UNIVERSITY OF COLORADO AT BOULDER LEEDS SCHOOL OF BUSINESS

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Inside: Forum Keynote Address on this page. Colorado Economic Sector by Sector Highlights start on page 2. Summaries of Industry Discussion Sessions from the 2009 Colorado Business Economic Outlook Forum appear throughout.

Colorado Business Economic Outlook Director and CU Leeds School of Business Associate Dean Richard Wobbekind presents the 44th annual University of Colorado economic forecast in Denver.

Forum Keynote Address

Navigating Turbulent Economic Times: A Global Company's Perspective

Brian Lewandowski

This economic downturn has highlighted the global interconnectedness of economies. The U.S. economy accounts for roughly $14 trillion of the $40 trillion global market, while China accounts for $1.3 trillion, and India and Mexico account for $800 billion each. Most stock indices are down 30%-60% worldwide. The Middle East and Europe were big buyers of U.S. subprime mortgages, and governments around the world are cutting spending, battling currency fluctuation, and maneuvering the financial crises with interest rate cuts and stimulus packages. At the 2009 Colorado Business Economic Outlook Forum held in December in Denver, Lee McIntire, CH2M HILL'S President and CEO-Elect, forecasted a swift recovery once things start to look up. In the mean time, there are many worries: job losses, commodity prices falling too far, strength of the dollar, protectionism, and deflation.

A $6 billion company, Colorado-based CH2M HILL has won prestigious contracts around the world, including the widening of the Panama Canal and delivering infrastructure at the London Olympics. The company distributes water through the recycling of wastewater in

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by Greg Swenson

2009 Colorado Business Economic Outlook: Sector Highlights

From the Editor

How will the Colorado economy fare in 2009 in the face of unprecedented shocks in the financial markets? Read highlights of the 44th annual Colorado Business Economic Outlook Forum in this issue. This half-day event, held on December 8 in Denver, included a sector by sector forecast, a Q&A panel session, a keynote address by Mr. Lee McIntire of CH2M HILL, and three industry breakout sessions. For additional details, visit leeds.colorado.edu/outlook.

—Richard L. Wobbekind

Agriculture—Despite record total cash receipts of nearly $7.6 billion, net income for the agriculture sector in 2008 was expected to fall sharply from the 2007 all-time high of $1.5 billion to $968.6 million. Net income for 2009 is forecast to be down slightly, to $963 million. Most of the nearly 35% decline can be attributed to surging expenses for feedstuffs, fuel, fertilizer, and seed, and higher land costs. Net income from the livestock sector, Colorado's largest agricultural sector, will fall from $4.23 billion in 2008 to $4.16 billion this year. The state's dairy industry continues to grow robustly, with the herd size in the state expanding 30% in the past five years, in part because Colorado's cows produce about 10% more milk per year compared to the national average. Colorado's corn industry is at the center of the "food or fuel" debate. Ethanol production has created new demand for corn, while increasing input costs and squeezing profitability for the cattle industry and ethanol producers. Corn prices in 2009 will remain high but well below 2008 record levels.

Natural Resources and Mining—Colorado's energy sector will continue to grow this year despite falling commodity prices and lower demand. About 3,000 workers will be added in 2009, down from the 4,700 added last year. The total value of oil, gas, and carbon dioxide production and coal and mineral mining in Colorado is forecast to total $12.1 billion in 2009, a decrease from $14.8 billion a year ago.

Construction—Segments of the construction industry have been in decline since 2005. Until recently, solid nonresidential and nonbuilding construction has somewhat offset sharp declines in residential building. The total value of construction in Colorado dropped more than 28% from 2007 to 2008, and will fall another 12% from 2008 to 2009, going from $9.9 billion to $8.7 billion. Overall, the sector is expected to lose 11,200 jobs for a total of 149,400 employed in 2009.

Manufacturing—Colorado's manufacturing sector will employ 143,500 people in 2009. It represents 6.4% of the value of all goods and services produced in the state, totaling $15.2 billion. Manufacturing employment in Colorado has slid each year since 2001 due to productivity gains, outsourcing, and shifting facilities offshore. On the nondurable side, slight declines will be seen in printing and publishing, while the beverage industry will remain flat. Food manufacturing may be squeezed if the rising dollar decreases demand for exports. Significant losses will again be registered in the computer and electronics sector. Three of the four major sectors, including transportation (aerospace), will record increases.

Trade, Transportation, and Utilities—The state's largest provider of jobs will contract in 2009 for the first time since 2003, shedding 4,800 positions. Retail will lead in jobs lost, with 2,500. Retail sales will climb by 1%—the fifth time this decade for negative real growth. Taxes from retail trade sales are a primary source of income for many of Colorado's municipalities. On the transportation side, slight declines are expected as airlines reduce capacity and business travel slows.

Information—After adding jobs in 2007 for only the second time in a decade, the Information Supersector lost 800 jobs in 2008 and is expected to lose another 1,400 high-paying jobs this year. Publishing firms are reinventing themselves on an ongoing basis as consumers continue their relentless march away from traditional print products toward electronic products and the Internet. Although the software sector is growing nationally, it is declining in Colorado, in part due to efficiency gains. After massive layoffs in the first half of the decade, it appears that telecom employment has stabilized at about 29,000 workers. The projected decline in 2009 is a function of general economic conditions rather than continued change in the structure of the industry.

Financial Activities—While most sectors were declining, the Financial Activities Supersector actually added employees during the 2001 recession. The creative financing opportunities that are causing angst today generated new jobs at the start of the decade. In 2009, Financial Activities employment will lose 2,900. On a positive note, credit unions have benefited from the turmoil in the financial industry as they are perceived as a safe place for investing cash. In 2009, employment in the finance and insurance sector will decline further, dropping 2,800 jobs, while the real estate and rental and leasing sector is expected to lose about 100 jobs.

Professional and Business Services—The Professional and Business Services Supersector, which include engineers, computer systems designers, scientific researchers, and other high-paying jobs, will add 3,500 positions in 2009, a far cry from the 16,100 added in 2007. Growth in the sector is important because of its close ties to Colorado's research universities, federal labs, and high-tech business clusters. In September 2008, NASA selected CU-Boulder's Laboratory for Atmospheric and Space Physics to lead a $485 million orbiting space mission slated to launch in 2013 to probe Mars' climate.

Educational and Health Services—This supersector has enjoyed job growth every year in the last decade. It will continue this trend in 2009 with an increase of 7,000 jobs, despite limitations on the supply side. The educational services sector will add 800 jobs, while the health services area will gain 6,200.

Leisure and Hospitality—After four years of strong economic activity and employment growth, the outlook is for a slower year in tourism as the supersector will lose 1,900 jobs in 2009. On a positive note, if lower fuel prices hold through the summer, total visitation to state and national parks will likely increase. Good snow trumps bad economy. Colorado ski areas will record more than 12 million skiers for the fourth-consecutive year if Mother Nature cooperates. Although proceeds from casinos tumbled by 11% in 2008, voters allowed local communities to establish betting limits, which may boost future proceeds.

Other Services—This supersector, which is comprised of private businesses that provide personal services such as auto repair shops, Laundromats, and beauty salons, is expected to add 1,000 jobs this year. Grant-making, religious, and social advocacy nonprofit organizations account for half of Other Services total employment. Despite reports of decreased giving, demand for services has risen. This supersector has added jobs every year since 1990.

Government—As a result of Colorado's growing population, the Government Supersector is expected to add 4,400 jobs in 2009. The number of federal government jobs will remain flat, with most of the increases occurring in local education.

International Trade—Colorado exports recorded a welcome turn-around in 2008, driven by a weaker dollar, the reopening of beef markets, strong increases in print machinery, and robust commodity exports, such as mineral fuels and molybdenum. Growth in these areas more than offset declines caused by the closing or relocation of high-tech facilities. Fourteen of the state's top 20 exports are manufactured goods. Colorado's top manufacturing exports, excluding computer and electronic components, showed double-digit growth in 2008, paralleling the national trend. Exports are expected to decrease 3% this year, following an increase of 5% in 2008.

Regional and Area Economic Forecast Highlights:

Boulder County—The number of jobs in Boulder County rose an estimated 1.6% as of August 2008, compared to the national rate of 0.2%. The county's unemployment rate in August 2008 remained lower than the state and national rates. The U.S. not seasonally adjusted unemployment rate was 6.1%, compared to 4.6% for Boulder County and 5.2% for Colorado. Boulder County has a high concentration of professional and scientific jobs, supported by the presence of CU-Boulder, major federal research facilities, and companies in aerospace, bioscience, and information. In 2007, the median household income in Boulder County was $63,257, significantly higher than the Colorado income level of $55,212 and the national level of $50,740.

COLORADO'S TOP MANUFACTURING EXPORTS, EXCLUDING COMPUTER AND ELECTRONIC COMPONENTS, SHOWED DOUBLE-DIGIT GROWTH IN 2008.

La Plata County—Construction, retail, tourism, health care, and natural gas extraction are significant contributors to the local economy. Population growth will continue to fuel the construction and real estate sectors of the economy. Although it appears the housing market in La Plata County is cooling off from recent years, it is still relatively strong, with median residential housing prices rising 9.7% from the second quarter of 2006 to the second quarter of 2007.

Mesa County—The Grand Junction gross domestic product grew by 80% over the past decade, and the economy was recently named the 15th-fastest growing in the nation. With energy extraction as its primary driver, followed by energy service industries and construction, the Grand Junction economy was projected to remain very strong in 2008. One of the immediate issues in the county is the availability of workers as the county has an unemployment rate of 3.8%. The rapid growth of the economy also has reduced housing vacancy rates to all-time lows and driven up the costs of construction and land for both residential and commercial purposes.

Northern Colorado (Larimer and Weld counties)—This region is expected to experience growth of 1.9%, or about 4,200 jobs. A substantial number of those jobs are anticipated to be in high-paying sectors. Emerging clean energy technologies may stem recent job losses in manufacturing. In 2008, two renewable energy companies announced they will open new facilities in the region, creating 2,000 jobs.

Pueblo County—Historically, Pueblo County has experienced moderate population growth. This trend will change when the Pueblo Springs Ranch is complete. The 24,000-acre subdivision in northeast Pueblo County is expected to total about 70,000 households, or 200,000 people, when completed. The Historic Arkansas Riverwalk Project has begun to pay the economic dividends its creators intended. In August 2007, the new 44,000-square-foot headquarters of the Professional Bull Riders Association was dedicated, and new restaurants and other establishments have opened near the new building.

Southern Colorado (El Paso County)—El Paso County has been strongly influenced by rising foreclosures, stagnant wage increases, a weak residential construction industry, and deployment of troops from Fort Carson to Iraq. All of these factors directly affect the region's employment, retail, wholesale, and commercial activity and the overall economic outlook.

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Forum Breakout Session

An Energy Update and Policy Issues Facing the State and Next Administration

John Tobin (fourth from left) of the Energy Literacy Project sets up the breakout session on energy issues.

Mark Edwards

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

Energy was one of the key political issues surrounding last year's election because energy is what makes this world go 'round. Energy is needed to run our automobiles that drive us to work, to power the factories that manufacture those same automobiles, and to heat our houses during cold winter nights. Energy is an essential commodity that is critical to sustaining our current quality of life and supporting the developing global economy. The breakout session at the 2009 Business Economic Outlook Forum answered many questions surrounding the energy industry. What is alternative energy? What is the true oil industry? How energy does affect the state of Colorado? How will alternative energy affect the mining industry?

Energy Industry Basics

The panel moderator, John Tobin of the Energy Literacy Project, began the session by emphasizing the strong presence of energy in the global economy. The United States is a net exporter of coal and imports approximately 25% of its energy resources from other countries. As of 2004, nonfossil fuels (wind and solar energy, biomass, and geothermic energy) made up only 20% of the market, while the remaining 80% represented traditional energy, such as coal, oil, and natural gas. Tobin emphasized that before looking at alternative energy we must first understand that the cheapest form of energy is to develop more efficient ways to use our current sources of energy and eliminate waste.

It is impossible to become completely energy independent. It is simple: we need energy. Tobin argued that the issue does not reside in "alternative energy," but in "additional energy." It is essential to diversify our energy intake so that the energy is effectively and efficiently used. These additional energy sources will not become a widespread commodity until the price of gas, oil, and coal increases above the price of these more expensive resources. It is expected that the demand for additional energy sources will not exceed the demand for conventional energy for approximately 30-50 years.

Energy Myths

Ramona Graves, professor and department head of the Petroleum Engineering Department at the Colorado School of Mines, provided a unique perspective of the energy industry by discrediting many myths. One myth is that the oil industry controls prices. Prices are actually controlled by supply and demand. Another is that the industry has no concern for energy security. In fact, many of the large oil and gas companies, such as BP, are developing alternative energies like biomass, solar, electric, and fuel cells to address carbon management. Yet another myth is that only a decade's supply of conventional fossil fuel exists. In reality, approximately 50 years remain.

The oil and gas industry is often perceived negatively by the public, but its impact on the global economy is often overlooked. In addition, production in the Western Hemisphere is often understated. For example, the Tar Sands in Canada provide more gas than Saudi Arabia. The United States also contains large amounts of gas hydrates, which may be possible to extract and distribute in 50-60 years. This has the potential to supply 70-130 times the proven reserves of conventional oil and gas. When these are available commercially, it may lessen our dependency on other countries and allow us to produce more energy domestically.

The United States currently drills about four times the diameter of the earth every year. The petroleum industry is striving to discover new technologies that will increase the production from unconventional resources and permit drilling in the arctic regions and possibly in extraterrestrial places. The Rocky Mountains, including Colorado, contain many unconventional resources, such as shale gas. Shale deposits in the region are estimated to contain 40-120 billion cubic feet of reserves per square feet. These deposits may significantly affect Colorado's economy and allow the state to remain a leader in energy production.

Economic Contributions

The energy industry has a strong presence in Colorado. Jeff Holwell, with the Colorado Office of Economic Development and International Trade, described the state as a leader in energy production. Traditional energy accounted for $10.9 billion of state GDP in 2007 and $11.6 billion in 2008. It is projected that the sector will make up $9.8 billion in 2009. The oil and gas industry employed 26,512 people in the state in Q1 2008, with an average wage of $133,776. Coal provided 2,270 jobs in 2007, with an average wage of $100,400. The energy industry is generating new projects across the state, including the new Vestas Wind Systems A/S blade and nacelle factory in Brighton. Also, the anticipated ConocoPhillips Corporate Learning Center and Global Technology Center in Boulder County will provide an estimated 7,000 jobs.

Alternative Energies and Traditional Mining

Jim Burnell from the Colorado Geological Survey argued that the new alternative energies will not only strengthen the energy industry, but will also propel the mining industry. As the demand for alternative energy increases, the need for mining workers will grow. Metals that are essential for constructing solar panels, such as silicon, germanium, and tin, are constrained by extractive processes, which in turn affects the growth of the alternative energy industry.

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Forum Breakout Session

Is There a Crisis in Colorado Real Estate Markets?

Nathan Hart and Brian Lewandowski

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

Tom Thibodeau, academic director of the CU Real Estate Center in the Leeds School of Business, along with fellow speakers Mike Rinner (The Genesis Group), Ty Richie (CB Richard Ellis), Jim Bolt (CB Richard Ellis), and Jon Weisiger (CB Richard Ellis), examined the residential and commercial real estate markets.

Overview

According to the Case Shiller Housing Price Index, Colorado housing prices dropped 9.2% from their peak (August 2006) to their trough (March 2008). Fifteen out of the 20 other cities analyzed had no trough. Housing prices in cities such as Miami, Los Angeles, and San Diego, which have experienced declines of over 30% since their highs in 2007, have not shown signs of bottoming. For other cities, like Minneapolis, the trough occurred in April of 2008, with an 18% decline.

According to information from the Federal Housing Finance Agency (FHFA) (formerly the Office of Federal Housing Enterprise Oversight), house prices in Colorado have increased at an annual average of 3.9% over the course of the decade, with the exception of Grand Junction, which climbed 8.1%. Thibodeau maintains that Colorado did not and does not have a housing bubble, pointing to the increase in the FHFA Colorado house price index between Q3 2006 to Q3 2008, from 358.2 to 364.5. In addition, the rate of foreclosures in the state has declined 14.7% from January to September year-over-year, and the Colorado Division of Housing is forecasting a 14% decrease for 2008. Adams County has the highest foreclosure rate in the state—roughly 1 out of 58 homes.

It appears that the government is gearing up to provide more help to homeowners. One proposal by FHFA would provide assistance to residential borrowers who have missed three mortgage payments and are on the verge of foreclosure. The plan reduces the monthly mortgage payment to 38% of household income, effectively separating the payment from the market price of the house and the outstanding mortgage balance. In addition, the Federal Housing Administration (FHA) announced higher loan limits ($625K in some markets) for FHA-insured mortgages that require very little down (approximately 5%). Some are also speculating that the U.S. Treasury is drafting a plan to bring mortgages rates down to 4.5% (currently at 5.5% in early December).

On the commercial front, over the 2000–2007 period, property cap rates declined nationally, and prices nearly doubled. Given the inverse relationship with price, when cap rates started increasing for all commercial property types in Q3 2007, prices began to fall. Office, retail, and industrial property prices have since flattened, and apartment prices have slightly increased. Colorado transaction volume (dollars) has shown great volatility over the past year, with substantial decreases in apartment (-57%), office (-71%), and retail (-80%) properties, and an increase in industrial property (+35%).

Real estate breakout session moderator and speaker Tom Thibodeau, CU Professor and Academic Director of the CU Real Estate Center.

Residential

Colorado ranks fourth in the country in terms of job growth—one reason for optimism in the housing market in Colorado, according to Mike Rinner. Given the positive in-migration and natural increase in population, Colorado stands to recover more rapidly than the rest of the nation.

In the Denver metro region, about 82% of foreclosures are on homes that had original mortgages for less than $250,000. Meanwhile, the interest rate spread between 10-year treasuries and mortgages has increased from 150 basis points (precredit crunch) to 300 basis points, consumer confidence continues to fall, and new home sales are down 47% year-to-date through Q3. Despite this, mortgage rates are falling, the number of existing homes on the market and the month's supply of homes are down, and there are signs of activity in listings.

Despite a lack of consumer confidence and ailing new home sales, a number of metrics may point to a bottoming in the Colorado housing market. The current glut of inventory on the market is not attributable to new home construction, but foreclosures. This is different from the 1980s where builders literally walked away from half-completed houses. Builders have responded to housing demand. Mature households, which typically have better incomes and are in their prime-earning years (45 and older), will grow in number. The state has had job growth, the foreclosure picture is improving, interest rates are falling, the resale market is looking better, the apartment market is still strong, and Colorado has had some home appreciation. Rinner forecasts 5,000 new home sales in 2008 and 5,500 in 2009, compared to 9,540 in 2007.

Office

Ty Richie focused on current office market conditions in Colorado, which are greatly impacted by state employment. Compared to other markets nationally, lower lease rates make Denver a comparatively attractive market. After a long run of positive absorption, slowing absorption and modestly increasing vacancy rates have put pressure on landlords to offer concessions, which indicates market power is shifting toward tenants. However, given tight credit markets and cautious lenders, credit worthiness of tenants will face greater scrutiny.

In the downtown and southeast markets, vacancies increased to 11% and 13%, respectively, in Q3 2008, in conjunction with a dip in lease rates. Alternatively, the northwest market has experienced a decline in vacancies to 14%, but lease rates are decreasing.

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Forum Breakout Session

The Future of Finance, Banking, and Equity Markets

Luke Willoughby and Sean Planchard

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

In the financial industries, which are at the forefront of the economic crisis, stability and assurance are hard to come by. Tasked with explaining the current crisis and predicting what may come, Ron New of Stifel Nicolaus and Tim Zarlengo of Credere Capital spoke at "The Future of Finance, Banking, and Equity Markets" breakout session at the 2009 Colorado Business Economic Outlook Forum in December. The capacity crowd listened attentively as Mr. New and Mr. Zarlengo reconstructed the collapse of the financial "house of cards."

Explaining the Crisis

New began the presentation, highlighting misused and overambitious securitization as the driving force behind the collapse. Securitization is the process by which cash flow-producing assets are "pooled" and "repackaged" as securities and then sold to investors. At its most basic level, this is a powerful tool for major financial institutions to provide a secure and profitable product, while creating demand for assets such as residential mortgages. A result of this higher demand is an increasing availability of cheap and abundant credit. Institutions found this credit to be very lucrative as increased leverage provides for higher returns. Consumers also had unprecedented access to credit terms that made new homes, cars, and other major expenditures possible. Institutions and consumers unknowingly constructed a "house of cards" delicately founded on leverage and a need for continuously rising prices of the securitized assets.

In a sense, Zarlengo commented, the leveraging of securitized assets became a tool so profitable it was like "manufacturing money." In order to continue to create these lucrative products, institutions oversaturated qualified lenders with cheap credit, and expanded into subprime borrowers. It was when unqualified borrowers began to default on their loans that the housing bubble popped, and the first card slipped, causing a downward spiral for the rest of the economy.

When prices began to fall, the risky leverage began to produce losses as fast as it had previously created earnings. Downward pressure from leverage on the markets, institutions, and collective individuals provides the basis for an unsettling point, New emphasized. He presented Bloomberg data showing that hourly wages, when adjusted for inflation, have been steadily decreasing since peaking in 2002. This begs the question, if the American economy is 70% fueled by consumer spending, how has it been able to experience GDP growth over the last few years when the average consumer has not been earning more money? The unsettling answer is the abundantly available and cheap credit. Since 2002 economic growth has been fueled almost exclusively by credit spending of the consumer, coupled with the risky, overambitious leveraging of the institutions.

Speakers Tim Zarlengo of Credere Capital and Ronald New of Stifel Nicolaus at the finance, banking, and equity markets session.

The State of Things Now

The economy is in the midst of recovery from the credit collapse. Leverage-saturated markets will need to undergo a credit reduction overhaul that will impact economies across the globe. New noted one silver lining: after this credit crunch, the global and national economy will emerge stronger due to healthier balance sheets and more knowledgeable and conservative spending patterns. The critical issue is the uncertain time frame. While it can be costly, deleveraging is conventionally a quick process for an institution relative to a consumer. If an institution does not immediately fail due to an accelerated loss of capital, then it has more access to the resources necessary for survival.

Unfortunately, deleveraging is a much more basic and difficult process for the consumer. With little to no resources available, it all comes down to more disciplined spending. Consumption must be cut back and any unaffordable assets sold in order to slowly pay off debt and return to a healthy balance sheet. For an economy that is 70% driven by these consumers, the forthcoming deleveraging period is expected to be drawn out.

What Does the Future Hold?

The recovery process will be far more difficult in the long term because credit has essentially evaporated. Entire industries are saturated with debt and leverage, making it difficult for financial institutions to lend money that simply isn't there. Even those with relatively secure assets will be extremely reluctant to lend money for fear of losing it to a defaulting borrower. Any lending that does take place will be very expensive relative to the cheap credit that was recently driving the economy. New brought up an example where Warren Buffet charged AA-rated Goldman Sachs, considered a relatively secure financial institution, a 10% interest rate for capital. Other strong institutions are unable to get rates lower than 14%. If this is the case for some of the largest institutions in the world, then the smaller companies and all but the most qualified consumers will find it nearly impossible to obtain any credit.

In the end, overleveraged books, widespread reduced spending, and incredibly tight credit have hurled the economy into turmoil. According to Zarlengo, it will not be surprising if the unemployment rate reaches 9 or 10%, with comparable economic indicators expected to perform similarly. Unfortunately, given the extent to which these issues have been encountered, it is likely this situation will last for an extended period.

New closed the session with the thought that lower interest rates may be a way to lessen some of the effects of the turmoil by keeping credit inexpensive and available. This will allow capital to flow more easily for both consumers and large institutions, and promote growth and recovery. However, it was cheap credit that got the economy into its current state and it is unrealistic to think that credit will be not abused in the future as well. The fact is that the house of cards has tumbled, and no one knows exactly how or when it will be constructed again.

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Australia and the engineering of desalinization plants in Asia. It is involved in the first zero-carbon, zero-waste $30 billion city—Masdar, in Abu Dhabi, United Arab Emirates (UAE). Regardless if the projects are in Alaska or Saudi Arabia, they have a positive impact on Colorado as the company's Englewood headquarters pays higher-than-average wages in the state for management and engineering activities. In effect, the firm exports services to other states and nations, thus bringing outside investment back to Colorado. CH2M HILL employees are located in 40 countries around the world, celebrating the diversity of a global enterprise.

McIntire proved savvy to the intricately entangled web of global economies, offering a glimpse of information and metrics watched by those at the helm of a global engineering enterprise.

Capacity. An estimated $5 billion project, the widening of the Panama Canal will essentially double traffic capacity and allow larger cargo ships carrying 10,000 containers to navigate the passage, saving both time and money (they currently round the southern tip of Africa, costing an additional estimated $500,000 per ship). The 94-year-old canal is a waterway for roughly 5% of the world's products, with two-thirds of goods delivered to or exported from the United States.

Ecosystems. Melting ice caps are opening up new shipping lanes north of Russia, Canada, and Alaska, which will enable resources ranging from minerals to sea life to tourism to be tapped. This is the new Northwest Passage, and may provide competition for the Panama Canal.

Currencies. The $14 billion London Olympics venue has a finite deadline. McIntire jokes, "It's not like you can miss the first day and just skip diving." Doing business in England and receiving payment in pounds has historically been a good thing given the exchange rate and relatively low corporate tax rate. However, with the recent currency volatility (£2.11 per $1 in November 2007, £1.46 per $1 in December 2008), CH2M HILL now has to hedge the British pound. Despite economic turmoil, the U.S. dollar has remained strong, showing that the dollar is still a "safe haven in times of fear—and there is fear out there."

Terrorism. In recent years, India has been a model of economic growth and advancement, luring sums of foreign investment. CH2M HILL has roughly 120 employees in the area and is working on the expansion of the Mumbai airport. Recent terror attacks in Mumbai essentially shut down the city, and the duration of the repercussions on foreign investment and tourism are unclear. It is for that reason McIntire believes that western Pakistan and eastern Afghanistan may be perhaps the most dangerous places in the world.

Housing. CH2M HILL saw the early effects of the housing slowdown in 2007. As developers stopped building, roads and water facilities dried up, and manufacturing went flat—if homes are not being built, then paint, carpet, lights, and other home inputs slow down, as well.

Energy. CH2M HILL is helping the UAE build a civil nuclear power infrastructure. Despite being oil-rich, the country spends about $4 million a day importing fuel.

Fiscal Spending. McIntire noted that about $2.5 trillion in bonds will be issued over the next few months by various entities. The Port Authority of New York and New Jersey tried to sell $300 million in bonds in December to no avail, despite being highly rated. It appears that liquidity remains tight. Banks are shoring up liquidity ratios with the bailout money, and will come out stronger.

One proposal is for the U.S. government to spend between $500 billion and $1 trillion on infrastructure. An estimated 5,000 off-the-shelf projects totaling $136 billion would have an immediate stimulus impact on the economy. Construction expenditures hit the economy fast, with spending on hard materials and equipment, employees making purchases, and so forth.

Oil. Roughly 94% of the world's oil reserves are held by countries, while only 6% are held by companies such as BP and ExxonMobil. Despite an unprecedented run-up and tumbling of oil prices ($146 per barrel in July to $43 in December), the Middle East remains a major geopolitical player. Saudi Arabia's reserves alone are more than 22 times ExxonMobil's worldwide reserves. Brazil discovered a huge oil field below the sea about 200 miles offshore, creating engineering and refining obstacles. Despite cheap oil helping household cash flows, lower oil prices hurt development and investment in renewable sources, such as wind and solar, and reduce the feasibility of drilling projects—notably on Colorado's Western Slope. A stable $50-$70 per barrel of oil would be better than $30-$40 per barrel.

Diversification of projects and customers in countries worldwide generally allows for greater stability in operations. However, juggling the economy, exchange rates, inflation, costs, and fiscal spending proves challenging even for a global engineering powerhouse. So what can CH2M HILL do to solidify its tenure as a global engineering presence? McIntire says that he will use opportunities to develop closer relationships with customers.

> "I'm going to get on an airplane right now, and go see my customers. I am going to get really close to them. I am going to listen to them. I'm going to see if there is anything I can do to help. Can I do any operations and maintenance for them? And when we come out of this I want to be closer to my customers than my competition."

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Forum keynote speaker Lee A. McIntire, President and CEO-Elect of CH2M HILL.

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REAL ESTATE CRISIS, CONTINUED FROM PAGE 5

Looking ahead, transit-oriented development in the metro region has strong potential. Cap rates are expected to go higher, per square foot prices will trend down, and volume will remain low in 2009. Tight credit markets will continue, and lenders will be more actively involved in transactions.

Industrial

Jim Bolt's discussion centered on Denver industrial property, which includes everything from research and development space to warehouse space. Denver is the distribution center for the Rocky Mountain states, thus making it a key location for most national companies. As the 19th largest industrial market—albeit a second tier distribution center—Denver is a geographically large region with relatively sparse population.

Denver's industrial market is in pretty good condition. Industrial space has not been overbuilt, and there continues to be substantial demand—Denver has about 220 million square feet of space and 6.5 million square feet of active-user demand. Vacancy rates are about 6% in the Denver market and 8% in the airport market—low compared to the nation. Industrial space is similar to a commodity in that it competes on price. Despite lease rates experiencing some weakness, the low vacancy rates will ensure that rates stabilize.

Given the current capital crises, little money is flowing into new development, and therefore new industrial space construction will come to a standstill. When new space gets built, Bolt anticipates a 20%-30% increase in rental rates given the less favorable debt environment and more expensive equity demanded for deals to come to fruition. In addition, properties that have debt coming due in 2009 will have to pay a higher spread on debt—if they are able to refinance. In addition, owners who have to mark properties to market face much different values than a couple of years ago. Private equity investment capital is available, but waiting on the sidelines to take advantage of distressed situations.

Retail

Jon Weisiger's presentation examined market conditions of the retail sector. With many consumers focusing on purchasing basic necessities, grocery stores and stores such as Costco and Wal-Mart have done well. Property transactions are down approximately 90%. Despite a number of large retailers closing their doors, commercial loan defaults remain low. However, cap rates have increased about 100 basis points. The days of 80%-100% leverage are over, and about $68 billion in loans is coming due in 2009. With a frozen lending market, this poses a potential shock to the retail property market. Investors, meanwhile, are sitting on the sidelines, waiting signs of market improvement.

In Colorado, well-positioned Class A properties, such as FlatIron Crossing, Cherry Creek, and Park Meadows, are holding strong. Weisiger estimated that within the next three years one of the Class B malls (Westminster, Aurora, Southwest Plaza) will close. The Denver region has seen negative absorption, some of which is functionally obsolete property that will likely be converted into something other than retail space. Nonetheless, Denver remains a great option for retail endeavors due in part to population and employment growth, a diversified economy, and the presence of high-tech industries.

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