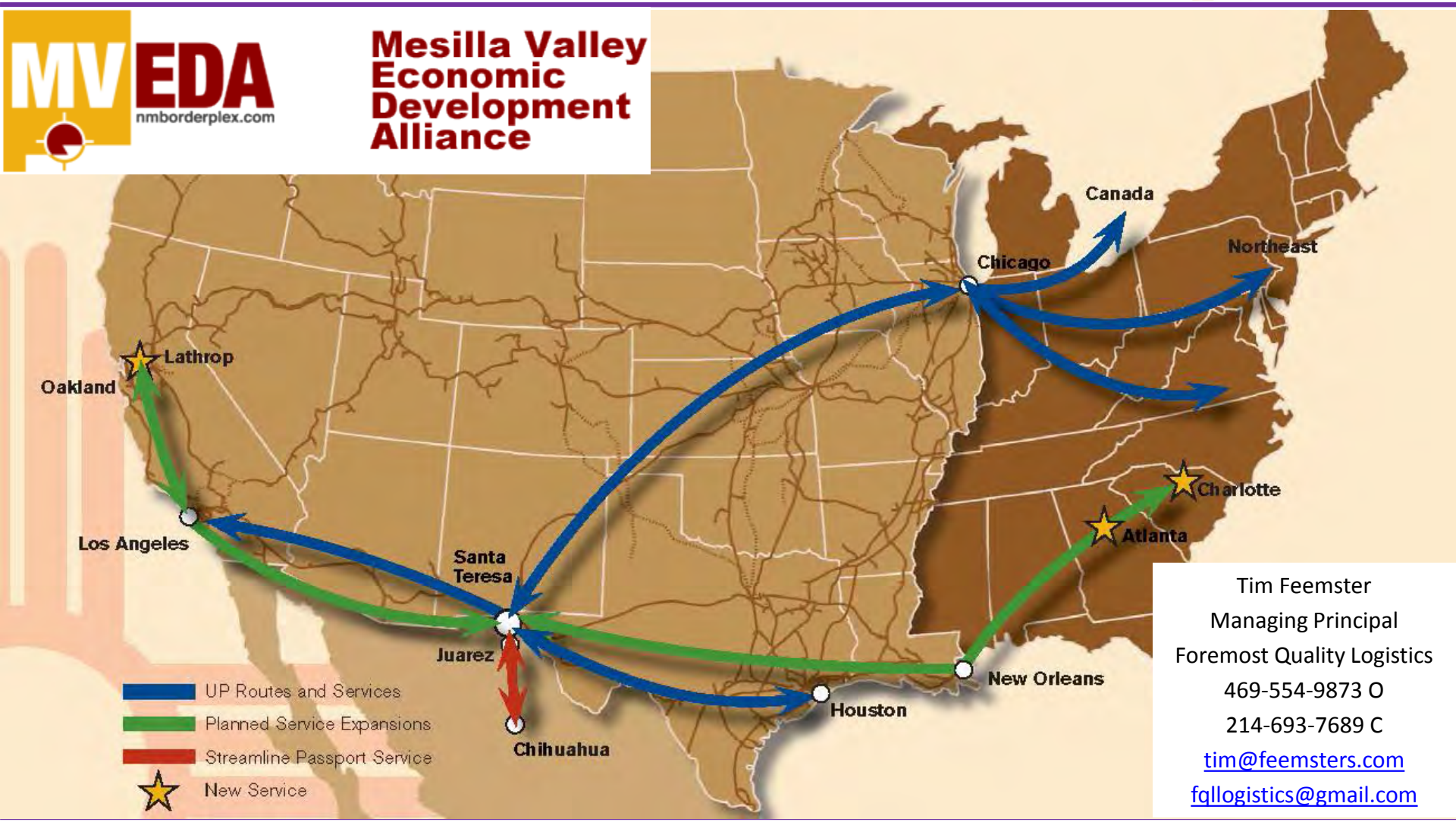
Global Logistics Trends and the Implications to Local Economic Development Strategy

MVEDA
nmborderplex.com

Mesilla Valley Economic Development Alliance



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FQL

Tim Feemster Professional Profile

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YEARS OF EXPERIENCE

35+ Years

AREAS OF SPECIALIZATION

- Facility Master Planning
- Lean Six Sigma Process Improvement
- Project Management
- Distribution Center Consolidations and Greenfield Design
- Economic Development Business Planning
- Keynote Speaker
- Meeting Facilitation
- Network Design and Planning
- Operations Management
- Real Estate Portfolio Strategy
- Supply Chain and Distribution Strategy
- Supply Chain Cost Reduction

PROFESSIONAL BACKGROUND

With over 35 years of industry and consulting experience, Mr. Feemster specializes in supply chain and distribution network strategy, operations management in manufacturing and distribution environment, supply chain cost improvement, distribution center master planning, and economic development business planning.

Before establishing Foremost Quality Logistics, Mr. Feemster was a senior manager in three manufacturing companies, a consultant, an executive in two third-party logistics providers, and a practice group leader in two real estate companies.

Mr. Feemster has been exposed to the economic development, manufacturing, logistics and supply chain issues facing many industries and involving both refrigerated and dry channels. These experiences include specific assignments in over 40 project start-ups, operations management, Lean Six Sigma quality management, project management, strategic planning, marketing, site selection, inventory planning and deployment, as well as transportation & private fleet management. He has been responsible for warehouse facility layout and design, logistics systems development, purchasing strategy, business planning, carrier rationalization, warehouse network analysis, and third party qualification and selection. In addition, Mr. Feemster is quoted frequently in both supply chain and real estate industry press and makes over 25 presentations a year to professional organizations, university students, and economic development groups. He was honored as one of the 2010 Rainmakers by DC Velocity magazine.

Past clients include Alpo Pet Foods, Cisco Systems (US & Mexico), Coke, Disney, Federal Express, Frito Lay, Georgia Pacific, GM (US and Mexico), HP (US & Canada), Ingersoll Rand (US & Europe), NCR (US & UK), Nike Golf (US & Europe), Nissan, Philip Morris, Ricoh, and Quaker Oats.

EDUCATION

Mr. Feemster holds an M.B.A. with distinction, in Marketing and Operations Research from the Ross School of Business, University of Michigan in Ann Arbor, MI. He received his Bachelor's degree in Mathematics from DePauw University, Greencastle, IN.

PROFESSIONAL ASSOCIATIONS

Warehouse Education Research Council (WERC) – Past President
Council of Supply Chain Management Professionals (CSCMP) – Registration Committee
DePauw University- National Alumni Board of Directors; North Texas Regional Alumni Board of Directors
Trade Data Exchange Board of Directors
University of North Texas Center for Logistics Education & Research Advisory Board
University of Houston Logistics & Technology Department Advisory Board

Opening Ceremonies- Cabinet Secretary Jon Barela

Agenda

- Introductory Questions
- Understanding Trends in Global Logistics
  - Origin Points
  - Sea Ports
  - Intermodal & Inland Ports
    - What are they
    - Why are they important
  - Panama Canal
  - FTZ
- Why do You Care- What is the Supply Chain Network Impact for the DC Network
  - Cost Drivers for Site Location
- Q&A Throughout

Questions

- How many of you work for
  - Economic Development
  - Manufacturers- make stuff, distributors- store/ship stuff
  - Governmental/Port Agency
  - Real Estate Brokerage/development Firm
  - Student or Professor
  - Press
  - Don't know?
- How many of you live within 150 miles of a Port city?
- Who has visited a Port or Intermodal Hub before yesterday?
- What are the major challenges to Global Trade today and in the future?

Very Large Internet Delivery

Teamwork- Team projects like those that come down from Corporate or The State. Who is **LEADING**, who is not committed, are you on the same page?

Future raw materials for the Southwest Steel Coil plant???

Ultimate in Green Power

Source: Tim Feemster

Profit Leverage Discussion

- CEO talks to his SVP of Sales and his SVP of Operations & Supply Chain in their annual goals and objectives meetings
  - CEO tells the SVP of Sales- “I want a 5% increase in sales next year
  - CEO tells the SVP of Operations & Supply Chain- “I want a 5% reduction in overall costs next year
- Who do you think has the better chance of making his happen?
- If both are successful, who should get the bigger bonus?

Source: Foremost Quality Logistics & UNT

Profit leverage of managing costs

EXAMPLE:

- The bottom line impact of a 5% increase to sales is substantially reduced by COGS
- Whereas a 5% reduction in costs goes right to the bottom line

Source: Foremost Quality Logistics & UNT

Profit leverage example- Baseline P&L

Baseline P&L

$100	Sales
$100	Net
($95)	COGS 95%
$ 5	Profit

Source: Foremost Quality Logistics & UNT

Profit leverage example- Sales up 5%

Baseline P&L		Sales +5% P&L
$100	Sales	$100
	Sales Increase	$ 5
$100	Net	$105
($95)	COGS 90%	($99.75)
$ 5	Profit	$5.25
	Improvement	$ 0.25

Source: Foremost Quality Logistics & UNT

Profit leverage example- Sales +5% & Cost -5%

Source: Foremost Quality Logistics & UNT

Baseline P&L		Sales +5% P&L	Cost -5% P&L
$100	Sales	$100	$100
____	Sales Increase	$ 5	-
$100	Net	$105	$100
($95)	COGS 95%	($99.75)	($95)
____	Cost Decrease	-	($ 5)
$ 5	Profit	$5.25	$ 10
	Improvement	$ 0.25	$ 5

Cost leverage results in a much larger return- 20 X

Profit Leverage- How much is a Nickel worth today?

Source: Foremost Quality Logistics & UNT

If the net profit on each sales $ is 5%, then...

Cost Savings of	Is Equivalent to a Sales Increase of
$5	$100.00
$50	$1,000.00
$500	$10,000.00
$5,000	$100,000.00
$50,000	$1,000,000.00
$500,000	$10,000,000.00
$5,000,000	$100,000,000.00

The profit of a Cost reduction of $.05/sq ft on a 1,000,000 sq ft bldg **equals** **Sales increase of $1,000,000 for the whole company**

Container / TEU

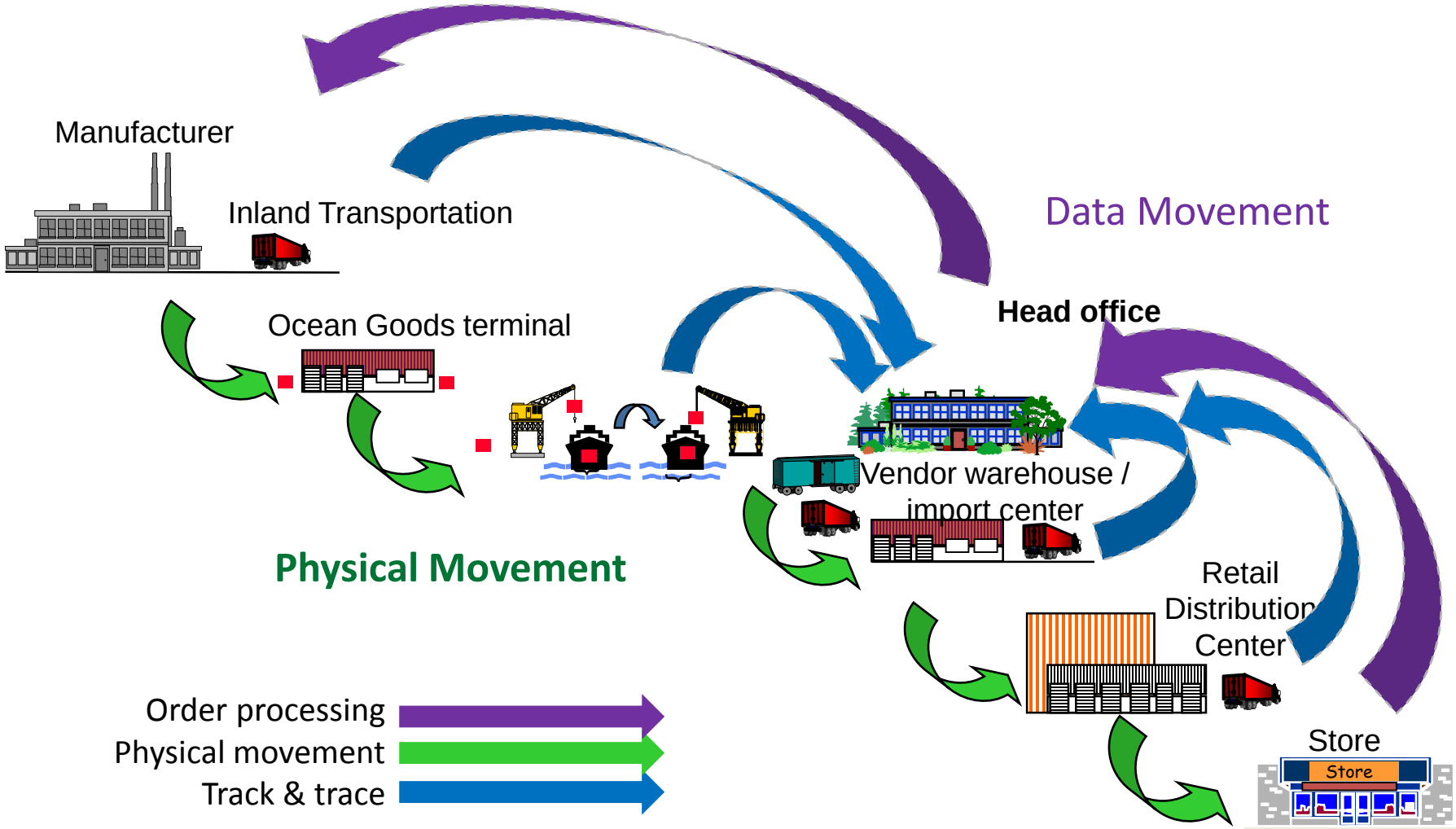
- Container- The box used to transport goods in International and Domestic commerce

- Twenty foot Equivalent Unit = TEU
  - One 20’ container = 1 TEU
  - One 40’ container = 2 TEUs

Chassis

The truck body used to transport containers, both international and domestic moves

The End-to-End International Supply Chain



Source: Tim Feemster, Foremost Quality Logistics

Relative Cost for Goods Movement

International Supply Chain

Air
$$$$$$/LB

Ship
$/Box/Ton

Rail
$$/Box/Ton

Truckload
$$$/Truck

Less than Truckload
$$$$/LB

Parcel
$$$$$/LB

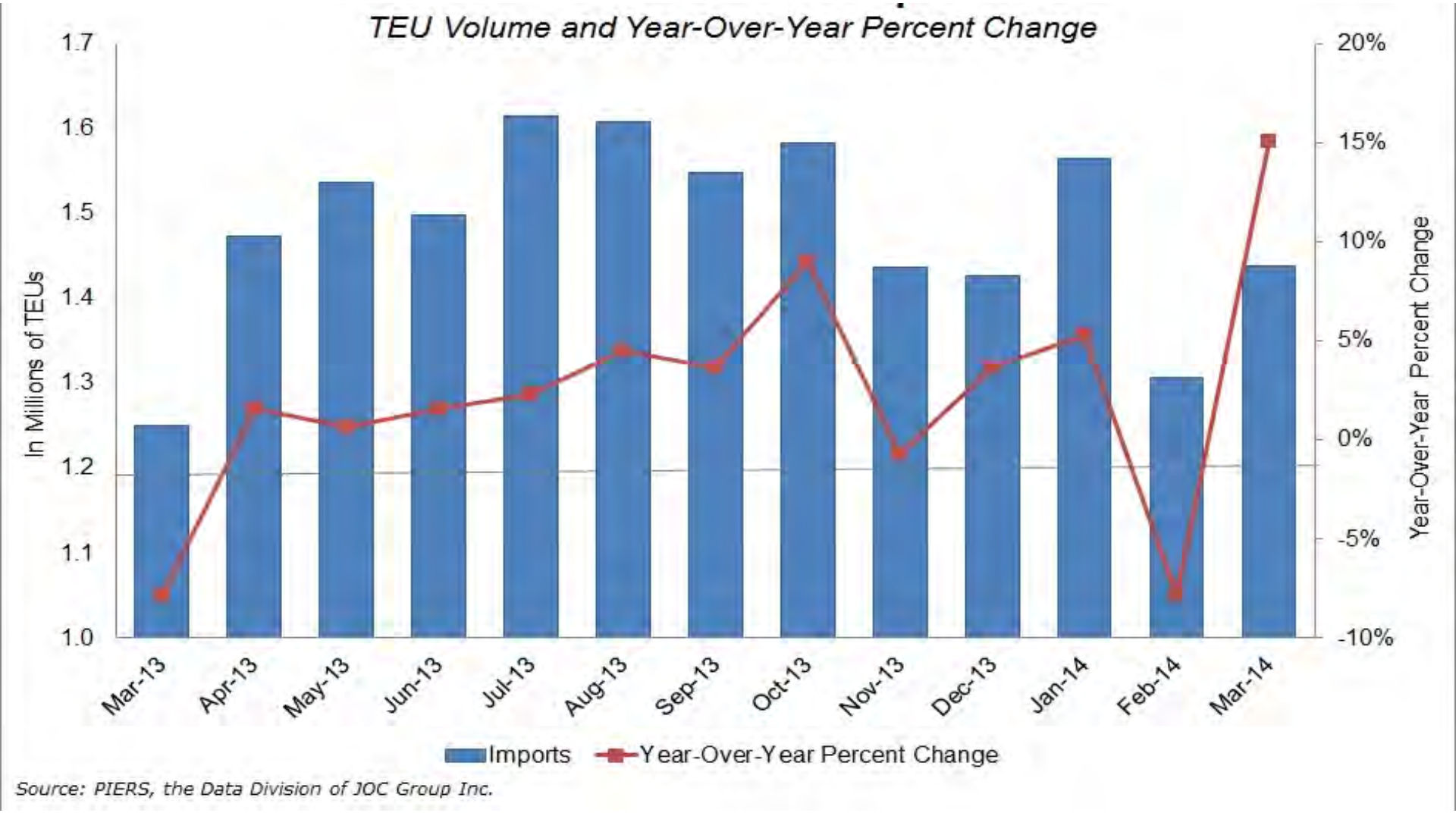
Source: Tim Feemster, Foremost Quality Logistics

US Foreign Trade- Value in 2012 (millions)

	Imports			Exports			Total	
1	China	$424,874	18.9	Canada	$244,199	15.8	Canada	$424,874
2	Canada	$323,925	14.4	Mexico	$175,159	11.3	China	$388,524
3	Mexico	$276,408	12.3	China	$103,508	6.7	Mexico	$451,568
4	Japan	$144,538	6.4	Japan	$ 64,599	4.2	Japan	$209,137
5	Germany	$105,084	4.7	United Kingdom	$ 48,293	3.1	Germany	$148,759
6	Korea, South	$ 57,874	2.6	Germany	$ 43,676	2.8		
7	United Kingdom	$ 54,497	2.4	Brazil	$ 37,252	2.4		
8	Saudi Arabia	$ 52,306	2.3	Netherlands	$ 35,918	2.3		
9	France	$ 41,099	1.8	Singapore	$ 27,013	1.7		
10	Ireland	$ 33,198	1.5	Belgium	$ 24,838	1.6		

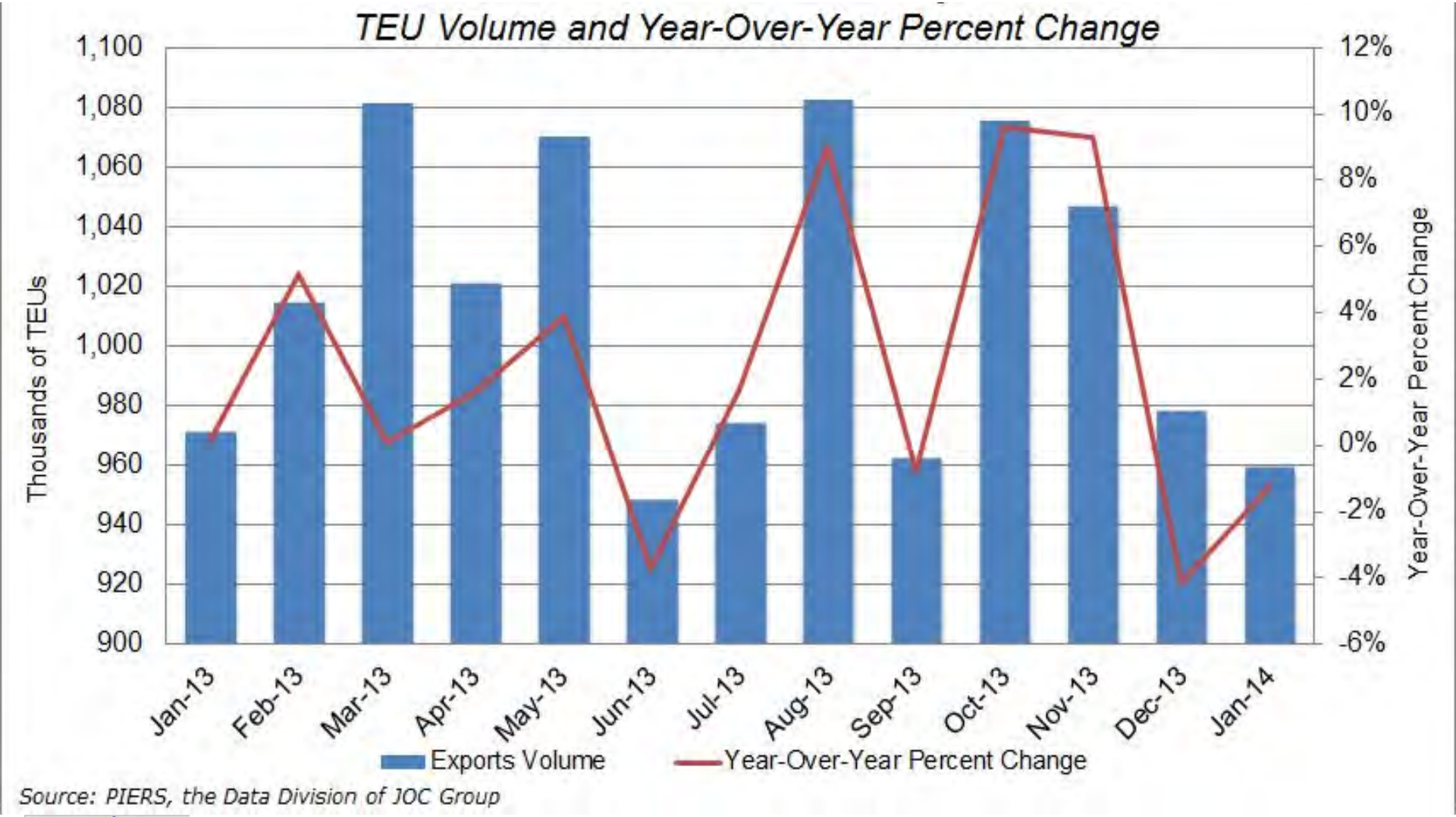
https://usatrade.census.gov/

US Containerized Imports



Source: PIERS, the Data Division of JOC Group Inc.

US Containerized Exports



Source: PIERS, the Data Division of JOC Group

Top 10 US **Container** Trading Partners- 2000 vs 2010

Ranked by 2010 containerized value in billions of dollars

Country	2003	2010	Percentage Change
China	$120.02	$270.33	125%
Japan	$59.86	$63.80	7%
Germany	$23.64	$36.32	54%
Korea, South	$20.54	$29.25	42%
Taiwan	$19.83	$23.65	19%
Brazil	$10.82	$18.61	72%
India	$7.14	$18.11	154%
United Kingdom	$14.60	$17.62	21%
Italy	$13.69	$15.94	16%
France	$10.73	$15.79	47%

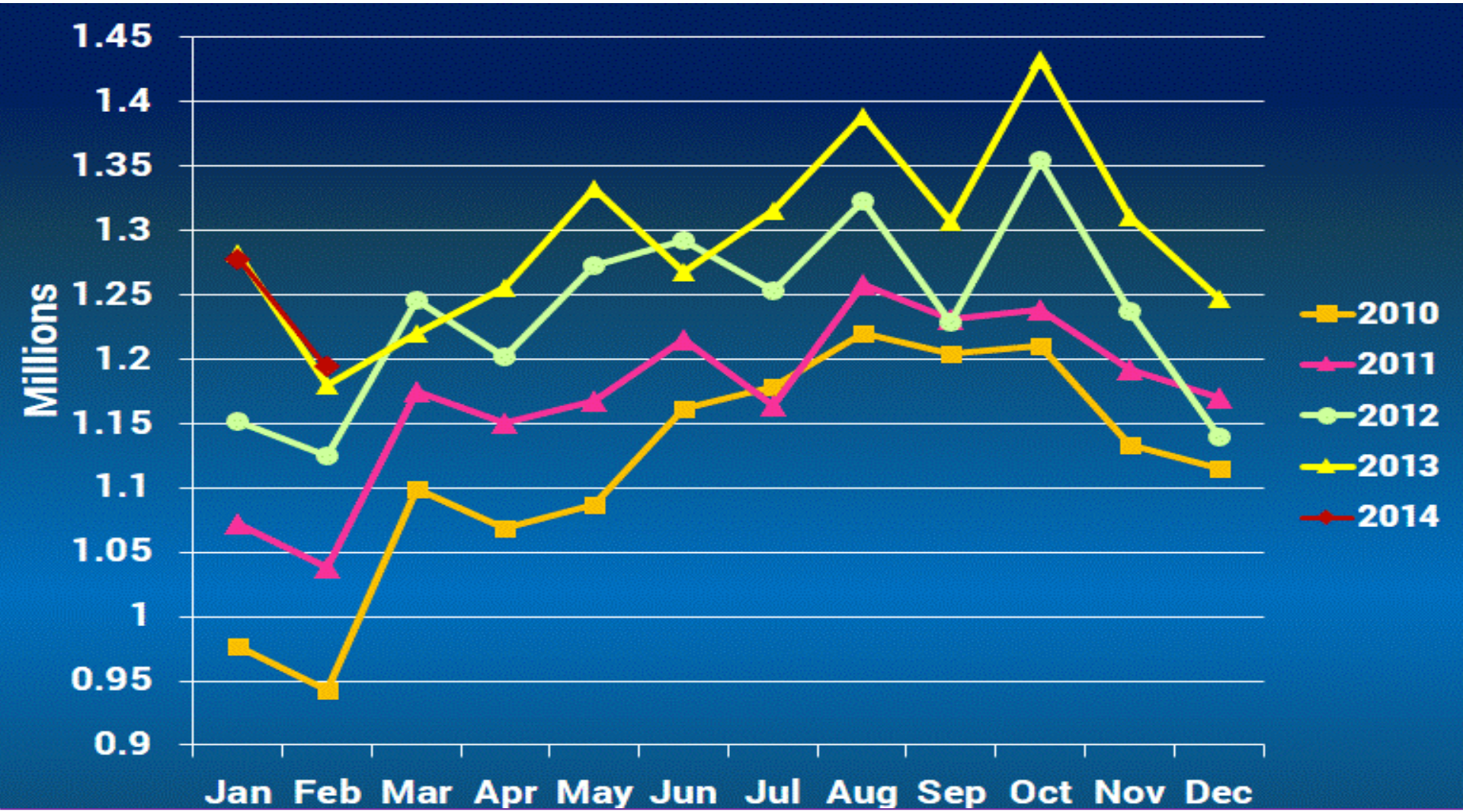
SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division. USA Trade Online. http://www.usatradeonline.gov/ (accessed September 2011).

Top US Trading Partners in Containerized Cargo- 2012 TEUs

1. Mainland China (1)
2. Japan (2)
3. South Korea (4)
4. Taiwan (5)
5. Germany (4)
6. Hong Kong
7. India (7)
8. Vietnam
9. Puerto Rico
10. Brazil (6)
11. Belgium
12. Indonesia
13. Italy (9)
14. Thailand
15. Netherlands
16. United Kingdom (8)
17. Guatemala
18. Honduras
19. Malaysia
20. Chile
21. Australia
22. Costa Rica
23. United Arab Emirates
24. Turkey
25. Philippines
26. France (10)
27. Spain
28. Singapore
29. Columbia
30. Dominican Republic

Source: PIERS/JOC 2012

Intermodal Traffic Totals 2010-2014

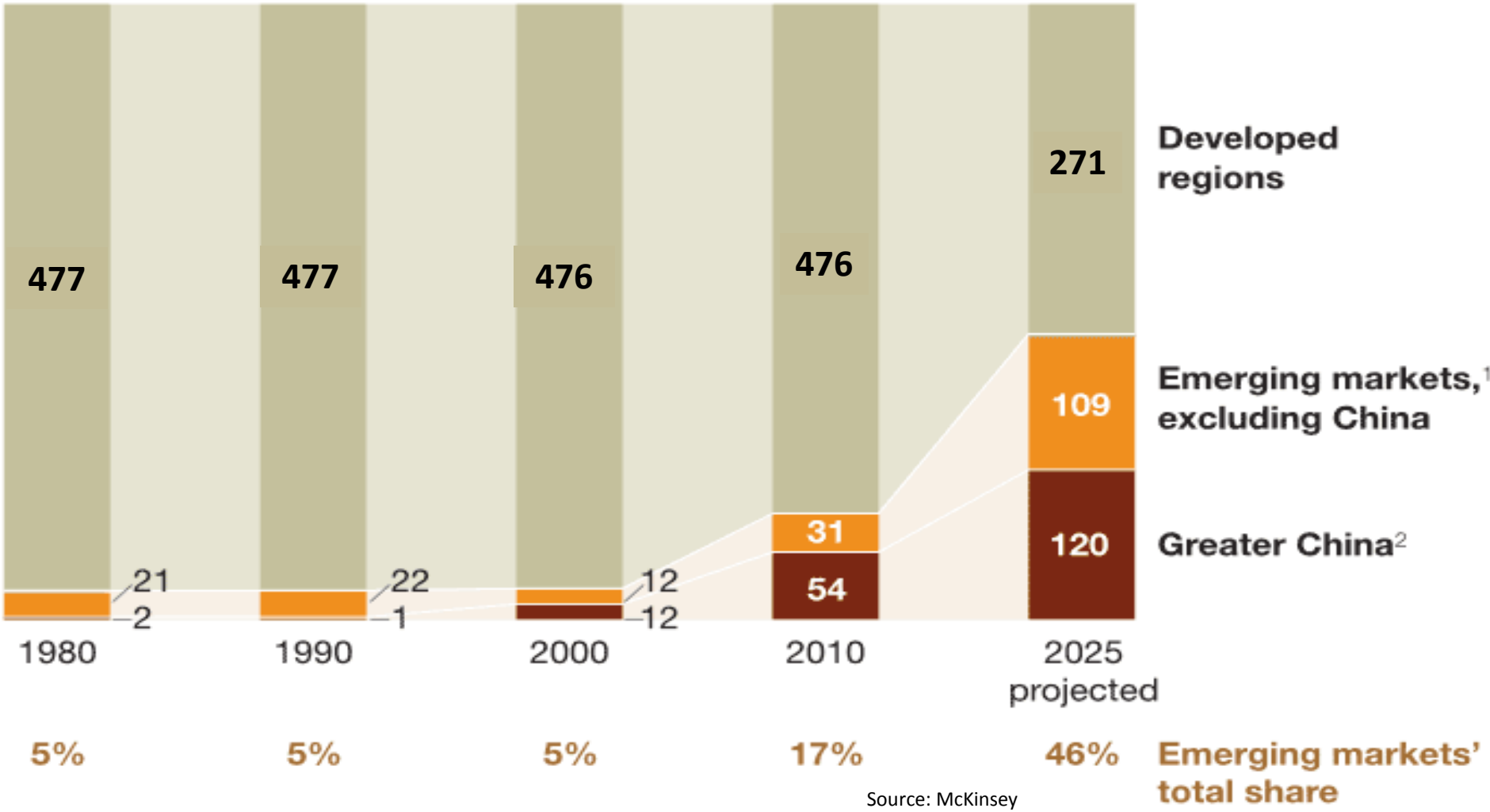


China to Surpass U.S. as World's Largest Trader

- China has held the title of largest exporter and second-largest importer globally since 2009
- 2013 numbers will show the country now has the world's largest trade value.
  - China's trade in 2013 is expected to have reached $4.14 trillion
  - U.S., which saw $3.26 trillion in trade from January to October, is not expected to have hit the more than $880 billion necessary in November and December to exceed China's numbers.
  - China's year-end trade data is expected in the coming days; U.S. numbers are expected next month.

Source: China Daily (Beijing)

The Fortune Global 500 by Location, Number of Companies



Source: McKinsey

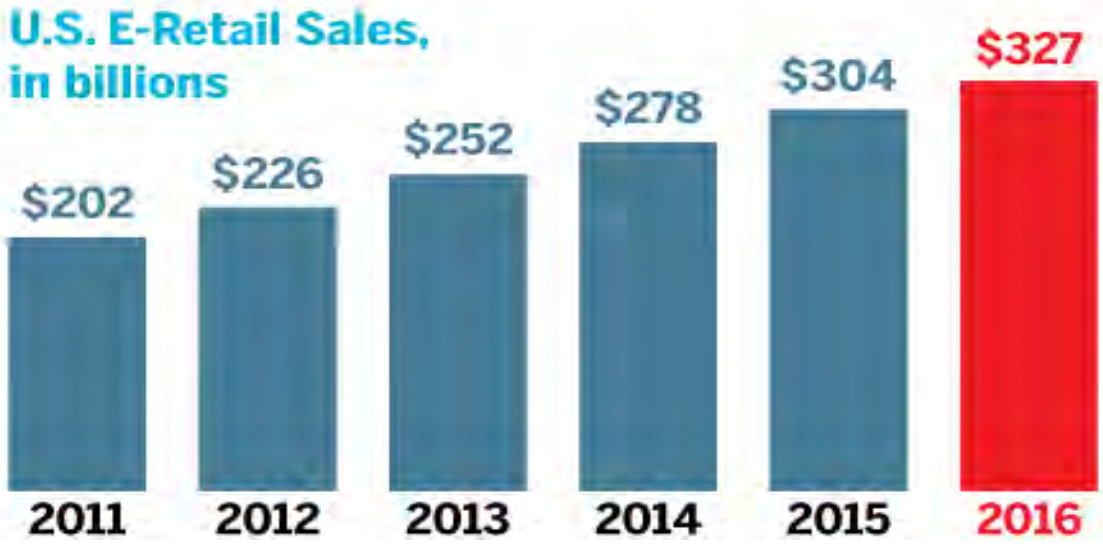
Seven Trends Affecting Site Selection

1. Growing demand in emerging global markets
2. Rising transportation costs
3. Emerging logistics hubs and the expansion of the Panama Canal
4. Downward pressure on rents have ended and a "flight-to-quality" in industrial real estate
5. Opting for more flexibility with 3PLs
6. Omni-Channel supply Chains to support **e**commerce, **m**commerce, **s**commerce
7. Move to CNG/LNG fuels for Trucks, Trains, Ships, and Cars

Source: Napolitano, Maida (2009), "Site Selection: 5 Trends for the New Economy," *Logistics Management*, Vol. 48, No. 9, pp. 42-47. and **Foremost Quality Logistics**

The Retail Sales Shift- US Estimates

- Within 5 years, the percentage of sales closed at physical stores vs. alternative sales channels (e-commerce, m-commerce and s-commerce) will drop from 91% (today) to 76% (Deloitte Study)
- By 2025 it has been estimated that e-commerce will represent 30% of all Retail Sales and account from *2.7 trillion in total sales (Source: Dematic)*

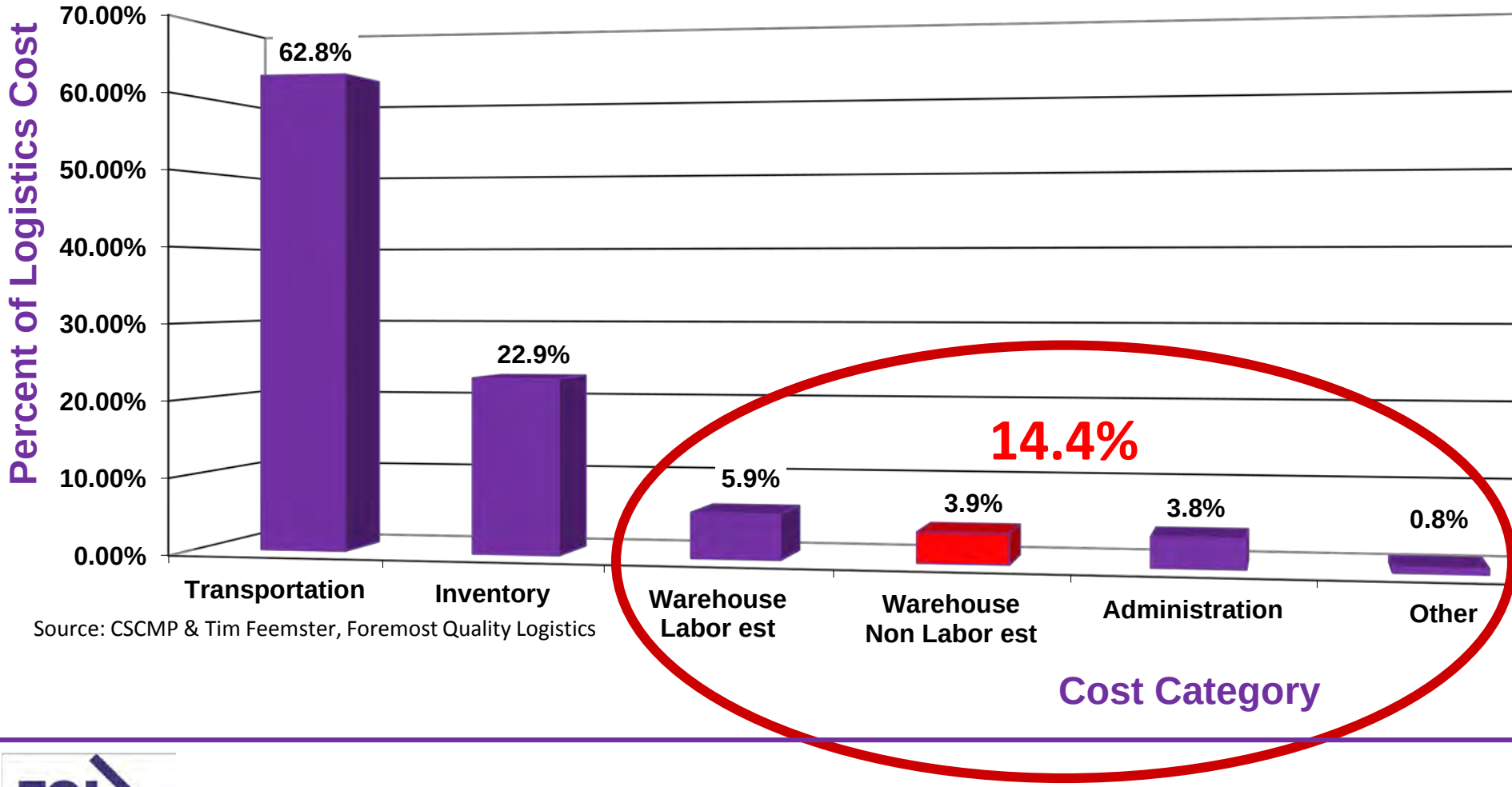


U.S. E-commerce Sales: 2011-2016

Online consumers will increase their spending 62% by 2016, according to Forrester Inc.

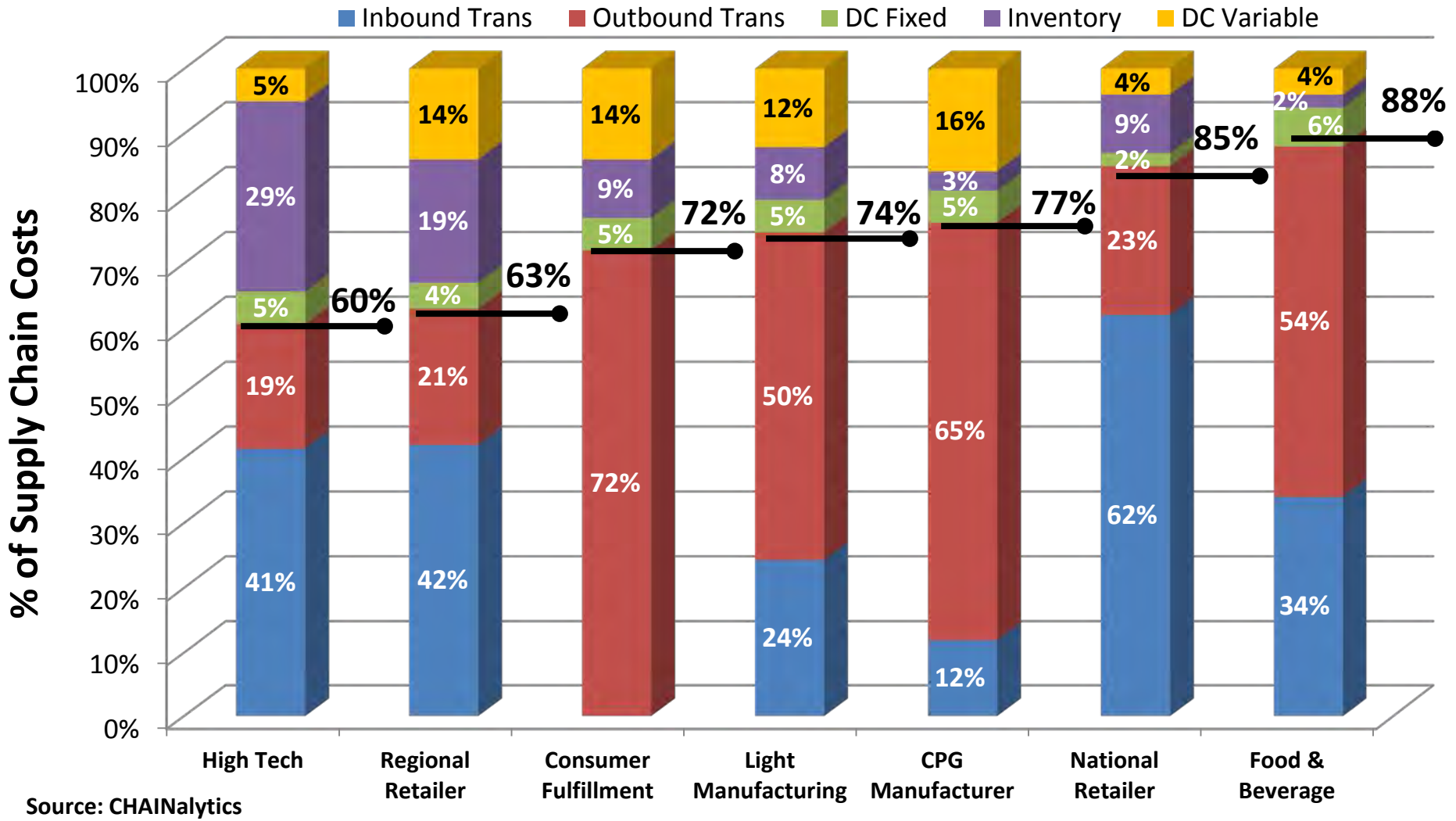
Source: Forrester, Inc.

Logistics Cost Breakdown- 2012



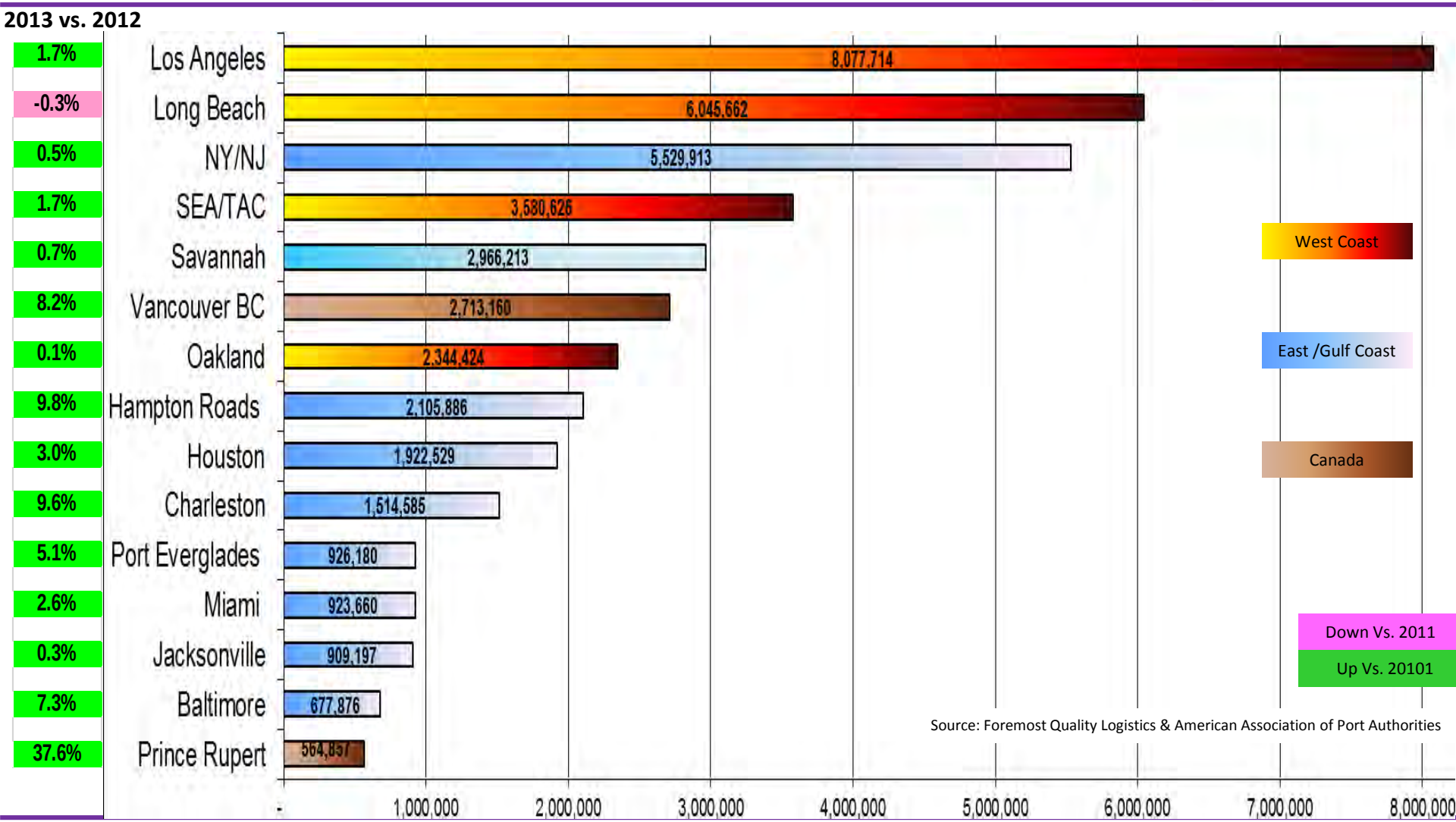
Source: CSCMP & Tim Feemster, Foremost Quality Logistics

Freight, Freight, and Freight, then Labor and Love



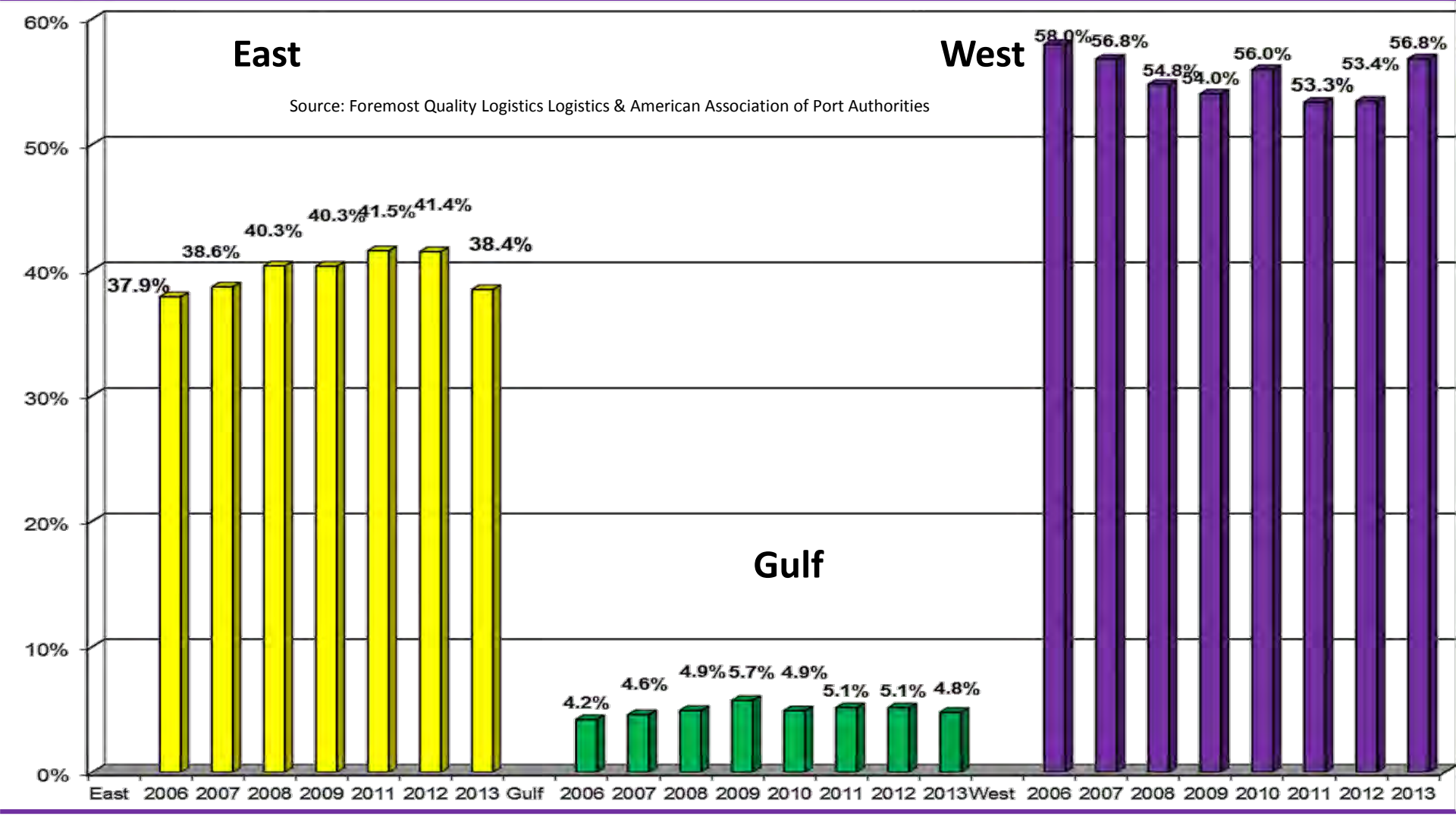
Source: CHAINalytics

NA Port Volumes- 2013 Final, AAPA

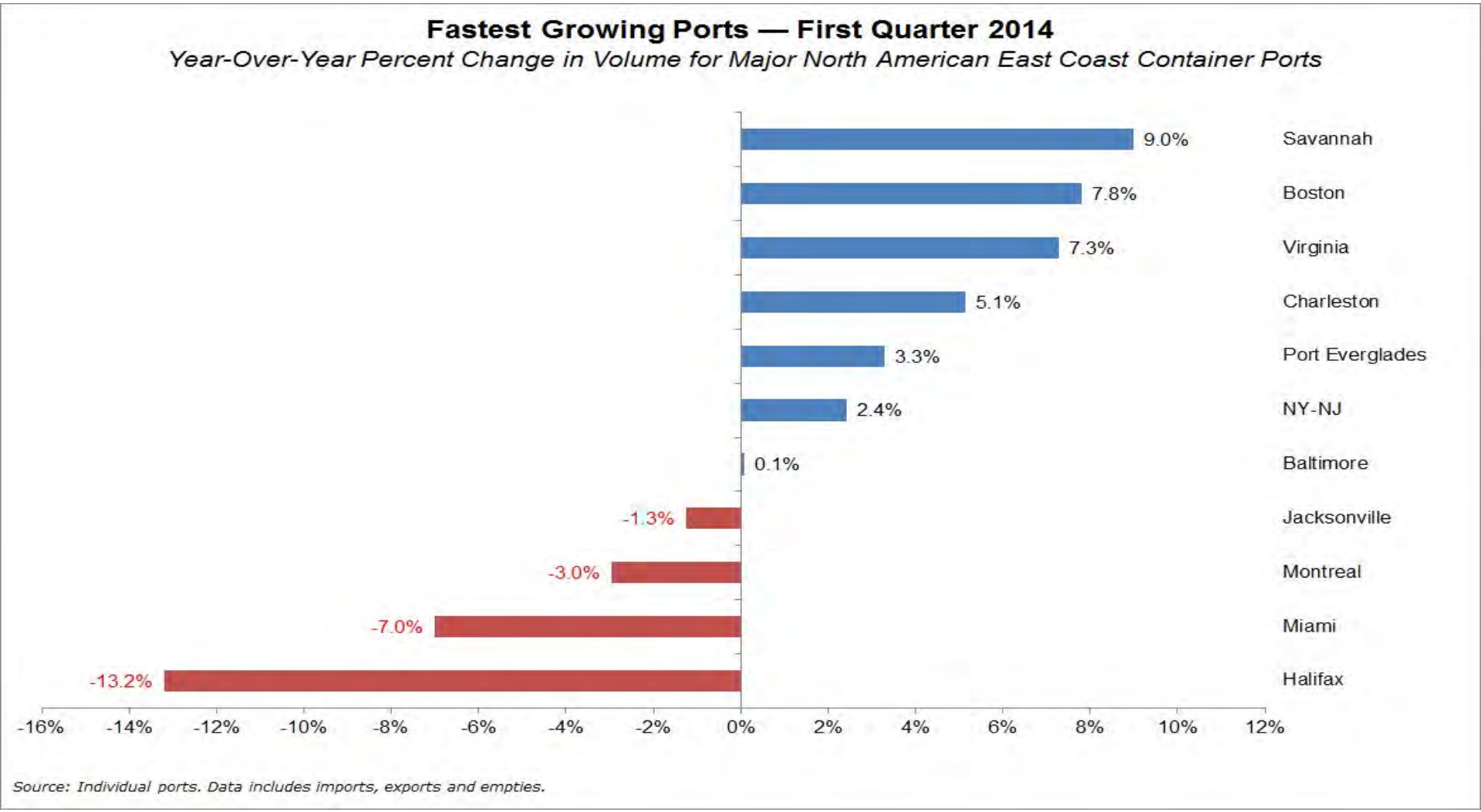


Source: Foremost Quality Logistics & American Association of Port Authorities

Port Container Volume Shift- 2006 thru 2013



East Coast Port Container Performance- Q1 2014



Evolution of Containerships

MV EDA
nmborderplex.com

A

Early Containerships (1956-)
500 – 800 TEU

137x17x9 meters (LOA – Beam – Draft)

6 containers across
4 containers high on deck

Fully Cellular (1970-)
1,000 – 2,500 TEU

200x20x9

215x20x10

4 containers high below deck

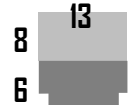
B

Panamax (1980-)
3,000 – 3,400 TEU

250x32x12.5

Panamax Max (1985-)
3,400 – 4,500 TEU

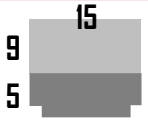
290x32x12.5



C

Post Panamax (1988-)
4,000 – 5,000 TEU

285x40x13



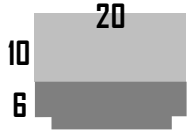
Post Panamax Plus (2000-)
6,000 – 8,000 TEU

300x43x14.5

D

New Panamax (2014-)
12,500 TEU

366x49x15.2



E

Post New Panamax (2006-)
15,000 TEU

397x56x15.5 ; 22-10-8 (not shown)

Triple E (2013-)
18,000 TEU

400x59x15.5

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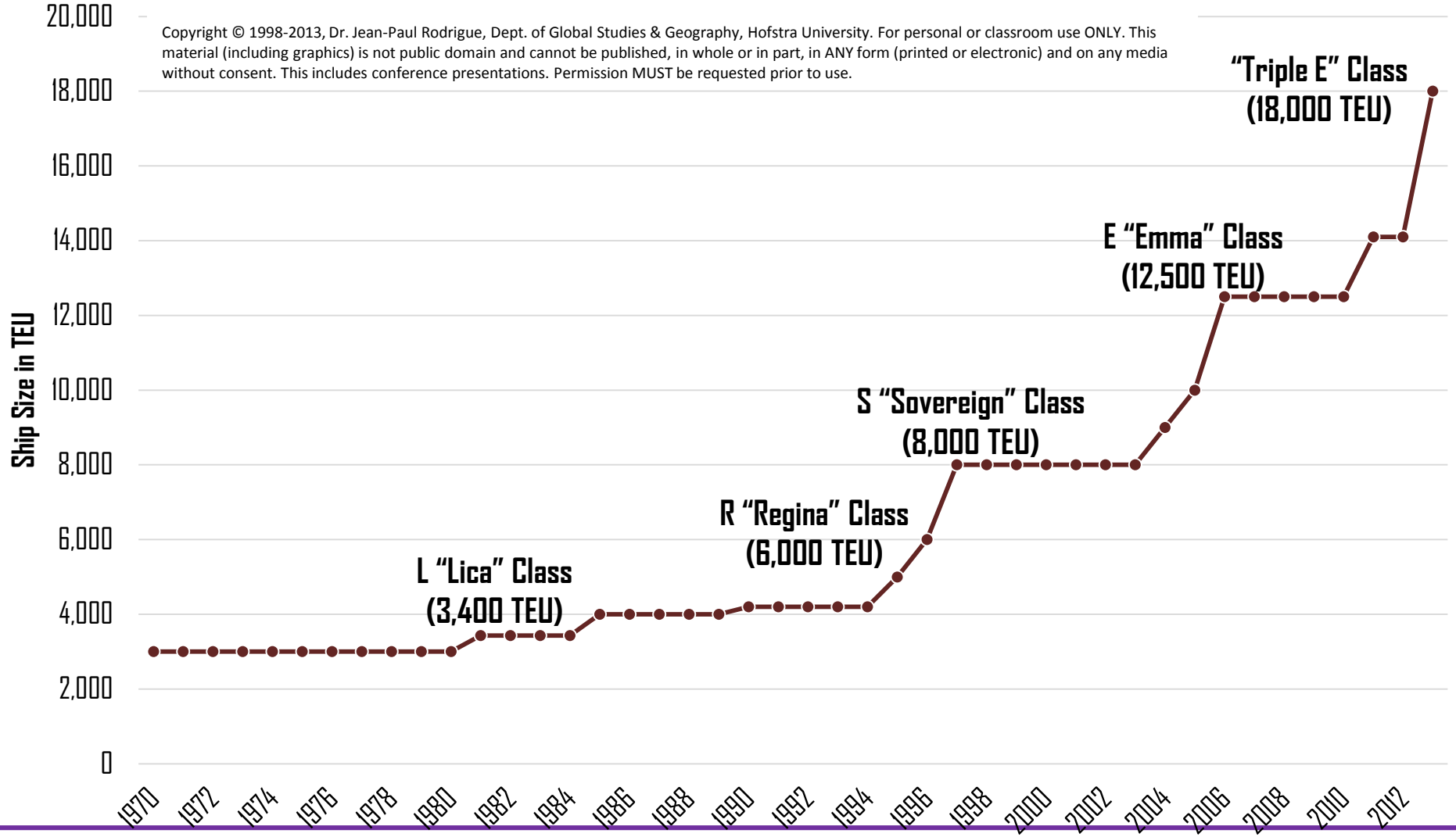
The Largest Available Containership, 1970-2013 (in TEUs)



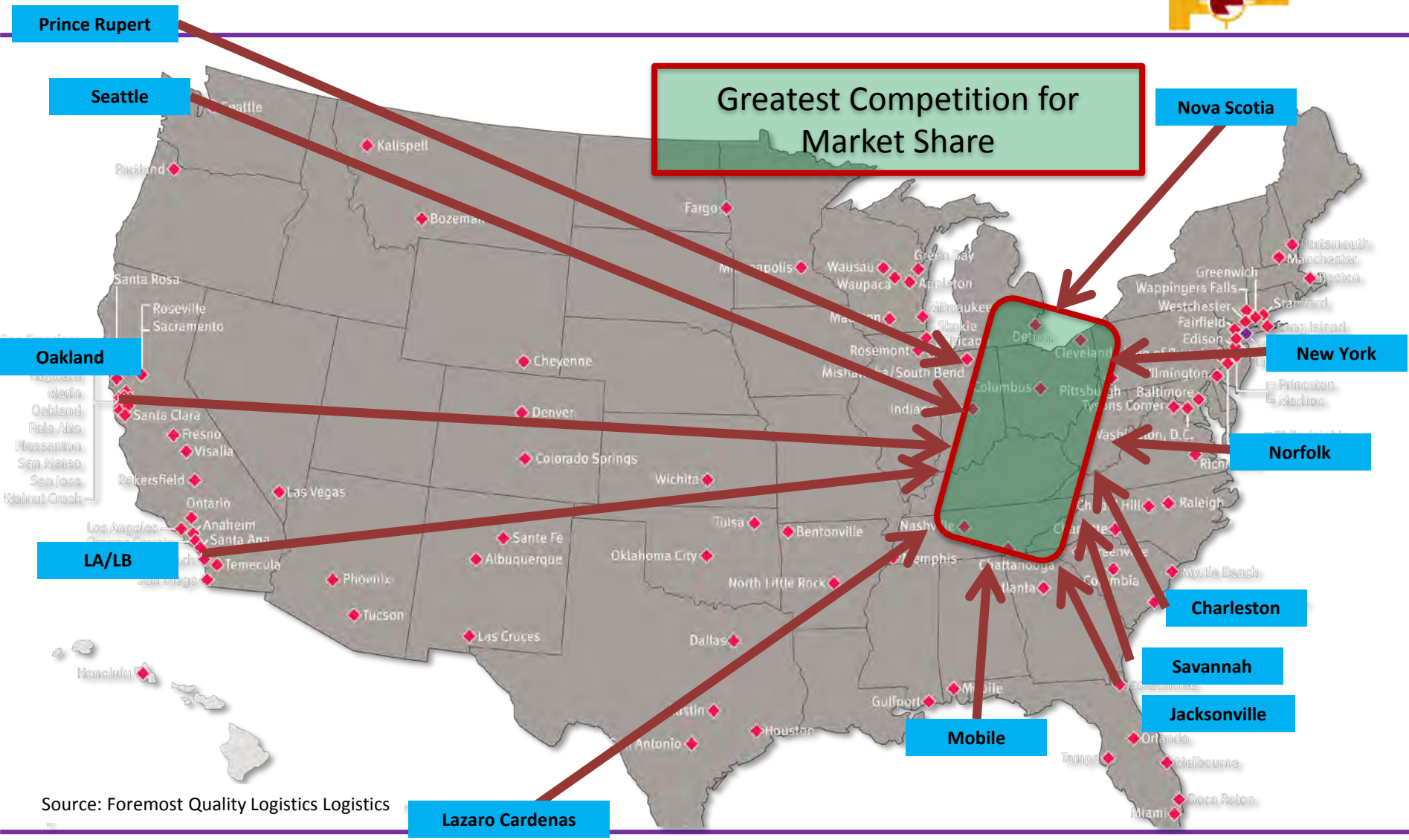
Characteristics of Some Historical Containerships

Year	Name	Capacity (TEU)	Yard	Length (m)	Width (m)	Draft (m)	Speed (knots)
1956	Ideal X	58	US	174.2	23.6	8	18.0
1968	Elbe Express	730	B&V	171.0	24.5	7.9	20.0
1970	Sealand Navigator	2,361		247.6	27.5	11.1	
1972	Liverpool Bay	2,961	B&V	248.6	32.3	13.0	23.0
1981	Frankfurt Express	3,430	HDW	271.0	32.3	11.5	23.0
1991	Hanover Express	4,407	Samsung	281.6	32.3	13.5	23.0
1995	APL China	4,832	HDW	262.0	40.0	12.0	24.6
1996	Regina Maersk	6,700	Odense	302.3	42.8	12.2	24.6
1998	Sovereign Maersk	8,200	Odense	332.0	42.8	14.5	24.7
2001	Hamburg Express	7,506	Hyundai	304.0	42.8	14.5	25.0
2003	OOCL Shenzhen	8,063	Samsung	319.0	42.8	14.5	25.2
2005	MSC Pamela	9,200	Samsung	321.0	45.6	15.0	25.0
2006	Emma Maersk	14,500	Odense	393.0	56.4	15.5	24.5
2009	MSC Beatrice	13,798	Samsung	366.1	51.2	15.0	25.2
2012	MSC Marco Polo	16,000	Daewoo	396.0	53.6	16.0	25.1

Specifications for Very Large Post-Panamax Containerships

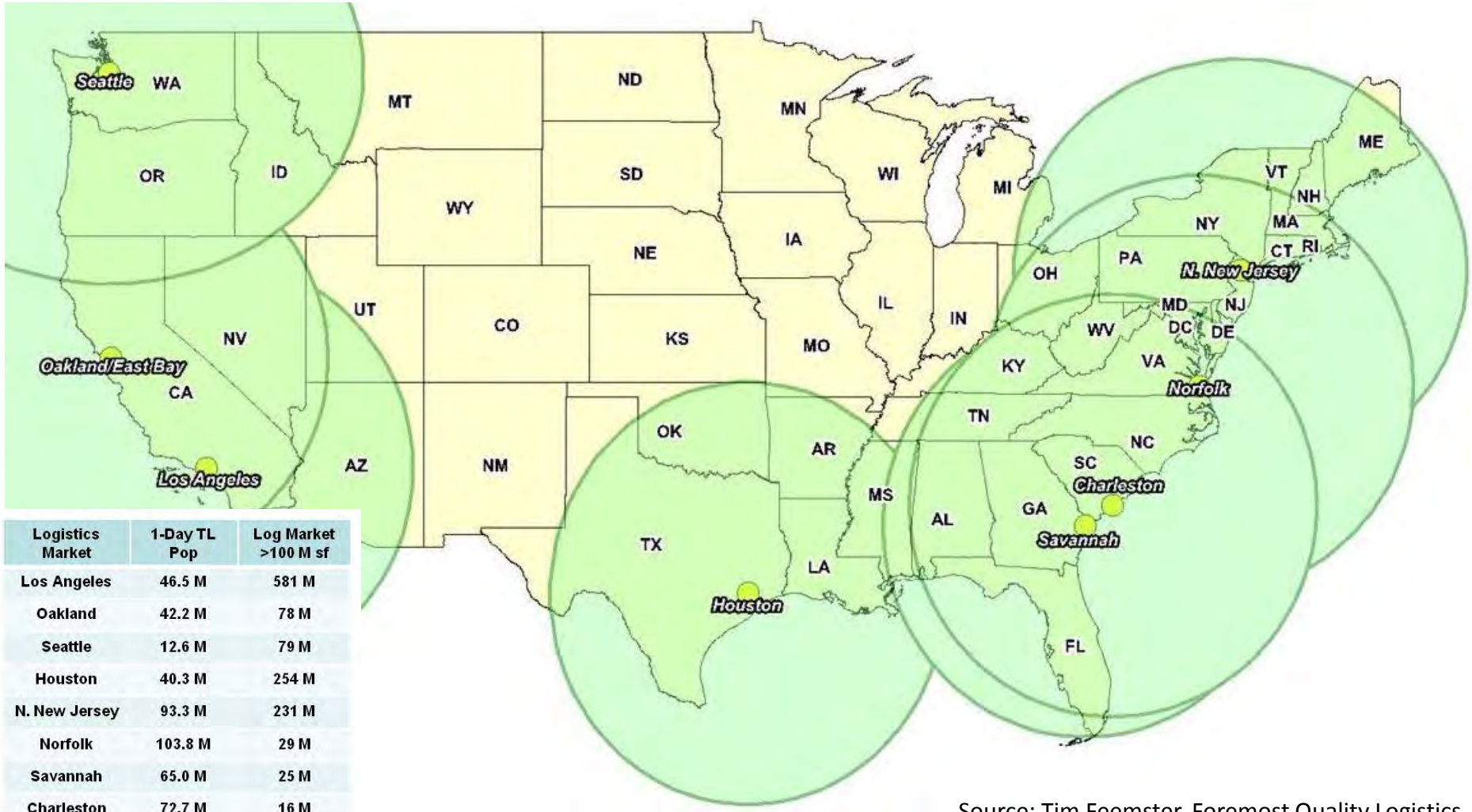
	"Triple E Class" (Projected 2013)	"E Class" (Emma Maersk)	"S Class" (Sovereign Maersk)
Capacity (TEU)	18,000	14,500	8,400
Length (meters)	400	397	348
Width (meters)	59	56	44
Draft (meters)	16.5	16	15
Deadweight (tons)	165,000	156,900	105,000
Speed (knots)	23 (19 optimal)	25.5	25

Potential New Options – Post Panamax



Source: Foremost Quality Logistics Logistics

Major Port Population/Sales Reach-1 day by truck

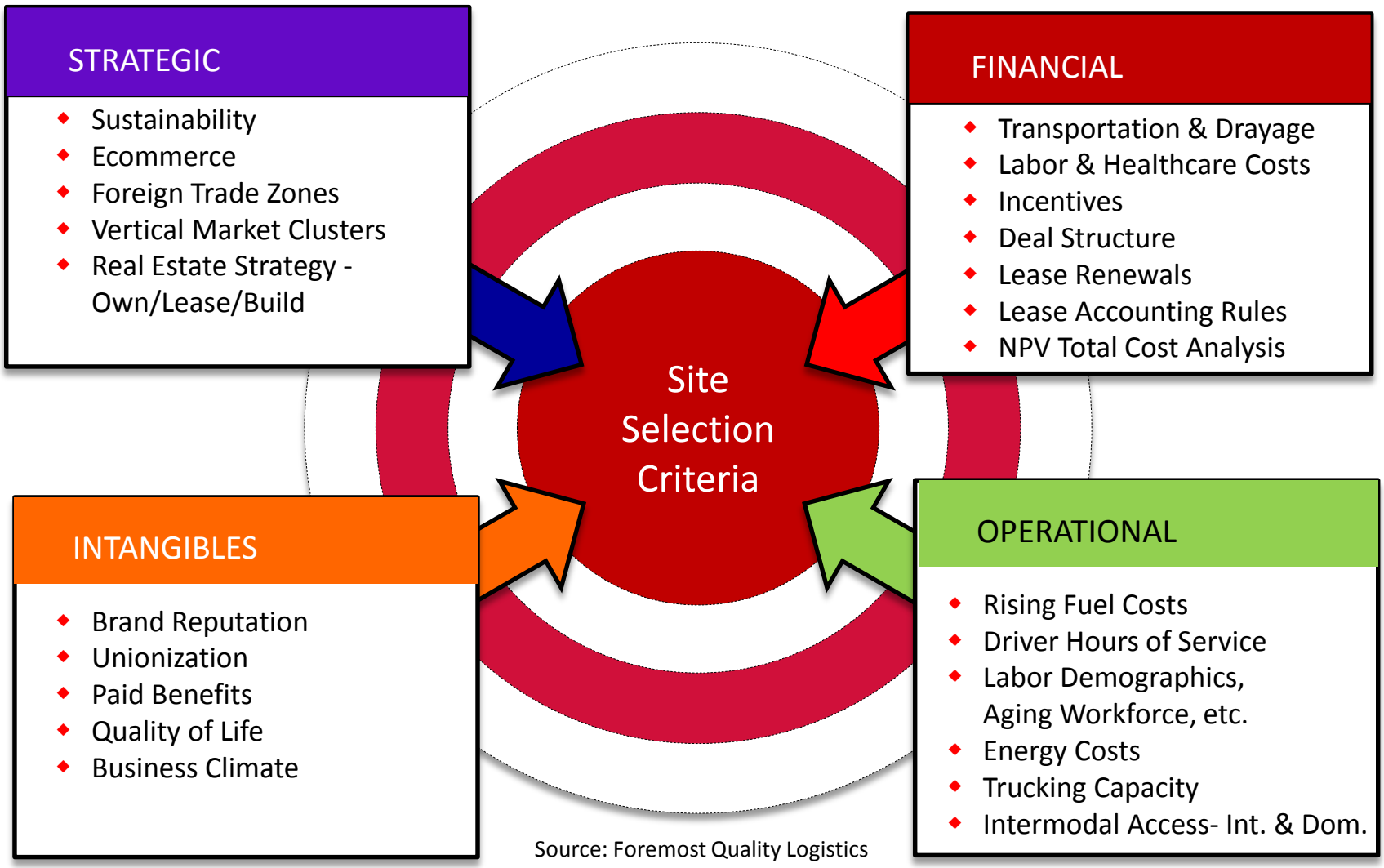


Logistics Market	1-Day TL Pop	Log Market >100 M sf
Los Angeles	46.5 M	581 M
Oakland	42.2 M	78 M
Seattle	12.6 M	79 M
Houston	40.3 M	254 M
N. New Jersey	93.3 M	231 M
Norfolk	103.8 M	29 M
Savannah	65.0 M	25 M
Charleston	72.7 M	16 M

Source: Tim Feemster, Foremost Quality Logistics

Trends: Thinking Cap or NASCAR Hans Device Prototype

Critical Trend Components



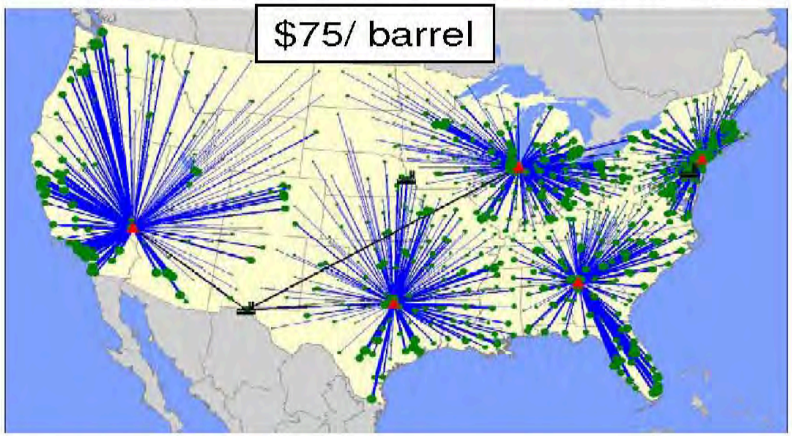
Source: Foremost Quality Logistics

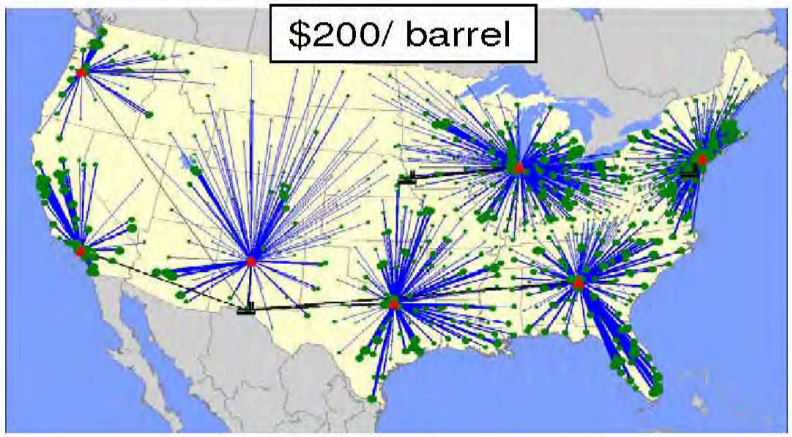
Fuel Impact on Warehouse Network

Impact on Warehouse Locations

Scenario	Warehouse							
	Atlanta	Chicago	Dallas	New York	Las Vegas	Albuquerque	Los Angeles	Portland
$75/ barrel	■	■	■	■	■			
$100/ barrel	■	■	■	■	■			
$125/ barrel	■	■	■	■	■			
$150/ barrel	■	■	■	■		■	■	■
$175/ barrel	■	■	■	■		■	■	■
$200/ barrel	■	■	■	■		■	■	■

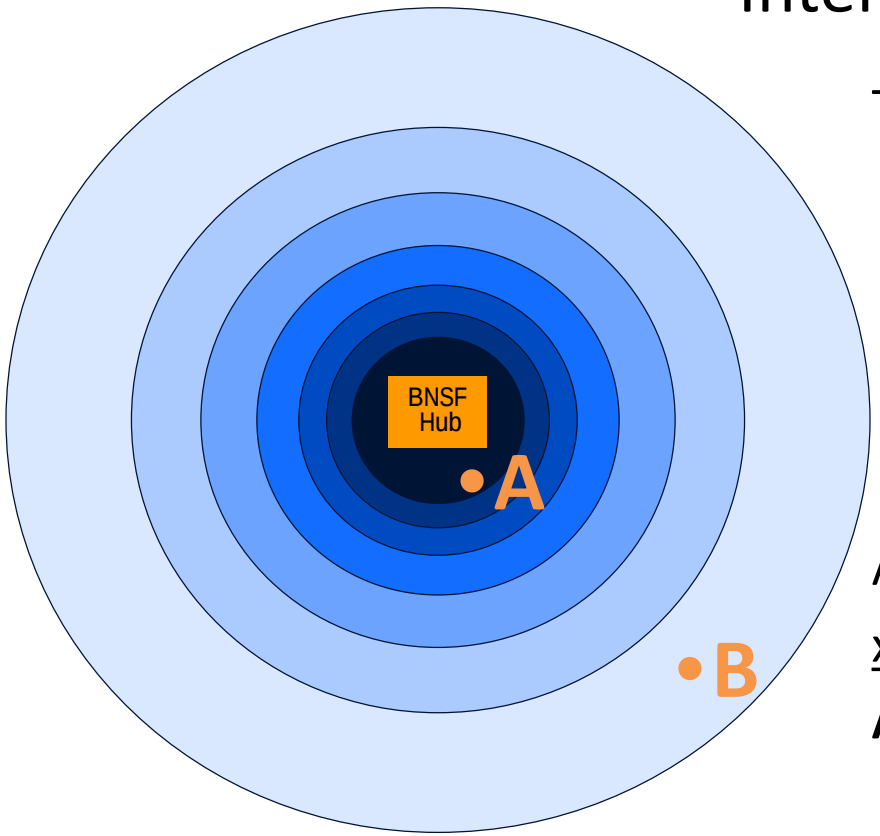
Moving from $125/ barrel to $150/ barrel changes the optimal number of DC's from 5 to 7. In particular, you can think of Las Vegas being replaced by Los Angeles, Albuquerque, and Portland.





Source: Dr. David Simchi-Levi, MIT

Distribution Center Co-Location Benefits



Intermodal Zones of Savings Example

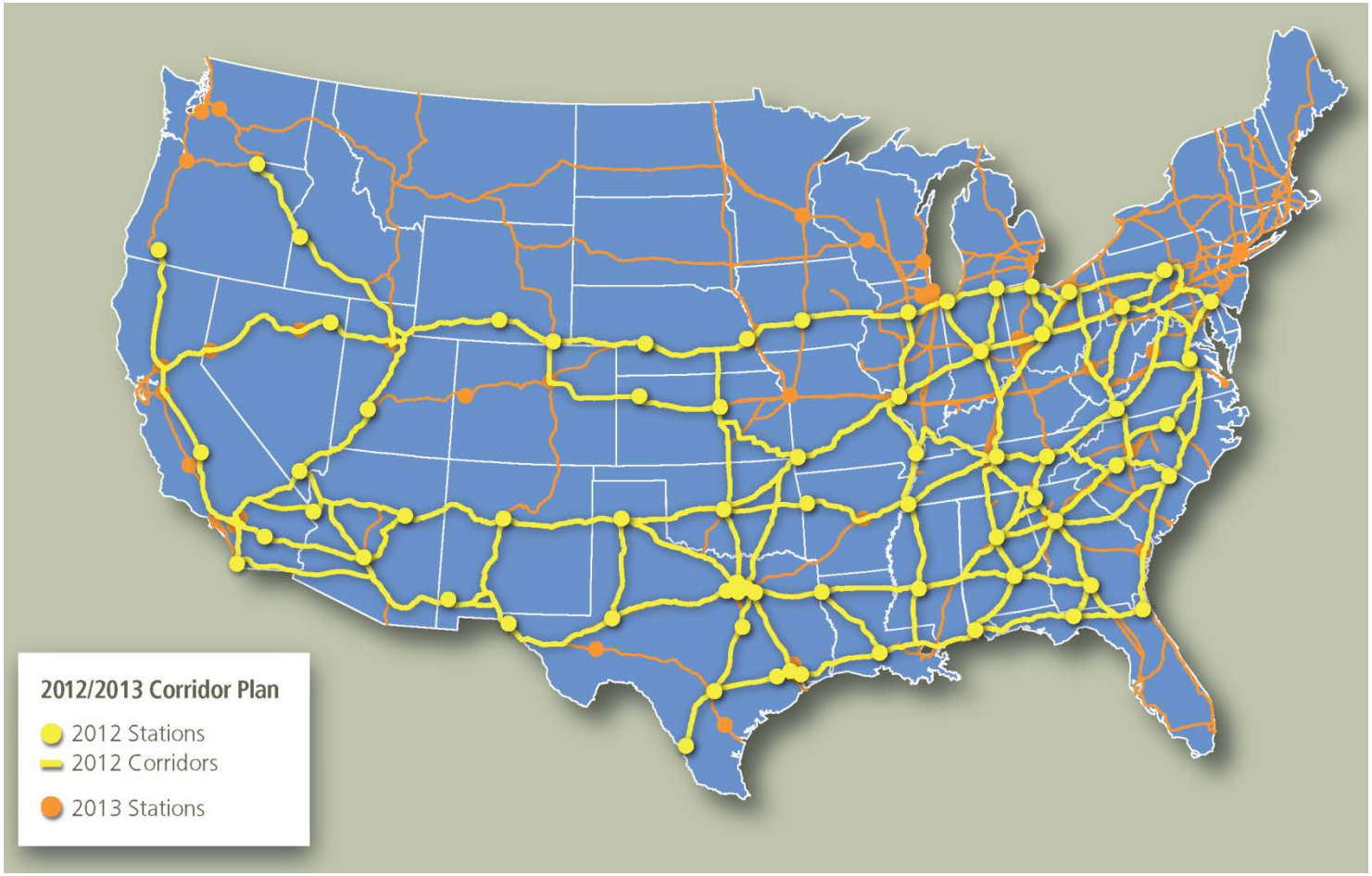
Two Potential DC Sites Under Consideration:

- Site A -- 3 miles from rail hub
- Site B -- 30 miles from rail hub
- 100,000 sq ft facility

Annual inbound units	2,000
x Drayage cost differential (A-B):	$100
Annual Co-Location Savings	**$200,000**

Total Occupancy Cost for B is $2.00/sq ft more

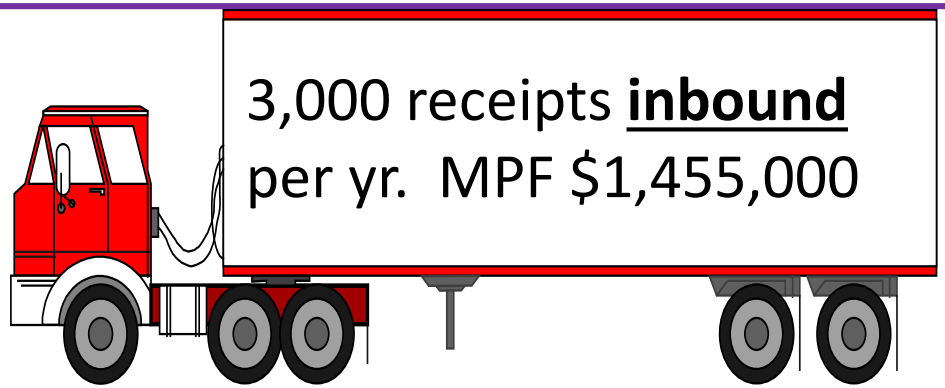
America's Natural Gas Highway of LNG Fueling Stations



Source: ©2013 Copyright Clean Energy Fuels, Founded by T Boone Pickens

Dan Gilmore of Supply Chain Digest notes that Sales of Natural Gas Trucks in the USA will Rise from 1% of Sales in 2013 to 5% in 2014

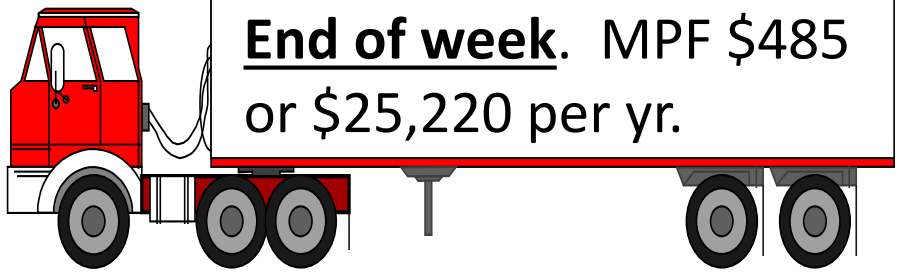
FTZ Example



3,000 receipts **inbound** per yr. MPF $1,455,000

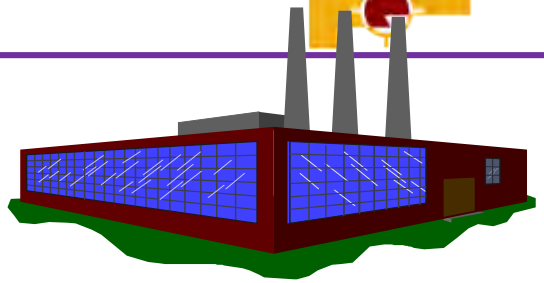
Shipments into Site

In a single year an FTZ importer can save
$ 1,429,780 MPF Fees



One entry filed at **End of week**. MPF $485 or $25,220 per yr.

Shipments into commerce with weekly entry.

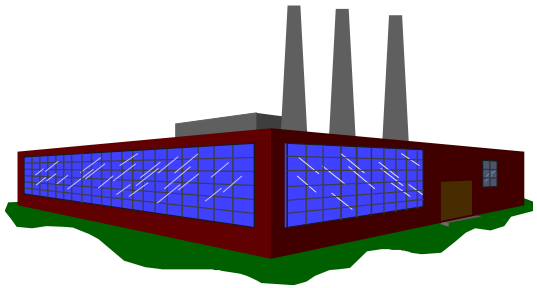


Pre Foreign-Trade Zone

Source: Tim Feemster, Foremost Quality Logistics

Assumptions:

1. 3,000 international containers a year into the facility per year
2. Container value $150,000
3. 1 BOL per container; $150,000 value per BOL



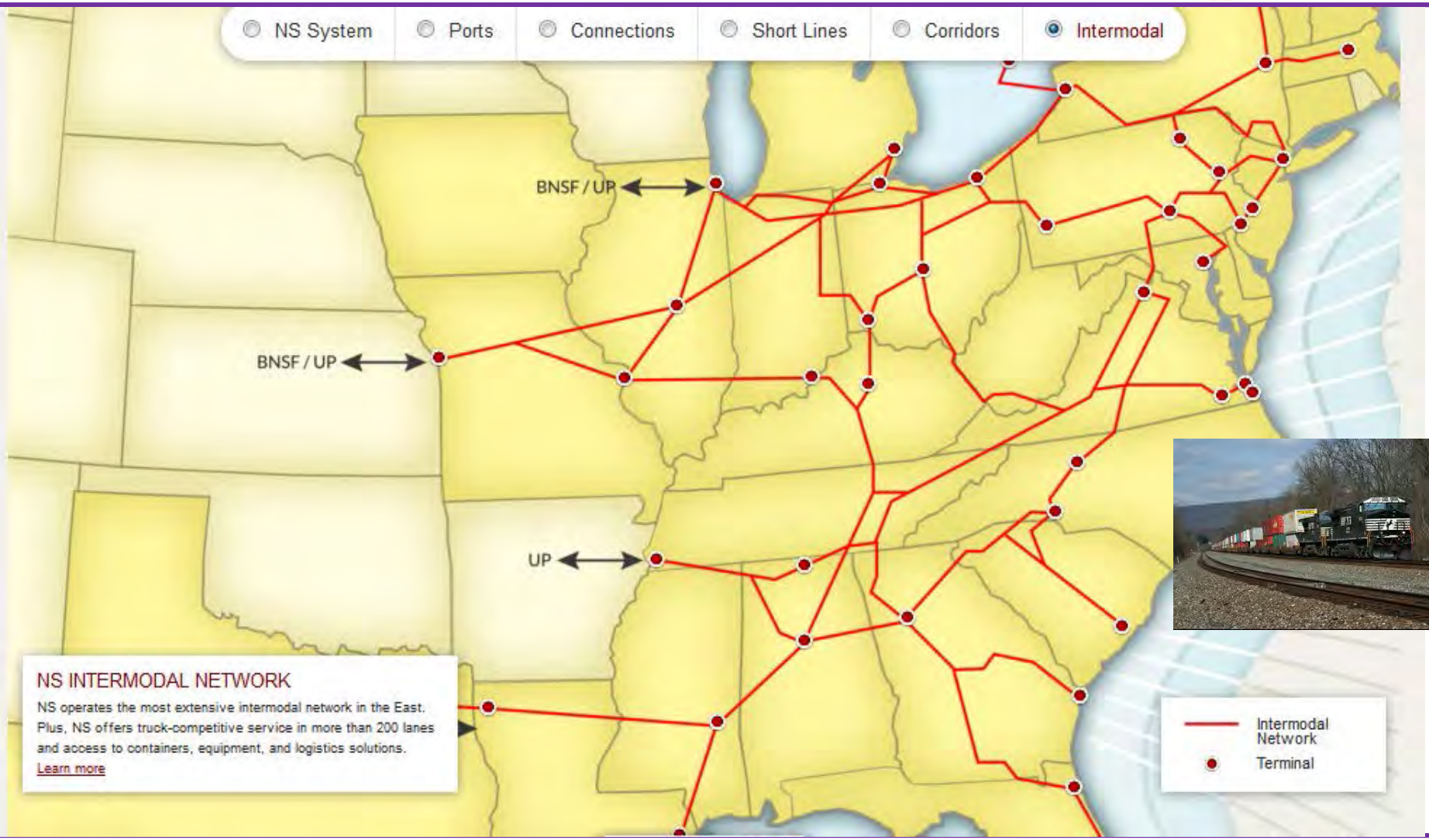
Post Foreign-Trade Zone

Let’s Work Together on This

UP Intermodal Routes

BNSF Intermodal Routes

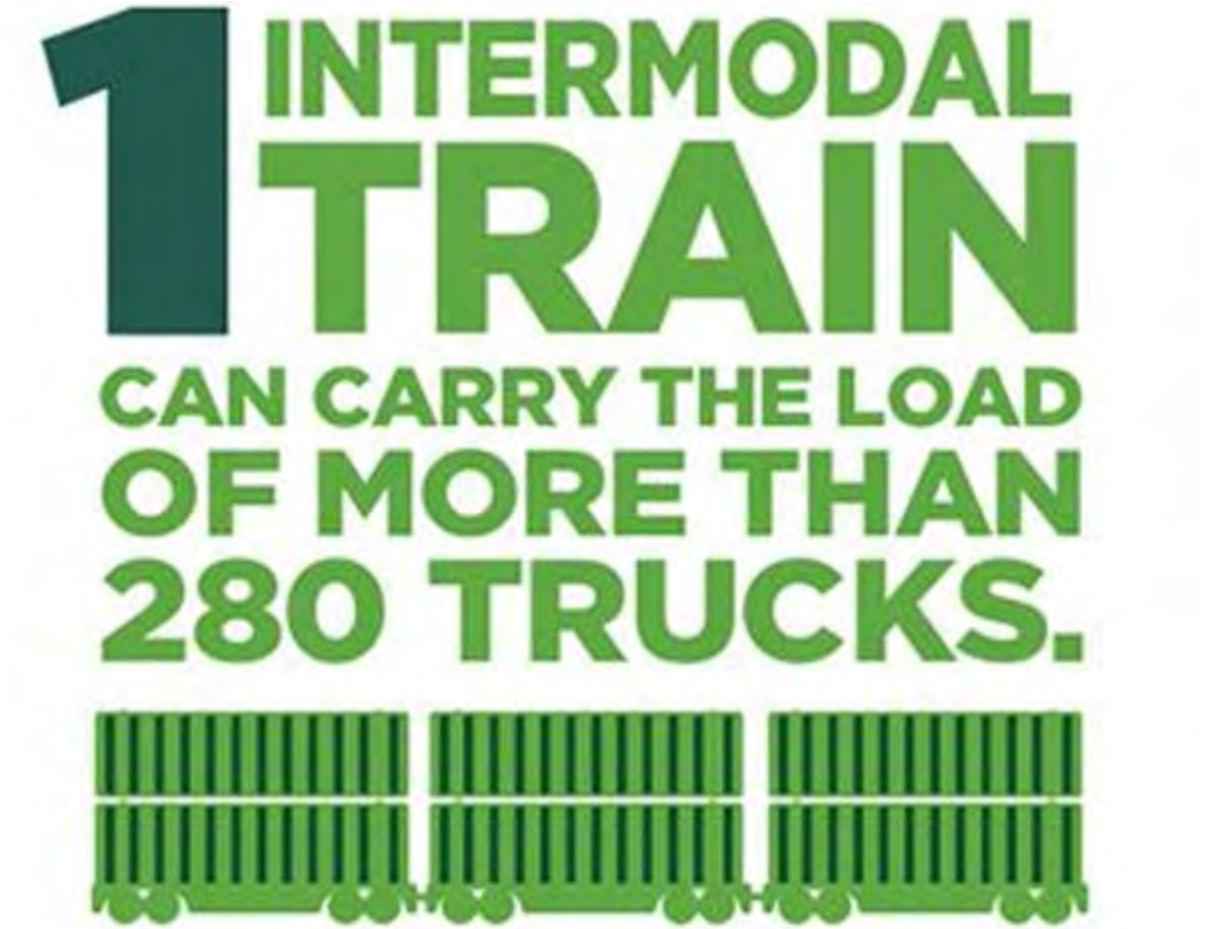
Norfolk Southern Intermodal Routes



CSX Intermodal Routes

CSX INTERMODAL

CSX Intermodal Conversion



One CSX Intermodal train equals 280 trucks off of the road.

Source: CSX & FQL Logistics

Why do We Care about Inland Ports

As Economic/Real Estate Development, Distribution, and Real Estate professionals, understanding the Global Supply Chain is “fun” but we need to know

Where does the container come to rest

- Local destination- at or near the Port
- Non-local destination- via rail or truck to the inland Port

This is where vertical happens- at the end of the “land bridge”

Source: Tim Feemster, Foremost Quality Logistics

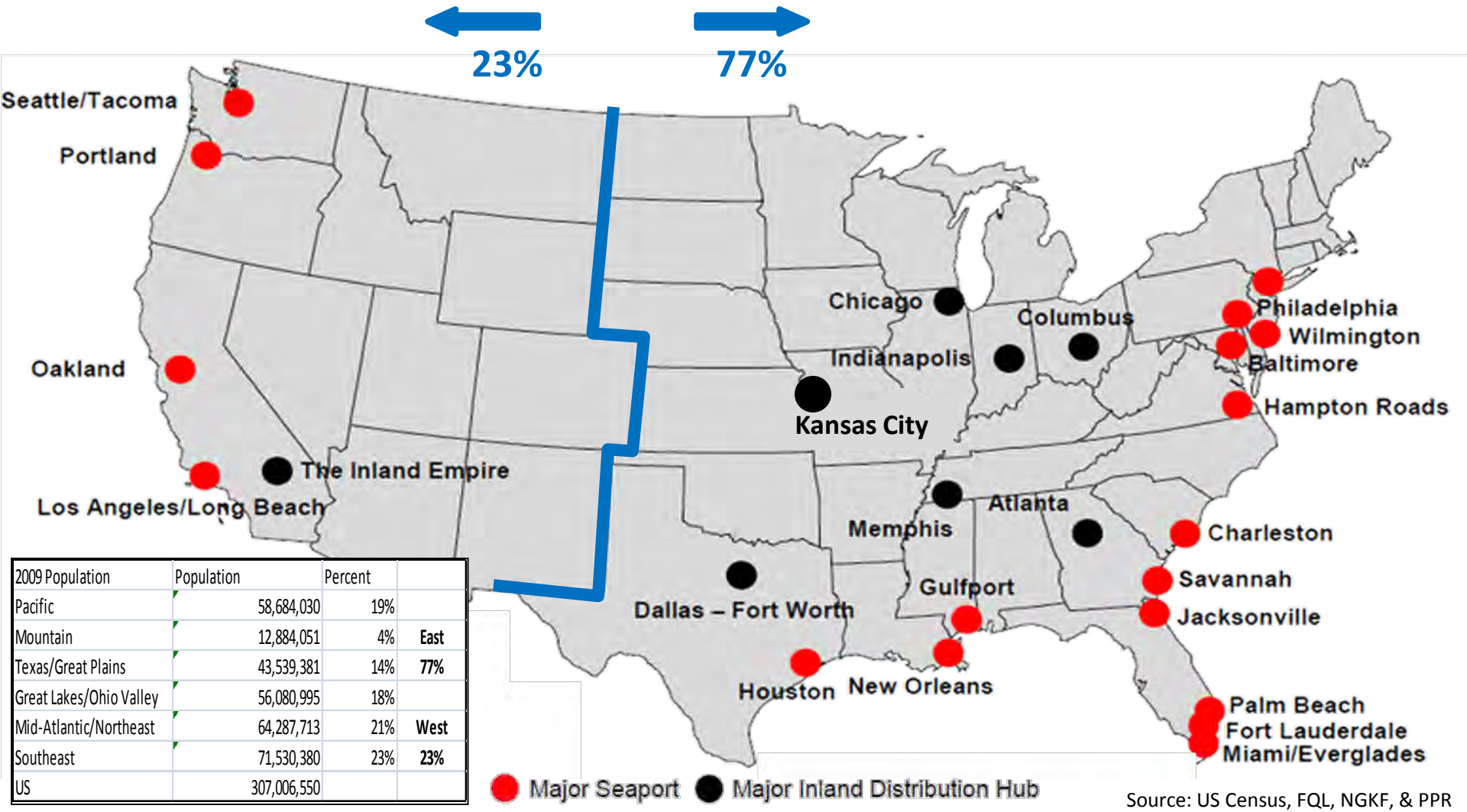
Inland Port ?

Critical Elements of an Inland Port – One Developer's View

- Hillwood's criteria as of 2001 (Developer of Alliance)
  - Base population of 3 million
  - Multiple transportation modes
  - 5,000 to 10,000 acres
  - Tax and local incentives
  - Strong employment base
  - Telecommunications infrastructure
  - Foreign Trade Zone (FTZ) Status

Source: University of Texas, Center for Transportation Research. *The Identification and Classification of an Inland Port. (2001)*

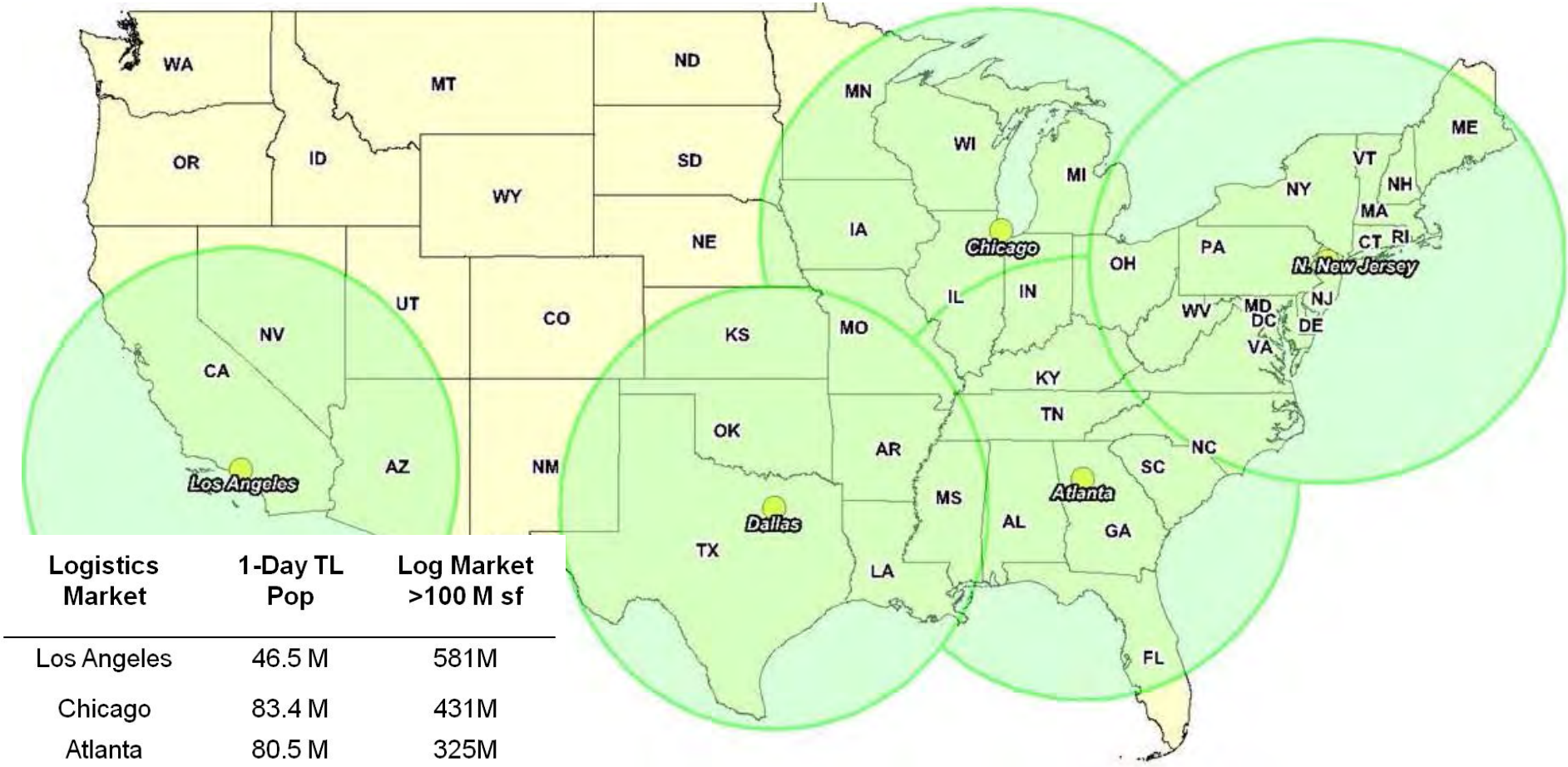
US Population- W 23%; E 77%; Top DC Markets



2009 Population	Population	Percent	
Pacific	58,684,030	19%	
Mountain	12,884,051	4%	**East**
Texas/Great Plains	43,539,381	14%	**77%**
Great Lakes/Ohio Valley	56,080,995	18%	
Mid-Atlantic/Northeast	64,287,713	21%	**West**
Southeast	71,530,380	23%	**23%**
US	307,006,550		

Source: US Census, FQL, NGKF, & PPR

Top Five Markets in the US



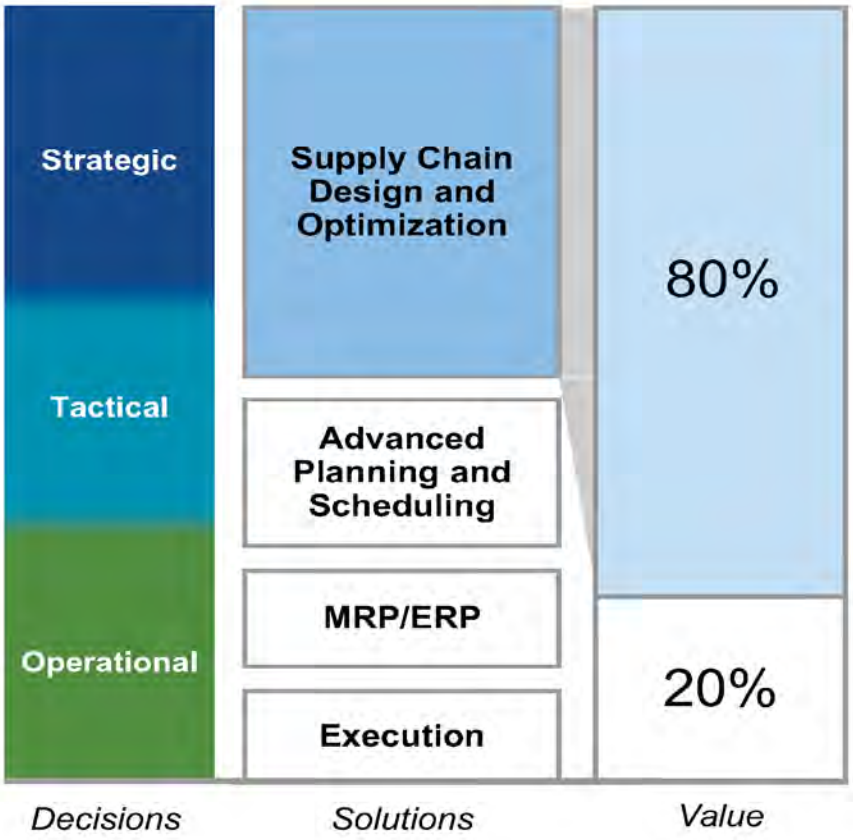
Logistics Market	1-Day TL Pop	Log Market >100 M sf
Los Angeles	46.5 M	581M
Chicago	83.4 M	431M
Atlanta	80.5 M	325M
Dallas	46.5 M	265M
N. New Jersey	93.3 M	231M

Source: Tim Feemster, Foremost Quality Logistics

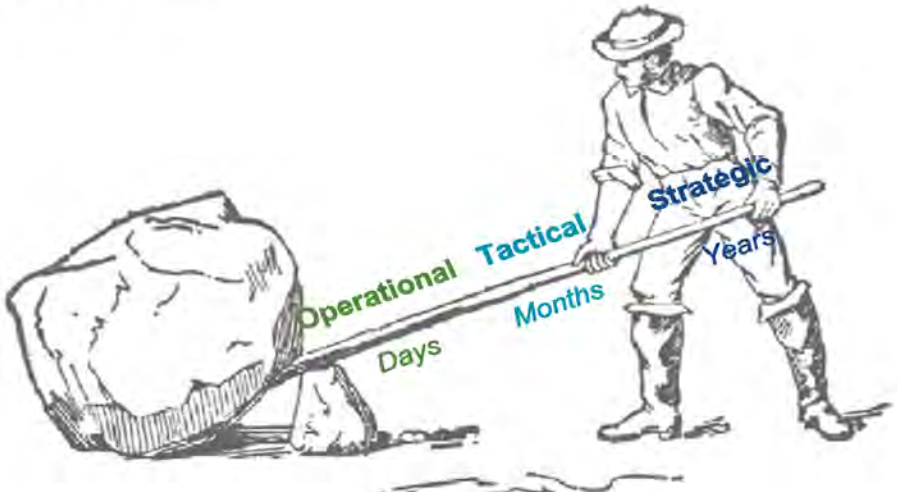
Always Know Where You are Going

Start With Supply Chain Strategy to Get Leverage

The majority of a supply chain's lifecycle costs are locked-in at the start.



- Overall strategy first, then specific sites and incentives
- Just like investment decisions – pick asset allocation first, then specific stocks, mutual funds, etc.



Source: Gartner / AMR Research

Los Angeles Industrial Sub Markets- Dray & Rent

Submarket	Rate($)
South Bay	$6.96/SF ($0.58)
Commerce/Mid-Cities	$6.24/SF ($0.52)
Industry	$5.28/SF ($0.44)
Chino	$4.08/SF ($0.34)
I.E. West	$3.72/SF ($0.31)
I.E. East	$3.12/SF ($0.26)

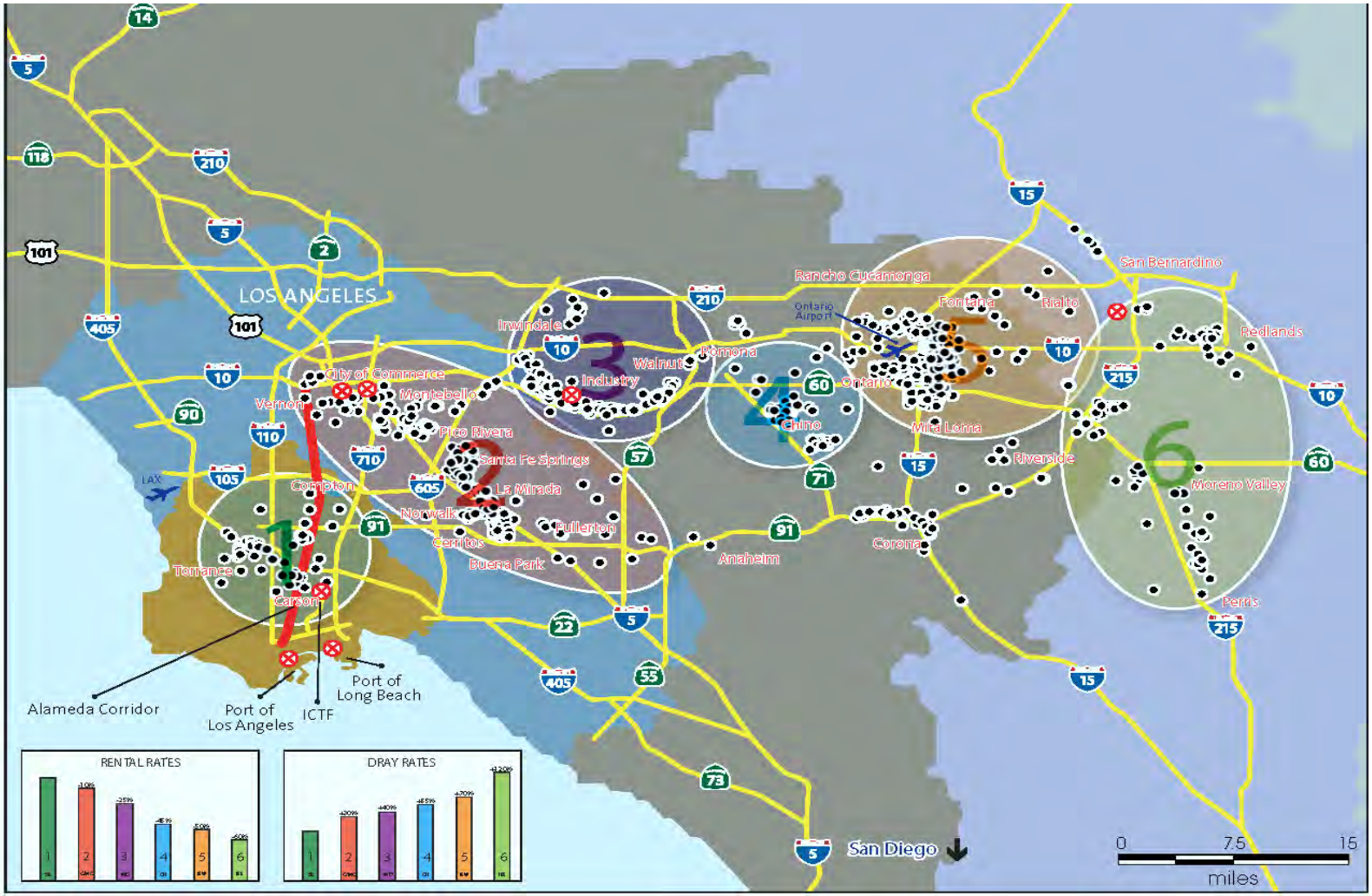
RAY RATES FROM PORTS* - Dec. 2011

Destination	Rate($)
arson	$155.00
ong Beach	$150.00
ancho Dominguez	$155.00
an Pedro	$155.00
ilmington	$155.00
ompton	$150.00
orrance	$170.00
erritos	$175.00
ommerce	$175.00
uena Park	$180.00
a Palma	$180.00
anta Fe Springs	$185.00
ico Rivera	$190.00
a Mirada	$180.00
os Angeles	$185.00
ernon	$185.00
ity of Industry	$210.00
ullerton	$185.00
ontebello	$185.00
ntario	$275.00
orona	$275.00
ira Loma	$285.00
ancho Cucamonga	$275.00
ontana	$275.00
ialto	$345.00
olton	$315.00
edlands	$350.00
iverside	$300.00
an Bernardino	$340.00
oreno Valley	$375.00

Fuel Surcharge, Traffic Mitigation & Clean Truck
ees Not Included

DRIVE TIME DURING PEAK HOURS

- 30 Minute Drive Time
- 1 Hour Drive Time
- 2 Hour Drive Time
- 3 Hour Drive Time
- Intermodal Sites
- Class A & B Whse/Dist. Properties 100,000 SF +



Source: Terry Reitz, NGKF

LA Drayage Calculator- Total Occupancy Analysis

Assumptions:		
Warehouse Square Feet	150,000	
Containers/Month	200	
Building Type	Class A	
Fuel Surcharge ("FSC")	27.50%	
Outbound Transportation	Cost Neutral	
Traffic Mitigation Fee ("TMF")	$123	per 40' container
Clean Truck Program ("CTP")	$50	per 40' container

*A. The Department of Energy (DOE) Index for 'Diesel Fuel Prices' in ***California*** is used for determining the Fuel Surcharge percentage

B. The DOE Index can be accessed at http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp

Dray Cost	Dray Rate	Dray Fully Loaded (FSC and	Traffic Mit Fee	Containers/ Mo	Dray Cost/Mo	Dray Cost/Yr
Carson (Port adjacent)	**$155**	**$268**	**Pier Pass**	200	$53,525	$642,300
Buena Park	**$180**	**$280**	**Pier Pass**	200	$55,900	$670,800
Industry	**$210**	**$318**	**Pier Pass**	200	$63,550	$762,600
Ontario (IE West)	**$275**	**$401**	**Pier Pass**	200	$80,125	$961,500
Moreno Valley (IE East)	**$370**	**$522**	**Pier Pass**	200	$104,350	$1,252,200

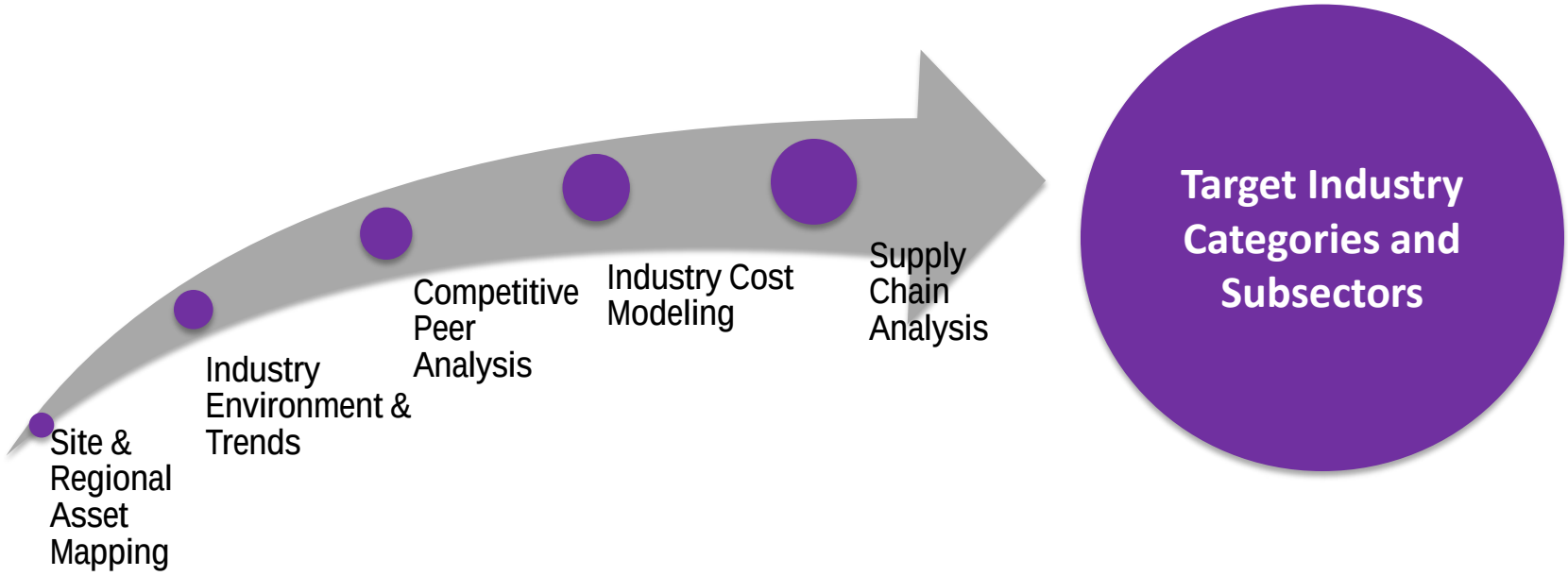
Occupancy Cost Plus Dray Cost	Market Net Rent/SF	SF	Net Rent/Mo	Total Operating Expense/M	Total Occupancy Cost/Mo	Dray Cost/Mo	Total Occupancy plus Dray
Carson (Port adjacent)	**$0.60**	150,000	$90,000	$18,000	$108,000	$53,525	$161,525
Buena Park	**$0.50**	150,000	$75,000	$18,000	$93,000	$55,900	$148,900
Industry	**$0.44**	150,000	$66,000	$18,000	$84,000	$63,550	$147,550
Ontario (IE West)	**$0.35**	150,000	$52,500	$16,500	$69,000	$80,125	$149,125
Moreno Valley (IE East)	**$0.31**	150,000	$46,500	$15,000	$61,500	$104,350	$165,850

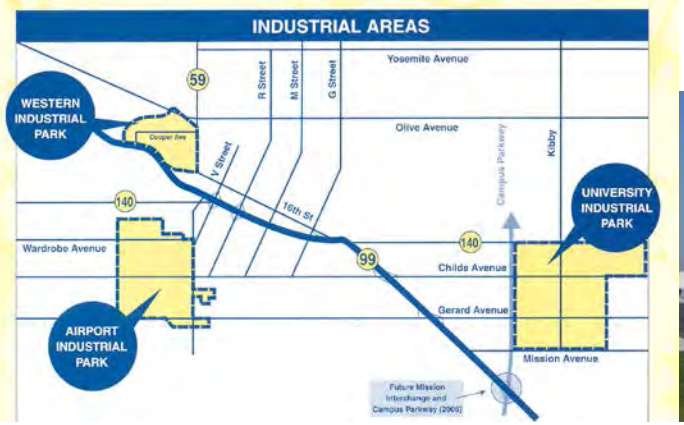
Transport Break-Even Per Building SF	
(Additional Transport Cost Compared to South Bay)	
Carson (Port adjacent)	$0.00
Buena Park	$0.02
Industry	$0.07
Ontario (IE West)	$0.18
Moreno Valley (IE East)	$0.34

Total Cost Difference	Total Occupancy Cost/SF	Dray Cost/SF	TotalCost/Building SF
Carson (Port adjacent)	$0.72	$0.36	**$1.08**
Buena Park	$0.62	$0.37	**$0.99**
Industry	$0.56	$0.42	**$0.98**
Ontario (IE West)	$0.46	$0.53	**$0.99**
Moreno Valley (IE Eas	$0.41	$0.70	**$1.11**

Source: Terry Reitz, NGKF

Reverse Site Selection- Industry Evaluation Process for Industrial and Manufacturing Target Assets

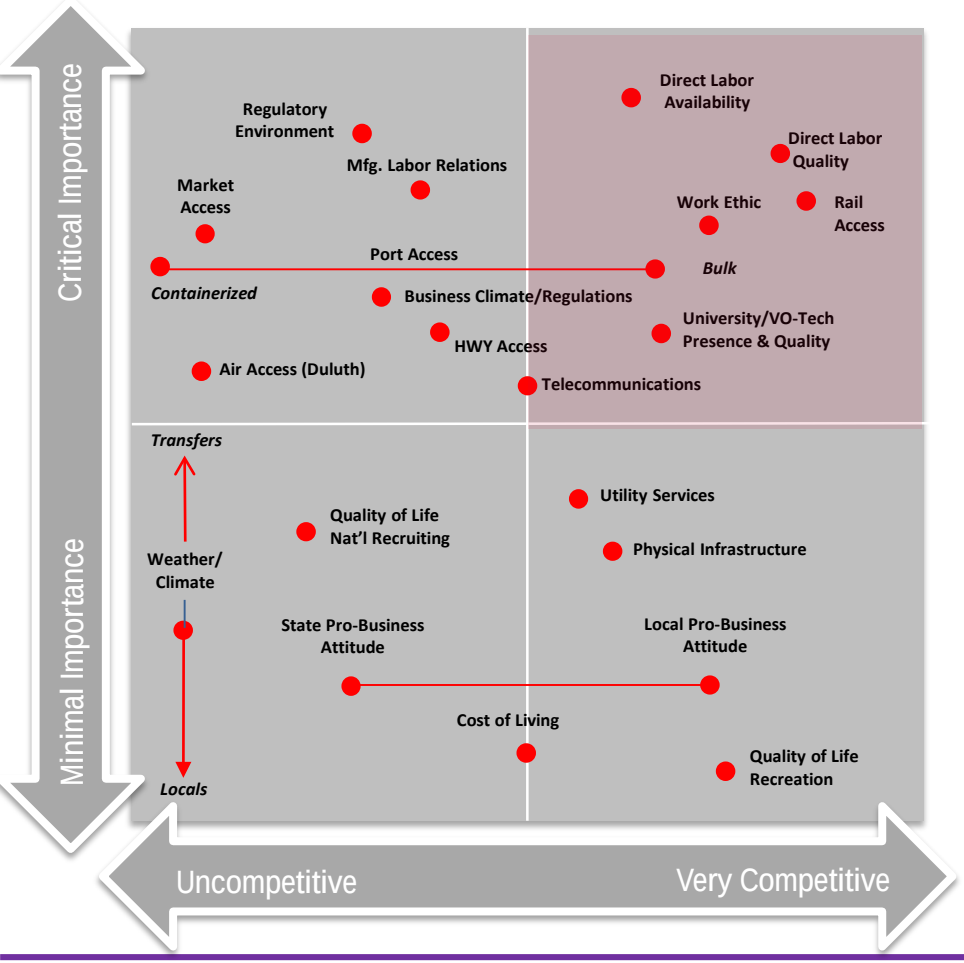




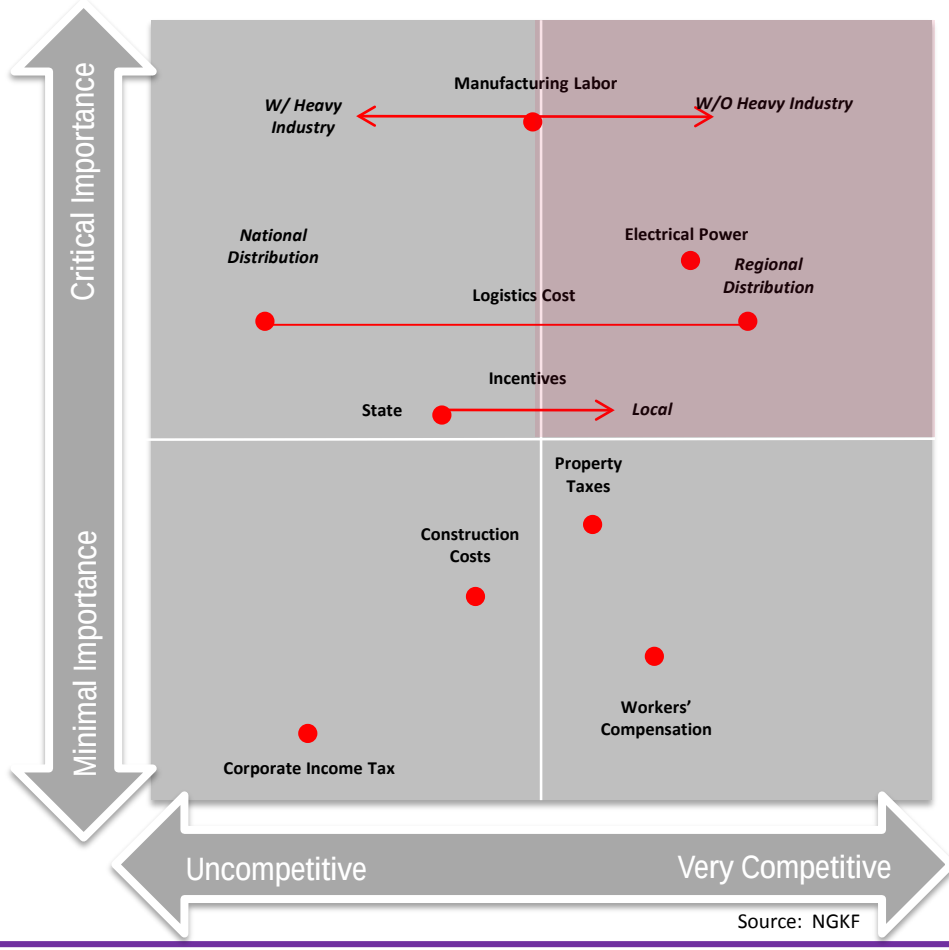
Source: Foremost Quality Logistics. City of Merced, & Liberty Property Trust

Mapping Assets & Industry Needs

Local Assets



Local Costs



Source: NGKF

Location Screening for Industrial/Manufacturing

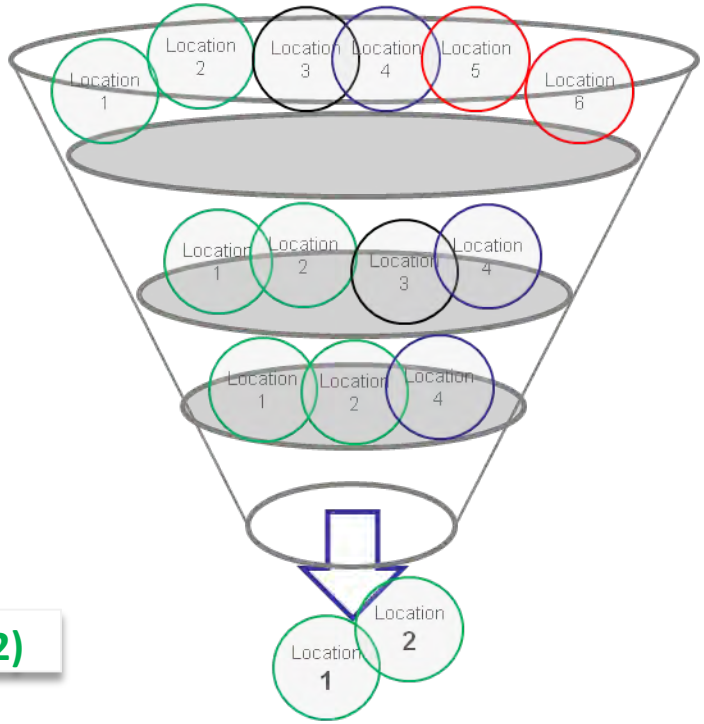
Let the data lead us. Identify locations by looking at everything at the start instead of artificially starting with a set of predefined "preferred" or "best-in-class" areas.

First Pass: Fatal Flaws
Screen out locations with fatal flaws e.g. Locations with insufficient connectivity or high logistics cost.

Second Pass: Major Flaws
Rule out Locations with major flaws e.g. Locations with key attributes but inadequate infrastructure like no intermodal, international airport or seaport access.

Third Pass: Manageable Flaws
Consider Locations that meet all critical criteria but have manageable issues – flaws that can be remedied or mitigated through negotiations with government officials

Preferred and back-up Locations (1-2)



Quantitative Analysis And Desktop Research Identify All Site Selection Criteria

Site Due Diligence, Qualitative Data Gathering, and Cost Modeling

Short List of Preferred Locations and Sites

Source: Tim Feemster, Foremost Quality Logistics

Real Estate & Infrastructure Needs

Source: Josh Bays- Site Selection Group

1 Real Estate

EXISTING BUILDINGS

- FDA & USDA buildings are in short supply
- Building conversion for food use is difficult
- Concrete construction, adequate building drainage, deliberate building layout, and sealed environment typically preferred

DEVELOPABLE READY SITES

- Mitigate cost and time to develop

2 Infrastructure

WASTEWATER

- Ability to handle high capacity effluent with high BOD content

WATER

- High capacity of quality water at an affordable rate

ELECTRIC

- Reliable and redundant power

NATURAL GAS

- Access to high capacity of natural gas

3 Other Characteristics

ADJACENT LAND USE

- Avoid heavy industrial uses that could cause containments, or agricultural uses that attract vermin

PROXIMITY TO SURFACE WATER

- Minimize exposure to water detention & retention ponds, creeks, wetlands, etc.

PREVIOUS BUILDING & SITE USE

- Redeveloped food processing opportunities require an environmentally conscious prior use.

What about Site Selection & Using a Professional

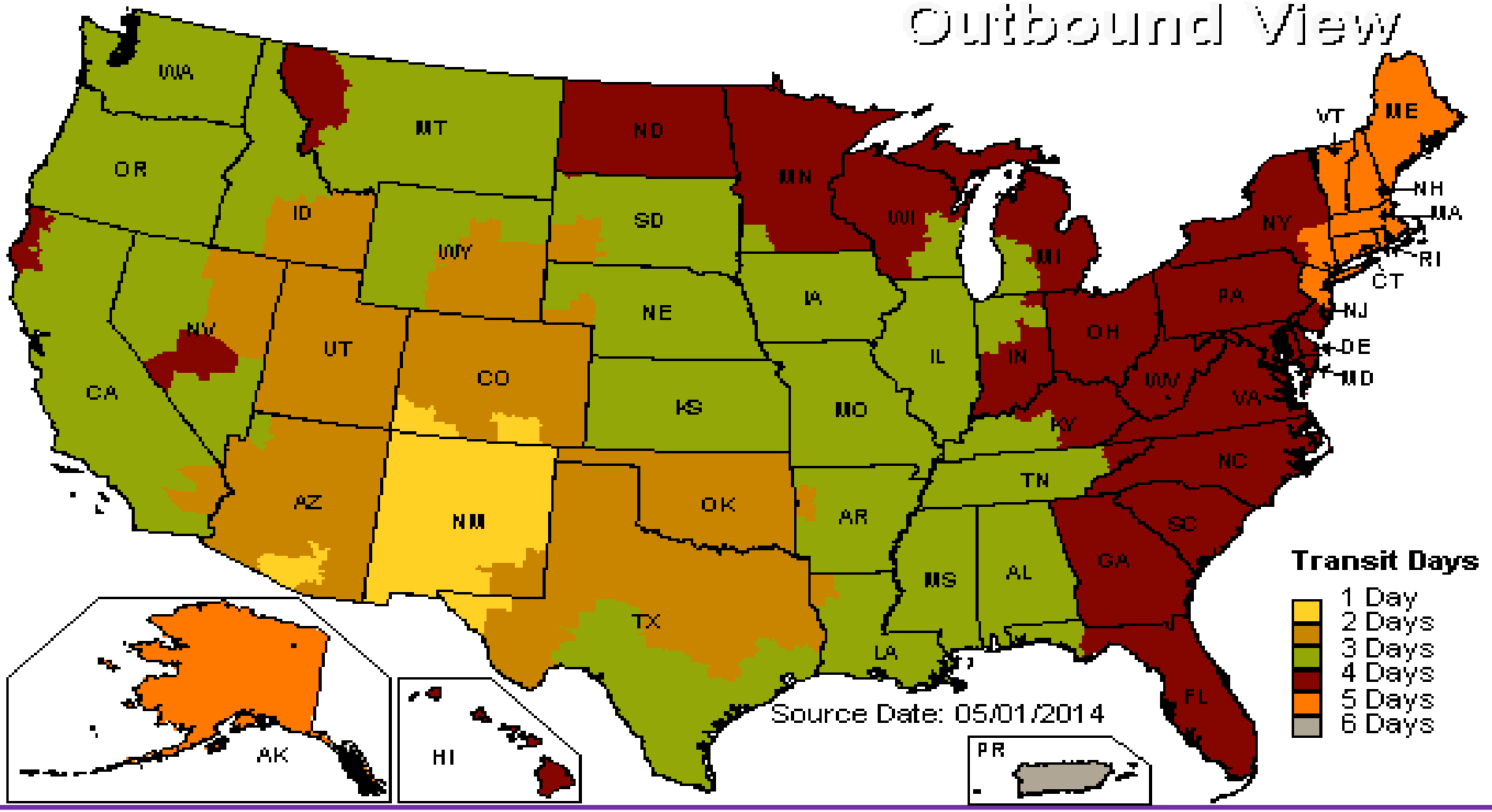
- Site selection is both an art and a science, best handled by professionals
- Almost all companies are risk averse
- Most company employees have never moved a site in their existing company or even their entire career
- I have done over 100 start-ups in my career, most site selectors have not done that many
- Many site selection companies have specialties- incentives, taxes, data centers, etc. but don't team with others
- You may know more about a subject than the site selection company. Use this to your advantage?
- Incentives rarely make a bad location a good one, be careful
- We are site eliminators, not selectors

Source: Tim Feemster, Foremost Quality Logistics

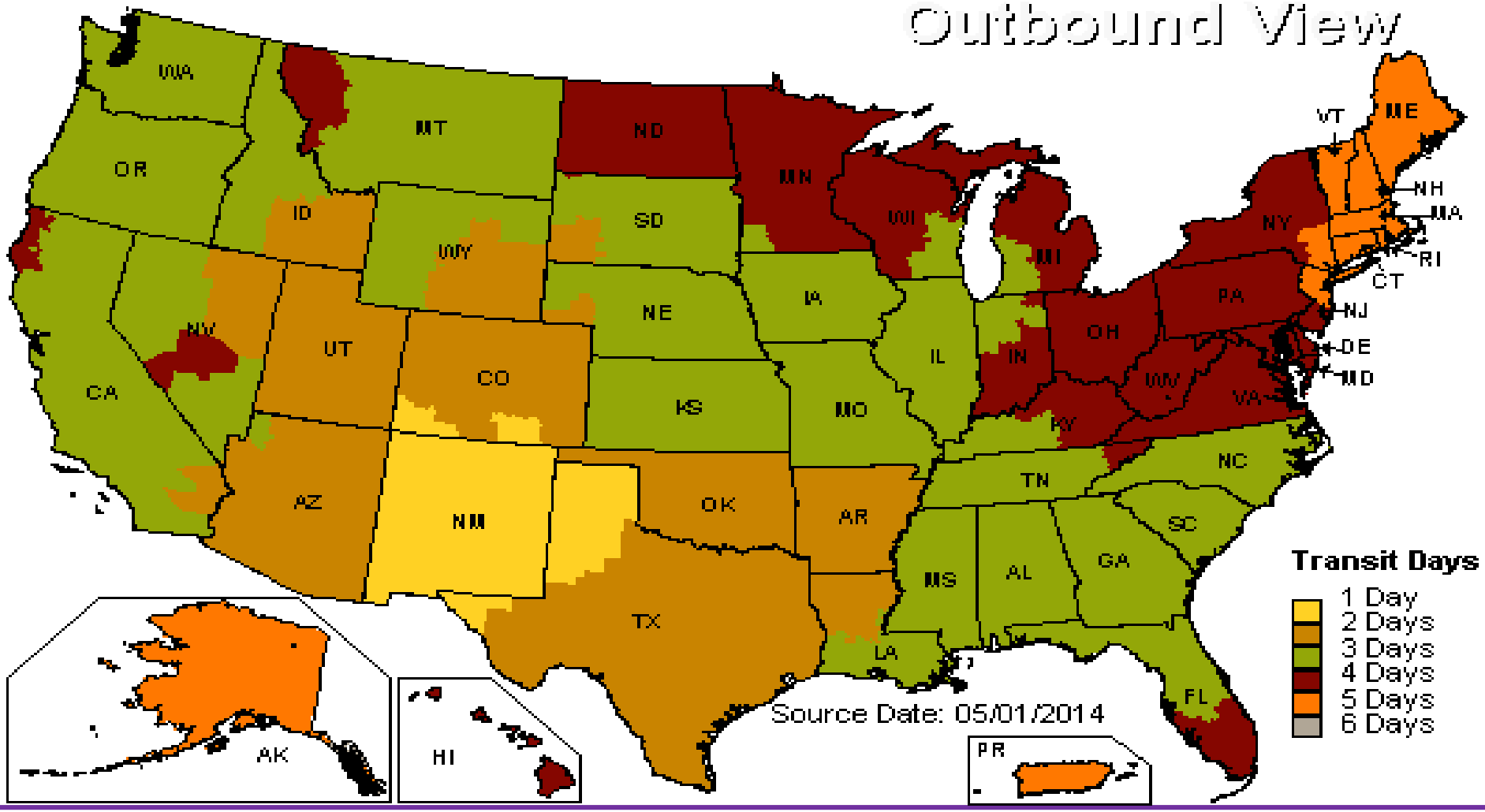
We Track ALL Shipments & Yes, We Know EXACTLY Where Yours Is!

Now Let's Discuss ecommerce Deliveries

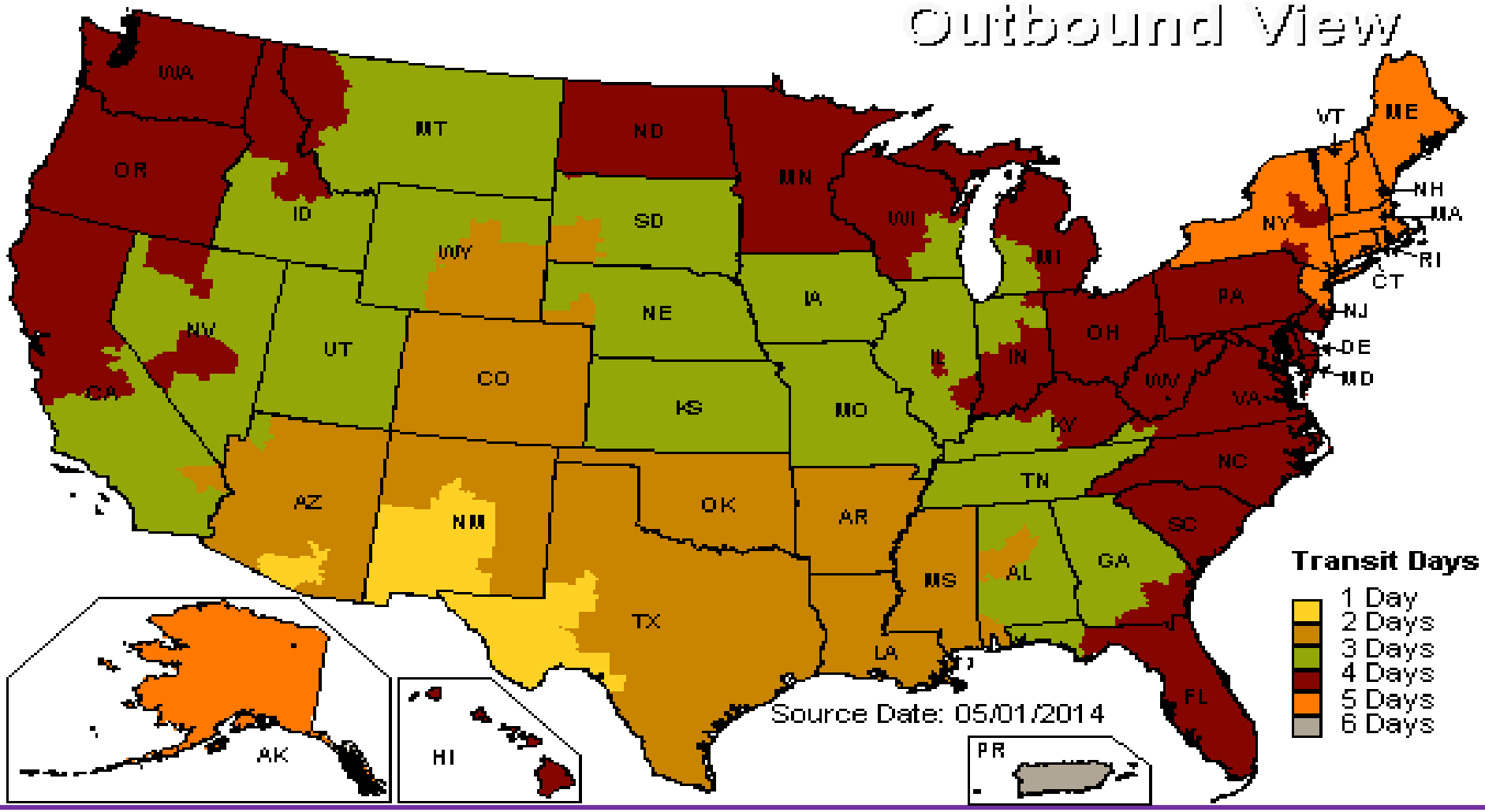
UPS Next Day Ground, Las Cruces, 88001



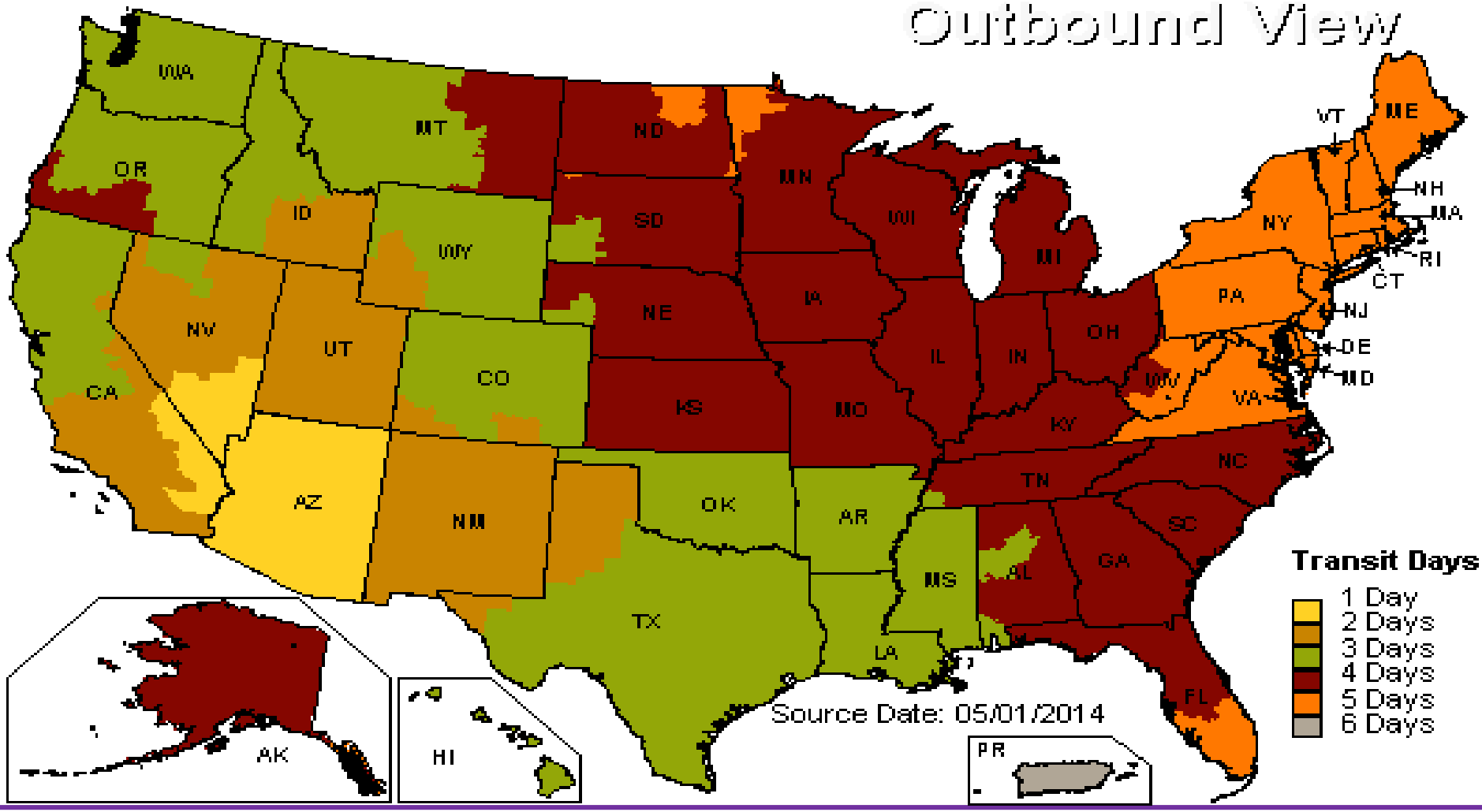
UPS Next Day Ground, Albuquerque, 87110



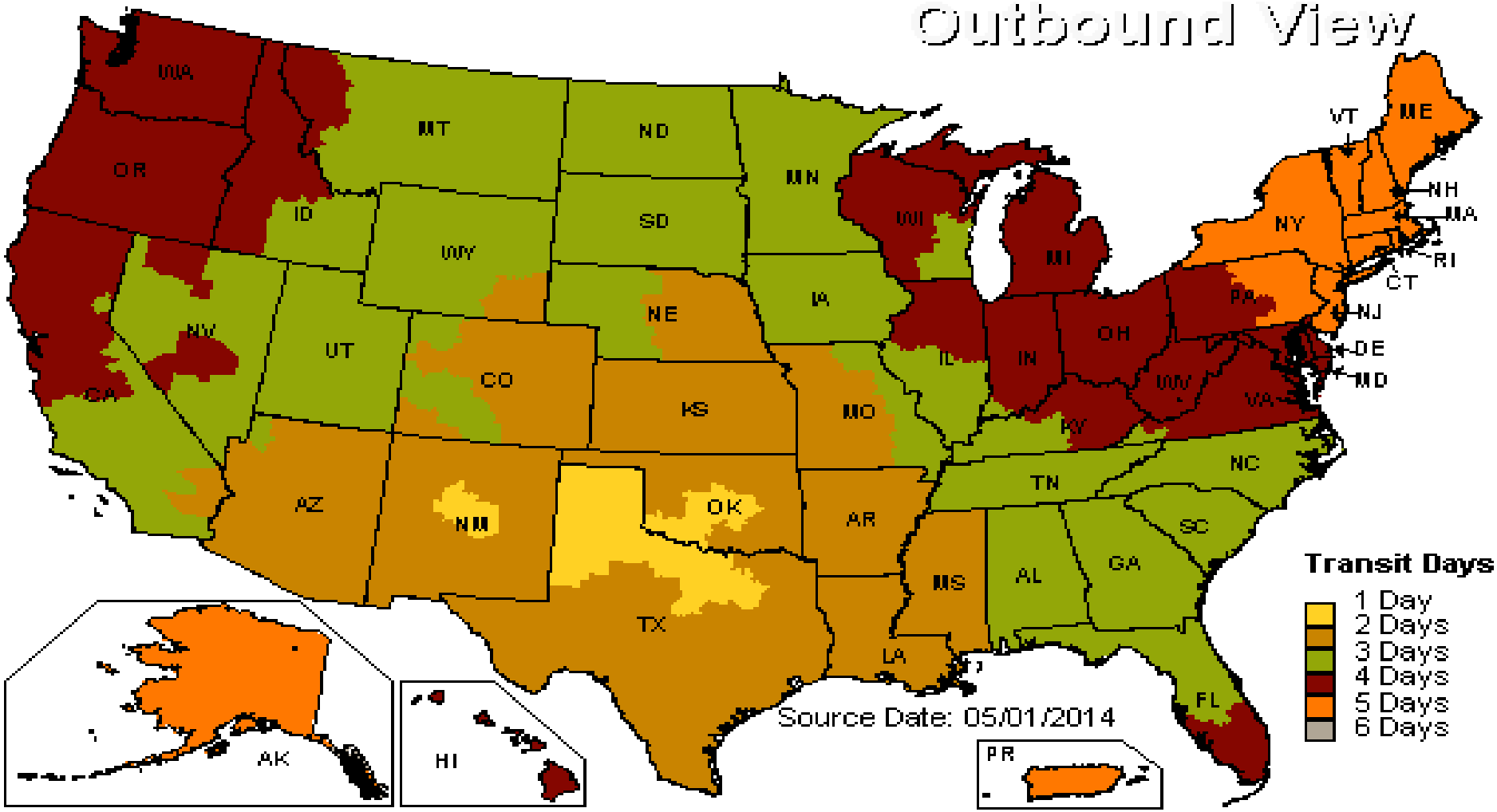
UPS Next Day Ground, El Paso, 79906



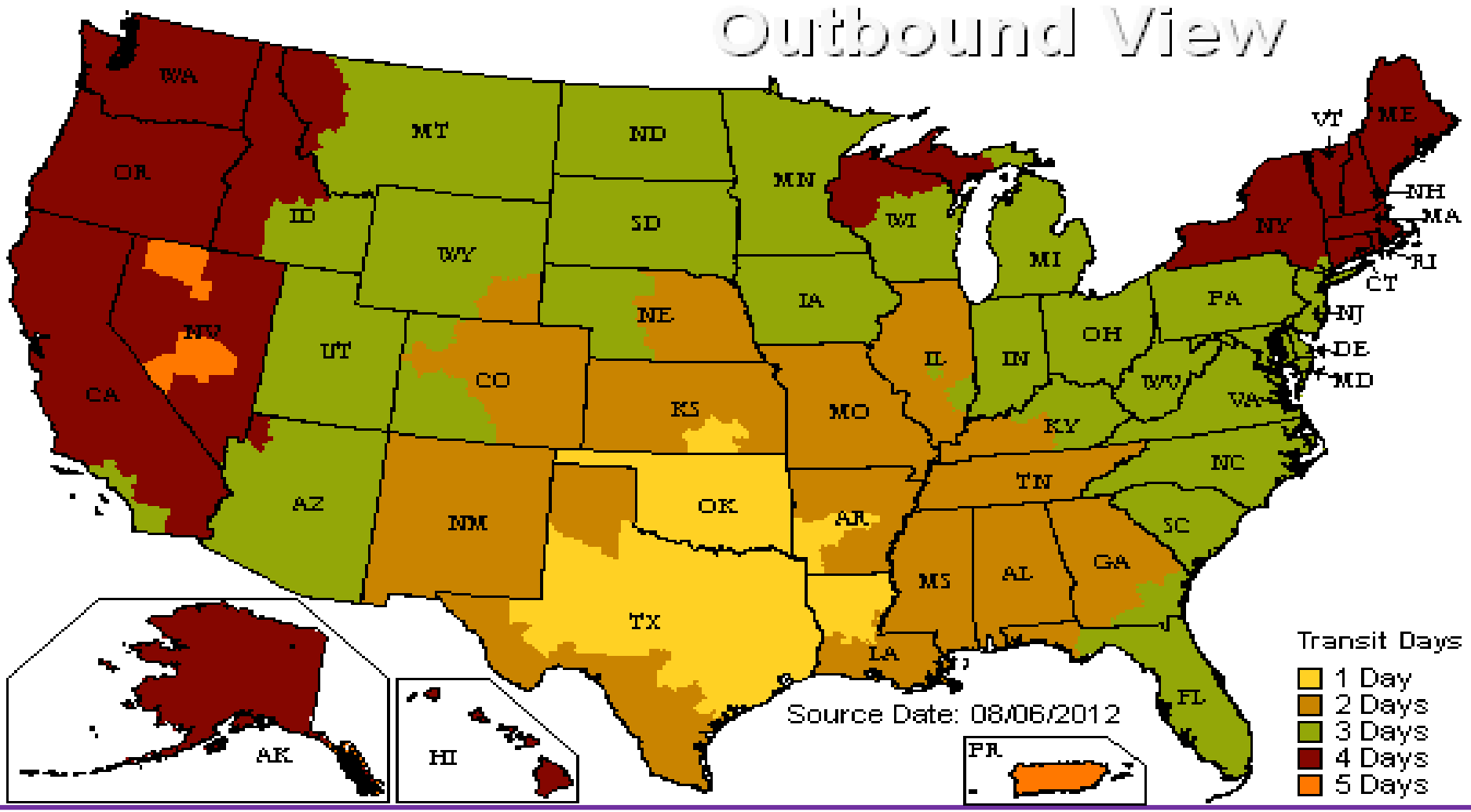
UPS Next Day Ground, Phoenix, 85017



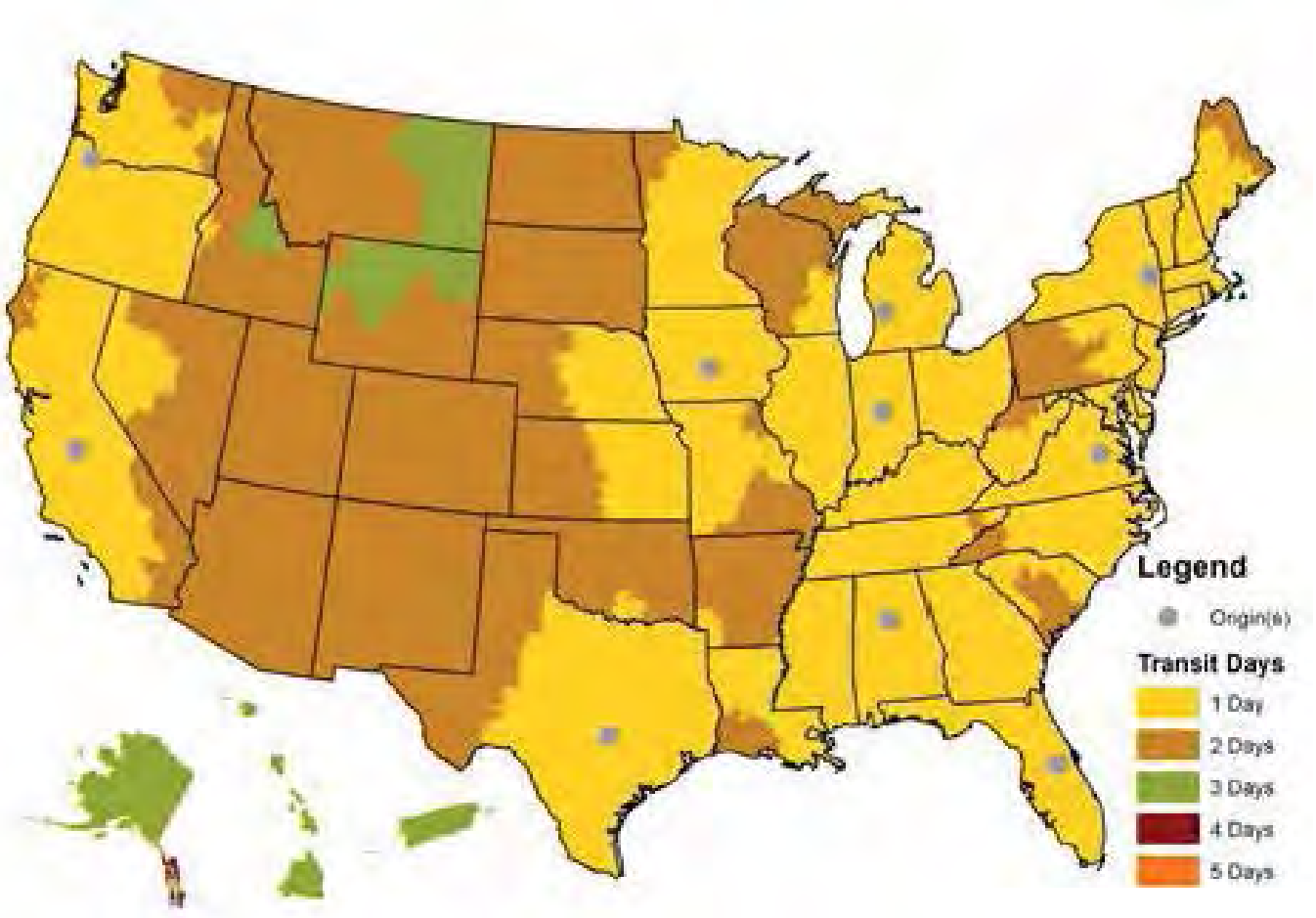
UPS Next Day Ground, Lubbock, 79404



UPS Next Day Ground, DFW



UPS Delivery Optimization- 10 DCs



Site selection assumes 10 DCs:

- Albany, NY 12202
- Austin, TX 78701
- Birmingham, AL 35203
- Des Moines, IA 50316
- Fresno, CA 93728
- Grand Rapids, MI 49503
- **Indianapolis, IN 46268**
- Orlando, FL 32824
- Portland, OR 97217
- Richmond, VA 23173

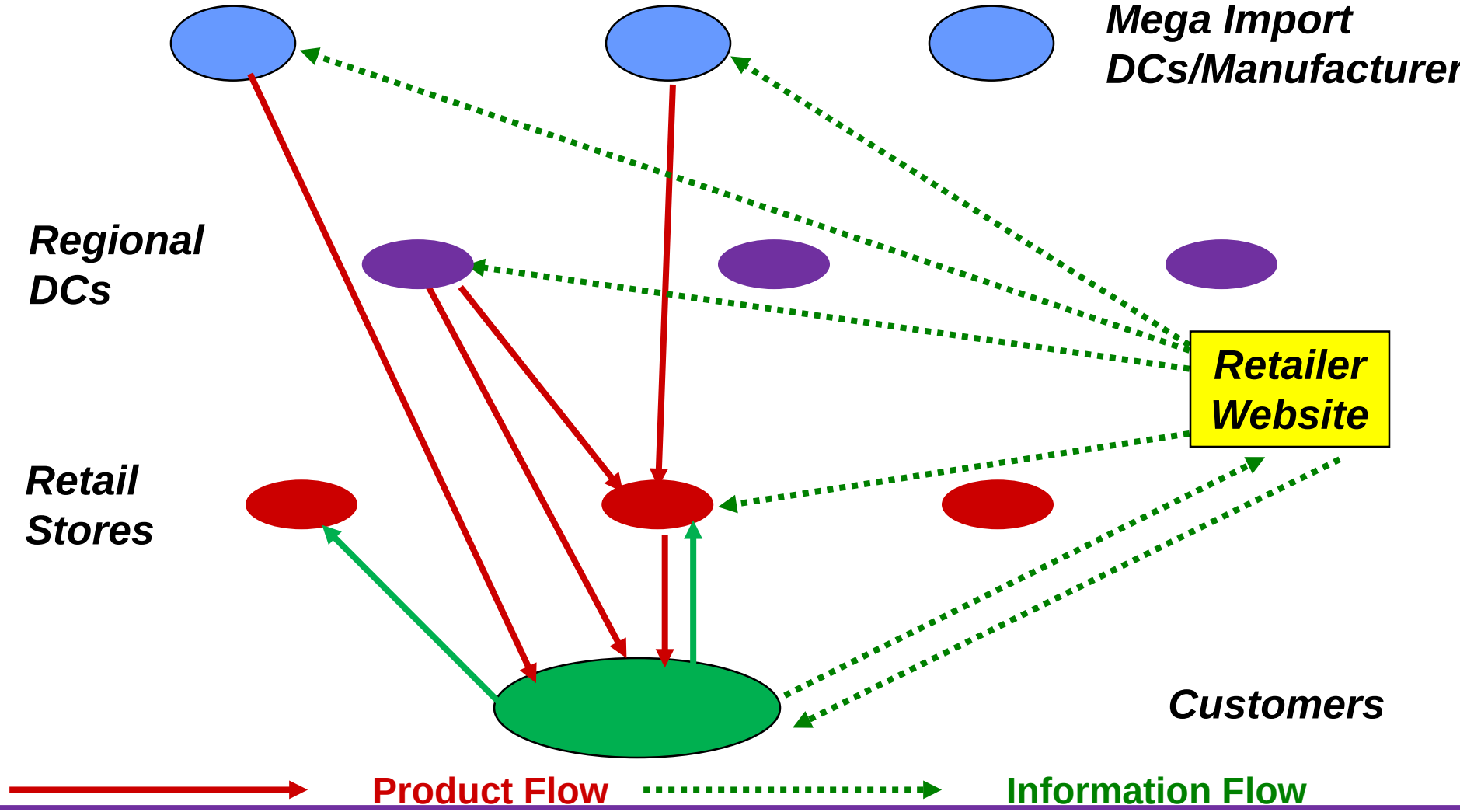
Average Transit Time- 1.16 days

Transit Days:

1 Day	84.7%
2 Day	14.5%
3 Day	0.7%
4 Day Plus	0.0%

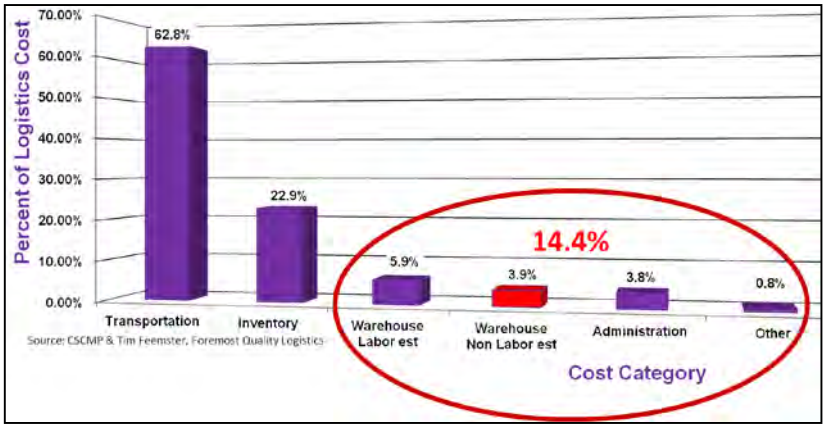
Source: UPS; Uses US Census data and UPS's Ground Network, & 10 DCs

OmniChannel Distribution- Amazon/Walmart



Top 10 Site Selection Criteria-
Warehouse/Distribution- Dry

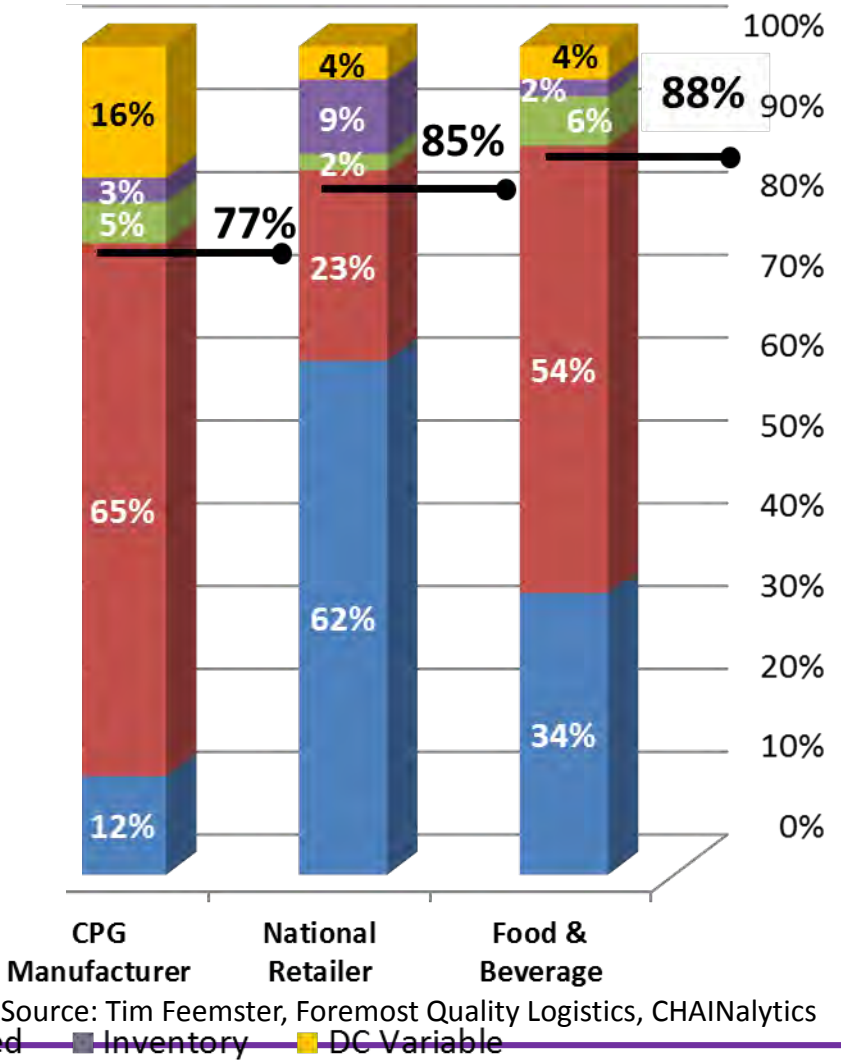
1. Transportation costs – both inbound and outbound
2. Logistics infrastructure – highways, intermodal, rail, FTZ
3. Labor costs, availability, & skills
4. Supply Chain interruption risk
5. Business climate- is there love
6. Rent /lease terms/ownership
7. Taxes & incentives
8. Utility rates
9. CAM charges
10. Access to public transportation- Have you done a drive time study for your workforce?



Source: Tim Feemster, Foremost Quality Logistics

Top 10 Site Selection Criteria-
Food Warehouse/Distribution Frozen

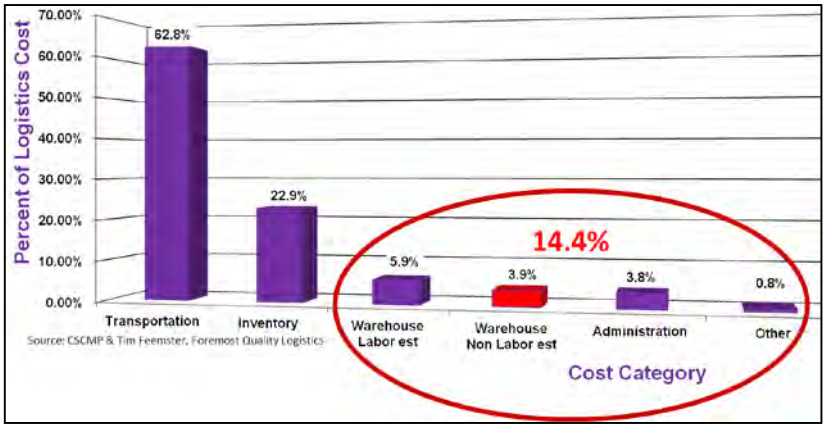
1. Transportation costs – both inbound and outbound
2. Utility rates/capacity for power, water & sewer
3. Logistics infrastructure – highways, intermodal, rail, FTZ
4. Labor costs, availability, & skills
5. Business climate- is there love
6. Supply Chain interruption risk
7. Rent /lease terms/ownership
8. Taxes & incentives
9. CAM charges
10. Access to public transportation- Have you done a drive time study for your workforce?



Source: Tim Feemster, Foremost Quality Logistics, CHAINalytics

Top 10 Site Selection Criteria- **Manufacturing**

1. Labor skills, costs, & availability
2. Transportation costs – both inbound and outbound
3. Supply Chain & business interruption risk
4. Logistics infrastructure – highways, intermodal, rail, FTZ
5. Utility rates
6. Business climate- is there love
7. Taxes & incentives
8. Rent /lease terms/ownership
9. CAM charges
10. Access to public transportation- Have you done a drive time study for your workforce?



Source: Tim Feemster, Foremost Quality Logistics

Supply Chain Trends for 2014 and Beyond

1. **Companies move beyond ERP and portals to work with trading partners**
   - Networked companies come out ahead- collaboration works
   - Siloed companies are falling behind- make sure you network inside clients
2. **Big data makes a difference if managed well**
   - Mobile computing, interfaces, and data entry are the future
   - Integrated SC modules drive data driven decision making
   - Key performance indicators (KPIs) drive successfully manage service levels
3. **Responsibility, transparency, and traceability important strategies**
   - Sustainability matters in supply chains and buildings
4. **Speed to market is important- think of Amazon same day**
   - Omni channel distribution will become the norm
5. **Planning for supply chain risk and disruption**
6. **Supply chain gains prominence at the C-level for strategy & execution**
7. **Interest rate volatility will send shocks through global trade**

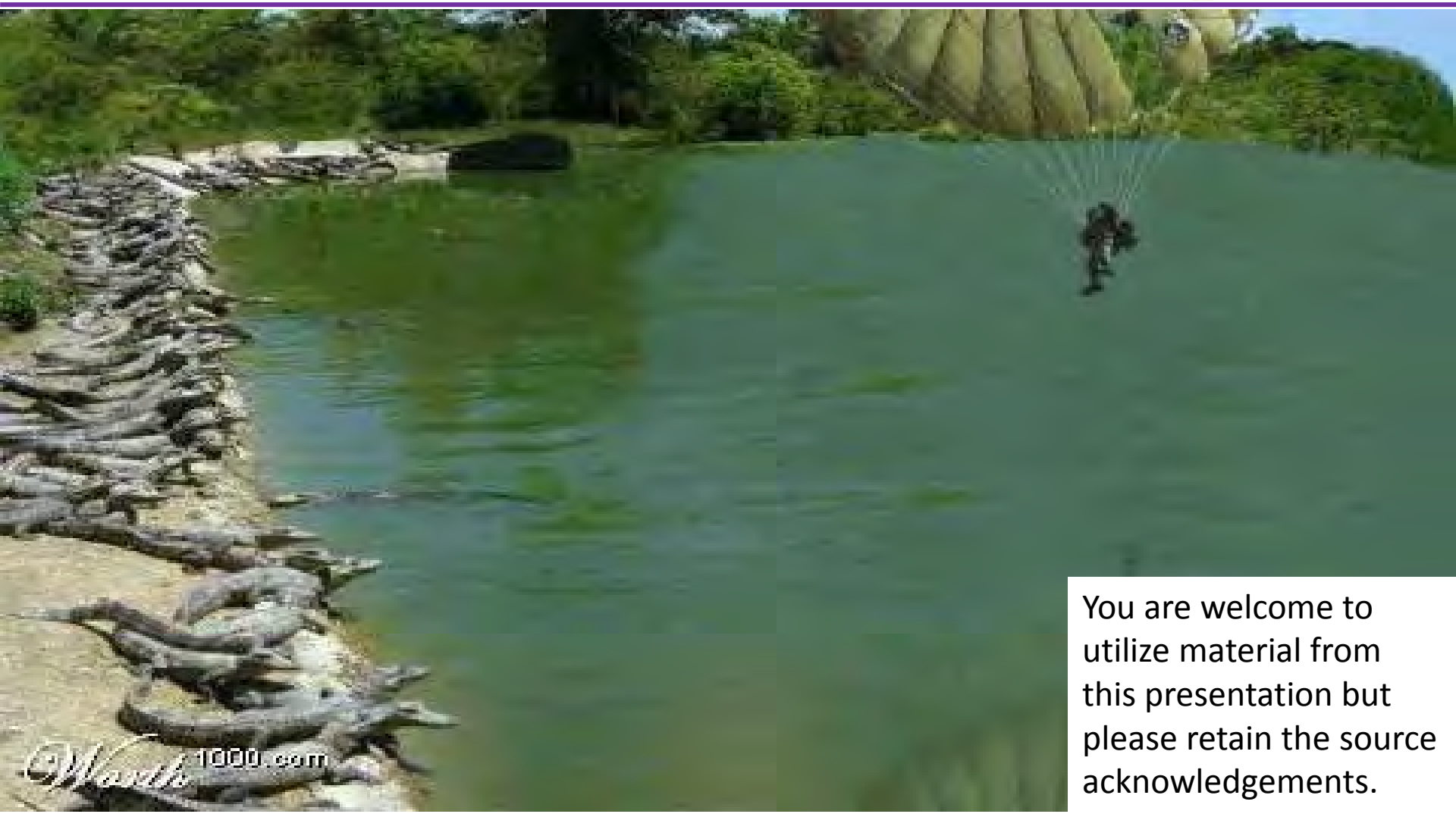
Source: Foremost Quality Logistics; Boris Felgendreher is marketing manager Europe at GT Nexus

What does the Future Hold?

1. Mobile, social, and e commerce will continue to explode
2. Omnichannel distribution will be a “norm”
3. Transportation & port infrastructures will be more gridlocked & landlocked
4. Diesel prices for transportation will remain volatile but on average increasing
5. Customers will expect faster and more predictable lead times
6. Global trade activity will grow, but so will its costs, risks, and complexities
7. There will be more sources of financial and operational risk with shifting manufacturing from China centric to other Asia and Mexico locations
8. Sustainability initiatives will have greater influence on supply chain networks (transportation), facility construction (lighting; HVAC; roofing; landscapes), and transportation choices (modal shifts; CNG/LNG as fuel)
9. Ageing populations will create labor force size and skills constraints in Trucking, Logistics and Manufacturing
10. The rules for lease accounting may change the Rent vs. Buy vs. 3PL decision in some companies

Source: Tim Feemster, Foremost Quality Logistics

Soon, I am going to be up to my neck in **ALLIGATORS**- What Questions do You Have?



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