

# COLORADO BUSINESS REVIEW

A publication of the Business Research Division  
Volume 72, Number 1, 2006

**Inside: Forum Keynote Address** on this page. **Colorado Economic Sector-by-Sector Updates** start on page 2. **Summaries of Industry Discussion Sessions** from the **2006 Colorado Business Economic Outlook Forum** appear throughout.



Leeds School of Business Dean Dennis Ahlburg (center) at the forty-first annual Colorado Business Economic Outlook Forum, with forum director Richard Wobbekind (from left); Gary Horvath, analyst with the Leeds School of Business; Tom Petrie, cofounder of Petrie Parkman & Co.; and Larry Olsen, executive vice president of the Compass Bank Commercial Real Estate Group.

## Forum Keynote Address

### Energy Market Drivers—2006 and Beyond

Brendan Hickey

In case we weren't yet aware, the impact that energy has on our daily lives became quite apparent this year. In 2005 we witnessed the effects of hurricanes on refinery capacities in the Gulf Coast, we remained heavily involved in the turmoil and instability that persists in the region that controls much of the world's energy supply, and we were forced to pay upwards of \$3.00/gallon at the gas pump.

With energy taking center stage in the economic picture this year, it should not be surprising that it was one of the underlying themes of the forty-first annual Colorado Business Economic Outlook Forum. In addition to holding a breakout session devoted to the topic (discussed in detail on page 6), the event also featured a keynote address delivered by

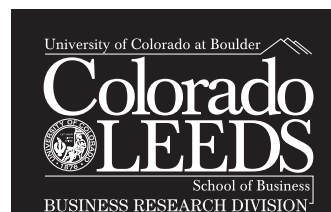
Thomas A. Petrie, chairman and CEO of Petrie Parkman & Co.

Petrie began his presentation with an examination of some of the key drivers in the energy market. One of the more important factors is global demand. The United States, with 25% of the world's oil consumption, dominates demand. Petrie suggested that although China is currently a distant second, with 9%, its torrid pace of economic growth could push this figure to 15 or even 20%. China is not the only country that is rapidly increasing its demand for oil. Russia, Brazil, and India are also experiencing brisk growth. As development continues in these areas, great upward pressure will be exerted on global energy demand, and, consequently, prices.

A second factor Petrie discussed was the weather cycle. He suggested that perhaps the hurricane season of 2005 was not merely an

aberration, but an indication of changing weather patterns. He pointed out that after falling in the 1970s and 1980s, the number of category 3, 4, and 5 hurricanes increased dramatically in the 1990s and will likely reach record levels by the end of the current decade. A long-term continuation of weather cycle changes could dramatically impact the supply side of the energy equation.

CONTINUED ON PAGE 6



Think Broadly.  
Act Boldly.



by Richard Wobbekind

## 2006 Colorado Business Economic Outlook: Sector Highlights

### From the Editor

How will the Colorado economy fare in 2006? Read the summaries of the forty-first annual Colorado Business Economic Outlook Forum in this issue of the *Colorado Business Review*. This annual economic forecast was presented on December 5 in Denver. The half-day event included a sector by sector forecast, a Q&A panel session, a keynote address by Tom Petrie of Petrie Parkman & Co., and four industry discussion sessions. Highlights appear on the following pages; for additional details, visit our web site at [leeds.colorado.edu/brd](http://leeds.colorado.edu/brd) or call me at 303-492-1147.

—Richard L. Wobbekind



**Gross Domestic Product (GDP)**—The GDP is expected to register 3.5% growth this year, a rate greater than the annualized average, 3.3%, from 1995 to 2004. The GDP deflator will drop slightly, registering 2.4% last year and 2.3% in 2006.

#### Consumption—

Nationally, growth will be driven by a 3.2% increase in real personal consumption and a gain of 7.2% in retail sales. Light truck and auto sales, a major component of retail sales, will drop from 16.9 million units to 16.6 million as a result of “spent-up” demand from creative financing programs during the last three years.

**Investment**—Although real business investment is expected to decrease, it will remain solid in 2006, at a rate of 5%. Replacement investment and expansionary investment will drive growth. Industrial production rates will remain strong, registering 3.3%.

**Government Spending**—The federal deficit is expected to increase from \$333 billion to \$394 billion this year. Costs associated with hurricane cleanup and the war in Iraq are factors that will push the deficit higher.

**Net Exports**—The trade deficit took a sharp jump at the end of 2005 in reaction to higher prices for exported oil. The deficit will likely decline as oil prices drop; however, a strengthening dollar may decrease the demand for U.S. goods and services in foreign markets.

**Prices**—Concerns about inflation will continue to dictate the monetary policy decisions of the Federal Reserve Board. Nationally, the change in the CPI is expected to be 3.3% in 2005 and fall slightly, to 3%, this year. Inflation rates for Colorado are projected to be 1.7% for 2005, with an increase to 2.2% in 2006. The state CPI remains lower than the national rate because of artificially low prices for housing and automobiles. Producer prices, as measured by the Producer Price Index, are expected to register 2.7% this year as energy prices stabilize or decrease slightly. Employment (average wage and salary levels) costs grew at a rate of 3.2% in 2005 and are forecast to rise to 3.6% in 2006.

**Population**—Nationally, population will continue to grow at a rate of 1%, while the state’s population will rise gradually, to 1.5%, in 2006. After bottoming out, net migration will climb to 27,000 people in 2005 and 32,000 this year.

**Labor Force and Unemployment**—In 2006 the labor force will rise at a slightly higher rate—over

1.9%—than the rate of population growth because of increased participation. At the same time, the Colorado yearly rate of unemployment is expected to drop to 5.1% in 2005 and return to the range of natural unemployment (4.5 to 5.0%) this year. The unemployment rate for 2006 is expected to measure 4.9%.

**Personal and Per Capita Income**—The outlook for income growth is brighter this year as the Colorado economy is forecast to outperform the U.S. economy in employment growth. Personal income is projected to increase by 6.8% in Colorado and 6.1% for the United States. Once again, the gap between Colorado and U.S. per capita income is expected to widen as annual averages will be \$39,917 for Colorado and \$36,635 for the nation.

**Employment**—About 11,300 goods-producing jobs will be added in 2006 as all goods-producing sectors are expected to experience positive employment growth. Similarly, all service-producing sectors, except Information, are expected to increase by a total of 40,800 jobs. In 2006, overall employment will grow 2.3% or 52,100 total jobs, within Colorado. This employment growth builds on the recovery that began during the first quarter of 2005.

**Agriculture**—Strong livestock sales, along with rising fuel and fertilizer costs, will be the driving forces behind profitability in Colorado’s agricultural industry in 2006. Total livestock sales in Colorado will reach nearly \$3.9 billion this year, the state’s third-highest sales level. After bumper crops of corn and wheat in 2004, total crop sales should increase slightly again in 2006, to \$1.4 billion. Total farm and ranching revenues will fall somewhat, to \$6.25 billion, this year. With production expenses of \$5.3 billion, net farm income will total \$950 million.

**Natural Resources and Mining**—Colorado’s energy sector is experiencing a boom, despite increased volatility in the marketplace. Greater demand for energy products, which has resulted in growth in employment, output, and total sales, is expected to continue in most energy areas through 2006. The addition of about 1,700 workers this year, bringing total sector employment to 18,500 jobs, will be driven primarily by increased production of natural gas. Crude oil is expected to rise slightly, and coal production will remain at 40 million tons, with output growth constrained by limitations in Colorado’s rail infrastructure.

**Construction**—Between 2001 and 2004 about 16,300 construction jobs were lost, although valuation was less volatile over that period. This sector will add 9,500 jobs this year. Total valuation of construction is expected to increase by 8.8% on the strength of residential and nonresidential construction. Valuation gains will occur in residential, nonresidential and nonbuilding areas.

**Manufacturing**—After losing 36,700 jobs between 2000 and 2004, the decline in manufacturing employment slowed in 2005 and will change directions this year with the expected addition of 100 jobs. This growth will be spurred by increased business equipment and overseas demand for the types of goods manufactured in Colorado. Nondurable goods employment is anticipated to fall by 200 positions, while durable goods will gain 300 jobs. The largest decline is anticipated in the computer and electronics sector, where 500 jobs will be lost. Other sectors will be relatively stable.

**Trade, Transportation, and Utilities**—Between 1995 and 2004, the TTTU Supersector grew by a total of 46,700 jobs, representing 13.6% of the total jobs added during that period.

will grow by 4,400 positions, and Management of Companies and Enterprises will gain 1,400 jobs. This supersector will lead Colorado in absolute employment growth, with an increase of 3.7%, or 11,700 positions.

**Educational and Healthcare Services**—This supersector includes private education and healthcare services. Declines in public education budgets should boost demand for services provided by private education organizations. As a result, private education employment will increase by about 800 jobs this year. Between 1995 and 2004, the healthcare sector accounted for 15.4% of all jobs added, or 53,100 workers. This sector is expected to grow by 5,900 jobs in 2006. Employment growth will continue to be limited by the supply of certified labor, and

last year was semiconductor exports. Overall total exports increased by 2.4% in 2005, and 3% growth is anticipated this year. A growing trade deficit, inflated by oil prices above \$60/barrel at the end of 2005, will drive the balance to above \$700 billion. In addition, a stronger dollar may dampen demand for U.S. goods and services. High oil prices, health concerns in Asia and Europe due to Avian flu, and recent bans on beef exports to Japan and Korea will impact trade in 2006.

**Across the West**—Colorado is tied for fourth in projected job growth this year, compared to the 10 other western states. The western United States is one of the strongest employment growth areas in the country.

## AS THE ECONOMY HAS IMPROVED, DEMAND HAS GROWN AND WILL REMAIN STRONG FOR ENGINEERING, COMPUTER SYSTEMS DESIGN, AND OTHER PROFESSIONAL OR TECHNICAL BUSINESS SERVICES.

Retail Trade grew by about 33,700 jobs. This year, Retail Trade is projected to gain 6,200 positions based on projected retail sales growth of 10.5%. As well, Wholesale Trade will increase by 1,200 positions. With an improving economy, the addition of Southwest Airlines, and record traffic at DIA, the Transportation Sector will rise by 300 jobs. The final sector, Utilities, is expected to grow by 100 positions in 2006. Overall, the TTTU Supersector will increase 1.9%, or 7,800 positions.

**Information**—After shedding 5,000 jobs in 2005, the decline in employment in the Information Supersector appears to be bottoming out. Only about 800 positions will be lost this year. On a more optimistic note, publishing companies are expected to add 200 jobs. Despite a positive outlook for Qwest and Time Warner, telecommunications will lose about 600 jobs, along with 400 jobs in other Information sectors. Overall Information employment will post a 0.8% decline.

**Financial Activities**—Between 1995 and 2004, 9.8% of all jobs added—about 33,900—were in the Financial Activities Supersector. The majority of recent growth has occurred in the credit intermediation area. This year the Finance and Insurance Sector will grow by about 2,200 jobs, along with another 1,100 jobs in the Real Estate and Rental and Leasing Sector.

**Professional and Business Services**—As the economy has improved, demand has grown and will remain strong for engineering, computer systems design, and other professional or technical business services. This year 5,800 jobs will be added in Professional and Technical Services, Administrative and Support Services

much of the growth will be for support staff. Overall, the supersector will climb by 3%, or 6,700 jobs.

**Leisure and Hospitality**—Good things are on tap for this sector in 2006. Southwest Airlines is coming to DIA, and the new 1,100-room Hyatt Colorado Convention Center hotel will be open. The completion in 2005 of the new road from I-70 to Central City increased revenues in that city. From an employment perspective, this sector is expected to add 5,600 jobs this year, an increase of 2.3%. About 3,800 of these will be in food services.

**Other Services**—This supersector is comprised of private businesses that provide personal services, such as auto repair shops, Laundromats, and beauty salons. Because these businesses fulfill many basic needs, growth is often contingent on population growth and on the state of the economy. This group will post a higher growth rate than that for population in both 2005 and 2006, adding approximately 1,900 and 2,000 positions, respectively.

**Government**—As the state's population has increased, so has the need for government services. Both state and local government sectors are expected to grow this year, with a gain of 1,500 state government and education jobs. Approximately 100 federal jobs will be lost. As in the past, the largest growth will occur at the local level, where about 3,100 positions will be added. Most of this will occur in the K-12 education sector. Total government growth will be 4,500 jobs.

**International Trade**—Colorado has not been able to sustain the record level of export growth that occurred in 2004. The glaring weak spot

### Around the State

- **La Plata County**—The La Plata County economy is highly seasonal, with most tourism occurring during the summer months. A mitigating factor to this seasonality is Fort Lewis College. Per capita income has improved over the last few years, both in absolute terms and relative to the national average. In 2003, La Plata County ranked 21st out of the state's 64 counties in terms of per capita income, with \$29,807. Population growth in the county remains around 3%, the same rate as the last eight years.
- **Northern Colorado**—More than \$1 billion in new capital construction projects over a two-year period will bring 2,000 new job opportunities to northern Colorado in 2006. A survey of the region's largest primary employers indicated that over the next three years they plan to expand their businesses by about 1.2 million square feet. Areas of development include Centerra, the 2534 Development, and Crossroads Business Park.
- **Pueblo County**—Although the Pueblo economy has been volatile in recent years, unemployment is down and will continue to improve in the months ahead. Job growth for the Pueblo MSA is 2.3% compared to 2004. About 1,000 jobs will be added for the construction of the Xcel Comanche power-generating facility. Population in the area is expected to grow at the same rate as the state, about 1.5%. Pueblo is a regional center for medical care and retail consumption, which serves as a stabilizing factor on the economy.

CONTINUED ON BACK PAGE



## Forum Breakout Session

# One of Colorado's Best-Kept Secrets: The Business of Homeland Security



Russ Farmer, PBC Inc. and SBIR Colorado, addresses the homeland security breakout session. Other panelists (from left) were Robert Kopplin, CH2M Hill; Murray Hamilton, University of Denver; and Duane Habeck, All Hazards Management. Lisa Shade from IBM (at far end) moderated the session.

A TOOL AVAILABLE  
TO BUSINESSES  
IN COLORADO IS  
THE HOMELAND  
SECURITY DATABASE  
COMMISSIONED BY  
THE COLORADO  
INSTITUTE OF  
TECHNOLOGY.

Lisa Shade

The homeland security arena is a growth industry with considerable opportunities that cross boundaries and span sectors. Indeed, examples of homeland security applications range from a one-time disposable shot from the medical field and a decontamination formula from the chemical field, to a household homeland security kit from the retail field. This is one of the best-kept secrets of doing business in this industry: funding is available for developing technologies that can then be commercialized in other environments. It can add markets and other sources of capital for developing products. For instance, a product developed to protect fire-fighters in a terrorist incident also benefits them in a fire situation.

The session included presentations by four panelists. Russ Farmer, president of PBC Inc. and the executive director of Small Business Innovation Research (SBIR) Colorado, gave in-depth information


about the use of SBIR grants and demonstrated how SBIR ideas can move onto commercialization. He talked about ADA Technologies, which uses federal grants to transition from technical research into the commercial environment. The firm has received multiple patents and has additional patents in development.

Robert Kopplin, director of emergency operations at CH2M Hill, discussed the homeland security infrastructure environment. Kopplin's background includes military experience, public service for the State of Colorado, and commercial experience. He talked about the Rocky Flats cleanup and the variety of infrastructure needs within the homeland security industry.

Murray Hamilton represented the academic environment. He talked about the Rocky Mountain Center for Homeland Defense and the many areas of research being conducted at the University of Denver. Murray shared his knowledge of counterterrorism, medical

countermeasures, toxin detection research, agricultural terrorism, and how to determine which drugs to stockpile. He also discussed U.S. Northern Command in Colorado Springs and the Colorado Critical Infrastructure Committee.

Duane Habeck, president of All Hazards Management, gave insight into emergency and operational preparedness, first responders, coordinating and monitoring tasks, and decision analysis tools. He discussed using federally developed technologies and integrating them into commercial services and products. Habeck also provided an understanding of incident handling, recovery measures, and coordinating restoration activities.

A tool available to businesses in Colorado is the homeland security database commissioned by the Colorado Institute of Technology. The database, which can be accessed at [www.coloradoit.org](http://www.coloradoit.org), contains academic, federal facility, and corporate listings, and details research, products, and services available with key-word searching to find areas of expertise. It can be used to find contacts and develop partnerships. In addition, other resources that show the range of government funding were also highlighted, including the Department of Homeland Security Contracts List for 2006 and industry publications. Visit [www.dhs.gov](http://www.dhs.gov) for more information. 

**Lisa Shade is a researcher with the BRD, and has experience with DHS contracting and the CIT homeland security database. She can be reached at [impact@Colorado.edu](mailto:impact@Colorado.edu).**

## Forum Breakout Session

# Colorado's Evolving Real Estate Market



Tamara Door, with the Downtown Denver Partnership, Inc., speaks at the real estate session.

### Ginger Wolf

Facing a packed room, the panelists of the real estate breakout session of the Colorado Business Economic Outlook Forum discussed the trends in Denver's real estate market.

Kim Koehn, Equity Office Properties, spoke first, comparing Denver's office real estate market growth to that of other large cities in the nation. Koehn said there are two strong drivers in the office realty market. The first is business investment, which showed smooth progression over the past 20 years but hit a lull in 2001 from which it is now recovering. Koehn also examined how much of that investment money is borrowed. The borrowing rate has been much more turbulent than investment as a whole, and dipped drastically over the 2002–2004 period.

The second driver is office employment growth, which is a direct indicator of the amount of office space needed. Office use as a percentage of the employed population in the city is above the national average, at 31%. Overall employment peaked in 2000, and Equity Office Properties estimates that the city will surpass that level in 2010.

Mark Ballenger, Grubb & Ellis, reported that Denver is in a desirable position looking to the future. Basic supply and demand levels demonstrated the upward drive in property value caused by an enormous supply of investment funds in the area. "There is a lot of capital chasing a little product," said Ballenger. He predicts that Denver will grow as natural gas companies exploring the Rocky Mountain region look to the city as an


ideal location for headquarters, and as the technology industry flourishes due to Denver's having the "highest concentration of tech workers in the country," at nearly 100 per 1,000 people.

Tamara Door is the president and CEO of the Downtown Denver Partnership, an organization that creatively plans, manages, and develops downtown Denver as a unique, diverse, vibrant, and economically healthy integral part of the Rocky Mountain region. The organization is working on the 2007 Downtown Area Plan, a key element of which is 14th Street, where eight properties have recently changed hands. This street is home to such prominent Denver landmarks as the Colorado Convention Center, the Denver Athletic Club, the Denver Center for the Performing Arts, and the new Convention Center hotel, the Hyatt. Such attractions place 14th Street in a position of growing importance to the city's tourism market.

Door predicted that Denver will be home to the highest percentage of baby boomers in the nation by 2010. She views the progress of FasTracks and the intelligent planning of the Downtown Hub as factors that will create a "car-free opportunity" within the city over the coming years. She said, "Denver is recognized nationally as one of the key cities in terms of doing really outstanding downtown planning," and that the combination of public and private investment keeps the state of Denver's downtown area enviable.

Turning to the financial side of the real estate industry, Bruce James, Brownstein Hyatt & Farber, discussed the increasing use of tax

increment financing (TIF) and public improvement fee (PIF) taxing structures to fund developments. With TIFs, a municipality releases the developer from paying taxes on the increase in value of the investment by freezing the base of the property taxes at the start of the project. PIF is a private sales tax collected by the developer, which it then turns into a public bond issuance that is used to pay for the project's infrastructure.

Park Meadows is an early example of these innovative funding options, and now the Belmar, Larkridge, and the Gates Company Campus redevelopment projects have all followed suit. "These are transactions [developments] that, even with the availability of this capital, could not have happened without the TIF and PIF structure that is available," stated James. Nevertheless, there is a debate over whether TIF and PIF truly benefit the public. Specifically, the legality of a private developer collecting taxes is questioned. Regardless, cities—particularly those in the northern quarter of the state—are adopting ordinances to allow these funding options. Developers have moved projects when the municipality did not permit such funding opportunities. 

**Ginger Wolf (Ginger.Wolf-ekblad@Colorado.edu) is a student research assistant with the Business Research Division.**

## Forum Breakout Session

# The Impact of Volatile Energy Prices on the Colorado Economy

Katie Vance

The 2006 forum session on the effect of energy prices on consumers and homeowners looked at the choices homebuilders face regarding energy conservation and examined the sensitivity of the retail sector to recent energy fluctuations. The session was moderated by Drew Bolin, with the Governor's Office of Energy Management and Conservation, and speakers included Megan Edmunds from E-Star Colorado (Energy Star) and JoAnn Groff with the Colorado Retail Council.

Edmunds started off the discussion by outlining E-Star's objectives. This nonprofit organization is committed to advancing energy efficiency in housing. It partners with, supports, and provides information through its energy ratings to participants in the housing industry, including homeowners and homebuyers, builders, home energy raters, real estate professionals, code officials, and utilities. Although Colorado is an energy leader in some areas, its building codes do not promote energy efficiency as well as other cold weather states.

E-Star has identified that many homebuyers focus on cosmetics in a new home, such as the


type of wall-finishing or number of can lights in the kitchen, and overlook the insulation levels or the efficiency of the heating system. Given the volatility of the energy market and the fact that utility companies essentially pass on their cost increases to consumers, it behooves homebuyers to examine the energy efficiency level of homes.

Edmunds described the joint efforts of the Department of Energy (DOE) and E-Star to transform the market by enticing homebuilders to create more energy efficient homes. Homebuilders are concerned with warranties and call-backs. E-Star and DOE are addressing these concerns by helping builders deal with comfort, moisture management, and air quality issues. E-Star is working to educate the homebuilding sector, and thereby offer homebuyers high performance homes that are comfortable, affordable, energy and environmentally responsible, and durable.

Likewise, the retail market is facing difficulties stemming from energy fluctuations. Groff stated that retailers' physical plant is the second highest cost category (after payroll), and transportation costs are also very important to retailers. Both these costs must be built into what is charged for a product. Quite often, however, retail firms are not able to raise prices when

transportation costs increase. Recently, the retail world learned that large spikes in energy costs significantly impact consumers' comfort level and their willingness to separate themselves from their discretionary income.

One retail sector that benefits from energy price hikes is the retro-fit marketplaces like Home Depot and Lowes. This market profits from consumers looking for greater insulation or the ability to purchase an on-demand water heater, for example. Groff reported that in times of an energy spike or volatility, or a cold spell, consumers are very concerned with their homes and conserving, which is good for these businesses.

As energy prices continue to climb, consumers will drive the market for more efficient products, and California is important in bringing these products to the whole nation. Given that state's strong environmental regulations, it is easier to make one energy efficient product that meets the requirements for that market, which can then be sold in other states across the nation, rather than manufacturing several different products. 

**Katie Vance (kecnav@yahoo.com) is a student research assistant with the Business Research Division in the Leeds School of Business.**

## ENERGY MARKET DRIVERS,

CONTINUED FROM PAGE 1

From instable weather climates, Petrie went on to discuss instable political climates. Obviously, Iraq is one of the chief areas of concern, but turmoil and instability are also prevalent throughout the Middle East and in other OPEC member countries, particularly Nigeria, and to some extent Venezuela. Going forward, this political and social unease creates an added level of uncertainty in evaluating global energy supply issues.

The domestic political situation will play an equally important role in energy markets. Petrie voiced some concern over pending legislation in the U.S. Congress regarding windfall profit taxes imposed on this industry in 2005 and potentially in future years. In addition to this "counterproductive" tax legislation, he also commented more broadly on current policy approaches to the looming energy situation. In his opinion, access to acreage for petroleum exploration has been proceeding at a "glacial" pace. Furthermore, while much of the focus has been on alternative

energy sources, he feels that although intriguing, these solutions may be overrated and are likely more difficult to achieve and more long term in nature than most people realize. An underappreciated solution that has not been getting much attention from policymakers is demand alteration. In Petrie's view this may be a more feasible long-term solution than alternative sources of energy supply.

Petrie then presented data that put current energy prices in a historical context, and entertained the possibility that perhaps we are approaching a tipping point. After reaching highs in September, heating oil, gasoline, and crude oil prices have trended down in recent weeks. However, Petrie cautions that we may be at a false summit, and prices could rise to new highs. Even if prices are at a tipping point and will continue to fall, the likelihood of them dipping below the \$40/barrel range is slim given the current level of supply uncertainty and demand growth.

Petrie then turned his focus locally, and discussed the prospects for Colorado's energy-related sectors. Although there is no significant oil drilling in the state, natural gas production is very important here. Petrie's forecasts are for a natural gas shortage this winter, barring significantly warmer weather.

While natural gas output has slowed in nearly every other area of the country, production in the Rocky Mountain region has soared. In fact, in 2005 the region is expected to surpass the Gulf Coast as the country's largest producer of natural gas. This growth is anticipated to continue for the next two decades. The Rocky Mountain region holds several competitive advantages in natural gas production. First, we have long-lived reserves and substantial extraction resources in place. The strength of the technology sector here in Colorado provides an

CONTINUED ON PAGE 7



## **Forum Breakout Session**

# **Colorado's Changing Population and Workforce**

Luke Willoughby

For the decade 1990-2000, the state of Colorado ranked third in the nation in terms of population growth, with a total increase of 30.6%. Only Nevada and Arizona grew faster over this period. The state's rapidly growing population has definitely helped shaped its economy. At the forty-first annual Colorado Business Economic Outlook Forum, the "Colorado's Changing Population and Workforce" breakout session centered specifically on how these trends have affected the state thus far and what to expect going forward. The session featured a three-person panel comprised of Cindy DeGroen, Colorado Department of Local Affairs, and Jennifer St. Peter and Joseph Winter, both from the Colorado Department of Labor and Employment. The discussion was moderated by Elizabeth Garner, also from the Department of Local Affairs.

Joseph Winter began the session with an overview of various employment data series. The Current Employment Statistics (CES) data is gathered by surveying business establishments on a monthly basis. CES data includes employment, hours, and earnings data. A time series is available by major industry for the state as a whole, and for each of the major metropolitan areas.

Winter turned the discussion to the significance of "driver" industries. One statistical tool used to gauge relative importance of industry sectors is the location quotient (LQ). Essentially, the LQ is a ratio measuring the concentration of an industry locally relative to the concentration of that industry in a larger reference area. Obviously, an LQ greater than 1 indicates higher relative concentration. Generally, an LQ

over 1.2 suggests the industry is of particular interest in that it draws significant employment from outside the area. Winters identified Natural Resources and Mining, and Construction, Information, Financial Services, and Professional and Business Services as primary drivers in Colorado as all have LQs near or above the 1.2 level.

Information, Financial Services, and Professional and Business Services are also important because they pay significantly higher than average wages.


One area that has been critical in driving Colorado's economic growth is advanced technology. Unfortunately, no widely accepted definition exists for the tech industry, so fully gauging its importance and evaluating trends become difficult. Jennifer St. Peter discussed the department's efforts to define and quantify advanced technology in Colorado.

Essentially, it has created a definition by aggregating tech-heavy industries across NAICS sectors. The definition includes industries ranging from basic chemical manufacturing to aerospace products and parts, to software publishing. An examination of the advanced tech employment time series shows that the pattern of growth in technology has mirrored that of the state as a whole, but with a more extreme upswing in the late 1990s and downturn starting in 2001. The Department of Labor is planning to begin releasing employment data for this cluster in early 2006.

In the session's final presentation, Cindy DeGroen shifted the focus from employment to population. As of July 2004, an estimated 4.65 million people were living in Colorado, a 1.4% increase from 2003. While growth has slowed somewhat since the 1990s, Colorado remains one of the nation's fastest growing states. However, there is much disparity in terms of where that

growth is occurring within the state. Since 2001, the Western Slope and the Front Range have had the highest rates of growth. Looking forward, the Department of Labor is projecting state population will reach 7.3 million by 2030, with 60% of the growth coming from net in-migration.

In addition to sustained growth, Colorado's population will also undergo dramatic changes in age demographics. Like the majority of the country, Colorado is experiencing a "graying" of society, driven primarily by the increase in aging baby boomers. In 2000 the ratio of persons 65 and older to persons 20-84 was 15.8% in Colorado, compared to 20.4% for the entire United States. By 2030 that figure is expected to increase to 27.2% for the state compared to 36.3% for the country as a whole. Historically, Colorado has been a relatively young state, and an aging population will impact wealth and health levels, and labor force participation in the state.

While the days of Colorado being a wild Rocky Mountain frontier may well be gone, the state's economy is still looking ahead to a great unknown. While an evolving population and labor force pose unique challenges, the growth opportunities presented are bountiful. 

**Luke Willoughby works as a student research assistant at the Business Research Division in the Leeds School of Business. He can be reached at [Luke.Willoughby@Colorado.edu](mailto:Luke.Willoughby@Colorado.edu).**


## **ENERGY MARKET DRIVERS,**

CONTINUED FROM PAGE 6

additional opportunity. Finally, the state's central location is advantageous as we are able to supply gas to western, eastern, and mid-continent states. However, the opportunity does not come without challenges. Commercialization will depend highly on whether technology improvements can be successfully implemented. Moreover, environmental issues, wildlife preservation, and other federal, state, and private restrictions limit access to land in Colorado. Drilling in the region

is further constrained by weather. In order to capitalize on increased production, pipeline and takeaway capacity needs to be expanded. Finally, prices in this region have historically been below national averages.

Ultimately, growth prospects for natural gas production in Colorado look promising. Several large exploration companies have already decided that the region's merits outweigh the challenges. Potential pipeline expansion is also

on the horizon. Obviously, the world's energy problems are far from being solved. In the meantime, Petrie feels that Colorado appears to be well positioned for growth in production of this all-important natural resource. 

**Brendan Hickey ([Brendan.Hickey@Colorado.edu](mailto:Brendan.Hickey@Colorado.edu)) is a research assistant with the Business Research Division.**

# COLORADO BUSINESS REVIEW

Nonprofit Org  
US Postage  
PAID  
Boulder CO  
Permit No. 257

The *CBR* is a bimonthly publication of the Business Research Division at CU–Boulder. Opinions and conclusions expressed in the *CBR* are those of the authors and are not endorsed by the BRD, the Leeds School of Business faculty, or the officials of CU.

View our Web site: <http://leeds.colorado.edu/brd/>

Richard L. Wobbekind, editor; Cindy DiPersio, assistant editor; Gary Horvath, technical advisor; Lynn Reed, design.

This report is not produced at taxpayer expense. The University of Colorado at Boulder is an equal opportunity/affirmative action institution.

For information/address change:  
Business Research Division  
420 UCB, University of Colorado at Boulder  
Boulder, CO 80309-0420 • 303-492-8227



Forum director Richard Wobbekind (left) with Q&A panelists Bill Kendall, Center for Business and Economic Forecasting; Tucker Hart Adams, The Adams Group, Inc.; and Tim Sheesley, Xcel Energy.

## SECTOR HIGHLIGHTS, CONTINUED FROM PAGE 3

- **Southern Colorado (El Paso County)**— Aggregate and specific economic evidence points to March-April 2003 as the turning point in El Paso County's economic recovery from a two-year downturn. The average unemployment rate for El Paso County fell from about 5.6% in 2004 to 5.4% in 2005. A modest improvement is expected this year,

with a drop to 5.3%. Additional gains in employment are anticipated as the economy continues to strengthen, particularly among technology-based, primary employers. With troops returning from Iraq and new hiring announced by Northrop Grumman, Intel, and Barclays Bank, the local area will enjoy job growth. Other positions will be added

in finance, healthcare, retail, and construction. 

**Richard Wobbekind is associate dean for external relations and director of the Business Research Division in the Leeds School of Business. He can be reached at [Richard.Wobbekind@Colorado.edu](mailto:Richard.Wobbekind@Colorado.edu).**