Real Estate Insights, Forecasts & Strategies

Strategic Advantage

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An in-depth look at the history of real estate 1950 - 2020

When Will the Good Old Days Return? [Hint…Never…Only New Good Old Days]

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Friends & Colleagues:

In the best of all worlds, we learn from the past, embrace the present and look ahead to a rewarding tomorrow. Over the past weeks, we have shared a brief yet concise history of the real estate industry, beginning in the 1950s. While the first two issues covered 60 years, the lessons learned, the discoveries embraced and the exceeded expectations shaped the foundation for the period 2010 through the 2020s. Tomorrow is not a start-over…it is a day to pivot and capture the abundance of opportunities occurring across the U.S. When one believes in the opportunities and possibilities ahead, the future of real estate and its valuable role in society will be assured. While the decade of the 2020s will likely be a period of domestic resets and unraveling, the real estate firms and leaders who envision potential, build upon the legacy that began in the 1950s, and make tomorrow better than today will flourish. The real estate industry is for dreamers, those who aspire to "take it to the next level," and those who want to make a difference.

In this edition of *Strategic Advantage,* we review the 2010s and outline many of the drivers shaping our future over the next decade. The real estate industry cannot guarantee outcomes, but it can lay the foundation for desired outcomes. We cannot reimagine the past, but we have multiple opportunities to create new journeys by realizing what the industry can become. From the redefinition of work, ecommerce, unprecedented technological advances, political tribes, shifting demographics, digitization, emerging housing and healthcare challenges, the impacts of an uncertain global economy, an emerging entrepreneurial society, and rapidly evolving capital markets…the future will be exciting for those who embrace and navigate change and create/implement a transformational, inspiring vision.

So…let's begin by taking a look at the 20-year period of the 2010s through the 2020s. We should not forget that visionary real estate leaders created the foundation, the road map and the inspiration that anything is possible. **Will the real estate industry pivot and follow in their footsteps, creating valued transformative outcomes, or will the industry become a spectator as life's journey passes by?** Welcome to Part 3 of 70 years of real estate history and an emerging 2020s decade of unique opportunities.

Please note that the information, data, dates, names, and references [collectively called "Data"] provided here were obtained from multiple sources. While we believe the information provided/obtained is accurate, no attempt was made to re-validate each data point provided by others. We welcome any additional and/or more current data points, as this "history" continues to be a work in progress.

The 2010s… Real Estate's Decade of Uncertainty

Losing control of your own destiny is difficult for many to face and resolve. As Jack Welch said, "Control your destiny or someone else will." **The decade of the 2010s was financially very profitable for many in the real estate industry**. **However, working for capital, survival consolidation, organizational/operational "system upgrades," and legacy exits created a leadership vacuum**. It is not that the industry lacks many great leaders, but the 2010s highlighted that **the real estate industry, in less than a decade, may be in jeopardy of losing its role as the "unfinished business of society" and the aspirational vision for binding our society together.**

The Internet of Everything, War on Terror, populism, protests, censorship, protectionism, rewriting history, conspiracy theories, social unrest, pandemic uncertainties, and shifting social attitudes have created **an environment of disruption and mistrust**. The seemingly unchecked role of the top tech firms [Google, Apple, Facebook, Twitter, Instagram] and endless stream of "podcasters" have influenced and/or controlled outcomes and personal choice. Cyber wars, cryptocurrency, virtual reality, artificial intelligence, political discourse, and economic disparity began to divide Americans into the haves and have nots…white collar vs. blue collar workers…and urban vs. suburban. As a result, the fractionalization of society in each of our communities has accelerated.

The list on the following page highlights some notable real estate events that occurred during the 2010 – 2019 period.

Notable Real Estate Events – 2010s Decade

Year	Event
2010	Fed’s securities portfolio reached $2.1 trillion
2010	Dodd-Frank Wall Street Reform Act enacted
2010	Dow Jones Industrial Average dropped nearly 9% in 36 minutes [May 6, 2010]
2010	Eataly founded in Alba, Italy, while WeWork was launched in New York City
2011	Prologis and AMB complete merger
2011	Mill Creek Residential founded
2011	Apartment List started by John Kobs and Chris Erickson
2012	Invitation Homes founded
2012	American Homes 4 Rent launched
2012	C-III Capital Partners acquired NAI Global
2013	Parkway Properties acquired Thomas Properties
2014	Greystar acquired Riverstone Residential Group
2014	BCG [Newmark] acquired Apartment Realty Advisors
2014	Tesla broke ground on Gigafactory near Sparks, Nevada
2014	Alexa Virtual Assistant became available
2014	Pinnacle Property Mgmt. Services gained Hunt Companies as an Investor
2015	Property Innovation Labs [Pi Labs] formed
2015	MetaProp created
2015	GE Capital Real Estate portfolio sold [$26.5 billion]
2015	Cassidy Turley acquired by DTZ; subsequently DTZ acquired by C&W [$2 billion]
2015	Niido™ Homesharing Apartment Communities founded
2015	CBRE acquired Global Workplace Solutions
2016	Fifth Wall co-founded by Brad Greiwe and Brendan Wallace
2016	Denver's "A Line" Fast Track opened to DIA
2016	Banner Oak Capital Partners launched
2017	Unibail-Rodamco acquired Westfield
2017	Amazon bought Whole Foods
2017	Tax Cuts and Jobs Act spurred job growth
2017	Greystar acquired Monogram Residential [$3 billion]
2018	Greystar acquired EdR student housing [$4.6 billion]
2019	Opportunity Zone Reform Act
2019	JLL acquired HFF [$1.8 billion]
2019	Passive investing totaled around $4.72 trillion
2019	ESG Funds brought in $20.4 billion, almost 4 times as much as 2018
2019	Bitcoin achieved market cap of more than $140 billion
2019	Proptech raised $31.6 billion by year end
2019	Blackstone acquired logistics assets from Colony Capital [$5.9 billion]

In this decade, real estate, a cornerstone for binding a society, moved from being a societal leader to an influencer and was rapidly becoming a follower. Robotics, virtual work platforms, online "everything," and social interaction became mouse clicks in everyday life. The rise in co-working space, collaborative workplace environments, networking and team-based settings shifted office space from a "place to work" to a "place to gather, interact and collaborate." Apple Computer's "spaceship," a 175-acre campus, opened in 2017 and set a design marker for others to follow. The Googleplex in Mountain View, California, broke ground in 2013 to add a new 1.1 million sf campus, dubbed the "Bay View." Nike's 286-acre campus with 75 buildings and a lake, housing around 17,000 people in Beaverton, Oregon, is a mecca for athletes and those who are part of sports culture. Microsoft's 500-acre campus [8 msf] in Redmond, Washington, houses over 50,000 employees and is working to become carbon negative by 2030. Digital assistants (Siri in 2010 and Alexa in 2014), smart phones, interactive watches, wearable technology, and mobile pay changed consumer and work/life patterns. **Work followed the worker 24/7. The consumer took hold of the retail experience. The real estate industry began to play "catch up" and sought to "get ahead of the curve" in the 2010s, but the gap remains larger than it should have been**. Self-driving cars and trucks, pilot-less aircraft, smart appliances, predictive analytics and legacy exits began to reshape the definition of real estate in society. By the end of the 2010s, the U.S. had 8.5 billion sf of retail space [around 24.5 sf per capita]. **Consolidation, brand equity, availability of growth capital, and legacy exits left a tremendous void. Who would lead the real estate industry during the next 10 – 20 years? Will the real estate industry be capital-, tech-, user-, and/or community-based? Tech companies began to fill the void.** In 2020, for example, the five tech giants occupied nearly 590 msf. Amazon has more than 150 msf of fulfillment centers worldwide. The commitment by leading tech firms to affordable housing [Apple $2.5b, Facebook $1b, Google $1b plus Amazon, Microsoft and others] is now reshaping housing in several markets.

In the 2010-decade, social values, opinions, and perspectives often were shaped by films and books. Movies such as Melancholia, Mad Max: Fury Road, The Tree of Life or Hell or High Water, as well as books by authors such as James Patterson, Stephen King, Danielle Steel or Ken Follet provided escapism from the rigors of the daily, fast-paced life in the 2010s. News headlines featured scandals, the Occupy Wall Street movement, Arab Spring, Brexit, natural disasters, and mass shootings, while the real estate industry was defined by words like teams, collaboration, transparency, and technology.

The decade of the 2010s saw CBRE's trailing 12-month revenues grow from $4.3 billion in 2010 to nearly $24 billion, year-end 2019. Over the same period, JLL's trailing 12-month revenues grew from $2.6 billion to nearly $18 billion by the end of the decade. In 2019, the global value of PropTech deals reached nearly $9 billion. Startups like WeWork, Katerra, Airbnb, and Urbandoor commanded investor interest. Venture capital firms such as Fifth Wall, MetaProp, and Camber Creek began to dominate investment capital for real estate-based proptech solutions. Foreign capital had an increased presence in U.S. real estate along with new "Silicon Valleys," as highlighted below. A 2015 amendment to FIRPTA waived the tax imposed on foreign pension funds for U.S. investments and was a growing catalyst for attracting foreign capital, plus global uncertainty.

Foreign Capital's Growing Impact on Real Estate Values
[Partial List]

Bahrain	
	– Investcorp
Canada	
	– Bentall Green Oak
	– Brookfield AM
	– Canadian Pension Plan
	– OMERS
	– WPT Industrial
China	
	– China Investment Corp.
	– China Life
Germany	
	– BUK
	– Deutsche Finance Group
	– Munich RE
Holland	
	– Bouw
	– Stichting
Ireland	
	– Core Capital
Israel	
	– Global Holdings
Japan	
	– KKR JN
	– Tokyu Fudosan
Kuwait	
	– Dimah Capital
	– KAMCO
Mexico	
	– Sora Capital

Netherlands	
	– Aegon
Qatar	
	– Qatar Investment Authority
Saudi Arabia	
	– Riyad Capital
Singapore	
	– GIC
	– Mapletree Investments
South Korea	
	– Hana Financial
	– KB Financial
	– KDB Life
	– KIS
	– KTCU
	– NH Investments
	– NPS
	– Samsung Life
	– South Korea Pension
	– Tiger
Spain	
	– Masaueau
	– Portegadea
	– RIU
Switzerland	
	– GMF Capital
	– Publica
Turkey	
	– Bilgili Holding
United Arab Emirates	
	– ADIA

The New Silicon Valleys

– **Silicon Valley –** Santa Clara, SF, Sunnyvale, Palo Alto, Mountain View	– **Silicon Forest** – Seattle, Portland
– **Silicon Beach –** Santa Monica, Culver City, Playa Del Rey	– **Silicon Hill** – Washington, DC
– **Silicon Roundabout –** East London	– **Silicon Alley** – Boston to New York
– **Silicon Hills –** Austin, Boulder, Denver	– **Silicon Slopes** – Salt Lake City and Park City
	– **Silicon Wadi** – Tel Aviv and Metro Haifa
	– **Silicon Valley South** – San Diego

After the Great Recession of 2007 – 2009, the U.S. economy made a slow recovery. From 2009 through 2012, more than 94 million foreclosures were filed, according to ATTOM Data Solutions. The Fed's decision to increase interest rates in 2015 probably led to the "mini recession" of 2016. The "miscarriage of economic policy making," according to Jordan Weissman of Money Box, left millions without work for far longer than necessary. **By 2016 the country was searching for nontraditional solutions to lingering, long-term problems. The real estate industry, pre COVID-19, was aging. "Staying on" or "staying around" by long-term employees placed glass-ceiling limitations on next-generation leaders**. Getting out while protecting net worth and cash flow became an important priority for many real estate professionals. Regulations, deal size, brand value, governmental oversight, and "formulas" made it difficult for next-generation leaders to get started. Real estate organizations and colleges accelerated their focus on training next-generation leaders, as highlighted below.

Real Estate Organizations & Degree Programs

Leading Real Estate Organizations

Year Formed	Organization	Acronym
1857	American Institute of Architects	AIA
1907	Building Owners and Managers Association	BOMA
1908	National Association of Realtors	NAR
1934	Institute of Real Estate Management	IREM
1936	Urban Land Institute	ULI
1939	National Apartment Association	NAA
1941	Society of Industrial and Office Realtors	SIOR
1942	National Association of Home Builders	NAHB
1957	Investment Council of Shopping Centers	ICSC
1960	National Association of Real Estate Investment Trusts	NAREIT
1967	National Commercial Real Estate Development Association	NAIOP
1978	National Multifamily Housing Council	NMHC
1978	American Planning Association	APA
1989	Commercial Real Estate Women Network	CREW
1990	National Association of Real Estate Investment Managers	NAREIM

Top Real Estate Degree Programs

- Cornell University
- Florida State University
- Georgia State University
- New York University
- Portland State University
- San Diego State University
- University of Alabama
- University of California
  - Berkeley
  - Los Angeles
  - San Diego
- University of Florida
- University of Georgia
- University of Pennsylvania
- University of Southern Alabama
- University of Southern California
- University of Texas – Austin
- University of Virginia
- University of Wisconsin - Madison
- Villanova University
- Virginia Tech

An additional 30 colleges/universities offer valued real estate degree programs.

This table highlights some of real estate's impacts on society during the 2010s.

Real Estate's Impact on Society – 2010s

- Mergers, entity acquisitions, and legacy exits created "mega" firms.
- PropTech redefined the role and integration of technology and real estate.
- Tech companies moved into real estate [investing and data mining].
- Real estate service companies pivoted to grow recurring revenue streams.
- Ecommerce shifts accelerated the development of warehouse/distribution centers.
- Customers controlled the retail engagement.
- Work could be conducted anywhere with an Internet connection, challenging the need for "dedicated physical space."
- Millennials became the largest generation in the U.S. labor force.
- First decade in 160 years to experience an increase in household size.
- Smartphones became a mobile workplace for many.
- Rise of populism and decline of traditional political parties began.
- Quantitative easing and low interest rates provided economic stimulus.
- The decline of brick-and-mortar stores accelerated.
- The trend toward digital currency and a cashless society increased.
- Decline of cable as subscribers moved to online streaming services.
- A decade of "crises" shifted real estate to an increasing "investment game."
- Climate change moved to the forefront, impacting every asset class.
- Rise of the shared economy accelerated during the decade.
- Social media began to redefine space.
- The 24/7 "always tethered" workforce shifted demand for office space.
- People texted more than talked, making structured space less attractive.
- Apple released its first iPad in 2010 making mobility an attractive option.
- Lyft [2012], along with Uber [2009], and Airbnb [2008] began to reshape real estate demand factors.
- Burj Khalifa [2010] became the tallest building in the world [2,717 ft.].

Mega Shift

Connectivity, accessibility, networking, and technology shifted real estate from a place or building to a sophisticated hub for work, shopping, and lifestyle. What was available within the four walls became far more valuable than the exterior. Technology, not dirt, was becoming the common link for owners and occupiers. New competitors, rising operating costs, and dramatic increases in asset pricing began to challenge many real estate firms to stay relevant and competitive.

Malls began to see consumer shopping shifts as ecommerce continued to grow. Industrial real estate developers experienced a rise in warehouse, distribution and flex space. Multifamily enjoyed a dramatic increase in rentals as delayed marriages and first-child births kept individuals and households renting longer.

2010s & Real Estate…What Did It Mean?

The period between 2010 and 2019 encompassed extraordinary years of growth, opportunity, and transformational change for the real estate industry. From ride-hailing apps to self-driving cars, movie-streaming, and Smart devices [Alexa and Siri], these upended historical norms. Capital moved to center stage, consolidation and legacy exits accelerated, bigger wasn't big enough, and digitization reshaped operating platforms. Opportunity funds, high net-worth families and institutional capital sought core assets in highly competitive markets. For many privately held real estate firm executives, the 2010 decade was the pinnacle of their career. With rapid job growth, inexpensive debt, pro-growth policies, and a rising demand for exceptional talent, the real estate industry offered a tsunami of opportunities. The plethora of capital-raising initiatives drove values to unprecedented levels. However, the culture and societal impacts were often relegated to "not as important" status, as growth increasingly was defined by AUM, revenues, EBITDA, promotes, and returns. Little did everyone know that within 90 days of the closed decade, the world and real estate industry would fundamentally change forever. As the industry prepared for the decade of the 2020s, the role of real estate in society suddenly was front and center in a marketplace of disruption, uncertainty, pandemic concerns, and political divide.

The 2020s…
A Decade of Transformation & Opportunities

The 2020s began with the global COVID-19 pandemic, and for more than two years many countries, and U.S. states and cities were "shut down," or functioning on "stay in place," "social distancing," and/or "masking" rules. Initially, tens of thousands of companies closed their doors, more than 22 million workers lost their jobs, and, according to a September 2020 Pew Research Center study, 50% of adults who lost their jobs due to the coronavirus remained unemployed. Trillions of dollars in various relief packages were deployed to assist those in need. The real estate industry, with a few exceptions [grocery, warehouse distribution, and multifamily], experienced a dramatic slowdown in investment sales, leasing activity, and new development starts. **Work from home, furloughs, and layoffs accelerated as the U.S. "froze" from mid-March 2020 through early fall**. Curfews and severe restrictions on dining, attendance at sports events, movie theaters, gyms, and gathering places changed consumer, work, and entertainment patterns. Reliance on technology accelerated as Zoom, Microsoft® Teams, RingCentral™, and GoToMeeting™ became the new virtual workplaces. For Baby Boomers it meant reduced or no travel and included both early and delayed retirements. For Xers it meant juggling working remotely, dealing with online education for their children and adjusting to life where one or both spouses were under-employed or unemployed. For Millennials it meant delayed marriages, putting off first child plans, keeping or finding a job and postponing major expenditures. Gen Zs missed a graduation, postponed college and had little social interaction. Household income dropped, careers were put on hold, and planning for a more "dependable normal" fluctuated, often daily. **All in all, 2020 and 2021 were challenging years for everyone.** In early 2022, top news stories included Russia invading Ukraine, rapidly rising inflation, interest rate hikes, increasing fuel and food costs, supply chain challenges and market correction risks. The post-COVID uncertainty continued.

The 2020s are destined to become a decade of lasting transformational change. There is no clear definition of what is now "old" and what will constitute "new." From working remotely to online shopping, from remote learning to extended social distancing, from the use of surrogate shoppers [Grubhub, DoorDash, Instacart, Shipt, Amazon Fresh, FreshDirect, etc.] to relying upon Amazon, UPS, FedEx, and USPS, Americans viewed real estate assets as "as-needed destinations." **Real estate became a safe place [homes, apartments], a needed space [warehouse], and a survival space [grocery, healthcare, pharmaceutical]. The emergence of the metaverse and block chain digital currencies is redefining the meaning of space. Investors pivoted into safe choices with trusted developers and real estate operators**. Between 2020 – 2025 CEL & Associates, Inc. expects record transactional activity…led by apartment and warehouse sales. As a key part of this shift, age cohorts are no longer a reliable metric since age is less relevant than socioeconomic status and shared values.

Introduction of the COVID-19 vaccine in late 2020 and subsequent boosters in 2021 merely shifted outcomes…it did not cause a "return to normal." The real estate industry of 2030 is taking shape 10 years ahead of schedule due to these dramatic shifts. Technology, capital, and strategic investment priorities have moved to center stage. Investments in PropTech accelerated, new staffing models emerged, the reliance/use of Independent Contractors or Freelancers increased, and succession planning and future proofing the organization became a priority for all C-suite Executives. The 2020s will see a continuation of legacy/founder exits, consolidation, and greater use of predictive analytics, robots, digital currencies, and artificial intelligence. **Assets and transactions by 2030 will exist simultaneously in the physical and digital world.** Many on-the-ground management and maintenance functions now can be performed remotely. Safety and healthful environments will become digital priorities for all building owners/operators. **Real estate will move from a place to a destination, from space to an environment, from a property to a connective hub, from a building to an all-encompassing environment/experience, and from a physical to also a digital experience. Creating trust and relationships will become more challenging**. Products/space must be designed for each user, not a collection of users. Generic space is far less relevant.

Data Points Highlight Rapid Changes Ahead

- Venture capital investments in real estate technology companies totaled $32 billion in 2021, narrowly beating out the previous record of $31.6 billion in 2019. [*Center for Real Estate Technology & Innovation*]
- The forecast for annual private real estate fund raising in 2026 is projected to be $163 billion. [*Preqin*]
- Investments in "natural resources" in 2021 totaled $130 billion with 430 unlisted natural resource funds in the market as of October 2021. [*Preqin*]
- In 2021, total transactional volume for all real estate classes totaled $808.7 billion, with the apartment sector representing 42% of all deal activity. [*Real Capital Analytics, Inc*.]
- As of February 2022, REITs owned 503,000 properties. [*NAREIT*]
- U.S. ecommerce grocery sales are expected to reach $147.5 billion in 2021, growing to $243 billion by 2025. [*Insider Intelligence*]
- It is estimated that 70% of organizational transformations fail due to people- and culture-related issues. [*McKinsey*]
- Cross-border industrial asset investors accounted for nearly $20 billion in deals in 2021. [*ALM Digital*]
- Onyx+East and Pretium have launched a $600 million SFR venture. This follows Greystar's announcement of an $840 million fund with CPP Investments, MORE Residential/Stockbridge Capital Group's $4 billion JV to acquire build-to-rent communities, and Blackstone's Home Partners of America $1 billion SFR platform called Choice Lease. Forty-three percent [43%] of GenZs want to rent single-family homes following their university education. [*Arbor*]
- More than 50% of holiday retail sales growth was driven by the 7% consumer price inflation. [*Chain Store Age*]
- A recent RentCafe survey found that 78% of apartment renters are interested in living in SFR communities. [*RentCafe*]
- In January 2022, Transcendent Electra signed an agreement to purchase $1.3 billion in build-to-rent homes. [*Connect*]
- Blackstone has $880.9 billion of assets under management at the end of 2021. [*Bisnow*]
- More than 70% of U.S. households have ordered groceries online in 2021. [*Bricks Meets Clicks*]
- Hines' U.S. Property Recovery Fund is seeking to raise $1 billion by May 2022.
- CBRE acquired Buildingi, an occupancy planning and technology services company. [*Bisnow*]
- In 2021 there was a record number of apartment unit absorptions [617,500] nationally. [*CBRE*]
- Oaktree Capital Management recently closed its third global real estate debt fund [$3 billion].
- By 2030, 40% of physicians in the U.S. will be 65 or older. [*Medical Economics]*
- Best states to retire: #1 Florida; #2 Virginia; #3 Colorado. Worst states to retire: #48 New York; #49 Mississippi; #50 New Jersey. [*WalletHub*]
- Spending on nonresidential building construction is estimated to increase by 5.4% in 2022, and 6.1% in 2023. [*American Institute of Architects*]
- Forty-five percent [45%] of Millennials say their financial situation prevents them from getting what they want. [*2022 Morning Consult*]
- Freight and shipping costs and delays continue to cause problems in 2022, along with ongoing pandemic-related delays. [*Freightos*]
- CPP Investments and Lennar Corp. formed a $979 million multifamily JV. [*ALM Digital*]

In fact, the real estate industry's biggest challenge [or opportunity] over the next decade will be to stay relevant. For the past 10 – 15 years, real estate has become far more of an employee of the capital. According to CoStar, total sf comprises approximately 8.3 bsf of office space, 18 bsf of industrial space, and 11.8 bsf of retail space. Per NMHC, 44.1 million households are renters, of which 37% live in apartments in the U.S. The apartment industry by 2022 has grown to a $171.7 billion [rental revenues] sector. Financial metrics [IRR, multiples, ratios, percentages and yields] have replaced the human metrics of the 1950s, '60s, and '70s. **This is today's pivotal moment for real estate. Do we lead or follow? Do we get a seat at the table or do we become a spectator? Do we get to impact societal outcomes in a positive way or merely provide commodity buildings where people live, work, and shop? And do we follow the tremendous visionary and transformative leadership of those who preceded us, or are we relegated to a category called, "missed opportunity?"**

By 2024 - 2025 we expect the pandemic of 2020 will be a distant yet forever lasting memory, but the underlying social/societal problems are likely to remain, and new global challenges are inevitable. Some have wanted to use the pandemic to gain political capital, while others may view COVID-19 as an opportunity to [re]shape cultural norms. The 2022 – 2025 period could be disruptive, as a result. Cities that are able/willing to cast off historical, the-way-we-have-always-done-it modes of governance, zoning, land use policies, and problem solving [or lack thereof] and work with visionary, transformative real estate leaders and organizations and community outcome-oriented capital partners will move the needle dramatically in a positive direction. Dynamic cities that embrace this public/private partnership mindset and avoid pre-ordained biases and political fractionalization will be successful. **There are reasons why world-class cities like Vienna, Sydney, London, Paris, Singapore, Toronto, and Prague, among many others, continue to "work."** The combination of historical and contemporary buildings, cultural/entertainment attractions, mass transit, preservation of older buildings and interactive museums, plus a balance between the private sector and government, have preserved these cities for centuries. None of those cities are perfect and all have challenges, but each builds upon its history. Remember, the past is to be learned from, not lived in. **Cities with visionary civic and real estate leaders reinvent themselves and can have more than one "golden age."** Thomas Monson said it so eloquently, "The past is behind, learn from it. The future is ahead, prepare for it. The present is here, live it."

The list on the following page highlights some of the actions cities must take during the decade of the 2020s.

What Cities & City Leaders Must Do

- Cities must not limit developers by regulating their activities, but should provide directional framework for what can be done and then seek ways to engage and encourage developers to actualize plans.
- Cities should dramatically step up their maintenance of every community's basic infrastructure. Streets, roads, and sidewalks should be free of trash, weeds, and debris. Graffiti should be removed immediately. Potholes, curb damage, broken streetlights, and sidewalk cracks/damage, plus all pedestrian amenities [trash cans, crosswalk buttons, etc.], must be abundant and regularly cleaned, maintained, and easy to use.
- Cities must encourage more, not fewer, mixed-use projects, a blend of housing types, and more public/private partnerships.
- Cities must provide clean, safe, graffiti-free light rail and bus options.
- Cities need to streamline/fast-track entitlement, permitting, and inspection processes.
- Cities must invest in and develop parks, open spaces, street artwork, and climate-sensitive landscaping…bringing nature back to communities.
- Cities need to preserve and enhance cultural/historical buildings and venues.
- Cities must encourage and incentivize green buildings and the use of green technologies.
- Cities must encourage vertical farming opportunities and use of solar energy-generating technologies.
- Cities should create better linkages between urban, urban/suburban, and suburbs or venue options connected in a way that accommodates need, demand, and opportunities.
- Cities need politically neutral leadership that places residents, visitors, and users first under a sustainable and "no agenda" plan to ensure optimal outcomes.
- Cities should adopt the 15-minute philosophy: everything a city has to offer is only 15 minutes away by walking, cycling or public transportation.
- Cities must create digital innovations and "great ideas" infrastructure, planning, and financial incentive platforms to encourage creative solutions that make city living far more rewarding.
- Cities must create, perfect, and actualize a robust platform of museums, local art exhibitions, 21st century libraries, recreational/cultural facilities, and non-profit foundations.
- Cities must encourage development of sports, entertainment, farmers markets and event venues.
- Cities should provide exciting and memorable reasons to attract new and repeat visitors to explore and enjoy all the city has to offer.
- Cities should develop committees or task forces to focus on crime. Obviously, this is a difficult and complex issue, but everyone must work together to safeguard all citizens, 24/7.
- Cities must adopt agile leadership qualities that enable a better service model for citizens.
- Cities must become results- not budget-driven entities to encourage new ways of working, rather than a continuation of the past.
- Cities must have a dynamic healthcare, mental health and wellness focus.

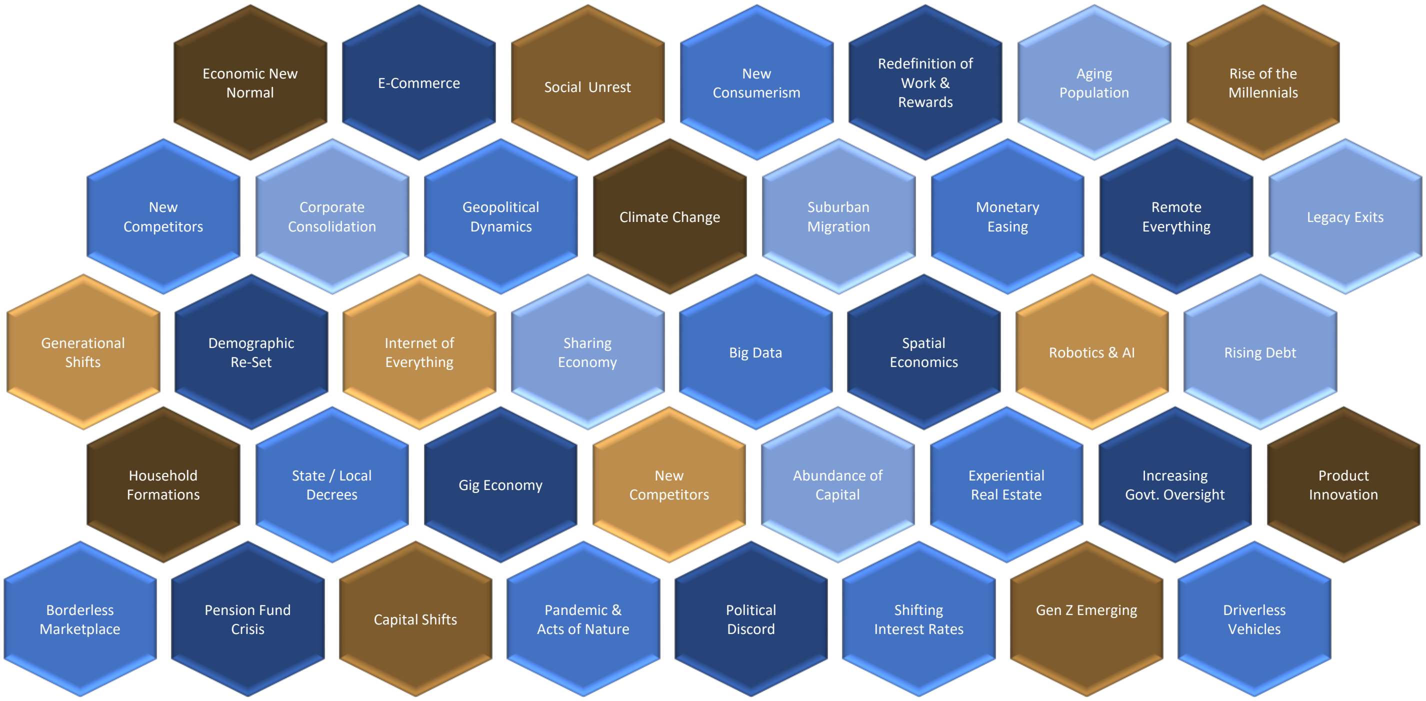
Source: CEL & Associates, Inc.

The list below highlights some of the most recent notable events impacting the real estate industry.

Notable Real Estate Events – 2020s Decade

Year	Event
2020	Greystar acquired Alliance Residential property management business
2020	Cushman & Wakefield acquired Pinnacle
2020	Tesla selected Austin, Texas, for GigiFactory [$1 billion]
2020	Clubhouse becoming a powerful real estate deal-making hub
2020	U.S. travel economic footprint dropped $1 trillion
2020	Atlantic Yards Project, Midtown Atlanta, landed Microsoft Corp. campus
2020	Pacaso launched, reshaping how Americans buy second homes
2020	JLL predicted demand for over 1 bsf of industrial space by 2025
2020s	Potential $51 billion build out of Midtown West, NYC
2021	Simon Property Group acquired Taubman Centers [$3.4 billion]
2021	Amazon launched $2 billion Housing Equity Fund
2021	Pittock Block Building, Portland, Oregon, sold for $326 million
2021	Thoma Bravo acquired RealPage [$9.6 billion]
2021	Tishman Speyer acquired smart-lock maker Latch [$1.5 billion]
2021	CoreLogic acquired by two private equity firms [$6 billion]
2021	Montgomery Street Partners launched Ground Lease REIT with $1 billion to invest
2021	Ares Management raised a $1.7 billion distressed senior housing fund
2021	Partners Group sold $1 billion industrial portfolio
2021	Kimco agreed to buy Weingarten [$3.7 billion]
2021	Bell Partners formed $800 million core multifamily fund
2021	Public Storage acquired ezStorage [$1.8 billion]
2021	Amazon distribution centers accounted for 8 out of 10 largest industrial projects underway
2021	UBS predicted 80,000 U.S. retail stores to close by 2026
2021	BowX SPAC agrees to take WeWork public [$9.0 billion valuation]
2021	Ensemble/Mosaic announced plan to develop Philly's Navy Yard [$2.5 billion]
2021	Oaktree Capital Management closed on $4.7 billion fund
2021	Google to invest in offices and data centers [$7 billion]
2021	CRE tech company Matterport to go public in SPAC [$2.9 billion]
2021	Blackstone/Starwood acquired Extended Stay [$6 billion]
2021	Apollo acquired Michaels retailer [$3.3 billion]
2021	Walmart to invest and "Define the Next Generation of Retail" [$14 billion]
2021	SmartRent completed business combination with Fifth Wall SPAC [$2.2 billion]
2021	Online grocery sales likely to reach nearly $130 billion by 2023
2021	Tricon Residential and Pacific Life Ins. create JV with initial $300m equity to target SFR
2021	Walmart acquires MeMD to offer virtual care
2021	Blackstone acquires 66 multifamily properties in San Diego County [$1 billion]
2021	Realty Income merged with VEREIT creating a $50 billion REIT
2021	Equity Commonwealth acquired Monmouth Real Estate [$3.4 billion]
2021	Ares/Pretium acquire Front Yard Residential [$2.5 billion]
2021	Berkshire Residential raises $1.5 billion apartment debt fund

Key Transformative Shifts Occurring Simultaneously



Source: CEL & Associates, Inc.

Currently nearly 40 transformative events [highlighted above] are occurring simultaneously and are directly impacting the real estate industry. These range from technology and digital transformation of work and consumerism to demographic and market shifts altering demand factors; from rising debt to legacy retirements and consolidation; and from the Internet of Everything to household income and formation changes. Change and challenges are everywhere, but **in times of disruption and change, those offer the best opportunities to [re]shape positive outcomes for all Stakeholders**. The real estate industry must move from seeking to creating opportunities…from winning at all costs to achieving valued outcomes…and from working *for* capital to a partnership *with* capital. For the real estate industry, 2020 was a wakeup call, highlighting that "going it alone" and a "me first" approach will not work in the years ahead. **The future is very clear to those who can and are willing to see through the fog of historical precedents**.

Following is a list and brief descriptions of some major transformative trends that will create opportunities as well as drive performance growth and profitability, while necessitating a pivot and restructuring of strategic business strategies and practices over the next decade. These are not presented in order of importance, impact or opportunity.

- **Shifting Demographics: By 2030, all Baby Boomers will be age 65 or older.** In 2030, 61 million Americans will be age 66 to 84 [the Boomers], and 9 million over the age of 84 [the fading Silent Generation]. One in every five Americans will be at retirement age. Seniors will outnumber children for the first time in American history. Net international migration is projected to overtake natural increase by 2030. **There will be 30 Americans ages 65 to 84 for every working-age person [today it is around 19:1]. Hispanics will compose 21.1% of the U.S. population. By 2030, there will be 70 million Millennials [35 – 49 years of age], and 40 million Gen Zs. Gen Zs [born 1997 – 2012]** will be the first generation to have grown up in the digital world and less entrepreneurial than Millennials [greater work life balance focus]. The accession of Millennials and Gen Zs into adulthood and the Boomers into elderhood will dramatically alter the demand for and the use of real estate. From smaller to more efficient housing options, to greater reliance on ecommerce, and from demand for healthy/safe environments, to a better work/life balance, real estate assets must change. **Expect a dramatic growth in last-mile warehouse distribution centers, data centers, single-family and multifamily rentals, convenience/experiential retail assets, healthcare facilities, and omnichannel grocery stores**. In a recent survey from the National Apartment Association, 43% of GenZs say they want to rent a single-family detached property after graduating. Gen Zs are also leaving the dense urban areas, according to a recent RentCafe study in favor of "vibrant" suburban areas. **Baby Boomer and Xers probably are more willing to work remotely since they have already "established their careers" and enjoy the flexibility of not going into the office every day**. Technology has enabled friendships and relationships without geographic borders, and as a result, Millennials and GenZs will not view going to work as the only way to make and build relationships. With the focus on time at home, a recent Apartment Guide survey shows that 38% of apartment residents are willing to pay more for amenities. Interestingly, to gauge housing demand in any given year, simply look at birth rates 33 years earlier, which is why we have high demand for first-time homebuyers and SFR today. Further, **today 57% of households are childless, a growing number of women prefer to remain child-free, and some 39% of marriages in the U.S. end in divorce**. Demographics and the marketplace are changing. Residential, retail, and office sectors must pivot to meet the new consumer and worker of the 2020s. A new workplace ecosystem is required to meet the demands of the office-based workforce.

- **Changing Consumer Patterns: By 2030 bricks-and-mortar stores will no longer be the primary source for retail sales.** U.S. mall values dropped 60% [Bloomberg] in 2020, while two mall REITs, Pennsylvania Real Estate Investment Trust and CBL & Associates Properties, filed for Chapter 11 protection. Approximately $4 billion in value was erased from 118 retail-anchored properties with CMBS debt after reappraisals [Zero Hedge]. **As ecommerce continues to serve an increasing market share, malls and retail-anchored centers are expected to experience further value declines**. According to Compass Point Research & Trading, **"only about half of the 1,100 U.S. indoor malls have a good chance of survival."** About 17% of retail properties with CMBS loans have been sent to workout specialists.

Real Estate's Impact on Society – 2020s
[Prospective]

- Location will become less important than connectivity/networking.
- Consumers, not retailers, will drive consumerism.
- Up to 35% of U.S. office workers will not return to the office full time.
- Real estate assets will be focused on creating valued interactive environments.
- Consolidation/retirements will reduce the number of real estate firms by 30% - 35%.
- Economic, low-regulation, entrepreneurial free zone markets will flourish.
- Predictive analytics, AI, and digital community will drive investments.
- Digital management platforms will oversee smaller buildings.
- Health monitoring technologies will be a component in all real estate buildings.
- Suburbs/edge cities will outperform many CBDs in real estate growth.
- Wellness ratings will become mandatory.
- Real estate loans may be subject to ESG and DEI requirements.
- Contact tracing may be mandatory in office buildings.
- Retail centers will use 3D scanners, infrared, and thermal imaging to monitor shoppers.
- New building materials will revolutionize the construction industry.
- Smart walls [health, safety, and entertainment/communications] will be in all Class A apts.
- A shift to cashless society will enable greater consumer tracking.
- Driverless cars and trucks will reshape parking needs/requirements.
- Up to 30% of current buildings will need to be upgraded or repurposed.
- 24- and 18-hour cities will flourish.
- Malls will move to 70% entertainment-based tenants ["experience retail"].
- Augmented and virtual reality will be commonplace, rendering the redefinition of space.
- SPACs [Special Purpose Acquisition Company] may accelerate mergers/acquisitions.
- NFTs [non-fungible tokens] emerge to reshape the buying/selling of real estate.

#1 Likely Mega Shift

Real estate firms will pivot and become lifestyle enterprises, shifting from asset-centric platforms, to capture the value of place, experience and connectivity. The seminal decision of the 2020s will be: does one work for capital or for benefit of all Stakeholders? The 2020s will be a pivotal year for the real estate industry. Will we remember our roots and our mission, or will we be relegated to sidelines as others [e.g., tech companies] take our leadership mantle?

This follows an entity acquisition trend, including: Onyx Capital's acquisition of Save-A-Lot, Apollo's purchase of Smart & Final, Kroger's acquisition of Harris Teeter, and Amazon's acquisition of Whole Foods. Further compounding the retail outlook CoStar estimated that **approximately 1.5 billion square feet of retail space leases expired in 2021.** Shorter leases and popups were being signed as businesses were faced with an unpredictable future. Agility and patience will be at the forefront for retail asset owners. Within a decade, shoppers can expect to walk into a store to find that their entire shopping history, propensity to buy, and most appealing items; the probability of buying "now" will be known to the store [AI] and then communicated to the customer via digital devices/apparel or instore co-bots. Everything will be "pre-set" at the store as predictive analytics drive the retail experience. **It is estimated that up to 33% of all retail purchases will occur online**. **Shopping centers will transition to entertainment and destination centers**. The discovery, education, and experience retailers and retail centers will flourish. **Values-based retail centers [e.g., environment, travel, interactive, etc.] will be branded by their experience or idea, not their name.** Popups, virtual showrooms, and personalized holograms will customize the visit/experience. **Every major retail real estate developer/manager will have cultural psychologists, mall ethnographers, and human behaviorists on staff**. Retail real estate will incorporate healthcare, community services, fitness and age-related business services into their centers. Amazon dominates with approximately 50% of U.S. ecommerce. That said, the human need to interact, experience, observe, escape, discover, and seek adventure will continue, causing retail real estate to pivot and restructure the retail experience to survive and compete. Mixed use projects will flourish along with omnichannel retailers.

- **Redefinition of Work:** According to the 2021 Freelance Forward survey, U.S. freelance workers contribute around $1.3 trillion to the economy each year, and in the U.S. **freelancers numbered 59 million in 2021. By 2027, it is estimated that around 50% of the U.S. workforce will be engaged in gig work [gig workers represented only 10% of the workforce in 2012]. The amount of office space per worker has been steadily decreasing, and by 2030, with a combination of remote workers, staggered shifts, optional in-office workdays, technological advancements, and work-life balance priorities, the overall square feet per office worker could be less than 100 sf** [it was around 175 sf – 185 sf in 2020]. By 2023, the number of "professional service robots" is expected to grow to 537,000 [IFR]. The success of Zoom, Microsoft® Teams, GoToMeeting, and BlueJeans made going into the office or traveling to attend meetings no longer a need/requirement. Office space by 2030 will be dramatically redesigned, and the office building role for tenants and the marketplace will be redefined. **According to CEL & Associates, Inc. research, around 35% of today's office workers will not return full time**. Post COVID-19, McKinsey & Co. indicates that up to 25% more workers in advanced economies than previously estimated could need to switch occupations by 2030. A Bain Company survey found that 84% of U.S. companies responding were accelerating automation in response to COVID-19. **A July 2020 McKinsey survey of business leaders found that 85% of companies surveyed have accelerated digitization during COVID-19.** McKinsey also found that about 20% - 25% of workers in advanced economies could work from home three to five days a week. Over the next decade, **CEL & Associates, Inc. expects office workers could fall into one of three categories: remote workers [30% - 35%]; resident workers [50% - 55%]; and hybrid workers [15% - 20%].** In the 2020s, the open office is a nonstarter, as a one-size-fits all solution will not be readily accepted in a post COVID-19 world. Real estate companies must reinvent and research: what constitutes the trusted work culture; what is the proper balance between digital infrastructure and the employee experience; and what is the appropriate staffing model [employees, freelancers, contract employees, etc.]. **Micromanaging is out, while empowerment, teams, and collaboration are in**. Best work-from-home cities like Philadelphia, Chattanooga, Phoenix, Madison, The Woodlands in Texas, Fort Collins, Nashville, Denver, Seattle, Portland, Salt Lake City, Austin, San Diego, Raleigh, and Richmond, among many others, will attract those who seek a work-life balance. **Office space in 2030 will be a combination of coworking space, flex space [up to 25% - 35%], public space, Cloud networking hubs, collaborative team/growth zones, and individualized settings. Occupiers by 2030 will need both physical space and virtual space to be competitive.** Decentralization, utilization of the agile workforce, and a complete redesign of the "workspace" will be requirements by 2030 if office building owners/operators expect to remain competitive. Older office buildings will be repurposed, a new workplace infrastructure will emerge, and the trending "Smart" building will be the preferred location for many occupants. **The office building of the future will resemble Marriott and function more like Google.**

- **Last-Mile Logistics:** The rapid growth of ecommerce over the past decade is expected to continue in the 2020s. NAIOP Research Foundation projected 315 million square feet of industrial net absorption for 2021, as getting products to retailers and consumers has become a top priority. **By 2023, Amazon will have at least 355 U.S. warehouses encompassing nearly 319 msf.** In 2020, Amazon earned around $600 in merchandise sales per retail and distribution square foot and planned to put 1,000 small delivery hubs in less accessible areas. In 2020 the value of the North American logistics market was around $2 trillion. New stacking systems, the growth in driverless vehicles and delivery drones, and rapidly rising demand for cold storage facilities will create demand-based opportunities for hundreds of millions of square feet of last-mile logistics facilities. Today, trucking accounts for around 70% of total freight tonnage movement in the U.S. From 2019 to 2030, freight tonnage is projected to increase 25.6%, according to the American

Trucking Association. **Consumers and businesses want just-in-time and need-it-now deliveries. B2B and B2C buying and delivery expectation patterns are changing rapidly**. Coca-Cola teamed with Walmart to make daylight drone deliveries [within a one-mile radius of a Walmart Supercenter] of select Coca-Cola products. The Sharing economy, machine-to-machine parcel deliveries, readily accessible "pick-up lockers," automated loading and picking systems, and use of robotics will mandate "new" warehouse/distribution facilities. The repurposing of existing and design of new facilities [with far more environmentally friendly features] will create many opportunities for real estate developers and entrepreneurs. **Logistic/warehouse facilities in 2030 will look like Walmart but function like Hartsfield Jackson Airport in Atlanta**.

- **Shift to a Rental-Based Society:** From Uber to iTunes, from Airbnb to furniture/clothing rentals, from the Netflix ability to stream the Nintendo Wii, the Microsoft Xbox 360 and Sony PlayStation 3 gaming systems, and from tools and equipment to home appliances, **the shift to a rental-based society is underway.** Renting is an economic, convenient, timesaving, environmentally sensitive, and a for-the-moment solution for a growing number of Americans. When purchasing is too expensive, when the value of a new purchase declines dramatically after taking possession, and when "trying it first" is a preferred consumer behavior, **renting becomes a pattern for daily life. Today more than 20% of Americans age 65 and older live in multi-generational homes. By 2030, CEL & Associates, Inc. expects residential rentals [multifamily and single-family] could comprise around 50% or more of market demand [today it is around 35%].** The median U.S. home value at YE 2021 or 1Q 2022 was around $346,900 and rising, while in many of the major U.S. employment centers, it is much higher [e.g., $793,100 in California, $615,000 in Colorado, $606,643 in Washington, $350,000 in Virginia]. **Many Millennials, Gen Zs, and a growing number of Gen Xers will not be able to purchase a home.** Further, in a gig economy and rapidly shifting job market trends, owning a home many be an anchor, not a launching pad. In 2020, the Millennial homeownership rate is 43%, well below the homeownership rate of Gen Xers [67%] and Baby Boomers [77%]. COVID-19 impeded Millennials' and Gen Zs' home buying abilities by many years…for some, permanently. **Renting for life is now a growing trend**. **Homeownership for those who live in their [owner occupied] homes could decline to 50% or lower [much like many European countries].** Companies like Vertical Harvest are combining affordable housing with vertical farms. Watch for a dramatic rise in single-family, affordable multifamily, age-restricted, and suburban residential rentals. Build-to-rent and rent-to-own options will grow over the next decade. Bill Gates' 24,000-acre "New Smart City" outside Buckeye, Arizona, may be a learning laboratory for the new cities of tomorrow. However, **one trend/concern to watch carefully is a growing demand for government control of all rental housing**. The initial seeds were sown in 2020 with COVID-reaction policies [e.g., eviction prohibition], and growing rent control legislation is a sign that housing may be declared a "right" and governmental controls are the best solutions. Multifamily properties will look like small villages, feel like WeWork and function like a cruise ship. **In the 2020s, the American Dream will be about the quality of life, not the "quantity of stuff."**

- **Rise in PropTech and the Metaverse:** Like FinTech [finance and technology], **PropTech [property and technology] is a rapidly growing and impactful real estate industry trend.** In 2021 sales of real estate in the metaverse topped $500 million [CNBC]. How the real estate industry buys, sells, designs, constructs, finances, manages, and monitors onsite activities is turning increasingly to technology-based solutions. Occupiers and users want to control their experience [lighting, temperature, accessibility] in a more friendly "digital occupant experience." 5G will enable a multitude of online experiences. By 2030 the real estate industry must face and respond to the Internet of Everything. By 2030 Americans will be able to communicate their thoughts digitally. **Our wearables, smart fabrics and embedded computing will enable us to taste, smell, feel textures, and touch. The lines between thinking and doing are blending together. When a tenant, resident, or consumer can touch, see, smell and experience anything, anywhere, at any time, then what becomes the role of real estate?** Real estate is rapidly moving toward ubiquitous connectivity. **By 2030 you will not "go online," but will *be* online 24/7. The rise of communitarianism is inevitable**. Digital reality, holograms, cognitive technologies, and blockchain are rapidly changing the real estate industry [does anyone know or care?]. Technology provides flexibility, customized experiences, data collection/analytics, and interactive communication among the various Stakeholders [occupier, building manager, owners, maintenance personnel, lender, vendors, etc.]. **Real estate is the largest asset class in the world, and yet it significantly trails many other industries in the use of technology.**

  PropTech will fundamentally change the residential rental, shopping, workplace, hospitality, and logistics sectors. Construction, property management, maintenance, and brokerage will be impacted significantly over the next decade. The rise of alternative transaction models, online financing and insurance software, capital-raising, worker productivity, leasing [think virtual tours], appraisal, and service offerings will be turned upside down with PropTech ventures. COVID-19 added preventive technology to existing facilities to assure safety and wellbeing of all users. While accurate numbers are not available, there are **an estimated 6,000 PropTech companies, and global investments in PropTech are estimated at $12 billion to $15 billion.** Firms like Fifth Wall, MetaProp, Real Estate Technology Ventures, among many others, have taken the lead in accelerating the perfection and rollout of many exciting and valued property-based technologies. While PropTech slowed by early 2020, **many investors and analysts believe the "best is yet to come."** Real estate is becoming a community where you connect, collaborate, build skills, and network. The role and need for brokers, lending officers, insurance agents, appraisers, maintenance personnel, property managers, leasing representatives, and capital markets professionals are being questioned, reviewed, and reshaped. **By 2030, technology for the real estate industry will be as valuable as capital has been prior to 2020**.

- **Healthcare & BioTech:** The U.S. healthcare spending increased 9.7% in 2020 to $4.1 trillion, a much faster rate over the 4.3% increase experienced in 2019. U.S. healthcare industry expenditures could reach more than $6 trillion by 2028. Annually, the U.S. spends around $12,530 per person on healthcare. The combination of an aging population; increases in chronic disease; greater expenses for vision, dental and dementia care; rising drug costs; and inefficiencies has created a growing demand to "fix it" and make healthcare and wellbeing a part of everyone's lives. Healthcare industry employment is expected to grow 16% from 2020 to 2030, adding around 2.6 million jobs. According to Grand View Research, the global BioTec market size was valued at $752.8 billion in 2020. From health to farming, and from food to bioinformatics, the BioTech industry is poised for significant growth over the next decade. **As a result, the real estate industry is poised to be the supplier of healthcare facilities; laboratories, research and development facilities; pharmaceutical factories; diagnostic centers; memory care and dementia facilities; rehabilitation and wellness centers; dental and optical care; outpatient facilities; and testing centers. Healthcare and biotech will be integrated into every office building, apartment community and retail center**. Manufacturing and distribution facilities will grow rapidly to meet the demand. The repurposing of aging industrial and office buildings will represent many unique redevelopment opportunities. The deployment of building sensors, smart walls, digital identifiers, ultraviolet technology, upgraded air filtration systems, and ionization and health monitoring technologies, will require building owners to invest in, not wait for the adoption of, new public healthcare practices. Markets with exemplary colleges and universities will flourish, because attracting talent to fill highly skilled positions will be the key to success.

- **Consolidation, Legacy Exits & Succession: By 2030, 50% - 60% of today's real estate founders, CEOs, and senior C-Suite executives will be retired, in accelerated phase-down or no longer actively involved in the real estate industry. Only 30% of privately held real estate firms survive into the second Generation, and only 3% survive into the fourth Generation**. This is hardly the trending data needed for a seamless transition. The net results are entity sales, mergers or bifurcations [passive income vs. operating income platforms]. Promoting leaders from within has only a 70% - 75% success rate. Over the next decade, the number of Founder exits, CEO retirements or enterprise sales will jump dramatically. By 2030, 25% or more of the real estate firms operating in 2020 will be gone. The growth of SPACs [Special Purpose Acquisition Company] will give additional opportunities for those who seek growth via entity acquisitions. The rising costs of talent, technology, capital procurement, and overall operating costs will benefit larger firms that can afford to invest and allocate those costs across multiple verticals/divisions. While succession planning initiatives will accelerate during the 2020 decade, the eventual outcome [without independent governance] is in doubt. **Consolidation probably will mean a reduction in C-suite talent and a growing need for visionary leadership. The negative impact of these consolidation trends on the real estate industry is probably one of the most significant determinants on the eventual role and relevance of the real estate industry in society**. The loss of and inability to replace the transformative leadership styles of those who have shaped the real estate industry for the past 70+ years is, today, an unanswered question. True visionary leadership cannot be automated, digitized or relegated to "processes." Great evergreen real estate companies are created by transformative teams of passionate visionaries.

- **Capital Dominance:** During the past 20 – 30 years, the role of capital in the real estate industry has shifted from Investor to Partner to Controller. **Real estate assets are increasingly becoming "too expensive" for the local/regional investor**. The increasing number of challenges to overcome [environmental, aging, HVAC systems, structural issues or use restrictions] limits the number of firms that have "staying power" capital resources. In 2020, more than 25,500 real estate assets were traded [those valued over $2.5 million]. Nearly all top buyers were institutions, funds, foreign buyers, and REITs. **The small to mid-size developer is increasingly challenged to find opportunities that do not require institutional capital**. Consequently, **the real estate industry has shifted to working for the capital, fees, and promotes, and is more focused on "turning assets" than "long-term holds." Overall asset impact to the surrounding environs has given way to yield and investment multiples**. Total global real estate assets under professional management totaled $10.5 trillion at the end of 2021 [MSCI]. Blackstone [$319b], Brookfield Asset Management [$211b], PGIM Real Estate [$145b], Prologis [$143b], and Nuveen [$132b] were the top five managers. KKR has dedicated $800 million to acquire warehouses. In late 2019 Blackstone closed on a $20.5 billion real estate fund. By year-end 2021, around $250 billion in capital was seeking real estate investment opportunities. While ESG is gradually shifting real estate strategies, **watch for a decade of acceleration in socially responsible real estate investing. The positive attributes of real estate on a community and the social fabric of that community will become an integral component of performance scorecards for institutional and fund investors. Niche real estate asset classes will gain additional exposure alongside the traditional asset classes**. Forty years ago, real estate was a very small allocation within institutional portfolios. Today, real estate has moved from an alternate investment class to join the big three [cash, bonds, and stocks] as an institutional asset class. However, while hundreds of billions in institutional capital have been deployed into real estate assets, the lack of a community or social responsibility has often been ignored. **The decade of the 2020s will be a fork-in-the-road moment for the real estate industry.** Does real estate work for the capital or is capital a partner in creating great outcomes for all Stakeholders? **The key question over the next decade is not where will capital take us, but how will it impact the vitality and value of our cities?** Will capital move the needle to a more holistic outcome? The issue isn't a lack of capital, but a fading lack of vision and leadership to achieve even greater results. The real estate industry can fill that void.

- **Service Companies Will Be Dramatically Different:** In the 1980s, it was all about "dots on the map" and "filling out the verticals." In the 1990s, it was about adding, expanding, and offering 20 – 30 different "service lines." By the 2000s, real estate service companies expanded and added capital markets and corporate solutions platforms. In the 2010s, consolidation, legacy exits, technology, and analytics became top priorities. In the 2020s, real estate service companies will again pivot and restructure their service platforms to reflect an ever-changing marketplace. **Many senior-level, experienced transaction brokers will shift their time and focus to the Principal side of real estate…raising capital, buying assets and building long-term cashflow. The industrial and retail areas of brokerage will come together to serve the logistics needs of retail tenants**. Many transactional brokers will move to the suburbs and seek a more balanced work/life career. **Up to 50% of today's brokers could be replaced by "strategic advisors" who look more like a McKinsey or BCG Partner**. Facilities services will expand dramatically over the decade as corporations seek to reset their hub operating platform, and provide a healthy, safe, and productive workplace environment. **During the next 10 years, "specialty brokers" will increase significantly as "niche experts" are preferred over general brokerage**. Financing will become automated and rely more upon sophisticated technology to navigate and serve the capital needs of clients. Property Management will be far more integrated with and dependent upon technology, real-time digital transformation, and remote/digitized oversight. Appraisals will become automated. **The ultimate outcome of the 2020s will be the rapid growth of the Big 3 via data/knowledge platforms, not "adding more staff."** Predictive analytics, proprietary data and unique strategic insights will dominate real estate service delivery platforms. Oh…and property management…this service line will be elevated in importance as recurring income becomes the #1 priority for most full-service real estate organizations.

- **ESG & DEI Opportunities:** It is estimated to require $5.2 billion over the 10-year period 2020 – 2029 to decarbonize the built environment and green real estate [Vivid Economics]. By the end of 2021, there were 1,105 projects, and more than 247 gross msf under LEED. Around 5% - 6% of all buildings are LEED certified, and approximately 11% - 12% have an Energy Star label.

Worldwide, there is approximately 1 bsf of recertified LEED space, nearly 24 bsf of LEED registered and certified, and 11,000 projects participating in LEED. More than 1 billion square feet of buildings are enrolled in the WELL Health Safety Rating. According to Verified Market Research, the global green building materials market size was valued at $256 billion in 2020 and is expected to grow to more than $653 billion by 2028. As much as 30% of all building materials [2.2 billion tons globally] used by a typical construction site can end up as waste [BigRentz].

Creating environment, social, and governance for the real estate industry means doing the right thing all the time. Seeking a net zero goal by 2050 is achievable, and annual assessments on ESG progress should be an integral component of annual planning and budgeting. Integrating social inequity, climate-related disruptions, implementing green leases and "scoring" investments under ESG standards could become commonplace over the next decade.

Diversity, equity, and inclusion in the 2020s will become a requirement for those seeking capital, entitlements, loans, and anchor tenant leases. It is estimated that around 9% - 10% of C-suite positions within the real estate industry are occupied by women, and 44% of those C-suite women are in a Human Resources role. Compared to other industries [finance 31%, healthcare 26%, technology 23%], the real estate industry has a long way to go…a tremendous opportunity for those who embrace DEI now, as the size of the talent pool for women and minorities is fairly small.

By 2030, every successful real estate firm, regardless of size, market or service focus, will have robust ESG and DEI plans that are regularly monitored and measured. All real estate firms must remember to stay focused on their vision, mission, and purpose, remain steadfast to their standards of excellence and core values, and always do the right thing…the first time…and every time.

- **Talent Shortage Will Require Pivots:** In the 2020s, the demand for outstanding talent far exceeds the pool of available talent. At the peak of COVID, 68% of real estate employees [full- and part-time] were working remotely. According to a CEL & Associates, Inc. survey, **78% of real estate firms are having difficulty finding qualified individuals to fill vacant or new positions.** In 2022, approximately 28% - 35% of real estate workers have returned to the office full-time. Real estate firms in 2022, due to COVID catch-up, inflation, and retention challenges, have **increased base salaries overall (up to 5%, 75th Percentile and 7%, 90th Percentile].** Benefits, perks, and other non-financial work/life balance options have accelerated. Real estate companies offering a telecommuting option for real estate employees has increased from 44.5% in 2019 to the current 60.6%. Around 48% of real estate firms are "expecting to change" their Talent Management plans to attract younger workers. Taking care of HIPOs, extending LTIP options to a larger pool of employees [excluding 401(k) programs], enhancing the onboarding experience, instilling a continuous culture of learning and **reimagining the "total" employee experience** are underway in the majority of best-in-class real estate firms. Talent analytics are being adopted and non-traditional sources for employees are being pursued. Absent great talent, a growing number of real estate firms are automating, digitizing, offshoring, using Independent Contractors, and/or outsourcing various functions. In the 2020s, real estate firms must: enact viable succession planning structures; strengthen their leadership team and capabilities; align vision, goals, strategies, and purpose; encourage innovation, transparency; and implement a firm-wide "standards of excellence" platform. Addressing the total "human experience" within the workplace will be both a challenge and a strategic opportunity for real estate firms throughout the 2020s.

Closing Remarks

From the 1950s through today, the real estate industry has experienced a rollercoaster ride of highs and lows, unprecedented opportunities, never-seen-before challenges and a truly remarkable 70-year run. Beyond the surge of demand after the end of WW II, and far more than the halcyon years in the 1980s and 2010s, it has become a major financial force in the U.S. and global economies. The real estate industry, according to federal statistics, contributes nearly $3 trillion to the U.S. economy. Some sources place the combined value of all real estate in the U.S. [residential, commercial, and government] at around $70 trillion, although no one knows for sure. Beyond the value, its greater significance is its role, impact, and relationship with 332 million Americans and tens of millions of visitors to the U.S. each year. **Real estate shapes our cities and communities, actualizes dreams, and binds society together. Too often the focus is on the four walls but not what happens inside those walls. What endures are not just quantitative metrics, but qualitative outcomes**. If life can be defined by what we do, then the real estate industry must be valued by its future societal and community impacts. American exceptionalism works when cultural values and outcomes are aligned. **Being rewarded for risk is as valuable as making a difference**.

The decade of the 2020s is off to a rough start, and the COVID recovery will continue to stretch through this year. However, this disruption offers the best opportunity for the real estate industry to recapture its role as the architect of great community outcomes. **We must open our minds to the new and exciting opportunities ahead, welcoming fresh perspectives and innovative thinking while avoiding herd mentality. The great industry icons of the past 70 years knew this**: to make a difference, you take bold steps, keep all options on the table and avoid overreaching. Society and the real estate industry must become self-aware and embrace, not compromise, core values. William Whyte, Bill Rouse, Jane Jacobs, and many others realized that real estate can bring people together for optimal results for all Stakeholders. **If we remember where we came from, we can be valued**

contributors to what makes our country and cities great…"aspirational, transformative and visionary leadership." Imagination begins…now.

I hope you have enjoyed these past three issues of *Strategic Advantage* [the 1950s through 2020s]. I trust you will be inspired by remembering what was and envisioning what can be. **Like you, I am excited to be part of an industry that has made and can make a difference.** We welcome any additional and/or more current data points, as this "history" continues to be a work in progress.

Regards,

Christopher Lee, Editor

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