



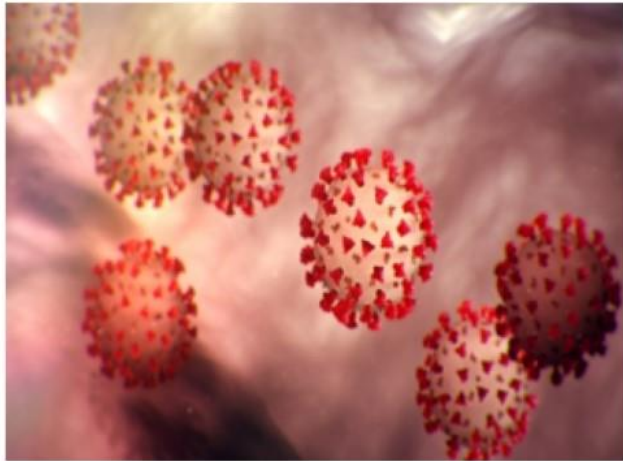
Real Estate in the Era of COVID and a Little Beyond

Mary Ludgin, Heitman Presentation for LAI

January 20, 2021

2020 Was A Year Like No Other: Coping With Disease, Recession, Politics, WFH, and Mother Nature

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US economy positioned for strong rebound in GDP helped by stimulus, vaccine, and pent-up demand but job growth will recover more slowly, with leaders and laggards

Property operations **surprisingly steady given the severity of the public health crisis and economic downturn**; retail, hospitality and senior housing are exceptions

Property fundamentals are **being reset in some sectors while prospects in others, after a brief pause, continue along their previous trend lines**

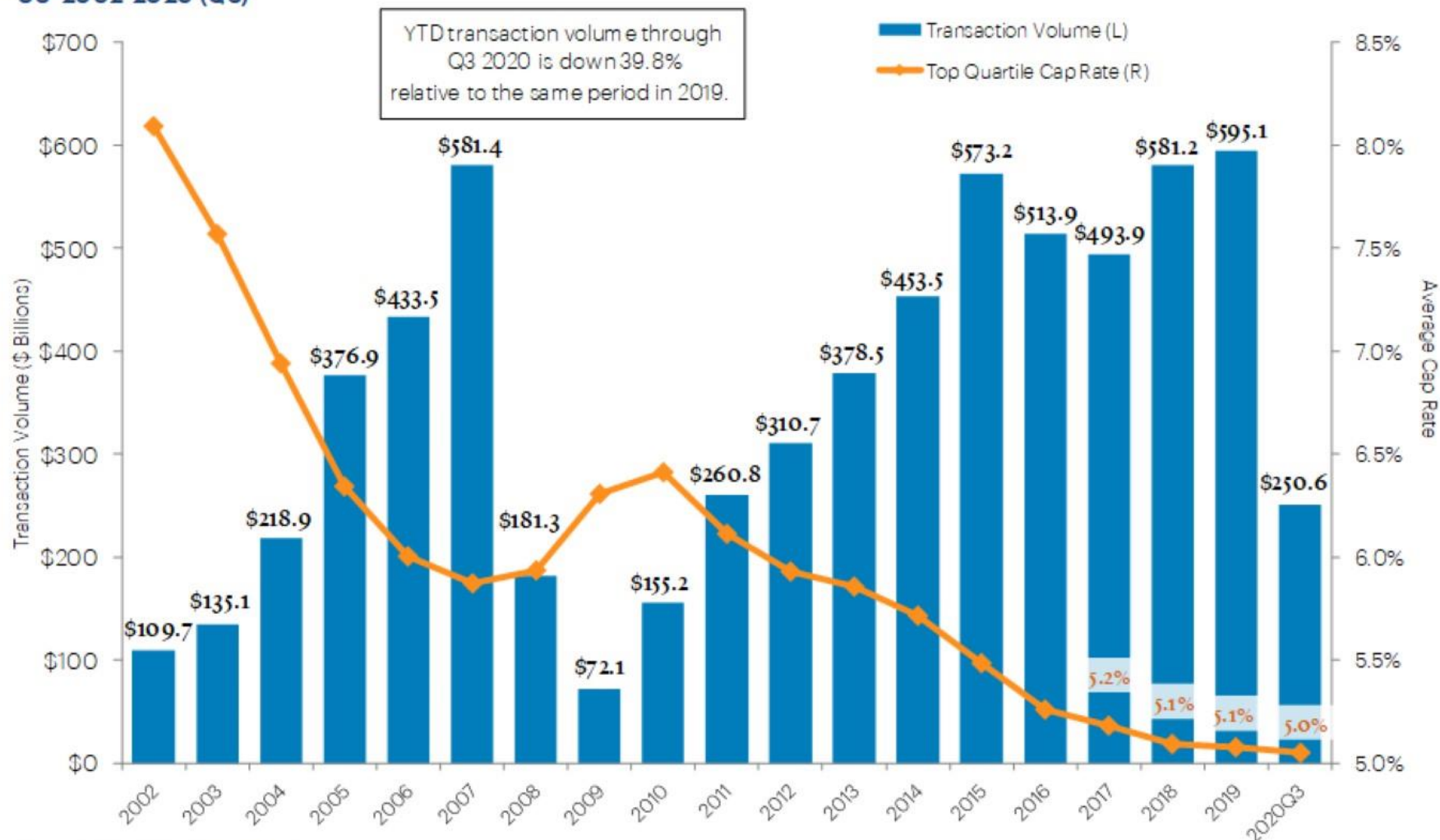
Liquidity, available credit, and price discovery exist in some, but far from all, real estate sectors and segments

A low interest-rate environment and a search for yield are **positives for real estate investment demand and real estate values**

Pre-Covid secular and structural changes disrupting many property types are being reinforced; **investor perspectives/portfolios need to evolve in response**

Transaction Activity Down YTD In a Binary Market

**ALL PROPERTY TYPES TRANSACTION VOLUME AND TOP QUARTILE CAP RATES
US 2002-2020 (Q3)**



Source: Real Capital Analytics; Heitman Research

Debt Availability – A Shifting Landscape

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LENDER APPETITE

Asset Class	Pre-COVID	Post-COVID	Comments
Multifamily	●	●	Lowest pricing, high liquidity
Industrial	●	●	Lowest pricing, high liquidity
Office	●	●	Uncertainty in underwriting
Retail	●	●	Out of favor, liquidity and value concerns
<i>Non-Traditional</i>			
Self-Storage	●	●	Stabilized assets preferred
Senior + Student	●	●	Fallout from COVID ongoing
Medical Office	●	●	Strong pricing, re-entry of more lenders
Single Family Rental	●	●	Increased inquiry from lenders
Hospitality	●	●	COVID correction still playing out

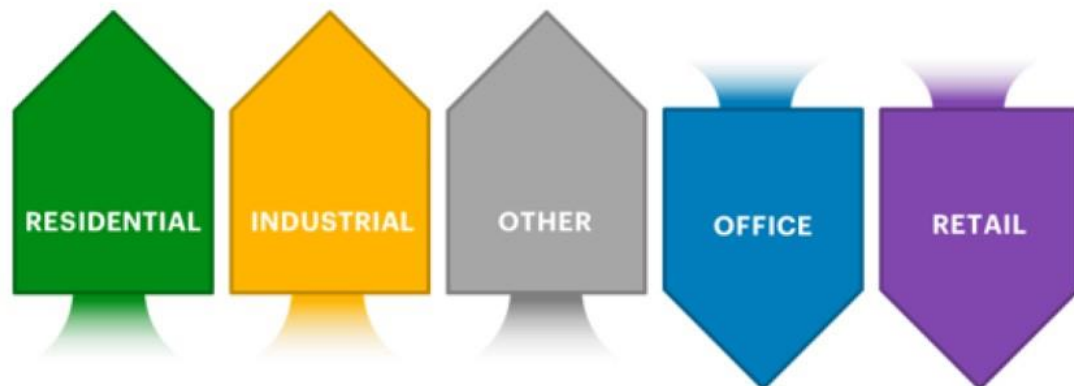
Major Disruption Was Occurring Pre-COVID

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Drivers: demographics, tech, and shift to knowledge economy

Real estate markets changing in response

Adjustments to sector weightings and institutional portfolio construction



DEMOGRAPHICS



TECHNOLOGY



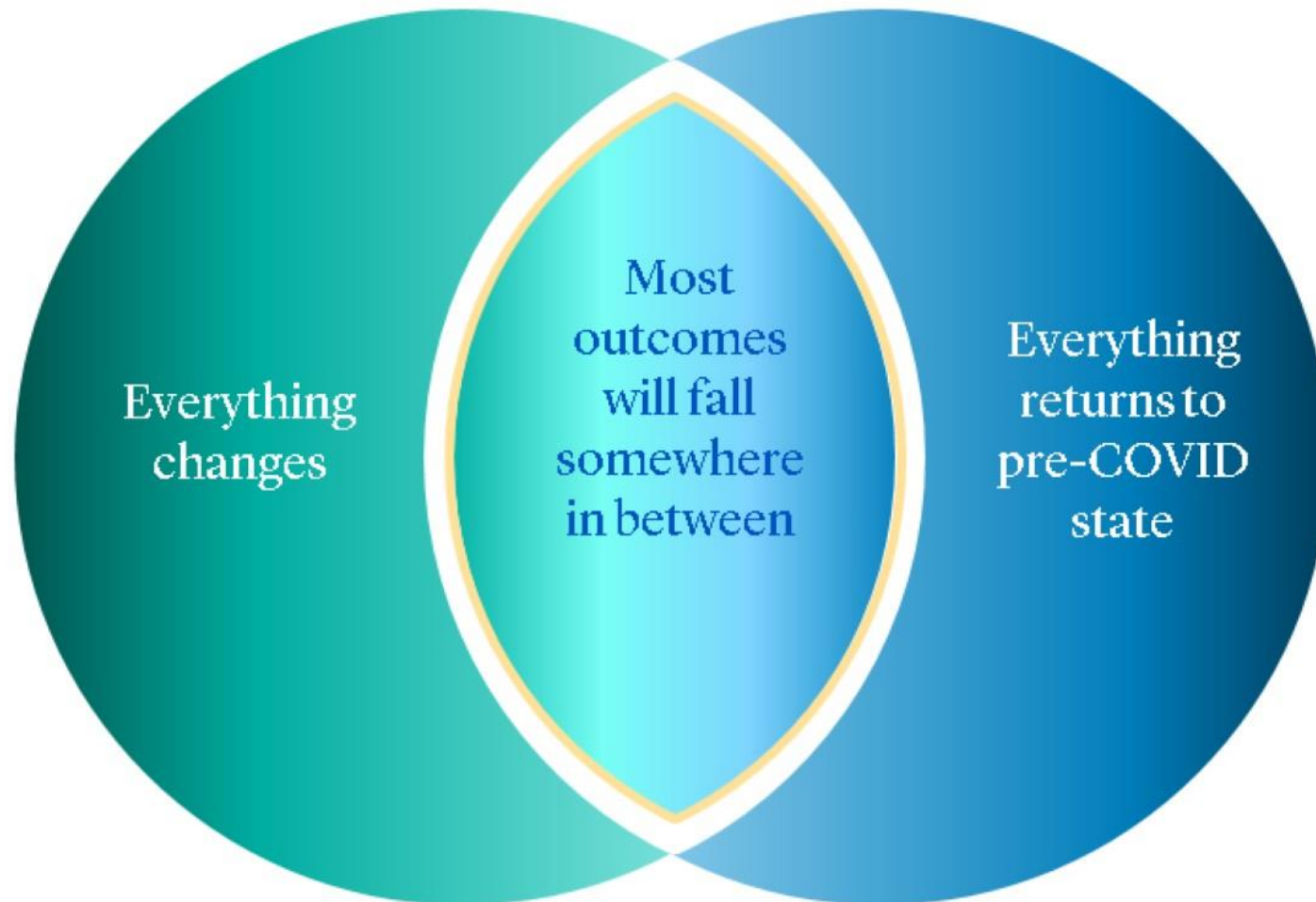
ECONOMY

STRUCTURAL SHIFTS

FLEXIBILITY

CONVERGENCE OF USES

OPERATIONAL INTENSITY



The Triumph of Technology Has Been on Display During the Pandemic

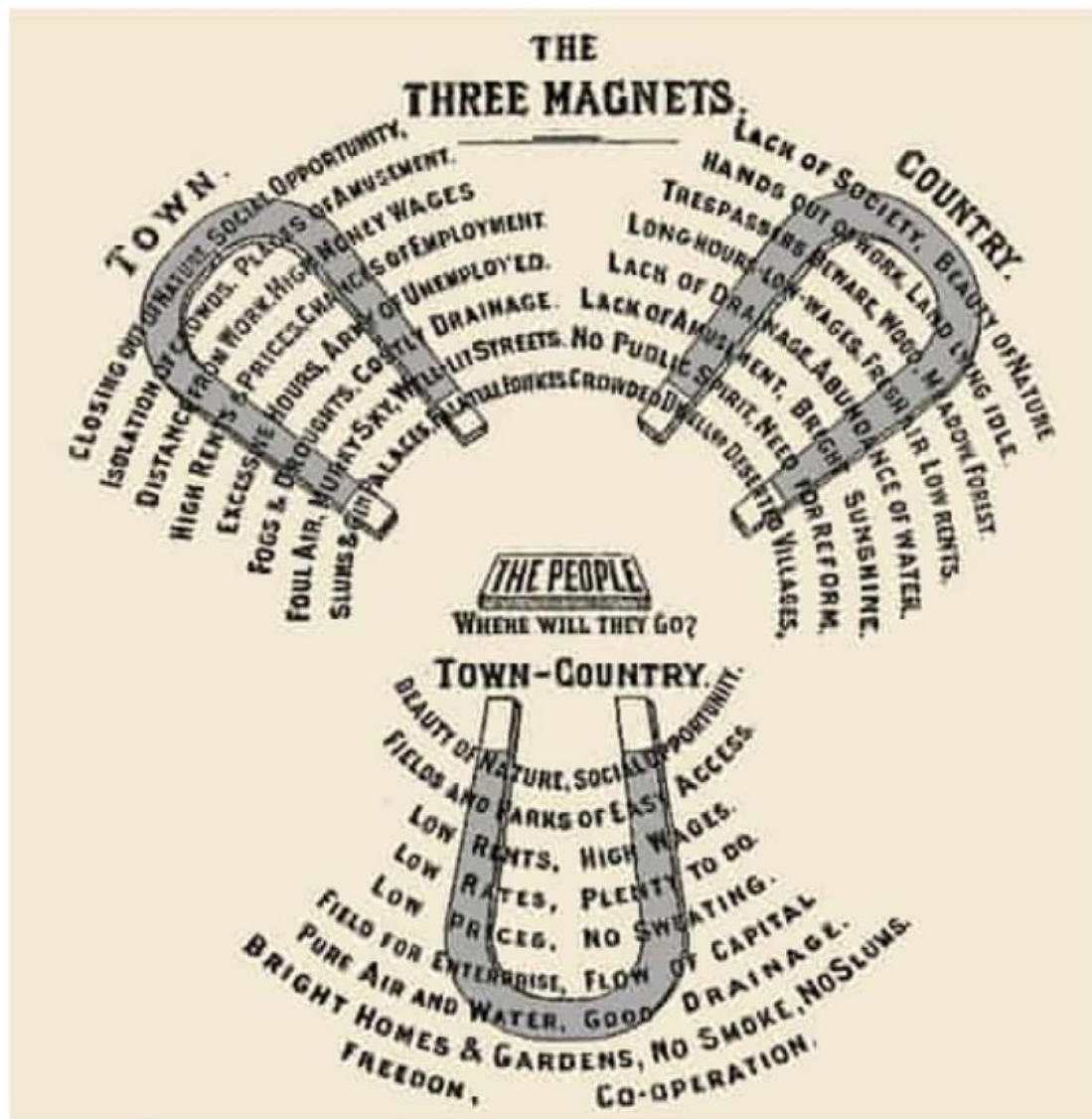
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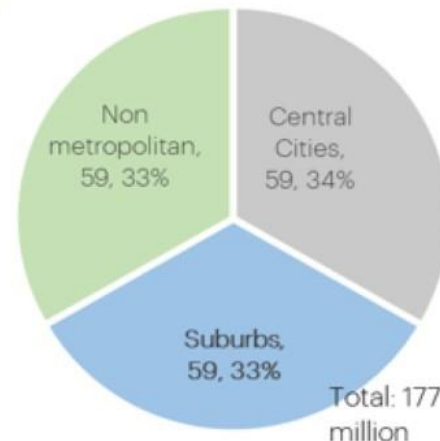
How will
18-24 months of
tele-everything
change our
spatial behaviors?

What's the Future of Cities in this Suburban Nation?

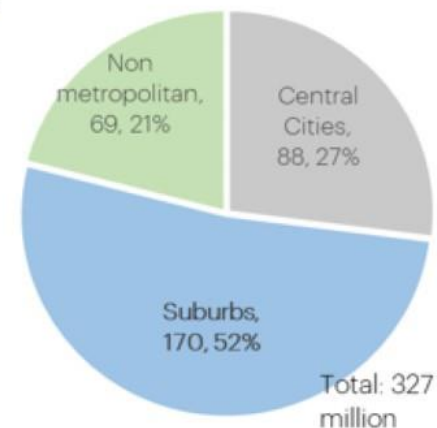
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1960



2016



Source: Ebenezer Howard, *To-Morrow: A Peaceful Path to Real Reform*; US Census Bureau; Heitman Research

No Empirical Evidence For Permanent Mass Exodus From Cities

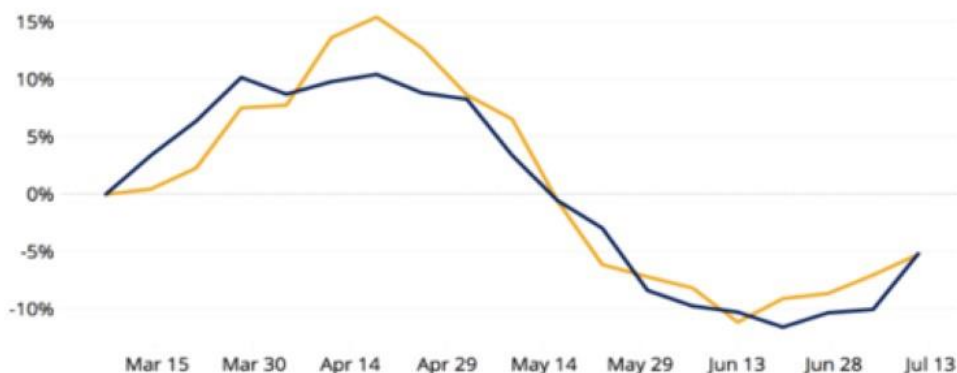
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COVID impact

- Pandemic moves skewed to higher-income cohorts
- Some moves temporary relocation to a second home, Mom & Dad's house
- Others are permanent, but just expediting a planned move
- No empirical evidence of widespread urban exodus
- No divergence of housing market indicators from Zillow
- Most people leaving big cities moving to...other big cities

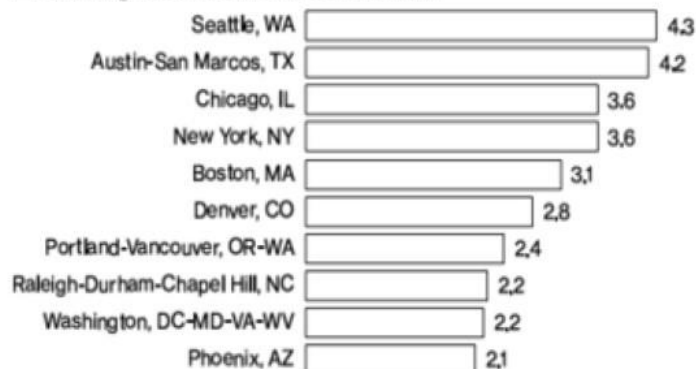
Change in YoY Share of Sales Sold Above the List Price, by **urban** and **suburban** ZIP codes



Source: New York Times; Zillow; United Van Lines; Heitman Research

Moving Out of San Francisco

Percentage total moves out of San Francisco



Source: United Van Lines

Note: Numbers are interest in moving, which is the number of people requesting a quote to move out of a specific location

Acceleration of Existing Trends

+

INDUSTRIAL

DATA CENTER

SINGLE-FAMILY RENTALS

-

RETAIL

Significant Near-term Impact/Mixed Recovery Outlook

STUDENT HOUSING

SENIOR HOUSING

HOSPITALITY

Moderate Near-term Impact/Little Long-Term Change

APARTMENT

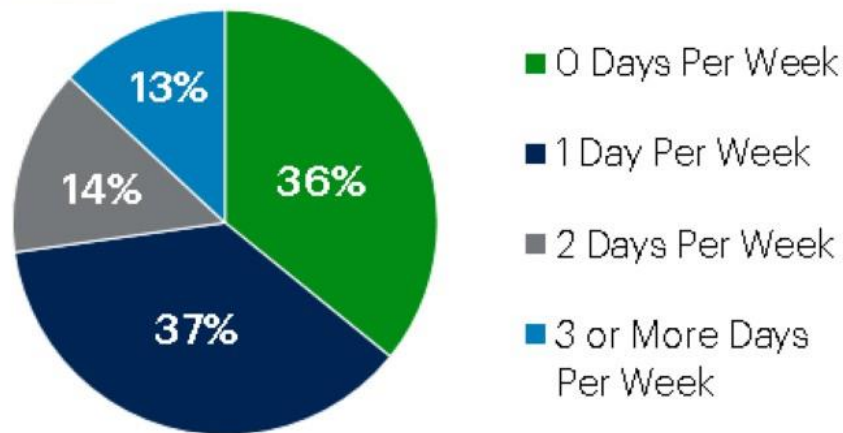
SELF-STORAGE

MEDICAL OFFICE

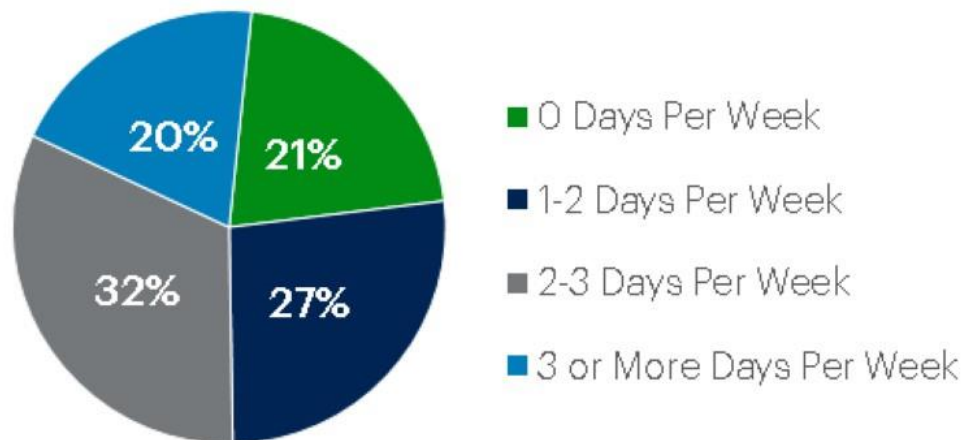
Countervailing Forces/Murky Outlook

OFFICE

Prior to the COVID-19 outbreak, approximately how many days did you work from home?



Once it is deemed generally safe to return to normal work activities, how many days would you like to work from home?



Near-term COVID Impacts

- Negatives
 - Working-from-home (WFH) success
 - Demise of retail amenities
 - Subdued leasing activity
 - Rise in sublease space
- Positives
 - End of densification trend

Things to Watch/Long-term Outlook

- Coworking impacts
- Post-COVID locational differences
- Reconfiguring space/design costs
- WFH adoption will vary widely by industry and job function
- Location, design, and technology need to change with the times

Source: JLL; Heitman Research

Technology Makes Work From Home Possible But Adoption Won't Be Universal

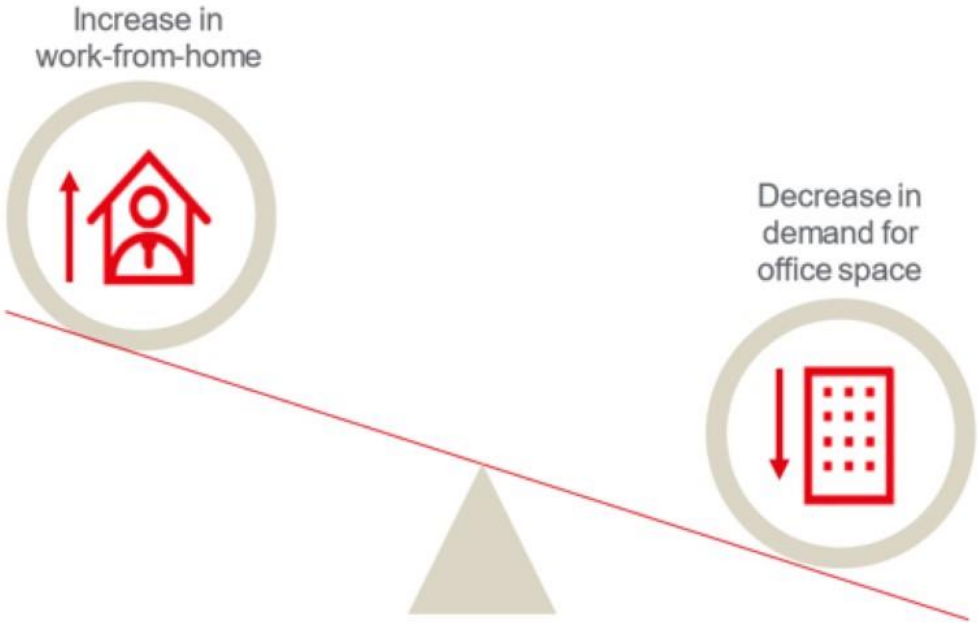
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Future office demand will be determined by both cyclical and structural factors



Current conversation is too simplistic...

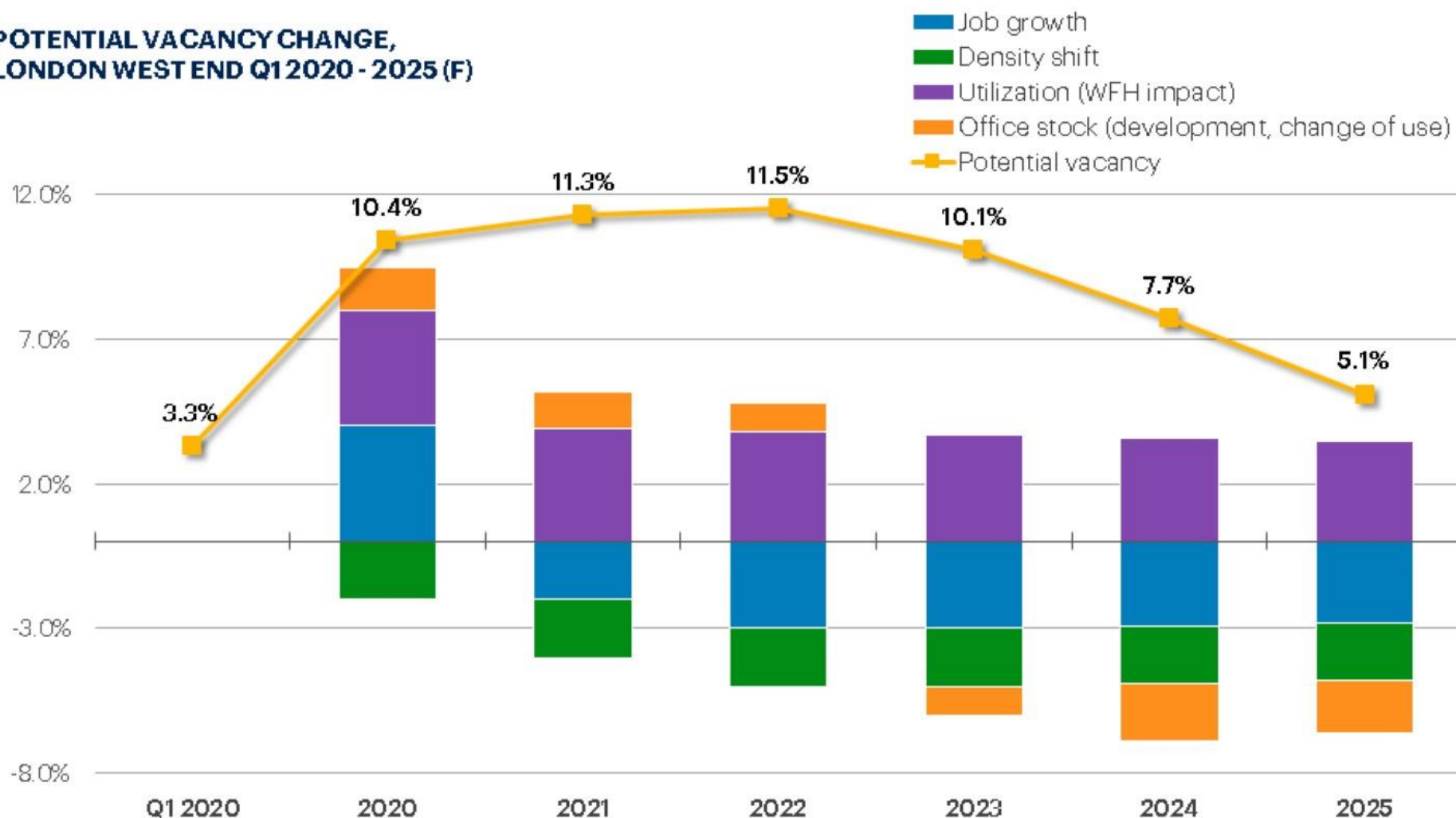


Future demand impact more complex with a broad mix of factors at play...

- Innovation
- Culture
- Collaboration
- Productivity
- Employee recruitment and retention
- Automation and offshoring
- Return on investment
- Risk management
- Economic growth
- Vaccine development
- De-densification
- Government guidelines
- Housing affordability
- Work-life balance
- Commuting patterns
- Environmental impact

Reduced Office Occupier Demand Could Stimulate Other Types of Demand

**POTENTIAL VACANCY CHANGE,
LONDON WEST END Q1 2020 - 2025 (F)**

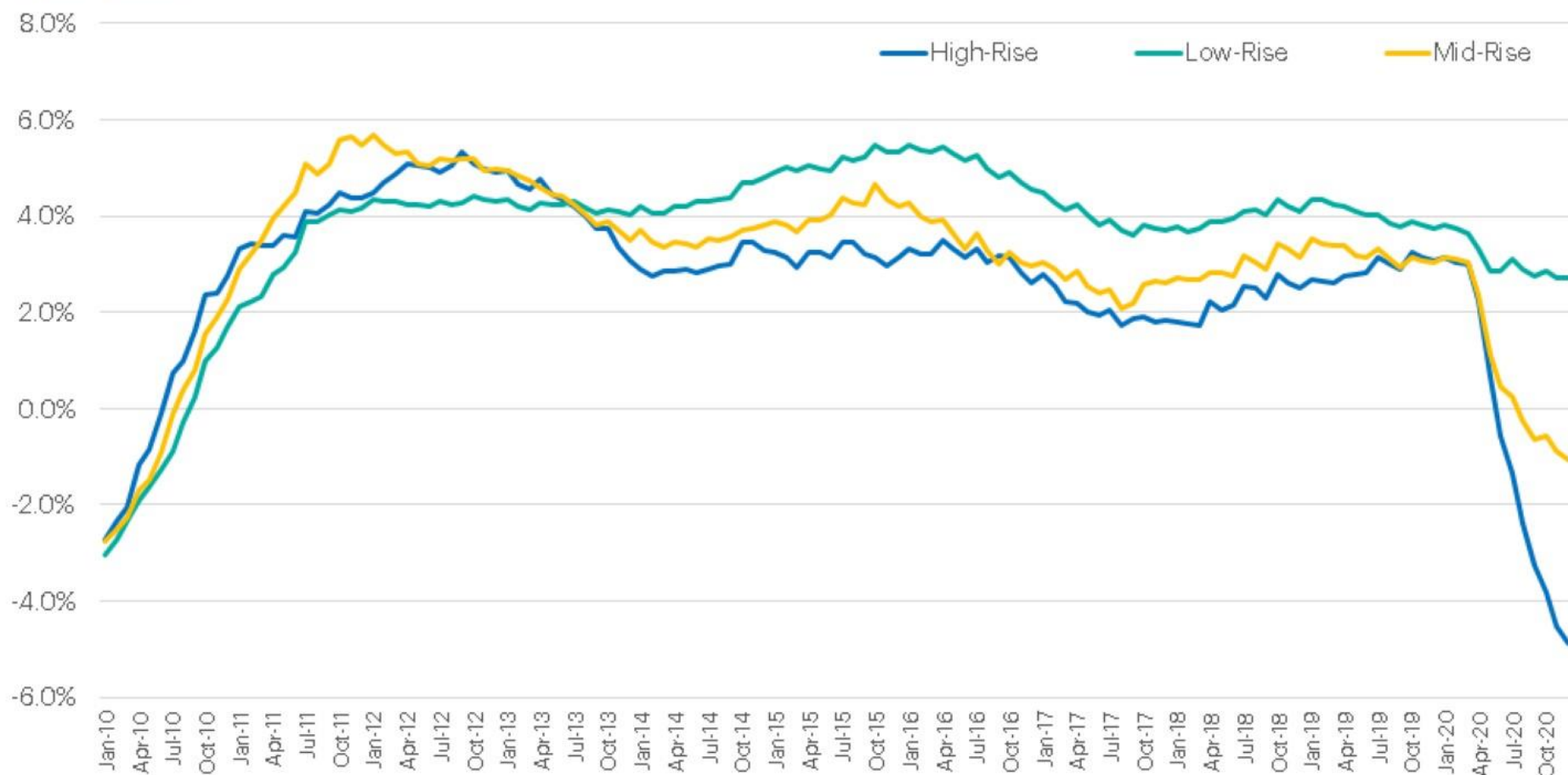


Source: UBS; Heitman Research. Figures are indicative only, not precise forecasts.

Apartments: Urban High-Rise Properties See Greatest Revenue Declines

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YOY REVENUE CHANGE (REV/ASF) BY BUILDING HEIGHT
US, 2010-2020

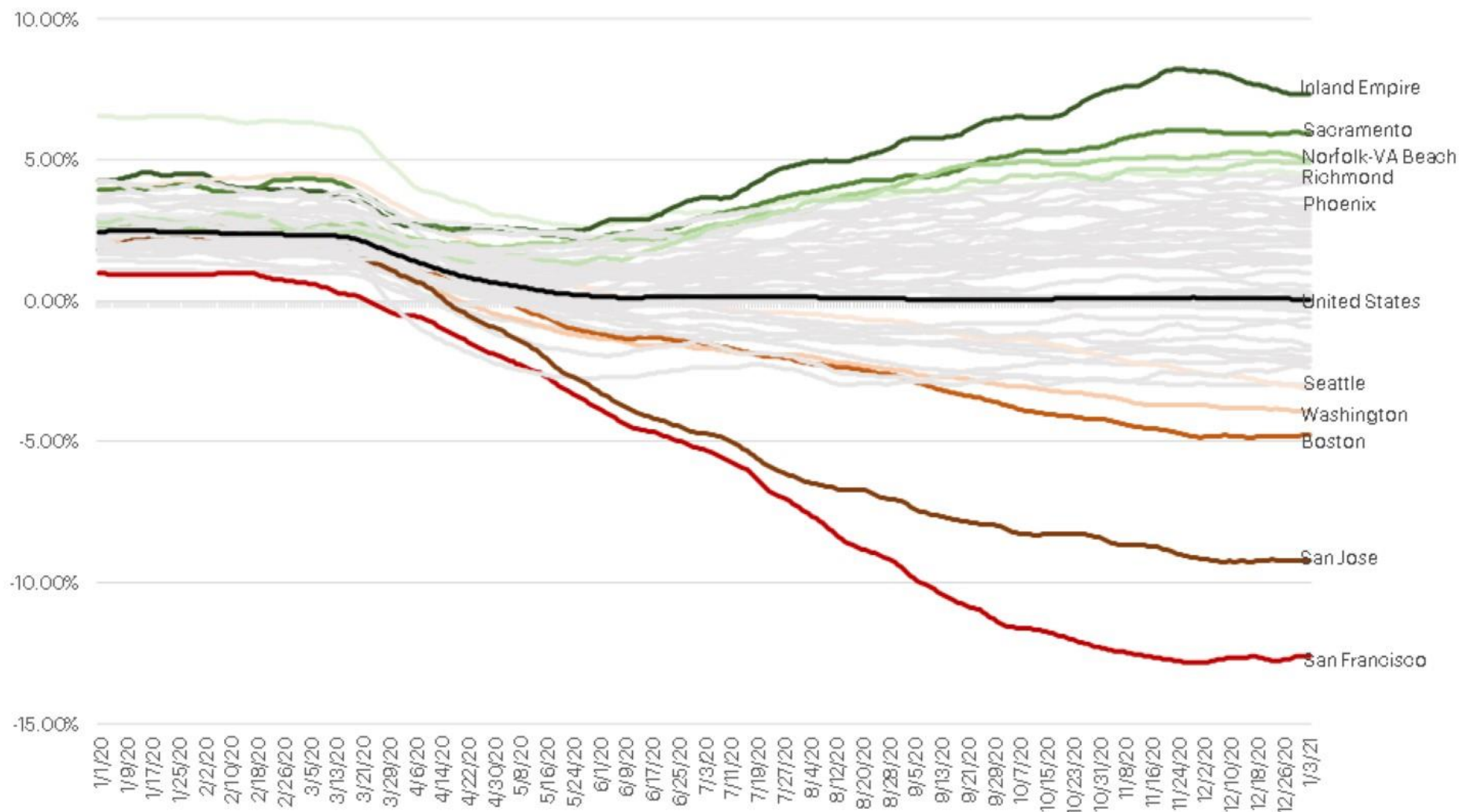


Source: RealPage, Heitman Research

CoStar's Daily Asking Rents Give Close to Real-Time View of Divergence in Fortunes

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DAILY ASKING RENTS PSF - TOP 50 METROS - YEAR-OVER-YEAR CHANGE
 JAN 2020 - JAN 2021



Source: CoStar, Heitman Research

Demographic Tailwinds Support Long-term Apartment Demand

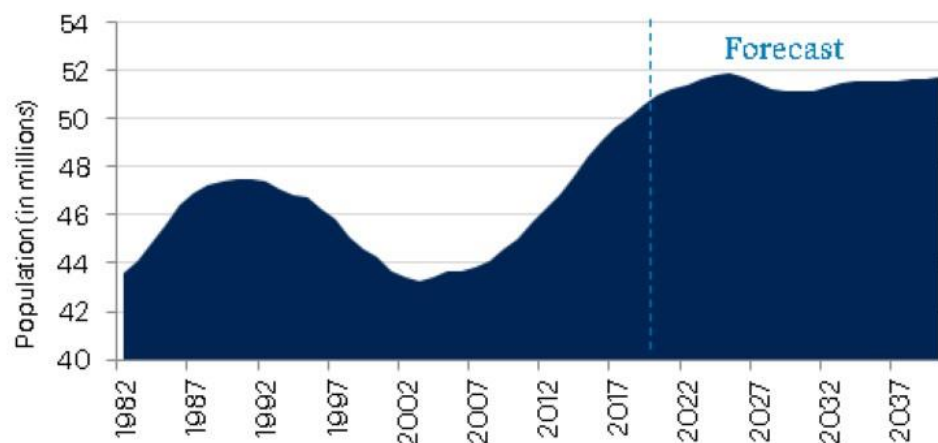
Demographic trends support residential demand, as does the increased propensity by all age cohorts to rent

Renting for reasons of preference and necessity supports a variety of investment strategies

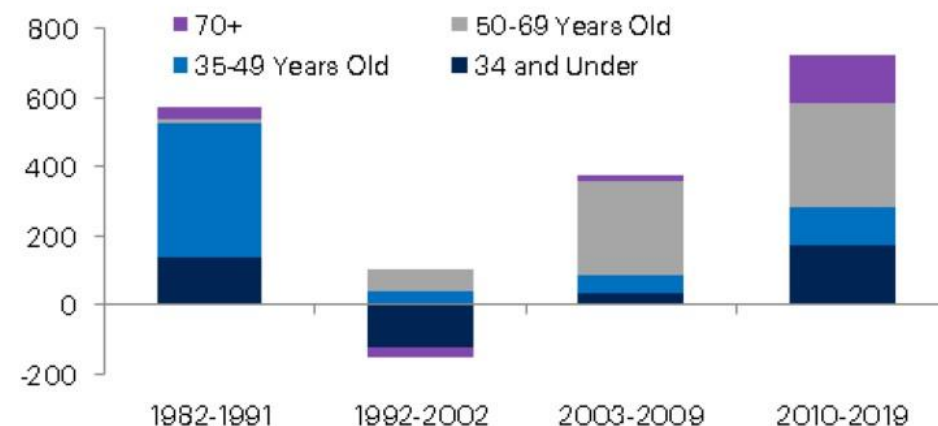
Two “un-precedented” recessions now in early careers of Millennials may limit homeownership

Scars of the pandemic recession may drive Gen Z renter demand for a long time

**POPULATION OF AGE GROUP MOST LIKELY TO RENT
US (25-34 YEAR AGE COHORT) 1982-2040**



**ANNUAL RENTER HH FORMATIONS BY AGE COHORT
US 1982-2019**



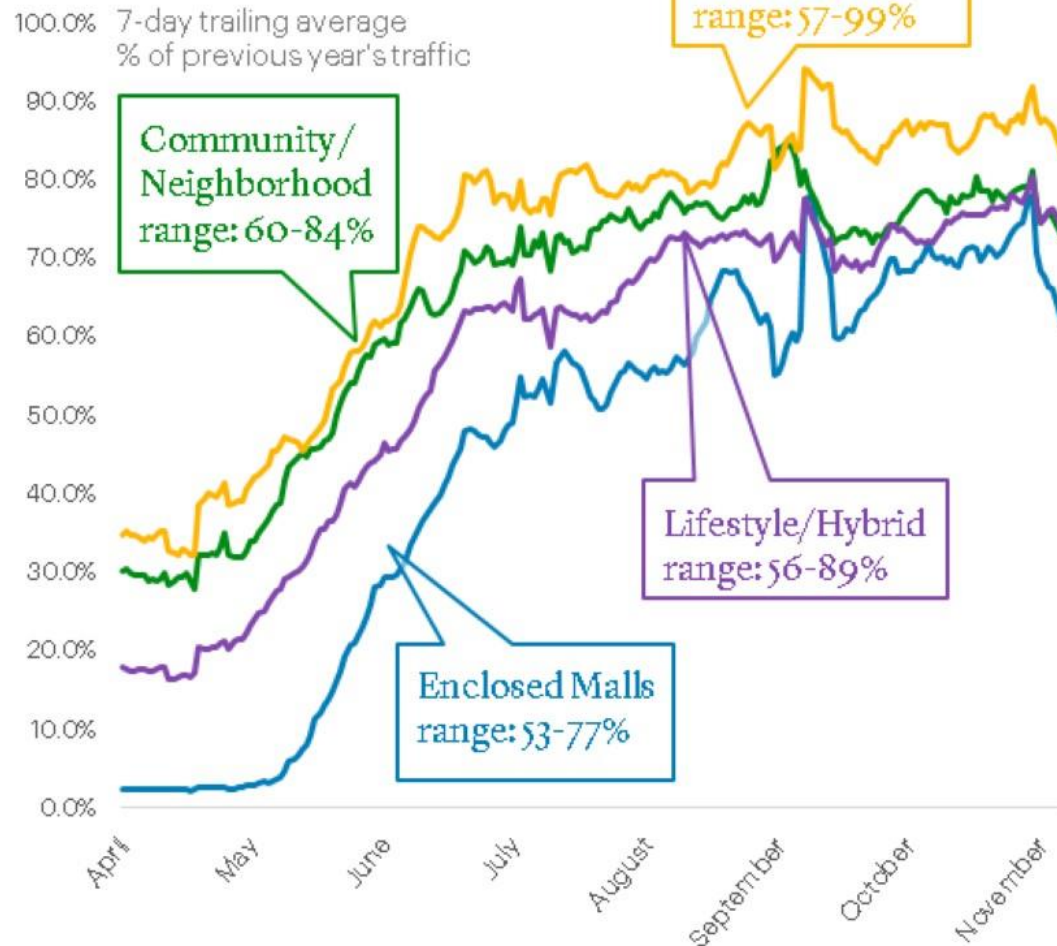
Source: Census Bureau; PopStatz; Heitman Research

Single-family rentals emerged as an institutional sector in the US in the aftermath of the Global Financial Crisis

The sector's characteristics fit well with demographic trends, including the maturation of the Millennial generation into its child-rearing stage



HEITMAN PORTFOLIO TRAFFIC APRIL 1 - NOV 6, 2020



Source: Placer.ai, Heitman Research Excludes properties facing geographic or other challenges

Near-term COVID Impacts

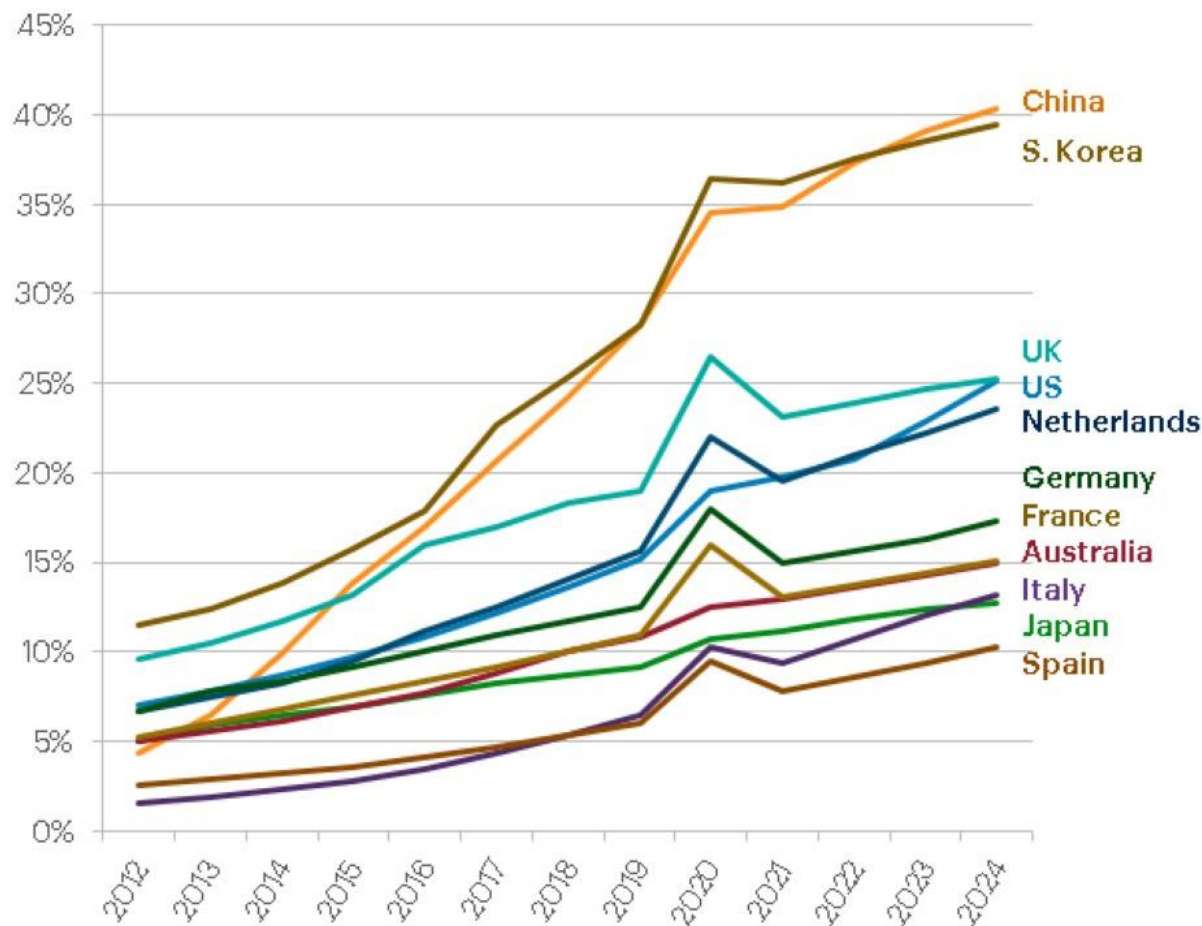
- Negatives
 - Accelerating demise of tired retailers and centers
 - Increased e-commerce penetration
 - Experiential tenants: previous strength now most at-risk
- Positives
 - Accelerating demise of tired retailers and centers
 - Stores as fulfillment centers (ship and pick-up)

Things to Watch/Long-term Outlook

- Shrinking of the retail universe is inevitable but painful; COVID has accelerated it
- When will experiential retail return?
- There will still be winners and losers – physical retail remains essential

E-Commerce Up Around the World, But Stores Remain Essential

**ONLINE SHARE OF RETAIL SALES, %
2012 - 2024(F)**



Retail is at the intersection of recession, movement restrictions, and fears about public places

Accelerated e-commerce penetration amplifies risk for retailers without online sales channels

Retailers with strong omni-channel operations were able to pivot during the lockdowns. BOPIS up 259% year-over-year in August

Source for online share of retail sales: CBRE/emarketer; Heitman Research; Source for Reason for not buying online, UNCTAD B2C E-commerce Index, 2019; Heitman Research

However, Retail Remains Oversupplied Globally

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Source: DeadMalls.com; Heitman Research

Retail Vacancies Will Create Investment Opportunities

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Last Mile Distribution
High Bay Warehouse

1085
Old Country Road
Westbury, New York



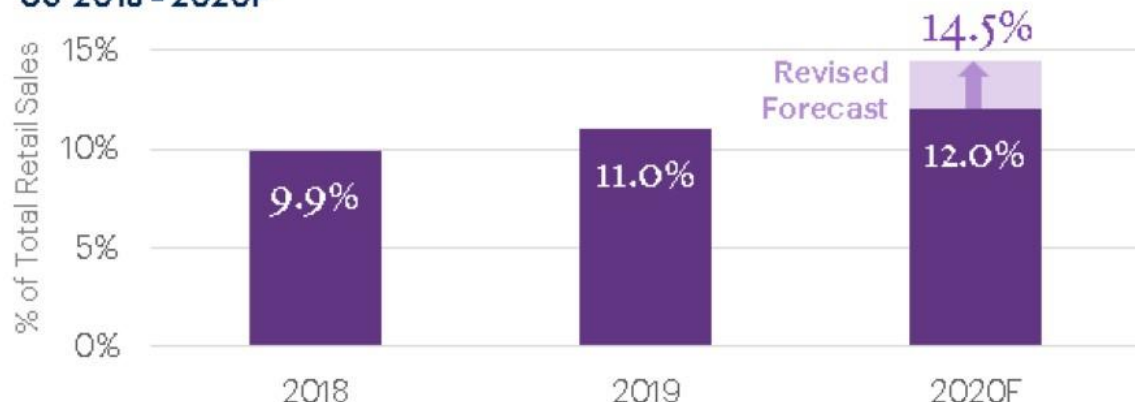
Near-term COVID Impacts

- Positives
 - E-commerce sales growth
 - Higher inventory levels
 - Cold storage demand
 - Reinforcement of omnichannel retail model
- Negatives
 - Some impact from slower economy, retailer woes

Things to Watch/Long-term Outlook

- Potential reshoring/supply chain restructuring
- Rethinking of lean just-in-time inventory model
- Reuse of empty retail boxes as fulfillment centers

**E-COMMERCE PENETRATION RATE
US 2018 - 2020F**



MOST ACTIVE OCCUPIERS YTD - NOV 2020

Occupier	SF*
Amazon	80,727,979
Walmart	7,978,465
Lowe's	5,089,447
Big Lots	3,440,119
FedEx	3,239,162
Uline	2,845,602
Geodis	2,529,432
XPO Logistics	2,505,572
US Elogistics	2,213,654
Home Depot	2,117,768

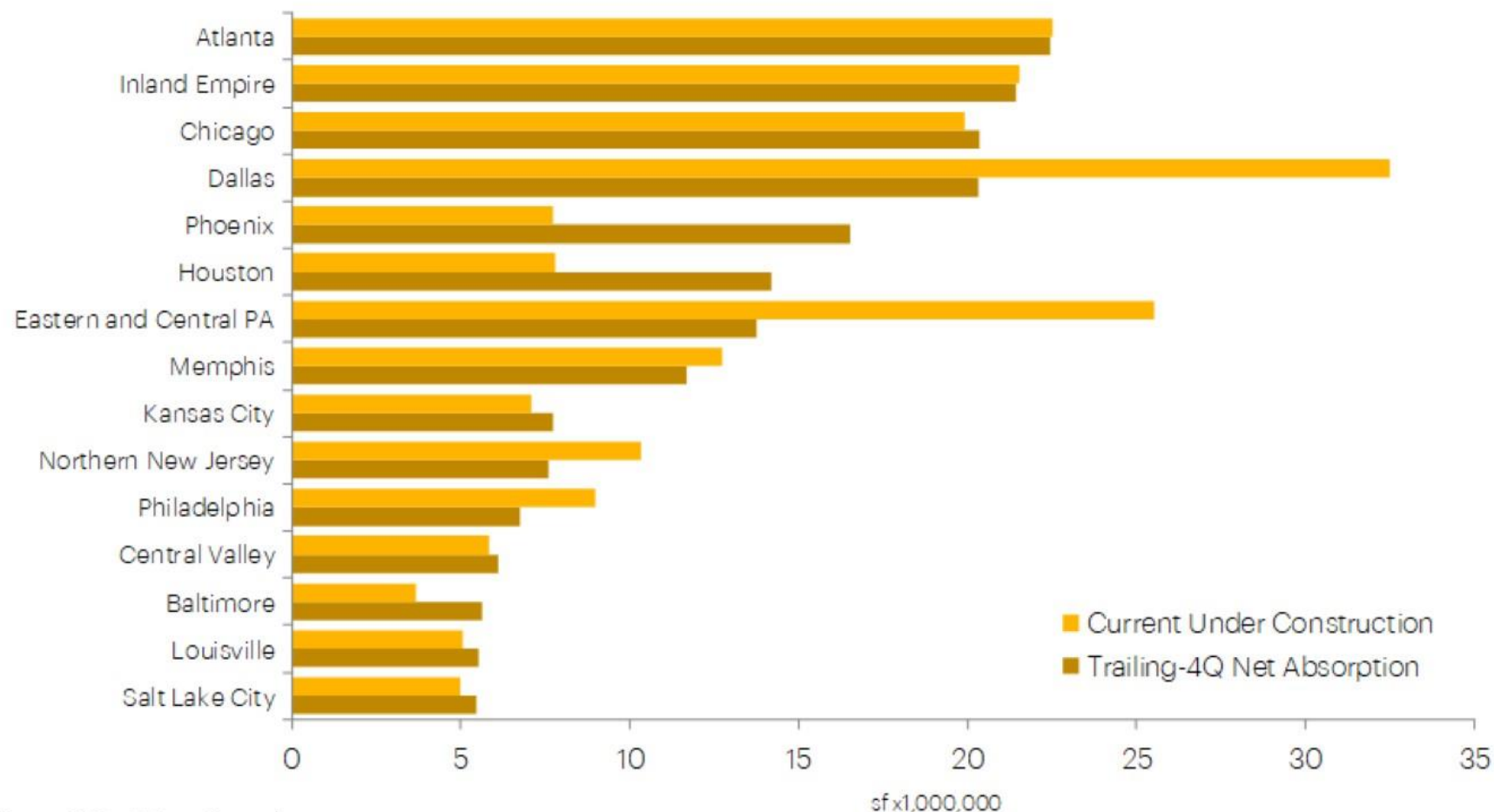
*Includes New Leases, Renewals, and User Sales



Few Major Markets See Large Imbalance Between Supply Pipeline and Trailing Demand

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**INDUSTRIAL NET ABSORPTION VS. SPACE UNDER CONSTRUCTION
MAJOR MARKETS (Q4 2020)**

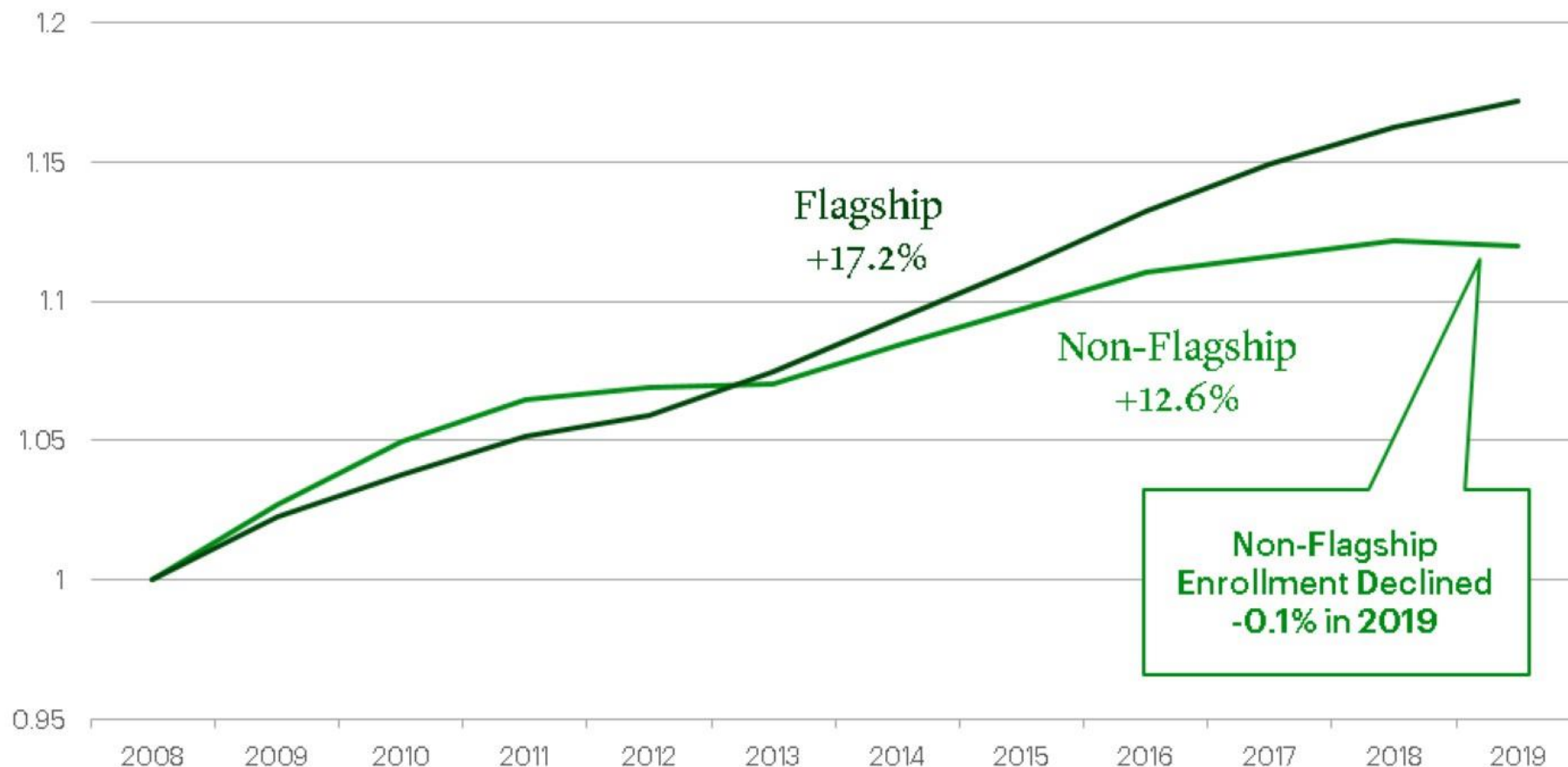


Source: CoStar, Heitman Research

Education Still Key in Knowledge Economy, But Pick Student Housing Spots Carefully

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INDEXED TOTAL ENROLLMENT GROWTH US 2008 - 2019



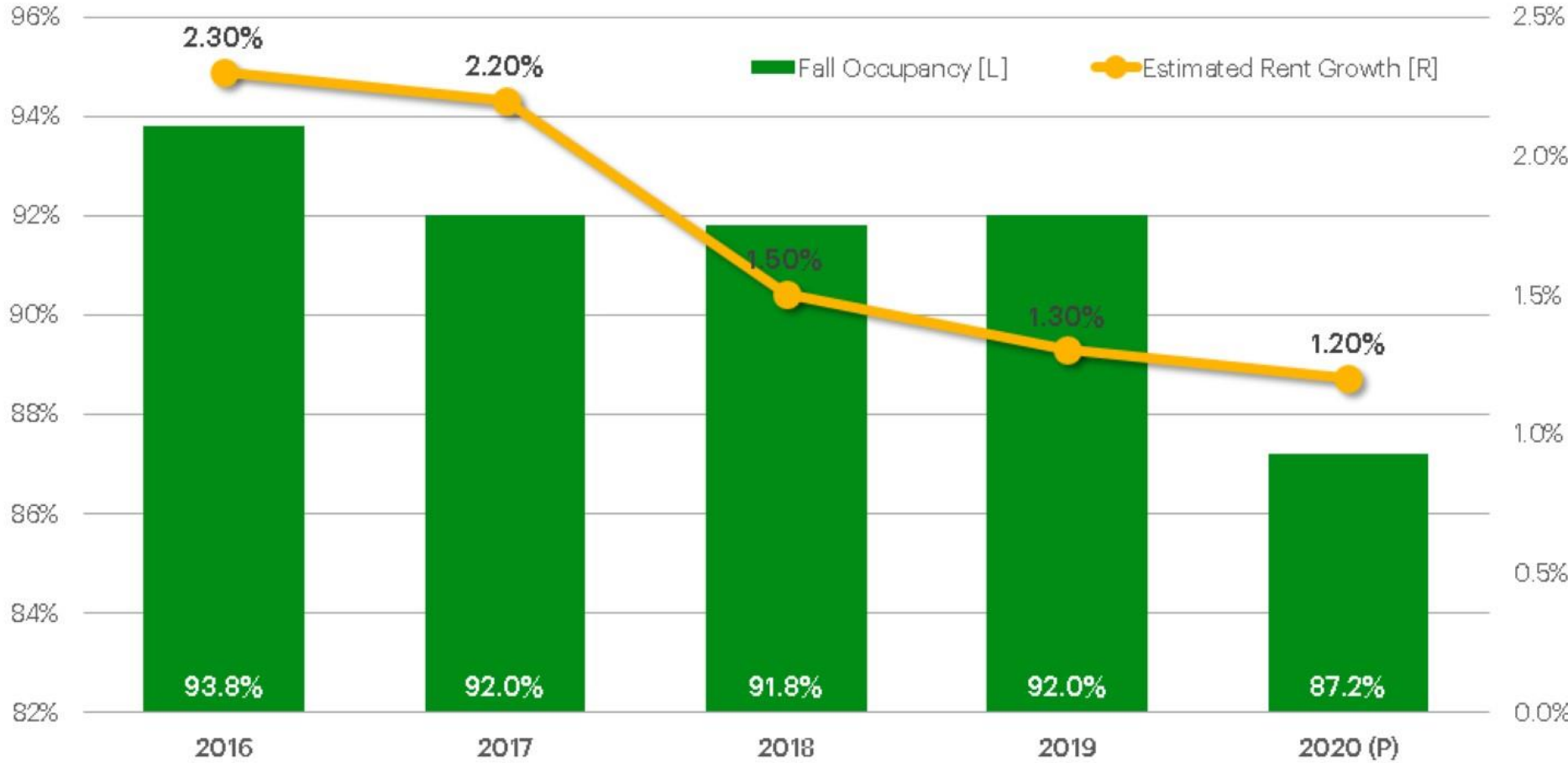
Source: Axiometrics; Heitman Research

A flagship university defined as the best-known, most-selective, largest, and highest-funded public universities in a state. These schools will also typically have a land-, sea-, or space-grant designation

US Student Housing Exceeded Expectations This Fall

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US NATIONAL AVERAGE STUDENT HOUSING OCCUPANCY VS ANNUAL ESTIMATED RENT GROWTH

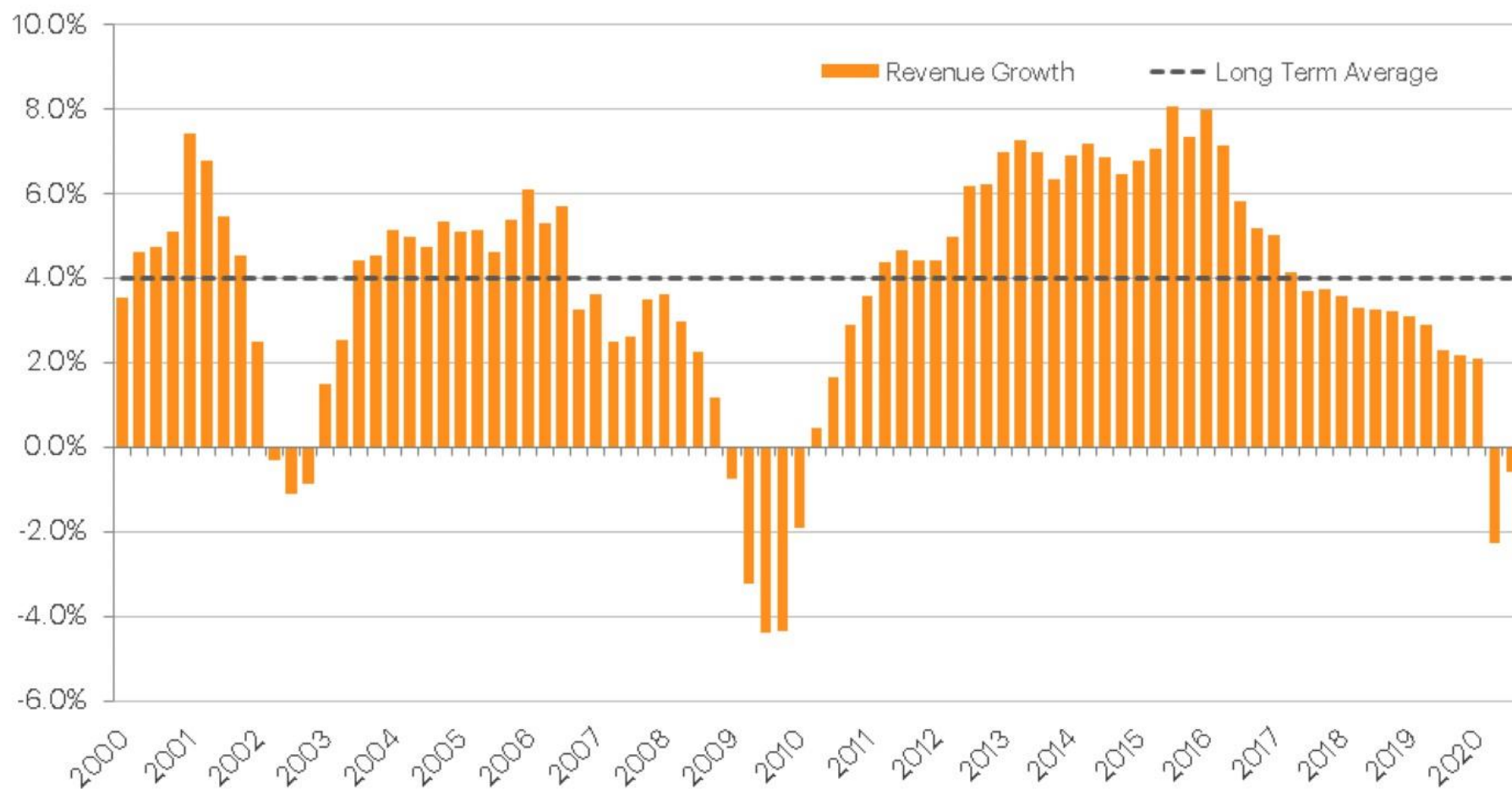


Source: AGC, Axio metrics, Heitman Research

Self-Storage Isn't Recession Proof But It Tends to Bounce Back Early

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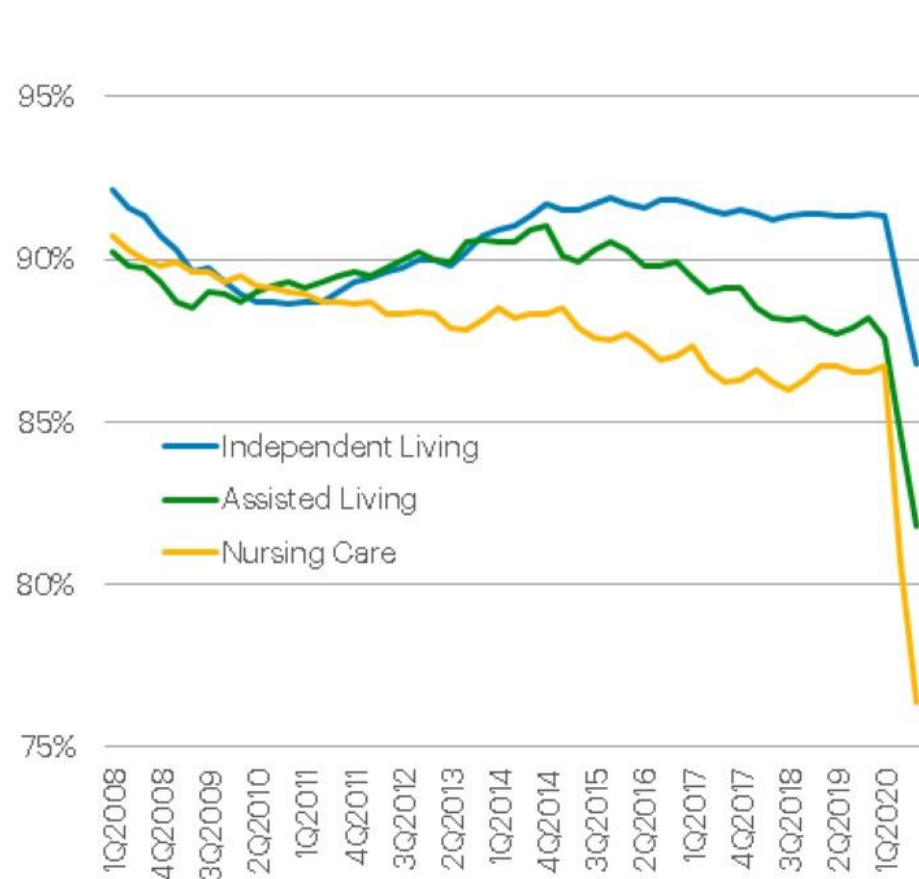
**SELF-STORAGE REVENUE GROWTH
US REIT SAME-STORE POOLS 2000-2020 (Q2)**



Source: REIT Reports; Heitman Research

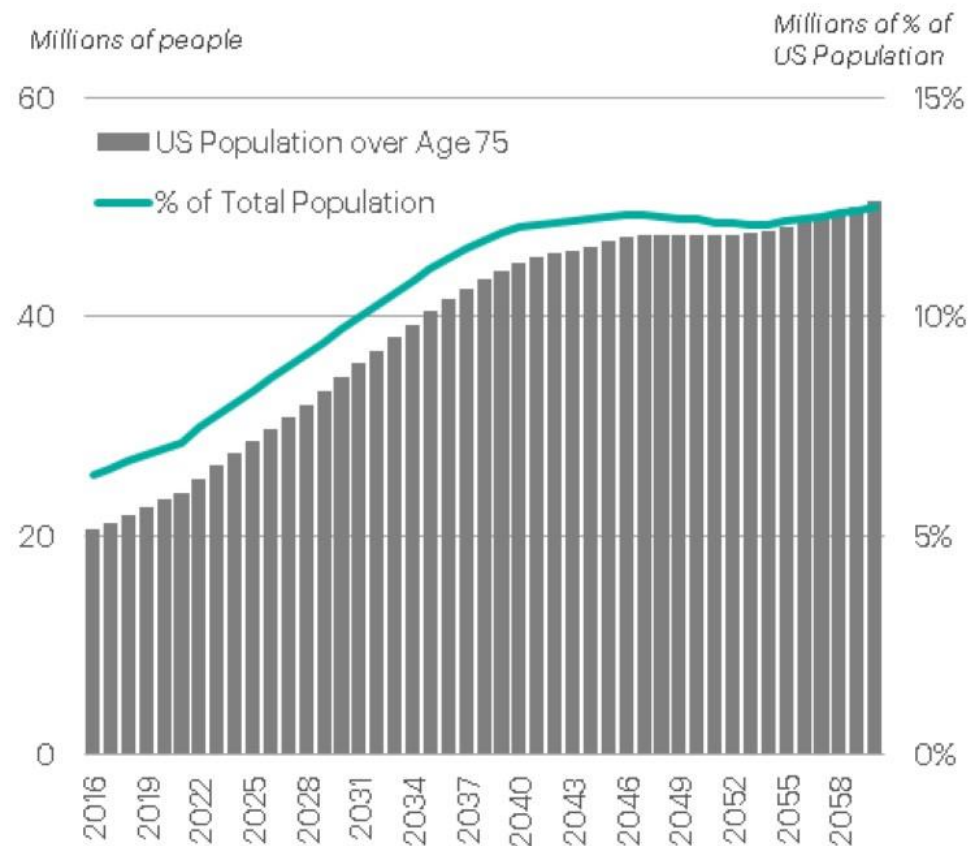
Senior Housing Occupancies Down But Don't Count this Sector Out

**SENIOR HOUSING OCCUPANCY BY CARE SEGMENT
US 2008 Q1 - 2020 Q3**



Source: NIO, Heitman Research

**PROJECTED US POPULATION OVER AGE 75
US 2016 - 2059(F)**

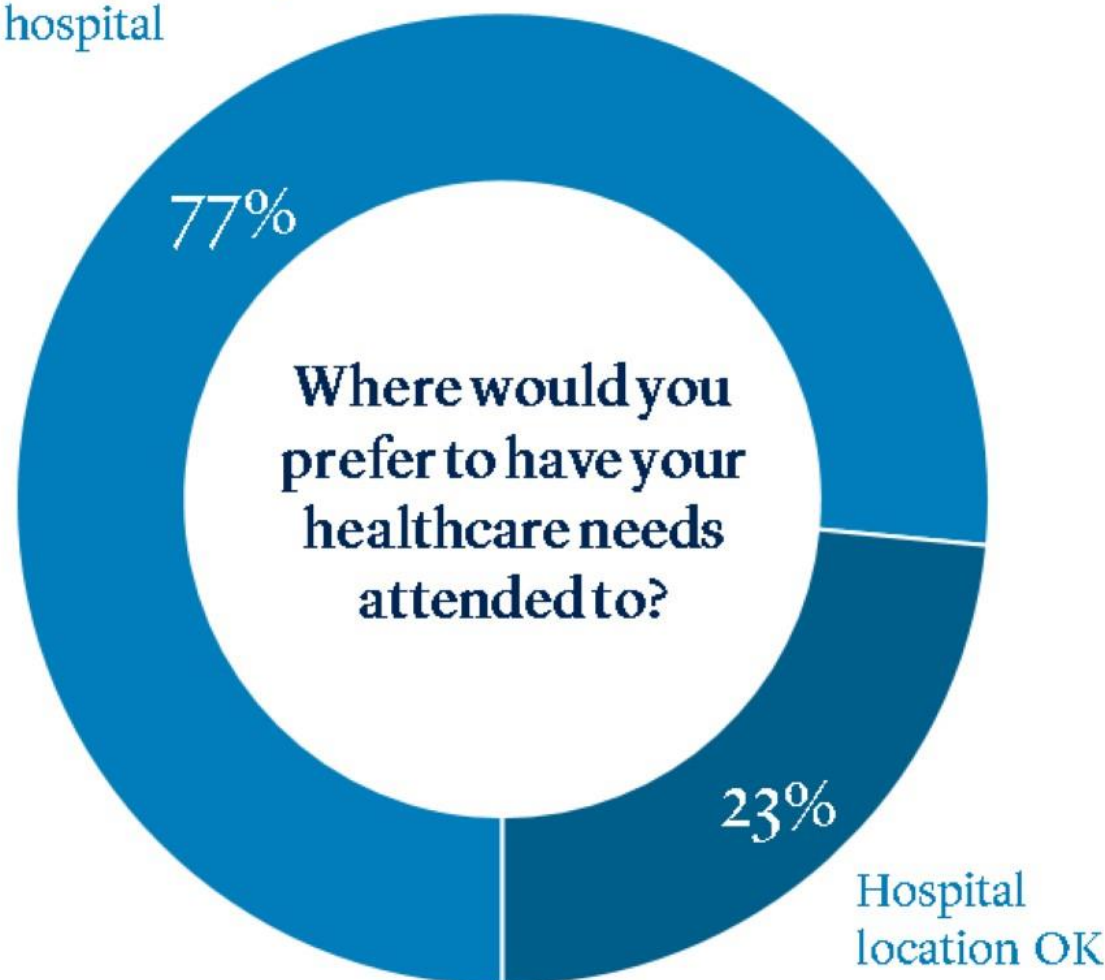


Source: U.S. Census Bureau, Heitman Research

Medical Office: Near-Term Performance and Long-Term Prospects Remain Strong

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Prefer location away
from hospital



Near-term COVID Impacts

- Negatives
 - Some temporary practice closures
 - Temporary suspension of elective procedures
 - Tenant financial pressures
- Positives
 - Growing attractiveness of outpatient settings

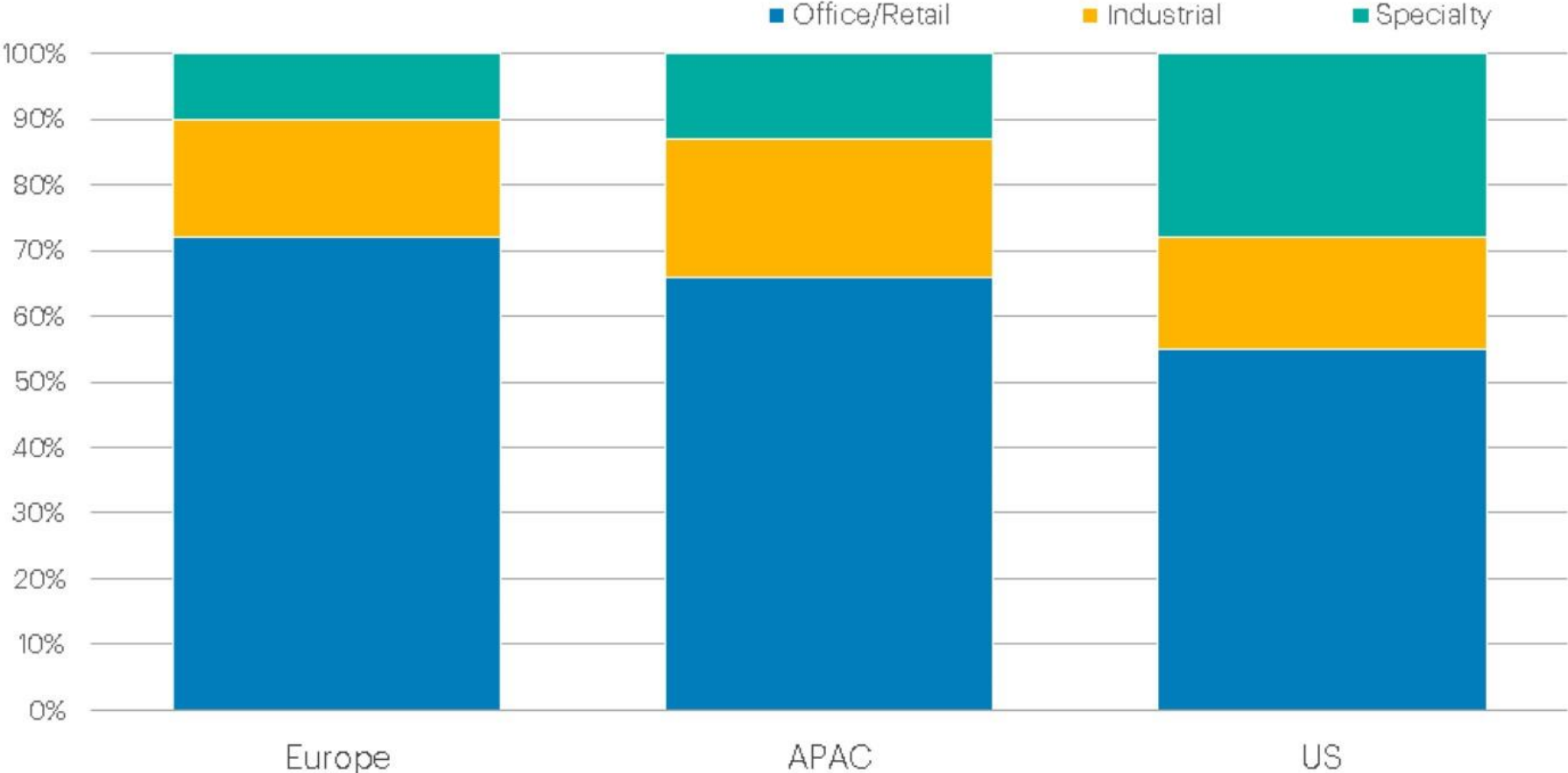
Things to Watch

- Rise of telehealth
- Loss of health insurance
- Monetization of provider real estate

Source: CVR and Carrichal Company (June 2020 survey of consumers in Atlanta, Dallas, Minneapolis, Phoenix and Louisville with 2,018 responses)

Sector Rotation Underway: More Expected

INSTITUTIONAL PROPERTY TYPE ALLOCATIONS BY SECTOR 2019



Source: NCREIF, INREV, ANREV; Heitman Research



Location

Location

Location

Recessions Make Great Entry Points

But Hedge Your Bets: Allocate to Debt

Catch a Rising Star: Non-Traditional Sectors Getting New Looks

Be Patient with In-Favor Sectors: Find Optimal Entry Points

Opportunities in Out-of-Favor Sectors: Watch for Mispriced Risk

Reduce, Reuse, Recycle: Applies to Bottles, Cans, and Buildings

Factor in Climate Risk

