LET’S TALK
Session Summary

• The World Turned Upside Down

• Most Robust Industrial Real Estate Market in History

• Fundamentals Lacking Fundamentals….Pricing, Rents….”Irrational Exuberance”?

• Food As a Major Growth Driver

• Translation for Location Strategy?

• Watching The Headlines… What Happens Next?
Is American Retail at a Historic Tipping Point?

- San Antonio Express News

• The shift has been building gradually for years. But economists, retail workers and real estate investors say it appears that it has sped up in recent months and may be at a tipping point.

• About 89,000 workers in general merchandise stores were laid off in 2017. That is more than all of the people employed in the U.S. coal industry.

• The job losses in retail could have unexpected social and political consequences, as huge numbers of low-wage retail employees become economically unhinged, just as manufacturing workers did in recent decades. About 1 out of every 10 Americans works in retail.

• Store closures, meanwhile, were on pace in 2017 to eclipse the number of stores that closed in the depths of the Great Recession of 2008.
Recent Annualized eCommerce Revenues (Select Retailers)

There's Amazon… and Then There is Everyone Else…

- Amazon: est. $23.5B
- Walmart: est. $112.7B

Source: eMarketer, Internet Retailer
Repeat After Me: *This is Not the Retail Apocalypse*

Clearly in the Midst of Disruption

FOR EVERY

1 CHAIN NET CLOSER,

2.7 CHAINS TO BE NET OPENER

16 CHAINS ACCOUNTED FOR

48.5% OF TOTAL STORE CLOSINGS

5 OF THE 16 ACCOUNTED FOR

28.6% OF TOTAL STORE CLOSINGS

42% OF RETAILERS SURVEYED PLAN ON INCREASING LOCATION COUNT

15% TO BE NET CLOSERS

43% NO CHANGE

IHL Services, Chain Store Age
Redevelopment of Retail Assets for Last Mile?
Not Nearly as Easy as It May Seem… At Least for Now
In the Meantime…..Expansion Still Has Legs

Logistics & Industrial Demand Drivers Look Good

### Consumer Confidence
- Back to Earth—slight pullback is no cause for concern given that confidence was at a 17-year high
- December: 122.1
- Prior 12-months
- Current
- H1 2018

### Industrial Production
- Back on Track—a weaker dollar, more-stable oil prices and global growth is boosting production
- November Y/Y %: +3.4%
- December

### Retail Sales
- Strong Finish—U.S. retail sales ended strong, capped strongest year for sales growth since 2014
- +4.2%
- December Y/Y %

### ISM Manufacturing Index
- Major Mojo—second fastest pace of expansion in six years, new orders growing at fastest pace in 13 years
- December: 59.7

### Light Auto Sales
- Solid Sales—first year in which total annual sales have fallen since 2009, but sales still solid
- November: 15.8M
- YTD unit sales

### Containerized Imports
- Record Run—2017 registered five of the seven highest-volume imports months on record
- November Y/Y %: +5.9%

### New Home Sales
- Super surge—November single-family sales surged 17.5%, fastest pace in 25 years
- November YTD unit sales: +9.1%

### Intermodal Rail
- Banner Year—2017 was the best year ever for U.S. intermodal rail volume
- December Y/Y %: +5.3%

Source: Conference Board, Federal Reserve, Institute for Supply Management, National Retail Federation, Association of American Railroads, Cushman & Wakefield
Market Overview

Industrial Market – North America

Absorption, Deliveries, Vacancy Rate
Prior Years

2017 U.S. Industrial Performance
Past Year

+246.3
ABSORPTION
(msf)

+246.1
DELIVERIES
(msf)

-40
VACANCY
(bps)

+3.7%
RENTS
(average)
The Market is Tighter Than Ever

The last 4 years are 4 of the biggest ever

Bond type returns

- 1997: 226
- 1998: 235
- 1999: 265
- 2005: 244
- 2006: 243
- 2007: 205
- 2014: 272
- 2015: 270
- 2016: 282
- 2017: 246

- 3.75%
- 4.5%
- 5.1%
- 4.25%
- 4.85%
- 4.1%
EVERYTHING IS DIFFERENT: Eight Challenges Driving Prices & Absorption

- Ecom Grows at 5X Retail
- What IS Retail?
- Is service free?
- Oil recovers
- Advanced Education, The Enemy
- SKU/location combos drive inventory higher
- Urbanization inflating infill property values
- BTS explosion: expensive, critical facilities
Tech and Demo-Driven Lift to Logistics

U.S. GDP (Annualized Rate) vs. Warehouse Net Absorption as % of Inventory

Source: Bureau of Economic Analysis, Cushman & Wakefield Research
The Rules of Fulfillment Have Changed

The Need for Speed

Retailer's Dilemma
Retailer's Inventory-to-Sales Ratio

Source: Census Bureau, Federal Reserve, Cushman & Wakefield Research
Four Building Types in Two Dimensions

Service Level & Urbanization: Do These Continue?

**SERVICE LEVEL MIGRATION**

**BIG BOX E-COMM**
- Larger eCommerce DC
- Highly automated
- Shipping in a cost-viable location

**TIERED MODEL**
- Larger replenishment DC
- Highly automated
- Shipping to multiple RDCs (3PLs or MT)

**CROSS DOCKS**
- Receiving TL
- Full of labeled orders
- Higher cost location
- Less staffing

**DEPOTS**
- Service level depot
- Urban core, 10-40K SF
- Some stocking & picking, less automated
- Some A+ inventory
- Possibly a 3PL or multi-tenancy

Two factors that will shape successful fulfillment chains over the next five years.
Getting Closer to the Consumer

The Two Types of Online Retailers: Amazon and Everyone Trying to Catch Amazon

Follow the Leader
Amazon, # of Transactions

- Fulfillment Centers
- Sortation
- Fresh / Pantry
- Prime Now / Delivery Station

ROOM FOR GROWTH

Closing in on the Population
% of Population w/in 20 miles on an Amazon Fulfillment Node

Source: U.S. Census Bureau, Piper Jaffray, Company filings, Cushman & Wakefield Research
Top of the Wish List – Ecom Users

- Proximity to Population
- Uninterruptable Logistics
- Affordable Labor
- Warehouse Design Efficiency
- Perfectly Accessible Site
Build to Suit Considerations

- REQUIRED FOR SPECIALIZED FUNCTIONALITY
- OWN EXPENSIVE ASSETS UNLIKELY TO DEPRECIATE
- NEED IT NOW !!
- LIQUIDITY (NOT) POST-RECESSION
- DEVELOPERS SPECIALIZE, SO GO DIRECT

U.S. Industrial Supply

Build-to-Suit Speculative

U.S. Industrial Construction Activity BTS vs. Spec
Right Clear Height?

**Trends:**
- Occupiers (investors?) seeking buildings with higher clear height
- More e-commerce mezzanines and robotics
- And 40’?

**Drivers:**
- Raising from 32’ to 36’ can create 20% more pallet positions
- Land cost drives vertical
- Lower operating costs

**Constraints:**
- Fire suppression system and exiting repercussions
- Additional construction costs and higher up front material handling equipment costs
- Height is only part of the equation
## Big Money

### E-Commerce
(Midwest – Non Chicago Pricing)

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**Hard Costs (Adds):**
- Interior Mezzanine: $4,850,000
- Mechanical Smoke Exhaust: $4,300,000
- Power Distribution: $5,100,000
- Sprinkler Enhancements: $2,500,000
- Clear Height: $1,000,000
- Expanded Site Work: $1,875,000
- Office Improvements: $4,600,000
- Security: $1,000,000
- HVAC: $2,800,000

**Total Hard Costs:** $28,025,000

### Traditional DC
(Midwest – Non Chicago Pricing)

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**Total Hard Costs:** $26,000,000

**Total Project:** $34,000,000
What’s Driving the Market?
Population, Consumption, Logistics Trends, eCommerce

Food is a Major Growth Driver *Everywhere*

People are eating out more now than ever before.

9 in 10 consumers say dining out with family and friends is a better use of their leisure time than cooking and cleaning up.
U.S. Cold Storage Snapshot

Solid Demand Fundamentals and Limited Supply Make Cold Storage a Hot Asset Class

U.S. Absorption and Rents are Climbing
4Q Trailing Average

U.S. Vacancy Remains Low
Vacancy Rate, %

Source: CoStar Group, Cushman & Wakefield Research
Current Trends

How is the Supply Chain Impacted?

**Healthy eating and fresh food frenzy**
- Need for more cooler space, more frequent deliveries, higher risk

**Physical grocers expanding in-store ready-to-eat meals**
- Increase menu choices requiring supply & distribution considerations

**Rising labor costs and lack of labor force**
- Need for in-depth, reliable site selection process

**3PLs have more hiring flexibility and access to labor**
- Need for discussion on pros & cons of company-owned vs. 3PL drivers/trucking companies
What Else is in the News?

- Amazon Wants to Open 2,000 Grocery Stores Across the U.S.
- Truckload Rates Nearing Cycle Highs: Limited Drivers and Equipment
- PetSmart Buys Online Pet Retail Rival Chewy.com
- Warehouse Workers Hard to Find, and Keep: Lehigh Valley, PA
- Albertson’s Acquires Plated, Seeking to Change Dining
- Walmart Closes 65 Sam’s Stores
Why Site Selection is Challenging

- LONG-TERM ALLOCATION OF PROPERTY, CAPITAL AND PEOPLE
- COMPANY-WIDE IMPACTS
- OCCURS INFREQUENTLY & COMPANIES ARE LEAN
- PRESENTS RISKS AND TECHNICAL CHALLENGES
- REQUIRES CONSENSUS-BASED DECISION-MAKING
- COMPANIES RARELY BUDGET SUFFICIENT TIME

Site selection is a high-profile, high-risk event that companies rarely face.
Tremendous Opportunity Lies Amongst the Risks

OPERATING CONDITIONS VARY GREATLY BY LOCATION. COSTS MAY VARY BY 100% OR MORE.

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<tr>
<th>Category</th>
<th>Notes</th>
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<tr>
<td>Labor</td>
<td>Costs, Availability, Skillsets</td>
</tr>
<tr>
<td>Transportation</td>
<td>Inbound and Outbound Freight Costs, Infrastructure and Proximity (to Suppliers, Customers, etc.)</td>
</tr>
<tr>
<td>Real Estate</td>
<td>Rent and/or Purchase Price, Availability and Suitability</td>
</tr>
<tr>
<td>Utilities</td>
<td>Rates, Capacity and Availability</td>
</tr>
<tr>
<td>Government Support</td>
<td>Taxes, Incentives, Permitting and Regulations</td>
</tr>
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Workforce Considerations Should be Top-of-Mind

Labor-market dynamics can vary greatly between candidate sites/cities. Consider them before committing.
Challenges in Today’s Real Estate Markets

- SUITABLE SPACE IS SCARCE, PARTICULARLY MANUFACTURING
- OCCUPANCY AND CONSTRUCTION COSTS ARE ON THE RISE
- CONSTRUCTION IS MORE SPECIALIZED, ESPECIALLY IN FULFILLMENT
- REAL ESTATE CONSIDERATIONS PLAY GREATER ROLE IN LOCATION STRATEGY THAN IN PAST

It is essential to consider real estate market realities at the start of site selection.
Common Mistakes and Risks in Facility Location Initiatives

There are many different types of risks, varying by topic and significance. The risks cited below tend to occur more frequently and can have the largest timeline, risk and cost impacts.

<table>
<thead>
<tr>
<th>Top Risks in Site Selection</th>
<th>Actions to Avoid / Mitigate Risks</th>
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<tbody>
<tr>
<td>• Failure to consider/weigh appropriate location factors, cost drivers and objectives at project start and early milestones</td>
<td>• Use thorough data-collection templates; require inputs from diverse client functional groups</td>
</tr>
<tr>
<td>• Unclear, un-socialized timeline/schedule objectives</td>
<td>• Create week-to-week project schedule at start; socialize across client team; review regularly</td>
</tr>
<tr>
<td>• Narrowing the search area too quickly</td>
<td>• Advocate to add states/regions at project start to avoid ‘backtracking’ and undiscovered options</td>
</tr>
<tr>
<td>• Site layout not thoroughly considered and or developed late</td>
<td>• Inventory factors/features that must be included in layout; obtain 3rd-party expertise as needed</td>
</tr>
<tr>
<td>• Insufficient technical review of site, infrastructure, labor markets, permitting and other technical matters</td>
<td>• Retain 3rd-party expertise/engineering involvement on critical technical matters and major costs on preferred sites</td>
</tr>
<tr>
<td>• Lack of executive team consensus, resulting in delays, re-work or cancellation</td>
<td>• Create defensible, clear, fact-based deliverables and recommendations; solicit cross-department review and feedback</td>
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Amazon’s Beehive Fulfillment Center: Really?
Where is the Limit?

Now this is urban logistics
Jacques Cousteau’s Fulfillment Center
Amazon’s Underwater Storage and Retrieval

Mermaids Need Not Apply
Cushman & Wakefield

Logistics & Industrial Platform

800+
650+ Dedicated Logistics & Industrial Professionals in the U.S.,
800+ in the Americas

#1
Top Market Share of U.S. Industrial Leasing

250 msf
2017 U.S. Transaction Volume valued at more than $8 billion

The World’s #1 Industrial Platform