

COLORADO BUSINESS REVIEW

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Forum Keynote Address

The Three Cs of Health Care

William Maguire

Health care is the largest industry in the United States and arguably one of the most regulated industries. **Roland Lyon**, president of Kaiser Foundation Health Plan of Colorado and keynote speaker at the 52nd annual Colorado Business Economic Outlook Forum, discussed issues surrounding the health care system.

Lyon separated health care into sections that he denotes as the “three Cs” of health care: cost, care, and coverage.

The first “C” of health care, cost, refers to the price that consumers pay

for health care and health insurance. Since 1980, the share of GDP devoted to health care has doubled, from 8.9% to 15.9% in 2015. Lyon discussed the “cost shifting” that has occurred in the health care industry, referring to the increased employee contribution to premiums as well as other health care expenditures borne by the average employee.

According to Lyon, the burden of health care costs on the average employee has increased by about 7% annually since 2006, rising from \$1,502 in 2006 to \$2,796 in 2015.

One of the reasons for rising health care costs is the fee for service structure. The fee for service system reimburses hospitals and physicians per treatment. Lyon argues that this system rewards health care providers for the volume of patients treated rather than the value offered to patients. Lyon also believes that one approach to increasing the value of health care is to pay physicians on a prepaid, or salary, system.

A healthy life is also a personal responsibility, described by Lyon as HEAL (healthy eating active living). According to Lyon, about 35% of health care costs stem from “unhealthy behaviors” on a personal level, including obesity, smoking, and alcohol and drug usage. Obesity accounts for roughly 20% of health care costs and smoking accounts for about 8.5% of health care costs.

Care, the second “C,” refers not only to the access of health care but also to the quality of the health care received. Lyon believes that “the lowest quality of care is that which is unaffordable...but the good news is that the most affordable care is that which is highest quality.” He argues

Roland Lyon, president of Kaiser Foundation Health Plan of Colorado



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FROM THE EDITOR

As highlighted at the 52nd annual Colorado Business Economic Outlook Forum held on December 5 in Denver, Colorado's employment growth is anticipated to occur at a slightly faster pace compared to 2016. The state is expected to add far more services-producing jobs than goods-producing jobs, continuing a long-term trend.

The half-day event featured an employment forecast for 13 industry sectors and a keynote address by Roland Lyon, president of Kaiser Foundation Health Plan of Colorado. An executive panel and three industry breakout sessions rounded out the afternoon.

Summaries of the day's proceedings are featured in this issue of the *CBR*. For additional details, visit colorado.edu/business/brd.

Please contact me directly at 303-492-1147 with any comments or questions.

—Richard Wobbekind

Summary of Forecast

Colorado's Employment to Grow by 2.4% in 2017, Adding Jobs in Nearly Every Sector

The following observations summarize the thoughts of the Colorado Business Economic Outlook committee members as of early December for 2017.



Richard Wobbekind, executive director of the Business Research Division, Leeds School of Business

Colorado added 76,200 jobs in 2015, growing by 3.1% and resulting in the second-best year of employment growth since 2000. Job growth continued in 2016, at a slower rate, adding 54,800 total jobs for a 2.2% increase. In 2017, Colorado's employment growth is anticipated to occur at a slightly faster pace from the previous year, increasing by 2.4% statewide and adding 63,400 new jobs.

Colorado is expected to add far more services-producing jobs than goods-producing jobs, continuing a long-term trend. From 2006–2016, the state added 329,200 services-producing jobs, while the total goods-producing employment has fallen by 12,200 jobs across the same period.

Job growth throughout the state has exemplified Colorado's recovery from the Great Recession. Since 2012, statewide job growth has reached levels not seen since the tech boom of the late 1990s.

Each services-producing sector is expected to add jobs during 2017, while two out of three goods-producing sectors are anticipated to post positive employment growth during the year. Only Natural Resources and Mining is projected to record modest job losses in 2017.

Agriculture—The Agriculture Sector will post lower net income for the second consecutive year in 2017 due to low cattle and grain prices. Following a decrease in net income of \$850 million from \$1.3 billion in 2015 to \$444 million 2016, profits are expected to fall again to \$392 million in 2017. The industry has been negatively

affected by the increase in the value of the dollar as exports have declined.

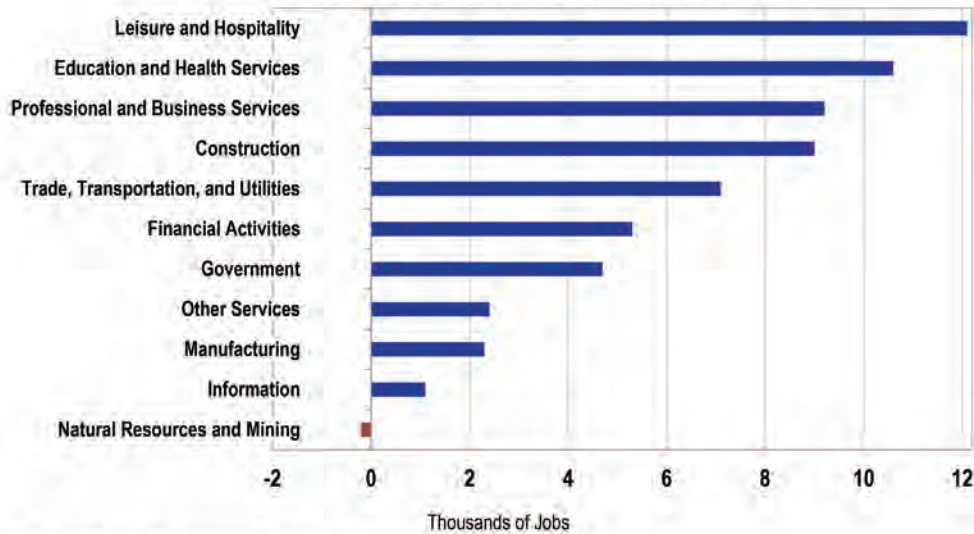
Construction—The demand for housing units in 2016 is expected to exceed supply by the greatest amount in over 18 years, due to increased migration into the state. While multifamily construction is expected to fall slightly in 2017, strong growth in single-family homes is forecasted to make up for any decline, with single-family permit growth exceeding the national average by 8 percentage points. Along with growth in both nonresidential and nonbuilding construction, industry employment is expected to reach 166,000 jobs in 2017.

Manufacturing—Following 10 years of decline, the Manufacturing Sector is expected to grow for the seventh consecutive year in 2017, increasing 1.6% in 2017. The growth is equally weighted between the durable goods and nondurable goods subsectors, adding 1,200 jobs and 1,100 jobs, respectively. Every subsector is expected to post modest employment increases except fabricated metals and computer and electronics. The increased use of robotics and automation is increasing the productivity in the Manufacturing Sector but at the cost of declining employment growth.

Natural Resources and Mining—Compared to the rest of the nation, Colorado ranks 7th in oil and gas reserves, 10th in coal production, 4th in gold production, and 1st in molybdenum production. Colorado is also a leading producer of renewable energy, including wind, solar, biomass, and hydroelectric energy sources. The total value of Colorado's Natural Resources and Mining production in 2016 is forecast to decline due to low oil and natural gas prices—34% lower than its peak value in 2014. Industry employment is also expected to continue to decrease in 2017, declining less than 1%.

Professional and Business Services—Professional and Business Services (PBS) Sector employment growth continues to increase, but at a slower rate. The sector is

COLORADO EMPLOYMENT CHANGE, 2016-2017



Source: Bureau of Labor Statistics (Seasonally Adjusted).

expected to post employment growth of 1.5% in 2016, down from 2.9% in 2015. Growth is projected to rebound to 2.3%, or 9,200 jobs in 2017. One of the main drivers of growth will be the come from the Professional, Scientific, and Technical Services Sector.

Trade, Transportation and

Utilities—TTU employment is anticipated to increase by 1.6% to total 461,800 jobs in 2017, with retail trade contributing the majority of industry growth. Retail sales forecast for Colorado calls for a 2.9% increase in 2016, slower than in year 2015, but stronger than current data suggest. Employment in this sector is forecast to increase by 6,600 jobs in 2017.

Education and Health Services—

Private education and health care services are expected to continue their trend modest growth, adding 12,100 and 10,600 jobs in 2016 and 2017, respectively. The majority of sector employment is made up of health care professionals, and the growing demand for health care is driven primarily by growth in the population and the expansion of healthcare coverage.

Leisure and Hospitality—Tourism-related employment is expected to grow by 10,800 jobs in 2016, marking the seventh consecutive year of growth. Colorado recorded a record number of visitors in 2015 thanks to a strong convention calendar and new lodging options in Denver, a gain in national park visits, and ski traffic that outperformed

the rest of the nation. Momentum in Colorado's tourism industry is anticipated to continue into 2017, with a forecasted increase of 12,100 jobs.

Government—Government employment within Colorado is expected to post a gain of 1.1% in 2017, driven by state and local government. Local government accounts for 60% of government employment in the state, the majority of which are teachers or staff in K–12 schools, and is expected to grow by 1% in 2017, roughly the same rate as Colorado's population. Local government benefits from higher home values and increased consumer expenditures as revenues come from property taxes and sales and use taxes. State tax revenues in Colorado are capped at a TABOR limit, and any excess revenues are refunded to taxpayers.

Financial Activities—The Financial Activities Sector is expected to continue to grow in Colorado in 2017, adding 5,300 jobs to reach total employment of 169,400. The forecasted increase in growth is driven by expectations of a stronger overall economy that provides more job opportunities within banking, insurance, and real estate. Financial Activities employment has recorded positive growth each year since 2012, illustrating a strong recovery from the recession.

Information—Broad but modest growth will be observed in the Information sectors, including publishing, film, telecom, and broadcasting. The


Information industry is expected to add 700 jobs in 2016 and grow by 1,100 jobs in 2017. Even as employment growth in the industry has fallen in recent years, the Information Sector continues to provide a substantial contribution to Colorado's GDP and ranks as one of the state's fastest-growing industries in terms of long-term output growth.

National and International

- Weak commodity prices will continue to negatively affect the agricultural and natural resources sectors, but will benefit consumers.
- Slowdown in the global economy and a strong U.S. dollar pose risks for Colorado's exports.
- U.S. GDP growth will likely remain in the 2 – 3% range in 2017.
- Changes in Fed policy will put upward pressure on interest rates.
- Inflation will remain in check for another year while interest rates remain low.

Colorado

- Employment growth will place Colorado in the top 10 states in 2017.
- Drought and weather fluctuations will cause volatility for agricultural producers.
- Strong in-migration will cause the demand for housing to outpace supply, resulting in higher home prices.
- In terms of population, Colorado is the second-fastest growing state in percentage terms. The state will continue to attract people from outside Colorado, contributing to an anticipated population increase of 100,000 people between 2016 and 2017.
- Colorado will sustain a sub-5% unemployment rate.

With Colorado's skilled workforce; high-tech, diversified economy; relatively low cost of doing business; global economic access; and exceptional quality of life, the state remains poised for long-term economic growth. 

For more information on each industry sector, visit colorado.edu/business/brd.

Executive Panel Health and Wellness

Michael Hansen

Opinions expressed by panelists reflect the most current market information available as of early December.

In recent years, the topic of employee health and wellness has been a source of much discussion. Wellness is more than just physical health, including financial health, emotional health, and workplace engagement. According to a recent Gallup poll, just 32% of American workers considered themselves engaged in their daily work in 2015. Through new and innovative programs, organizations are hoping to create healthier, happier, and more engaged employees.

In the executive panel at the December 5 Outlook Forum, four

state business leaders shared how their respective organizations have implemented employee wellness programs and discussed the results of their initiatives. The discussion was led by **Colleen Reilly**, the founder and vice president of Total Well-Being, a Telligent Company. Reilly was joined by **Bill Munn**, general counsel for Nelnet; **Matt Steinfort**, executive vice president of Zayo Group; and **Jeremy May**, president of ALPS Fund Services.

The session began by exploring the differences between a more traditional, participation-based wellness program and the various programs offered within each panel participant's organization. Munn explained the reasons for Nelnet's

focus on wellness, which goes back to the company's core value of providing a great place to work for its employees. Nelnet's executives recognized the need for employees to be healthy, as well as the resulting benefits to the company from a healthy workforce. Employees who are happy and healthy, Munn explained, provide better service and show stronger engagement throughout their work. While Nelnet's wellness program began by focusing on physical wellness, the program evolved to focus on financial and emotional health as well. Because of the program, Nelnet has seen higher employee engagement scores and lower healthcare costs, paying only roughly 70% of projected employee healthcare expenses.

Steinfort, responsible for Zayo's people, culture, and brand, described the company's wellness program as a results-driven approach, with the end goal not being lower healthcare costs but best-in-class employee engagement. Along with physical health, Zayo puts an emphasis on the financial health of each employee and professional development opportunities. The Zayo Academy program provides internal training opportunities for Zayo employees, and the company makes an effort to hire and promote from within the organization. Steinfort also emphasized that there is no "one size fits all" wellness program. Zayo has corporate specific programs and engagement goals, but different



Richard Wobbekind, Business Research Division, with executive panelists Jeremy May, ALPS Fund Services; Matt Steinfort, Zayo Group; and Bill Munn, Nelnet. Colleen Reilly, Total Well-Being, a Telligent Company, moderated the panel.




Colleen Reilly, founder and vice president of Total Well-Being, a Telligen Company

regions and departments have discretion when defining specific details. For example, bonus payouts are based on the performance of specific groups each quarter, and different offices throughout the country have different wellness seminars. Zayo has also attempted to phase out companywide email as its primary form of communication, replacing it with Chatter, a corporate social network designed by Salesforce. Steinfort and his team can look at discussions and comments throughout the network for feedback on the company's programs.

May described a unique approach toward wellness at ALPS Fund Services—a focus on mindfulness and emotional intelligence. The ALPS mindful leadership program introduces the concept of mindfulness to executives and top leaders within the organization. May stated that, as a leader, emotional intelligence is more important than just IQ, and believes that training employees will result in better emotional and mental wellness throughout the company. In May's discussions with employees months after the mindfulness training, employees indicated they were much

more engaged, while others shared that the program helped them combat depression and cut down on traditional medication. Recently, ALPS has been working with the Leeds School of Business at the University of Colorado Boulder to integrate behavioral health into the business school curriculum so students entering the workforce will be able to identify behavioral health issues and apply best practices.

The panel concluded with a discussion of strategies that organizations have used to successfully implement their programs, even when facing resistance from employees. Munn described the importance of explaining *why* the program is being implemented in order for employees to “buy-in” to the program. The panelists agreed that the desired results will not be achieved if workers see a wellness program as a corporate initiative designed to cut costs. Leaders must be able to show the purpose of the program, and implement the program gradually to allow employees time to adjust. While successful change can happen, it must match the culture of the organization. At ALPS Fund Services, May noted that introducing meditation concepts into a financial services firm was not well received initially, even by leadership. Rather than implementing the program as a single companywide initiative, he saw success by introducing it piece by piece to the firm's executives, allowing them to apply and expand the principles to their own departments as needed. Within ALPS, taking part in the program was voluntary and optional for all employees. Reilly also noted that she has seen more success implementing wellness programs when companies ask employees what they need and want when designing the program. Building programs through focus-group feedback from middle management is also beneficial. 

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Forum Breakout Session

Evolution or Revolution: Lessons from the Financial Services Industry

Lucas Oliveira

Opinions expressed by panelists reflect the most current market information available as of early December.

The financial services industry has experienced dramatic change in the past decades—whether from shifting client preferences, technological advances, or a dynamic regulatory environment. Due to the large amount of capital involved, the financial services industry is often the first to feel the impacts of environmental changes and is frequently the first to attempt to adapt to them. In a session moderated by **Ron New**, a capital markets consultant, panelists **Tobin McDaniel**, Schwab Wealth Investment Advisory, Inc.; **Michael Nguyen**, Evolv Capital; and **Gibson Smith**, formerly with Janus Capital Group, reviewed the current state of the financial services industry and discussed the industry's future.

New framed the session by expressing his belief that the changes in the financial industry have been more of an evolution than a revolution, and that “while there's been a lot of change, you've pretty much been able to see it coming.” Topics discussed in the session included regulation, demographics, and technology.

Regulation

The financial services industry attempts to take an objective survey of the current regulatory and legislative environment. According to New, “it doesn't matter who's in office, doesn't matter who the politician is, we look at the rules, we look at the regulation, we look at the legislation, and we're

trying to figure out, ultimately, how do we make money within that context.” Regulatory change requires careful analysis of new policies, translating into a financial burden and exertion of resources by firms in the industry. Therefore, gridlock and preservation of the status quo, usually in the form of one party in the executive office and another party controlling Congress, are usually preferred by Wall Street. Hence, with the upcoming political landscape of a Republican president and Congress, it will be interesting to see how potential regulatory changes in the short term will impact the industry.

Taking stock of where the economy currently stands as indicated by major U.S. indices, the stock market has shown strong growth in recent months, gaining even more fuel from what the market has treated as a pro-business election result. However, significant changes may lie ahead. McDaniel emphasized the importance of maintaining a balanced, diversified portfolio, and resisting the impulse of making large, reactive changes in response to current events.

Regulation, much like business and the markets, is cyclical. A deregulated environment, analyzed from the perspective of a financial industry employee, was, as stated by Smith “a lot easier, a lot more fun, and a lot more profitable.” Unfortunately, this environment brought many negative consequences, perhaps, most notably, greed. The financial environment of 2008 led to the passage of stricter regulations on Wall Street. According to Smith,

although this regulation may have been created to reprehend those who may have been in the wrong leading up to the crisis, the ultimate burden is being placed on the individual investor.

Smith claims that, “the [current] regulatory environment is putting an undue cost on the individual investor. It's stifling growth, it's stifling opportunity.” Although these regulations were enacted for the correct reasons, he believes that it is now time for change, and that the market will react positively to it. Essentially, the pendulum has swung too far in the regulatory direction and is poised to swing back. Analyzing the Dodd Frank Act specifically, Trump treasury secretary candidate and former Goldman Sachs banker Steven Mnuchin has expressed his intent to roll back parts of the act. However, Nguyen pointed out that Dodd Frank was implemented because of “Bear Sterns, Lehman Brothers, and AIG. That recapitalization of the banks has happened, it's worked,” and the banks have benefited from it. Now as the pendulum may start to swing back, he stated that being ahead of the regulatory cycle “creates a window of opportunity.”

A last note regarding legislation: both major political parties have agreed that there is a need for infrastructure improvement. However, these projects will be costly, and numbers such as a trillion dollars of spending are not out of reason. With infrastructure spending leading to more borrowing and more debt, interest rates are likely to rise to compensate for the additional risk. Smith asserted that current low interest rates

are a result of an artificial market created by the central banks, and he expects that the nation is advancing toward a higher interest rate environment.

Demography and Technology

Although the financial services industry has in some aspects progressed steadily, demography and technology have been drivers of rapid change in the industry. Many millennials have never lived in a world without the Internet, without the opportunity to google any question they may have, and without access to a super computer in their pockets. Technology has facilitated changes in the industry at a faster pace than ever before. These two intertwined topics were discussed extensively in the session.


In 2015, Charles Schwab launched Schwab Intelligent Portfolios, a fully automated robo advisory service. McDaniel explained that investors using this technology can “go online, answer a few questions, and have a portfolio built and managed for them.” Intelligent portfolios are diversified across asset classes and are automatically rebalanced, and they even automatically harvest tax-losses on investment declines to offset

taxes on investment gains. Schwab is not the only firm to offer a robo advisor, and with only a 0.3% advisor fee, the convenience provided is tempting for not only tech-savvy millennial investors, but for any individual looking to simplify their personal finances.

In fact, McDaniel stated that the average Schwab Intelligent Portfolio client is around 50 years old. He explains that although the younger population tends to be the early adopters, older individuals are increasingly transitioning to the service. Ultimately, investors today want the convenience of checking their investments and portfolios on their phones, regardless if the neighboring app is the *Wall Street Journal* or Snapchat. Over the 21 months that Intelligent Portfolios has been available, Tobin has noticed that most individuals are sticking with the service, even through difficult market trends such as the first quarter of 2016.

Although most individuals may envision the robo advisor client as someone with little investment knowledge or interest, Tobin explains that many investors are comparing robo advisor returns with their own actively managed portfolios. With more funds continuing to flow into

these low-cost investment vehicles, the future of both investment and financial management careers looks set for change. Nguyen proposed that this may take the form of transitioning to an hourly fee payment system rather than the amount under management system that is commonly used today. Pressures on active fund managers from low-fee investment vehicles, such as exchange-traded funds (ETFs), are another technological force shaping the industry.

Amid all these changes, Smith, who frequently mentors CU Boulder students, warns not to “underestimate this generation—they are wicked smart.” He is enthusiastic about the changes that millennials will create, stating that the students he mentors are “savvy, and they understand how the world works and how things function.” Given the changes and uncertainty facing the financial services industry, it is reassuring to know that the next generation of industry professionals are prepared to meet the challenges discussed. 

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Rep. Dan Thurow (R-Dist. 55); Philip P. DiStefano, chancellor at the University of Colorado Boulder; and Rep. J. Paul Brown (R-Dist. 59) at the 52nd annual Colorado Business Economic Outlook Forum in Denver.



Forum Breakout Session

Healthcare in the World of Analytics: Clinical and Business Decision Making Industry

Jackson Rueter

Opinions expressed by panelists reflect the most current market information available as of early December.

The Internet of Things (IoT) is becoming increasingly prevalent in modern society and influences the way that people interact with one another and businesses. In retail, for example, consumers on websites like Amazon are profiled, receiving suggestions for other products they might be interested in. Oracle is just one company that provides these services. In a session moderated by **Gregg Macaluso**, who heads the Business Analytics Program at the Leeds School of Business, panelist **Rick Maguire** of Oracle explored how big data will shape the future of the medical industry.

Maguire emphasized that the impact of complex—normally referred to as

“big”—data on the healthcare field is just beginning, and that the outcomes will benefit both patients and providers. Learning from different technologies, collecting data, and using the data to make actionable decisions is critical to an efficient healthcare system. Data are produced constantly by sensors, tests, and other technology, but it is useless without context. Maguire broke down complex data into four categories: data cleansing, data democratization, data security and governance, and the digital transformation. He emphasized that developing a method to understand complex data is crucial, noting, “It is not about the *data*, it is about *information*.”

Data Cleansing

Making data usable is the first step to taking advantage of the IoT in the healthcare industry. Data must be transformed as it comes in so that data scientists can use it effectively without creating bias or losing data. The data are then funneled into a data reservoir of information that has been “cleaned” and stored for further use. These reservoirs are where the mining begins. Data without context is “simply noise,” so researchers and informaticists like Maguire are tasked with using metadata (i.e., data about data) to frame and analyze data further. Having an effective process up to this point is critical so that the decisions based off the information derived from the data are correct and prudent. The implementation of a system like this to deliver quality healthcare outcomes has been referred to as

“precision medicine” by Pfizer: providing the right drug, at the right time, with the right dosage, for the right patient. As our understanding of medicine advances, the healthcare industry will move toward this goal, but it is not there yet. Organized data and additional data from sources like social media and wearable technology will help push healthcare to the level of precision medicine.

Democratizing Data

Ensuring that everyone has access to this data is also critical to the effective delivery of healthcare. Tier II and Tier III hospitals may not have access to data scientists or the same resources as Tier I hospitals, but still need to use the same information to treat their patients. “Our utility of data is limited by our ability to interpret and use it. It isn’t about the data, it is about the knowledge that we can gain from it,” Maguire said. Managing petabytes of information is difficult, especially when it comes to integrating different types of data. Evaluating data independently of other existing information diminishes the quality of outcomes, as well as reduces the ability of business leaders to make decisions using it. In healthcare, this means that professionals may have imperfect information regarding patients or the population they are treating. Maintaining accessibility to this information at all medical care centers will ensure that all patients have access to consistent treatment and a high quality of care wherever they go.





Richard Wobbekind, executive director, Business Research Division; and Kelly Brough, president and CEO, Denver Metro Chamber of Commerce


Data Security and Governance

In the age of information, data security and governance matter. Particularly in healthcare, with substantial privacy laws, the data generated by individuals and its transmission to medical care centers will be a core issue moving forward. Safeguarding data as it moves to care centers and is interpreted by data scientists is challenging because there are many opportunities for an individual's health data to be compromised. Data can be changed into the same information, regardless of whether it is intercepted at the source or from a database once it has been manipulated. With the right tools, the same story will be told either way. Compounding the issue, once the data have been interpreted and made into *information*, the security surrounding the storage and use of the data is another issue. A doctor that has access to a patient's complete medical history immediately sounds ideal, but it is easy to see where it can go wrong. Ease of access can

quickly become a breach given the right circumstances, and the sensitivity of healthcare information only magnifies the issue and need for solid data security.

The Digital Transformation

Our society is headed toward a streamlined, more remote system in the future. Disruptive advances in medical technology will shift the paradigm around how patients receive treatment. With the continued integration of technology and IoT into how patients receive care and how information is collected, this process will only continue. The benefits are numerous, including a higher quality of care at a lower price. Integrating data from Fitbits, heart monitors, glucose monitors, and insulin pumps will allow physicians today and in the future to adjust and predict treatments for patients on the fly, leading Maguire to predict that medicine will become *proactive* instead of *reactive*. The advent of smartphones and tablets will foster a better connection between patients and their healthcare

professional or medical center, improving the flow of information and treatment recommendations. Increasing this information flow also helps reduce "failures of care" as treatments are adjusted based on continuously new information. Providing end-to-end care focused on effective delivery of the right treatment, at the right time, for the right patient, is what data analytics can do for the healthcare field. Positive healthcare outcomes are the ultimate goal of the healthcare industry, and business analytics will revolutionize how patients are treated. 

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Forum Breakout Session

Colorado Real Estate: Is There Still Room for Growth?

John Griswold

Opinions expressed by panelists reflect the most current market information available as of early December.

National housing prices have recovered to their pre-recession peak (in nominal dollars), and the Colorado housing market is far outpacing national growth. The panelists in the real estate breakout session expressed a multitude of opinions regarding their respective submarkets; however, one point reigned true for all—that the Denver market is exceptionally hot and becoming excessively expensive. This session, organized by the Leeds School of Business Real Estate Center Academic Director **Tom Thibodeau**, explored whether there is still room for growth in the Denver market. The discussion featured representatives from the industrial, office, multifamily, single-family, hotel, and retail submarkets. The main factors contributing to the growth are increases in millennial population, expansion of job opportunities for professionals, and low interest rates contributing to mortgage borrowing. The census of the panel was that there is still room for growth, but that Denver is becoming the most expensive city for real estate that is not on a coast.

Industrial

Jessica Ostermick, director of Capital Markets, Industrial & Logistics, at CBRE, described the industrial real estate market as the “darling of the recovery.” Largely driven by e-commerce and the desire for streamlined shipping solutions, retailers are in dire need of

warehouse and distribution space. Firms like Amazon and Walmart are constructing massive regional distribution facilities in the Denver area to fulfill the needs of the entire Front Range. The industrial real estate market has experienced 26 consecutive quarters of net absorption and four years of vacancy rates below 5%. Urban redevelopment projects like River North, Central 70, and the National Western Stock Show project have driven out industrial tenants in favor of new apartments and retail use. These tenants are now in need of new space. This has fueled construction in the submarket as 10 million square feet of construction have been delivered since 2010. One notable risk is from the marijuana industry as its ongoing consolidation may cause pullback for industrial space. Ostermick sees modest room for growth in the industrial submarket; however, high construction costs and land constraints are inhibitors of extensive future growth.

Office

The Denver office submarket has experienced massive growth in both office space available and rental price as the city’s economy expands. In a two-year span, from 2014–2016, 2.9 million square feet of office space were built in the central business district (CBD) and North Platte valley, totaling 13% growth for the submarket. **Tim Harrington**, executive managing director of Newark Grubb Knight Frank, highlighted the tremendous development that the subsector has experienced throughout six years of

sustained growth and construction activity. Harrington suggested that high land costs in the CBD will fuel the desire for firms to tackle new frontiers like the River North Art District (RiNo), Stapleton, D4 Urban Development Project at I-25 and Alameda, and the Denver International Business Center. The most recent sale of land in the CBD, just west of Union Station in LoDo, sold for \$650 per square foot, compared to \$150 per square foot in locations like RiNo. Rather than “expanding up,” Denver will begin to “expand out” as the hunger for office space continues.

Apartment/Multifamily

When looking across the downtown Denver skyline, one can’t help but notice the multitude of cranes at work, many of them building new apartment complexes. Although it seems excessive to many native Denverites, **Scott Johnson**, division president of Lennar Multifamily, claims that the market is in equilibrium. From 2008–2016, the Denver population grew 9.5% while the number of apartments increased 10%. Johnson cites a shortage of housing, income growth, and a growing population for the 57% increase in projected rent prices from 2008–2018. For Lennar, occupancy rates are still above historical equilibrium as they have been running at 95%+ for the past five years compared to a 94% equilibrium. Millennials and empty nesters flocking to urban environments are driving the growth in multifamily and apartment housing as monthly rent prices are projected to reach over \$1,400 in 2018. Johnson believes

that there is still room for growth in the Denver market—demand is certainly there—however, new building is limited as construction loans are hard to come by.

Single-Family

The single-family housing market has still not recovered from the Great Recession as 2015 permits totaled only 11,000, running at 91% of the historical average. **Jeff Handlin**, president of Oread Capital & Development, highlighted that high demand, low supply, and low volume of new buildings are the factors contributing to the high cost of purchasing a home in Denver. The average cost of purchasing a single-family detached home in the Denver-Boulder MSA is \$520,000 compared to a national average of only \$360,000. A short supply of single-family inventory is partially due to the subcontractor capacity in this market; most subcontractors have left to work in multifamily. The number of new multifamily permits are running at 157% of the historical average. When analyzing population growth in Denver, millennials are driving demographic changes and they largely prefer to live in urban environment instead of a suburban location. Handlin believes there is significant potential for construction growth in the single-family submarket as the market is in need of lower-priced options.

Hotel

Since 2012, nearly 3,000 new hotel rooms have been delivered in downtown Denver, which has flooded supply and

decreased revenues. **Brett Russell**, director of business management at HSV, highlighted a multitude of factors affecting the hotel submarket, particularly as Airbnb gains significant traction. Russell projects that the high occupation rates of approximately 85% in recent years will fuel hotels to drive up prices through 2019 to reach maximum revenues and better manage the depreciation of their inventory. However, as new supply continues to hit the Denver market, Russell projects a slight pull back. Like nearly every other submarket, there is significant growth potential for the hotel industry in RiNo as new office space will promote business travel. The Colorado Convention Center will also serve as a catalyst for future growth in the CBD as its events continue to grow in size, thus fueling more hotel space for attendees. Overall, Russell sees modest room for hotel growth north of Denver and along the I-25 corridor; however, an oversupply of rooms will prompt a slight downturn in future years.

Retail

The Denver market has undergone serious downsizing in the retail space as shoppers prefer a “boutique” feel compared to a traditional “department store” atmosphere. **Tal Diamant**, shareholder with Brownstein Hyatt Farber & Schreck, discussed the new concepts driven by millennial shoppers. Traditional stores are opting for a smaller footprint, like the new “365” concept from Whole Foods, featuring similar products in a more intimate atmosphere. Another

trend is the growing concept of shared spaces as compounds like “The Source” and “Galvanize” bring together retail and businesses in a shared space for increased social interaction. As the Denver retail market is mostly driven by millennials, large Sears and Bally’s Fitness facilities are being broken up and leased to smaller, more boutique firms like Orange Theory and Pure Barre. While Diamant sees room for growth in the retail market subsector as rental rates plateau, the space will continue to change as millennial shoppers encourage the development of new concepts. 

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that high-quality care increases the overall health of a community, which, in turn, lowers premiums. Increasing the health of a community can also come from making care more convenient and accessible. This can be accomplished in many ways, such as creating smaller, less expensive clinics, mobile clinics, or the use of communication technologies that allow patients to instantly message doctors. Lyon also discussed a care plan used by Kaiser Permanente called “Primary Care Plus,” where nurses are dispatched directly to patients’ homes. This reduces hospital fees for those patients. Programs like Primary Care Plus decrease costs, thus increasing the affordability and access of health care.


Lyon contends that the value of health care offered to patients in Colorado has been increasing over the past few years. Between 2010 and 2015, hospital readmissions have decreased by 9.2% in the state. A reduction in hospital readmissions is a signal that the care provided is improving.

Coverage, the last of the “three Cs,” refers to the access to health insurance by consumers. Approximately half of health coverage in Colorado in 2015 was provided by employers, and this has been decreasing for several years. The percentage of people covered by

Medicare and Medicaid was 38% in 2015, and unlike coverage provided by employers, that percentage is growing. About 8% of health care purchasers are individuals, and this percentage is rising as well. The percentage of uninsured people in Colorado has decreased significantly over the past five years. About 16% of Colorado residents were uninsured in 2011, and in 2015, that number decreased to approximately 7%. According to Lyon, the majority of the reduction in Colorado in the rate of uninsured is due to Medicaid expansion. From 2010 to 2015, the U.S. population has grown about 4%, while the number covered by Medicare and Medicaid has grown 27%.

According to Lyon, the number of employers participating in cost sharing with employees has grown from 10% in 2006 to 46% in 2015. Also, about six million people nationally choose to pay a fine rather than purchase health care. This indicates that those people are not finding value in health insurance.

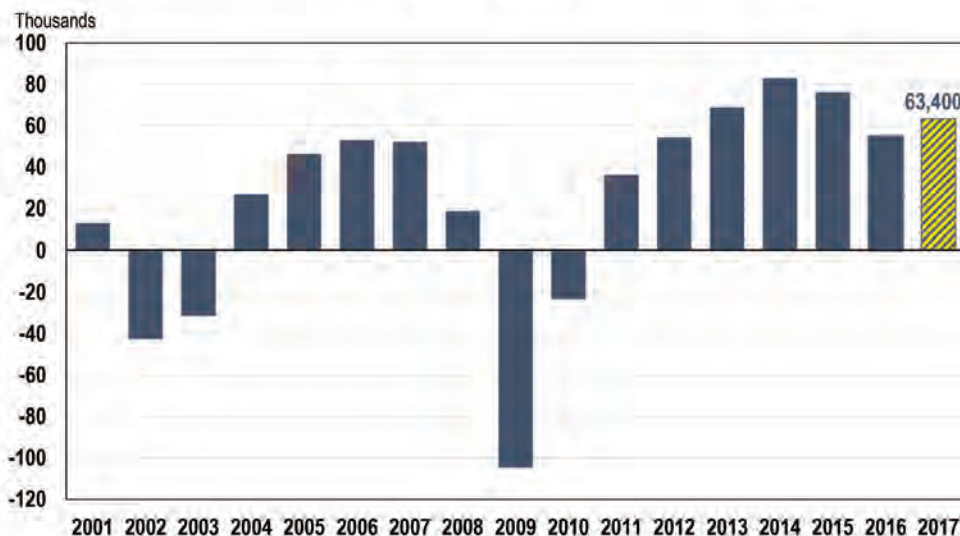
Lyon concluded his keynote address by stressing the importance of people taking a larger responsibility for their own health. He believes that health care costs would decrease to a quarter of their current level if everyone focused on HEAL. Lyon cited a 2007 health study

published in *The New England Journal of Medicine* titled “We Can Do Better—Improving the Health of the American People.” It reported that 40% of one’s health is due to individual behaviors and 20% is due to social and environmental factors. 

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COLORADO BUSINESS REVIEW

COLORADO EMPLOYMENT GROWTH JOBS ADDED



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