

# AAPA 2017 PLANNING FOR SHIFTING TRADE

## Logistics and Distribution Center Site Selection Strategies

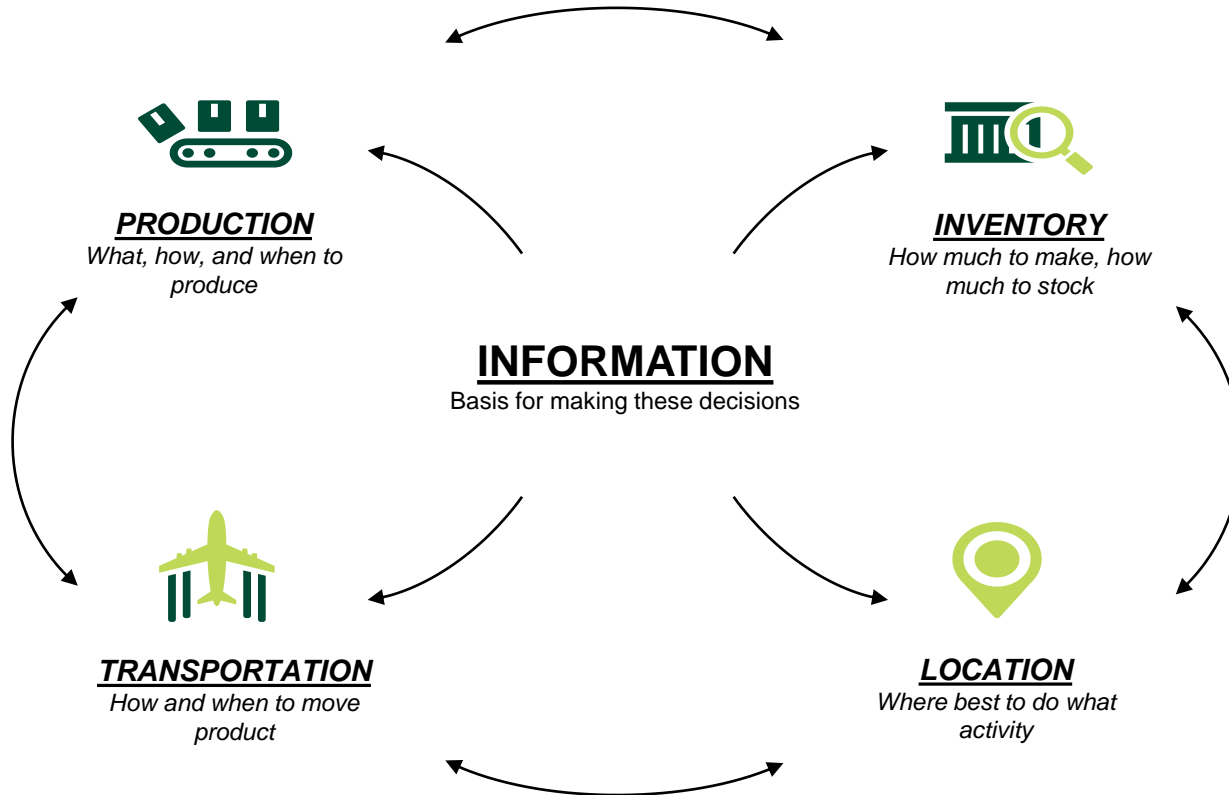
*Joe Dunlap, MANAGING DIRECTOR – Supply Chain Services*

FEBRUARY 3<sup>RD</sup>, 2017

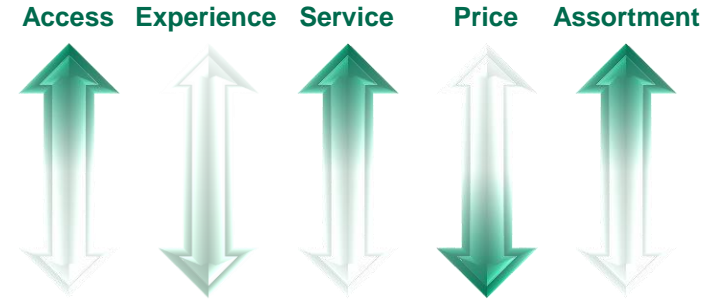
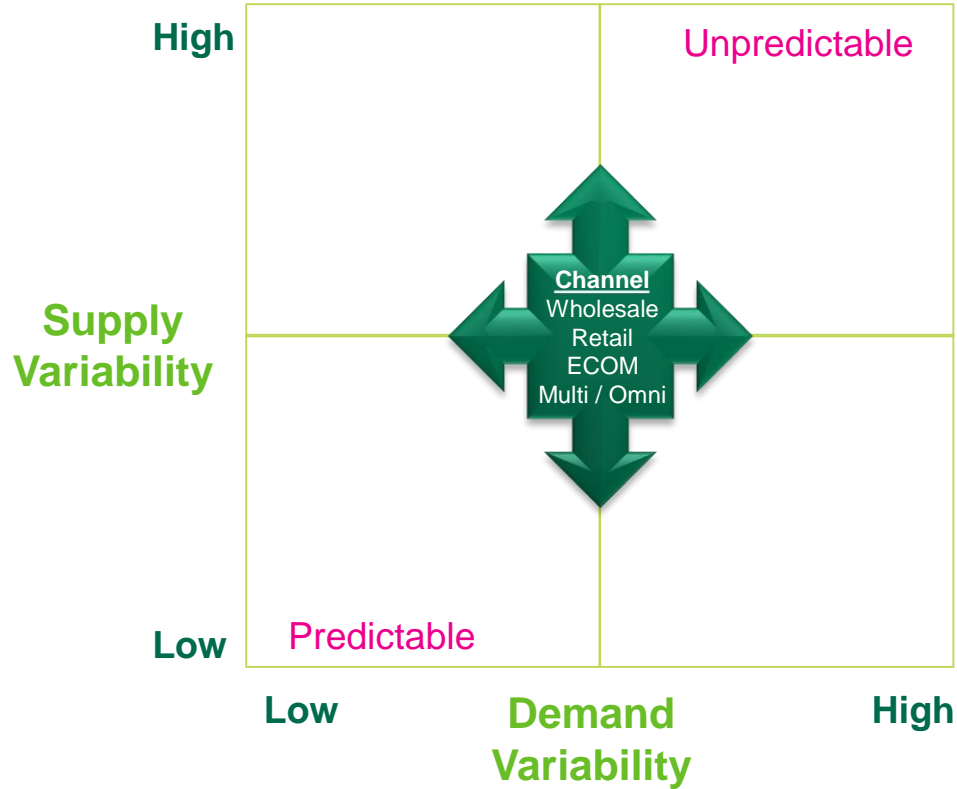
A large, modern industrial warehouse with a high ceiling and a complex steel truss structure. The ceiling is illuminated by numerous bright, recessed lights. In the foreground, a yellow and white forklift is parked on the right side. The floor is a smooth, light-colored concrete. In the background, there are stacks of materials, possibly wood or metal, and other industrial equipment. The overall atmosphere is clean and professional.

# SUPPLY CHAIN STRATEGY

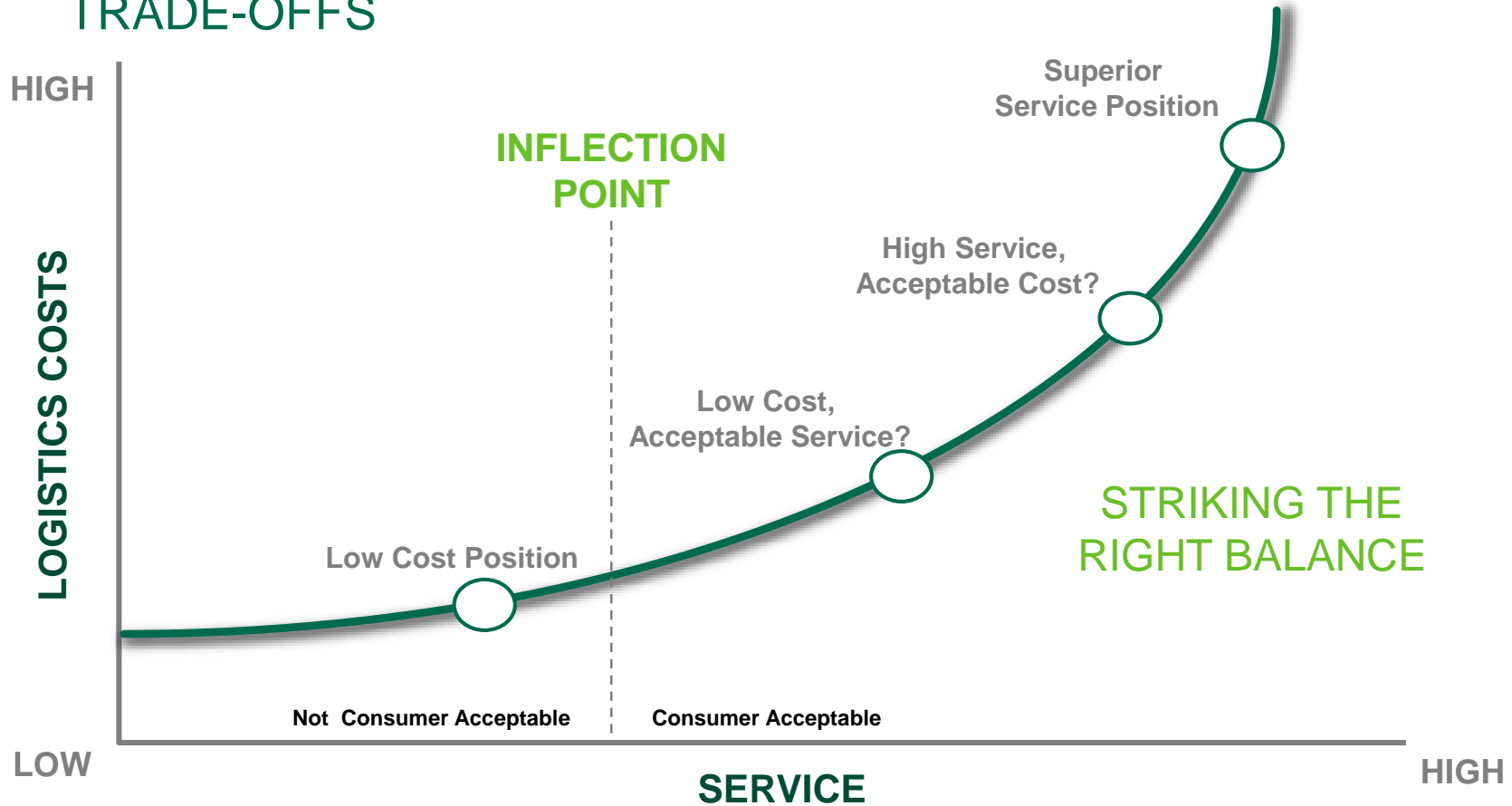
# PROBLEM STATEMENT



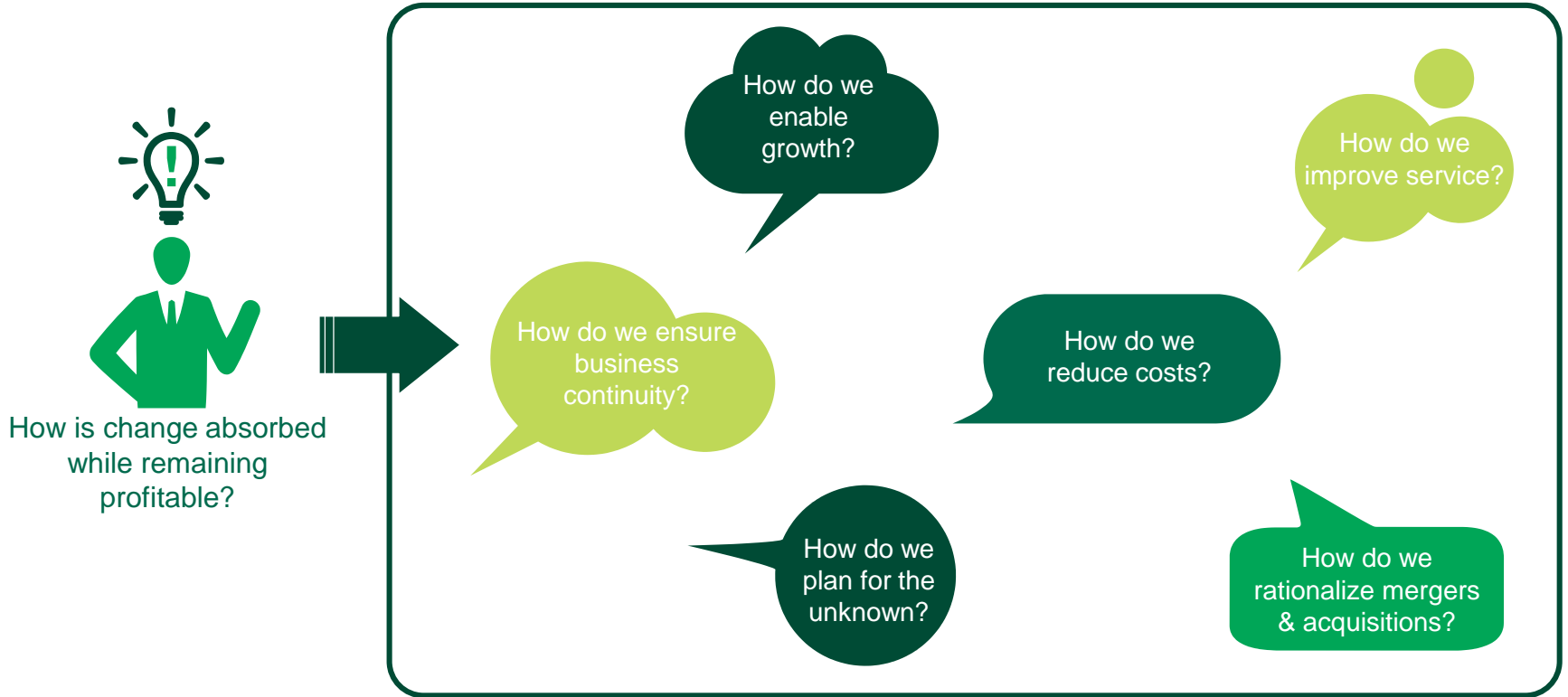
# SUPPLY CHAIN STRATEGY FRAMEWORK



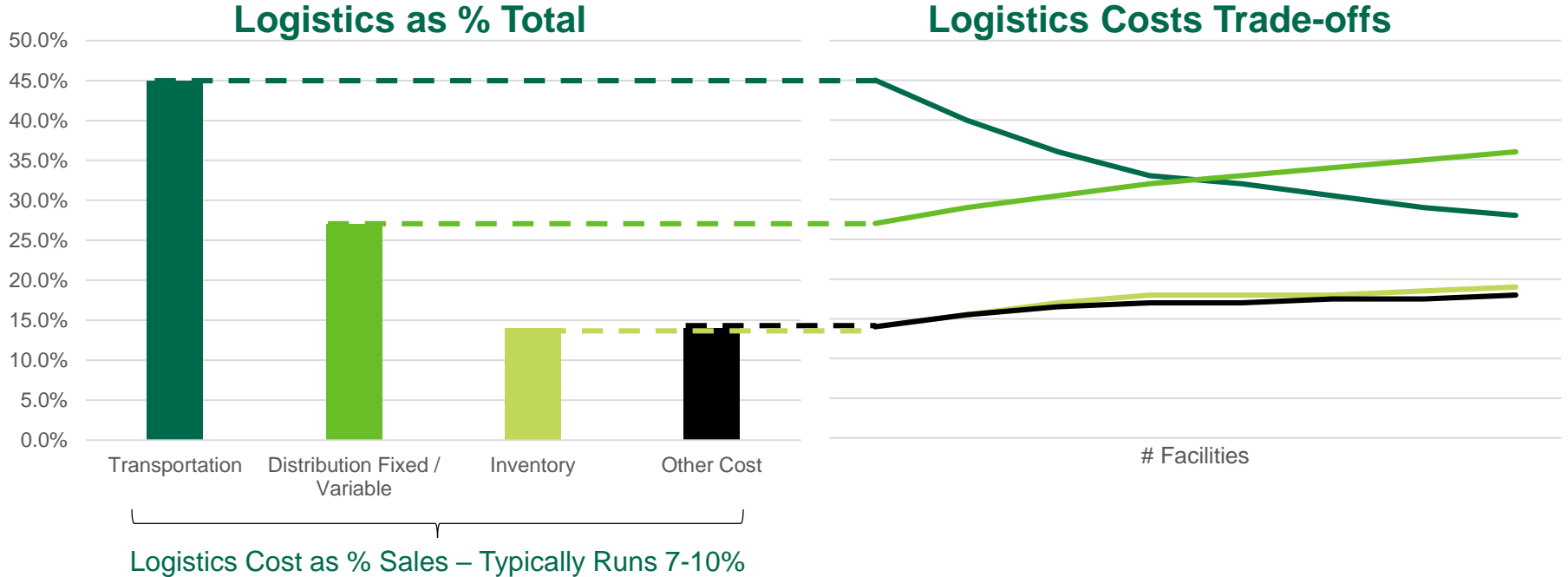
# TRADE-OFFS



# BUSINESS IMPERATIVES



# LOGISTICS OPERATING COSTS

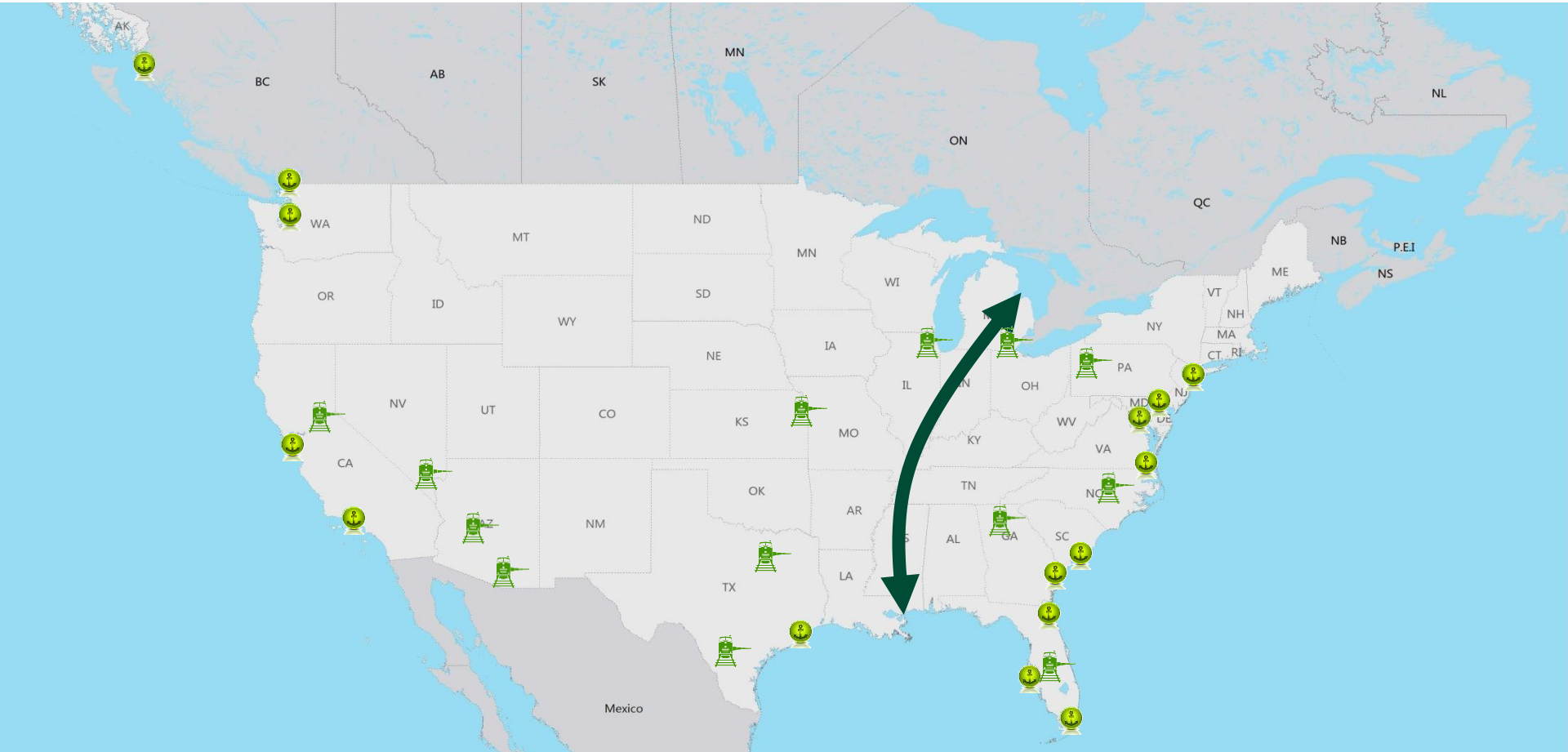


A large, modern industrial warehouse with a high ceiling and a complex steel truss structure. The ceiling is illuminated by numerous bright, recessed lights. In the foreground, a yellow forklift is parked on the right side. The floor is a smooth, light-colored concrete. In the background, there are various industrial equipment, including pallet racks and other forklifts, suggesting a busy manufacturing or logistics environment.

TRANSPORTATION &  
INFRASTRUCTURE



# TRANSPORTATION & THE COST EQUIVALENCE LINE



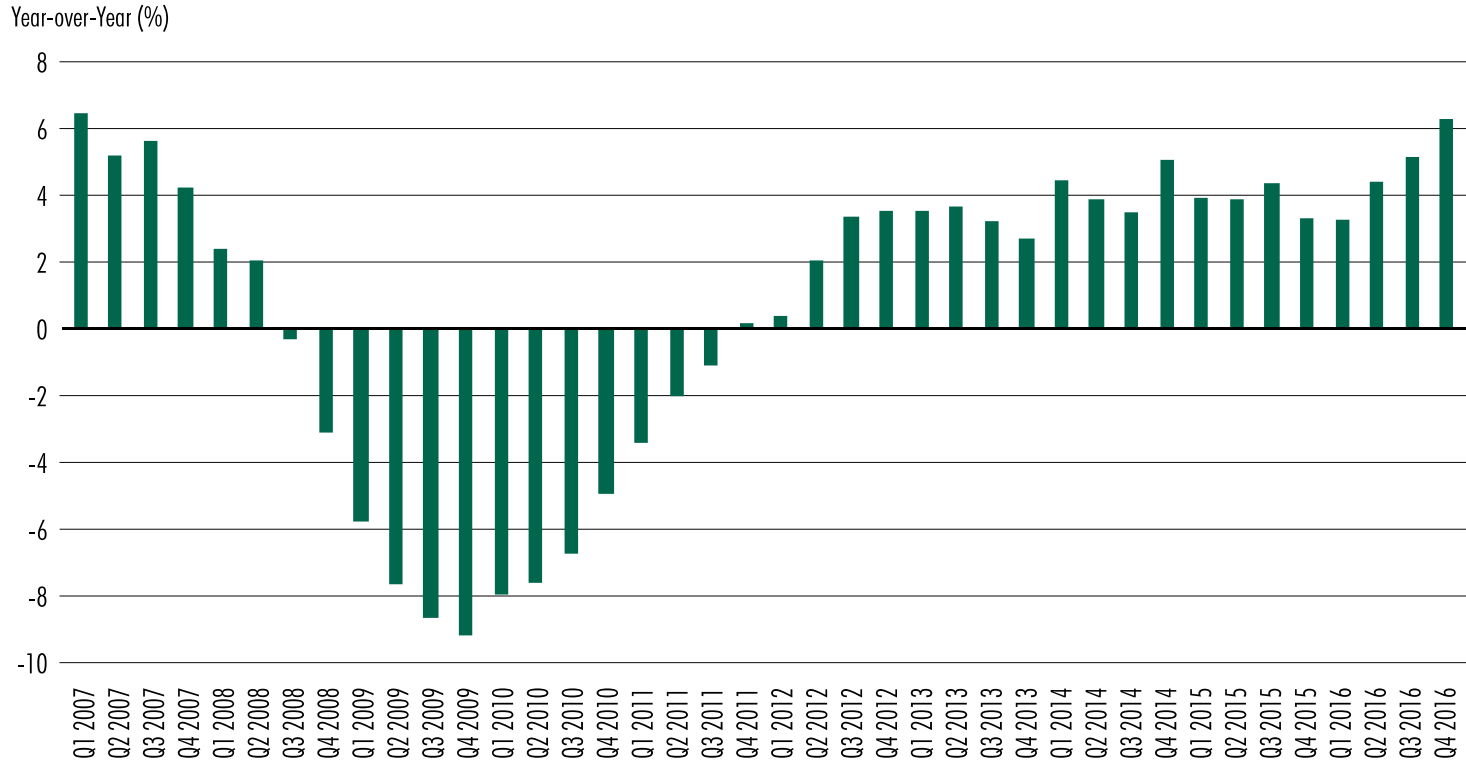
# PARCEL HUBS



A wide-angle photograph of a large, modern industrial warehouse. The ceiling is high, featuring a complex network of white steel trusses and numerous bright, recessed lights. The floor is a smooth, light-colored concrete. In the foreground on the right, a yellow and white forklift is parked, facing left. The forklift has the number '30' on its side and a 'B' on the mast. In the background, there are stacks of materials, including what appears to be lumber or panels, and other pieces of industrial equipment. The overall atmosphere is clean and professional.

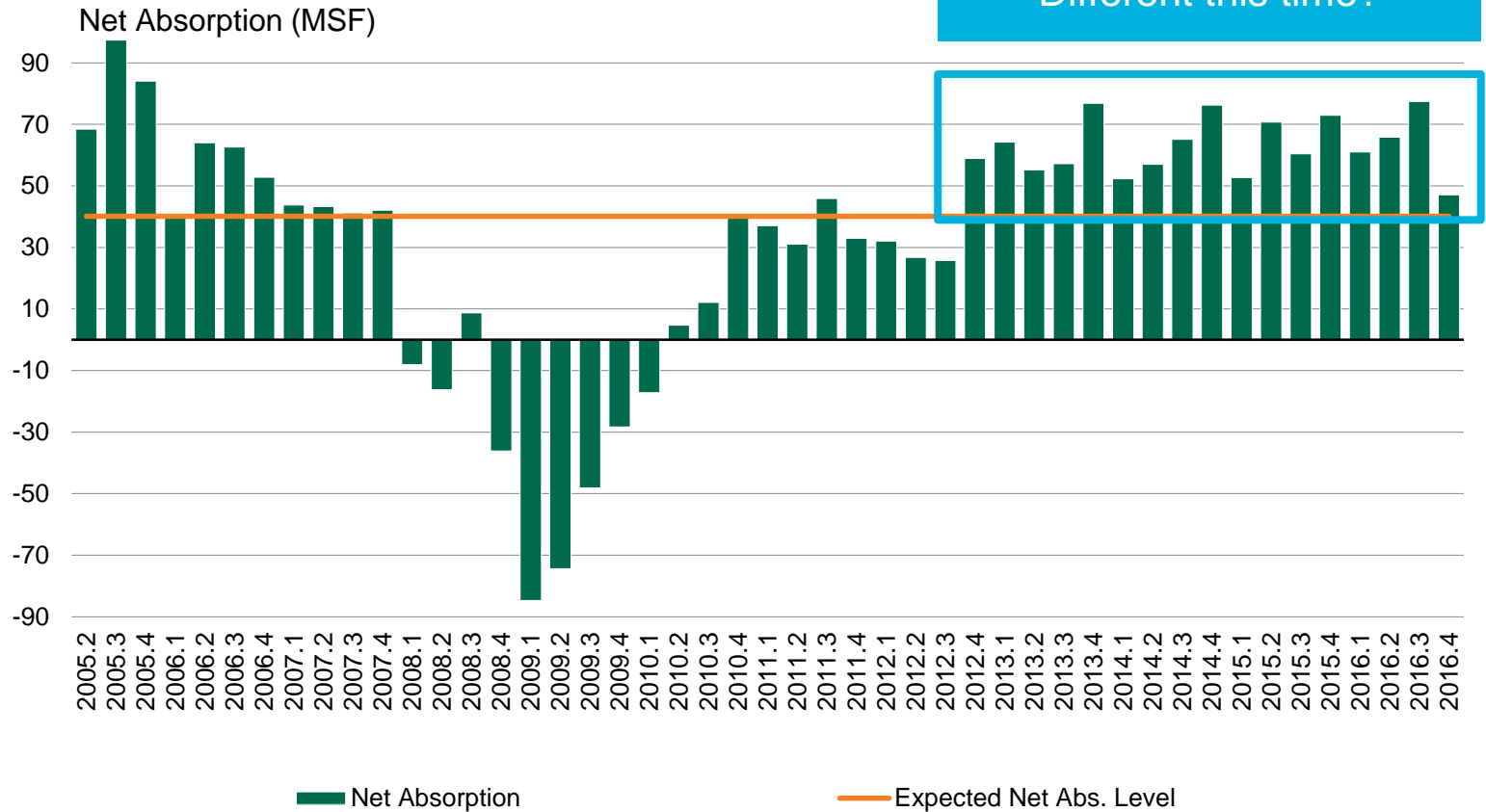
REAL ESTATE

# U.S. INDUSTRIAL RENT GROWTH

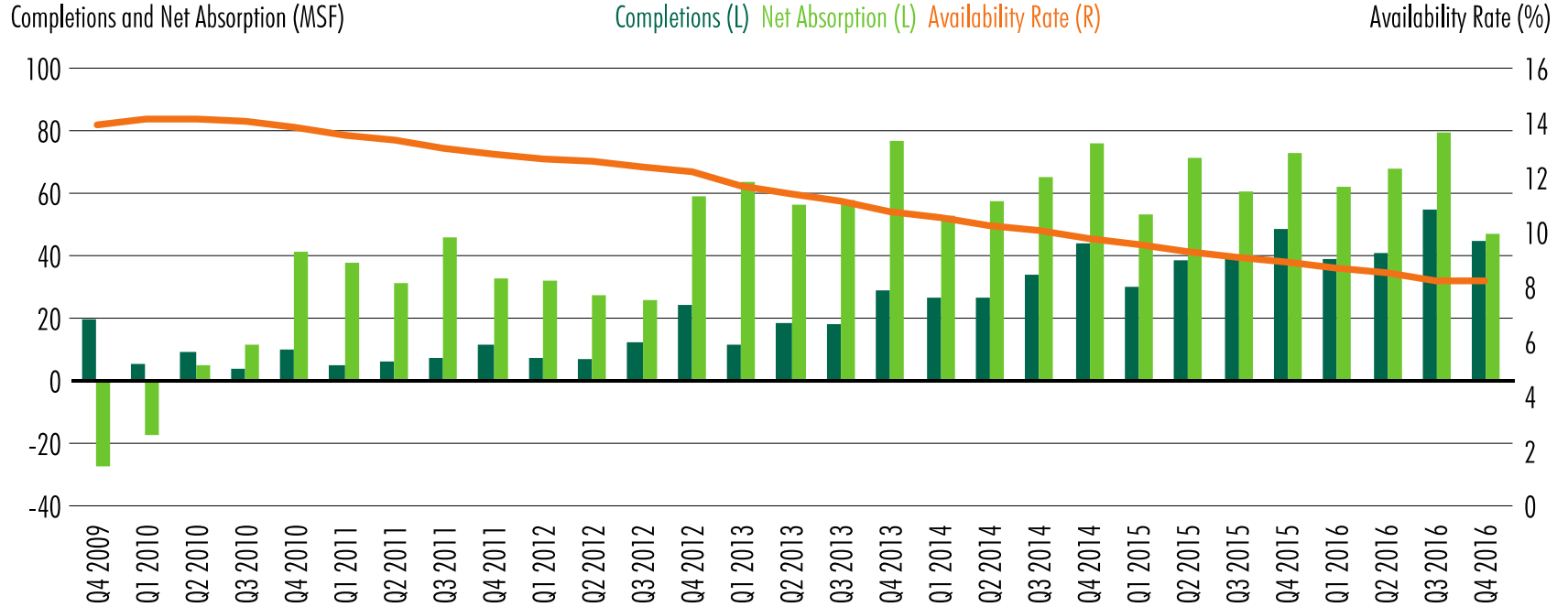


Source: CBRE Econometric Advisors, Q4 2016.

# U.S. NET ABSORPTION



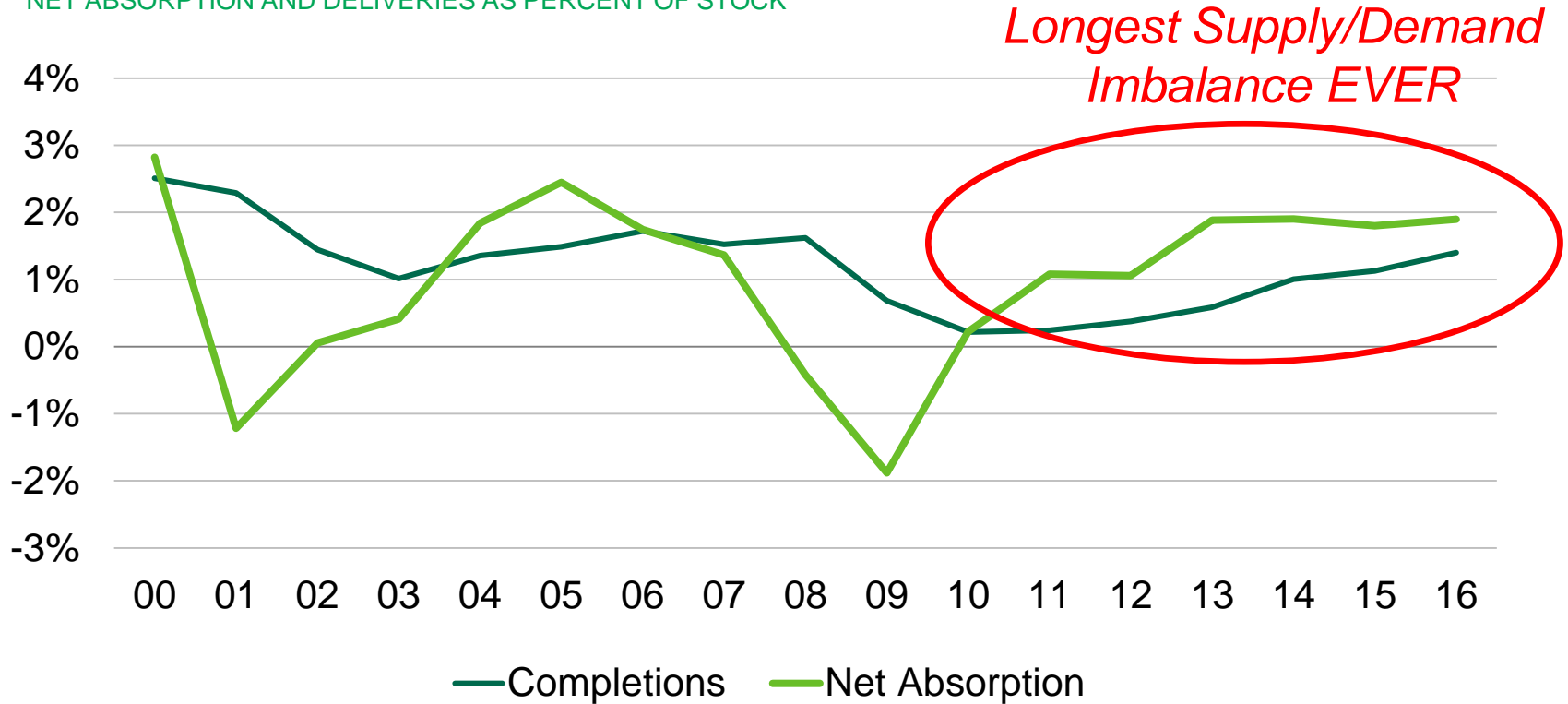
# U.S. INDUSTRIAL SUPPLY AND DEMAND



Source: CBRE Econometric Advisors, Q4 2016.

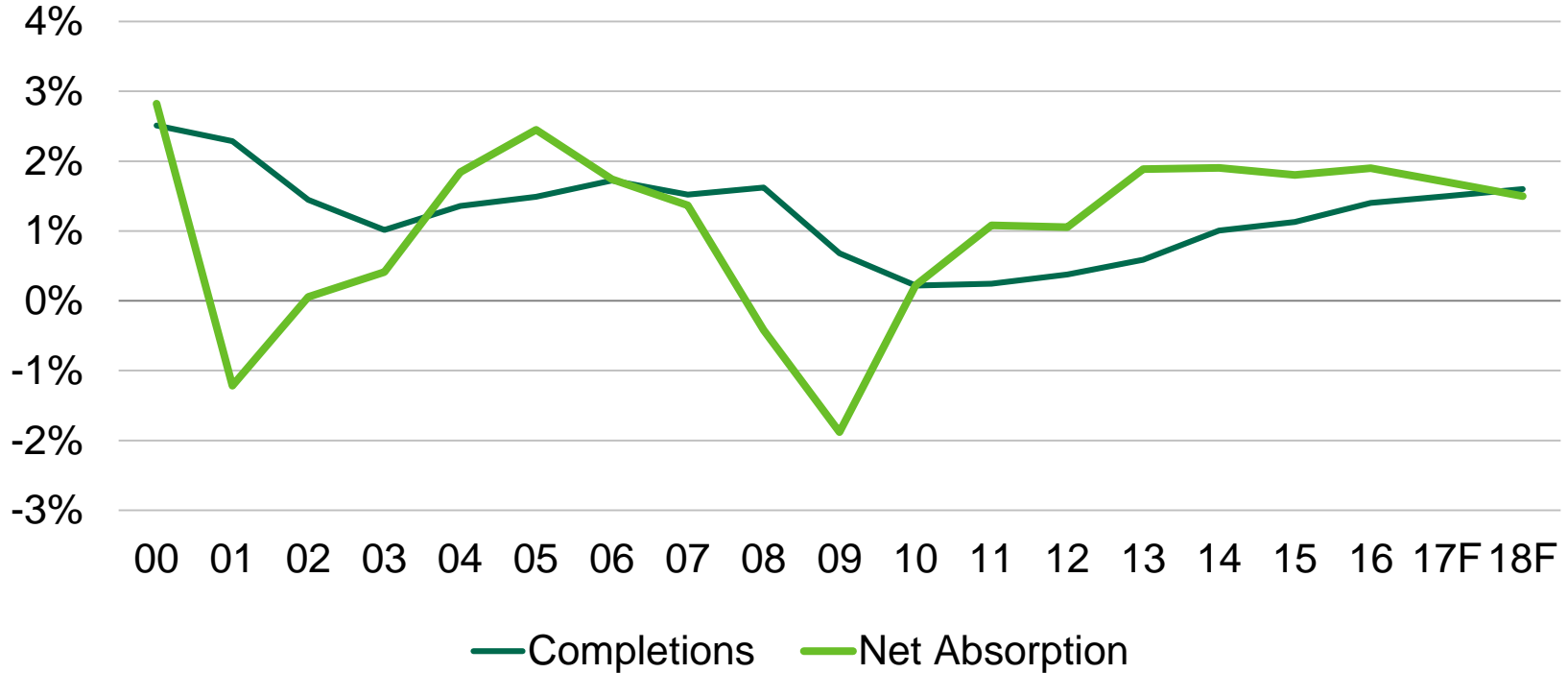
# U.S. INDUSTRIAL SUPPLY AND DEMAND - IMBALANCE

NET ABSORPTION AND DELIVERIES AS PERCENT OF STOCK



# U.S. SUPPLY VS. DEMAND – BALANCE

NET ABSORPTION AND DELIVERIES AS PERCENT OF STOCK

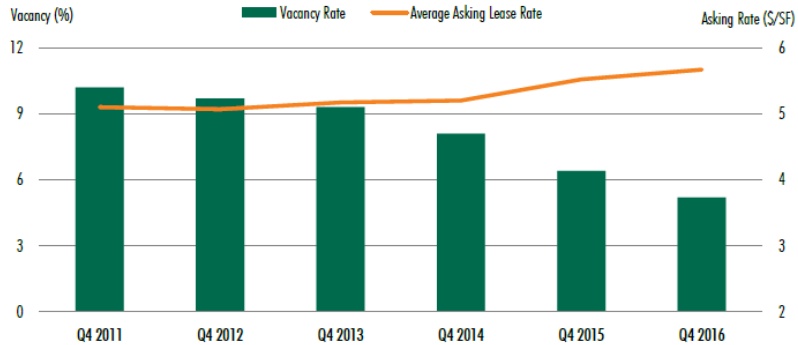




# TAMPA-AREA REAL ESTATE COMPARISONS

## Total Vacancy vs Average Lease Rate (NNN)

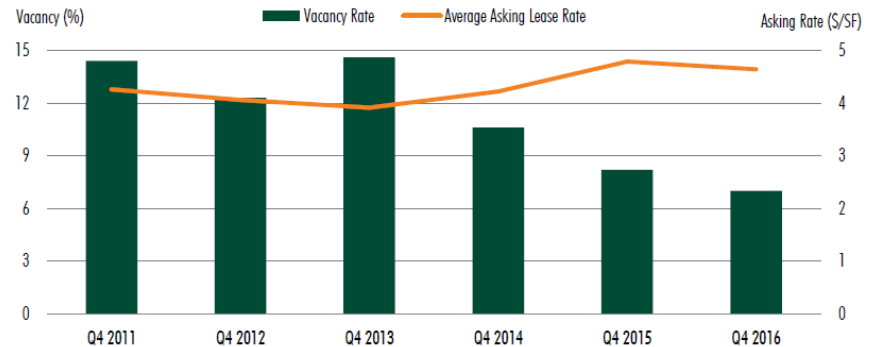
### Tampa Industrial



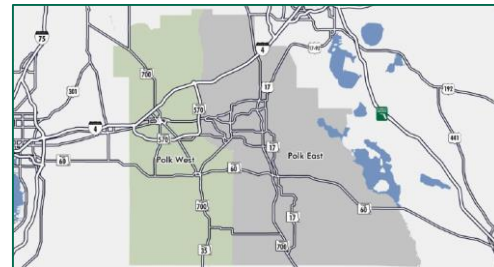
Source: CBRE Research, Q4 2016.



### Polk County Industrial



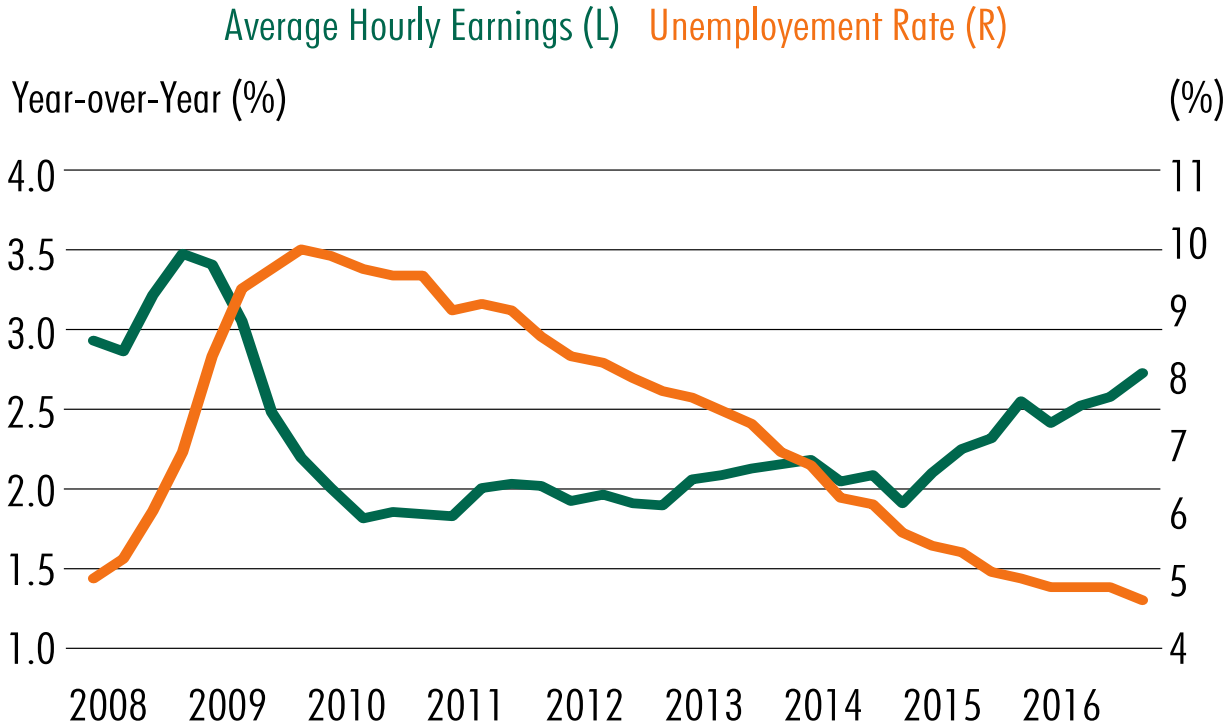
Source: CBRE Research, Q4 2016.





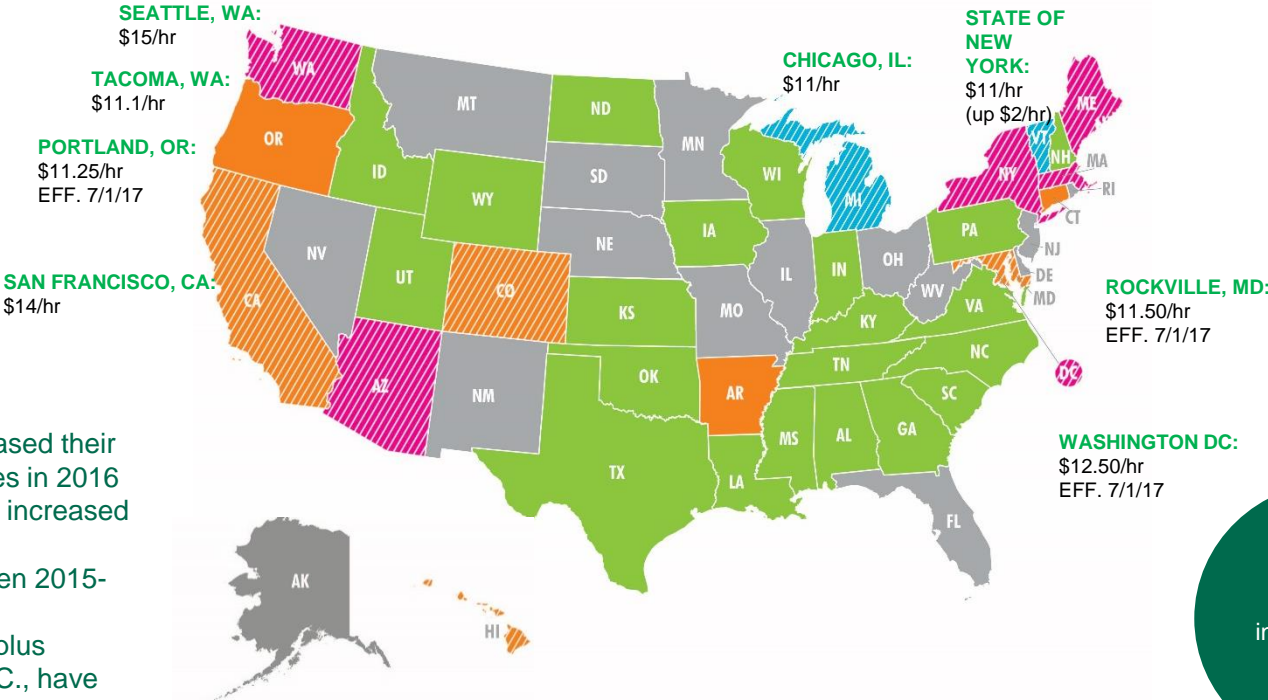
LABOR

# TIGHT LABOR MARKET GENERATES WAGE GROWTH



Source: U.S. Federal Reserve, Q4 2016.

# MINIMUM WAGE CHANGES BY STATE: 2016-2017



### HIGHLIGHTS

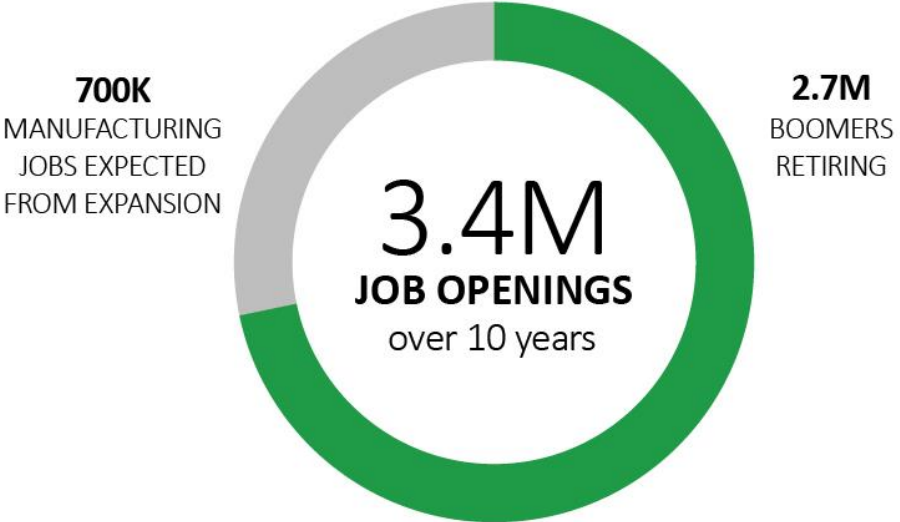
- 19 states increased their Minimum Wages in 2016
- Minimum wage increased an average \$0.68/hr between 2015-2016
- Eleven states, plus Washington D.C., have increases in minimum wages planned for 2017
- Ten states will see cost of living increases in minimum wage

**\$1/HR INCREASE**  
in wages for  
500 JOBS  
increases labor  
spend by  
**\$1M**  
ANNUALLY

FedMin	Min Wage is same as Federal Minimum Wa	\$0.50-\$0.99	Min Wage Change from 2016 is \$0.50/hr to \$0.99/hr
No Change	No change from 2016, BUT Min Wage is HIGHER than 2016	≥\$1.00	Min Wage Change from 2016 is \$1.00/hr or MORE
<\$0.50	Min Wage Change from 2016 is LESS than \$0.50/hr		
			States with future increases in min wage approved

# CHANGING LANDSCAPE

## MIND THE SKILLS GAP



Source: Deloitte analysis based on data from U.S. Bureau of Labor Statistics and Gallup Survey.

# TAMPA LABOR COMPARISONS



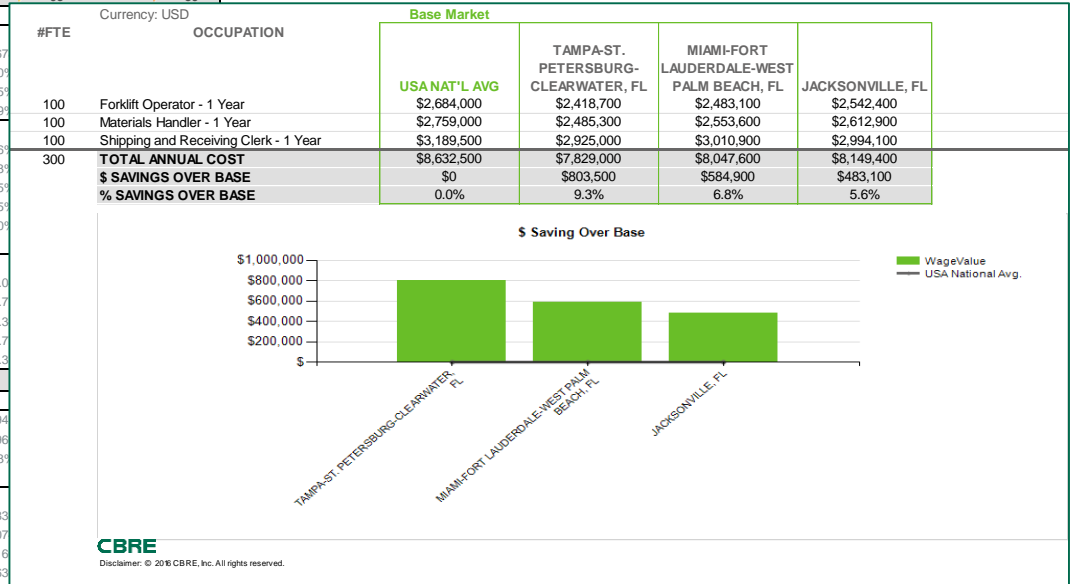
- Jacksonville, FL
- Miami-Fort Lauderdale-West Palm Beach, FL
- Tampa-St. Petersburg-Clearwater, FL
- National Average

Demo - Ports		Nat'l Avg		Miami-Fort Lauderdale-West Palm Beach, FL		Tampa-St. Petersburg-Clearwater, FL	
		Value	Index	Value	Index	Value	Index
Radius: Metro Currency: USD							
100.0% Union			83		100		123

# TAMPA LABOR COMPARISONS



Demo - Ports	Nat'l Avg	Miami-Fort Lauderdale-West Palm Beach, FL		Tampa-St. Petersburg-Clearwater, FL	
		Jacksonville, FL			
Radius: Metro Currency: USD					
<b>100% TOTAL INDEX</b>		109	101	99	
<b>49.0% Labor Supply</b>		115	98	89	
<b>50.0% Availability and Quality</b>		130			
<b>60.0% Demographics</b>		151			
25% Labor Force	365,216	703,143	193	2,941.67	
25% Projected Population Growth	4.2%	6.9%	164	6.0%	
25% Unemployment Rate (Annual)	5.3%	5.2%	98	5.5%	
25% Transportation, Warehousing & Utilities	4.0%	6.0%	150	4.9%	
<b>40.0% Education</b>		98			
40% High School Graduates	23.6%	23.6%	100	24.6%	
20% Some College Experience (no degree)	20.9%	23.1%	110	18.3%	
20% Associate's Degree	8.2%	10.3%	126	9.5%	
10% Total 2-Year College Enrollment	3.2%	0.3%	10	0.5%	
10% Total 4-Year College Enrollment	6.3%	6.1%	97	9.0%	
<b>50.0% Skill Set Employment per 10,000 Workers</b>		100			
<b>100.0% Ports Skill Set</b>		100			
40% Industrial truck and tractor operators	39.15	35.99	92	28.0	
20% Industrial machinery mechanics	23.44	20.89	89	10.7	
20% Laborers and freight, stock, and material movers, hand	180.40	254.66	141	172.3	
10% Maintenance workers, machinery	6.71	3.86	57	1.7	
10% Packers and packagers, hand	51.71	56.55	109	65.3	
<b>49.0% Labor Cost</b>		104			
<b>20.0% Macro Labor Costs</b>		99			
50% Median Household Income	54,149	53,128	102	49.94	
50% ERI Cost Of Living	50,000	51,596	97	56.96	
0% Projected Household Income Growth	9.5%	12.9%	63	12.3%	
<b>80.0% Skill Sets</b>		105			
<b>100.0% Ports Skill Set</b>		105			
40% Forklift Operator - 1 Year	26,840	25,424	105	24.83	
20% Warehouse Laborer - 1 Year	24,860	23,652	105	23.07	
20% Warehouse Worker - 1 Year	26,105	24,749	105	24.16	
10% Transportation Manager - 1 Year	76,701	76,135	101	79.63	
10% Warehouse Supervisor - 1 Year	45,531	43,948	103	44.365	
<b>2.0% Business Environment</b>		83	100	123	
<b>100.0% Union</b>		83	100	123	
100% Public	35.9%	41.9%	83	35.9%	100
			100	27.6%	123

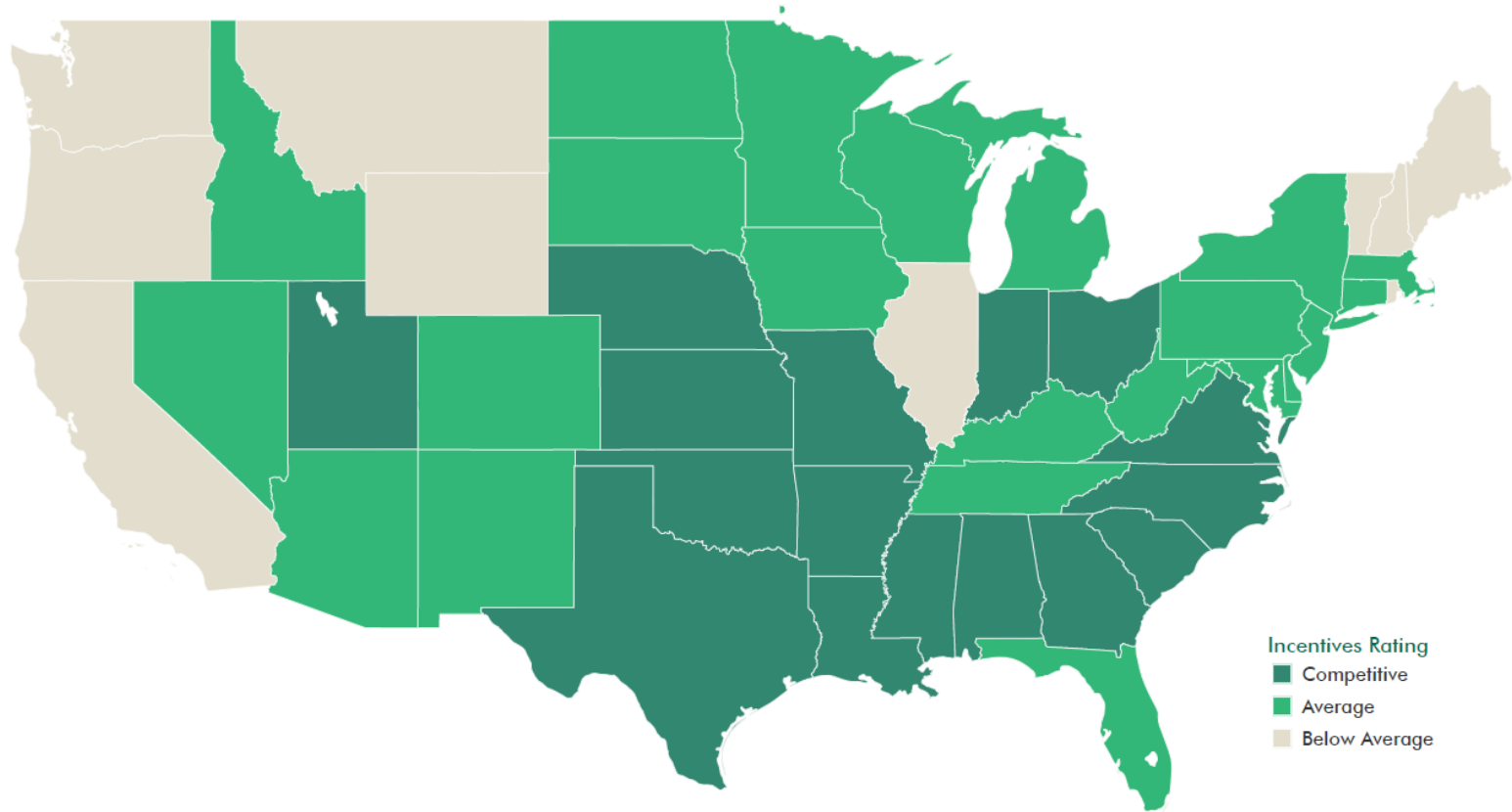


# INCENTIVES

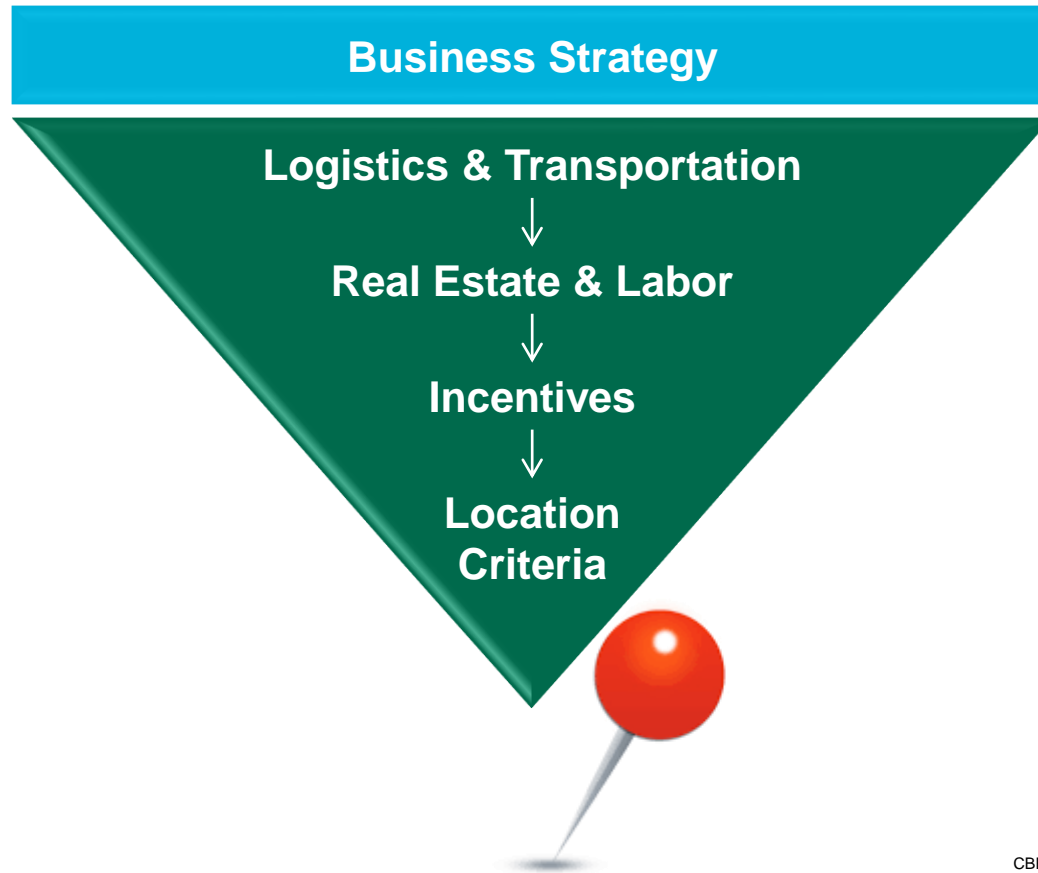




# RELATIVE STATE LEVEL INCENTIVE COMPARISON



# ALIGNMENT OF TRADE-OFFS




A large, modern industrial warehouse with a high ceiling and a complex steel truss structure. The ceiling is illuminated by numerous bright, recessed lights. In the foreground on the right, a yellow and white forklift is parked. The forklift has a yellow body with white accents and a black mast. The number '30' is visible on the side of the forklift's body. In the background, there are stacks of materials, possibly wood or metal, and other industrial equipment. The floor is a smooth, light-colored concrete. The text 'OTHER DRIVERS' is overlaid in the center of the image. 'OTHER' is in white, and 'DRIVERS' is in green.

OTHER DRIVERS

## CONSUMER IMPATIENCE

72%

A close-up photograph of a white ceramic coffee cup filled with dark coffee and a layer of brown foam. The cup sits on a matching white saucer, both placed on a light-colored wooden surface. The lighting is soft, highlighting the texture of the coffee and the grain of the wood.

96%

A close-up photograph of a hand with a pinkish nail polish pressing a bright green circular button on a silver coffee machine. The button is illuminated with a green glow. Above it are two other buttons, one with the number '3' and one with the number '2', both on dark circular backgrounds. The machine's surface is metallic and reflective.

# 2016 ESTIMATED POPULATION

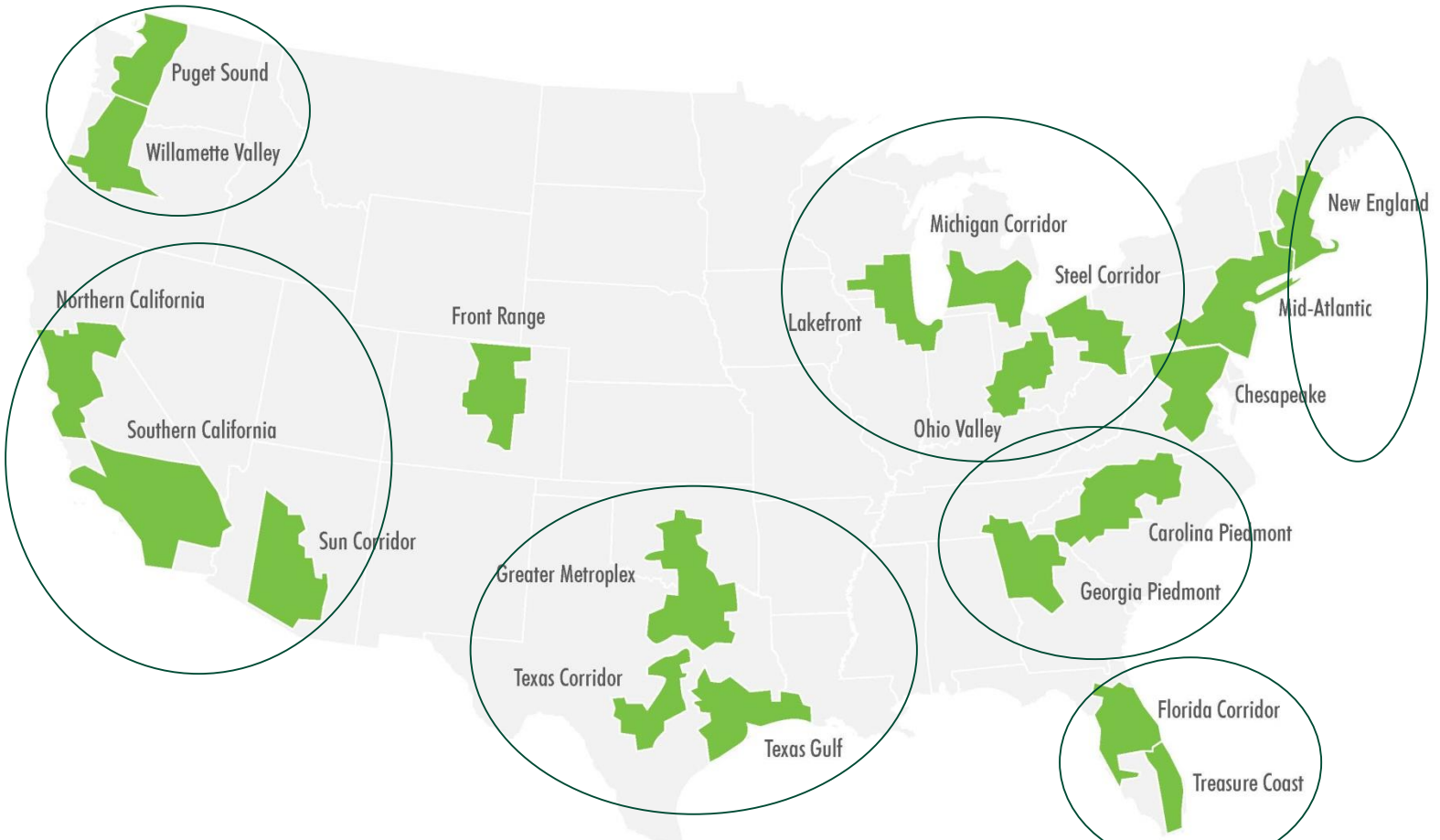
1	New York Newark Jersey City, NY, NJ, PA	20,257,610
2	Los Angeles Long Beach Anaheim CA	18,402,337
3	Chicago Naperville Elgin, IL, IN, WI	9,581,252
4	Dallas Fort Worth Arlington, TX	7,116,310
5	Houston The Woodlands Sugar Land, TX	6,627,843
6	Washington Arlington Alexandria, DC, VA, MD, WV	6,146,025
7	Philadelphia Camden Wilmington, PA, NJ, DE, WV	6,077,137
8	Albuquerque Santa Fe Albuquerque, NM	6,052,325
9	Atlanta Sandy Springs Roswell, GA	5,736,343
10	Boston Cambridge Newton, MA, NH	4,793,844
11	San Francisco Oakland Hayward, CA	4,671,181
12	Phoenix Mesa Scottsdale, AZ	4,606,379
13	Riverside San Bernardino Ontario, CA	4,527,243
14	Dayton Warren Dearborn, MI	4,299,305
15	Seattle Tacoma Bellevue, WA	3,727,468
16	Albuquerque Santa Fe Albuquerque, NM, NV	3,545,559
17	San Diego Carlsbad, CA	3,311,903
18	Tampa St. Petersburg Clearwater, FL	2,979,932
19	Denver Aurora Lakewood, CO	2,657,244
20	St. Louis, MO, IL	2,612,942
21	Baltimore Columbia Baltimore, MD	2,600,911
22	Charlotte Concord Gastonia, NC, SC	2,486,213
23	San Antonio New Braunfels, TX	2,394,156
24	Orlando Kissimmee Sebring, FL	2,289,025
25	Portland Vancouver Hillsboro, OR, WA	2,267,287
26	Pittsburgh, PA	2,252,095
27	Sarasota Bradenton Venice Arcadia, CA	2,227,662
28	Cincinnati, OH, KY, IN	2,163,683
29	Las Vegas Henderson Paradise, NV, CA	2,119,844
30	Kansas City, MO, KS	2,094,583
31	Cleveland Elyria, OH	2,061,108
32	Columbus, OH	2,061,108
33	Austin Round Rock, TX	2,006,227
34	Indianapolis Carmel Anderson, IN	2,001,125
35	San Jose Sunnyvale Santa Clara, CA	1,990,215
36	New York New Rochelle Mount Vernon, NY	1,940,230
37	Virginia Beach Norfolk Newport News, VA, NC	1,724,025
38	Providence Worcester, RI, MA	1,613,744
39	Albuquerque Albuquerque West Allamogosa, NM	1,572,913
40	Indianapolis, IN	1,492,789
41	Oklahoma City, OK	1,365,088
42	Memphis, TN, MS, AR	1,347,257
43	Louisville Jefferson County, KY, IN	1,282,802
44	Richmond, VA	1,274,618
45	Raleigh, NC	1,274,618
46	New Orleans Metairie, LA	1,291,168
47	Hartford West Hartford East Hartford, CT	1,213,556
48	Little Rock, AR	1,174,763
49	Birmingham Hoover, AL	1,150,168
50	Buffalo Cheektowaga Niagara Falls, NY	1,126,916
51	Rochester, NY	1,087,919
52	Grand Rapids Wyoming, MI	1,043,611
53	Tucson, AZ	1,013,316
54	Utah Honolulu, HI	1,002,987
55	Phoenix, AZ	983,079
56	Tulsa, OK	983,079
57	Birmingham Hoover, AL	983,079
58	Worcester Stamford Norwalk, MA, CT	953,222
59	Wilmington, NC	918,168
60	Allentown Easton, PA, NJ, DE	907,252
61	Baltimore, MD	893,286
62	Albany Schenectady Troy, NY	882,496
63	Green Bay Anderson Woodland, WI, SC	877,895
64	Knoxville, TN	865,163
65	New Haven Milford, CT	859,686
66	Dallas, TX	856,465
67	Dayton, OH	852,316
68	Madison Edinburg Mission, TX	852,316
69	Birmingham Hoover, AL	852,316
70	Allentown Easton, PA, NJ, DE	852,316
71	Columbia, SC	812,505
72	Dayton, OH	803,268
73	North Port Sarasota Bradenton, FL	764,693
74	Omaha Council Bluffs, NE, IA	758,626
75	Chattanooga North Chattanooga, TN	758,626
76	Little Rock North Little Rock Conway, AR	739,811
77	Shakopee, MN	727,839
78	Alaska, AK	704,556
79	Colorado Springs, CO	703,946
80	Cape Coral Fort Myers, FL	697,664
81	Bowie City, MD	685,225
82	Syracuse, NY	667,783
83	Winston Salem, NC	664,484
84	Lakeland Winter Haven, FL	648,202
85	Dayton, OH	646,186
86	Wichita, KS	644,995
87	Madison, WI	643,699
88	Springfield, MA	620,625
89	Des Moines West Des Moines IA	627,509
90	Dayton Dayton Beach Oriental Beach, FL	611,203
91	Texas, TX	604,453
92	Augusta Richmond County, GA, SC	597,440
93	Provo-Orem, UT	586,796
94	Jackson, MS	579,115
95	Palm Bay Melbourne Titusville, FL	565,824
96	Harrisburg Carlisle, PA	565,541
97	Sarasota Manatee Bartow Hialeah, PA	557,187
98	Durham Chapel Hill, NC	552,226
99	Spokane Spokane Valley, WA	552,225
100	Chattanooga, TN, GA	549,579



Population Range	Color
4,790,344 to 20,257,610	Red
2,812,942 to 4,790,344	Orange
2,094,363 to 2,812,942	Green
1,450,789 to 2,094,363	Blue
1,136,916 to 1,450,789	Purple
908,252 to 1,136,916	Light Purple
832,786 to 908,252	Light Blue
697,666 to 832,786	Light Green
621,283 to 697,666	Light Orange
549,579 to 621,283	Light Purple

# METROPOLITAN TO MEGAPOLITAN

60 Million New People in 20 U.S. Markets by 2040

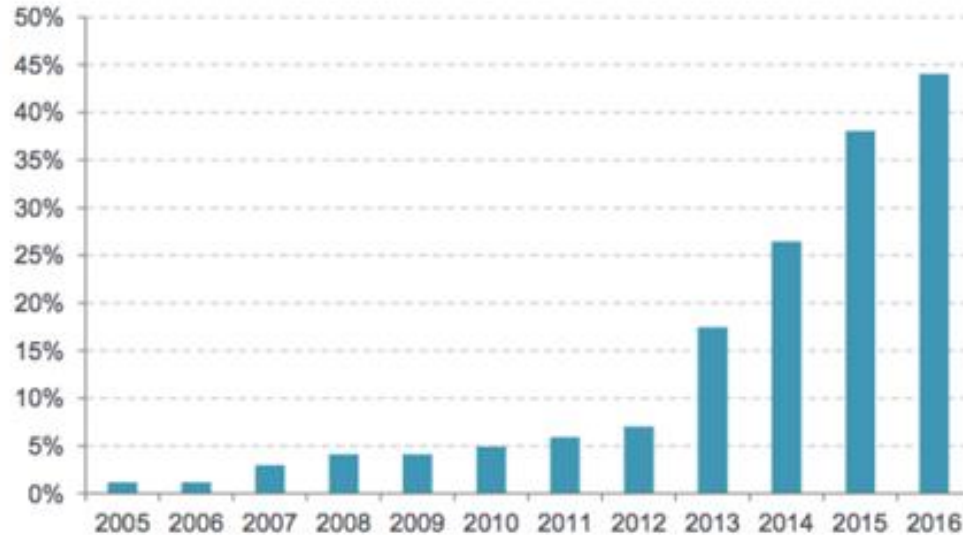


Source: Virginia Tech Metropolitan Institute, 2013.

# ECOM SUCCESS IS SIMPLE....ACCESS TO CONSUMERS

Exhibit 5

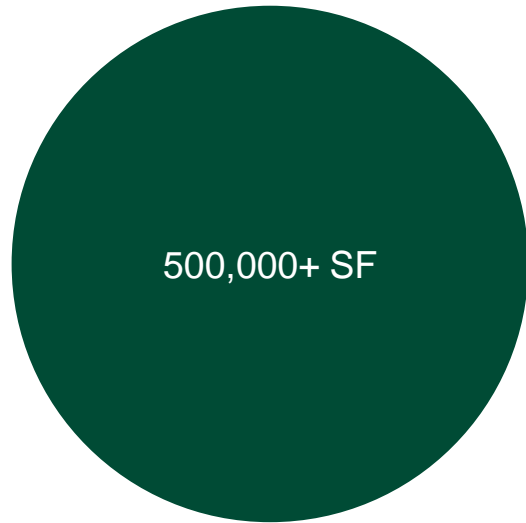
## Amazon's Footprint Increasingly Closing in on Population % of Population within 20 Miles of an Amazon Fulfillment Network Node



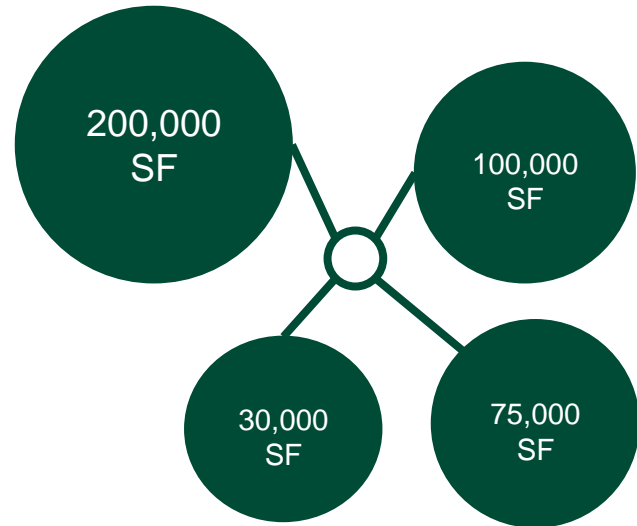
Source: Piper Jaffray, company filings, MWWPL, Facebook, Twitter, various news sources, US Census Bureau

# EMERGING E-COMMERCE TRENDS

**CURRENT**  
Mega E-Commerce Facility



**FUTURE – LAST MILE**  
Infill. Multiple Locations  
Strategically Located.





# THE AMAZON NETWORK

## ■ Fulfillment Centers

Massive warehouses with large variety of products, and high-speed conveyor systems; role is to fill customer orders

## ■ Regional Sortation Centers

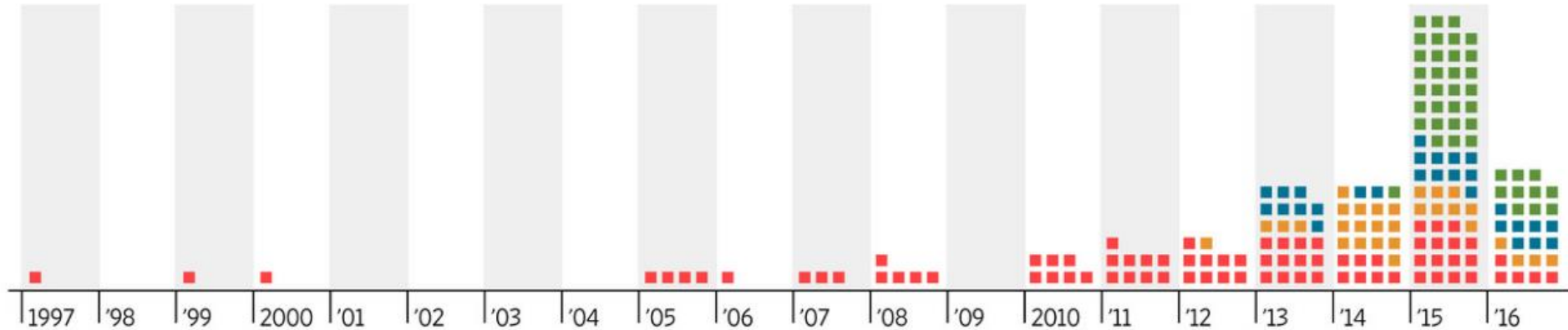
Smaller facilities designed to aggregate boxes into a defined grouping of ZIP Codes

## ■ Delivery Stations

Close to metro areas, often near airports; sort packages for outbound routes for last-mile delivery

## ■ Prime Now Hubs

Near centers of large metro areas; stocked with popular items for Prime Now customers to receive as quickly as one hour



Note: Figures are estimates

Source: MWPVL International

THE WALL STREET JOURNAL.

A large, modern industrial warehouse with a high ceiling and a complex steel truss structure. The ceiling is illuminated by numerous bright, recessed lights. In the foreground on the right, a yellow forklift is parked. The floor is a smooth, light-colored concrete. In the background, there are stacks of materials, including what appears to be lumber or panels, and other industrial equipment. The overall atmosphere is clean and professional.

# REAL ESTATE REQUIREMENTS

# E-COMMERCE FULFILMENT CENTER SITE SELECTION CRITERIA



Sales tax  
and incentives



Workforce quality,  
availability and  
flex component



Near UPS and  
FedEx hubs



Proximity to  
customer demand  
clusters



Large areas  
with low  
land cost



Supporting goods  
movement  
infrastructure



Located in  
24/7 operation  
zones

# REQUIRED E-COMMERCE FACILITY FEATURES



Tremendous Amount  
of Infrastructure  
(i.e. Conveyors &  
Sortation Systems)



Mezzanines:  
Require 36' – 40' Ceilings  
Multiple Levels



Abundance  
of Car Parking



Heavy Power  
with  
Dual Redundancy



Located in  
24/7 Zone



Life Systems &  
HVAC Requirements  
Increased

# SUMMARY



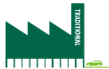
- Align business strategy with SCM strategy. Understanding the trade-offs between freight costs, inventory, real estate, labor and service requirement is critical



- Corporations will always seek out the lowest total operating cost model that meets the service level



- All things being equal, facilities are typically closer to customers via transport infrastructure
  - Improves speed to market and customer service levels
  - Reduces complexities and risk
  - Shrinks inventory levels
  - Lowers freight costs



- Industrial real estate market seems to be closing the gap toward being a balanced market



- Industrial labor wages are on the rise, availability, competition and skills are becoming challenging



- With the increasing costs incentives may have a bigger role

An aerial photograph of a port area, heavily overlaid with a teal color. The scene shows a large number of stacked shipping containers in the foreground and middle ground. In the background, a city skyline with various high-rise buildings is visible under a cloudy sky. On the left side, the complex metal structure of a port crane is prominent. A road with a few vehicles runs through the container yard.

**CBRE** *Build on  
Advantage*

THANK YOU