

# COLORADO REGIONAL CRE TRENDWATCH 2019



# HELLO

Brought together by stok, leaders from Colorado's commercial real estate (CRE) industry and beyond convened to discuss the future of CRE, exploring trends and predictions for the industry in 2019 and more.

After a foundational macroeconomic overview, the panelists delved into both the global and regional outlook, covering topics ranging from investment and financing to design and development. This report compiles their insights.

We're incredibly grateful to our speakers for sharing their insights for the coming year and beyond:

**Justin Cooper**, VP, Saunders Construction

**Melissa Marsh**, Senior Managing Director of Occupant Experience, Savills Studley, PLASTARC

**Brent Mather**, Principal & Design Director, Gensler

**Rick Petersen**, Principal, OZ Architecture

**Alex Robbins**, Real Estate Strategic Portfolio Lead, Google

**Dominick Sekich**, Partner, Moye White

**Cyndi Thomas**, Partner & EVP, Etkin Johnson Real Estate Partners

**Matt Vance**, Research & Analysis Director, Economist, CBRE

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## ABOUT STOK

Founded in 2008 with offices in Denver and San Francisco, stok provides values-aligned real estate services to developers, property owners, and corporations around the world. By integrating finance with design, engineering, and management services, stok optimizes the real estate design and development process, yielding cost savings and radically better projects.

Contact stok to discover how to develop High Performance Buildings.

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Credit: Simon Zhu (Hong Kong)

# 1. GLOBAL OUTLOOK

## 1.1 VOLUME OF GLOBAL CAPITAL

One of the primary drivers of the commercial real estate industry today and looking forward is the incredible (and growing) volume of global capital chasing investment opportunities. This acceleration really began in 2000 when the global savings rate was 23%. It has since jumped to 28% today, reflecting an increase in capital interested in investing in U.S. real estate.

A few factors correspond to the increase in global capital that we're seeing today. One is inequality; the effect of more financial resources in fewer hands, which leads to a bump in the savings rate and further growth in capital. Another factor is global demographics. With the exceptions of the U.S. and Japan, most of the world is not

getting older. In fact, India, China, and the Post-China 16 (the 16 countries projected as tomorrow's "China" in low-value manufacturing) are all entering a savings phase. Ultimately, this increase in volume of capital has translated to a growing interest in U.S. commercial real estate by foreign investors with deep pockets.

CBRE Economist Matt Vance has explored the impact of this rise in global capital in tandem with CBRE's Global Chief Economist, Richard Barkham. They've seen capital value growth rise more quickly than rental values. That being said, they expect asset prices and yields to remain stable despite a forecasted recession in 2021.

"The global savings rate has jumped to 28% today, reflecting an increase in capital interested in investing in U.S. real estate."

## 1.2 DATA IN CRE

Humans have separated biological sciences from engineering science for a long time, thinking of the former as largely unpredictable and the latter as more structured. Yet, that mental model is changing, and the driver of that change is data.

Global design guidelines for large firms have begun to work to quantify the human experience of space. From wearables to track physiology and health, to sensors tracking oxygen levels and light quality, data is shaping the way spaces are being designed. Beyond the benefits to building occupants, the adjustments made in space design and operations to increase performance have been shown to also significantly increase the financial value of the building itself, as quantified in stok's The Financial Case for High Performance Buildings report.

However, privacy related to that data remains a large concern for building users. Alex Robbins at Google expects the trend to continue where anonymized data is used to understand spaces and to improve infrastructure but warns against using that data to guide the behavior of building occupants.

On the other hand, Google is beginning to develop internal labor analytics tools to help inform decision-making for further real estate moves and has become much more specialized to forecast moves for specific job functions. This reflects the change for technology companies to be reaching a point where they're thinking 10 years down the road, not just 6 months.

"Global design guidelines for large firms have begun to work to quantify the human experience of space."



Data has a better idea

Credit: Franki Chamaki (Australia)



## 1.3 HUMAN-CENTRIC DESIGN & DEVELOPMENT

Credit: Horizon Photoworks (The Edge Amsterdam)

Whether it is discussing how buildings will be designed in the future or how corporations are making real estate decisions today, there is an undeniable trend toward increased consideration of human experience.

According to Melissa Marsh of Savills Studley / PLASTARC, there has been a shift in thinking of buildings as being a container for people to becoming an enabler of people. She points out that humans have occupied buildings that they've designed and built themselves for millennia, and it is only a recent phenomenon that the majority of building occupants do not understand the design, construction, and operation of the spaces they occupy. Similarly, buildings haven't been designed to understand the people within them, creating a disconnect between space and occupant. Data is now being used to change that (see Section 1.2).

"Google's approach to siting new projects is first and foremost about locating talent."

There has also been a shift in how corporations are thinking about locating their offices. Businesses coming to people (and not vice versa) is historically unique and characteristically contemporary American. This is in the fiber of how Google makes real estate decisions. Their approach to siting new projects is first and foremost about locating talent. However, they're not just thinking about engineering talent, for instance, any longer; it's also about finding a highly-skilled labor force around different product areas, sales, and administration.

According to Google America's portfolio strategy leaders, the cities tech companies are searching for share the following characteristics:

- High quality of life
- Have a large, diverse talent pool from which to draw for respective job functions
- Access to public transportation
- Focus on education (particularly STEM)
- Ability to scale

However, Google is currently contending with increasingly saturated markets and is thus looking at new avenues to access talent. Whether due to this saturation or to increased costs of living, the talent tech seeks is sometimes no longer attracted to the cities they once were.

## 1.4 NEXT GENERATION MOBILITY

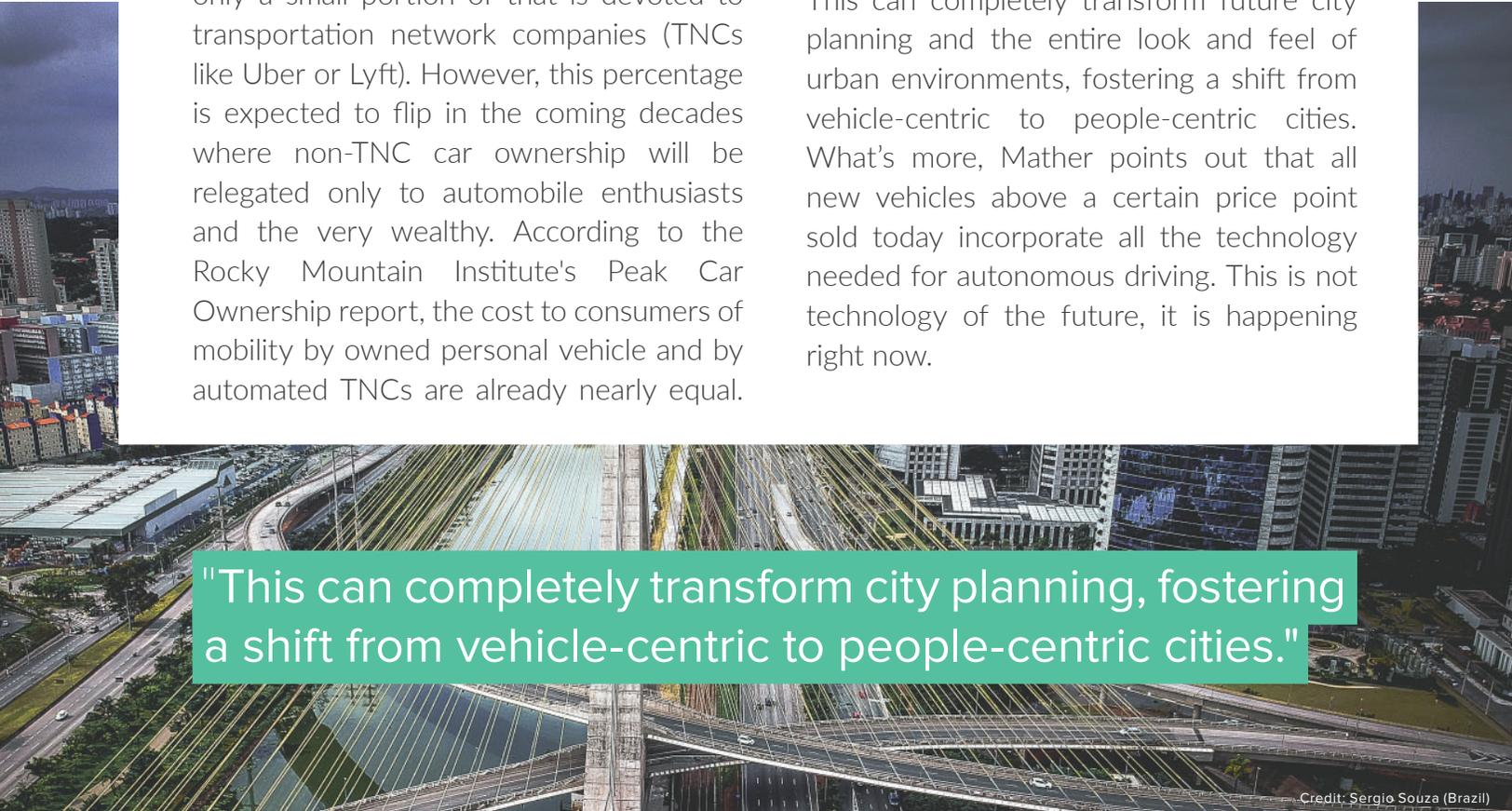
A key element of a market that draws owners and tenants of commercial real estate is the transportation system that connects that city both internally and globally. The Millennial generation has chosen to live in urban and mixed-use areas for lifestyle purposes, which has meant a shift away from personal vehicle ownership to more walking, public transit, and even rideshare scooters.

While there are over 300 million gas- or diesel-powered cars, motorcycles, and trucks on U.S. roads today, Brent Mather and the research team at Gensler expect these will all be obsolete from a production standpoint by 2030. Of the \$2.1 trillion personal vehicle ownership industry today, only a small portion of that is devoted to transportation network companies (TNCs like Uber or Lyft). However, this percentage is expected to flip in the coming decades where non-TNC car ownership will be relegated only to automobile enthusiasts and the very wealthy. According to the Rocky Mountain Institute's Peak Car Ownership report, the cost to consumers of mobility by owned personal vehicle and by automated TNCs are already nearly equal.

There is also a significant financial upside for cities that adopt an automated mobility services model, which when realized should help accelerate the shift.

Under this increasingly automated mobility system, Mather expects about one vehicle for every 20 to 30 people because the vehicles are always in circulation. This lower volume of vehicles should mean less traffic (certainly welcome in many markets), but that's just the beginning. With the increased employment of LIDAR (Light Detection and Ranging) technology, vehicles themselves can be closer together, meaning lanes and rights of way can become smaller, leaving more space for people.

This can completely transform future city planning and the entire look and feel of urban environments, fostering a shift from vehicle-centric to people-centric cities. What's more, Mather points out that all new vehicles above a certain price point sold today incorporate all the technology needed for autonomous driving. This is not technology of the future, it is happening right now.



"This can completely transform city planning, fostering a shift from vehicle-centric to people-centric cities."

Credit: Sergio Souza (Brazil)

## 2. REGIONAL OUTLOOK

### 2.1 DEMAND-SIDE DRIVERS OF CRE PERFORMANCE

Beginning to see the effects of the increase in global capital mentioned above, Denver is now being viewed as a “Gateway Light” market, according to CBRE's Global Gateway Cities Americas report. Chasing yields throughout the country, foreign capital has risen from about 3.5% of total volume in Denver in 2014 to nearly 10% today. In addition to this influx in foreign investment, Denver is experiencing a number of demand-side drivers that are powering the commercial real estate space.

The most important of them is employment growth. Colorado was one of only two states in 2017 that experienced over 2% job growth in an environment of less than 3% unemployment. In addition to the 3% unemployed who are looking for work counted in the U3, the U6 rate also includes discouraged workers and the underemployed (i.e. part-time workers who would prefer to work full-time). The difference between U3 and U6 serves as a “reservoir of talent.” Denver however has an incredibly low U6 and the 4th highest participation labor rate in the country. In short, the city has run out of people to employ.

Except, that is, for in-migration. Almost all the city's ability to fill jobs comes from new people moving into the state. While the region is still experiencing high rates of net

migration, those rates are slowing (almost half in 2016 compared to 2015). In-migration rates haven't changed much (still ~225,000 annually), but the number moving out of the state is increasing, largely due to reduced affordability in the area. There's also been a shift in the location in-migrants land when coming to Colorado. From 2010-2016, 98% of people moving into Colorado moved to either Denver, Colorado Springs, or Northern Colorado (including Fort Collins and Loveland). Of that, 67% went to Denver. In 2016 however, 20% of newcomers didn't land in any of those three markets and of the remaining 80%, only 33% came to Denver.

There is good news yet for Denver. As a result of low unemployment and a hot job market, for the past 3 to 4 years the region has averaged 4% wage growth. An environment of incredibly low inflation means that there is an improving cost of living (wages are outpacing inflation by double). Pair this with accelerating real estate pipelines, particularly in multifamily, and the market is experiencing diminished rent growth. As this cycle winds down, Vance expects to see affordability concerns begin to find a little balance.

**"Denver is now being viewed as a "Gateway Light" market."**

## 2.2 CONSTRUCTION COSTS

A topic very front-of-mind to the Denver real estate community is rising construction costs. Not only is the pipeline continuing to expand year-over-year (\$5.7B in 2017 in Colorado to a projected \$6B in 2018), but the City of Denver has also seen a significant increase in Site Development Plan (SDP) submissions since last year

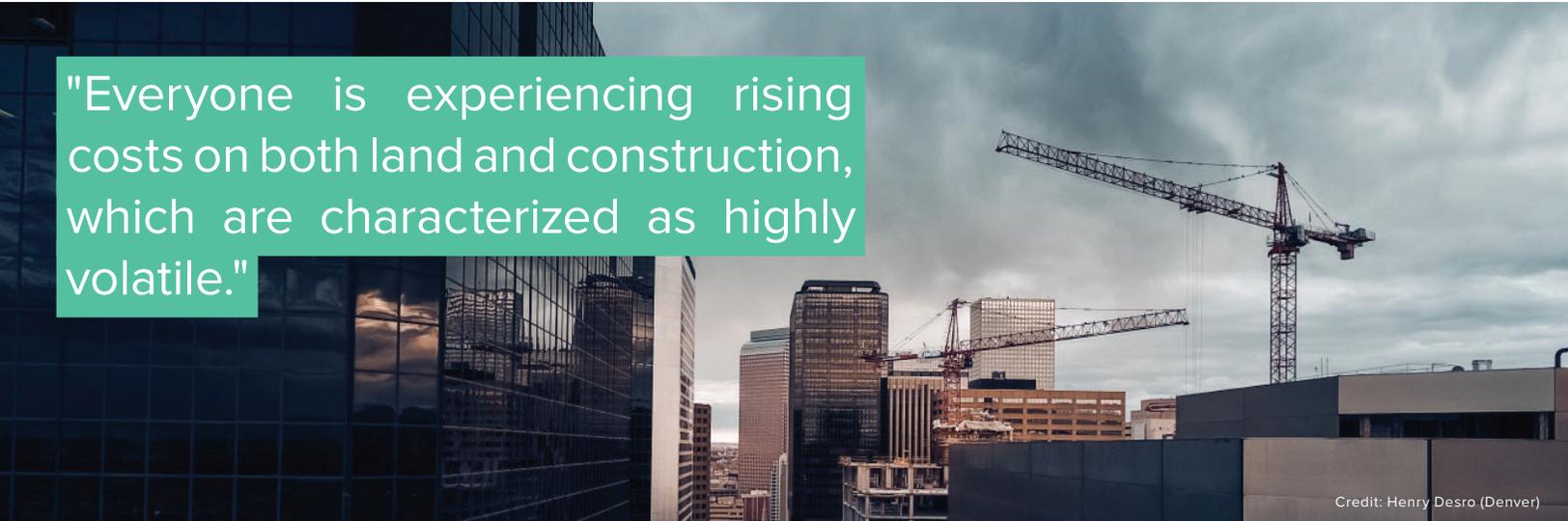
Demand is growing, but it is also a changing environment. Everyone is experiencing rising costs on both land and construction, and Justin Cooper of Saunders Construction characterizes those costs as “highly volatile.” Newly-imposed tariffs can have an impact of anywhere from 5 to 7% but can feel much higher when working on a project. GCs are feeling the effects of these tariffs (on materials like steel, asphalt, and aluminum) paired with higher fuel costs and the fact that the prices they charge, while increasing, are climbing at slower relative rates.

For developers, these rising construction costs lead to difficult decisions. With so much foreign and domestic capital flowing into the Denver market, the associated

yields that investors expect to meet can mean real strain for developers. Rapid increases in construction costs can also mean delayed projects with the resulting capital constraints.

So, with increased costs, developers must decide whether to produce lower yielding products, charge higher rents to tenants, or significantly value engineer out tenant improvements. At some point, developers won't develop a building if they don't have the rents to justify it. All these factors can play a hand in slowing the development cycle, leading to less building.

However, there are strategies Denver developers are undertaking to address these rising costs. Rather than turning to risky lending sources or accepting lower margins, they are exploring opportunities in alternative financing (see Section 2.5), using cross-laminated timber (CLT) structure rather than conventional materials with rising hard costs, and considering eventualities in contracts that deal with raw materials.



"Everyone is experiencing rising costs on both land and construction, which are characterized as highly volatile."

Credit: Henry Desro (Denver)



"There is a lingering stigma around the pursuit of a career in construction and so it is paramount to create an environment where construction workers can have the skills and opportunities to craft a career in the field."

## 2.3 LABOR SHORTAGE

Hand-in-hand with rising construction costs is the challenge of a labor shortage. During recent downturns in the Denver market, the construction industry experienced significant losses in the skilled trades, and those laborers haven't returned. The effect today is not only a lack of quantity of labor, but a lack of quality as well.

This lack of access to quality labor has made it difficult for GCs to complete their work from a financial perspective, Cooper points out. GCs see labor as less productive than at any other time in their careers, which is ultimately now being priced into projects in ways they never were before.

That said, a trend of better access to the trades is beginning to form. Cooper points out that Saunders is seeing 4 to 6 bids by subs on every package. There is more interest, but they're not seeing pricing bottom out like they did in 2008 to 2009.

While the labor shortage is a challenge, GCs are strategically adapting. They are beginning to partner more widely, finding opportunities with technology companies to identify processes that can be automated and working to do so. Additionally, there have been moves towards the modularization of the construction process by forward-thinking, technology-driven companies like Kattera. The California-based company acquired Colorado's Bristlecone Construction Corp. with expectations that the Denver market would be receptive to the potential of modularization as a method to save on both material costs and labor.

Finally, all panelists point to the importance of engaging and supporting trade schools. There is a lingering stigma around the pursuit of a career in construction and so it is paramount to create an environment where construction workers can have the skills and the opportunities to craft a career in the field.



## 2.4 BUILDING PERFORMANCE

Credit: Etkin Johnson Real Estate Partners (ATRIA Denver)

So, with higher construction costs and a labor shortage, what gives? According to Rick Petersen of OZ Architecture, unfortunately it is the performance of the buildings.

When developers are facing the costs listed above in addition to higher costs of land and limits to the rent that can be charged on a project, decisions often come at the expense of building materials and high-performance design. If a foreign investor is ready to deploy capital quickly in this environment, cheaper and lower-quality materials are often used to make the pro forma work.

However, it is not all doom and gloom for developers. Many, like Cyndi Thomas at Etkin Johnson, are working on finding ways to creatively bring sustainability and

high-performance design into projects. Developers are looking at certification programs like the WELL Building Standard that go a bit farther than LEED in addressing occupant health that tenants are demanding.

Thomas points to ATRIA, a project in a Denver suburb where her company is exploring the opportunities to incorporate principles of health and wellness into that and future projects.

While some developers are trying to grow Denver into a leading market for high-performance buildings, Thomas points out that there will be greater improvements when developers receive additional education from GCs, architects, and specialty consultants on best practices in high-performance design and construction.

"Developers are looking at the WELL Building Standard to address occupant health that tenants are demanding."

## 2.5 APPETITE FOR INNOVATION IN DENVER MARKET

While there is interest in innovation in this market (e.g. embracing lean practices, prefabrication, modularization, and partnering with alternative industries), there is still often a disconnect between Denver and the people who are driving innovation.

Some innovation in Denver has been borne of necessity from the rising costs listed above, but there's an essential opportunity for this market to cut out the waste and inefficiencies of the current design and construction process by taking best practices from other models and working more collaboratively throughout the full project cycle. Petersen at OZ points out that in some projects, this more collaborative approach is already beginning to take shape with the engagement of different actors (e.g. window and wall manufacturers) to gain important expert perspective to complement their own.

In addition to innovation in process, there is a rising tide of innovation in financing. Commercial Property Assessed Clean Energy (C-PACE) is private funding that sits on the real estate tax roll, almost acting like a mill levy. It has rights above first lender and runs with the building rather than the owner. Tenants help pay through Common Area Maintenance fees and real estate tax

reimbursements. If pursued in hospitality, hotel guests would pay a fee. This financing can be broadly applied to energy efficiency projects, on-site renewable generation, and more. Denver's World Trade Center development (an \$880M project in the River North district designed by OZ) has been aided substantially by C-PACE financing. On the project, \$24M is being contributed through C-PACE.

In addition to new financing vehicles, there are a growing number of public-private partnerships (PPPs) as creative ways to deliver projects in Denver. Saunders is a leader in PPPs (which they call "collaborative project delivery") around social infrastructure, or the buildings that support a community. Not only do these projects bring in private money, but they also bring in private sector knowledge and speed.

Projects such as district energy implementation at the National Western Complex and the Great Hall at DEN Airport create opportunities for innovative development to happen at or below traditional development costs. The element that is still being worked out is how the owner can maintain control on both quality and performance of the delivered product.

"Not only do PPPs bring in private money, but they also bring in private sector knowledge and speed."



Credit: Arina Habich (Denver International Airport)

## 2.6 WHAT'S NEXT

In a final look forward, a couple predictions emerged for the Denver market. For one, the region can expect to see a resurgence in its inner ring suburbs (e.g. Lakewood and Arvada). While Millennials have had an affinity towards urban environments, they are expected to flee the city when they begin having families and seeking schools for their children.

However, the suburbs that are expected to be the most desirable are those with access to the urban center via public transit, such as Denver's light rail. What's more, these suburbs are currently populated with many 55+ empty-nesters who will likely be looking to downsize once there are condos available in the market to do so.

Additionally, the panel expects that the new River Mile district is setting itself up to be positioned as the downtown hotspot in the next cycle, predicting it as a center for high quality development. The district is expected to have the lowest parking ratio in the city, which tracks with the expectation that by the time the area is developed, the personal vehicle as we know it will be largely if not entirely obsolete.

On the whole, while all panelists demonstrated that the coming years of commercial real estate in Denver won't be without its challenges, we can also expect innovation and plenty that will make the market as exciting as any looking forward.



"The suburbs that are expected to be most desirable are those with access to the urban center via public transit."

Credit: Jessica Fadel (Colorado Rockies)



# EVENT PHOTOS

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stok.com  
hello@stok.com  
@teamstok