Forum Keynote Address

Colorado: Learn, Live, Grow, and Embrace Community Capitalism

Jackson Rueter

Colorado is in the midst of record state in-migration and an economic boom. Cultivating and attracting the right people is essential to effective talent management and strategy. This will help the state to continue to grow its highly educated workforce and remain an economic leader.

Kent Thiry, chairman and CEO of DaVita HealthCare Partners, believes that Colorado’s vibrant economy is a great place to do business. In 2009, DaVita announced it was moving its headquarters from El Segundo, California, to Denver because of the state’s economic potential, as well as Denver’s central location and high quality of life. In his keynote address at the 51st annual Colorado Business Economic Outlook Forum, Thiry highlighted the importance of talent strategy in Colorado and its role going forward. “The good thing about talent strategy is that all you have to do is be better than the other guy,” said Thiry to an audience of around 900. He detailed four keys to successful talent strategy for the state: be a differentiated place to learn, be a differentiated place to live, be a differentiated place to grow, and embrace community capitalism.

Place to Learn

Thiry began his discussion of education in Colorado by saying, “Education is everyone’s issue,” noting that the future of the nation will be determined in the classroom. Thiry continued that education provides an excellent return on investment in terms of both economic and citizenship returns. Delivering the right education to the right people at the right time is critical to quality education, but education must also be pursued by students.

America’s higher education system is “the envy of the world” and is a source of competitive advantage for the United States. However, there are ways in which higher education in the United States can improve. To begin, Thiry stated that conventional four-year undergraduate programs are not for every student and can lead to unfulfilling

continued on page 9
From the Editor

As highlighted at the 51st annual Colorado Business Economic Outlook Forum held on December 7 in Denver, employment growth is expected in both goods-producing and services-providing sectors in 2016. The half-day event featured an employment forecast for 13 industry sectors and a keynote address by Kent Thiry, chairman and CEO of DaVita HealthCare Partners. Three industry breakout sessions and a CEO panel discussion 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 at 303-492-1147 with questions or comments.

Richard L. Webbekind

The following observations summarize the thoughts of the Colorado Business Economic Outlook committee members as of early December for 2016.

Job growth peaked in Colorado in 2014, with 78,900 additional jobs in the state, resulting in the best year of employment growth since 2000 in both absolute and percentage change (3.3%). Employment growth continued in 2015, albeit at a slightly slower pace—73,700 jobs, 3% growth. The forecast for 2016 includes 64,400 jobs, or 2.6% growth, as the state faces labor force and infrastructure constraints.

Beginning in 2012, Colorado has recorded employment growth not seen since the tech boom years leading up to the 2001 recession. Continuing a long-term trend, Colorado will add more services jobs in 2015 and 2016 than goods-producing jobs. However, the pace of growth in goods-producing industries has collectively out-paced services post-recession, growing more than 23% from 2010 through 2015 compared to 13% for services.

The goods-producing sectors will increase their employment base in 2016.

Agriculture—Gross farm revenue will decrease faster than expenses in 2016, leaving farmers with the lowest net farm income since 1997 under the auspices of commodity price declines.

Construction—Household formation continues to exceed the growth in housing units in Colorado, adding fuel to the construction industry and to home prices. Coupled with growth in nonresidential and infrastructure construction, Colorado is poised to record the second highest value of Construction on the books in nominal (not inflation-adjusted) terms, increasing 10% year-over-year. Industry employment is forecasted to increase 5.8% in 2016, leaving the industry 2.9% below peak levels recorded in 2007.

Manufacturing—Following a decade of decline, employment is expected to increase for the sixth-consecutive year in 2016, growing 1.6% compared to 2.7% growth in 2015. A decrease in exports is cited as a drag on industry growth. Most industry growth will come in durable goods.

### Summary of Forecast

Colorado Employment Will Continue to Expand in 2016 but at a Slower Pace

The goods-producing sectors will increase their employment base in 2016.

Agriculture—Gross farm revenue will decrease faster than expenses in 2016, leaving farmers with the lowest net farm income since 1997 under the auspices of commodity price declines.

Construction—Household formation continues to exceed the growth in housing units in Colorado, adding fuel to the construction industry and to home prices. Coupled with growth in nonresidential and infrastructure construction, Colorado is poised to record the second highest value of Construction on the books in nominal (not inflation-adjusted) terms, increasing 10% year-over-year. Industry employment is forecasted to increase 5.8% in 2016, leaving the industry 2.9% below peak levels recorded in 2007.

Manufacturing—Following a decade of decline, employment is expected to increase for the sixth-consecutive year in 2016, growing 1.6% compared to 2.7% growth in 2015. A decrease in exports is cited as a drag on industry growth. Most industry growth will come in durable goods.

#### COLORADO EMPLOYMENT CHANGE FORECAST 2015–2016

<table>
<thead>
<tr>
<th>Professional and Business Services</th>
<th>Education and Health Services</th>
<th>Trade, Transportation, and Utilities</th>
<th>Construction</th>
<th>Leisure and Hospitality</th>
<th>Government</th>
<th>Financial Activities</th>
<th>Manufacturing</th>
<th>Other Services</th>
<th>Information</th>
<th>Natural Resources and Mining</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="chart1.png" alt="Professional and Business Services" /></td>
<td><img src="chart2.png" alt="Education and Health Services" /></td>
<td><img src="chart3.png" alt="Trade, Transportation, and Utilities" /></td>
<td><img src="chart4.png" alt="Construction" /></td>
<td><img src="chart5.png" alt="Leisure and Hospitality" /></td>
<td><img src="chart6.png" alt="Government" /></td>
<td><img src="chart7.png" alt="Financial Activities" /></td>
<td><img src="chart8.png" alt="Manufacturing" /></td>
<td><img src="chart9.png" alt="Other Services" /></td>
<td><img src="chart10.png" alt="Information" /></td>
<td><img src="chart11.png" alt="Natural Resources and Mining" /></td>
</tr>
</tbody>
</table>

Thousands of Jobs

Source: Colorado Business Economic Outlook committee.
Natural Resources and Mining — Colorado ranks seventh in the nation as an energy producer, with abundant oil, natural gas, and coal. Other resources, such as molybdenum, uranium, and aggregates, lead the state to have the fifth-highest number of industry workers nationally. Total value of production descended from record levels in 2015, mostly due to lower oil and natural gas prices. The industry should see a modest increase in value in 2016 on more stable pricing; however, employment will decrease 4.2%.

The outlook for services employment shows growth in every sector in 2016.

Education and Health Services — Private education and health care services are expected to add 10,900 jobs in 2015, demonstrating resilience both during and after the recession. Most of the growth will be in health care, driven by population growth, accessibility, and demographic shift.

Professional and Business Services — This industry will record the most employment growth in 2016, increasing by 15,500 jobs, as an expanding economy lends demand for core industry services. The industry is building on gains in the Professional, Scientific, and Technical Services subsectors related to Colorado’s high-tech industries and research institutions; the state records a 33% higher concentration of Professional, Scientific, and Technical Services Sector employment than the nation.

Trade, Transportation, and Utilities — TTU employment is anticipated to increase by 10,800 in 2016, with retail trade contributing more than half of industry growth on the basis of a stronger economy and healthier consumer. Retail sales are anticipated to rise 5.6% in 2015.

Leisure and Hospitality — Colorado’s tourism industry will continue to grow in 2016, building on greater capacity in hotels and convention centers, and positive early signals for skier visits, gaming proceeds, and visits to Colorado public lands. This sector expects growth of 9,000 jobs in 2016.

Government — Government employment will increase modestly in 2016, growing 0.8%, with the greatest gains in local (K–12) education, and the weakest growth in federal government employment. Local government finances show greater stability due to rising property values (property taxes) and increased consumption (sales and use taxes). State finances have also been increasing with population growth and economic expansion, but are dampened by TABOR revenue limits.

Financial Activities — The Financial Activities Sector will grow in 2016 on the foundation of an improving overall economy that supports more banking, insurance, and real estate employment. The industry is projected to add 2,100 jobs in 2016, mostly in banking.

Information — The industry turned the corner in 2014, with modest growth in telecom, broadcasting, and film that barely offset losses in the publishing sector. The industry will record modest gains in both 2015 and 2016. Industry GDP continues to climb on productivity gains.

National and International

- Weak commodity prices will have repercussions on the agriculture and natural resources industries, but lend a boost to consumers.
- U.S. GDP growth will likely remain below 3% in 2016.
- The reversal of Fed policy may begin putting slight upward pressure on interest rates.
- Inflation will continue in check for another year, and interest rates will remain at low levels, even with policy moves.

Colorado

- Employment growth will place Colorado in the top 10 states in 2016.
- El Niño may cause volatility for agriculture production, as well as tourism.
- Home prices will continue to creep higher in Colorado as inventory is absorbed, making housing affordability a detriment to some communities in the state.
- In terms of population, Colorado is the fifth-fastest growing state in the nation in percentage terms. The state will continue to attract people from out of state, which will contribute to population growth of 1.7%.
- Colorado will sustain a 4% 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 is poised for long-term economic growth.

For more information on each industry sector, visit colorado.edu/business/brd.
Colorado CEOs Discuss State’s Workforce

Justin Lau

Colorado’s robust job growth and thriving economy grabbed national headlines in 2015. In the CEO panel, five business leaders shared their insights on the Colorado economy and how the companies they represent are positioning their businesses to best recruit and retain workforce talent. The businesses are in vastly different sectors: products manufacturing, health care, telecommunications, and financial services. Ellen Balaguer, a retired senior executive with Accenture, led the discussion. Panelists included Mary Rhinehart, chairman and CEO of Johns Manville; Joe Mello, COO of DaVita HealthCare Partners; Matt Erickson, president of physical infrastructure of Zayo Group; and Brian McDonald, SVP of client service and support at Charles Schwab.

Balaguer led the session with a brief overview of the job market and education’s impact on the labor force. By 2020, 74% of jobs in Colorado will require post-secondary education; this is the third-highest percentage in the nation. For the high school graduating class of 2020, only 23% are projected to attain post-secondary education. This suggests that the state will be in a large talent deficit by 2020 if it continues on its current course. Balaguer believes that Colorado must “significantly increase our overall talent” to accommodate future needs. In addition, the focus of employment should be on embracing diversity. In Colorado, 16% of the current workforce is Hispanic, but more important, 31% of the upcoming high school graduating class is Hispanic. It is imperative that Colorado’s employment base evolve into an increasingly diverse workforce.

The discussion transitioned to the Colorado economy. Rhinehart believes that an emerging problem is the affordability of housing, especially for millennials since they often prefer living close to city centers. Also, Rhinehart commented that Colorado needs to develop more skilled labor. For her, construction labor will play an even more significant role in supporting the growth of Colorado in the future.

When panelists were asked about recruitment and retention, two underlying themes were present in all responses: culture and diversity. For Mello, recruitment success lies in retention. Companies with high retention rates are attractive to employees. Giving employees the opportunity to grow within the company, considering family needs in the employment equation, and creating a culture that promotes giving back to the community are a few of the methods DaVita employs to retain and recruit talent. For Rhinehart, the retention focus of Johns Manville’s business is on employees nearing retirement age. The big issue she is tackling is how to retain and transfer knowledge as employees retire. She suggested a step-down retirement system so employees can slowly step away from the job instead of leaving it all at once. In addition, Rhinehart emphasized the importance of keeping women in the workplace as diversity is an ongoing issue.

Erickson and McDonald said their companies are focusing on recruiting millennials now for future company development. Zayo Group attracts millennials by positioning their offices near city centers and offering lenient family leave policies and the option to work from home. In the financial services sector, the average age of a financial advisor is 57 and a large percentage of them are white males. Going forward, McDonald emphasized that all companies really need to “reframe the way we think about our workforce.”

The panel concluded with a discussion of business and government collaboration. All panelists acknowledged that it is vital for their businesses to continue to foster and grow relationships with local communities and government. For Charles Schwab, this has meant collaborating with other major investment services firms and the state to create the Colorado Investment Services Coalition (CISC). The consortium focuses on talent attraction and development within the investment industry through concerted partnerships with area colleges and universities. A notable partnership was created in 2015 when Charles Schwab entered into a five-year commitment with the Leeds School of Business at the University of Colorado Boulder to develop and invest in a certified financial planner (CFP) program. Development of the program began that fall.

Justin Lau is a Research Assistant with the Business Research Division and may be contacted at justin.lau@colorado.edu.
Company Overviews

Johns Manville
• Johns Manville, a Berkshire Hathaway company, is a global building and specialty products manufacturing company.
• Since 1988, Johns Manville's global headquarters has been located in downtown Denver. It employs 7,000 people globally.

DaVita HealthCare Partners
• DaVita HealthCare Partners provides variety of health care services to patient populations in the United States and globally.
• The Fortune 500 health care company, which is headquartered in Denver, currently employs about 1,700 people. A planned expansion, with ground breaking scheduled for July, will add space for another 1,200.

Zayo Group
• Zayo Group is a global provider of bandwidth infrastructure services.
• Headquartered in Boulder, the company went public in 2014, raising $287.8 million in its IPO.

Charles Schwab
• A financial services provider, Charles Schwab manages $2.55 trillion in client assets, including 1.5 million corporate retirement plan participants.
• The firm plans to consolidate jobs around the state at its Lone Tree campus, which will ultimately employ approximately 4,000 workers.
Opinions expressed by panelists reflect the most current market information available as of early December.

Colorado’s unemployment rate has been decreasing since 2010, to an estimated low of 3.6% for November 2015 according to the Colorado Department of Labor and Employment. The labor market continues to be very strong in the state; the Colorado Business Economic Outlook Committee estimates around 65,100 jobs will be created in 2016. Panelists in this breakout session, moderated by Joe M. Barela, regional workforce director with Arapahoe/Douglas Works!, talked about the ways low unemployment can hamper recruitment.

Speakers were: Marc Butler, founder and CEO of JR Butler Inc.; John Carlson, executive director of the Colorado Brewers Guild; Noel Ginsburg, chairman and CEO of Intertech Plastics; and Lou Trebino, managing director of KPMG in Denver. The session first centered on how the strong economy affects recruitment and retainment of good talent. Then the panelists discussed their strategies for recruiting and retaining local talent.

The session began with Barela pointing out that the number of job postings has increased. Every company that lists a job on the labor market must post that job, on average, nine times to fill it. As the economy has recovered, Barela has seen the job postings increase while hiring has remained flat, indicating that while there is demand for employees, there is increasingly a lack of supply. Colorado, and the Denver MSA, specifically, saw unemployment rates dip below 4% in 2015 as the region returned to full employment.

Barela also pointed out the role of the “gig economy,” which consists of people employed for part-time work, usually on contract, in contrast to a full-time job. While the number of jobs that constitute part of the gig economy has increased, the percentage of those jobs has declined to around 8% of the total workforce. While there is an entrepreneurial trend in Colorado, the workforce participation rate has increased at a faster rate than the gig economy.

Trebino spoke further on this as he noted that there are many more changes occurring in the workforce, particularly changes in workforce demographics, than what he has seen in the past few years. KPMG’s clientele and C-suite executives are becoming more diverse, prompting KPMG to find talent from nontraditional backgrounds. This is what led the company to locate the first KPMG Ignition Center in Denver, reflecting the city’s livability and economic growth. As the company grows, Trebino noted it is having difficulties attracting and retaining talent. In response, KPMG has developed specialized career paths for employees, ranging from high-tech to health care.

Moving to manufacturing, Carlson spoke about the growth the craft beer industry is experiencing in Colorado. The industry has grown to more than 6,000 workers and contributed $1.15 billion to Colorado’s economy in 2014. As the industry expands, so does the demand for a wide range of jobs, from chemists to accountants and lawyers. Breweries are also increasingly interested in developing innovative packaging. Recently, Colorado State University developed a food science program to meet that demand. Colorado’s craft brewers expect to keep growing across the state.

Ginsburg discussed Intertech’s problems acquiring good talent in Colorado. In his experience, the main reason for this is that traditional areas of supply—from trade schools to apprenticeships—no longer exist. During the recession, more than 600,000 manufacturing jobs went unfilled nationally, while at the same time there were thousands of unemployed people. To help connect workers to jobs, the Colorado Advanced Manufacturing Alliance created BASIC, Business and Schools in Collaboration, to develop a new pipeline for business. Intertech has developed apprenticeships so students and teachers can see these employment opportunities in manufacturing and drive interest in the field. What Ginsburg learned from the experience building the program is that the industry is not taking charge. It is failing to do its part in training talent. He described a lack of a formalized system for ushering individuals into manufacturing careers. This also costs businesses as they lose contracts because they do not have a domestic workforce with the necessary skills. During a recent visit to Switzerland, Ginsburg found that the country has an apprenticeship program that teaches young adults about trades. The apprentices learn skills that can be used in industry and earn good wages in the meantime. A delegation from the Business Experiential Learning Commission will visit Switzerland in
January to learn about this program and determine how it might be implemented in Colorado.

Butler commented about the shortage of available workers in the construction industry. Many construction workers left the industry during the recession to work in other fields. This has put pressure on the sector to look for talent in other areas, often at workers who may have difficult backgrounds and family situations. These individuals may not be "work ready," lacking life skills, from basic finance to conflict resolution. In response, Butler created the Elite Team, a program that teaches job skills and life skills, including leadership training, basic finance, and etiquette to develop good character. The program is relatively small but is very successful, providing strong leaders for the field.

Overall, finding employees in a full employment market is what Butler describes as "a forced march."

The panel was concerned about not only about the acquisition of new talent, but the aging of their workers as well. The best strategy in the short term might be to acquire workers from other companies, but this is not efficient and sustainable in the long term. Another issue the panel discussed is that many employees do not have the diverse set of skills that allow them to succeed, specifically writing and critical thinking skills. In general, the business community needs to address these workforce issues now to take advantage of the current strong economy and prepare for the loss of employees who will be leaving the workforce in the coming decades.

Heberto Limas-Villers is a Student Research Assistant with the Business Research Division. He may be contacted at heli8827@colorado.edu.
Making Sense of Commodities Prices

Jackson Rueter

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

The commodities sector in Colorado can be broken into three categories: agriculture, metals, and natural gas and oil. The state experienced an oil and gas boom coming out of the recession, though with the crash of oil prices in 2014, the industry is beginning to shrink. The story for natural gas and oil production is much the same. Production reached a record high in 2014 and will likely remain stagnant or fall in 2016 with the price decline. Agricultural commodities have fallen in the last year; however, a rebound in some prices is expected in 2016. A number of recent economic developments have been affecting the price of commodities, mainly the rising strength of the dollar and China’s changing demand.

Agricultural commodities are varied in terms of price decline in the past year as they tend to be more insulated from economic fluctuations. Dan Kowalski of CoBank gave an overview of agricultural commodities in 2016, including lower price volatility than in recent years. There has been a shift from a demand-driven market to a supply-driven one as supply grows. Overall, the trend is a slight decline in the price of agricultural commodities. Going forward, the predicted rise in interest rates and the strength of dollar will impact agricultural commodity prices, though not as much as is widely believed. China also heavily influences prices. With food spending growing in the country (5% in 2015), China is expected to aid in the rebound of some commodity prices. Corn and wheat prices have declined over the last year and are anticipated to do so in 2016, and supply will contract. The beef supply, which has been low in recent years, is forecast to increase in 2016. Currently, the large milk supply is expected to contract, which will cause a price increase in 2016 and greater price volatility.

Stuart Sanderson with the Colorado Mining Association highlighted how the mining of metals and coal in Colorado are a boon for the economy. In 2015, mining contributed an estimated $8.8 billion to Colorado’s GDP while supporting 73,450 jobs. Colorado is currently the top molybdenum producer in the United States, the 4th-ranked producer of gold and the 10th-ranked producer of coal. Molybdenum is used in a variety of ways, including alloy steels, solar panels, and flat panel displays. Demand for molybdenum is decreasing, most notably in China. As a result, the Henderson Mine announced in October 2015 that it will reduce production by 45% in 2016. Both the Climax and Henderson mines are expected to continue operations in 2016.

Gold in Colorado is produced almost exclusively by the Cripple Creek and Victor Gold Mine near Victor, Colorado. Newmont Mining, based in Greenwood Village, Colorado, announced in June that it will buy the Cripple Creek and Victor Mine for $820 million from AngloGold Ashanti Ltd.

Colorado also holds the only pure natural nahcolite (commonly known as sodium bicarbonate, or baking soda) deposit in the nation. Gypsum for wallboards and lime-stone for concrete are two other Colorado mining products, and prices are expected to rise as the housing boom continues.

Colorado coal is also known as "compliance coal" due to its low sulfur content. This “clean coal” produces roughly 60% of energy in Colorado, and coal is currently the fastest-growing energy source worldwide. In 2016, coal production is expected to continue declining as the price of natural gas remains low and Front Range power plants switch to natural gas. The Clean Power Plan will also have a negative impact on coal production as it mandates the reduction of greenhouse gas emissions from power plants nationwide.

Michael Orlando, with Economic Advisors Inc. and University of Colorado Denver, noted that natural gas and oil are heavily influenced by technology, policy, demand, and the pricing strategy of the Organization of the Petroleum Exporting Countries (OPEC). The supply of natural gas is growing as technology improves. With the low price of natural gas and tighter regulation of emissions, natural gas is experiencing increased demand as coal-fired power plants are being replaced.

The shale oil boom stagnated in 2015 as production plateaued and jobs were cut due to consistently low prices. The WTI Spot Price sank to $40.40 per barrel for the week of December 4, 2015, the lowest since the start of 2010. OPEC, led by Saudi Arabia, has increased production to just under 32 million barrels per day in an effort to retain global market share by squeezing out higher-cost competitors. Growth in global demand for oil has slowed in line with moderation in China and other developing countries. As a result, U.S. oil inventories are expected to expand into early 2016 as well, further staving off potential price increases. Oil prices are expected to remain low in the short and medium term, but 2016 is forecast to see oil prices bottom out and then slowly rebound.

Jackson Rueter is a Student Research Assistant with the Business Research Division. He may be contacted at jackson.rueter@colorado.edu.
careers for some who are thrust into higher education unnecessarily. He added that reallocating existing resources within higher education to develop and promote areas like computer science are key to meeting future labor demands. Vocational schools also play an important role in higher education by creating highly skilled labor that can lead to a high quality of life and middle class income, in addition to providing better services in the economy.

K–12 education is crucial to maintaining and developing a highly educated workforce. There are three keys to effectively develop K–12 education over the next 10 years: transparency, accountability, and choice. Thiry notes that to achieve transparency and accountability, creating comparable metrics is essential. The quality of teachers and teacher training needs to increase as well. While some suggest that charter schools are the answer to advancing K–12 education, Thiry emphasized the importance of the traditional school system to wholly serve students. University programs for K–12 teachers further student development in the classroom and provide additional training to teachers. Teachers who go through these programs often have more growth opportunities, are more engaged, work more cohesively in teams, and are more aware of district priorities.

Early childhood education has the potential for the greatest return of any level of education in the state. Establishing a more comprehensive early childhood education program is important for families where both new parents must work, so that children are exposed to discourse, reading, and other activities at an early age. High-quality education is achieved through an engaged community.

**Place to Live**

According to Thiry, Colorado needs to maintain its affordable, livable downtown areas. To continue to attract educated talent, Colorado’s affordability must remain high in urban areas because that is where young people want to live. Embracing diversity and inclusion is also key as the United States becomes more diverse demographically, so that high-level talent will immigrate to Colorado. Maintaining the quality of life within the state will also encourage other talent to move here while retaining existing human capital.

**Place to Grow**

Strong growth and a positive business climate in Colorado need to be maintained going forward as more people and businesses move to the state.
Opinions expressed by panelists reflected the most current market information available as of early December.

Nominal house prices in Colorado have been higher than U.S. nominal house prices since 1993. Today, the gap is wider than ever before. In 2015, Denver and Boulder were among the hottest real estate markets in the nation. This breakout session, organized and moderated by University of Colorado Real Estate Center Academic Director Tom Thibodeau, tackled the question of how long the real estate boom will last in the Denver Metro area. The session examined the industrial, office, single-family, multifamily, and hotel markets. The outlooks were mixed, although the majority of panelists were cautiously optimistic. The main factors expected to contribute to growth include rising population, low interest rates, continued job growth, and Denver’s ability to attract top talent. The consensus is that housing will continue to show strength in 2016, but not at the rate seen these past years.

**Industrial**

The national industrial real estate market experienced tremendous growth in 2015, and Denver was no exception. Nationally, business inventories and the industrial production index were at all-time highs while availability rates were at the lowest point, 9.6%, since 2001. Panelist Tyler Carner, with CBRE, discussed several strong indicators of health in the Denver market, including a record low vacancy rate (4.6%), 22 consecutive quarters of positive net absorption, and a 5% year-over-year increase in lease rates as of Q3 2015. Denver made a full recovery to pre-recession levels in 2014; new peaks were set in 2015.

Contrary to popular belief, the continued growth of the Denver industrial market has not been solely due to the emergence of marijuana. The marijuana market only makes up 2.6% of the total industrial real estate market, occupying a total of 3.7 million square feet. The true drivers behind the market were the strong fundamentals. Denver’s economic strength, ability to attract a qualified workforce, exposure to the tech industry, and a hot housing market are all reasons why Denver’s industrial real estate market will continue to grow for the foreseeable future.

E-commerce serves as the national market’s main driver of growth. Online retailers have utilized an increasing amount of warehouse space in order to gain geographical advantage for faster delivery times. The emergence of e-commerce has not been felt in Denver’s industrial market, but Carner believes that it will only be a matter of time before e-commerce emerges in Denver, driving up prices for industrial space.

In addition, Denver has fared well in the face of volatile oil prices in 2015 due to its low exposure to energy companies. However, Northern Colorado has experienced the opposite, and its industrial market is expected to soften as oil production in the Denver-Julesburg Basin stalls. According to Carner, there is no Achilles’ heel to Denver’s market as all fundamentals are strong. The greatest risk he perceives is nationwide macroeconomic uncertainties.

**Office**

Nationally, fundamentals for the office market remain strong due to soaring corporate profits and healthy bank balance sheets. In Q3 2015, office asking rents increased 2% year-over-year nationally while Denver increased 6% year-over-year. Denver is in the seventh inning according to panelist Doug Wulf, who is with Cassidy Turley Fuller Real Estate. He implies that the boom is not over but may be a little less exciting going forward. Although he believes that Denver markets in general will have tempered growth, he thinks the following markets will remain hot: River North Art District (RiNo), Lower Downtown (LoDo), Cherry Creek North, South Broadway (SoBo) to the former Gates Ford campus.
rubber factory, and the Southeast Corridor of Denver’s Transit Oriented Development. Denver is expecting job growth but that is anticipated to decrease in the future, driving absorption lower. In addition, physical construction and land costs have been increasing over time. That, along with the limited number of well-located sites, will further limit new office supply in the future. Even with factors limiting future supply, Denver is still expecting delivery of 1–2 million square feet per year during 2016–2018 that will not exceed tenant demand.

One trend that is continuing to evolve in the office market is the rent gap between Class A and Class B properties. The spread is the highest it has been in recent years, suggesting that more tenants are willing to pay more for quality. The emerging rent gap is expected to widen in the upcoming years as tenants continue to gravitate toward more vibrant and amenity-rich sites. Similar to the Denver industrial market, falling oil prices have not significantly impacted the Denver office market. This is because only 6% of the Denver economy is linked to energy compared to Houston, with 17% of its economy linked to energy.

**Single-Family**

Panelist Jeff Handlin, with Oread Capital & Development, reminds us that the boom in residential real estate has really been a two-sided story. For the landholders and developers, the cycle has been healthy. For the homebuilders, the combination of low interest and high prices have prohibited them from the “boom” some have experienced. The average new single-family home is at an all-time high of $480,000 in Denver. This a 17% increase over the past two years when evaluated on a rolling 12-month average. Prices overall have been driven by increased demand but another trend is emerging: fixed costs of houses are increasing. The increased costs of municipal permits and rising water costs are two factors that have bumped up the cost to build a home today. Handlin considers this a problem as it is slowly eliminating the entry-level single-family home. The nearly 3,000 decrease in annual single-family building permits highlights that new home volume has also been slow to recover. This is currently creating a shortage of housing, especially in areas in or near city centers. Handlin believes that the current new-home volume and overall supply of new single-family homes is simply not there.

**Apartment/Multifamily**

Panelist Scott Johnson with Lennar Multifamily thinks that the growth of multi-family markets will continue but at a much more moderate pace. Year-on-year rent growth in Q2 2015 was 9.9%, up from 9.5% in the previous quarter. The increase in rent is a positive sign of demand, but the percentage increase is unprecedented and unsustainable for any housing market. Future projections show rent growth returning to more sustainable levels (3–5%) in the next three years. In that time span, occupancy projections are anticipated to remain above 94% even with positive projected net migration. The trailing four quarters of absorption was 8,500 units in Denver, double the usual amount of absorption. In 2014, net completions totaled 8,149 apartment homes; from 2015 to 2018 that number is projected to be around 7,000 per year, with roughly 3,000 per year from downtown Denver. Among the factors that may hinder future multifamily real estate in Denver rent growth are a lack of growth in the high-income bracket (above $75,000) and a worker shortage. In 2014, the average annual household income in downtown Denver was $91,961.

**Hotels**

Brett Russell with HVS thinks that Denver hotels will experience similar performance patterns to the national hotel market. Nationally, occupancy is expected to stabilize in the next three years, and the average daily rate is expected to increase the next two years. Hotel values, occupancy rates, and revenue per available room are expected to decline in the Denver Metro area after 2016, similar to the national trend. The number of hotel rooms currently in the pipeline is more than 5,600, and this supply, along with future construction, is expected to make hotel values dip slightly. Even with moderate expectations, Denver hotels are still seen as extremely attractive investments to real estate investment trusts (REITs). Notable 2015 hotel purchases by REITs include the acquisition of the $72 million Crowne Plaza Denver Downtown and the $86 million Curtis Hotel.

Justin Lau is a Research Assistant with the Business Research Division and may be contacted at justin.lau@colorado.edu.
economic system of a community, of a society, of our country, should be designed to serve the country and society.” He asserted that many of the world’s problems cannot be solved without harnessing the power of the free market system. Colorado’s strong economy is what has made it a national economic leader and why he believes that Colorado is positioned to remain a leader for the foreseeable future. “This is a state and a city that is better positioned to make the right decisions over the next 50 years.”

Jackson Rueter is a Student Research Assistant with the Business Research Division. He may be contacted at jackson.rueter@colorado.edu.