

TRANSPORTATION RESEARCH BOARD

# Navigating the Supply Chain Congestion Crisis

**November 3, 2021**

**@NASEMTRB**  
**#TRBwebinar**

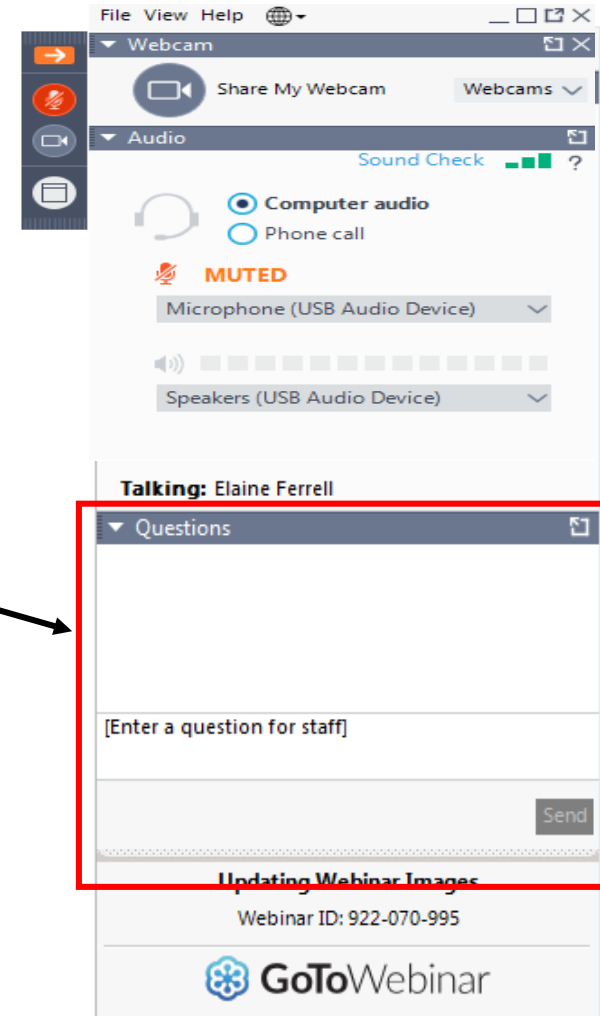
# Learning Objective

Identify tools and practices to maintain flow of freight and supplies



# Questions and Answers

- Please type your questions into your webinar control panel
- We will read your questions out loud, and answer as many as time allows



**#TRBwebinar**

# Today's Panel

- Moderator: Joseph Bryan, *WSP*
- David Libatique, *Port of Los Angeles*
- Melinda McLaughlin, *Prologis, Inc.*
- Jess Dankert, *Retain Industry Leaders Association*

**TRB Webinar Series**

# **Supply Chain Congestion: Navigating the Crisis**

*David Libatique, Deputy Executive Director, Port of Los Angeles*

November 3, 2021



**THE PORT  
OF LOS ANGELES**

# 4+ Years of Trade Disruption

## 2018-2019 U.S.-China Trade Tensions Tariffs & Retaliatory Tariffs

Manufacturer Migration to Southeast Asia  
= Cargo Routing to U.S. East Coast

Cargo Owners Pull Inventories Forward in  
Advance of Scheduled Tariff Increases

Tariff Wars Exacerbate  
Trade Deficit Imbalances

Record-Setting 2018 Volume

## 2020-2021 COVID-19 Disruptions Distressed Supply Chain

Economies Shutter  
China Manufacturing Halts

Global and Regional Workforce Shortages

Consumer-Driven Cargo Surge  
E-Commerce Boom

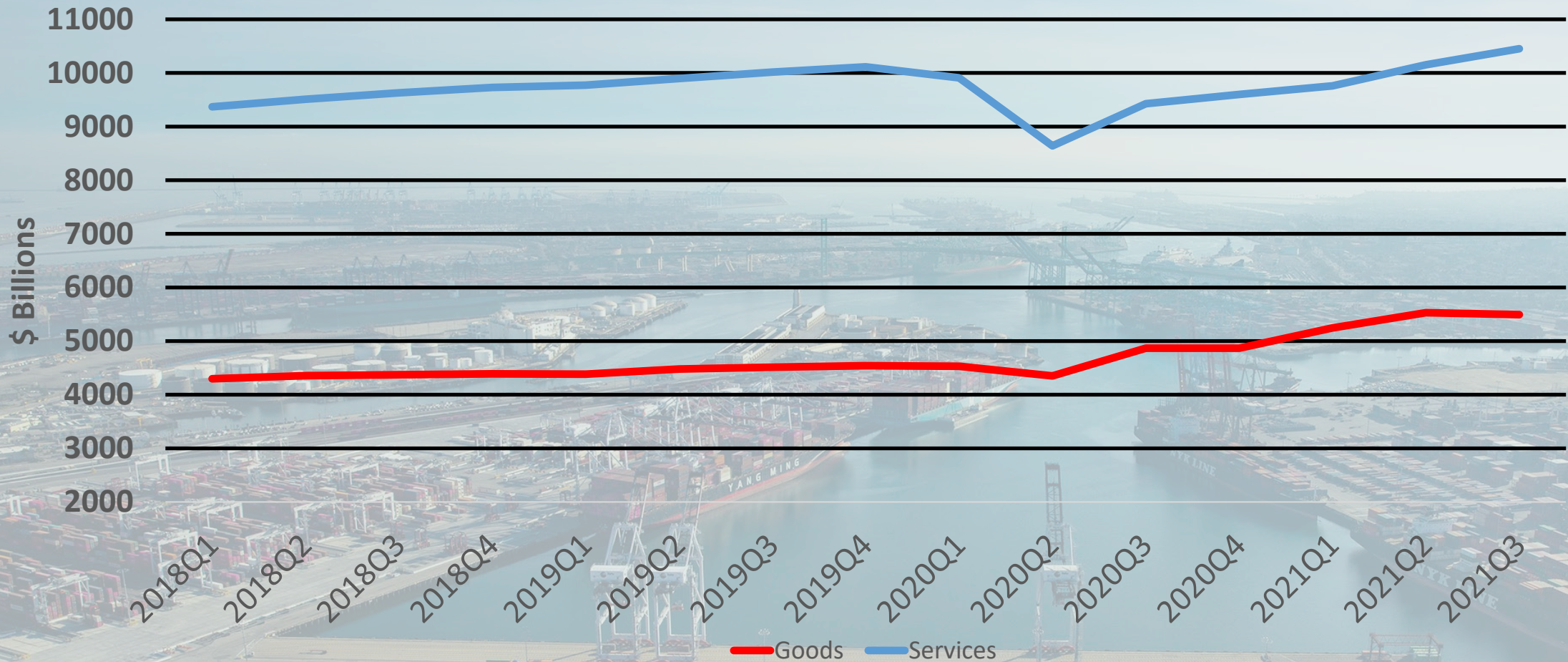
Global Supply Chain Disruptions

Container Shortages  
Shipping Price Hikes

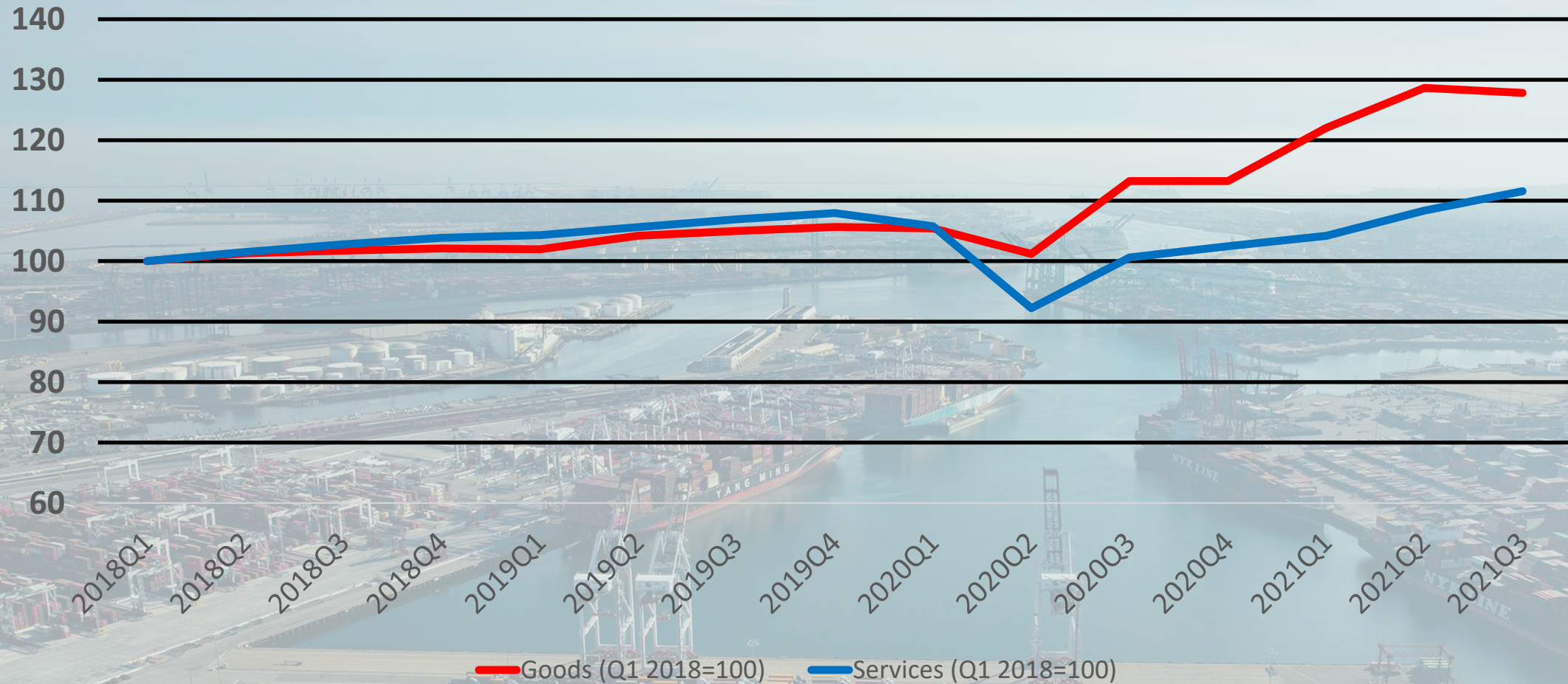
POLA Exports Down 31 out of 35 months  
thru Sept. (biggest declines since 2002)

Record-Setting 2021 Volume

# Goods vs Services, 2018-2021

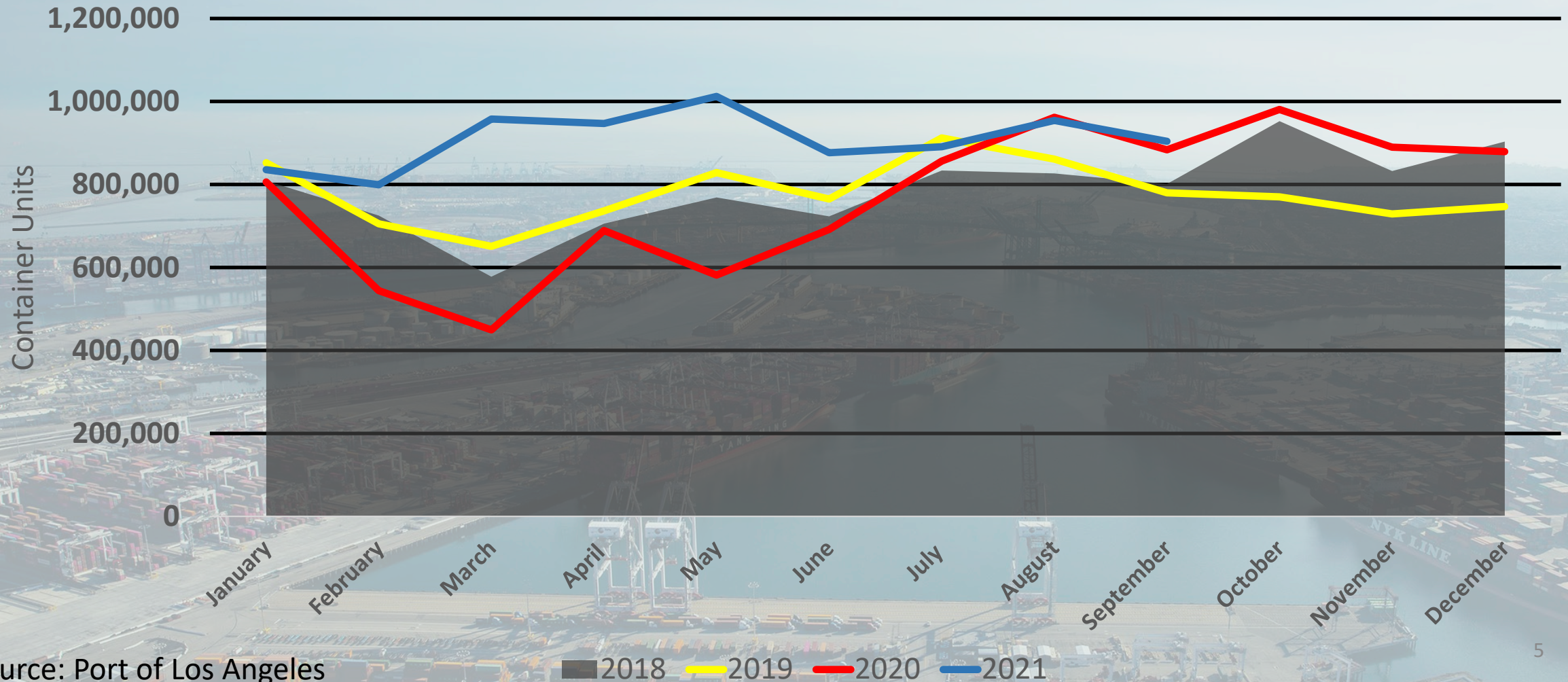


# Goods vs Services, 2018-2021

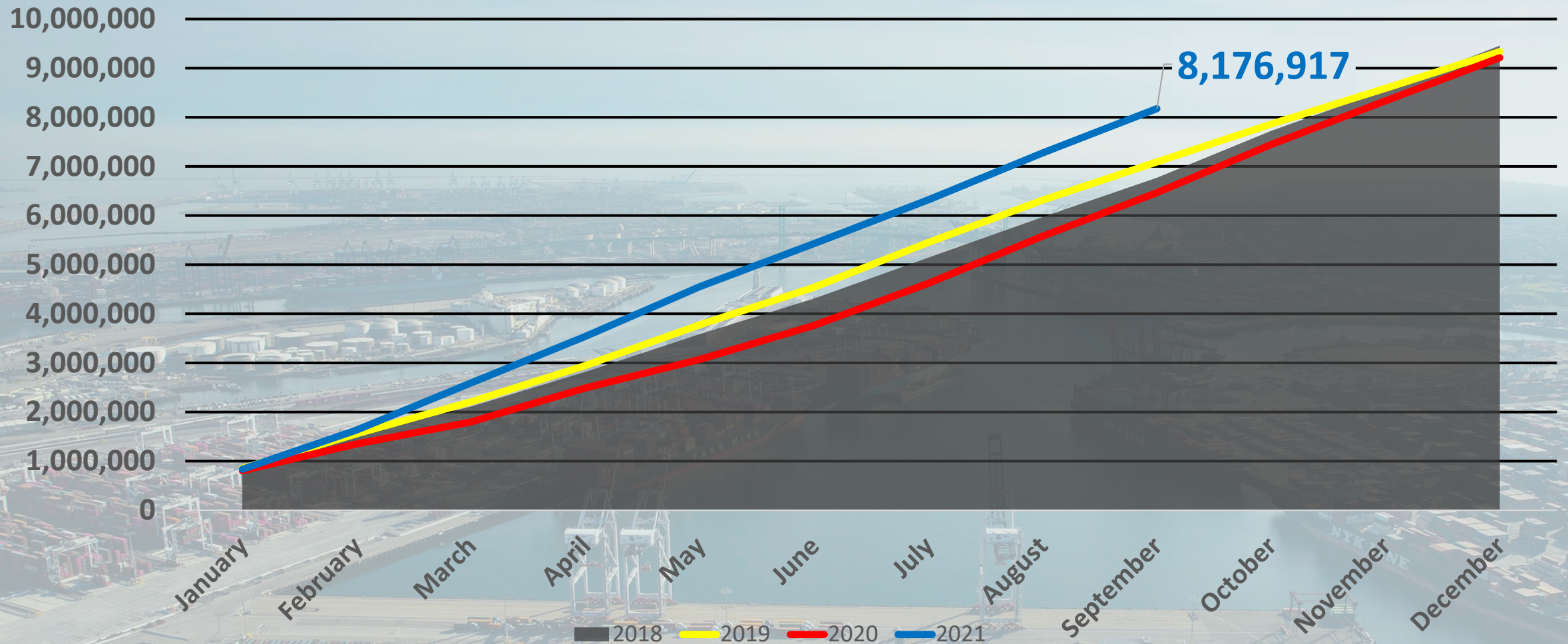




# Monthly Container Volume, 2018-2021



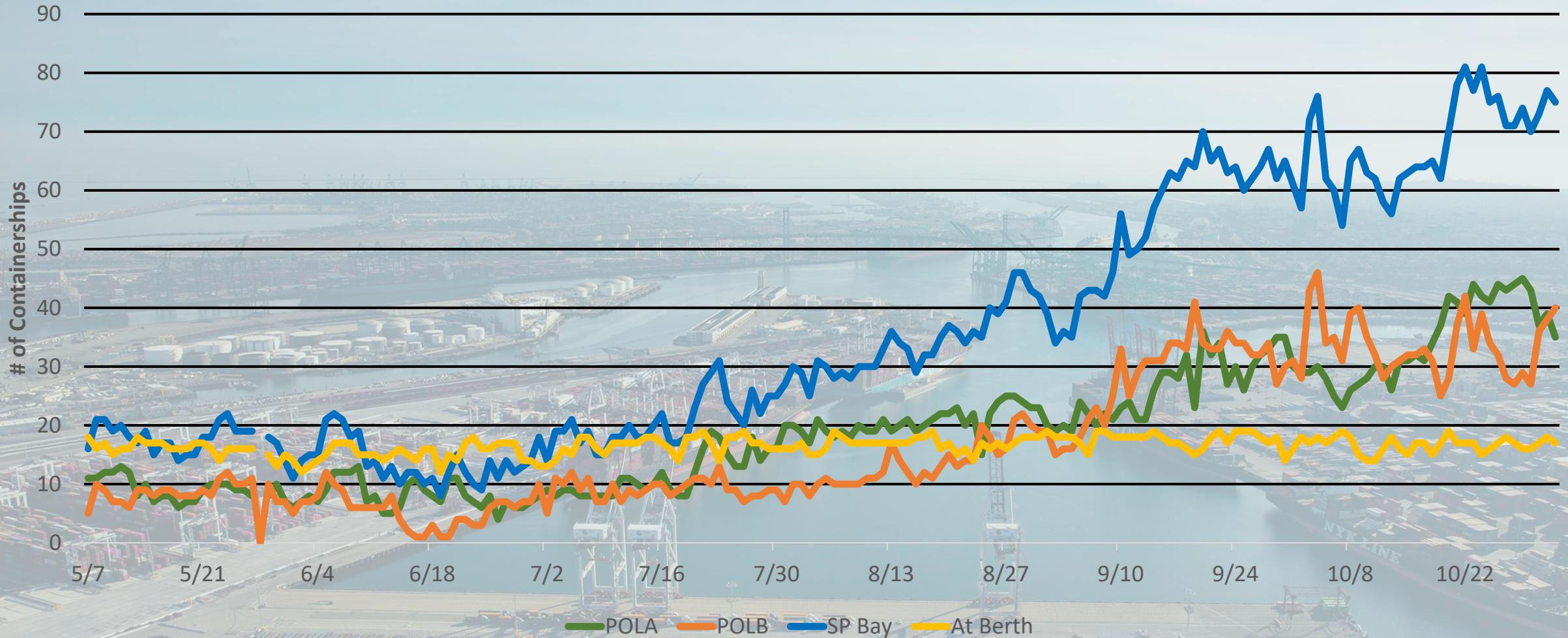
# Cum. Annual Container Volume, 2018-2021



# Impacts on the Supply Chain

- Unprecedented Cargo Surge
- No Place to Take Cargo
- Equipment Tied Up
- High Rate of Unused Gate Appointments
- Environmental and Quality of Life Impact

# Containerships at Anchor & at Berth



# The Current Situation

**Ships At  
Anchor:**

**75 (35  
POLA)**

**En route:**

**21 (10 POLA)**

**Avg. Dwell:**

**14 Days**

**At Berth:**

**17 ships**

**Avg. Time at Berth:**

**5.2 Days**

**Total Containers  
in Terminals**

**78,319**

**Dwell Time:**

**9.7 Days**

**Rail Dwell:**

**4.5 Days (13.4)**

**Street Dwell:**

**8.8 Days (9.9)**

**Labor Gangs**

**39 (0)**



# Terminal Dwell Times

## Total Containers in Terminals

**78,319**

### 0-4 Days:

**30,874 (39.4%)**

### 5-8 Days:

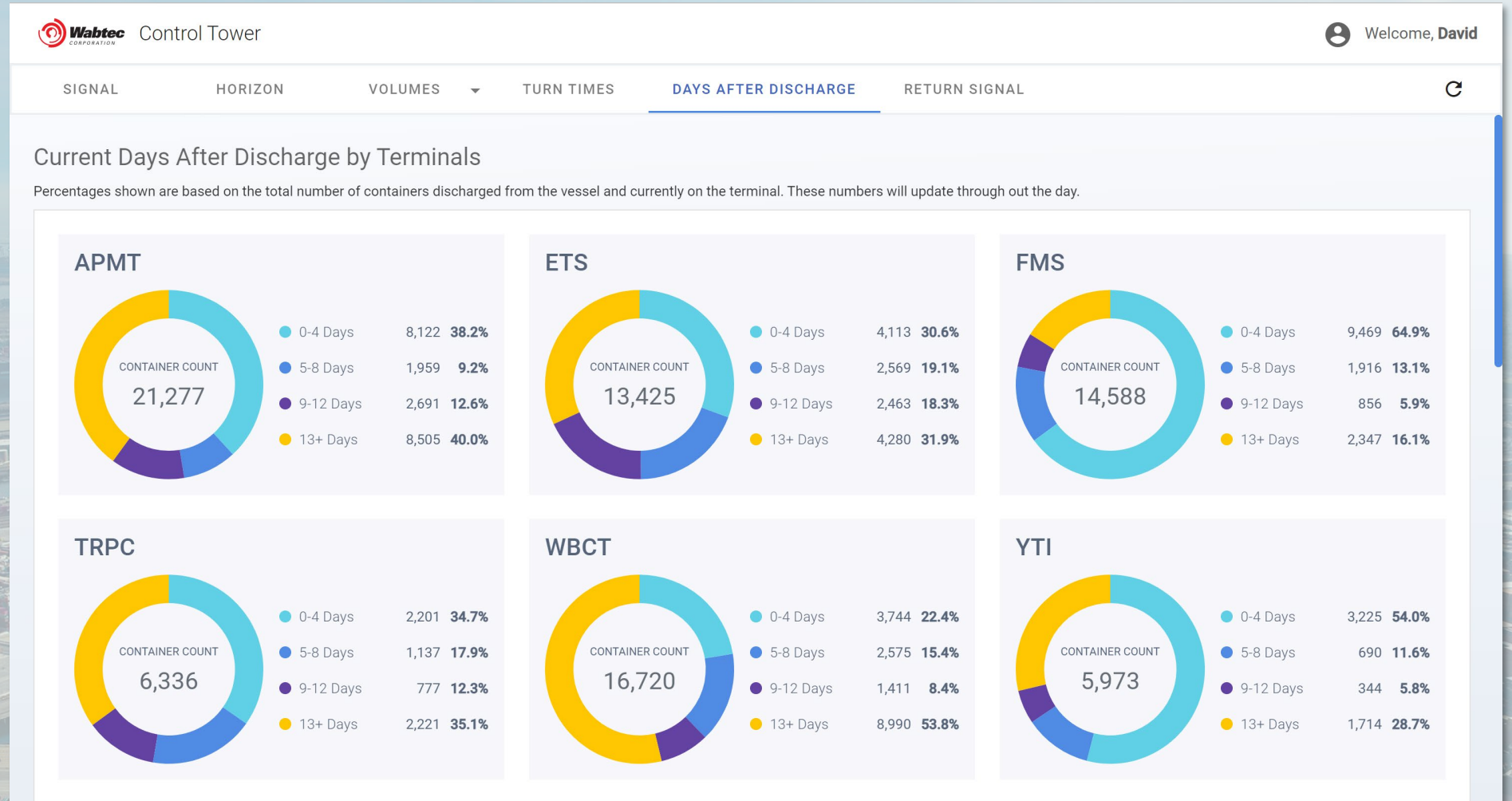
**10,846 (13.8%)**

### 9-12 Days:

**8,542 (10.9%)**

### 13+ Days:

**28,057 (35.8%)**



# Responses to Congestion

- Accelerate Cargo LA
- Presidential Announcement
- Fees and Incentives

- Accommodate Non-Drayage Drivers
- Long-term Workforce Development

- Repair Bad Order Chassis
- Open Empty Depot



- Make Port Land Available
- Explore 2-3 Strategic Sites throughout the Region

- Towards 24/7 Operations
- Improved Info Sharing

- Container Excess Dwell Fee to Free Up Terminal Space
  - Sweeper Ships

# THANK YOU

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[portoflosangeles.org](http://portoflosangeles.org)



THE PORT  
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Prologis Park Fremont, Fremont, California

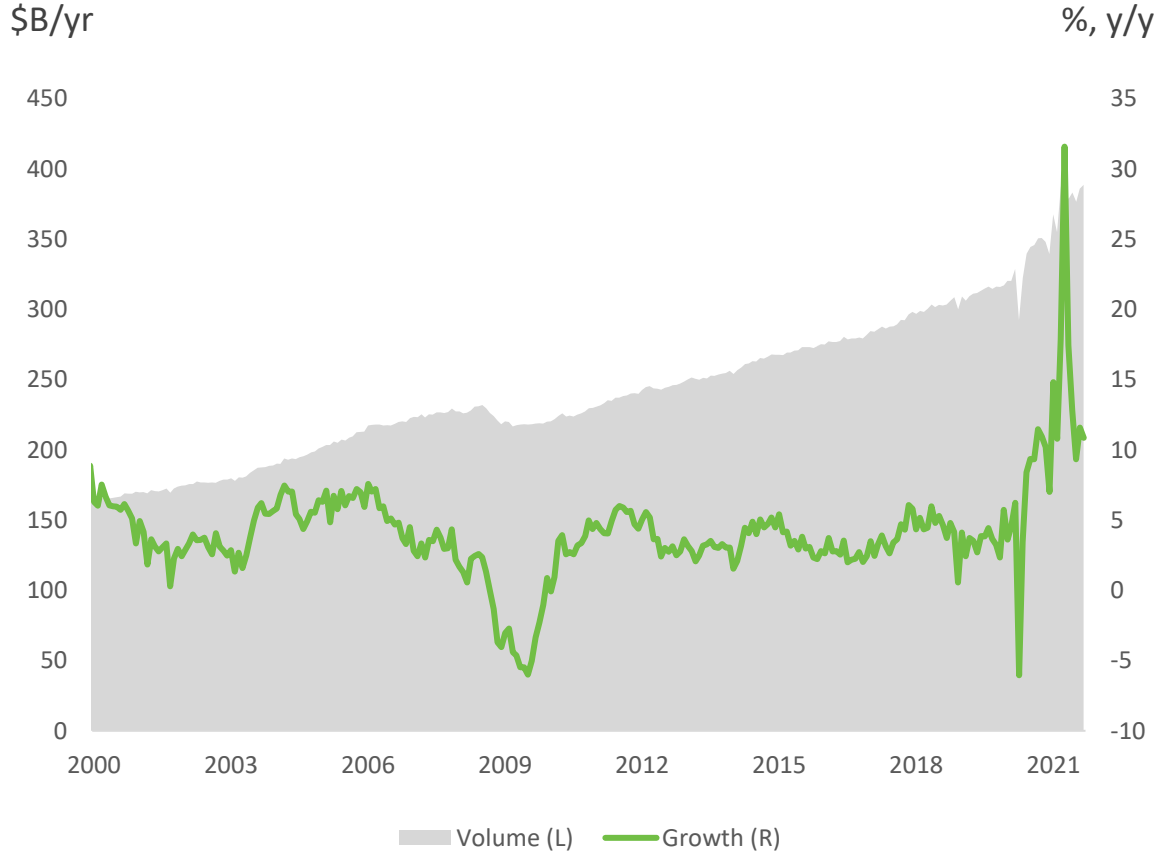
# Managing Workforce Assets

Melinda McLaughlin, SVP, Global Head of Research

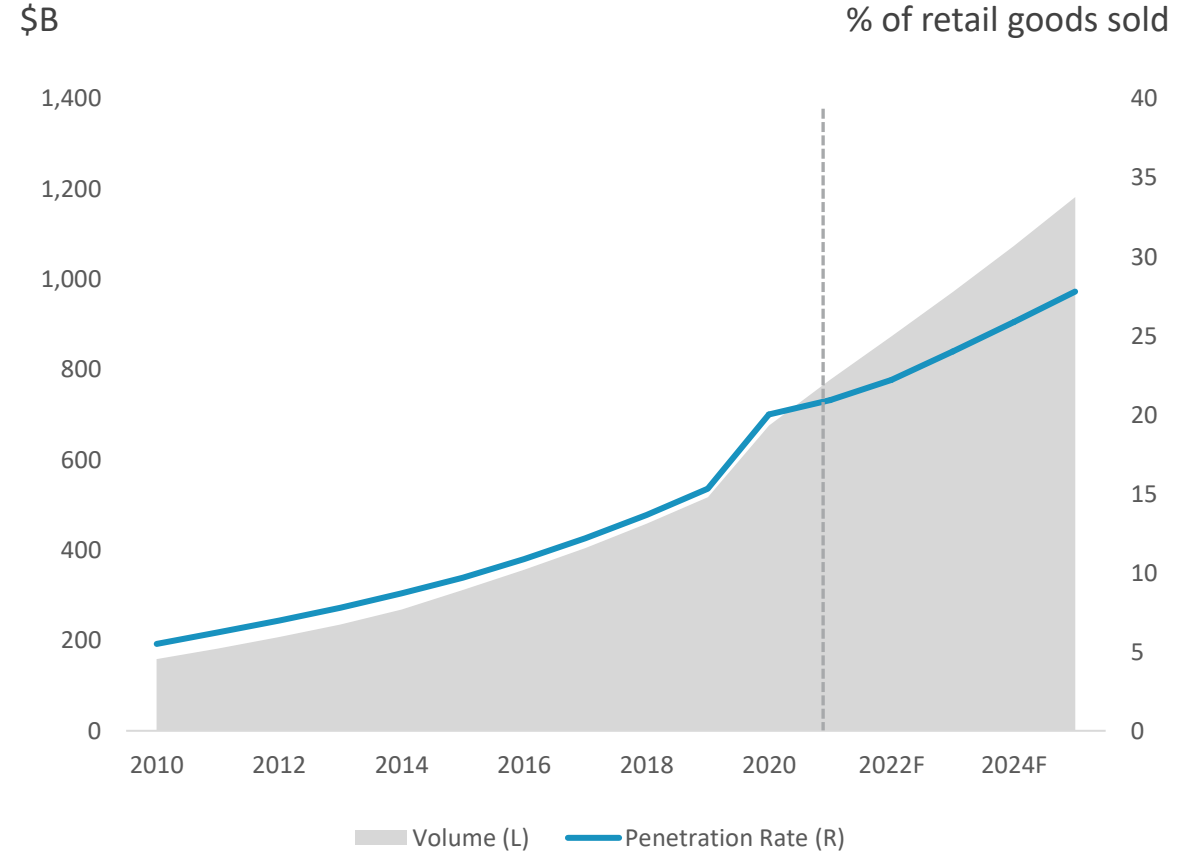
What's driving demand for logistics real estate?

# Consumer spending habits have shifted

## RETAIL GOODS SALES, U.S.



## ONLINE SALES, U.S.



1. Sources: Euromonitor, U.S. Census Bureau

# E-commerce strengthening the expansion

## E-COMMERCE SUPPLY CHAIN EFFICIENCY

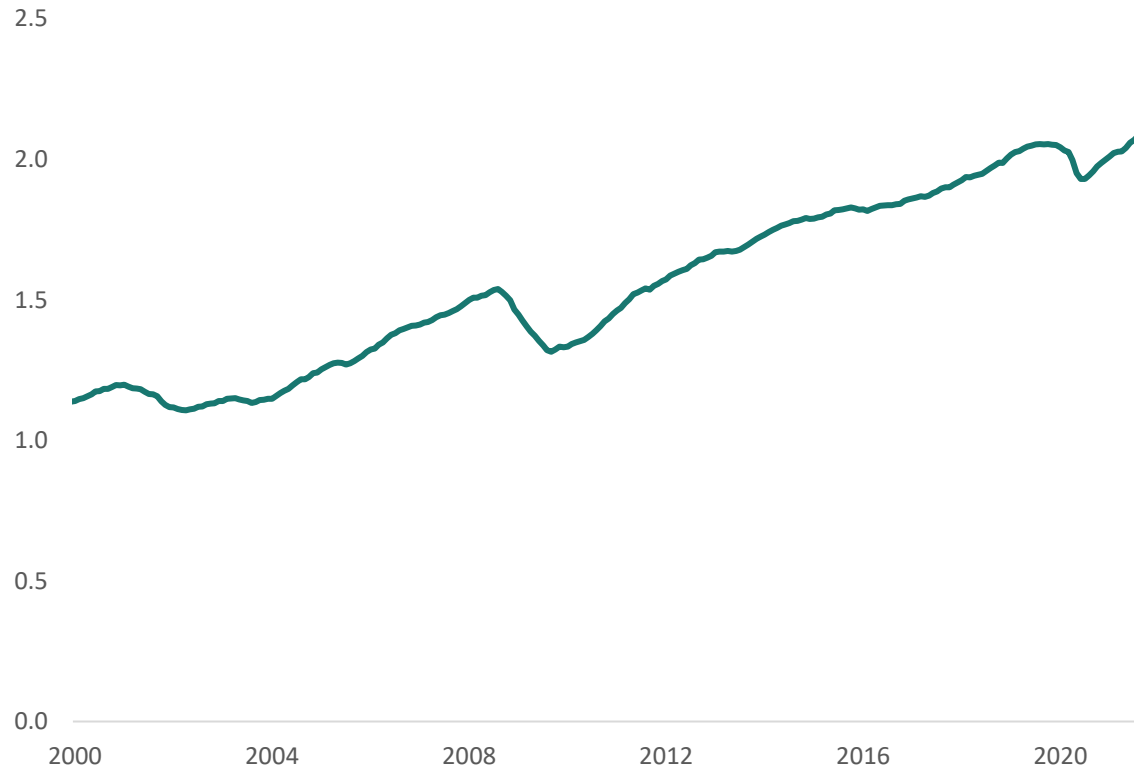
	SALES (US\$, B)	SPACE (MSF)	EFFICIENCY (SF / \$1B)
Online	234	265	1,174
			+/- 3x 
Brick-and-Mortar	1,343	449	334K

Source: Internet Retailer, company filings, Prologis Research  
 Note: Based on 2019 company 10-K reports

# Rising inventory levels

## INVENTORIES

\$, Trillions, Retailers



## INVENTORY TO SALES RATIO, U.S.

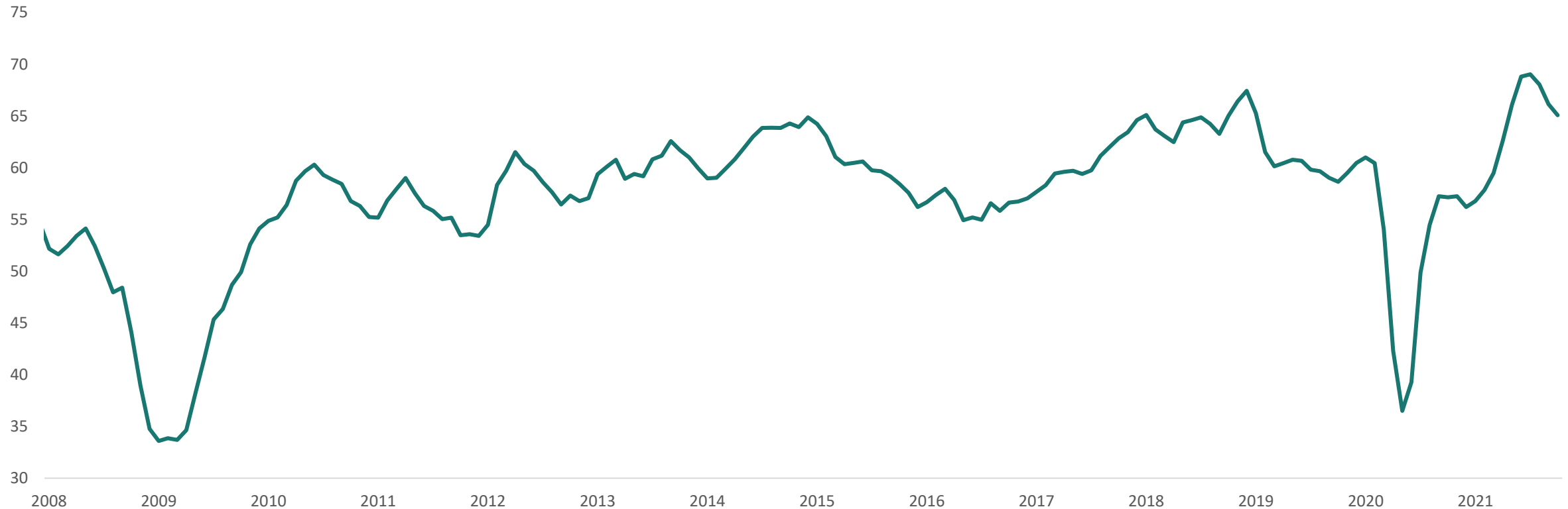
Ratio, Retailers



# Surging activity in U.S. facilities

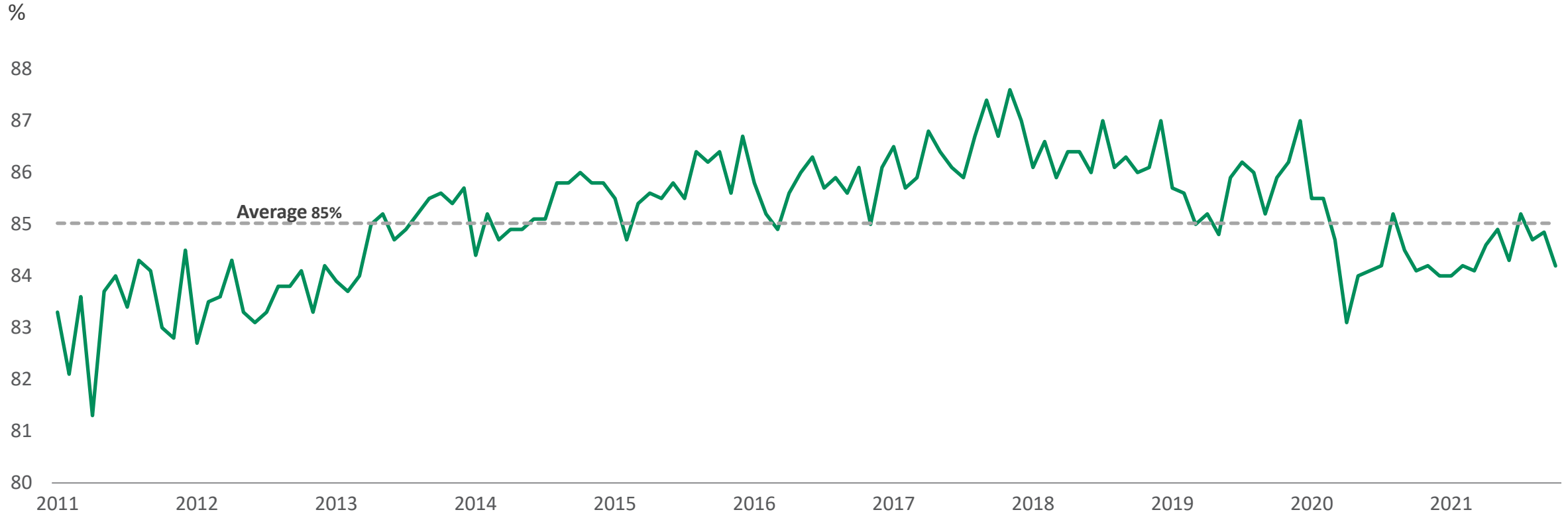
## PROLOGIS IBI ACTIVITY INDEX

50=neutral, 3-month moving average, SA



# Utilization rate stuck as sales outpace re-stocking

## PROLOGIS IBI UTILIZATION RATE

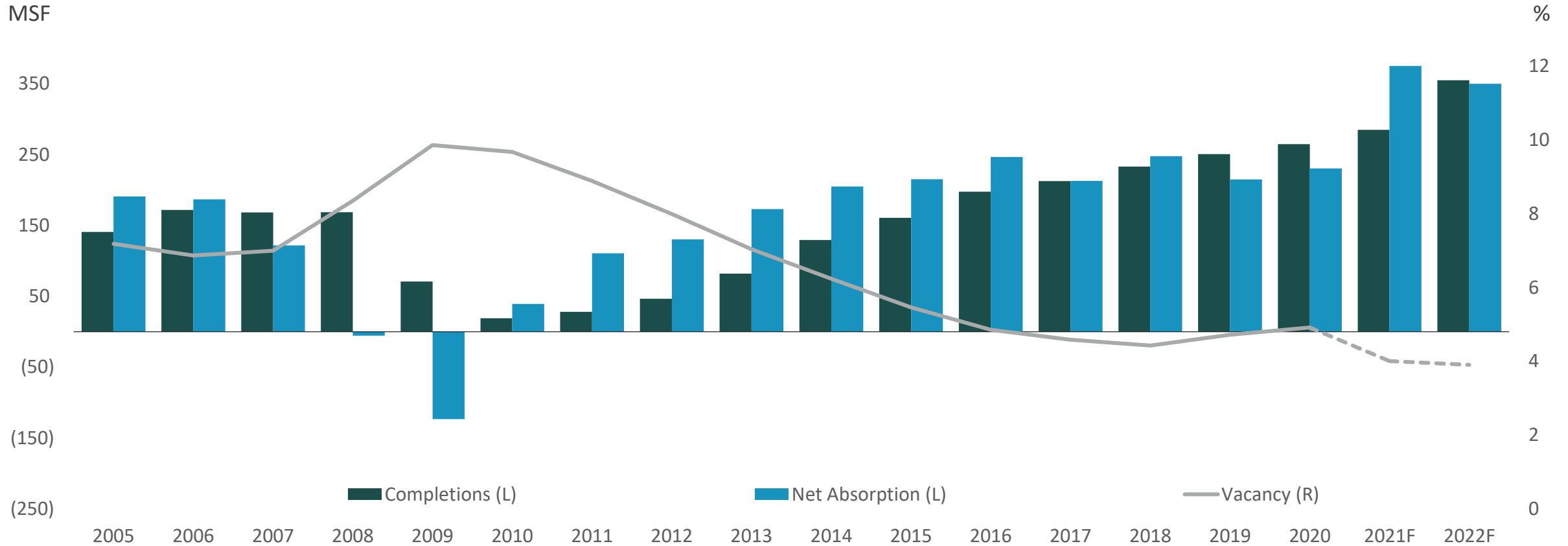


Logistics markets remain tough for  
securing new space



# Tight market fundamentals

## MARKET FUNDAMENTALS, U.S.

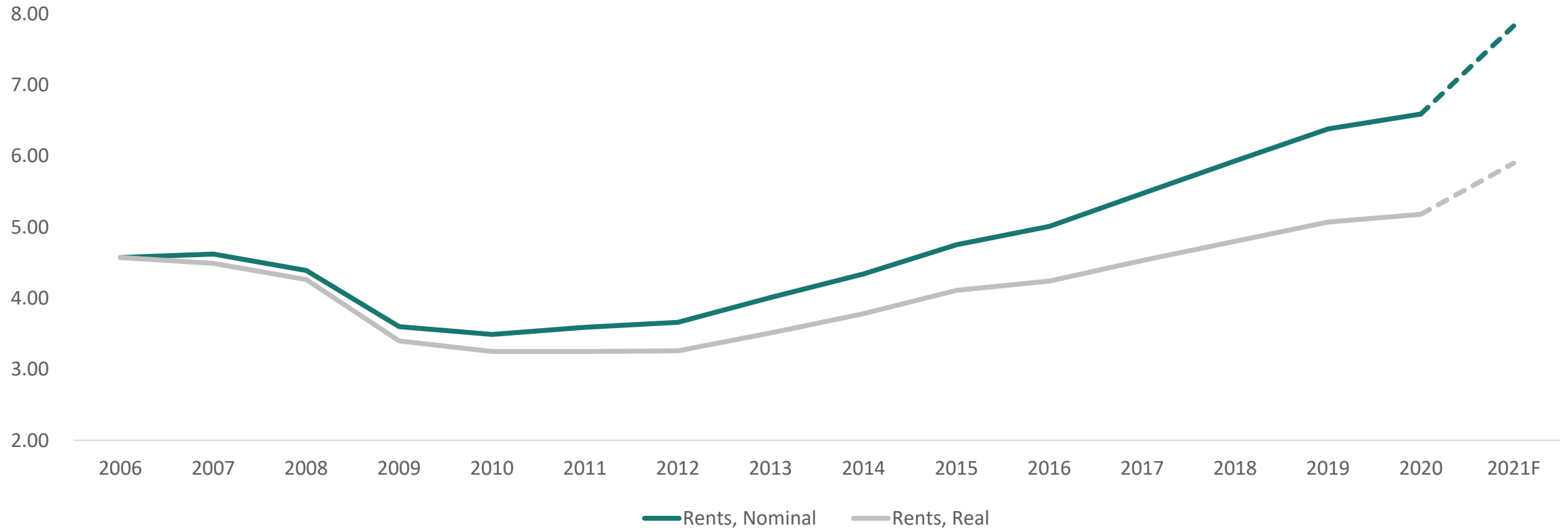


1. Source: CBRE, CBRE-EA, Colliers, JLL, Cushman and Wakefield, Prologis Research (forecast)

# Market rents continue to rise

## MARKET RENT, U.S.

\$, net effective rent

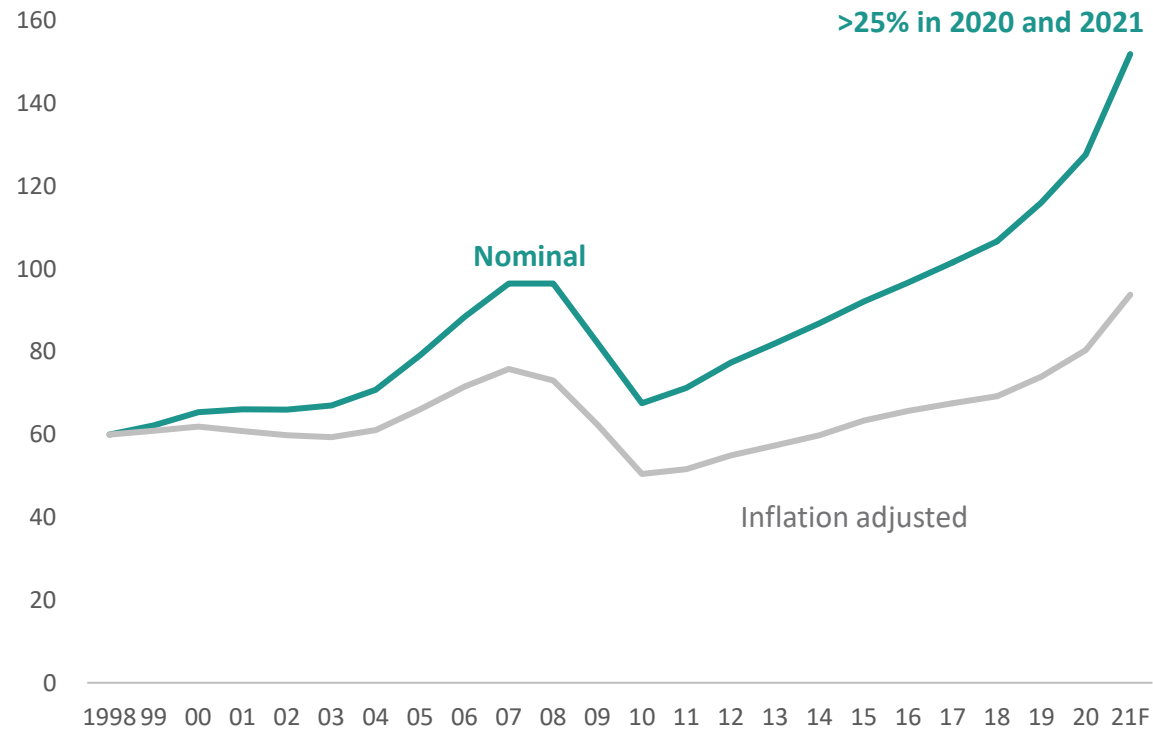


1. Source: Prologis Research

# Build costs growing quickly

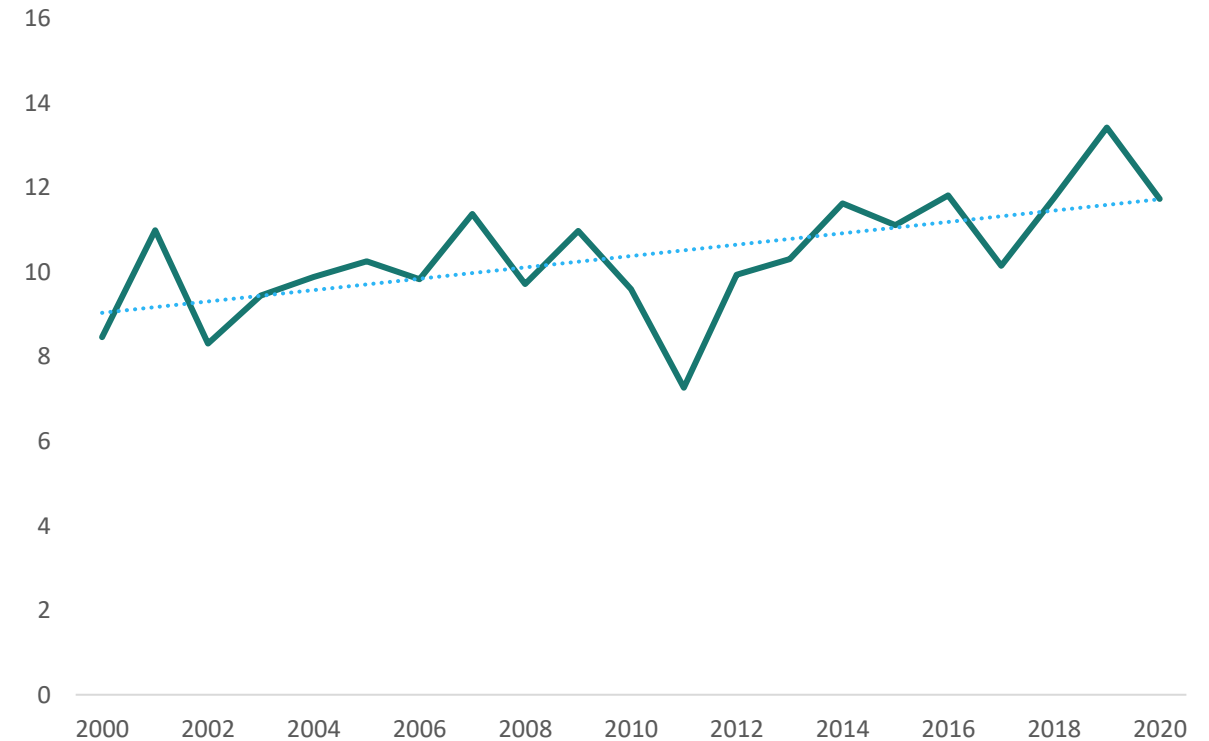
## REPLACEMENT COST, U.S.<sup>1,2</sup>

\$/SF



## CONSTRUCTION TIME, U.S.<sup>3</sup>

Months



1. Source: Prologis Research estimates based upon Turner Construction, Engineering News Record, Prologis Research

2. Note: Inflation-adjusted is in 1998 dollars

3. Time between ground-breaking and delivery

# Construction cost example - Central Valley, CA

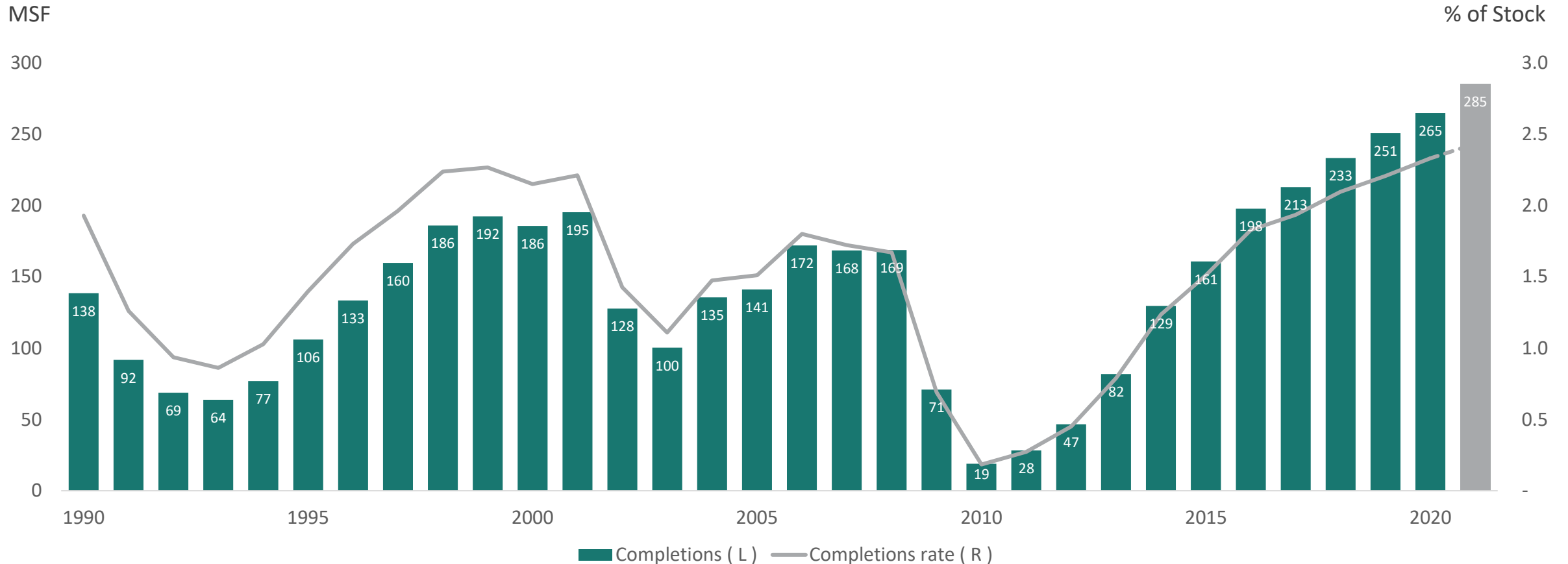
>50% growth over 3 years

<u>2020</u>	<u>2017</u>	
\$35	\$20	Land
\$80	\$55	Hard Costs
<u>\$25</u>	<u>\$20</u>	<u>Soft Costs</u>
<b>\$140</b>	<b>\$90</b>	<b>Total</b>



# Real estate developments in historical context

## ANNUAL COMPLETIONS

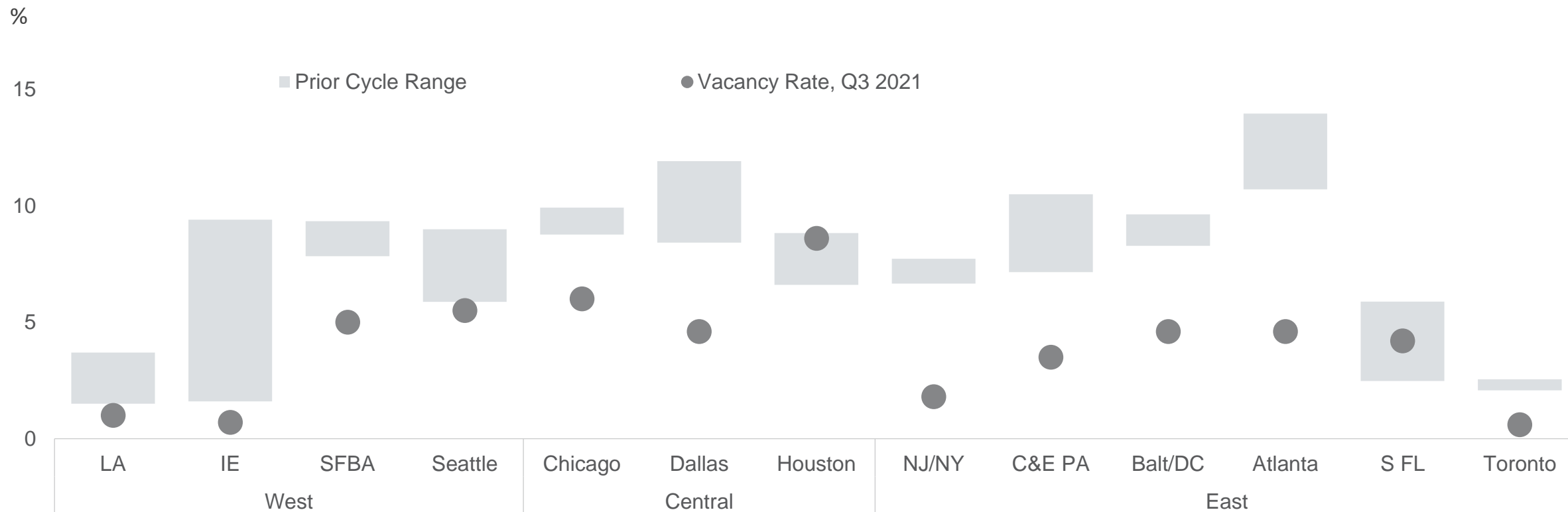


1. Source: CBRE-EA, Prologis (forecast)

Conditions vary by market

# Differences by market

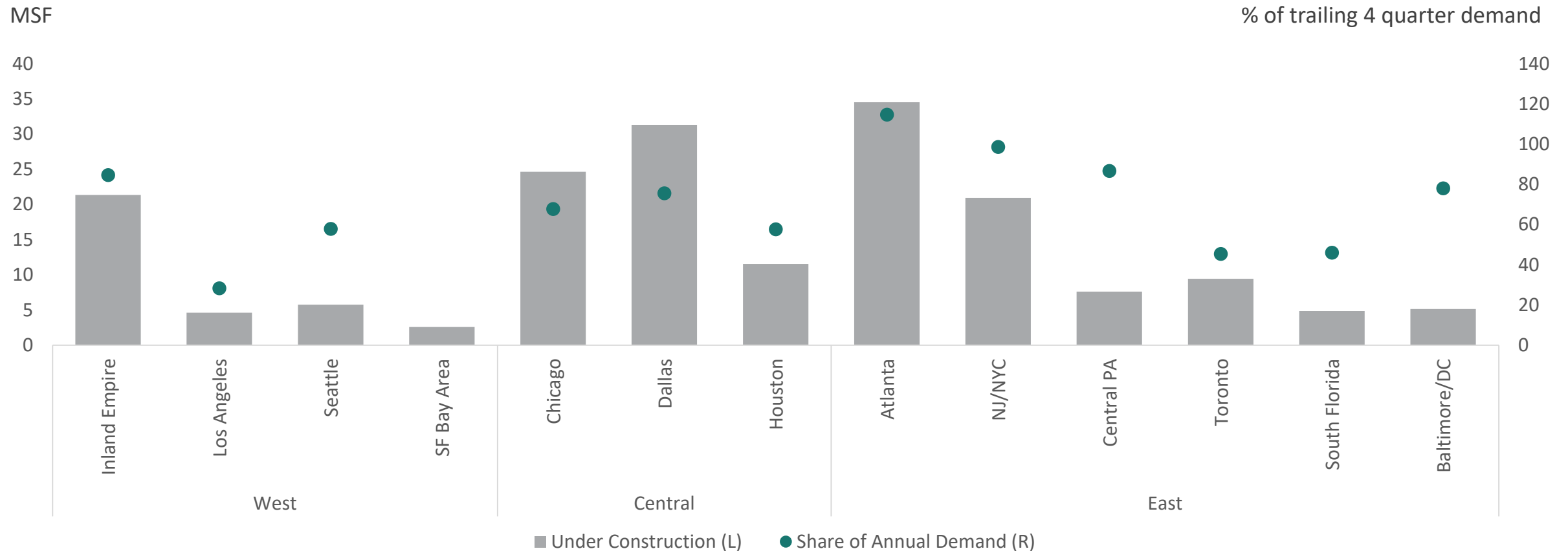
## VACANCY RATES BY MARKET



1. Source: CBRE, CBRE-EA, Colliers, JLL, Cushman and Wakefield, Prologis Research

# Market details

## CONSTRUCTION PIPELINE BY MARKET



1. Source: CBRE, CBRE-EA, Colliers, JLL, Cushman and Wakefield, Prologis Research





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# Navigating the Supply Chain Congestion Crisis

TRB Webinar



**RETAIL INDUSTRY  
LEADERS ASSOCIATION**

November 3, 2021

# REPRESENTING THE LEADING BRANDS IN RETAIL

PREMIER MEMBERS



# Challenges



# Challenges



# Inbound Challenges



# Outbound Challenges



# Labor Challenges





# Mitigating Disruption



# Last-Mile & Parcel



# Sourcing Strategies



# Near-term Measures



# Long-term Solutions



# THANK YOU

Jessica Dankert

Vice President, Supply Chain

[jess.dankert@rila.org](mailto:jess.dankert@rila.org)



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#TRBAM

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