Improving Deschutes County’s Competitiveness

Business Location and Retention Factors

A report by

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in partnership with

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July 2010
Improving Deschutes County’s Competitiveness:

Business Location and Retention Factors

A report by Headwaters Economics
in partnership with Economic Development for Central Oregon
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ABOUT HEADWATERS ECONOMICS

Headwaters Economics is an independent, nonprofit research group whose mission is to improve community development and land management decisions in the West. For more information about Headwaters Economics, contact Ben Alexander, 406-599-7423, ben@headwaterseconomics.org.

ABOUT ECONOMIC DEVELOPMENT FOR CENTRAL OREGON

Economic Development for Central Oregon (EDCO) is a private, non-profit organization dedicated to diversifying the regional economy by attracting new investment and jobs. For more information about EDCO, contact Eric Strobel, 541-388-3236, eric@edcoinfo.com.

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INTRODUCTION

Almost all of the highest flyers in the West during the past several decades have struggled during the most recent national recession. Nowhere is this contrast between economic boom and subsequent decline more dramatic than in Central Oregon’s Deschutes County.

In the early 1990s, Deschutes County reinvented itself from a timber and related wood-products manufacturing economy into a real estate and construction, hospitality, and service economy. By doing so, it developed into one of the fastest growing micropolitan areas in the country and experienced an economic transformation that was the envy of many in the West.

The national recession that began at the end of 2007, however, pointed out the weakness of this new economy: Deschutes County now has one of the worst unemployment rates in the region and the highest among similar fast-growing peers across the West.

This report analyzes the reasons behind this reversal of fortune and then turns to how Deschutes County can facilitate its economic recovery by exploring what makes the region a compelling place to conduct business and how Central Oregon can increase its long-term economic diversity and resiliency.

We achieve this by reviewing a wide variety of trends and data for Deschutes County and four peer counties in the West. We also interviewed local businesses leaders and company owners, and talked to economic development experts across the West.

We asked them what the most important factors are in their region for business and employee location and retention decisions. The responses paint a clear picture of competitive strengths and weaknesses for Deschutes County. They point to the importance of a mix of traditional location and retention factors such as base costs (e.g., land and transportation prices) and non-traditional quality of life factors (e.g., open space and trails, and low crime rates).

What brought many individuals and businesses to Central Oregon is not necessarily what is sustaining enterprises. Understanding the right mix of cost and quality factors is important to retain current businesses while building a more diverse and resilient economy in the region as a tentative economic recovery begins.
EXECUTIVE SUMMARY

For many years, Central Oregon was known for its great tourism opportunities, high quality of life, and booming economy—making Deschutes County one of the fastest growing regions in the West. The recent national recession, however, revealed a number of weaknesses in this new economy, and Deschutes County now has one of the worst unemployment rates in the region.

This report analyzes the reasons behind this economic reversal by analyzing a variety of Central Oregon trends and data, interviewing local business leaders, and comparing Deschutes County to four similar peer counties: Washington County, Utah; Kootenai County, Idaho; Boulder County, Colorado; and Ada County, Idaho.

The report concludes with a series of recommendations for how Deschutes County can facilitate its economic recovery by utilizing strategies that combine with the region’s enduring strength as a desirable place to live to create a broader range of economic diversity and long-term resiliency.

- **Housing:** Although prices have fallen significantly, housing costs still put the county at a competitive disadvantage. A greater variety and cost range of housing, located near downtowns and work locations, will make it easier to retain and attract firms and workers.

- **Amenities:** Central Oregon should sustain and increase quality of life through green spaces and trails, vibrant downtowns, and diverse cultural opportunities to attract skilled labor and their families.

- **Capital:** Public and private incentives can make a difference by providing low interest loans, development bonds, and loan forgiveness—and should be combined with efforts to help businesses know which banks can provide short-term capital.

- **Networks:** Peer-to-peer business networks are critical for businesses to exchange ideas and talent. Businesses also should explore whether there is the foundation of a material sciences business cluster in the region as a way to boost this potentially significant sector.

- **Collaboration:** Groups should agree on a clear point of contact for new and current businesses looking for assistance. Coordination also should encourage companies to search first for services locally. To improve recruitment of skilled workers, business advocates should focus on the needs of spouses through a jobs bank or referral arrangements.

- **Marketing:** Deschutes County should emphasize its strengths—such as recreation and quality of life—along with the positive news about how the region is more competitive now than at the peak the last business cycle. It also makes sense to target visitors as potential future business owners.

- **Access:** Compared to its peers, Deschutes County is isolated from larger cities and should take steps to improve air, rail, road, and freight services and infrastructure.

- **Education:** Increasing the intellectual capital and workforce skills depends in large measure on expanding educational institutions and opportunities in the region to promote worker skills, partnerships, business spin-offs, and idea incubation.
CENTRAL OREGON AND THE RECESSION

This section focuses on the transformation of the economy in Deschutes County leading up to the current recession, impacts of the economic downturn, and why this recession has been so severe locally.

Central Oregon Reinvents Itself

In recent decades, Deschutes County’s economy has changed dramatically. It has evolved from a timber and wood-products manufacturing economy into a more diverse regional economic hub for Central Oregon that is home to a broad range of industries and entrepreneurs, and attractive to retirees and tourists. (Note: data in this sub-section run through 2007 to show performance up to the beginning the current recession).

Since the decline of the logging and wood-products manufacturing economy that culminated in the closure of the Daw/Crown Pacific Lumber Mill (formerly Brooks—Scanlon Mill) in 1992, Deschutes County has been an incredibly strong economic performer, outpacing economic growth in Oregon and the United States by a large margin.

Figure 1 illustrates Deschutes County’s economic performance relative to the state and nation. County employment grew by more than 400 percent since 1990, while the state (75% growth) and nation (46% growth) experienced much more modest increases over the same time period.

Figure 1. Employment, Deschutes County Compared to Oregon and the U.S., 1970 to 2007

This economic growth was led by a new mix of industries, most notably by what are called “services,” that transformed Deschutes County from a commodity-producing to a service-providing focus. These services range from hospitality and health care to engineering, information, legal, and other technical services. For more details on the developing service economy, see the socioeconomic profile of Deschutes County (available online, www.headwaterseconomics.org/deschutes).

Figure 2 compares services and non-services employment growth in the county since 1970. Service-related employment accounts for 77 percent of all new jobs created in the county since 1990. By 2007, service industries in Deschutes County accounted for 71 percent of all jobs, while non-services, including manufacturing, accounted for 21 percent of all jobs. Government employment made up the remaining jobs.

Figure 2. Employment by Major Industry Category, Deschutes County, 1970 to 2007

Note: The vertical light blue bar in the figure above indicates a change in the way the U.S. government categorizes industries in 2001—from the older Standard Industrial Classification (SIC) system to the current North American Industrial Classification System (NAICS).


Real estate, construction, finance, and other sectors related to land sale and development were central to the Deschutes County economy and its growth in recent decades. These sectors straddle the services/non-services divide. However, their importance can be appreciated by examining each sector’s share of total employment in 2007: real estate and rental and leasing accounted for 7 percent; construction 12 percent; and finance and insurance 4 percent.

Manufacturing has been an important part of the economy for decades but employment in this sector has not grown since the early 1990s. It represented 6.5 percent of total employment in 2007 and has evolved into more value-added woods products (e.g., Jeld-Wen Windows and Doors) and non-wood products sectors such as metal, electronics, and plastics manufacturing.
While there are a number of larger employers in a few industries in the county, smaller enterprises account for the vast majority of businesses. Figure 3 shows firms by industry and the number of employees in 2007. Businesses with fewer than 20 employees comprised more than 90 percent of the total number of firms (vertical blue lines) in Deschutes County.

Figure 3. Firms by Size and Industry as a Percent of Total Firms, Deschutes County, 2007

Employment and business growth in Deschutes County was fueled in large measure by population growth. In the 1990s population grew at an annualized rate of 5.3 percent, and between 2000 and 2007 by an annualized rate of 4.5 percent. This rate of growth exceeded all but a handful of counties in the West and was driven largely by in-migration. As Figure 4 (next page) shows, in-migration to Deschutes County from elsewhere accounted for 87 percent of all population growth from 2000 to 2007.

Figure 4. Components of Population Change, Deschutes County, 2000 to 2007


Many of these new residents, especially those nearing or in retirement, brought wealth they had accumulated elsewhere. This is apparent in the growth of non-labor sources of income that accompanied the population’s expansion and the overall growth of the economy. Non-labor income is a mix of money earned from investments and government transfer payments, most of which is related to retirement.

Figure 5 shows the growth of non-labor income compared to labor earnings from 1970 to 2007. Non-labor income added $1.4 billion since 1990, in real terms, and in 2007 accounted for $2.3 billion or 40 percent of total personal income in the county.

Figure 5. Non-Labor Income Compared to Labor Earnings, Deschutes County, 1970 to 2007

As one of the fastest growing economies in the West, Deschutes County has been an incredible success story, reinventing itself to compete in a modern service economy and attract retiree and investment income. The most recent recession, however, resulted in unusually high job losses and unemployment.

**Recession Impacts in Deschutes County**

Deschutes County has been among the hardest hit areas in Oregon during the current economic downturn. The recent national recession officially began in December 2007 and is not officially over, but is generally thought to have ended in late 2009.\(^2\) (Note: data in this sub-section run beyond 2007 to show the impact of the recession.)

According to the National Bureau of Economic Research, “A recession is a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in production, employment, real income, and other indicators. A recession begins when the economy reaches a peak of activity and ends when the economy reaches its trough.”\(^3\)

For many people, the unemployment rate is the most obvious sign of a recession. According to the U.S. Bureau of Labor Statistics, the unemployed are “[p]eople who are jobless, looking for jobs, and available for work are unemployed.” The unemployment rate is the number of unemployed divided by the labor force, which is made up of both the employed and the unemployed age 16 years and older. Significantly, those who have no job and are not looking for one are “not in the labor force” and are not counted as unemployed, leading to the potential to undercount the true number of out-of-work persons.\(^4\)

As Figure 6 shows, since 2000 the unemployment rate in Deschutes County had a low of 3.8 percent in September 2006 and a high of 16.7 percent in March 2009. After a decline in later 2009, the rate rose again to 15.8 percent in March 2010. This is a startling increase in unemployment and well above the comparable unemployment rate in the nation and peer counties examined in this report.

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**Figure 6. Unemployment Rate, Deschutes County, January 2000 to March 2010 (March is a preliminary estimate)**

The current high unemployment rate reflects recent large job losses. Figure 7 shows that between March 2007 and March 2010 Deschutes County shed 8,697 jobs, a 13 percent decline in overall employment.

In most cases, one would expect to see many of those who lose their jobs and cannot find new employment to seek employment elsewhere, and for people from other places not to move to a location with such high unemployment and where finding a job will in all likelihood be difficult. In Deschutes County, however, since the start of the recession few people are leaving and net in-migration continued right up until the end of 2009.

Figure 8 shows that from 2007 to 2009, population in the county grew by 5,118 people in net terms. Natural population change (births minus deaths) has become relatively more important (1,731 net new people from 2007 to 2009), but in-migration is still more significant (3,387 net new people from 2007 to 2009).
The migration of people to and from Deschutes County has a distinct geographic dimension. Map 1 shows net migration to (in black) and from (in red) Deschutes County between 2007 and 2008. People are coming to Deschutes County largely from California, Arizona, and the Willamette Valley in Oregon—a pattern that is consistent with pre-recession migration trends. People are leaving for a mix of locations, including the Pacific Northwest, western Montana, and northern Idaho.

Map 1. Net Migration To and From Deschutes County, 2007 to 2008


The fact that, in net terms, people are staying in Deschutes County may be a function of how widespread the recession’s impact is across the nation and the difficulty of finding work elsewhere, along with challenges associated with selling a house in a declining market and other attachments to place that result in an unwillingness to relocate.

Because Deschutes County did not experience a net outmigration until the very end of 2009, the labor force remained fairly steady during the recession—as shown in Figure 9. This stable labor force has exacerbated the unemployment rate which otherwise would have declined had there been significant outmigration.
One response to the challenge of staying in Deschutes County during the recession after losing work is to work for yourself, becoming a self-employed proprietor. Figure 10 shows that a growing share of the employment base, 30 percent in 2008 and an increase of three percentage points since 2006, are now individual proprietors. This shows entrepreneurial talent, but also a measure of desperation as there are few wage and salary job openings relative to the number of unemployed.6

Average wages declined during the recession, but they have started to recover. Figure 11 shows that from an pre-recession peak of $23.6/hour in April 2007 average wages fell to a recession low of $20.8/hour in September 2009 before recovering to $22.1/hour in March 2010. The growth of individual proprietors, who earn less than wage and salary jobs on average, has pulled wages down.
On the other hand, the decline of lower-paying retail sector jobs and growth of relatively higher-paying healthcare jobs has helped wages to recover somewhat. (Note: See Appendix for details on changes in compensation by industry.)

Figure 11. Average Hourly Earnings per Job, Deschutes County, January 2007 to March 2010 (March is a preliminary estimate)


The impact of the recession on Deschutes County appears to have been moderated somewhat by the overall economy’s reliance on non-labor sources of income. Despite volatility in the stock market and other investment vehicles, non-labor income has been a stabilizing component of the economy. Figure 12 shows that non-labor income grew from 38 to 41 percent of total personal income from 2006 to 2008. As a source of income, it is especially important to retirees, many of whom live on investment income and Social Security, and households surviving on income maintenance programs. As the largest single source of personal income in Deschutes County, it is also crucial to sustaining regional spending, retail businesses, and the health care sector during the economic downturn.

Figure 12. Non-labor Income as Percent of Total Personal Income, Deschutes County, 2000 to 2008 (retirement, investments, etc.)

The “Why” of the Recession in Deschutes County

The easiest way to explain why Deschutes County suffered heavy employment declines is to look at industry-level data leading up to and during the recession. (Note: We use total compensation by industry as a proxy for employment by industry because these data are more current.

Figure 13 shows the dramatic run-up and decline in construction compensation (purple line), in real terms, which increased from $208 million to $418 million between 2001 and 2006, and fell to $291 million from 2006 to 2008, a 30 percent decline.

**Figure 13. Total Compensation by Industry, Deschutes County, 2001 to 2008**

![Graph showing total compensation by industry for Deschutes County from 2001 to 2008.](image)

*Note:* Compensation is the sum of employee wages and salaries and supplements to wages and salaries, shown here by industry.


Several other industries followed this same trend, including manufacturing (which has a large wood-products component focused on the housing market), retail trade, and real estate and rental and leasing (which facilitated development, sales, and construction-related rentals and leasing of equipment). Together with construction, these sectors catered to the booming development market that accommodated rapid in-migration and drove much of the recent economic expansion. And as Figure 14 shows, these four sectors explain almost all the loss in compensation from 2006 to 2008.
Less well appreciated is the continued growth of a number of industries in Deschutes County during the current recession. Health care and social assistance, a large regional industry and strong performer in the recent boom years, added over $50 million in compensation from 2006 to 2008. Government, which typically performs counter cyclically in recessions, also grew, adding another $34 million over the same time period. High-skill new economy sectors, such as information and professional, scientific and technical services, added another $13 million each from 2006 to 2008. Despite these bright spots, on the whole Deschutes County’s economy relied too heavily on real estate and construction, and it paid the price when this sector collapsed. In Bend, for example, housing permits fell from 4,460 in 2005 to 376 in 2009. The overbuilt housing market and lack of demand for new housing amplified recession impacts, making recovery more difficult.

In the boom years prior to the recession, Central Oregon had become less affordable for a growing number of families. Median home prices in Bend, for example, rose from $163,000 in 2000 to $279,900 in 2005 before skyrocketing to $345,000 in 2007. Area wages were not keeping pace with these price increases. From 2000 to 2007, average earnings per job rose much more modestly from $36,558 to $39,066, in real terms, a seven percent increase.

This affordability gap made Central Oregon less competitive, as firms struggled to lure new employees who could afford housing at a time when the regional economy was more-or-less characterized by full-employment. This challenge affected businesses not involved in construction and real estate activities, making it harder for the region to foster broader industry diversity, and as a result contributed to the severity of the recession’s impact.
In order to evaluate Deschutes County’s experience during the current recession and to learn from peers about assets and programs they had in place or have undertaken during the current recession to lessen its impact and position for a recovery, we compare Deschutes County to select peers across a range of performance indicators.

We chose four peers. Two—Washington County, Utah (St. George) and Kootenai County, Idaho (Coeur d’Alene and Post Falls)—were selected because of similarities in size, strong growth leading up to the recession, and amenity similarities. Two—Ada County, Idaho (Boise) and Boulder County, Colorado (Boulder)—were selected because they are larger than Deschutes County but are seen by many as further along the development curve that Deschutes County could take in the future.

The Appendix at the end of this report contains detailed figures on population, economic, labor force, and housing data and trends for each county (or related metro area).

**Peer Counties**

**Washington County, Utah**—similar in size, on Interstate 15, five hours from Salt Lake City and two from Las Vegas, very popular with retirees, includes significant public lands such as Zion National Park.

**Kootenai County, Idaho**—similar in size, on Interstate 90, home to Coeur d’Alene and Post Falls, very close to Spokane, Washington, includes Coeur d’Alene Lake and significant public lands.

**Boulder County, Colorado**—larger in size, less than an hour from Denver, home to the University of Colorado-Boulder, high-tech center, world-class parks and trails system, adjacent to significant public lands such as Rocky Mountain National Park.

**Ada County, Idaho**—larger in size, on Interstate 84, capital of Idaho, recent high-tech success story, on Boise River and close to public lands, including Snake River Birds of Prey National Conservation Area.

Table 1 on the following page summarizes indicators used to evaluate relative performance across geographies. Interviews with key business experts and elected officials in the peer counties add details and are explained in the next section of this report.
Table 1: Indicators Comparing Performance Among Peers in the Recession

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>Deschutes County (OR)</th>
<th>Washington County (UT)</th>
<th>Kootenai County (ID)</th>
<th>Boulder County (CO)</th>
<th>Ada County (ID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pop. growth, 2007-2009</td>
<td>Yes: 3.4%</td>
<td>Yes: 3.9%</td>
<td>Yes: 4.1%</td>
<td>Yes: 2.6%</td>
<td>Yes: 3.3%</td>
</tr>
<tr>
<td>Pop. growth from net migration, 2000-2007</td>
<td>Yes; dwarfs internal growth</td>
<td>Yes; triple internal growth</td>
<td>Yes; dwarfs internal growth</td>
<td>Yes; but internal growth triple migration</td>
<td>Yes; double internal growth</td>
</tr>
<tr>
<td>Pop. growth from net migration, 2007-2009</td>
<td>Yes; double internal growth</td>
<td>Yes; but mostly internal growth</td>
<td>Yes; triple internal growth</td>
<td>Yes; balanced with internal growth</td>
<td>Yes; balanced with internal growth</td>
</tr>
<tr>
<td>Pop. over 25 with college degree, 2008</td>
<td>29%</td>
<td>26%</td>
<td>23%</td>
<td>57%</td>
<td>34%</td>
</tr>
<tr>
<td>Empl. Change, March 2007 to March 2010*</td>
<td>Big decline: -16%</td>
<td>Big decline: -14%</td>
<td>Slight decline: -2%</td>
<td>Slight decline: -8%</td>
<td>Decline: -10%</td>
</tr>
<tr>
<td>Average hourly earnings, March 2010*</td>
<td>$22.1, growing</td>
<td>$17.9, steady</td>
<td>$16.6, steady</td>
<td>$27.4, declining</td>
<td>$21.6, growing</td>
</tr>
<tr>
<td>Non-labor income % of total, 2008 (% pop. over 65 in paren.)</td>
<td>41%, growing (14%)</td>
<td>43%, growing (18%)</td>
<td>39%, growing (15%)</td>
<td>32%, leveling (9%)</td>
<td>32%, growing (10%)</td>
</tr>
<tr>
<td>Proprietor's income % of total, 2008</td>
<td>30%, growing</td>
<td>27%, growing</td>
<td>25%, growing</td>
<td>27%, growing</td>
<td>22%, growing</td>
</tr>
<tr>
<td>Change in compensation by industry, 2006 to 2008</td>
<td>Decline in construction, manufacturing, retail trade; growth in health care, government, information</td>
<td>Decline in construction, information, retail trade; growth in health care, government, prof., sci., &amp; tech. services</td>
<td>Decline in admin. &amp; waste, construction, retail trade; growth in government, health care, prof., sci., &amp; tech. services, arts, entertain. &amp; recreation</td>
<td>Decline in manufacturing, mgmt. of companies, growth in wholesale trade, finance &amp; insurance, government, health care</td>
<td>Decline in manufacturing, mgmt. of companies, construction, retail trade; growth in health care, government, prof., sci., &amp; tech. services</td>
</tr>
<tr>
<td>Labor Force</td>
<td>Steady</td>
<td>Slight decline</td>
<td>Growing</td>
<td>Recent decline</td>
<td>Slight decline</td>
</tr>
<tr>
<td>Change in labor force since 2007*</td>
<td>15.8%</td>
<td>9.7%</td>
<td>11.9%</td>
<td>6.4%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Unemployment rate, March 2010*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>Down sharply</td>
<td>Down sharply</td>
<td>Decline, but recent rise</td>
<td>Up, then down</td>
<td>Down sharply</td>
</tr>
<tr>
<td>Housing permits since 2007**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing price index since 2007** (4th Q 2009 index in paren.)</td>
<td>Sharp decline (189)</td>
<td>Decline (153)</td>
<td>Decline (187)</td>
<td>Slight growth (201)</td>
<td>Decline (170)</td>
</tr>
<tr>
<td>Median house price, 2008*</td>
<td>$321,600</td>
<td>$262,400</td>
<td>$234,400</td>
<td>$358,600</td>
<td>$203,900</td>
</tr>
</tbody>
</table>

Note: * = Metropolitan Statistical Area; ** = Core Based Statistical Area. Data sources at end of Appendix.
Population

During the current recession, from 2007 to 2009, population growth continued in all counties, with Kootenai (4.1% growth) and Washington (3.9% growth) counties leading, Deschutes (3.4% growth) and Ada (3.3% growth) counties in the middle, and Boulder County (2.6% growth) slower than the rest.

Compared to the period 2000 to 2007, during which in-migration drove the large majority of population gains in all counties, there was relatively more growth from natural increases (births minus deaths) from 2007 to 2009 in all places, especially for Washington County.

At the end of 2009, Deschutes and Washington counties lost population due to net out-migration in net terms, while the others continued to grow. Boulder County was the only geography to lose population in the early 2000s as a result of the last recession. It has since experienced modest gains, balanced between internal growth and in-migration.

The educational attainment of the population, as measured by the percent of the adult population 25 years and older with a college degree or greater in 2008, varies among counties. Kootenai County is the least educated (23%), followed by Washington County (26%) and Deschutes County (29%), and at the head of the class is Boulder County (57%). As the business interview results below show, an educated and skilled workforce is in demand and a competitive asset in today’s economy.

Economy

The continued growth of population in most peers is surprising given the extent of recent employment declines. Deschutes County leads in percent decline (-16% from March 2007 to March 2010) followed by Washington County (-14% from March 2007 to March 2010), and as noted above these two counties lost population to out-migration starting in late 2009.

Not only were Deschutes and Washington counties the highest flyers in terms of population and economic growth in the decades leading up to the current recession, they were the most reliant on the construction industry. Figure 15 shows total compensation from employment in construction, indexed, from 2001 to 2008 for all five counties. Deschutes and Washington counties grew the most and then declined the most in this period.
Average earnings in Deschutes County declined almost three dollars an hour during the current recession (from $23.6/hour in April 2007 to $20.8/hour in September 2009) before recovering some lost ground ($22.1/hour) and are now at a midpoint among peers. By contrast, Washington and Kootenai counties’ wages have been unaffected by the recession, but they are the lowest among the peer counties—$17.9/hour in Washington County and $16.6/hour in Kootenai County in March 2010. Boulder County, with the highest average earnings ($27.4/hour in March 2010), has seen a steady decline in wages since the 2001 recession. While Ada County, despite heavy losses in higher-paying manufacturing jobs and significant cutbacks at Micron Technologies in particular, has experienced a steady rise in wages through the recession—they were $21.6/hour in March 2010.

Non-labor income has been a stabilizing element in the economies of all five counties during the recession. The three smaller counties—Deschutes, Washington, and Kootenai—are more reliant on non-labor sources of income, all hovering around 40 percent of total personal income, while the larger counties are closer to 30 percent of total personal income in 2008. This difference may be explained by the percent of the population over the age of 65 in each county. Deschutes (14%), Washington (18%), and Kootenai (15%) have a considerably higher share of their total population over the age of 65 years.

Deschutes County has the highest percent of its labor force working as self-employed proprietors (30% of total employment in 2008). This may be due to the lack of available wage and salary jobs, a reflection of economic stress and desperation, and/or a sign of innovation. In Washington County, where proprietors were 27 percent of total employment in 2008, growth in proprietorship could indicate stress given the large percentage of jobs it lost during this recession. However,
in Boulder County’s case, where there were fewer job losses and a large self-employed share (proprietors were 27% of total employment in 2008), this may be more closely associated with innovation and entrepreneurship.

The types of industries that shrank during the current recession are fairly consistent across geographies. Declines are found in construction (as shown in Figure 15 above), manufacturing, and retail trade. Above-average negative impacts in Deschutes and Washington counties are clearly associated with the falling fortunes of real estate and construction activities and the scale of this contraction. For example, in Deschutes County construction payrolls fell by 30 percent and in Washington County by 25 percent in just two years from 2006 to 2008.

Several industries that grew consistently across geographies during this recession were government, health care, and professional, scientific, and technical services. Gains in these sectors have substantially softened the recession’s impacts. Health care is an area that clearly offers promising long-term prospects as the U.S. population ages and the aging baby boomers continue to move to attractive places like Deschutes County.

Other sectors have also grown during the broader economic downturn, though these vary by geography. From 2006 to 2008 payrolls in Deschutes County information services (+13%), in Boulder County wholesale trade (+22%) and finance and insurance (+14%), and in Kootenai County arts, entertainment, and recreation (+22%) all increased considerably in the recession. These sectors are key to the ongoing recovery and may point to competitive strengths that can increase future resilience.

**Labor Force**

The labor force (the number of employed and unemployed over the age of 16 years) has remained more level than one might expect given the extent of job losses in all geographies. As covered above, this is partly due to the fact that until recently people were still moving to all five counties during the recession. Since 2007, the labor force has held steady in Deschutes County, declined slightly in Washington and Ada counties, and grown in Kootenai County.

Figure 16 shows unemployment rate trends across geographies from January 2001 to March 2010. Deschutes County has the highest unemployment rate among peers during the recession (15.8% in March 2010). The combination of a heavy reliance on construction, the highest percent of job losses among peers, and until recently continued in-migration together have pushed unemployment so high. In contrast, Boulder County, which has the lowest reliance on construction, suffered a smaller share of total job losses and experienced less in-migration, has the lowest unemployment rate (6.4% in March 2010).
Figure 16: Unemployment Rate, January 2001 to March 2010


Housing

The housing market and house prices have been central to the current recession. We already have discussed how a reliance on construction, manufacturing (largely focused on wood-products related to construction), and real estate sectors hurt the Deschutes County economy once the recession hit. And how a combination of oversupply and dwindling demand has steeply reduced house prices. In Bend, the median house price (for a residence on less than one acre of land) fell from $345,000 in 2007 to $212,000 in 2009, a 39 percent decline.10

Figure 17 (next page) illustrates the dramatic run-up in Bend metro area housing prices starting around 2005 from a comparative perspective. It also shows a large housing price decline for the metro area beginning in 2007. This reduction makes housing slightly less expensive than in the Boulder metro area (Bend’s housing price index was 189 and Boulder’s was 201 in the fourth quarter of 2009), but still more expensive than in the other peers.

Compared to Boulder County, however, Deschutes County has lower average earnings (more than $5/hour less in March 2010), making housing even more expensive relative to wages. The Boise metro area has much less expensive housing, while Ada County earnings are comparable to those in Deschutes County. The St. George metro area has even cheaper housing, but Washington
County also suffers from lower wages that discount this advantage. And the Coeur d’Alene metro area has housing priced on par with the Bend metro area, but Kootenai County wages are well below (more than $5/hour less in March 2010) those in Deschutes County. With the exception of Kootenai County, in other words, housing affordability remains a competitive disadvantage for Central Oregon.

Figure 17: Housing Price Index (1995 = 100), 1st Quarter 1995 to 4th Quarter 2009


As we tentatively move toward an economic recovery and Deschutes County businesses try to expand existing companies and attract new firms and employees to the area, housing remains a challenge. Of course, market conditions set housing prices and wages, but solid planning and a mix of housing types and price ranges will help make Deschutes County a more affordable place to live for families and workers.
THE BUSINESS PERSPECTIVE ON LOCATION

This section reviews literature on business location and retention factors, summarizes interviews with local business owners and human resource staff on variables that are critical for Deschutes County, and reports on interviews with economic development experts and elected officials in the peer counties.

Business Location and Retention Literature

Traditionally, factors associated with the cost of business—land, labor, and raw materials—have dominated business decisions and economic development efforts. Conventional wisdom assumes that firms are rational, cost-minimizing entities, and that there is a formal process, especially for larger businesses, to determine the best location.

According to a 2003 review of location theory,

Some of these factors may directly affect the cost of doing business at a particular site, such as state and local taxes, property values, site construction costs, stringency of local environmental regulations (including clean-up for brownfield sites), strength of local labor unions, and worker compensation laws. Indirect cost factors may also have a potentially large impact on a firm’s bottom line, such as the ease and efficiency of the local permitting process, community attitudes toward business, quality and availability of infrastructure and government services, availability of post-secondary educational institutions to name but a few.\(^{11}\)

Cost remains an important business concern, but there is also a growing recognition that quality of life factors are important to location and retention choices. During the last half century, as the driving force behind the U.S. economy has shifted from basic commodity production and lower-value manufacturing to new sectors such as research and development, high-tech manufacturing, and services—specifically those linked to goods production, such as architecture and engineering—what businesses are looking for in a location has shifted as well.

Traditional location factors are relatively less important to firms in knowledge-based enterprises which, thanks to advances in transportation and communication, now have far fewer constraints on where they conduct business. These more “foot loose” businesses, whose success is relatively independent of location, are more sensitive to the preferences of founders and employees and less focused on traditional cost factors.\(^{12}\)

While quality of life variables are still often thought of as “would like” rather than “must have” factors, this is changing. A growing body of research developed over the last 30 years has documented this shift. According to a recent survey of the literature, “Quality of life consistently ranks near the top of locational criteria for high–technology, R&D labs and other facilities that are more footloose in relation to traditional cost–sensitive location factors and place a greater emphasis on attracting and retaining skilled labor.”\(^{13}\)
In addition, for mobile firms and smaller businesses that do not have a formal or “rational” site selection process, quality of life factors, ranging from civic and public health to environmental and recreational factors, are more important. These amenities attract businesses, and also make the recruitment of employees easier. For industries where skilled labor is in high demand, quality of life factors can make the difference between hiring or failing to hire new workers. In other cases, amenities allow for lower wage rates, or compensate for lower wage rates, and reduce worker turnover.

While quality of life factors have grown in importance, many of today’s innovative firms also prefer (or require) locations that are close to markets, suppliers, competitors/collaborators, and a skilled workforce—what is now often referred to as an attractive business “cluster.” Rural areas and smaller cities that lack scale and depth in specialized areas can still compete for more innovative and growing business sectors, though they may face additional challenges attracting and retaining larger companies.

There is evidence that the combination of outdoor amenities, “creative class” workers, and an entrepreneurial context are stimulating significant economic growth in rural and micropolitan areas. In addition, recent research has shown that access to markets via air travel, when combined with environmental and recreational amenities, are strongly associated with economic growth.

Another way to think about business attraction is to focus on population migration patterns. The choices of aging “baby boomers” (born from 1946 to 1964) in particular are having and will have a large impact on the economic geography of the West—what one demographer calls an “age-wave tsunami” with tremendous economic consequences. Areas that are attractive to live in, “with desirable physical attributes—pleasant climates, mountains, beaches, lakes—are likely to increase their already high share of baby boomer migration.”

This trend has a number of economic advantages for places that can attract boomers. For example, baby boomers are better educated than previous generations and bring with them unprecedented wealth. The U.S Government Accountability Office estimates boomers hold investments valued at roughly $76 trillion, or a third of the value of all stock and 11 percent of the value of all bonds in the U.S. market. As this wealth is converted to income and spending, it stimulates other sectors of the economy, including construction, recreation and tourism, retail trade, and medical services.

The baby boomer retirement is shaping up differently than earlier retirement patterns. In spite of their wealth, most boomers will work longer than previous generations and/or opt for “semi-retirement.” An estimated 80 percent of baby boomers will keep working past retirement age and the same percent are expected to keep working, at least part-time, after “retirement.”

The literature on location decisions suggests that cost and convenience factors remain important, especially for firms who operate with significant location constraints. Traditional factors are growing relatively less important to location decisions for companies that are more “footloose” due to changes in production, transportation, and communication shifts, and that are engaged in more knowledge-intensive activities. For these firms, quality of life and the preferences of founders and employees can be more important. Similarly, the aging and “retirement” of the baby boomers places a premium on quality of life offerings.
For most locations a balance between incentives, infrastructure, and quality of life appears to be a smart approach to attracting new businesses and sustaining their success as they grow.

**Interviews: Deschutes County Competitiveness**

The findings on the following pages reflect conversations we had with business leaders. They are not the result of a randomly selected survey and therefore do not imply statistical accuracy or the ability to make inferences about the full population of businesses. The results of these in-depth, free-flowing conversations, however, offer insights that are less likely to be captured by more formalized random sample surveys.

We conducted a series of interviews with business owners and human resource staff in the four main communities (Bend, Redmond, Sisters, and La Pine) in Deschutes County to get their sense of what makes business work in Central Oregon and how to improve competitiveness.

The interviews focused on learning what brought business to the area, what it is like to conduct business in Central Oregon, whether businesses can attract and retain the employees they need, and how the current recession has changed the business environment.

The good news is that companies by and large are happy to be in Central Oregon and their needs dovetail nicely with a number of ongoing economic development efforts. However, the current recession has pointed out some basic weaknesses and at the same time has created new opportunities that will require adaptation.

Table 2 on the next page summarizes interview results and is followed by a discussion.
Table 2: Summary Results from Deschutes County Business Interviews

<table>
<thead>
<tr>
<th>Reason came/moved business to Central Oregon?</th>
<th>What makes it work for business/employees?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of life</td>
<td>Founders and employees love Central Oregon</td>
</tr>
<tr>
<td>Safe, beautiful, people friendly</td>
<td>People want to be here</td>
</tr>
<tr>
<td>Climate (little rain)</td>
<td>Commercial airport in Redmond</td>
</tr>
<tr>
<td>Public lands, parks, trails</td>
<td>High speed internet access</td>
</tr>
<tr>
<td>Outdoor recreation</td>
<td>Communities communicate well</td>
</tr>
<tr>
<td>Vacationed here first, then decided to move</td>
<td>Good networks</td>
</tr>
<tr>
<td>Fishing and hunting</td>
<td>Low labor turnover</td>
</tr>
<tr>
<td>Great lifestyle</td>
<td>Redmond business friendly</td>
</tr>
<tr>
<td>Good place to raise kids</td>
<td>Employer can pay less because of amenities</td>
</tr>
<tr>
<td>Not a rat race, or too fast paced</td>
<td></td>
</tr>
<tr>
<td>Business founder chose to live here</td>
<td></td>
</tr>
<tr>
<td>“Wholesomeness” of Central Oregon</td>
<td></td>
</tr>
</tbody>
</table>

What makes it difficult for business/employees?

- Gap between wages and cost of living
- Business taxes in state
- Shipping access and costs (at larger scales)
- Must recruit out of area for higher level employees
- Schools below average
- Lack of graduate degree holders
- No significant university presence
- Technical skills missing
- Lacks big city clusters and networking access
- Still a “turboprop” place
- Outside main venture capital radar
- Access to working capital
- Not enough businesses in particular industries
- Lack of job opportunities for spouses
- Labor market too small
- Does not feel like business is a priority
- People do not want to work overtime

Impact of recession on competitiveness?

- People are still coming
- Reduced cost of business (land, rent, labor)
- Housing more affordable
- Challenging to sell home
- Greater use of contractors (instead of employees)
- Easing of tight labor market
- Even lower employee turnover
- Cut costs to become more competitive
- Greater focus on efficiencies
- Forced to develop new markets
- Access to capital more difficult
- Opportunity to gain market share
- Difficult for employees with current high mortgages
- Challenging when spouse laid off

Note: The results in the table above are listed in no particular order.
**Reason Came/Moved Business to Central Oregon?**

Almost all of the interviewees indicated they came to Deschutes County because of the quality of life, and one individual who did not say he loves it here now and would not leave because of the lifestyle. The incredible mix of assets in the county brought company founders and employees alike to the region. Many visited Central Oregon first as tourists, returned later, and determined to move to Deschutes County when they could. The link between pleasure travel and the decision to move and conduct a business is strong enough that this connection is worth pursuing as a business recruitment approach.23

Most company founders we talked to simply decided to move here because they liked it. As their companies grew, their employees learned to love the region as well. The ability of communities to attract and welcome new people, allowing them to call it “home” in relatively short order also pays dividends as companies consider whether leaving makes sense. Owners we talked to said they would not want to leave, and would expect significant resistance from employees if this were proposed.

The types of amenities that business owners care about overlapped, though there was a diversity of assets and activities mentioned. People generally spoke of the climate and outdoors first, and the ability to recreate on trails, rivers, and public lands. Hunting, fishing, biking, running, and other familiar pursuits matter to business owners as a reason to live in Deschutes County. Access to the outdoors and recreation right from work or home is important too—for the sake of convenience and because it fits with wellness programs supported by companies and the preferences of employees.

A second common strand is an attraction to the pace of life, friendliness, and safety of the area’s communities. Many owners feel that a more urban lifestyle is a “rat race” with more pressure, less time for family, long commutes, and fears about safety and drugs. These points all reaffirmed a widely shared sense that Central Oregon is a good place to raise a family, and that for business owners deciding where to put down roots or human resource staff trying to hire new employees this is important to their choice of location and ability to attract workers. This connection suggests a family-oriented recruitment approach may be worth exploring in the future.

The family theme is closely related to education. Some believe local K-12 education for their kids was adequate, others were less enthusiastic. All agreed it was a crucial component for them and their decision to live and work in Central Oregon. At this point, it appears that primary and secondary education offerings are acceptable but are not a resource that sets the area apart or gives it an advantage over other locations. In Redmond, business owners mentioned that a four-day school week would have been disastrous for companies because it would have sent the message that education is not a priority and placed an additional day-care burden on workers.

**What Makes it Work for Business/Employees?**

This question focuses on what works for businesses and employees once they are living and working in the region. Interviewees reiterated again and again how much they “love” Central
Oregon. One owner said it feels good to live in a place where “people want to live” as opposed to having to live somewhere or feeling trapped. Several individuals commented on positive and open networks in communities—both of place and interest. They noted that these communication channels help facilitate entry into the region and assist firms trying to access local business resources once they are settled.

On infrastructure, owners mentioned repeatedly the importance of high speed internet access and commercial air service at the Redmond airport. Connections to other places and markets is crucial and, despite isolation from larger urban centers, owners felt they could communicate and travel adequately in most cases. Of course, there was some grousing about being a “turboprop” place and the added time and expense of air travel.

As pointed out in the literature section above, a number of owners and human resource staff said that because of the high quality of life in Central Oregon there was low labor turnover and employees were generally willing to trade lower wages for amenity benefits.

Redmond in particular got high marks for the city’s business-friendly approach and willingness to assist with a range of challenges such as siting, permitting, zoning, infrastructure, etc.

What Makes it Difficult for Business/Employees?

There is no shortage of items that business owners in the county believe represent challenges—for operations, profitability, and expansion efforts.

Owners generally think Oregon is not a business-friendly state and as an example cited a recent personal income tax increase for individuals with higher taxable incomes and new corporate income taxes. Though concerned about the burden taxes place on business, most acknowledged that they did not choose where to locate their business based on tax rates.

Shipping access and costs are a problem for businesses that produce or process bulkier material. This was not the case for smaller businesses or larger firms that work with more compact goods or services. Central Oregon’s degree of isolation, which is notable when compared to the peers examined in this report, is a disadvantage and fuel or transportation price increases in the future could negatively affect a number of businesses.

The gap between area wages and the cost of housing was a topic cited by almost everyone we interviewed. As noted earlier, on the eve of the recession communities like Bend had simply become unaffordable for most families. This affordability gap developed into a central recruitment hurdle, which was exacerbated by wages that are lower for comparable work in larger cities. Several individuals said they had tried to hire people who were willing to take a pay cut or pay more for housing but not both. This challenge clearly put Deschutes County at a competitive disadvantage.

It was generally noted that businesses have a hard time hiring senior employees or employees with narrow technical competencies in the region, and that it was often difficult to attract these employees to Deschutes County. A number of reasons were cited. They include the wages and cost of living issue, but also the size of the labor market and number of companies working in any
given sector. If someone were to take a job with a company and it did not work out, there would be limited employment opportunities with similar companies or for similar talents. In addition, there are relatively few job opportunities for spouses who also have professional ambitions.

The scale question also came up related to industry clusters. A number of owners felt they were out of the mainstream for their industry and that this put them at a disadvantage. The business and social networks in Bend and Redmond are excellent but they are limited in their reach. The lack of depth in emerging sectors—ranging from aeronautics to biotech—contributes to difficulties finding technically skilled employees, getting access to capital, especially from sources of venture capital which typically operate closer to larger cities and in more mature industry clusters, and forging new business relationships. A related point made by a number of owners is that Central Oregon right now is better suited to starting and growing a smaller business than scaling up a mid-sized enterprise because of the lack of technical, financial, supply, and, in some cases, available space resources.

The absence of a major university presence was noted by almost everyone interviewed as a problem for the region. Owners thought a larger university institution could help with education rates and specific skill competencies, and allow for higher education-private partnerships to incubate ideas, pursue research, and provide for ongoing training. Most thought the intellectual capital of a larger university would benefit business and complement the communities and natural amenities in the region.

Several interviewees felt that business was not a priority in the region. This comment was directed at some local governments but also used to describe parts of the workforce that are more interested in recreation or other pursuits than working, especially overtime.

**Impact of Recession on Competitiveness?**

Although the recession has been difficult for many businesses, and firms have already failed in or will not survive the current economic downturn, owners and human resource staff talked about a variety of ways the recession not only challenged their business but also created opportunities.

The cost of business in Deschutes County has gone down. Land, rental and leasing options, and labor are all more readily available. As with lower housing costs for individuals, this makes the region and its businesses more competitive on price. Competing for labor in the tight market prior to the recession inflated wages and made hiring difficult. This pressure has eased, and some sectors have been able to hire workers displaced from other industries who have transferable skills. A number of companies also are seeing lower employee turnover.

The reduction in house prices alleviates the gap between wages and housing costs, but it has not made Deschutes County altogether affordable—in the case of Bend to date, it has made housing slightly more affordable than in Boulder, Colorado but still more expensive than in the other peers we examined. There also remains the buyer’s confidence game—how far prices will fall before they stabilize—and the problem of selling housing in other markets that are also depressed in order to move to Central Oregon. For business competitiveness, it makes sense to examine avenues to better match wage rates and housing prices.
A cost-conscious mindset has led some companies to look for new efficiencies. For example, this has led to a greater reliance on contract labor to offset both the cost and the risk of hiring employees before the recovery is more mature. Firms also have streamlined production and explored new efforts to cut energy use that may pay longer-term dividends. Some companies are developing new markets to sustain demand for their goods and services in the downturn, and these could grow with the broader economic recovery. Others have taken advantage of difficulties their competitors face to grow market share.

Access to capital has become much more difficult compared to the pre-recession period. Banks are struggling with their balance sheets and new capital requirements mean that, in the short-term at least, banks have less working capital to lend. Interviewees expressed frustration about how difficult it is to obtain loans and confusion about which banks are actually making business loans.

**Interviews: Peer County Competitiveness**

We talked to economic development specialists and elected officials in the peer counties to find out what works for business in their communities that may have relevance for Deschutes County.

**Washington County, Utah (population = 137,473 in 2009)**

**Strengths**

St. George and Washington County see themselves as similar to Bend and Deschutes County. They too have been on a long-term growth trajectory (faster and for longer than Deschutes County) driven by in-migration, especially an older population (18% of the population is 65+ years old). Key ingredients of success include a favorable climate; Interstate 15, which connects St. George to Salt Lake City, Las Vegas, and southern California; the advent of cheap air conditioning; and golfing opportunities.

Religion is important. The first Mormon temple in the West was built in St. George, and it has a long tradition of attracting members who are looking for a place to work and retire. The area has a reputation in the region as “the” place to retire and the temple provides a strong sense of community and continuity for many people.

Dixie State, a two-year college that now offers a limited range of bachelor’s degrees, is “focused on economic development in the region” through partnerships with local businesses and a range of training programs for high school students and applied technology apprenticeships.

Historically, Zion National Park and other local parks and trails were seen as less significant to economic development, but they have become more important over time to visitation and as amenities new residents want and enjoy. A good example is the Red Cliffs Desert Preserve which was established in 1996 to protect sensitive habitat, the area’s scenic red rock backdrop, and a popular recreation area.
Weaknesses

The county’s economy lacks diversity and remains too reliant on construction, retirement, and tourism.

In late 2009, net in-migration turned negative for the first time. This has local people worried.

Housing prices have fallen substantially in the recession, but relatively low wages (wages averaged $17.9/hour in March 2010) continue to make housing unaffordable for many families (median house price of $262,400 in 2008).

Looking ahead

Incentives: For the first time local government is providing tax abatements to businesses that relocate to the area and have provided jobs that pay 20 percent or more above the median wage.

Amenities: The area is promoting a broader array of amenities and more events such as Senior Games and an Ironman triathlon, and built several open-air amphitheaters.

Connections: An expansion of the airport due to be completed in 2011 will accommodate larger planes and more flights to Salt Lake City, Los Angeles, and Phoenix.

Kootenai County, Idaho (population = 139,390 in 2009)

Strengths

Coeur d’Alene and Post Falls in Kootenai County have experienced long-term growth stimulated by a combination of in-migration for quality of life reasons and economic opportunities that stem from proximity to Spokane just across the border in Washington state.

There really are two different competitive strengths in the county: in Coeur d’Alene a focus on tourism and recreation, and retirees and health care; in Post Falls low taxes and labor rates have supported the growth of satellite activities such as warehousing, light manufacturing, and call centers.

Both communities benefit from proximity to Spokane, with its larger economy, higher cost of business, solid commercial airport, major hospitals, and educational facilities, including Gonzaga University and a Washington State University branch campus.

Amenities are seen as “incredibly important” to the economy. Officials in the area mention in particular the relaxed lifestyle, outdoor recreation, Coeur d’Alene Lake, and recreation events as key to attracting visitors and early/active retirees who often keep working in one capacity or another.

The relatively large government sector (17% of total employment in 2008, almost all state and local) has supported steady economic growth and provided a cushion in the current recession. Northern Idaho College in Coeur d’Alene is also an important asset and houses a nursing curriculum as well as workforce training programs.
Weaknesses

Primary and secondary schools are not adequate. This is a barrier for families considering moving to the county. In addition, high school graduates are not competitive in the labor market when they graduate.

The economy lacks sector diversity. The current recession pointed out the downside of an over-reliance on construction and retail trade sectors. Wood products manufacturing, a competitive strength historically, also fared poorly in this recession and may struggle in the future.

The area is caught in a long-term, low-wage pattern. The low-cost strategy in Post Falls keeps wages low, while lower-paying tourism and recreation jobs in Coeur d’Alene have the same effect—in March 2010 average hourly wages were $16.6/hour, the lowest of the counties examined in this report.

Looking ahead

Kootenai County is still growing and this is cause for optimism in the area. This sustained growth may explain a determination to pursue current strategies despite their weaknesses.

Spokane will continue to be the economic hub of the region. Post Falls is looking to promote its cost advantages in taxes, land values, and wages to businesses operating in the metro area. Coeur d’Alene will stay focused on generating more tourism and retirement-related in-migration and expenditures.

Boulder County, Colorado (population = 303,482 in 2009)

Strengths

The city of Boulder lies in the foothills of Colorado’s Rocky Mountains approximately 30 miles northwest of Denver. It is home to the University of Colorado’s (CU) main campus, with approximately 30,000 enrolled students, as well as 14 federal laboratories and several Nobel laureates. Boulder is known for its natural beauty, outdoor recreation, natural product retailers and restaurants, extensive transportation options, and its dynamic research and high tech sectors. Boulder County has the best educated adult population (57% of adults 25+ years of age in 2008), highest average earnings ($27.4/hour in March 2010), and lowest unemployment rate (6.4% in March 2010) among counties examined in this report.

The large government sector, especially CU, is key to the county’s economic success. It provides stability in economic downturns, but more importantly supports a highly educated workforce and partnerships with entrepreneurs that spin off companies, patents, and products—an average of 10 bioscience companies are formed each year based on technologies developed at CU.

Quality of life is also central to the Boulder success story. To take one example: The city of Boulder first invited Frederick Law Olmstead to draft a “plan for improvement” in 1908 that called for a network of green space throughout the city. Since that time, the city has won a national reputation...
for its strong growth policy and well-cultivated system of green infrastructure—a 27,000 acre greenbelt, excellent public transit, and extensive foot and bike paths. The city was the first city in the United States (in 1967) to pass a tax focused specifically on open-space preservation.

The city of Boulder has a unique brand today that involves leadership in sustainability, innovation and technology, and a high quality of life with great amenities and a vibrant downtown. It is also home to large technology firms such as IBM, Ball Aerospace, and Level 3 Communications that, along with CU, foster a large professional class, more scientists and engineers as a percent of the workforce than anywhere in the country, and cluster synergies in related industries.

**Weaknesses**

Boulder is expensive—there is tremendous demand to live there and the city has limited new housing permits since 1971 constraining supply. The high cost of living (median house was $358,600 in 2008) has pushed people to neighboring communities. An estimated two-thirds of the workforce commutes from elsewhere, creating problems with traffic, congestion, and lost sales tax revenue.

The high cost of land and buildings also makes it difficult to retain larger, mature businesses (in the 200+ employee range) that have trouble finding suitable and affordable commercial and industrial space and as a result move to neighboring communities and counties. There is also resentment directed at Boulder based on real and perceived inequalities both in the county and with surrounding towns.

The 2001 recession, in which the “dot com” bubble burst, hit Boulder hard and was a wake up for many who thought the area was immune to economic downturns. In hindsight Boulder was too reliant on a relatively narrow set of industries (e.g., data storage and technology companies). Less well appreciated is the adaptation in Boulder’s economy since then: a number of firms have successfully shifted from data storage, for example, to internet software.

While earnings are high in Boulder County, they have declined by 12 percent since 2000. It’s not entirely clear why this is happening but the loss of larger companies, especially in high-tech manufacturing and information services, may be the reason.

**Looking Ahead**

Maintain current sweet spot: Boulder is trying to maintain the balance and benefits of a world-class university town, top notch talent and technology, a high quality of life in a spectacular setting, and an open-mindedness about new ways of doing things.

Sustain a “virtuous cycle”: Unlike some places where people make money and then retire elsewhere, Boulder is a place where successful entrepreneurs want to stay. This has led to a generation of successful business people who now mentor and invest in new institutions and enterprises. This is now occurring in biotech. The founder of Amgen, which started in Boulder and is now the world’s largest biotechnology company, recently endowed the new Colorado Institute of Molecular Biology at CU, which is being led by a chemistry professor who is a Nobel
laureate.

Continue to foster innovation: Boulder is known for its culture of innovation and as a great place to launch a company. There are a variety of networks such as TechStars, Ignite Boulder, the entrepreneurship initiative at CU called the Flatiron Center, and numerous coffee gatherings in the city that keep entrepreneurs connected and offer mentoring, education, and start-up funding. Unlike the scene in Silicon Valley, which can feel overly institutional and highly competitive, there is still a feeling of informality and collaboration that people love and believe is important to sustaining innovation.

**Ada County, Idaho (population = 384,656 in 2009)**

**Strengths**

Boise is at the center of Ada County. It is home to a number of corporate headquarters (e.g., Simplot, Albertsons, Boise-Cascade, and Micron). Boise also has strong business competencies in emerging sectors such as analytic software, geosciences, including geothermal, and LED/solar research and development.

The Boise River Greenbelt is cited as central to the city’s quality of life and business vitality. In 2002 citizens voted to approve a bond to purchase open space in the surrounding foothills. The area now has 4,000 acres of open space, 125 hiking and biking trails, and 26 miles of greenbelt along Boise River. These amenities have helped to make Boise a “cool” place to live and encouraged downtown revitalization. The area also has a low crime rate and is more affordable than other peers examined in this report by a large margin (median home price of $203,900 in 2008).

Ada County has a large government sector (12% of total employment in 2008), which includes the state capital and Boise State University.

**Weaknesses**

The lack of regional planning has led to sprawling development, traffic congestion, and air quality problems in the Treasure Valley. Outlying areas are mainly commuting suburbs and they were overbuilt, lack commercial integration, and have been hit hard in the current recession.

Micron Technologies, a large semiconductor company based in Boise, contracted significantly in the current recession. Their downsizing, and related impacts on their suppliers, was painful for Ada County and highlighted the vulnerability of relying on a single, large employer.

Primary and secondary schools are not adequate, and a recent large cut in state school funding has made matters worse. This is an impediment for recruiting workers with school-age children and to the ongoing challenge of growing a skilled workforce. Despite the presence of Boise State, companies lack access to a large pool of educated, skilled workers—a mid-sized Boise software company recently opened an office in Boulder, Colorado to access skilled workers.

Some think Boise lacks a culture of innovation. Entrepreneurs are more focused on building
a business they can hand down to their children than one they can grow, sell, and then move on to other ventures. Two Boise venture capital firms expressed frustration that they are not seeing investment opportunities in Boise—that the shortage isn’t capital but entrepreneurs and companies with “exit strategies” for their business ideas.

**Looking Ahead**

A great place to live: The “cooler” Boise becomes the easier it is to recruit a skilled workforce. There are ongoing efforts to improve regional planning, provide for more widespread and accessible open space and trail amenities, and improve K-12 schools to make Boise attractive to talented young adults and heads of families.

Engineering/science expertise: Companies and programs at Boise State are cultivating engineering and computer science graduates to meet the demand for these skills.

Innovation: The city of Boise and the Idaho Small Business Development Center are starting a “Greenhouse” that will house and incubate 10-12 start-up companies and help them to get on their feet. The Greenhouse incubator is going to be housed in a building that the city owns. Boise is spending funds to upgrade the building that formerly housed the Water Quality division of the Public Works Department with more efficient windows and HVAC. In addition to providing services for “green” businesses, the building itself may become a model to other companies for how they can retrofit their buildings to be more efficient.

**Interview Summary**

The interviews reaffirm the literature review findings on business location and decision factors. They show that a mix of cost and quality variables are important to succeeding. As the economies of the region have moved beyond extraction to attraction as a central element in their success, quality of life amenities have become more important. These resources by themselves, however, do not confer the same economic advantages without the presence of important institutional (e.g., universities), infrastructural (e.g., airport), and cost (e.g., price of housing) advantages. It is also clear that some peers are choosing to compete more on price while others are focused on differentiating qualities, as the contrast between Post Falls and Coeur d’Alene demonstrates. The large gap between the smaller and larger peer counties shows that for Central Oregon to compete at the next level it will have to invest in and develop a mix of assets to foster a more mature, high-skill economy.
RECOMMENDATIONS

The recession experience, local interviews, and discussions with experts in peers point to a number of approaches and action items worthy of consideration for Deschutes County.

The research for this report has made it clear that a heavy reliance on real estate, construction, and related finance is perilous. This economic foundation is too narrow by itself to sustain long-term resilience and competitive strength. Another way to put this is that the region should focus on taking advantage of its desirability as a place to live to create a broader range of industry diversity.

The companies in Deschutes County are already more innovative and the economy more developed in higher-skill sectors than in similarly sized Washington County, Utah and Kootenai County, Idaho. The leap to compete with larger urban centers such as Boise and Boulder raises issues of scale, depth, skills, and access that must be resolved in order to compete on this higher plane.

If Deschutes County wants to take an ambitious step forward, there will have to be levels of cooperation not seen today—to increase efficiencies, support more mature clusters, maximize existing talent, bring in new talent, protect and promote the area’s compelling mix of amenities, and build new research and educational institutions.

Below is a list of recommendations, some of which are already in circulation, that we believe will serve Central Oregon well. In most cases, recommendations apply to supporting the growth of existing businesses as well as to attracting new companies, and to the need for more skilled labor.

Housing: Deschutes County remains unaffordable for too many families and workers. Although housing prices have fallen significantly during the current recession, they still put the region at a competitive disadvantage, especially when area wage rates are considered. More affordable housing, more varied types of housing, and new or renovated housing located near existing downtowns and work locations will make it easier to retain and attract the workforce the region will need as it emerges from this recession.

Amenities: The example of Boise and Boulder point to the importance of developing amenities to attract skilled workers and their families. Boise’s system of green spaces and trails is a crucial element in that city’s ability to appeal to younger technology workers in particular. And Boulder complements its incredible open space and trails with a vibrant downtown, diverse cultural scene, and excellent restaurants. Communities in Central Oregon, Bend in particular, have the ability to compete at this level if there is a continued commitment to green infrastructure, downtown development, and a lively arts and entertainment scene.

Capital: Accessible sources of public and private capital, whether for operations or planned expansions, will help businesses through the recession and grow as the broader economic recovery develops.

Fiscal tools like Oregon’s low interest loans and development bonds, enterprise zones conferring
tax and fee abatements, and locally supported loan forgiveness programs tied to specific performance are all worth continuing and expanding as resources permit.

Some banks are lending little while others with healthier balance sheets are more active. Businesses need to know where to go for short-term capital needs. A bank index or some other way of ranking banks by their willingness and capacity to lend to business will help firms who need loans to keep their doors open and to reposition as the recession ends.

Securing capital for firms trying to significantly advance a concept or product requires skills and connections that many companies lack internally. New efforts like EDCO’s Venture Catalyst program are designed to meet this need. PubTalk and the Bend Venture Capital conference are also good avenues to expose companies to investors. More generally, firms can use assistance to match their business strategy to the expectations of investors, and then to find the right investor.

Networks: Peer-to-peer business networks such as Opportunity Knocks and more industry-specific groups like Central Oregon Bioscience Consortium and High Desert Enterprise Consortium are critical to keeping businesses connected with each other and allowing for the exchange of ideas and talent. Regular meetings should be continued with the goal of pushing ambitious companies forward and sustaining an open culture of innovation and talent sharing.

A number of business owners mentioned material sciences as an emerging business cluster in Central Oregon, noting the spin-offs from Bend Research as well as newer entrants into this field. Developing such a business cluster could be an important competitive strength. We recommend convening a focused discussion to determine what building blocks are missing to overcome potential disadvantages such as distance from primary centers for this field, the need for a highly educated labor force, and the limits of available venture capital.

Collaboration: A number of firms admitted to being overwhelmed by the range of business organizations in Central Oregon and expressed a desire for more coordination between groups like the Small Business Administration, Chambers of Commerce in the region, and the Small Business Development Center. A common clearinghouse of information and coordination of activities will create a clear entry point for businesses seeking assistance.

Coordination between firms also should strive to plug leaks in the local economy by creating a directory that will allow companies to search for services locally before sending business outside Central Oregon. This could be accomplished in part with a “support each other” campaign that emphasizes how local cooperation supports global competitiveness.

In the interviews we regularly heard that the lack of employment opportunities and connection to place for spouses impedes efforts to recruit skilled workers. Coordination between hospitality groups and business advocates should focus on the needs and interests, including jobs, culture, and recreation, of spouses. This type of support could evolve into a jobs bank or referral arrangement for spouses to minimize the downsides of a smaller labor market for professional couples.
**Marketing:** Central Oregon has a high profile surrounding its great recreation and tourism opportunities, high quality of life, and booming economy of recent decades. While Deschutes County remains strong on the first two counts, anyone paying attention knows that the economy is not booming now and may have an unduly negative impression of what’s happened to the region’s economic strengths during the current recession. Interests in the county should counter any negative impressions with positive news about the economic environment in Central Oregon and how in many ways the region is more competitive now than at the peak the last business cycle.

A number of excellent marketing ideas were suggested by business owners in the interviews. These include: appealing to families with younger children who may be attracted to the wholesomeness of Central Oregon; reaching out to active professionals working in occupations or for companies that are relatively footloose; contacting “career harvesters” who have expertise as well as mature networks and may be looking for the high quality life offered in Deschutes County and willing to mentor younger entrepreneurs; and utilizing area people with specific talents/skills to reach out to professional peers around the country to market what Central Oregon has to offer.

Almost every business owner we talked to for this report visited Deschutes County first as a tourist, and there is evidence from around the West to confirm a connection between pleasure and business travel-stimulated entrepreneurial migration. It makes sense to focus on this link by developing ways to target visitors as potential future business owners and workers in the region. Visit Bend and others are embarking on this type of effort with a “Job-Creation and In-Migration Through Tourism” plan and needs resources to succeed.

**Access:** Compared to peers examined in this report, Deschutes County is isolated both geographically and by virtue of the air, rail, and highway connections to larger cities. Commercial air service is excellent for the size of the population base in Central Oregon, but its future cannot be taken for granted. Travel bank investments (in which travelers pre-purchase travel) and airline revenue guarantees are good ways to sustain or improve service. Diversifying air freight options will give companies more ways to move products in a time-sensitive manner. More convenient railroad cargo service schedules and depot locations, and more competitive pricing will help businesses with bulkier products. Passenger rail service to Portland also will make this important city much more accessible.

**Education:** Expanding higher education in the region is important for Central Oregon to address and to come up with specific strategies to resolve. Almost every interview we conducted reaffirmed the interest in a larger university presence—for all the reasons that the University of Colorado is important to Boulder (skills, partnerships, idea incubation, spin-offs, innovative culture, etc.) Expansions of Central Oregon Community College and OSU-Cascades are possibilities, as are partnerships like OSU-Cascades has initiated with Cornell University’s School of Hotel Administration on hospitality training. Successfully increasing the intellectual capital of the community and skills in the workforce over the long-term may well hinge on this question.
REFERENCES

6 This point was made recently by Robert Reich, former U.S. Secretary of Labor, in a New York Times op-ed. See: http://www.nytimes.com/2010/06/02/opinion/02reich.html.
13 Slavesen, David, and Henry Renski, “The Importance of Quality of Life in the Location Decisions of New Economy Firms,” page 30.
21 DeVaney, S. A. and Y. Su, “Factors Predicting the Most Important Source of Retirement


23 Visit Bend and others are embarking on a program called “A Plan for Job-Creation and In-Migration Through Tourism” that capitalizes on this logic.

APPENDIX: DETAILED COUNTY-LEVEL COMPARISONS

This appendix compares Deschutes County to four peers, based on trends in Population, Economy, Labor Force, and Housing. The table below provides a snapshot of key comparisons among the counties. Details are available in charts and figures in the following pages.

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>Deschutes County (OR)</th>
<th>Washington County (UT)</th>
<th>Kootenai County (ID)</th>
<th>Boulder County (CO)</th>
<th>Ada County (ID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pop. growth, 2007-2009</td>
<td>Yes: 3.4%</td>
<td>Yes: 3.9%</td>
<td>Yes: 4.1%</td>
<td>Yes: 2.6%</td>
<td>Yes: 3.3%</td>
</tr>
<tr>
<td>Pop. growth from net migration, 2000-2007</td>
<td>Yes; dwarfs internal growth</td>
<td>Yes; triple internal growth</td>
<td>Yes; dwarfs internal growth</td>
<td>Yes; but internal growth triple migration</td>
<td>Yes; double internal growth</td>
</tr>
<tr>
<td>Pop. growth from net migration, 2007-2009</td>
<td>Yes; double internal growth</td>
<td>Yes; but mostly internal growth</td>
<td>Yes; triple internal growth</td>
<td>Yes; balanced with internal growth</td>
<td>Yes; balanced with internal growth</td>
</tr>
<tr>
<td>Pop. over 25 with college degree, 2008</td>
<td>29%</td>
<td>26%</td>
<td>23%</td>
<td>57%</td>
<td>34%</td>
</tr>
<tr>
<td>Empl. Change, March 2007 to March 2010*</td>
<td>Big decline: -16%</td>
<td>Big decline: -14%</td>
<td>Slight decline: -2%</td>
<td>Slight decline: -5%</td>
<td>Decline: -10%</td>
</tr>
<tr>
<td>Average hourly earnings, March 2010*</td>
<td>$22.1, growing</td>
<td>$17.9, steady</td>
<td>$16.6, steady</td>
<td>$27.4, declining</td>
<td>$21.6, growing</td>
</tr>
<tr>
<td>Non-labor income % of total, 2008 (% pop. over 65 in paren.)</td>
<td>41%, growing (14%)</td>
<td>43%, growing (18%)</td>
<td>39%, growing (15%)</td>
<td>32%, leveling (9%)</td>
<td>32%, growing (10%)</td>
</tr>
<tr>
<td>Proprietor’s income % of total, 2008</td>
<td>30%, growing</td>
<td>27%, growing</td>
<td>25%, growing</td>
<td>27%, growing</td>
<td>22%, growing</td>
</tr>
<tr>
<td>Change in total compensation by industry, 2006 to 2008</td>
<td>Decline in construction, manufacturing, retail trade; growth in health care, government, prof., sci., &amp; tech. services</td>
<td>Decline in construction, information, retail trade; growth in health care, prof. &amp; sci., &amp; tech. services</td>
<td>Decline in admin. &amp; waste, construction, retail trade; growth in government, health care, prof., sci., &amp; tech. services</td>
<td>Decline in manufacturing, mgmt. of companies; growth in wholesale trade, finance &amp; insurance, government, health care</td>
<td>Decline in manufacturing, mgmt. of companies, construction, retail trade; growth in health care, government, prof., sci., &amp; tech. services</td>
</tr>
<tr>
<td>Change in labor force since 2007*</td>
<td>Steady</td>
<td>Slight decline</td>
<td>Growing</td>
<td>Recent decline</td>
<td>Slight decline</td>
</tr>
<tr>
<td>Unemployment rate, March 2010*</td>
<td>15.8%</td>
<td>9.7%</td>
<td>11.9%</td>
<td>6.4%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Housing permits since 2007**</td>
<td>Down sharply</td>
<td>Down sharply</td>
<td>Decline, but recent rise</td>
<td>Up, then down</td>
<td>Down sharply</td>
</tr>
<tr>
<td>Housing price index since 2007** (4th Q 2009 index in paren.)</td>
<td>Sharp decline (189)</td>
<td>Decline (153)</td>
<td>Decline (187)</td>
<td>Slight growth (201)</td>
<td>Decline (170)</td>
</tr>
<tr>
<td>Median house price, 2008*</td>
<td>$321,600</td>
<td>$262,400</td>
<td>$234,400</td>
<td>$358,600</td>
<td>$203,900</td>
</tr>
</tbody>
</table>

Note: * = Metropolitan Statistical Area; ** = Core Based Statistical Area. Data sources at end of Appendix.
Components of Population Change, Deschutes County, 2000 to 2007

Components of Population Change, Deschutes County, 2007 to 2009
Average Hourly Earnings per Job, Deschutes County, January 2007 to March 2010
(March is a preliminary estimate)

Non-labor Income as Percent of Total Personal Income, Deschutes County, 2000 to 2008

Proprietors as a Percent of Total Employment, Deschutes County, 2000 to 2008

Appendix: 3
Total Compensation by Industry, Deschutes County, 2001 to 2008

Net Change in Total Compensation by Industry, Deschutes County
2006 (before recession) to 2008 (during recession)
Labor Force, Deschutes County, January 2000 to March 2010
(March is a preliminary estimate)

Number of People (in thousands)

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

March, 2000 57,010 jobs
March, 2007 76,186 jobs
March, 2010 67,489 jobs

Total Employment, Deschutes County, January 2000 to March 2010
(March is a preliminary estimate)

Number of Jobs (in thousands)

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

March, 2000 57,010 jobs
March, 2007 76,186 jobs
March, 2010 67,489 jobs

Unemployment Rate, Deschutes County, January 2000 to March 2010
(March is a preliminary estimate)

0% 2% 4% 6% 8% 10% 12% 14% 16% 18%

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

March, 2000 5.7%
March, 2007 15.8%
March, 2010 16.7%
Components of Population Change, Washington County, 2000 to 2007

Components of Population Change, Washington County, 2007 to 2009
Average Hourly Earnings per Job, Washington County, January 2007 to March 2010
(March is a preliminary estimate)

Non-labor Income as Percent of Total Personal Income, Washington County, 2000 to 2008 (retirement, investments, etc.)

Proprietors as a Percent of Total Employment, Washington County, 2000 to 2008
Total Compensation by Industry, Washington County, 2001 to 2008

Net Change in Total Compensation by Industry, Washington County
2006 (before recession) to 2008 (during recession)
Labor Force, Washington County, January 2000 to March 2010
(March is a preliminary estimate)

Number of People (in thousands)

0 10 20 30 40 50 60 70
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

March, 2000 37,139 jobs
March, 2007 64,453 jobs
March, 2010 58,908 jobs

Total Employment, Washington County, January 2000 to March 2010
(March is a preliminary estimate)

Number of Jobs (in thousands)

0 10 20 30 40 50 60 70
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

March, 2000 37,139 jobs
March, 2007 64,453 jobs
March, 2010 53,193 jobs

Unemployment Rate, Washington County, January 2000 to March 2010 (March is a preliminary estimate)

Unemployment Rate

0% 2% 4% 6% 8% 10% 12%
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

March, 2000 4.0%
March, 2001 4.3%
March, 2002 4.4%
March, 2003 4.5%
March, 2004 4.6%
March, 2005 4.7%
March, 2006 4.8%
March, 2007 4.9%
March, 2008 5.0%
March, 2009 9.7%
March, 2010 10.4%
Housing Permits Issued, Saint George UT CBSA, 2003 to 2009

Housing Price Index (1995 = 100), Saint George UT, 1st Quarter 1995 to 4th Quarter of 2009
Population, Kootenai County, 2000 to 2009

Net Migration, Kootenai County, 2000 to 2009

Components of Population Change, Kootenai County, 2000 to 2007

Components of Population Change, Kootenai County, 2007 to 2009
Average Hourly Earnings per Job, Kootenai County, January 2007 to March 2010 (March is a preliminary estimate)

Non-labor Income as Percent of Total Personal Income, Kootenai County, 2000 to 2008 (retirement, investments, etc.)

Proprietors as a percent of Total Employment, Kootenai County, 2000 to 2008
Total Compensation by Industry, Kootenai County, 2001 to 2008

- Construction
- Manufacturing
- Health care & social assistance
- Finance & insurance
- Prof., scientific, & technical services
- Accommodation & food services
- Administrative & waste services
- Wholesale trade
- Other services, except public admin.
- Information
- Arts, entertainment, & recreation
- Real estate & rental & leasing
- Mgmt. of companies & enterprises
- Trans. & warehousing
- Utilities
- Mining
- Educational services

Net Change in Total Compensation by Industry, Kootenai County
2006 (before recession) to 2008 (after recession)
Labor Force, Kootenai County, January 2000 to March 2010 (March is a preliminary estimate)

Total Employment, Kootenai County, January 2000 to March 2010 (March is a preliminary estimate)

Unemployment Rate, Kootenai County, January 2000 to March 2010 (March is a preliminary estimate)
Housing Permits Issued, Couer d’Alene ID CBSA, 2003 to 2009

Housing Price Index (1995 = 100), Couer d’Alene ID, 1st Quarter 1995 to 4th Quarter of 2009
Average Hourly Earnings per Job, Boulder County, January 2007 to March 2010 (March is a preliminary estimate)

Non-labor Income as Percent of Total Personal Income, Boulder County, 2000 to 2008
(retirement, investments, etc.)

Proprietors as a percent of Total Employment, Boulder County, 2000 to 2008
Labor Force, Boulder County, January 2000 to March 2010 (March is a preliminary estimate)

Number of People (in thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of People</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>156,275 jobs</td>
</tr>
<tr>
<td>2007</td>
<td>168,801 jobs</td>
</tr>
<tr>
<td>2010</td>
<td>172,136 jobs</td>
</tr>
</tbody>
</table>

Total Employment, Boulder County, January 2000 to March 2010 (March is a preliminary estimate)

Number of Jobs (in thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Jobs</th>
</tr>
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<tbody>
<tr>
<td>2000</td>
<td>156,275 jobs</td>
</tr>
<tr>
<td>2007</td>
<td>168,801 jobs</td>
</tr>
<tr>
<td>2010</td>
<td>161,137 jobs</td>
</tr>
</tbody>
</table>

Unemployment Rate, Boulder County, January 2000 to March 2010 (March is a preliminary estimate)

<table>
<thead>
<tr>
<th>Year</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>0%</td>
</tr>
<tr>
<td>2007</td>
<td>7.4%</td>
</tr>
<tr>
<td>2010</td>
<td>6.4%</td>
</tr>
</tbody>
</table>
Housing Permits Issued, Boulder CO CBSA, 2003 to 2009

Housing Price Index (1995 = 100), Boulder CO, 1st Quarter 1995 to 4th Quarter of 2009
Population, Ada County, 2000 to 2009

Net Migration, Ada County, 2000 to 2009

Components of Population Change, Ada County, 2000 to 2007

Components of Population Change, Ada County, 2007 to 2009
Average Hourly Earnings per Job, Ada County, January 2007 to March 2010 (March is a preliminary estimate)

Non-labor Income as Percent of Total Personal Income, Ada County, 2000 to 2008 (retirement, investments, etc.)

Proprietors as a percent of Total Employment, Ada County, 2000 to 2008
Total Compensation by Industry, Ada County, 2001 to 2008

Net Change in Total Compensation by Industry, Ada County
2006 (before recession) to 2008 (after recession)
Labor Force, Ada County, January 2000 to March 2010 (March is a preliminary estimate)

Number of People (in thousands)

March, 2000: 163,413 jobs
March, 2007: 191,598 jobs
March, 2010: 175,127 jobs

Total Employment, Ada County, January 2000 to March 2010 (March is a preliminary estimate)

Number of Jobs (in thousands)

March, 2000: 163,413 jobs
March, 2007: 191,598 jobs
March, 2010: 175,127 jobs

Unemployment Rate, Ada County, January 2000 to March 2010 (March is a preliminary estimate)

Unemployment Rate (%) from 2000 to 2010
Housing Permits Issued, Boise ID CBSA, 2003 to 2009

Housing Price Index (1995 = 100), Boise ID, 1st Quarter 1995 to 4th Quarter of 2009
Sources:


Definitions:

Metropolitan Statistical Area/Core Based Statistical Area:

Data were identified in the format obtained from the original source. These included counties, Metropolitan Statistical Areas and Core Based Statistical Areas. For the five geographies compared in this report, a Core Based Statistical Area is the same as a Metropolitan Statistical Area.

According to the U.S. Census Bureau:
“Metropolitan and micropolitan statistical areas (metro and micro areas) are geographic entities defined by the U.S. Office of Management and Budget (OMB) for use by federal statistical agencies in collecting, tabulating, and publishing federal statistics. The term “Core Based Statistical Area” (CBSA) is a collective term for both metro and micro areas. A metro area contains a core urban area of 50,000 or more population, and a micro area contains an urban core of at least 10,000 (but less than 50,000) population. Each metro or micro area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core.”

Housing Price Index:

According to the Federal Housing Finance Agency:
“The HPI is a broad measure of the movement of single-family house prices. It serves as a timely, accurate indicator of house price trends at various geographic levels. It also provides housing economists with an analytical tool that is useful for estimating changes in the rates of mortgage defaults, prepayments and housing affordability in specific geographic areas. The House Price Index is published by the Federal Housing Finance Agency using data provided by Fannie Mae and Freddie Mac. It is based on transactions involving conforming, conventional mortgages purchased or securitized by Fannie Mae or Freddie Mac. Only mortgage transactions on single-family properties are included.”