Industrial Property Trends

May 7, 2018

Lang Williams, SIOR
Senior Vice President
CBRE|Hampton Roads
AGENDA

• SUPPLY CHAIN DYNAMICS

• ECONOMIC CYCLE & U.S. LOGISTICS MARKET

• INDUSTRIAL REAL ESTATE INVESTOR TRENDS

• DEMAND DRIVERS

• PORT MARKET RANKINGS
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SUPPLY CHAIN DYNAMICS

POPULATION, CONSUMPTION, & ECONOMY

World Cities – Population 1M+

SUPPLY CHAIN
Shippers decide on how to import product largely based on four criteria:

- SPEED
- COST
- RELIABILITY
- COMPLEXITY
SUPPLY CHAIN ANALYSIS
MOVEMENT CHARACTERISTICS BY MODE

- FASTER
- MORE EXPENSIVE
- MORE RELIABLE
KEY SHIPPER QUESTION
Where shall I locate my facility to reach the most consumers with the lowest transportation costs?
SUPPLY CHAIN ANALYSIS
LOGISTICS COST AS % OF SALE

From year to year, logistics costs as a percentage of sales vary and are mostly derived from distribution fixed / handling along with inbound and outbound transportation cost.

*Other includes reverse logistics, customer services, planning and administrative functions.

Source: CBRE analysis of 2017 CSCMP State of Logistics Report
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GROWTH BETTER IN 2018

FIGURE 1: GROWTH BETTER IN 2018

Real GDP Growth

<table>
<thead>
<tr>
<th>Country</th>
<th>Last 3 years</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>U.S.</td>
<td>2.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Japan</td>
<td>1.7%</td>
<td>2.0%</td>
</tr>
<tr>
<td>France</td>
<td>2.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Germany</td>
<td>3.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Italy</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>U.K.</td>
<td>1.8%</td>
<td>1.8%</td>
</tr>
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Year-over-year GDP growth comparison, measured from year-end.
DOES U.S. ECONOMIC CYCLE EQUAL U.S. INDUSTRIAL CYCLE
NONFARM EMPLOYMENT GROWTH (Y-o-Y, %)
US INDUSTRIAL MARKET YTD 2018

<table>
<thead>
<tr>
<th>Metric</th>
<th>Q1 2018</th>
<th>Last 12 Months</th>
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<tbody>
<tr>
<td>Vacancy</td>
<td>4.5%</td>
<td>Flat</td>
</tr>
<tr>
<td>Net Ask Rent</td>
<td>$7.01</td>
<td>5.9%</td>
</tr>
<tr>
<td>Completions</td>
<td>35 msf</td>
<td>203 msf</td>
</tr>
<tr>
<td>Net Absorption</td>
<td>41 msf</td>
<td>223 msf</td>
</tr>
</tbody>
</table>

Source: CBRE Research, Q1 2018
### THE U.S. LOGISTICS MARKET
Where are we compared to the previous peak?

#### 2005 - 2007 (PREVIOUS CYCLE PEAK)
- Total Deliveries: 566 MSF
- Total Absorption: 715 MSF
- Average YOY Rent Growth: 5.3%
- Availability Rate: 7.2 - 7.6%

#### 2014 - 2017 (CURRENT CYCLE)
- Total Deliveries: 680 MSF
- Total Absorption: 1,023 MSF
- Average YOY Rent Growth: 5.0%
- Availability Rate: 6.7 - 4.5%
POSITIVE NET ABSORPTION STREAK EXTENDS RECORD LONGEST STREAK IN MORE THAN 20 YEARS
RENT GROWTH IN U.S. INDUSTRIAL REAL ESTATE

6 YEARS...AND COUNTING
U.S. AVERAGE INDUSTRIAL LAND PRICE PER ACRE

Source: CBRE Research, Q4, 2017
WHAT IF THE CYCLE HAS THREE MORE YEARS?
Based on the average “last three years” of every cycle since 1980...

- Up to 750 million square feet of net absorption
- 10-12% growth in net asking rents

Source: CBRE Econometric Advisors, Q1, 2018; NAIOP
US HISTORICAL & FORECASTED SUPPLY
Deliveries as Percent of Stock

Source: CBRE Econometric Advisors, Q1 2018
US HISTORICAL BTS VS SPEC CONSTRUCTION

Speculative Construction unusually Constrained

Approx. 30% pre-committed

Source: CBRE Econometric Advisors, Q4, 2017
TOP LOGISTICS MARKETS

RANKED BY UNDER CONSTRUCTION (MSF)

Inland Empire: 23.0
Dallas/Ft. Worth: 19.2
Atlanta: 14.5
PA I-78 81 Corridor: 14.2
Central NJ: 9.4
Houston: 8.5
Central Valley: 8.0
Seattle: 6.6
Phoenix: 6.4
Memphis: 6.3
Chicago: 6.0
Los Angeles: 5.6
WHERE IS THE CONSTRUCTION?
44% OF PIPELINE IN JUST EIGHT MARKETS

1. INLAND EMPIRE
2. DALLAS/FT. WORTH
3. ATLANTA
4. PENNSYLVANIA
5. CENTRAL VALLEY, CA
6. SEATTLE
7. Measured Million Sq. Ft.
8. Source: CBRE Research, Q4
Locations in Virginia, Pennsylvania & Maryland can provide two-day ground service with UPS to all Atlantic Coast states and most/all areas east of the Mississippi River.
Pennsylvania & Norfolk Logistics Reach

Pursuant to Virginia Code Section 62.1-132.4, this is proprietary information and data furnished in confidence to the Virginia Port Authority. This proprietary information shall not be disclosed outside of Virginia International Terminals and the Virginia Port Authority.
# Industrial Market, Buildings Over 100,000 Square Feet

<table>
<thead>
<tr>
<th>Market Size (SQ. FOOTAGE)</th>
<th>Pennsylvania I-78/I-81</th>
<th>Norfolk</th>
<th>Virginia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017 Net Absorption</td>
<td>11,599,557</td>
<td>1,855,699</td>
<td>4,716,149</td>
</tr>
<tr>
<td>2017 New Construction</td>
<td>11,899,200</td>
<td>1,173,290</td>
<td>5,695,439</td>
</tr>
<tr>
<td>2018 Under Construction</td>
<td>14,248,182</td>
<td>675,000</td>
<td>1,899,299</td>
</tr>
</tbody>
</table>

Source: CBRE Research
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INVESTOR TRENDS

- Bigger is better, portfolios are generating pricing premiums
- Foreign Sovereign Wealth Funds prefer $1+ Billion deals
- Sweet spot for offerings is $50M - $100M

- Cap rates compressed in 2017 (2% - 5%)
- ROC spreads for spec development range from 75 – 125 bps

- New Construction is accelerating, but still lower than absorption
- Spec development is the best opportunity value add returns
- Smaller buildings (less than 250K SF) have the best risk / return profile

- Continued strong operating fundamentals
- Potential for rental rate / NOI appreciation
- Glut of global equity and debt capital
- Foreign capital is actively targeting U.S. logistics »»11 of the last 22 portfolio sales have been to foreign investors
THE U.S. LOGISTICS MARKET
TOTAL U.S. INDUSTRIAL ACQUISITIONS

<table>
<thead>
<tr>
<th>Year</th>
<th>Excluding Entity Level Transactions</th>
<th>Including Entity Level Transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 (peak)</td>
<td>$57.2 B</td>
<td>$60.9 B</td>
</tr>
<tr>
<td>2015</td>
<td>$57.0 B</td>
<td>$77.7 B</td>
</tr>
<tr>
<td>2016</td>
<td>$57.2 B</td>
<td>$60.3 B</td>
</tr>
<tr>
<td>2017</td>
<td>$67.2 B</td>
<td>$72.2 B</td>
</tr>
</tbody>
</table>

Year-Over-Year % Change

Source: Real Capital Analytics
THE U.S. LOGISTICS MARKET:
INVESTOR DEMAND & PRICING: CLASS A CAP RATES

[Map showing various cities with corresponding capitalization rates]
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WHO IS DRIVING THE DEMAND IN US NATIONALLY?

- E-COMMERCE
- MEDICAL
- FOOD/BEVERAGE
- CONSUMER GOODS

50% OF LARGEST DEALS
THE U.S. LOGISTICS MARKETS
RETAIL E-COMMERCE SALES GROWTH

$1 Billion in E-commerce sales = 1.25 MSF distribution space

Annual requirements of 50-60 MSF of additional DC space
WHAT DOES THIS MEAN FOR INDUSTRIAL?

The e-commerce emergence into industrial is only in the beginning stages. Lots of growth moving forward!

- **For Owners** – Creating additional pressure on a very tight industrial market.
- **Result** – Lease rates will continue to **appreciate 6% - 8% annually** over the next 24 months.
- **Cap Rates** – Continued compression.
- **E-commerce** – Related demand from users will move more aggressively to the infill sites.
- **Light industrial** (20-150,000 sq. ft.) will see the greatest appreciation and rent growth
TRADITIONAL VS E-COMMERCE LOGISTICS SCHEMA

Traditional:
1. Regional distribution platform
2. Local warehouse
3. Stores/mass distribution

E-Commerce:
1. Urban logistics space
2. E-fulfillment center
3. Consumers
4. Parcel hubs
5. Lockers/pick up points

CBRE Research, Q1 2017.
Online shopping is clearly important to millennials, and they like to take advantage of home delivery. There are regional differences, however. Almost half of millennials surveyed in India and China, for example, opt for office delivery.
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2017 TEU VOLUME & NEW INDUSTRIAL CONSTRUCTION

2017 TEU Volume  2017 Total New Construction Completions (SF)
## CBRE 2017 LOGISTICS REPORT
### Overall Ranking

<table>
<thead>
<tr>
<th>Port</th>
<th>2017 Overall Rank</th>
<th>2016 Overall Rank</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles</td>
<td>1</td>
<td>3</td>
<td>↑ 2</td>
</tr>
<tr>
<td>Long Beach</td>
<td>2</td>
<td>1</td>
<td>↓ 1</td>
</tr>
<tr>
<td>New York/New Jersey</td>
<td>3</td>
<td>2</td>
<td>↓ 1</td>
</tr>
<tr>
<td>Seattle/Tacoma Alliance</td>
<td>4</td>
<td>6</td>
<td>↑ 2</td>
</tr>
<tr>
<td>Norfolk (Port of Virginia)</td>
<td>5</td>
<td>9</td>
<td>↑ 4</td>
</tr>
<tr>
<td>Savannah</td>
<td>6</td>
<td>4</td>
<td>↓ 2</td>
</tr>
<tr>
<td>Houston</td>
<td>7</td>
<td>5</td>
<td>↓ 2</td>
</tr>
<tr>
<td>Vancouver, Canada</td>
<td>8</td>
<td>7</td>
<td>↓ 1</td>
</tr>
<tr>
<td>Oakland</td>
<td>9</td>
<td>10</td>
<td>↑ 1</td>
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<td>12</td>
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### CBRE Seaport & Logistics Index Ranking Methodology

The CBRE Seaports & Logistics Index blends two major criteria – **port infrastructure capabilities** and **real estate fundamentals**. Under each criteria, scores were weighted by importance and summed to provide a port’s score for that criterion. A market that ranked first in each criteria would receive a total score of 1.0.
CBRE 2017 LOGISTICS REPORT PORT INFRASTRUCTURE RANKING

<table>
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<tr>
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<th>2017 Infrastructure Rank</th>
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</tr>
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<tr>
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</table>

CBRE Port Infrastructure Index Ranking Methodology

Larger ports tend to rise to the top, but outsized growth—both short and long term—helped boost the Port of Virginia into the top five.

Infrastructure index criteria include:
- Cargo throughput (TEU)
- Long-term TEU growth
- Year-over-year TEU growth
- Local population density
- Projected population growth
- Class I rail lines
- Number of container terminals
- Mean-low water channel depth
- Total number of cranes
- Total number of neo-Panamax cranes
CBRE 2017 LOGISTICS REPORT REAL ESTATE RANKING

CBRE Real Estate Index Ranking Methodology
In the overall index, real estate carries a lower weight than port infrastructure. The index views markets from the perspective of both owners and occupiers, with the goal of identifying markets that have healthy real estate fundamentals overall.

Markets that skewed too far toward owners (with rents beyond peak) or occupiers (with stagnant rent and relatively high ability) did not fare as well in the index.

Real estate index criteria include:
- Total size of market (sq. ft.)
- Availability of existing space
- Demand activity
- Historical and forecast construction rates
- Rental growth
- Position in economic cycle

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