

**nuveen**

REAL ESTATE

# The Future of the Workplace

How office location and Millennials' expectations can help attract tomorrow's top talent

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October 11, 2019

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Appalachian Human Resources Summit  
Parkway Ballroom, Plemmons Student Union

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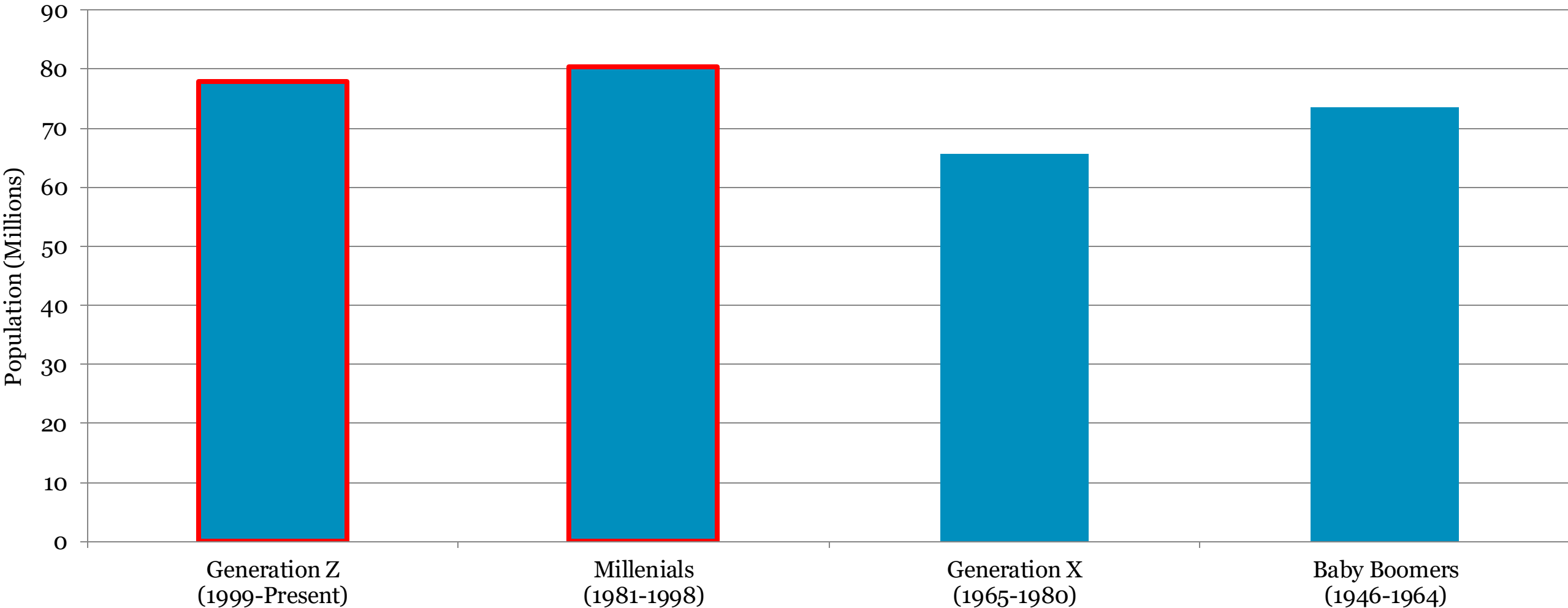
Melissa Reagen, Managing Director, Head of Research, Americas

# Tomorrow's world: Video

# Demographic shifts will impact the workplace

# Demographics are a key megatrend

Generation Z and Millennials will drive demand for real estate in the coming decades

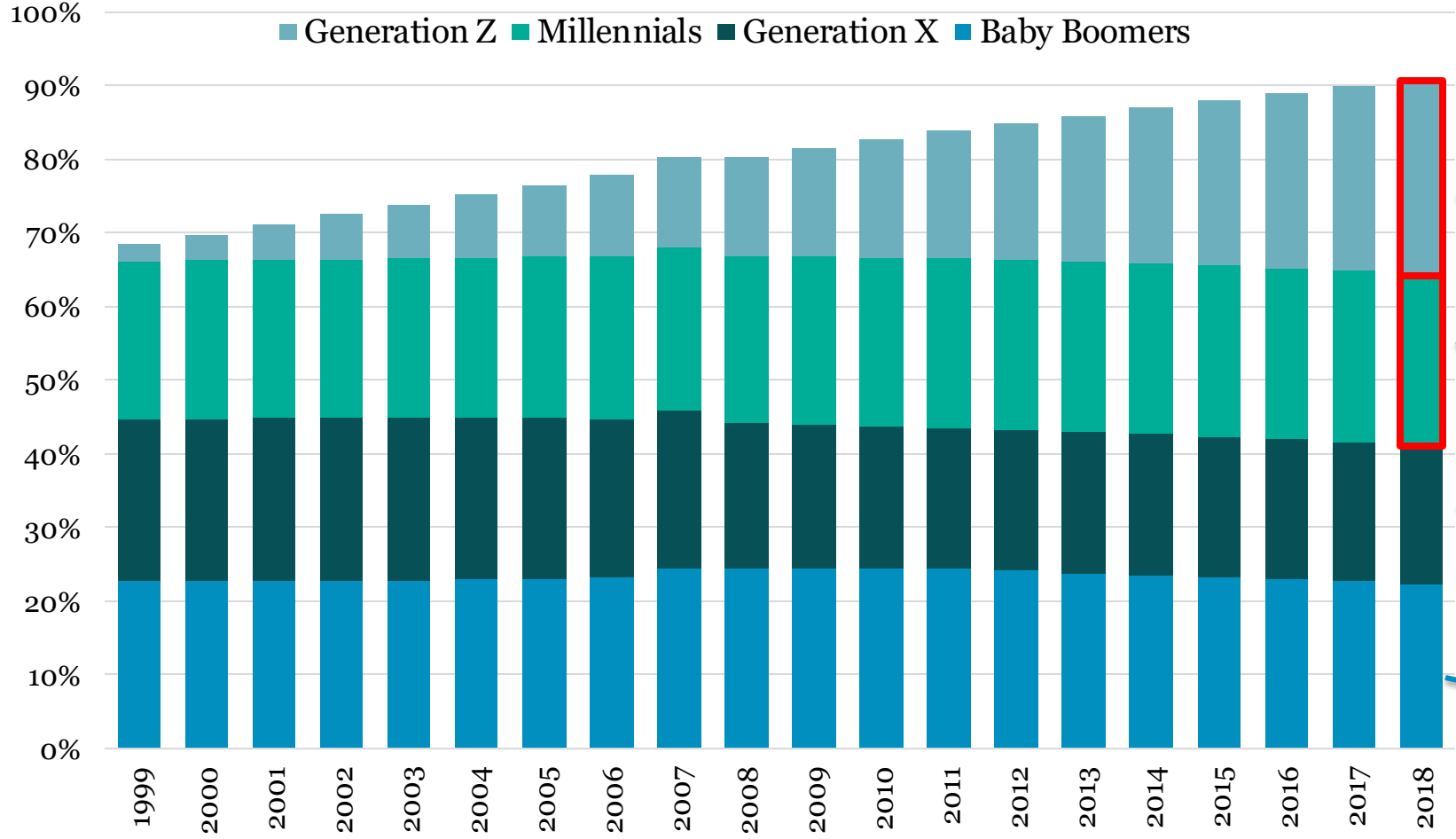


Source: US Census Bureau, Pew Research Center

# Demographics are a key megatrend

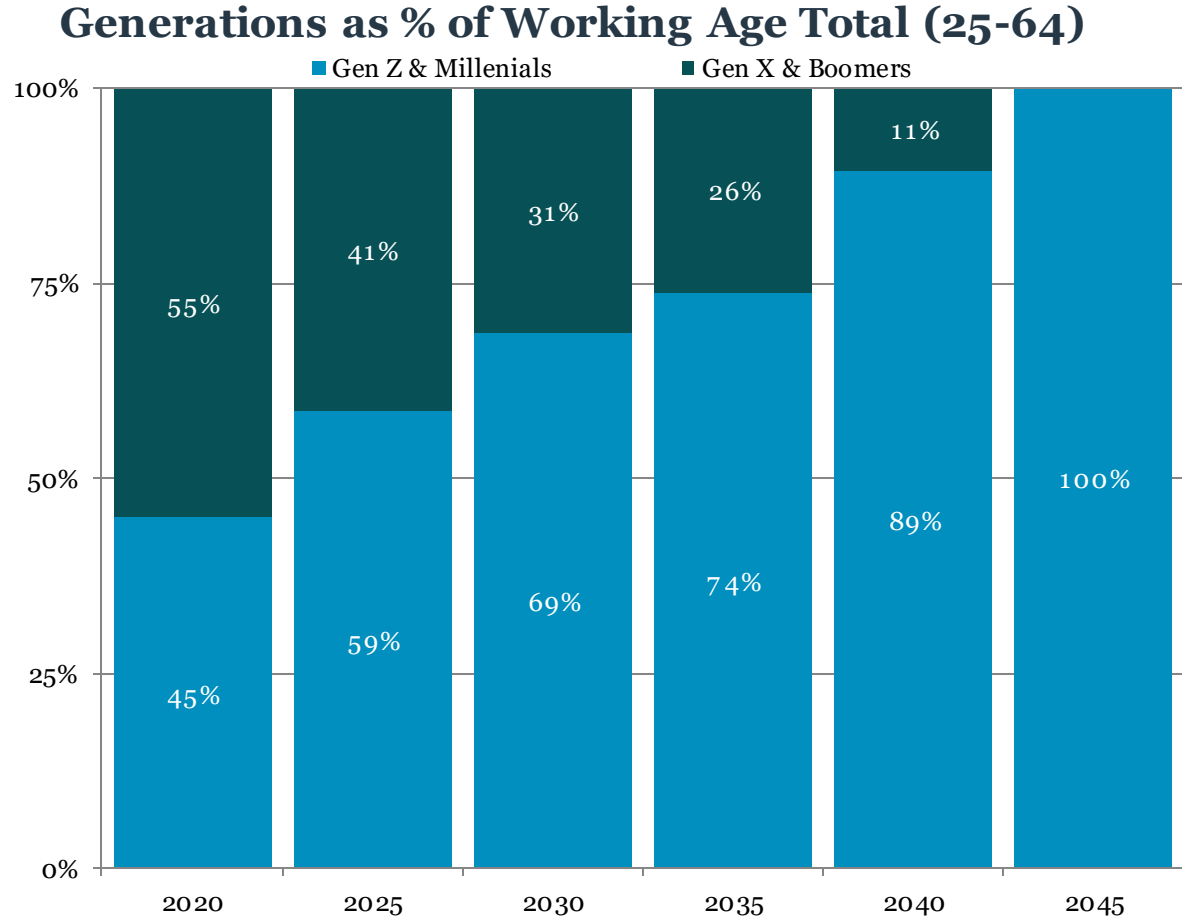
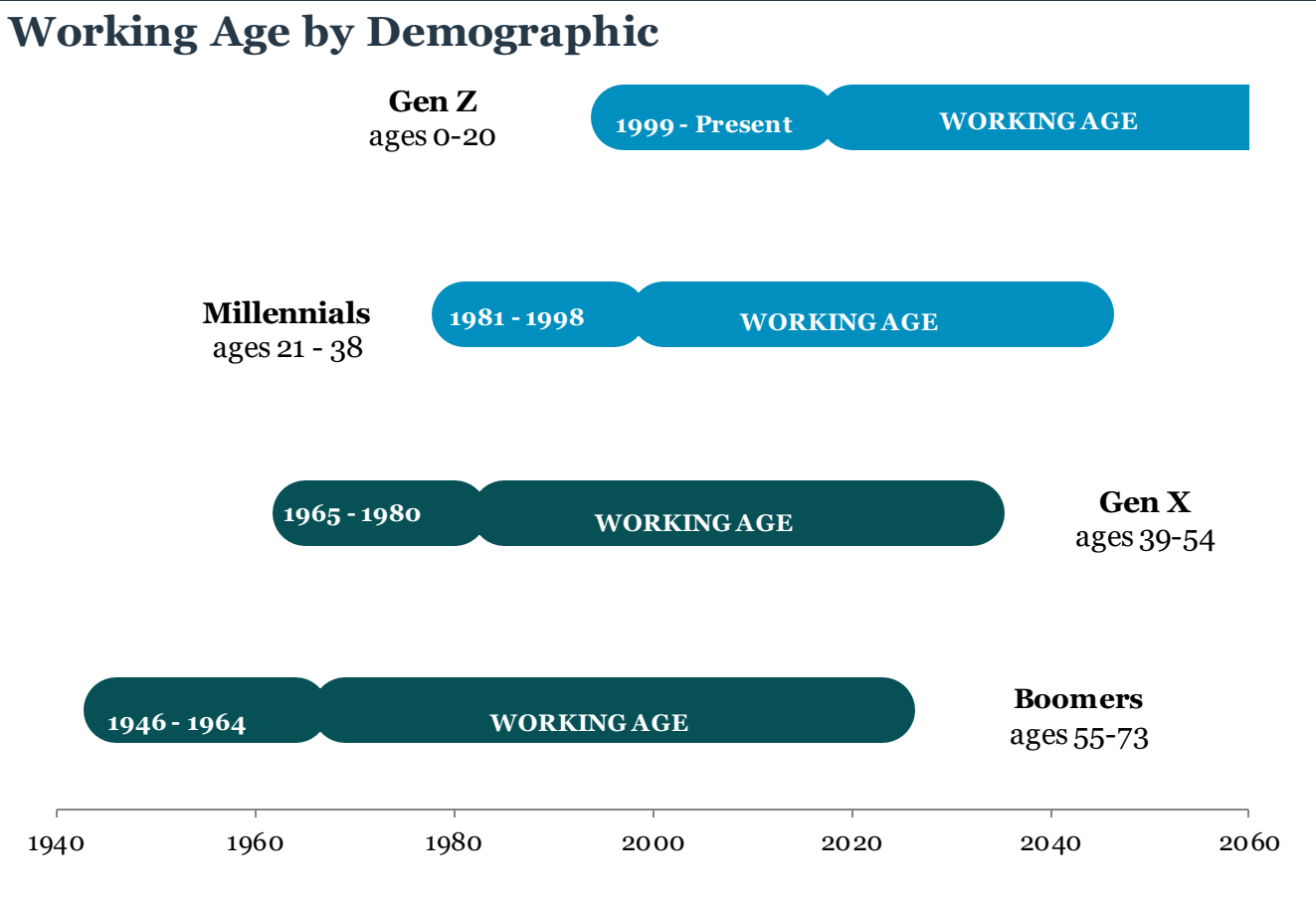
Generation Z and Millennials comprise half of the total U.S. population

## Generations' Share of Total U.S. Population



Source: US Census Bureau

# Generation Z and Millennials will comprise ~75% of workforce by 2035



Source: Harvard Joint Center for Housing Studies, America's Rental Housing 2017; US Census Bureau

# Retaining millennials aka the “job hopping generation”

- 21% of millennials say they've changed jobs within the past year,
- **More than 3X the number of non-millennials who report the same**
  
- 60% of millennials say they are open to a different job opportunity
- **15 percentage points higher than the percentage of non-millennial workers who say the same**
  
- Not just leaving for high-paying jobs, but for:
  - **Positive work culture**
  - **Better work-life balance**
  - **Environmental and social issues**



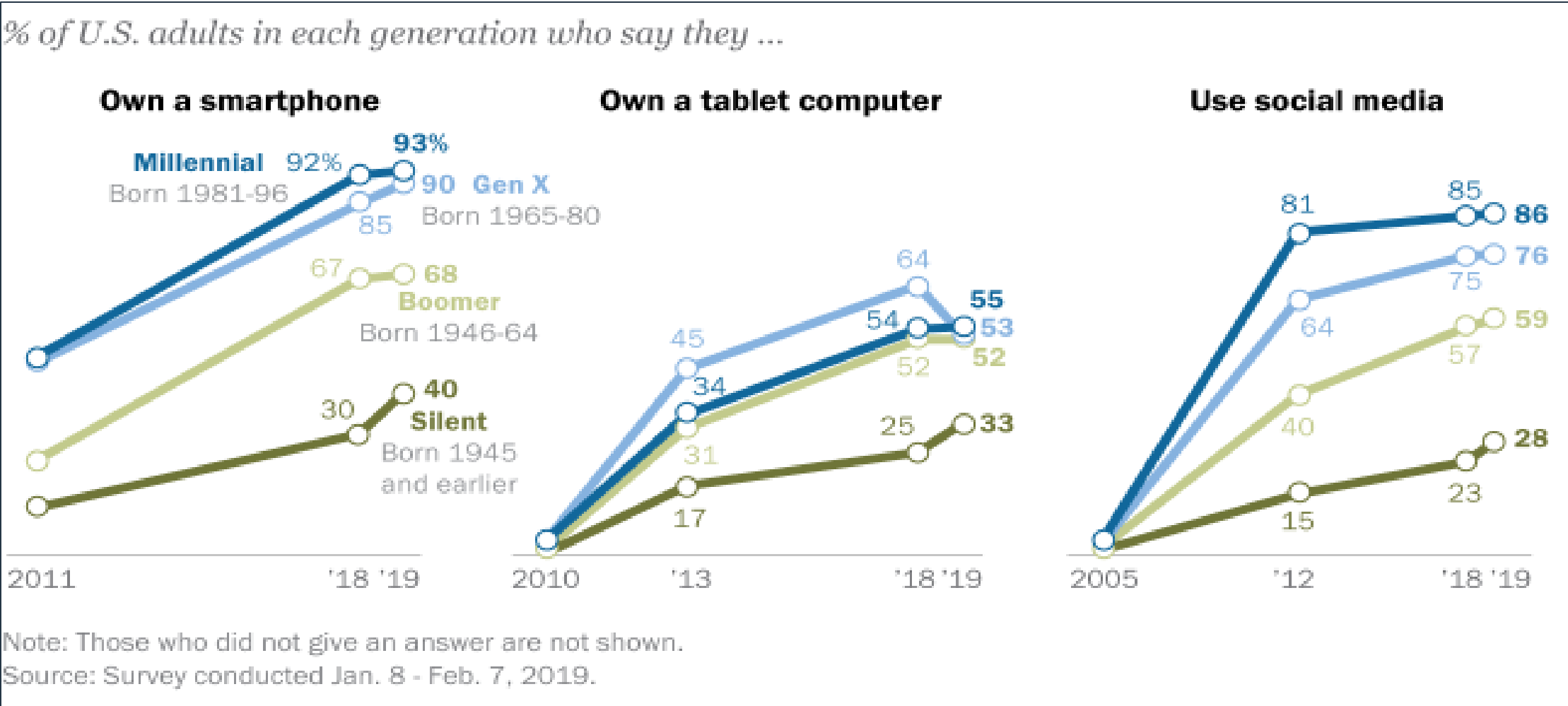
Source: Gallop, 2019

# Attracting and Retaining Talent in Tomorrow's World



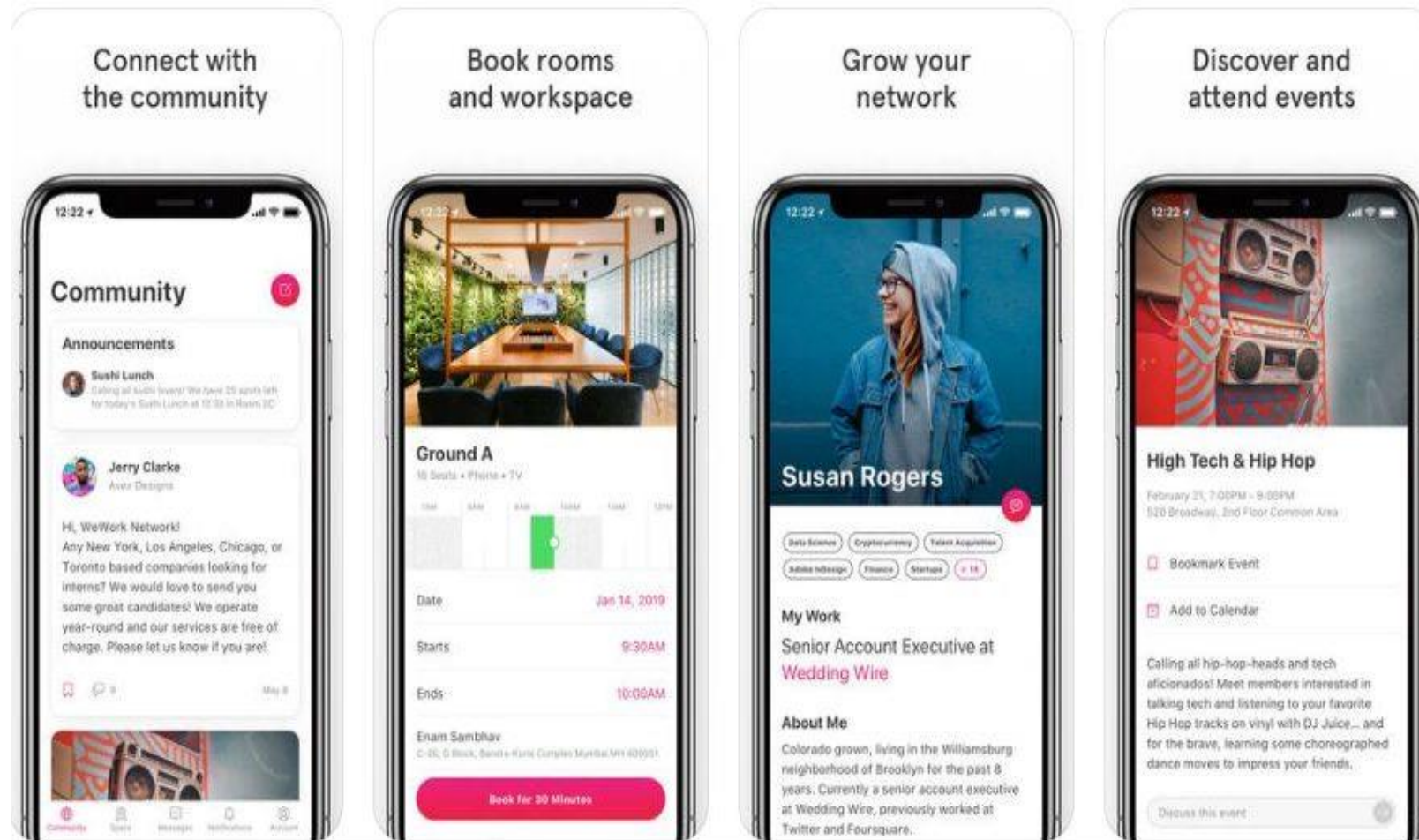
# Younger workforce is technologically adept

A more tech-advanced workforce will impact workplace desires and expectations



Source: Pew Research Center

# Tomorrow's offices: technologically-advanced



## Younger generations will desire tech-enabled workplaces:

- Applications that allow them to book conference rooms, help find nearest lunch locations booking conference rooms via app
- Social messaging within application (i.e. Jammer, community board)

Source: WeWork

# Tomorrow's offices: amenity-rich

Younger generations entering workforce will desire amenity-rich work environments



Wellness



Various areas



Cafeteria







High design



Fitness

# Tomorrow's offices: flexible

Flexible space is projected to be 30% of market inventory by 2030 (vs. 5% today) due to insatiable tenant demand driven by fundamental shifts in technology and consumer preferences

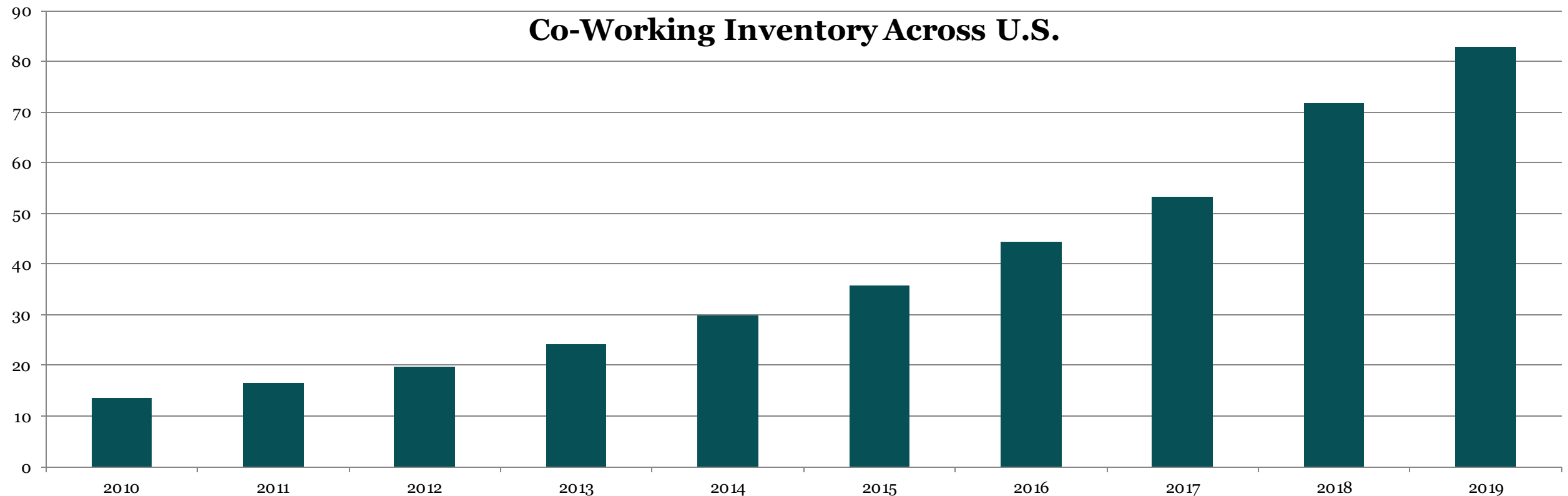
	 Urbanization	 "X" as a service	 Evolving work culture	 Fixed cost reduction
<b>Driver:</b>	The workforce is mobilizing to cities at an accelerated pace	Companies seek flexibility: Most companies only plan 36 months ahead for strategic purposes	Digital nomads demand innovative formats: <b>60%</b> of employees today do not feel engaged at work	#1 reason businesses move to flexible workspaces: <b>51%</b> are looking to reduce occupancy costs
<b>Result:</b>	<b>Flexible space extending its reach</b>			
	<b>+23%</b> Average annual growth of the <b>flexible space sector</b> (2010-present)	vs. <b>+1%</b> Average annual growth of the <b>overall U.S. tenant base</b> (2010-present)	<b>+30%</b> Of operator revenue comes from <b>corporate tenants</b>	<b>49%</b> Flexible space share of total office net absorption ( <b>vs. 5% in 2010</b> )

Source: CoreNet Global, JLL study, MindMetre survey

# Flexible office space: fad or long-term workplace solution?

Flexible office is a traditional office alternative primarily based on three characteristics:

1. Offer desk space or private offices within a shared space
2. Flexible rental agreements
3. Fosters a close-knit, entrepreneurial, and professional community

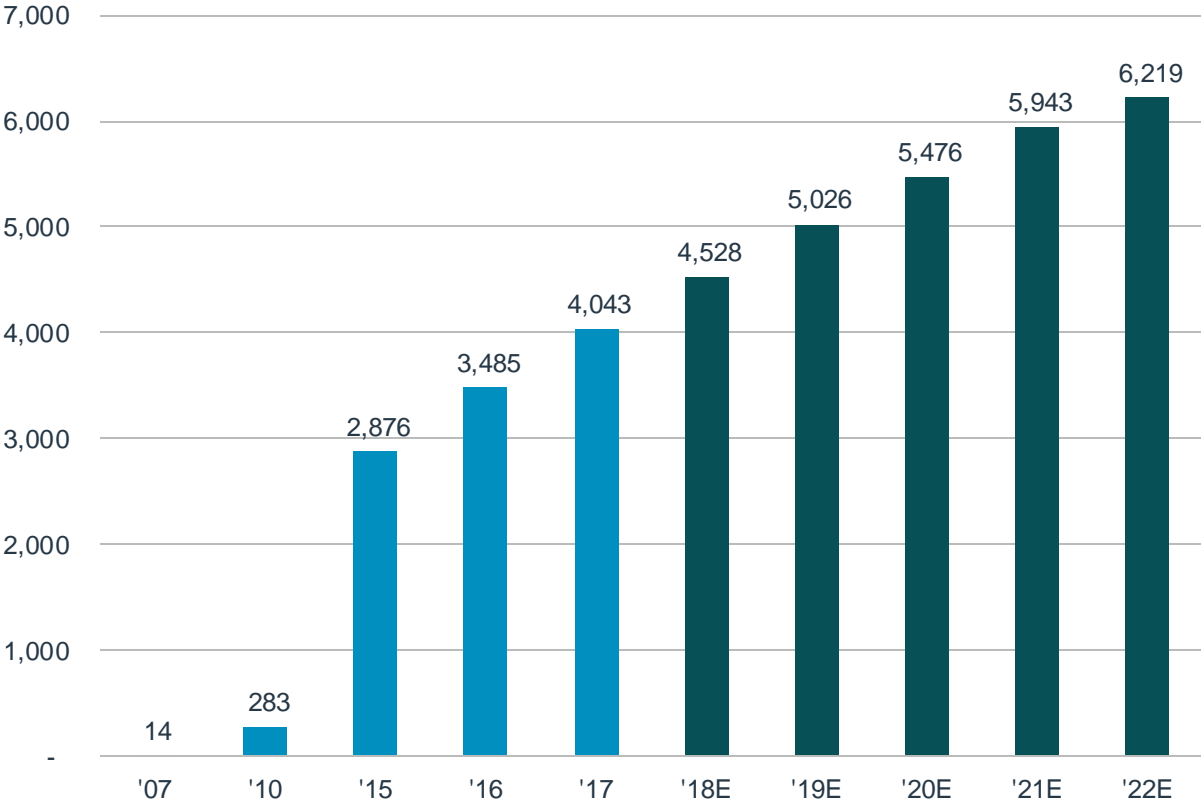


Source: JLL

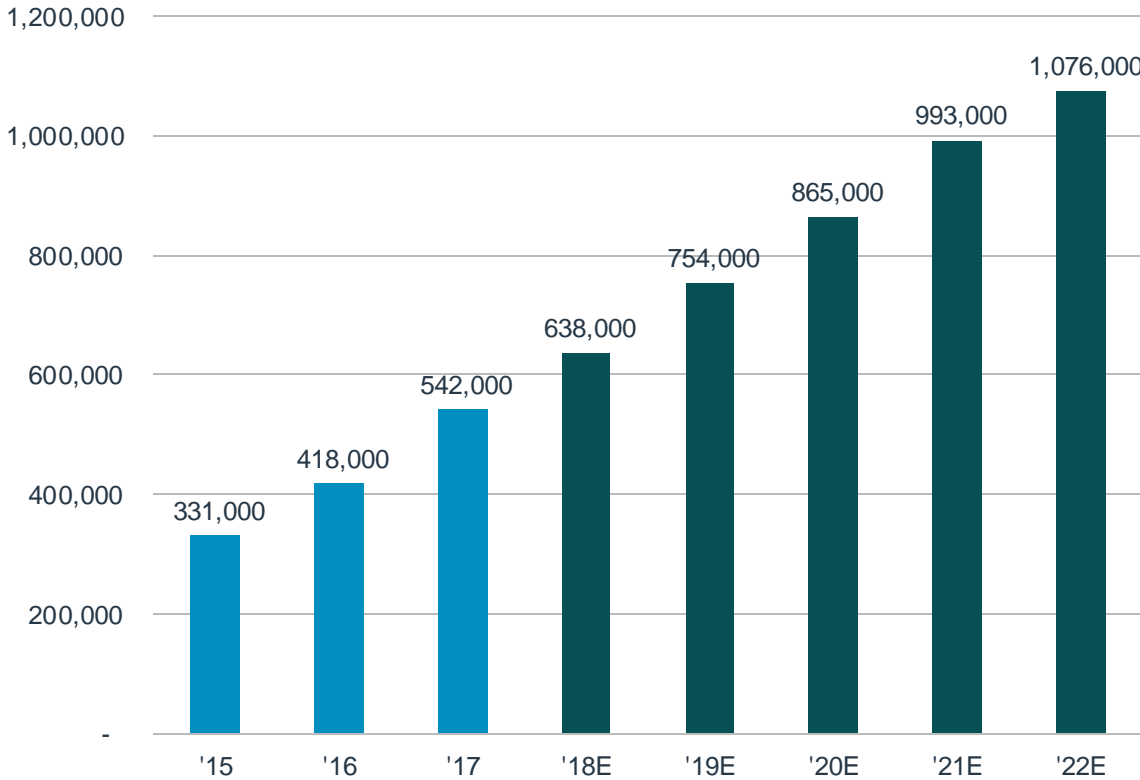
# Co-working space continues to increase across U.S.

The demand for co-working has stemmed from a conflux of societal, economic, demographic, and technological factors that include renewed interest in entrepreneurship, changing business priorities, the rise of the contingent workforce, and growth in technology.

### U.S. Co-working Spaces



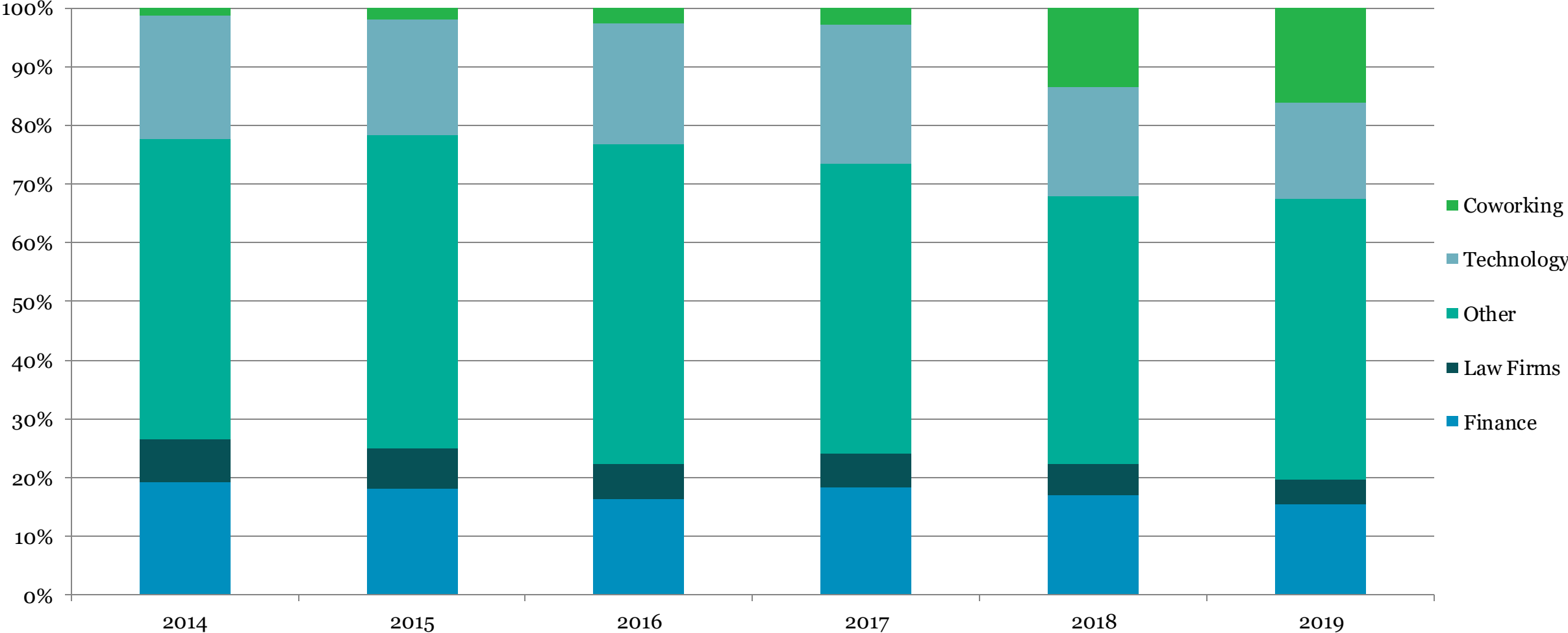
### U.S. Co-working Members



Source: Emergent Research, GCUC

# Office demand shifting towards tech and co-working

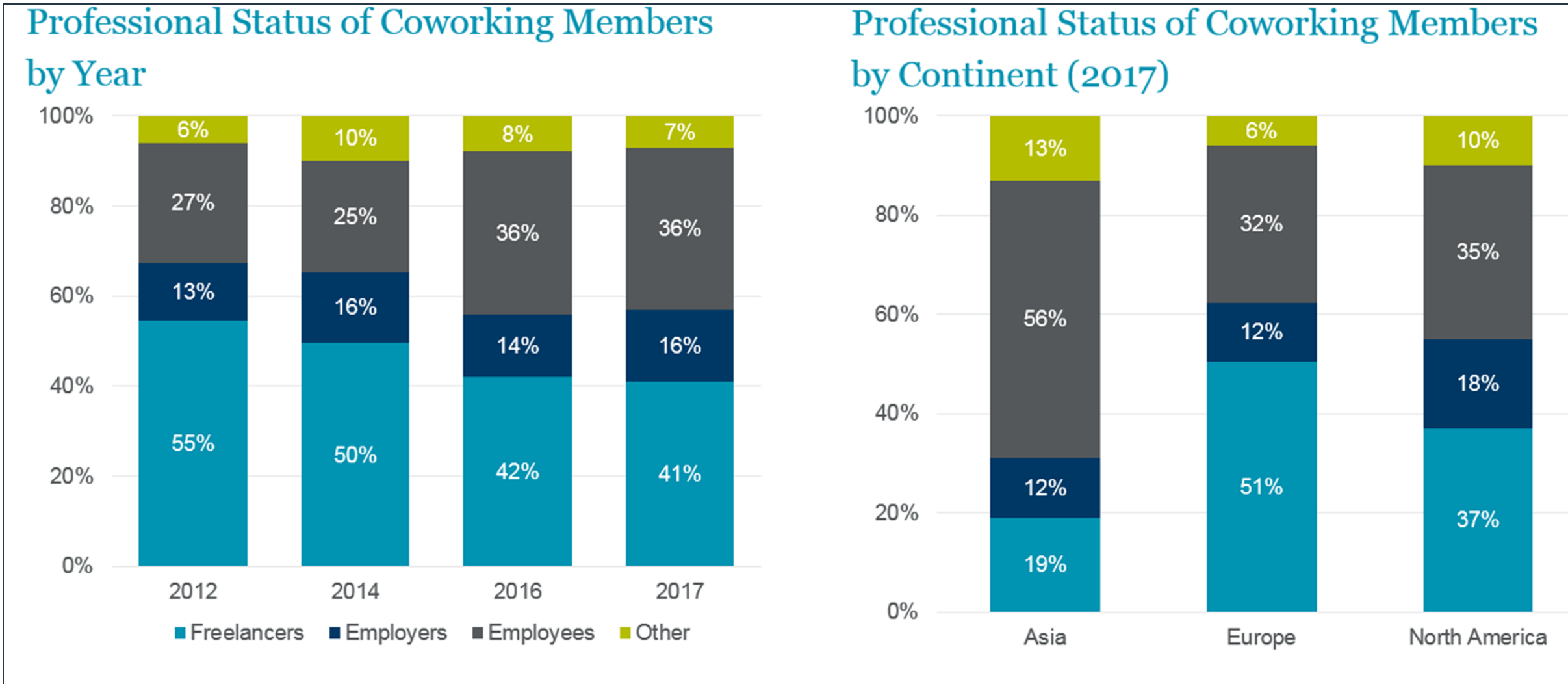
Co-working as a % of total office leases signed



Source: JLL

# Flexible office: Not just for start-ups

Many larger companies are using flexible offices to attract and retain talent



Source: Deskmag 2017 Global Coworking Survey



# The rise of flexible office operators

Millennial and Gen Z workplace preferences will fuel growth for co-working companies

 Regus

ALLEY

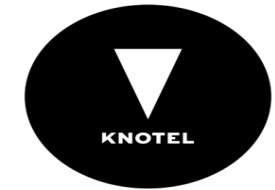
wework

LEVEL

 SPACES.

THE  
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rise



≡ SOHO  
WORKS

CENTRAL  
WORKING

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THE OFFICE GROUP

WORK.LIFE

workfrom

# Tomorrow's workplace: progressive HR benefits

- Unlimited Paid Time Off
- Work from home
- Dress for your day
- Maternity/Paternity Leave
- Fitness and health reimbursement
- Providing free breakfast/lunch
- Paid time off for volunteering

**Business**  
**'All the men are psyched' about Goldman Sachs' relaxed dress code. For everyone else, it's complicated.**

**Google has so much free food, employees worry about gaining the "Google 15."**

**14 companies that give their employees unlimited vacation days**

Erin McDowell Aug 30, 2019, 3:27 PM

**TECH**  
**WeWork Puts Four-Ber Limit on Once-Bottomless Kegs**  
Last call for endless free alcohol as shared office-space company caps New York tenants' drinking

**Cayenne pepper ginger shots, homemade lemon tarts, and Michelin-starred chefs — here's what employees at Silicon Valley's biggest tech companies are offered for free**

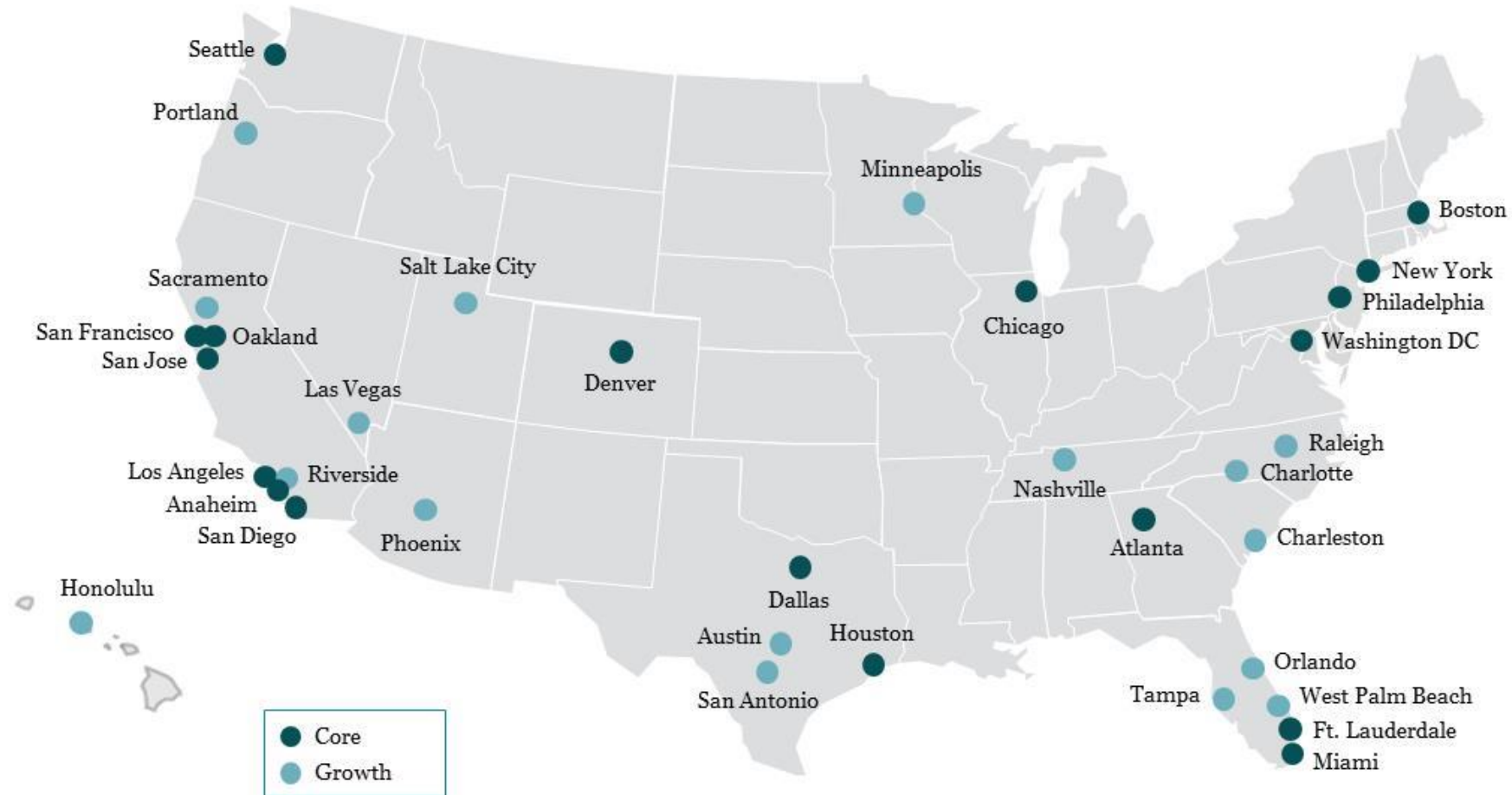
Katie Canales Jul. 31, 2018, 4:36 PM

**BANKS**  
**Suits and ties now optional: Goldman Sachs says it's relaxing its dress code**  
PUBLISHED TUE, MAR 5 2019 - 2:00 PM EST  
UPDATED WED, MAR 6 2019 - 4:02 PM EST

Source: Forbes; Business Insider

# Tomorrow's cities: Attracting Talent

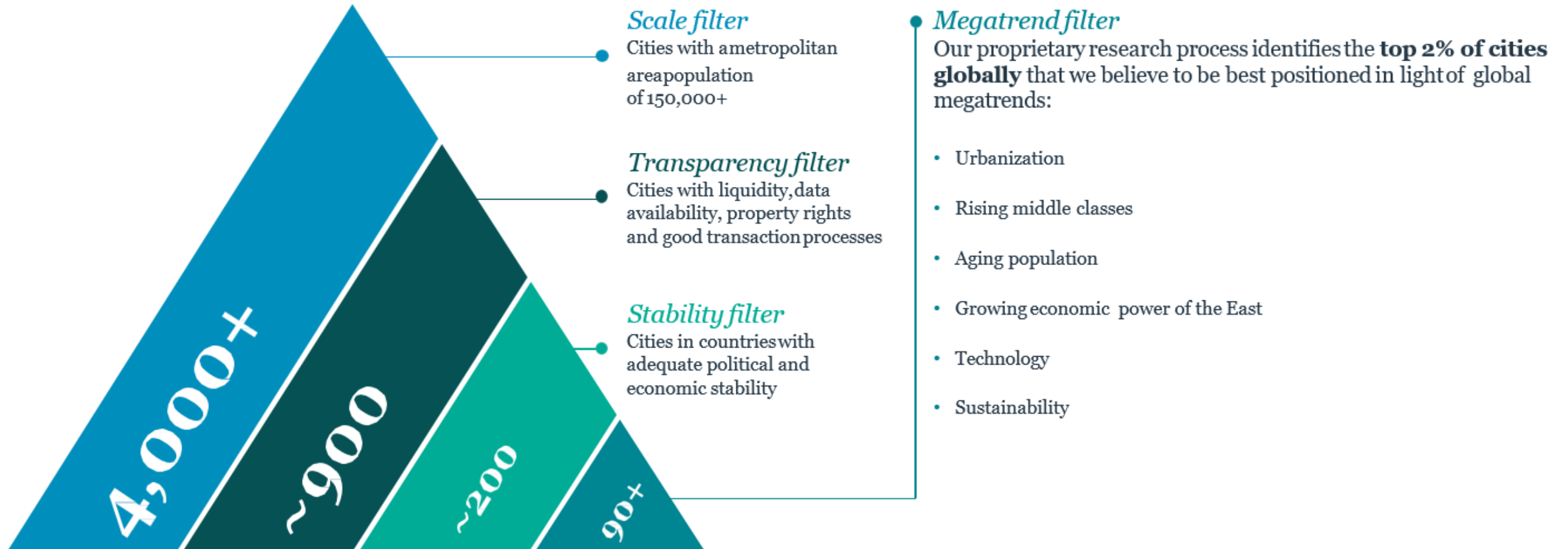
# Attracting talent: U.S. tomorrow's cities



Source: Nuveen Real Estate

# Our proprietary city-focused approach

Identifies those cities best positioned for structural growth



Source: Nuveen Real Estate

# Our proprietary city-focused approach

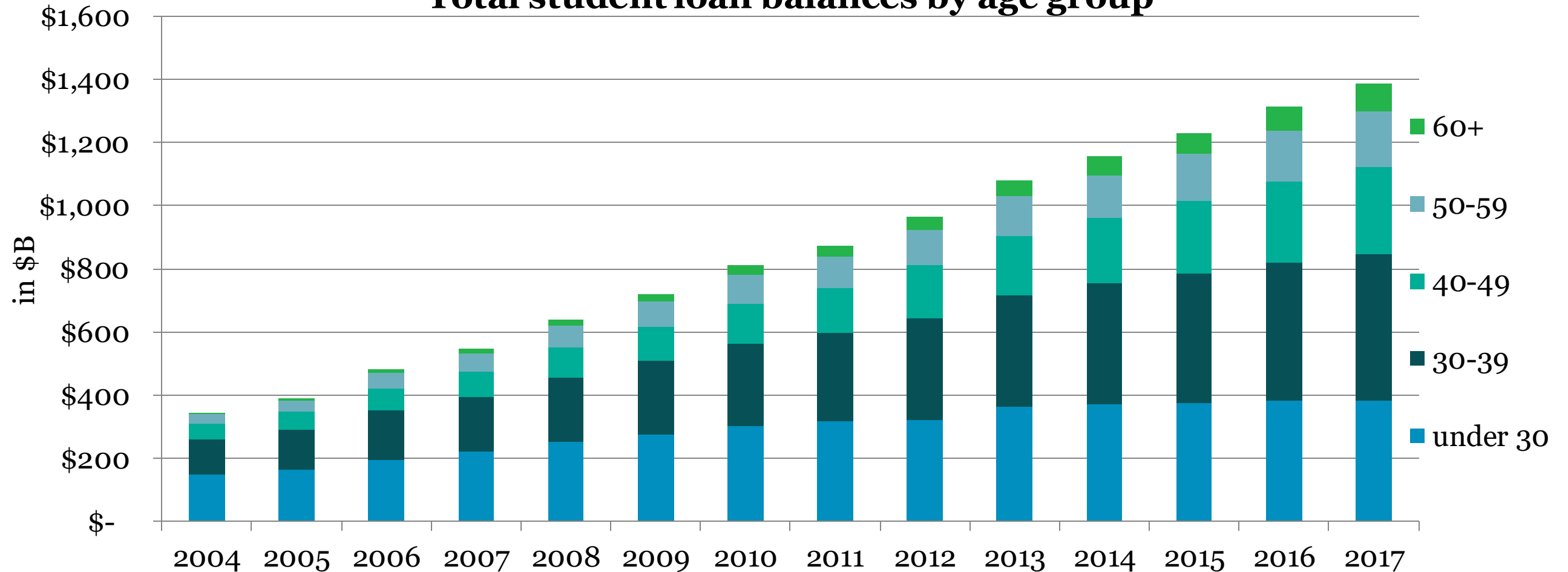
Our research identifies the characteristics of cities best positioned for structural growth

Characteristics	Metrics	Best-Positioned City Examples
<b>Hard Factors</b> <ul style="list-style-type: none"><li>• Scale</li><li>• Productivity</li><li>• Youthfulness</li><li>• Affluence</li></ul>	<ul style="list-style-type: none"><li>• Population, Size of GDP</li><li>• GDP per Capita</li><li>• Population &lt;40</li><li>• Households &gt;\$100K</li></ul>	<ul style="list-style-type: none"><li>• London</li><li>• New York</li><li>• Los Angeles</li></ul>
<b>Soft Factors</b> <ul style="list-style-type: none"><li>• Connectivity</li><li>• Technology</li><li>• Liveability</li></ul>	<ul style="list-style-type: none"><li>• International flights</li><li>• Innovation index</li><li>• Quality of life index</li></ul>	<ul style="list-style-type: none"><li>• Boston</li><li>• San Francisco</li><li>• Sydney</li></ul>
<b>Growth Factors</b>	<ul style="list-style-type: none"><li>• Population growth</li><li>• Economic growth</li><li>• Affluence growth</li></ul>	<ul style="list-style-type: none"><li>• Perth</li><li>• Shanghai</li><li>• Austin</li></ul>
<b>Sustainability</b>	<ul style="list-style-type: none"><li>• Air quality index</li><li>• Climate change vulnerability</li><li>• Grid carbon intensity</li></ul>	<ul style="list-style-type: none"><li>• Brisbane</li><li>• Copenhagen</li><li>• Auckland</li></ul>

# A Reality: College debt is rising

Student debt burdens influence where younger generations can afford to live

## Total student loan balances by age group

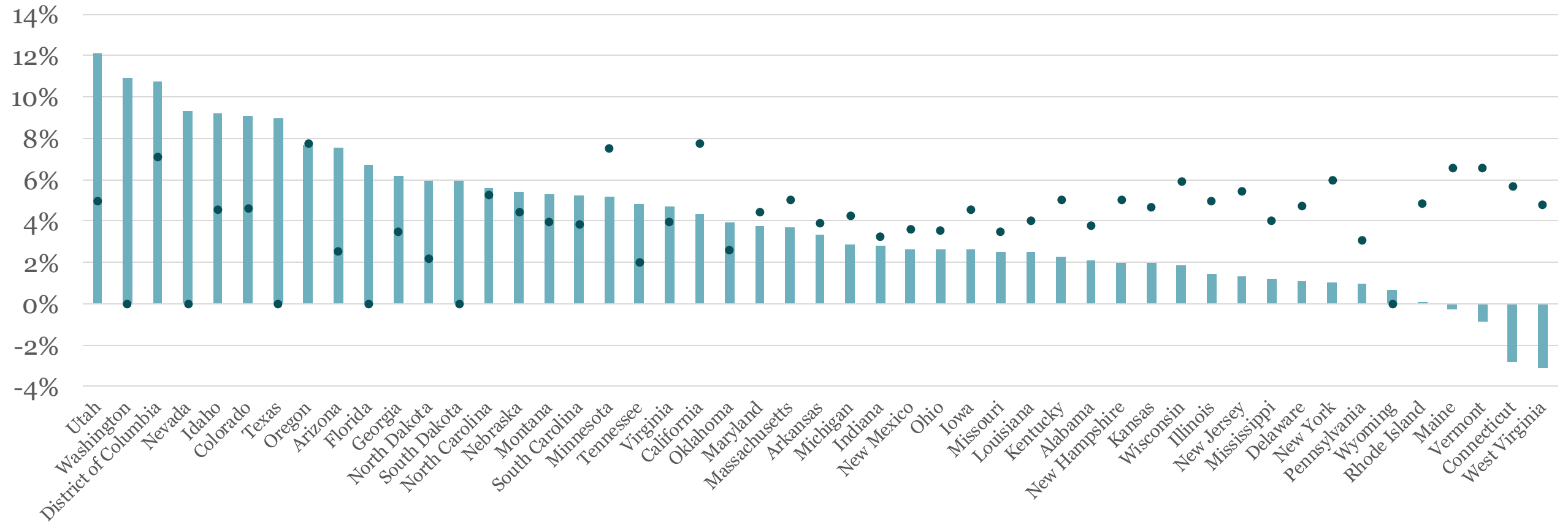


Source: Federal Reserve Bank of New York Consumer Credit Panel / Equifax

# Affordability will impact where younger generation move

States with low (or no) personal income tax rates like Nevada and Texas are expected to experience strong population growth in the medium term. States with high personal income tax rates like Connecticut and Maine are expected to experience weak population growth in the medium term.

**State Population Growth (2020-2027) vs. 2019 Average Personal Income Tax Rate**



Source: StratoDem Analytics, 2019  
 Note: Straight-line average of personal income tax rate



# LinkedIn study: worker migration from major coastal cities

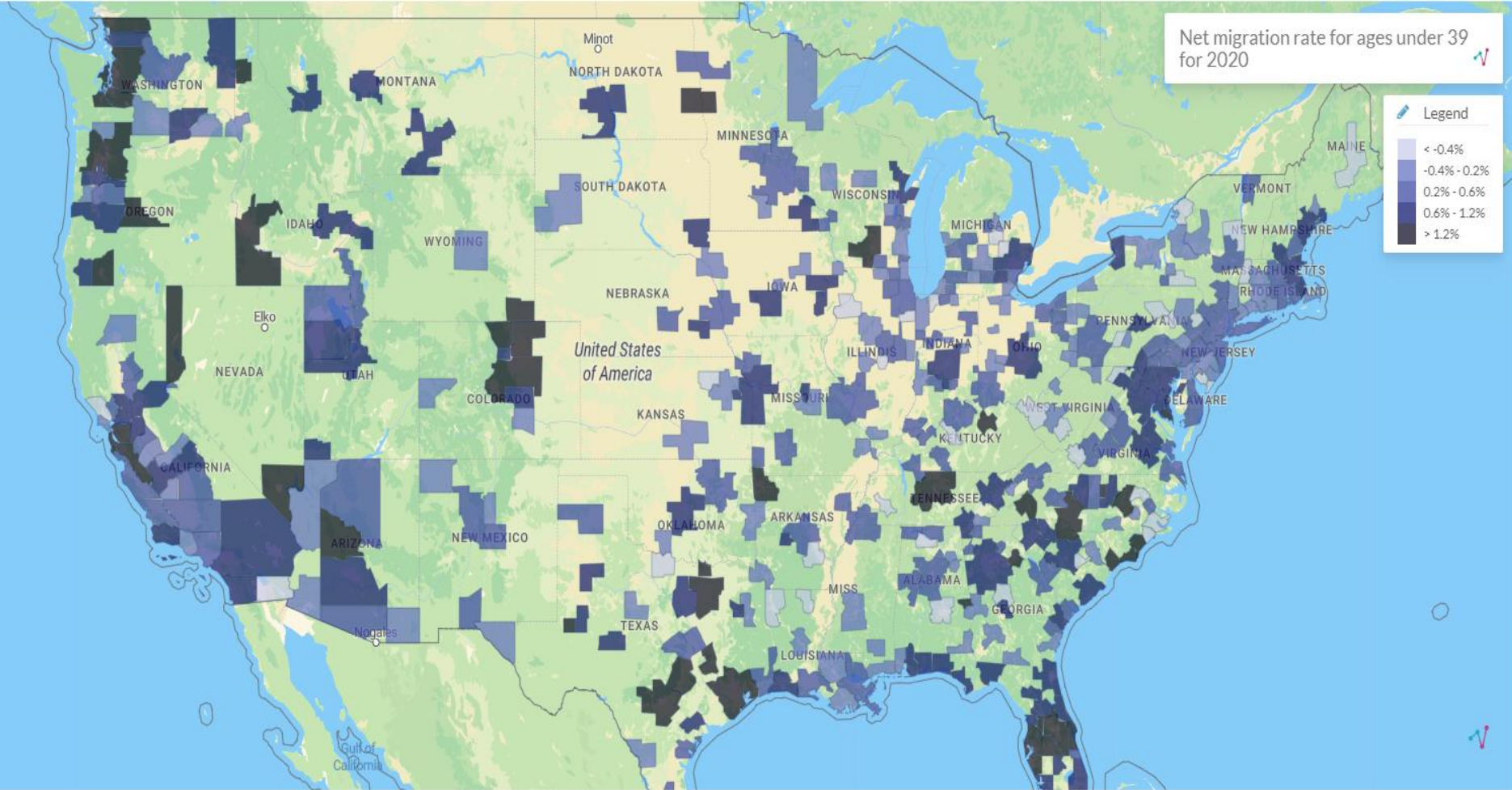
According an analysis for the WSJ by LinkedIn, the livability crises of West/East Coast are a pushing factor



Source: LinkedIn, 2019

# Net migration rate of Millennials and Generation Z (2020)

Strongest net-migration experienced in Sunbelt cities



### Winners:

- Austin, TX
- Orlando, FL
- Nashville, TN

### Losers:

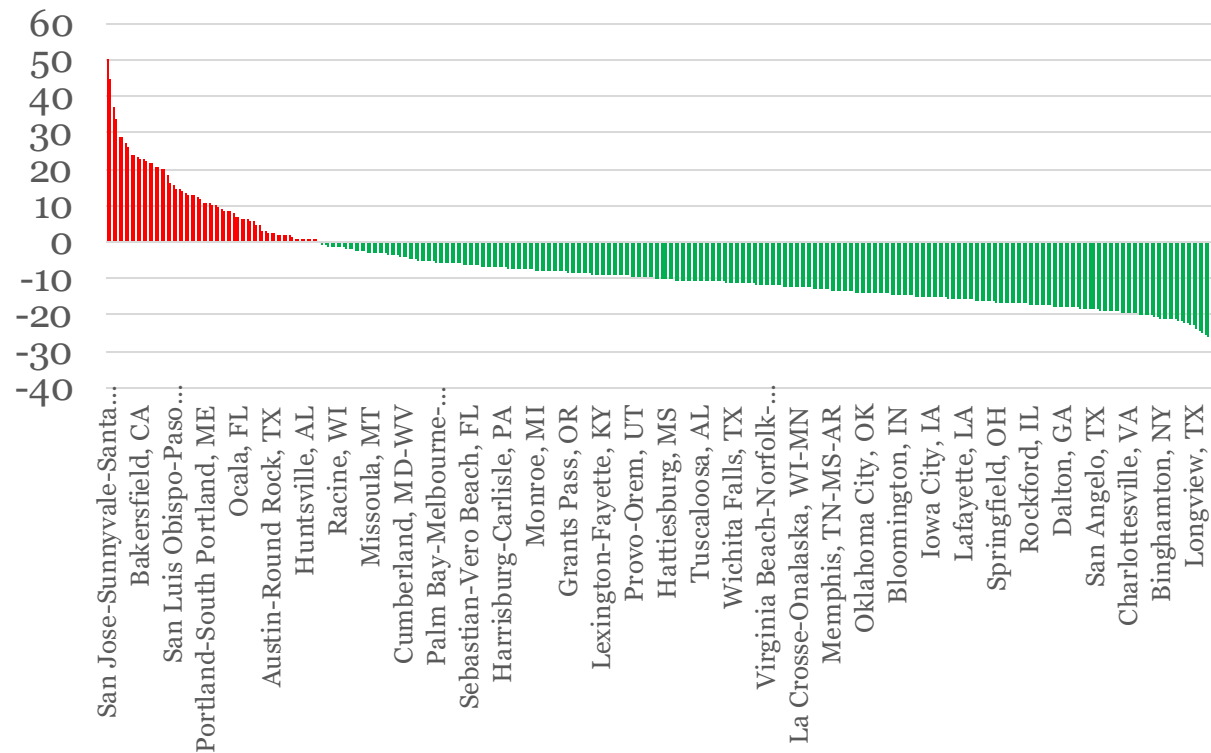
- Youngstown, OH
- Milwaukee, WI
- Scranton, PA

Source: StratoDem Analytics

# Companies are moving to cities with lower business costs

Northeast and California cities are amongst the most expensive places to do business while Sunbelt cities are amongst the least expensive

Moody's Analytics: Cost of doing business index relative to US



## High cost of doing business:

- San Jose, CA
- Manchester, NH
- Honolulu, HI
- San Diego, CA
- Fairfield County, CT
- Providence, RI
- Hartford, CT
- Worcester, MA

## Low cost of doing business:

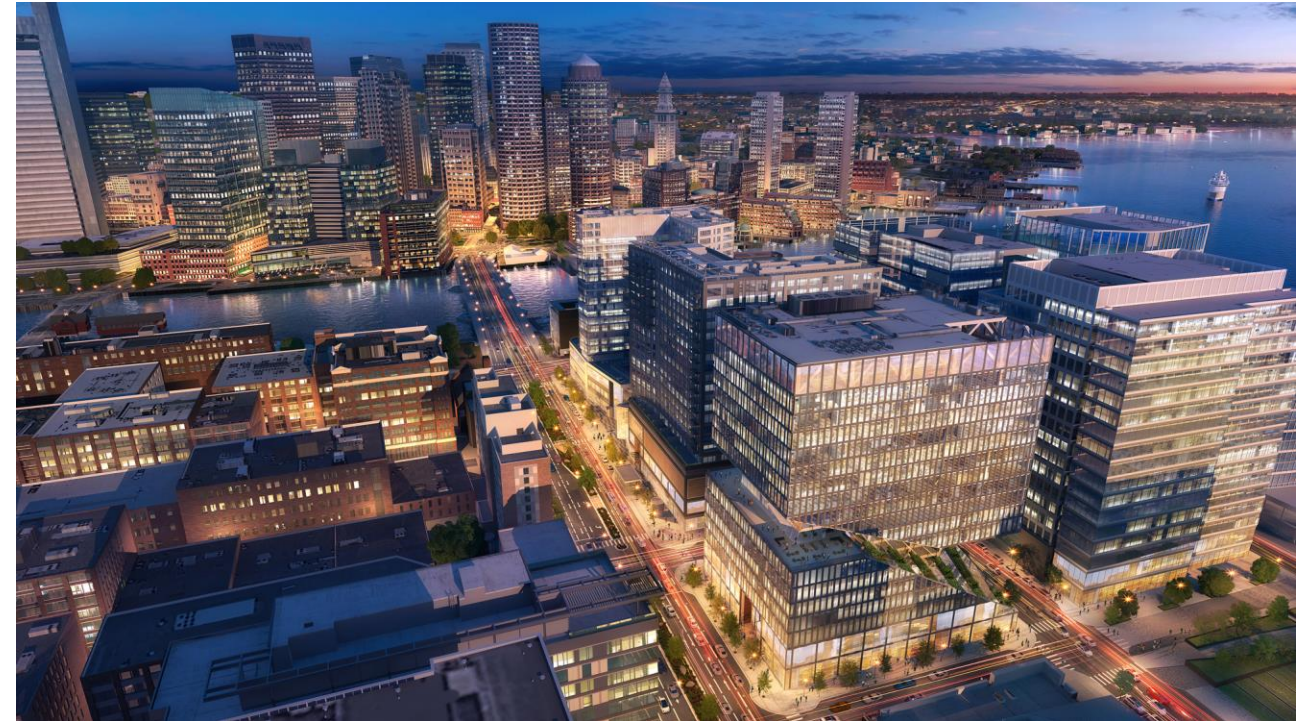
- Greensboro, NC
- Savannah, GA
- Memphis, TN
- Charlotte, NC
- Reno, NV
- Durham, NC
- San Antonio, TX
- Las Vegas, NV

Source: Moody's Analytics

# Where in the city will they want to live/work?

- Live-Work-Play areas
- Walking distance to restaurants, bars, fitness studios, etc.
- Compatible location for ride sharing applications (Uber, Lyft, etc.)
- Close proximity to public transportation

## Seaport Boston



# Smart cities will attract talent

# Rise of smart cities

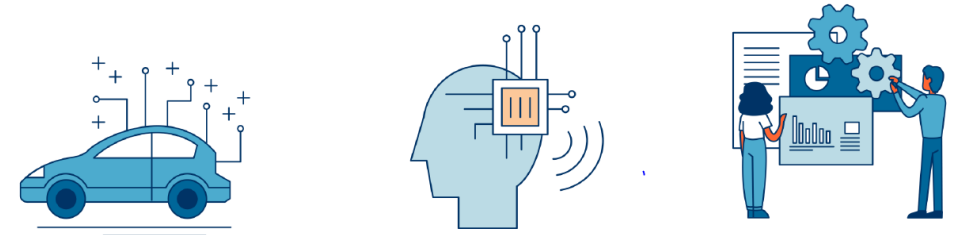
Smart cities and their benefits

## What is a Smart City?

“Smart cities” are **interconnected urban environments**

## Why Now?

Technological advancements (e.g., IoT, 5G AI) have reached a tipping point








Data is collected by sensors, processed by AI and integrated by decision makers



# Technological Disruptors

## Chain of Events

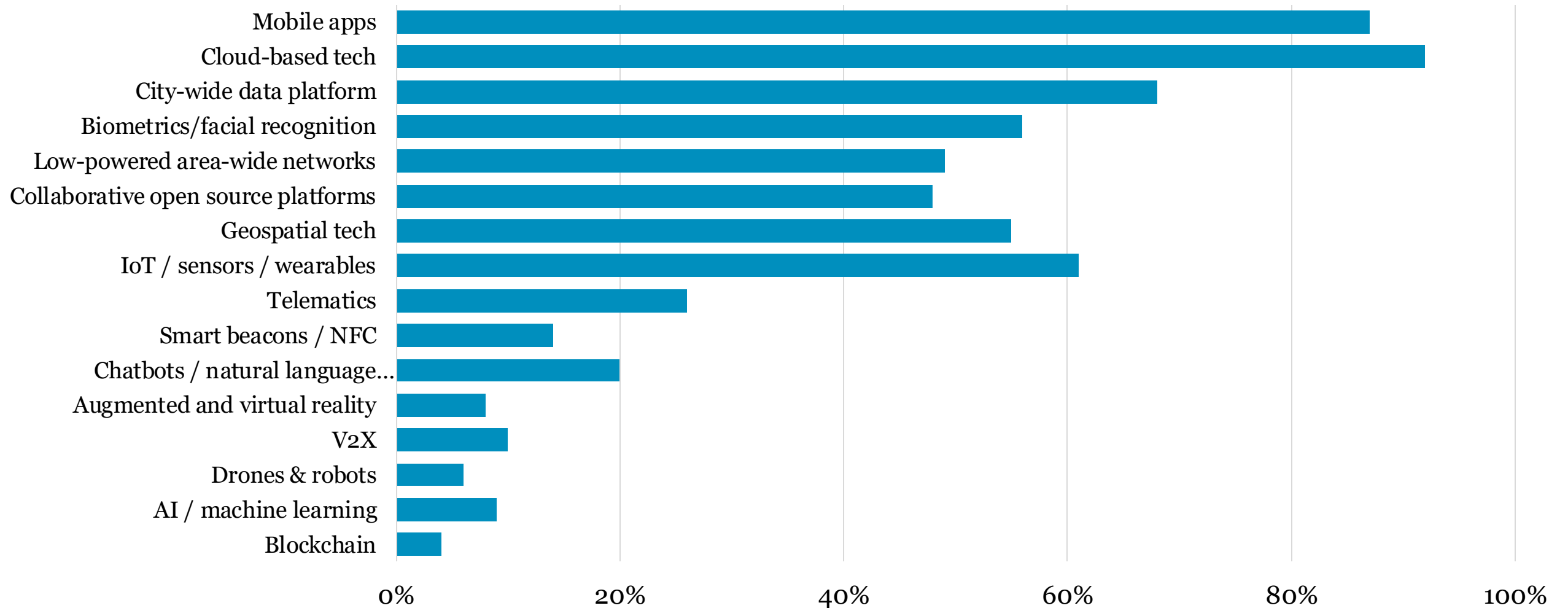
### Virtual Meets Physical: Technological Disruptors, Chain of Events

					
<b>Disruptor</b>	<b>e-Commerce</b>	<b>5G</b>	<b>Internet of Things</b>	<b>Sharing Economy</b>	<b>Big Data</b>
<b>Est. Mass Adoption</b>	<b>2012</b>	<b>2020</b>	<b>2023</b>	<b>2028</b>	<b>2030</b>
<b>Potential Impact (Out of 10)</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>7</b>	<b>8</b>
<b>Commentary</b>	Despite the presence of Amazon and e-commerce for more than a decade, it wasn't until recently that it began to significantly impact brick & mortar outside of a few niche retail sectors.	5G serves as a gating technology that allows for always connected devices. As a gating technology, there is a lot of capital being deployed to capture a piece of the broader opportunity.	The advent of reliable fast-connections and the introduction of always connected devices will bring the digital world to the physical.	A sharing economy is unattainable without a convenient way to know what & where sharables are located. The IoT solves this conundrum and will give birth to myriad new opportunities.	Currently, data in the physical world needs to be intentionally collected. Ever-present always connected devices will create an explosion in the amount of available data.

Source: Nuveen Real Estate

# Smart City Technologies

Technologies that cities use now and plan to use in 3 years



Source: City Zenith



# Total IT/Technology budgets across US



Source: Local municipalities

# Smart cities across America: New York City

Goal: reduction in accident fatalities, CO2 emissions

- Low-Power WAN deployments with smart sensors
- Smart traffic signals
- Vision Zero safety corridors
- Connected electronic toll system
- ACE Program:
  - \$650 million in funding
  - Over 600 buildings
  - 900 metric tons of CO2 savings in 2018
- LinkNYC
- BigBelly



BigBelly Bins



Source: New York City Department of City Planning

# Smart cities across America: San Francisco

Goal: 10% reduction in single-occurrence vehicle trips

- Autonomous shuttles on Treasure Island - EasyMile shared driverless vehicles
- Smart traffic signals\*\* discuss as part of the solution
- Vision Zero Safety
- Connected electronic toll system
- BigBelly



Source: San Francisco Planning Department

# Important information

Real estate investments are subject to various risks including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.

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Tomorrow's World Video: 692479-G-INV-AN-12/19