

CBRE ECONOMETRIC ADVISORS Presents

# NEW LANDSCAPE

CBRE AMERICAS RESEARCH CONFERENCE 2017

## GENERAL SESSION

*The Evolution of  
Retail Distribution*

FRIDAY, SEPTEMBER 14, 2017  
8:45 AM - 10:00 AM



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Advantage*

# THE EVOLUTION OF RETAIL DISTRIBUTION

**Bill Wheaton, Ph.D.**



**MIT Professor**  
Senior Economist,  
Consultant to CBRE EA

**David Egan**



**CBRE INDUSTRIAL**  
Global Head of Industrial &  
Logistics Research

**Melina Cordero**



**CBRE RETAIL**  
Americas Head of  
Retail Research

**Jing Ren, Ph.D.**



**CBRE, EA ECONOMIST**  
Retail Economist

**Colin Yasukochi**



**CBRE MODERATOR**  
Director, Research  
and Analysis

- Consumer and Retail Sales Trends
- Why is this Happening? – E-Commerce/Omnichannel
- Real Estate Implications: What does it mean?

# CONSUMER AND RETAIL SALES TRENDS

WHO IS BUYING WHAT – AND WHERE

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# IS THIS THE EVOLUTION OF RETAIL DISTRIBUTION?

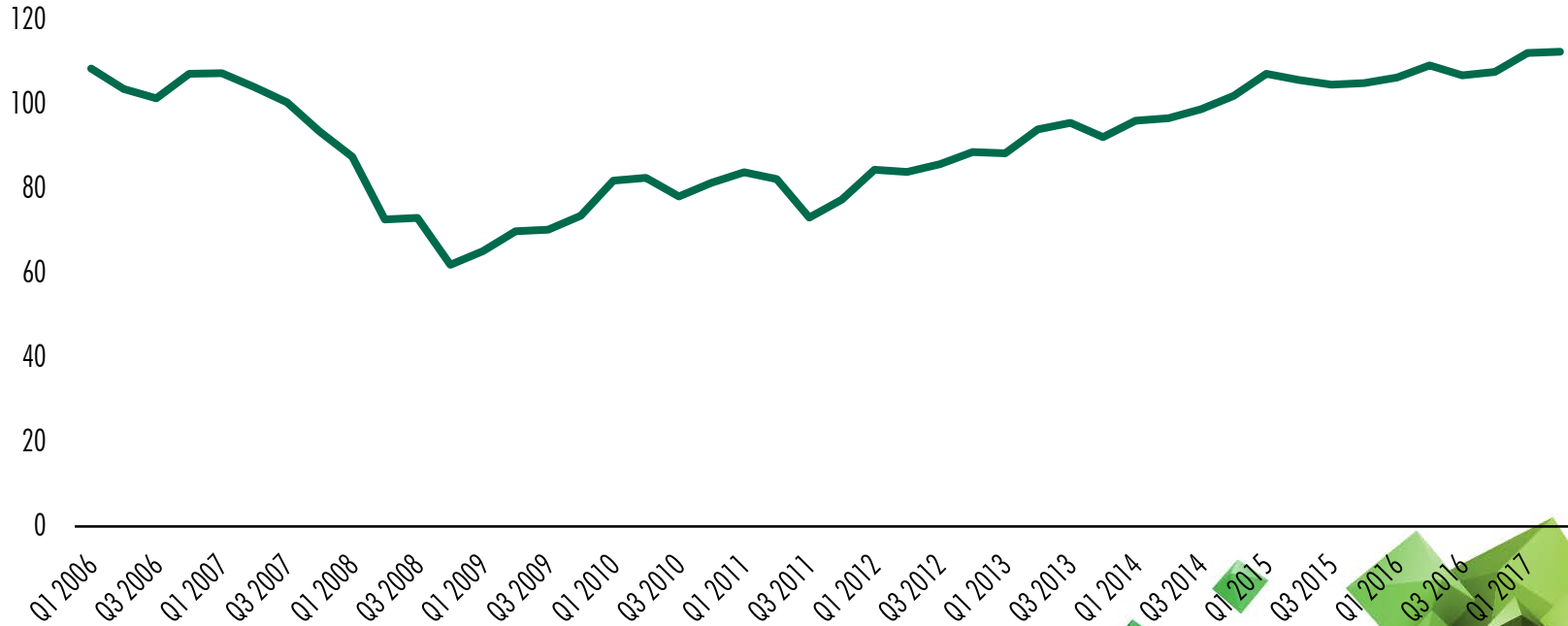
“America’s retailers are closing stores faster than ever”



Are we entering “a retail ice age?”

# BUT CONSUMER SENTIMENT IS AT A 17-YEAR HIGH

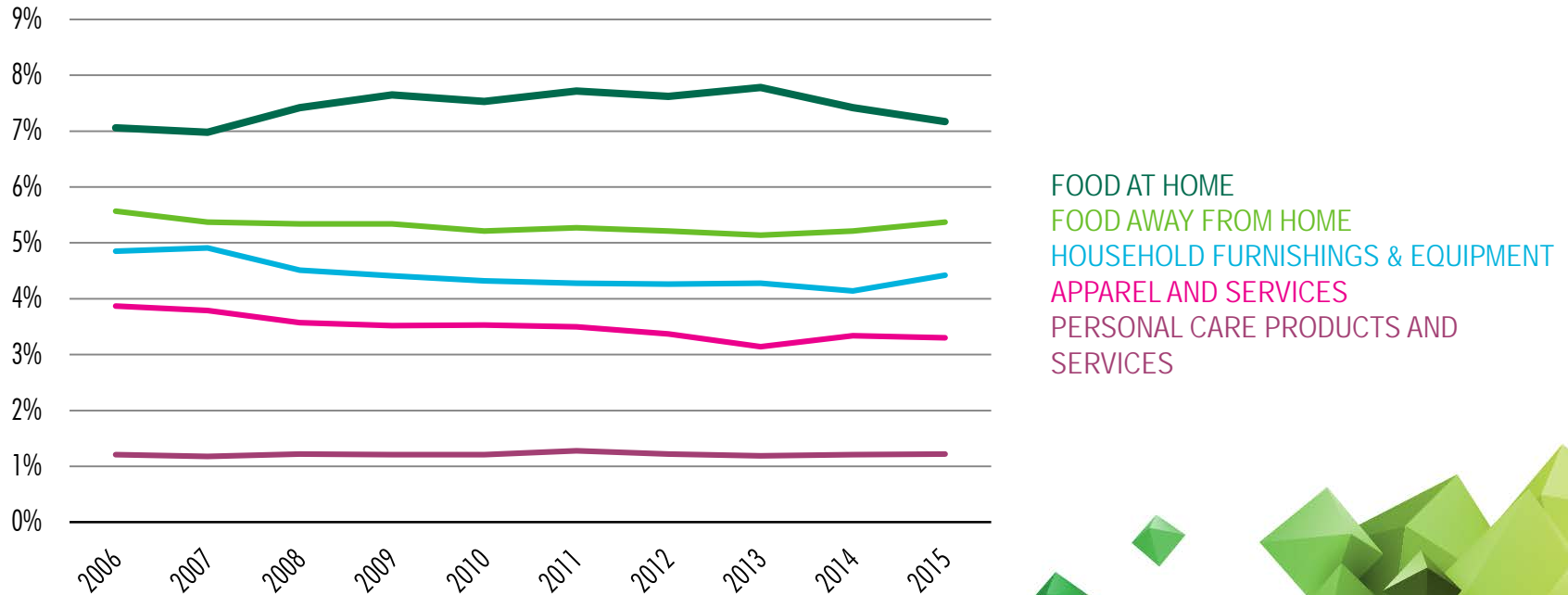
## CONSUMER SENTIMENT INDEX



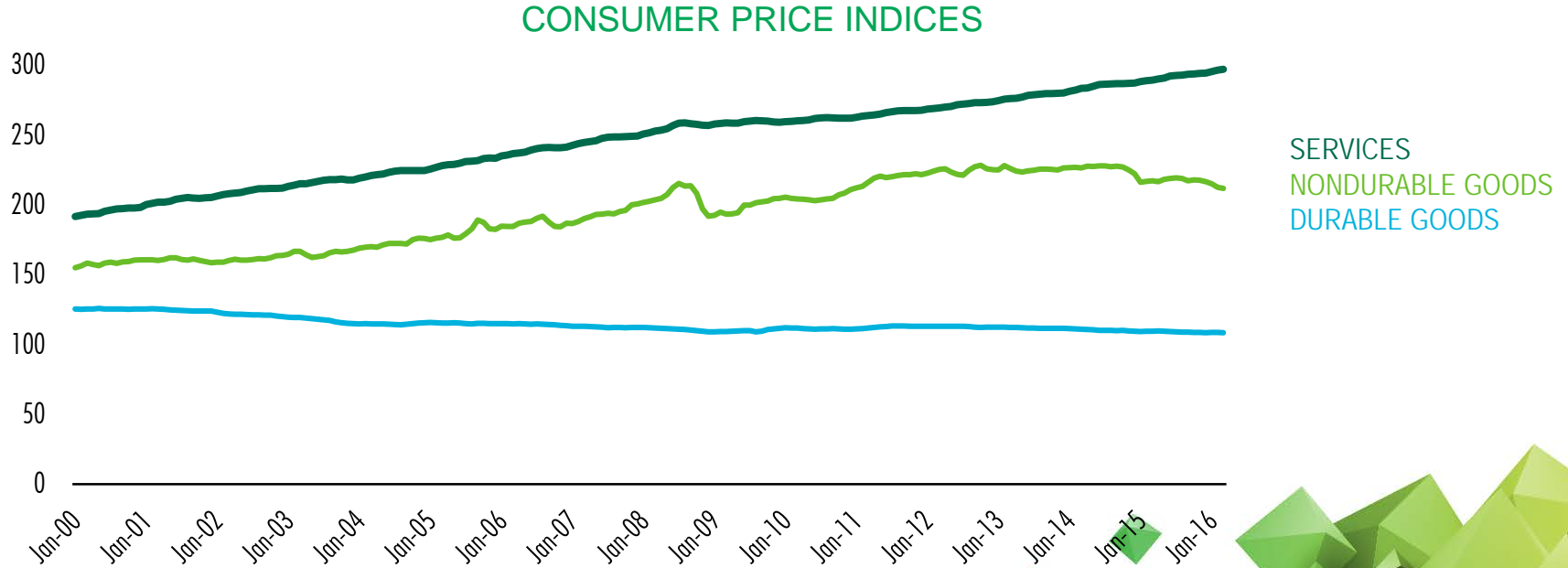
Source: University of Michigan, FRED, Q2 2017.

# WHAT WE'RE BUYING HASN'T CHANGED DRAMATICALLY...

## SHARE OF EXPENDITURE BY RETAIL CATEGORY (2006-2015)



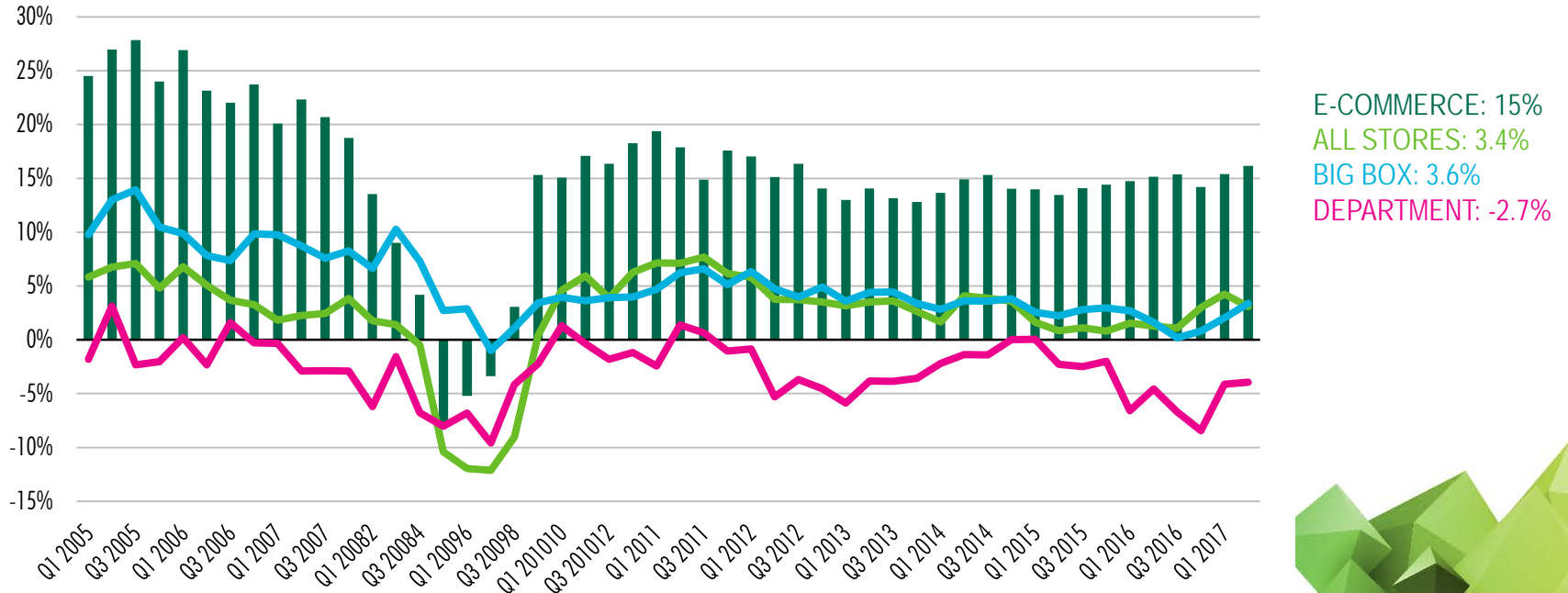
# EVEN THOUGH DURABLE GOODS HAVE BECOME CHEAPER RELATIVE TO NON-DURABLES (FOOD AND SERVICES)



Source: Federal Reserve Economic Data, 2016.

# THE CHANGE IS *WHERE* PEOPLE ARE BUYING

DISTRIBUTION OF RETAIL SALES BY CHANNEL (2008-2017 YOY)





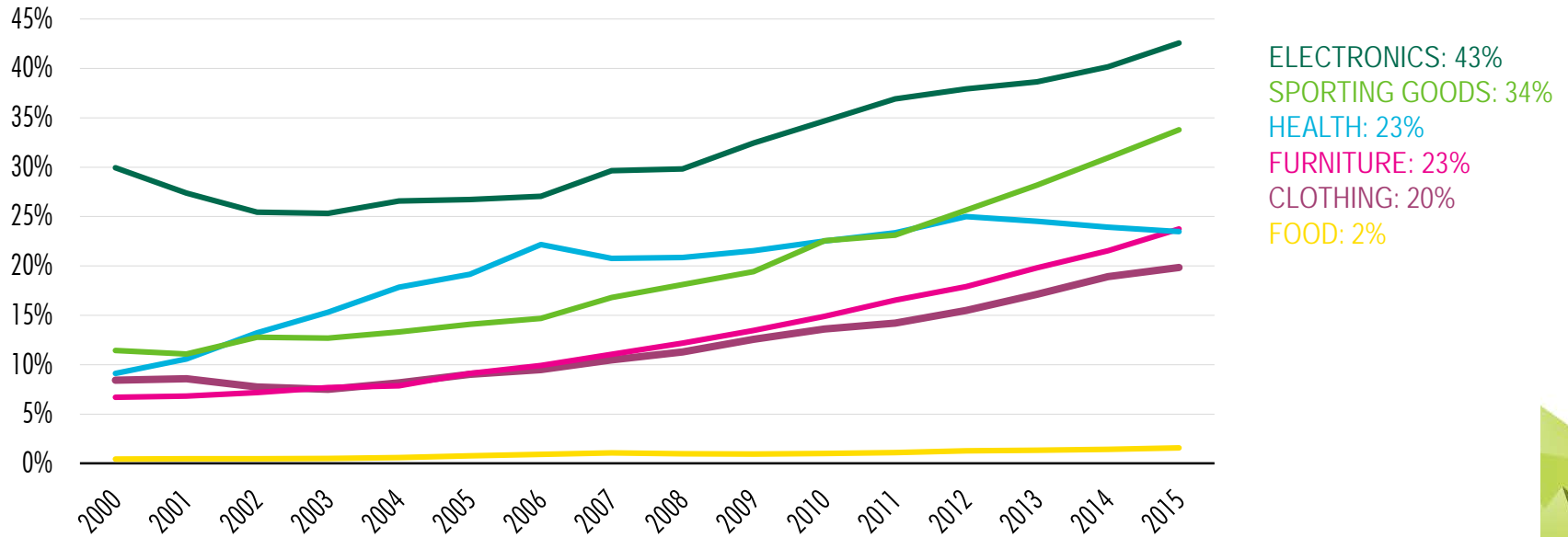
# MOST GROWTH IS IN NON-STORE SALES, BUT MOST STORE SALES ARE *NOT* COLLAPSING

CATEGORY SALES GROWTH BY CHANNEL (CUMULATIVE 2006-2016)

		NON-STORE		STORE
CLOTHING	▲	180%	▲	18%
ELECTRONICS	▲	92%	▼	-4%
GROCERY	▲	124%	▲	30%
FURNISHINGS	▲	167%	▼	-6%
HEALTH	▲	52%	▲	41%
SPORTING GOODS	▲	208%	▲	4%

# NON-STORE SHARES VARY WIDELY, BUT MOST SHOW HIGH GROWTH AND LITTLE SIGN OF SLOWING

## SHARE OF NON-STORE SALES BY CATEGORY



# RESULTING SHIFTS IN CONSUMER EXPECTATIONS PUT SIGNIFICANT PRESSURE ON RETAILERS

## THE RISE OF THE “HIGH-MAINTENANCE” CONSUMER



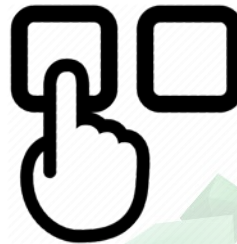
TIME

CONVENIENCE



LOCATION

CHOICE



# E-COMMERCE / OMNICHANNEL

E-POCALYPSE FOR BRICK AND MORTAR?

# THE DISTRIBUTION SECTOR OF AN ECONOMY IS..

1. The channel through which goods move from the producer to the end user or consumer:

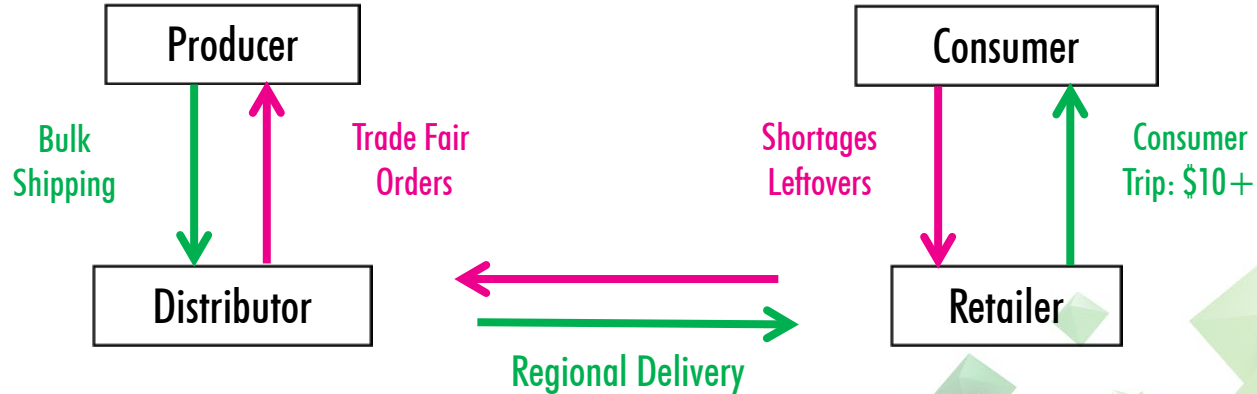
Shipping + Wholesaling + Retailing = 20% of developed country GDP

**BUT IT'S ALSO**

2. The channel that determines how consumers get information about and gain access to the variety of goods available, while providing producers with feedback about consumer preferences for those goods

# THE TRADITIONAL DISTRIBUTION CHANNEL

- Multi-agents manage inventories
- 3-step shipping
- High last-mile cost to searching consumer
- Limited consumer choice & weak feedback to producer



# INTERNET DISTRIBUTION WITH INTERMEDIARY

- Single agent inventory management
- 2-step shipping
- Finger-tip search
- Low UPS last-mile costs
- Huge consumer choice, direct feedback to producer



# PRODUCTIVITY FOR GOODS DELIVERED BY INTERNET VERSUS TRADITIONAL DISTRIBUTION CHANNELS

STORE	SALES/WORKER (U.S.) <sup>1</sup>	SALES/SQ. FT. <sup>2</sup>	SQ. FT./WORKER <sup>3,4</sup>
Amazon (U.S.)	\$530k	\$850	1240
Walmart (U.S.)	\$226K	\$430	690
Macy's	\$167K	\$185	1201
Publix	\$181K	\$646	372
Best Buy	\$316K	\$988	415

1. Annual 10k. U.S. operations
2. Annual 10k. U.S. operations
3. Ratio assuming 2.0 10-hr shifts/day (internet), 1.33 8-hr shift/day (other stores)
4.  $\text{Sq. ft./worker} = \text{Shifts} \times (\text{sales/worker}) / (\text{sales/sq. ft.})$



# COST TO GENERATE AND DISTRIBUTE \$1 OF RETAIL SALES EXCLUSIVE OF COST OF GOODS & LAST MILE.<sup>4</sup>

STORE	WAGE/ (SALES/WORKER) <sup>1</sup>	RENT/ (SALES/SQ. FT.) <sup>2,3</sup>	TOTAL
Amazon	\$0.071	\$0.018	\$0.089
Walmart	\$0.166	\$0.035	\$0.201
Macy's	\$0.22	\$0.19	\$0.41
Publix	\$0.207	\$0.023	\$0.23
Best Buy	\$0.12	\$0.015	\$0.135

1. Annual wage assumed to be \$37,500
2. Annual base rent: \$7 (internet), \$10 (Big Box, grocery, electronics), \$20 (Dept. Store)
3. Fit out (added to rent): \$5 (Internet, Big Box, Grocery, electronics); \$15 (Dept. Store)
4. Excludes consumer travel time/cost in reaching the store, or doorstep delivery cost

# HENCE LITTLE LIMIT TO INTERNET PENETRATION BUT AMAZON?

- Types of goods and services Amazon finds difficult
  - Low volume, product differentiated, designed to order
  - Involving some level of human intervention
  - Larger, heavier, difficult to store/ship, delivery lags
  - What goods/services are “Amazon-proof”?
- Alternatives: specialized, internet intermediaries:
  - Tires (Tire Rack), Furniture (Wayfair), Luxury watches (Jomashop), Handbags (Farfetch), Crafts (Etsy), Electronics (Best Buy)
- What about food (9% of expenditure)?
  - U.S. vs EU

# EVENTUAL SPACE TRANSITIONS

- If we move \$1 in sales from Macy's to Amazon...
  - Retail space demand drops .0054 sq. ft.
  - Warehouse space demand rises by .0012 sq. ft. (22% of the retail loss)
  - Demand for retail workers drops by .000006
  - Demand for warehouse workers rises by .0000019 (35% of the retail loss)
- Ultimately, the world of actual stores where people shop in person...  
Shifts to virtual stores, and goods are delivered
- Virtual shopping provides:
  - For consumers: more choice, better information on products
  - For producers: Better information for product design
  - Savings in travel time, shipping and inventory cost (that 20% of GDP)

# IMPLICATIONS FOR CRE: WHAT DOES IT ALL MEAN

# CRITICAL QUESTIONS

- What's wrong with shopping malls? Are they in decline or do they have a department store problem?
- Is occupied retail stock rising or falling? How has that affected retail jobs?
- Can brick-and-mortar stores fight back with omni-channel efforts? How are stores doing, relative to pure-play e-commerce?
- Is retail property still a good investment?
- How has warehouse supply responded to e-commerce demand? What about the last-mile?

# WHAT'S WRONG WITH SHOPPING MALLS?

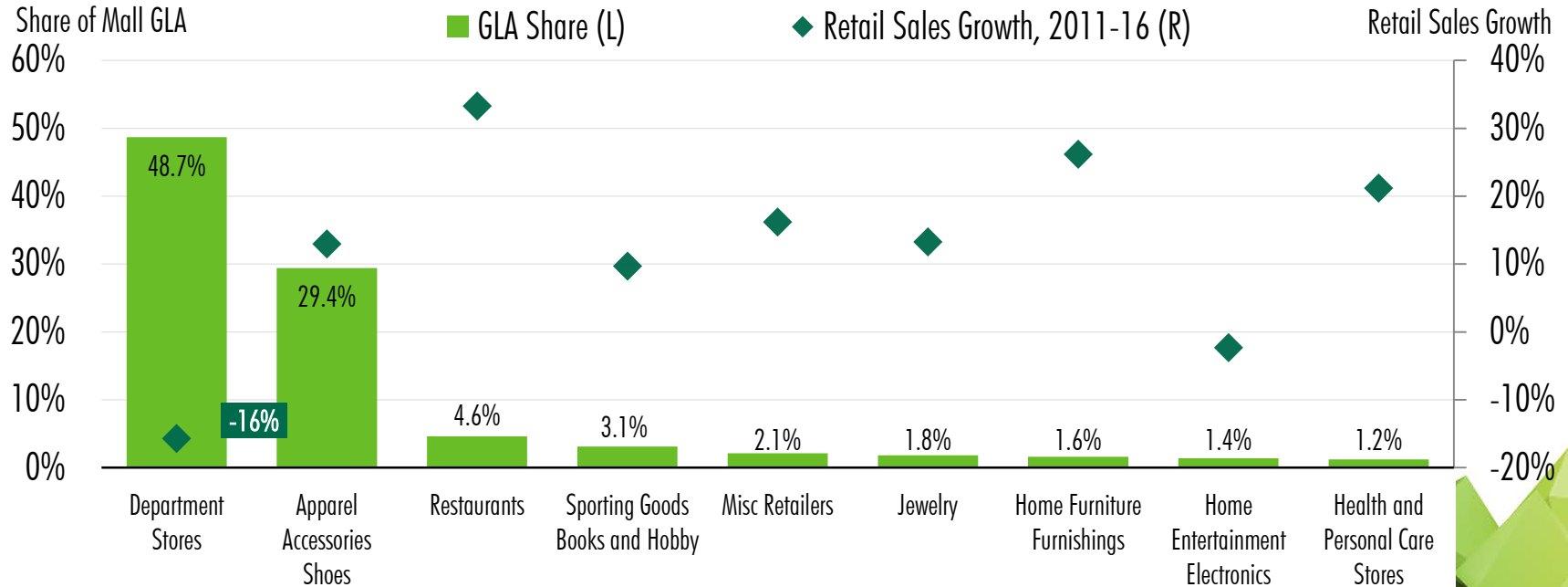
I will defend  
the **mall**



TYRIONLANNISTER.NET

# WHAT'S WRONG WITH SHOPPING MALLS?

Distribution of U.S. Mall Gross Leasable Area (GLA) vs. Sales Growth for Key Retail Categories



Source: CBRE Research, U.S. Census Bureau, ICSC, August 2017.

# IS OCCUPIED RETAIL STOCK RISING OR FALLING? HOW HAS THAT AFFECTED RETAIL JOBS?

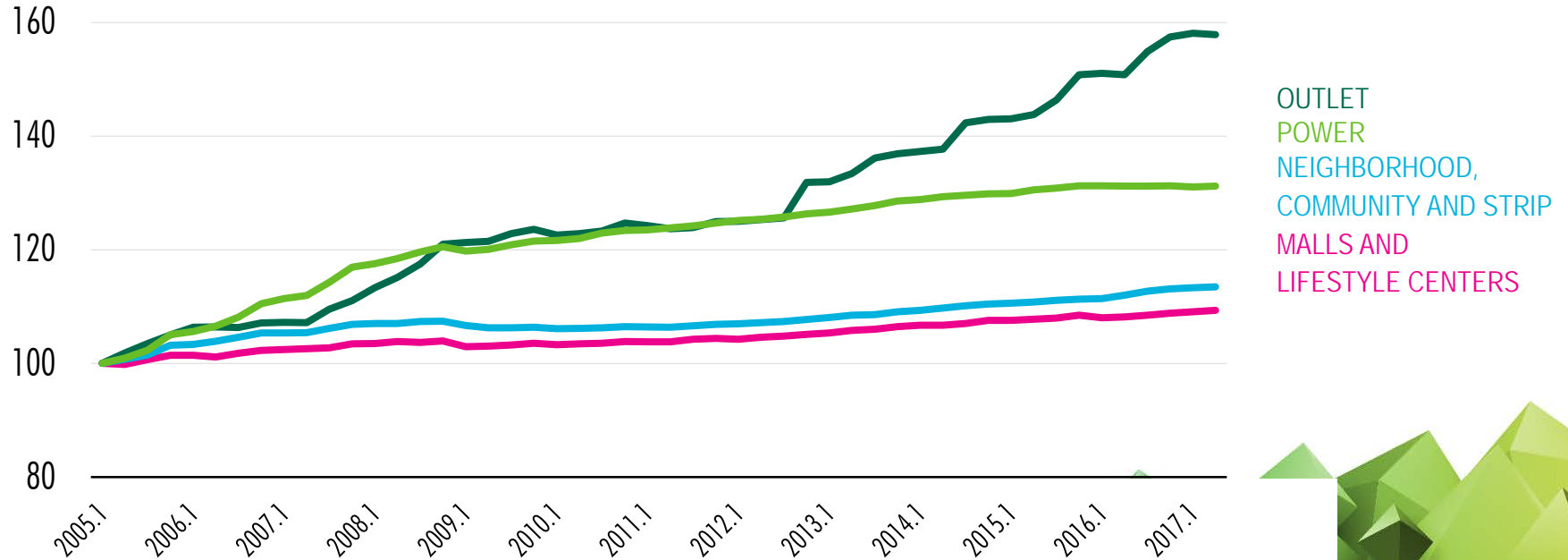




# OCCUPIED STOCK STILL RISING, DESPITE E-COMMERCE PENETRATION

## U.S. Occupied Retail Stock, by Category

Index, 2005 = 100

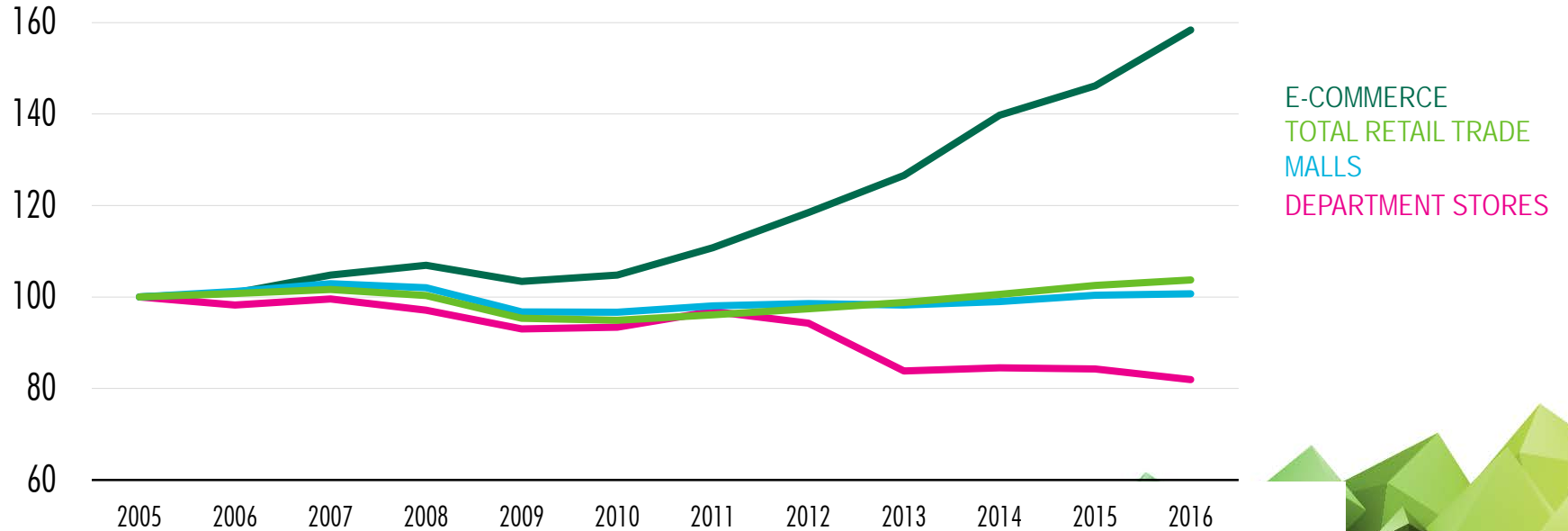


Source: CBRE Econometric Advisors, Q2 2017.

# RETAIL JOBS: E-COMMERCE RISING AND DEPT STORES FALLING

## U.S. Retail Employment, by Category

Index, 2005 = 100



Source: Bureau of Labor Statistics and CBRE Research, August 2017.

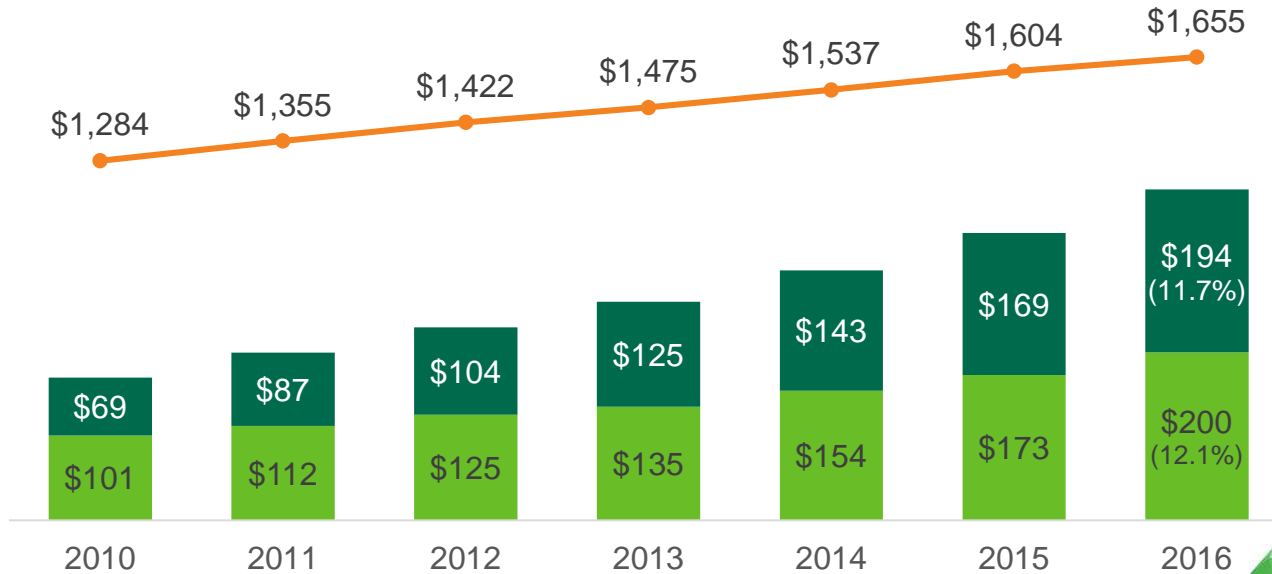
# CAN BRICK-AND-MORTAR STORES FIGHT BACK WITH OMNI-CHANNEL?

e-pocalypse

The word "e-pocalypse" is written in a large, black, serif font. Below the text is the Amazon smile logo, a thick orange arrow that curves upwards from left to right, ending in a hook-like shape.

# CAN BRICK-AND-MORTAR STORES FIGHT BACK WITH OMNI-CHANNEL?

Pure-Play Internet vs. Omni-Channel Internet (U.S. Retail Sales in Billions)



INTERNET SALES OF PURE-PLAY  
E-COMMERCE RETAILERS  
INTERNET SALES OF BRICK AND  
MORTAR RETAILERS  
TOTAL GAFO\* SALES

\*GAFO includes: general merchandise stores; clothing and clothing accessories stores; furniture and home furnishings stores; electronics and appliance stores; sporting goods, hobby, book, and music stores; and office supplies, stationery, and gift stores.

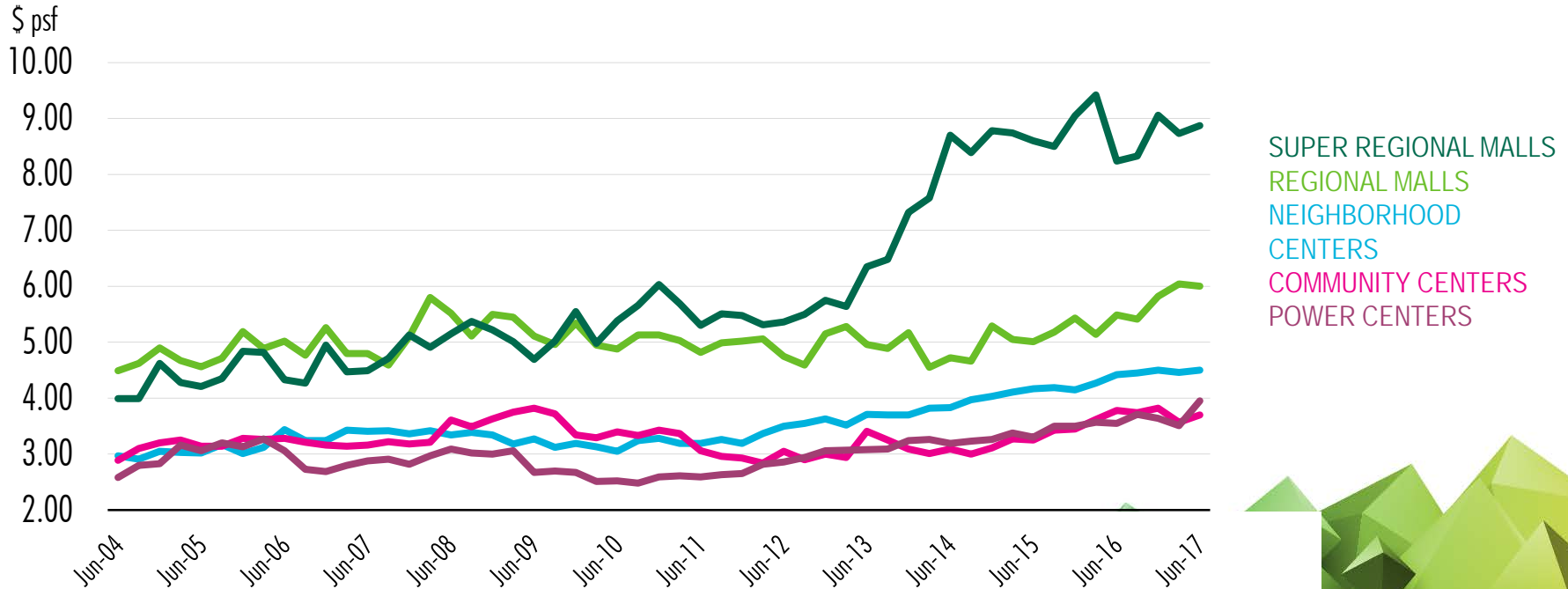
Source: U.S. Census Bureau and Euromonitor International Q1 2017

# IS RETAIL PROPERTY STILL A GOOD INVESTMENT?



# RETAIL CONTINUES TO BE A GOOD INVESTMENT

U.S. Net Operating Income, by Category (Still Growing)



Source: NCREIF, August 2017.

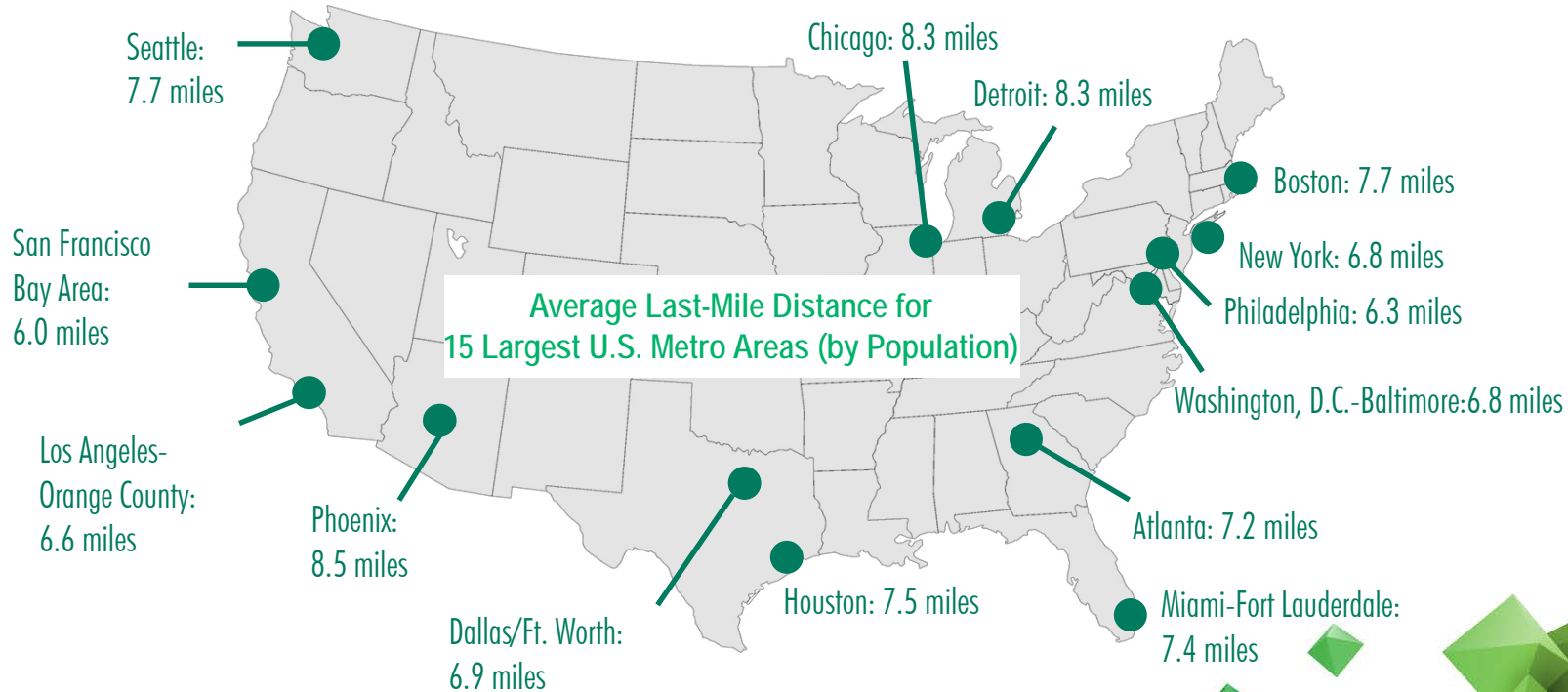
THE EVOLUTION OF RETAIL DISTRIBUTION

# HOW HAS WAREHOUSE SUPPLY RESPONDED TO E-COMMERCE DEMAND?



“New Face of Retail”

# E-COMMERCE FULFILLMENT SPACE MUST BE NEAR MAJOR POPULATIONS TO BE SUCCESSFUL



Last-mile facilities used in this analysis were opened within the past two years and sized under 200,000 sq. ft.  
Source: CBRE Research, July 2017.



# HOW HAS WAREHOUSE SUPPLY RESPONDED TO E-COMMERCE DEMAND?

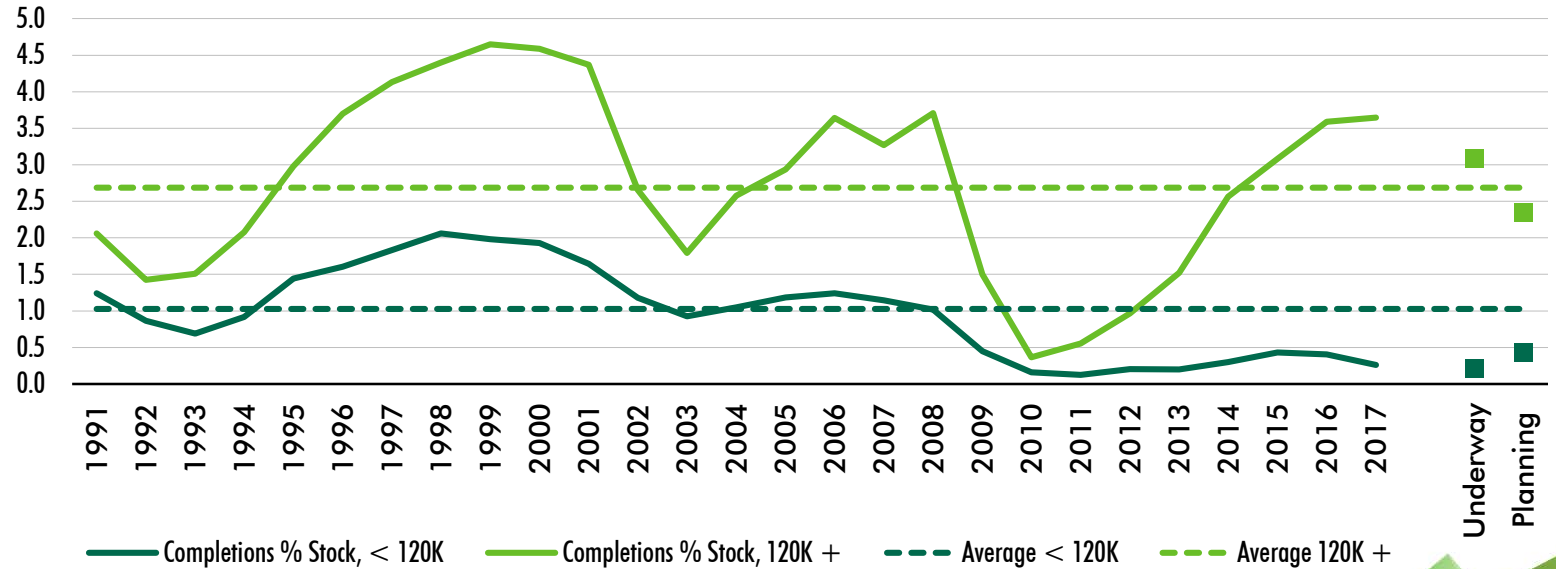
U.S. Infill/Last-Mile Space is at a Premium



Markets: Atlanta, Baltimore, Boston, Chicago, Dallas, Detroit, Houston, Los Angeles, New York, Orange County, Phoenix, San Francisco, Seattle  
Measurements taken from approximate city center  
Source: CBRE Research, Q2 2017.

# ...WITH LITTLE NEW SUPPLY ON THE HORIZON

Completions Rate (% of Inventory), %



Source: CBRE-EA, Q2 2017

# QUESTIONS & ANSWERS

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