AAPA 2017 PLANNING FOR SHIFTING TRADE
Logistics and Distribution Center Site Selection Strategies
Joe Dunlap, MANAGING DIRECTOR – Supply Chain Services

FEBRUARY 3RD, 2017
SUPPLY CHAIN STRATEGY
PROBLEM STATEMENT

INFORMATION
Basis for making these decisions

PRODUCTION
What, how, and when to produce

INVENTORY
How much to make, how much to stock

TRANSPORTATION
How and when to move product

LOCATION
Where best to do what activity
LOGISTICS COSTS

Not Consumer Acceptable

Consumer Acceptable

Low Cost Position

Low Cost, Acceptable Service?

High Service, Acceptable Cost?

Superior Service Position

STRIKING THE RIGHT BALANCE

TRADE-OFFS

INFLECTION POINT

HIGH

LOW

SERVICE

HIGH
BUSINESS IMPERATIVES

How is change absorbed while remaining profitable?

How do we enable growth?

How do we ensure business continuity?

How do we plan for the unknown?

How do we reduce costs?

How do we improve service?

How do we rationalize mergers & acquisitions?
LOGISTICS OPERATING COSTS

Logistics as % Total

Logistics Costs Trade-offs

Logistics Cost as % Sales – Typically Runs 7-10%
TRANSPORTATION & INFRASTRUCTURE
PARCEL HUBS
REAL ESTATE
U.S. INDUSTRIAL RENT GROWTH

Source: CBRE Econometric Advisors, Q4 2016.
U.S. NET ABSORPTION

Net Absorption (MSF)

Different this time?

Net Absorption

Expected Net Abs. Level

Net Absorption

Expected Net Abs. Level
U.S. INDUSTRIAL SUPPLY AND DEMAND

Completions and Net Absorption (MSF)

Source: CBRE Econometric Advisors, Q4 2016.
U.S. INDUSTRIAL SUPPLY AND DEMAND - IMBALANCE

NET ABSORPTION AND DELIVERIES AS PERCENT OF STOCK

Longest Supply/Demand Imbalance EVER

Completions  Net Absorption
U.S. SUPPLY VS. DEMAND – BALANCE

NET ABSORPTION AND DELIVERIES AS PERCENT OF STOCK

Completions

Net Absorption
TAMPA-AREA REAL ESTATE COMPARISONS

Total Vacancy vs Average Lease Rate (NNN)

Tampa Industrial

Polk County Industrial

Source: CBRE Research, Q4 2016.
LABOR
TIGHT LABOR MARKET GENERATES WAGE GROWTH

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

**MINIMUM WAGE CHANGES BY STATE: 2016-2017**

- **SEATTLE, WA:** $15/hr
- **TACOMA, WA:** $11.1/hr
- **PORTLAND, OR:** $11.25/hr EFF. 7/1/17
- **SAN FRANCISCO, CA:** $14/hr
- **CHICAGO, IL:** $11/hr
- **WASHINGTON DC:** $12.50/hr EFF. 7/1/17
- **ROCKVILLE, MD:** $11.50/hr EFF. 7/1/17
- **STATE OF NEW YORK:** $11/hr (up $2/hr)

$1/HR INCREASE in wages for 500 JOBS increases labor spend by $1M ANNUALLY.
CHANGING LANDSCAPE

MIND THE SKILLS GAP

700K manufacturing jobs expected from expansion

3.4M job openings over 10 years

2.7M boomers retiring

600K jobs unfilled in 2011

233% increase

2M expected to go unfilled in 2025

TAMPA LABOR COMPARISONS

Average Market Score Against National Average

<table>
<thead>
<tr>
<th>Demo - Ports</th>
<th>Nat'l Avg</th>
<th>Jacksonville, FL</th>
<th>Miami-Fort Lauderdale-West, FL</th>
<th>Tampa-St. Petersburg-Clearwater, FL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radius Metro</td>
<td>Value</td>
<td>Index</td>
<td>Value</td>
<td>Index</td>
</tr>
<tr>
<td>100.0% Union</td>
<td>Value</td>
<td>Index</td>
<td>Value</td>
<td>Index</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td></td>
<td>100</td>
<td>123</td>
</tr>
</tbody>
</table>
## TAMPA LABOR COMPARISONS

### National Average Comparison

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Value 100%</th>
<th>Value 41.9%</th>
<th>Value 83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehouse Supervisor - 1 Year</td>
<td>$45,531</td>
<td>$43,948</td>
<td>$24,831</td>
</tr>
<tr>
<td>Transportation Manager - 1 Year</td>
<td>$76,701</td>
<td>$76,135</td>
<td>$76,349</td>
</tr>
<tr>
<td>Warehouse Worker - 1 Year</td>
<td>$26,105</td>
<td>$24,749</td>
<td>$24,831</td>
</tr>
<tr>
<td>Warehouse Laborer - 1 Year</td>
<td>$24,860</td>
<td>$23,652</td>
<td>$22,533</td>
</tr>
<tr>
<td>Forklift Operator - 1 Year</td>
<td>$26,840</td>
<td>$25,424</td>
<td>$26,840</td>
</tr>
<tr>
<td>Packers and packagers, hand</td>
<td>$51.71</td>
<td>$56.55</td>
<td>$51.71</td>
</tr>
<tr>
<td>Maintenance workers, machinery</td>
<td>$6.71</td>
<td>$3.86</td>
<td>$1.77</td>
</tr>
<tr>
<td>Industrial machinery mechanics</td>
<td>$23.44</td>
<td>$20.89</td>
<td>$10.71</td>
</tr>
<tr>
<td>Industrial truck and trailer operators</td>
<td>39.15</td>
<td>35.99</td>
<td>9.5%</td>
</tr>
<tr>
<td>Base Market</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jacksonville, FL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miami-Fort Lauderdale-West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palm Beach, FL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tampa-St. Petersburg-Clearwater, FL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Demo - Ports

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>#FTE USA NAT'L AVG</th>
<th>TAMPA-ST. PETERSBURG-CLEARWATER, FL</th>
<th>MIAMI-FORT LAUDERDALE-WEST</th>
<th>PALM BEACH, FL</th>
<th>JACKSONVILLE, FL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forklift Operator - 1 Year</td>
<td>$2,684,000</td>
<td>$2,418,700</td>
<td>$2,483,100</td>
<td>$2,542,400</td>
<td></td>
</tr>
<tr>
<td>Materials Handler - 1 Year</td>
<td>$2,759,000</td>
<td>$2,485,300</td>
<td>$2,553,600</td>
<td>$2,612,900</td>
<td></td>
</tr>
<tr>
<td>Shipping and Receiving Clerk - 1 Year</td>
<td>$3,189,500</td>
<td>$3,025,000</td>
<td>$2,010,900</td>
<td>$2,994,100</td>
<td></td>
</tr>
<tr>
<td>TOTAL ANNUAL COST</td>
<td>$8,632,500</td>
<td>$7,829,000</td>
<td>$5,647,600</td>
<td>$8,149,400</td>
<td></td>
</tr>
<tr>
<td>% SAVINGS OVER BASE</td>
<td>0.0%</td>
<td>9.3%</td>
<td>6.8%</td>
<td>5.6%</td>
<td></td>
</tr>
</tbody>
</table>

### Education

- High School Graduates: 23.6%
- Some College Experience (no degree): 20.9%
- Associate's Degree: 8.2%
- Bachelor's Degree: 4.1%
- Master's Degree: 2.4%
- Doctorate Degree: 1.5%

### Labor Cost

- Median Household Income: 54,149
- Projected Household Income Growth: 9.5%

### Business Environment

- Projected Population Growth: 2.0%
- Projected Household Income Growth: 9.5%

### Ports Skill Set

- Skill Set Employment per 10,000 Workers: 1.0%
- Total 4-Year College Enrolment: 5.3%
- Total 2-Year College Enrolment: 3.2%
- Total 2-Year College Enrolment: 6.3%
- Total 4-Year College Enrolment: 9.8%
- Total 2-Year College Enrolment: 6.1%
- Total 4-Year College Enrolment: 9.01%

### Skill Sets

- 50%: Demographics
- 25%: Labor Force
- Projected Population Growth: 4.2%
- Unemployment Rate (Annual): 5.3%
- Transportation, Warehousing & Utilities: 4.0%

### Availability and Quality

- 40%: Availability and Quality
- Education: 44.3%
- High School Graduates: 23.6%
- Some College Experience (no degree): 20.9%
- Associate's Degree: 8.2%
- Bachelor's Degree: 4.1%
- Master's Degree: 2.4%
- Doctorate Degree: 1.5%

### Labor Supply

- 49.0%: Labor Supply
- Availability and Quality: 50.0%
INCENTIVES
ALIGNMENT OF TRADE-OFFS

Business Strategy

Logistics & Transportation

Real Estate & Labor

Incentives

Location Criteria
OTHER DRIVERS
2016 ESTIMATED POPULATION

Map showing the estimated population of various cities and states in the United States.
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, MWPL, 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.

500,000+ SF

200,000 SF
100,000 SF
30,000 SF
75,000 SF
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.
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 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
THANK YOU