

# COLORADO BUSINESS REVIEW

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## This issue:

**Adams County and Healthcare Industry Investment on this page. Workforce Development on page 2. On page 4, Bridging Workforce and Economic Development. Partners for a Strong Colorado Workforce on page 5, and on the back page 2010 Colorado Business Economic Outlook Forum.**



## Adams County Responding to Healthcare Industry Investment

# New Facilities and Expansions Expected to Drive 41% Increase in Jobs

For those who argue that workforce development is not an integral part of economic development, don't mention that to Adams County Economic Development (ACED) or its sister agency, Adams County Education Consortium (ACEC). Housed with economic development, ACEC has a unique ability to respond quickly to the needs and opportunities of the business community. And, through its partners in education, business, and workforce development, ACEC can create real time and long-term pipeline solutions that maximize the skill development and earning potential of Adams County residents while providing employers with a better trained, locally available workforce.

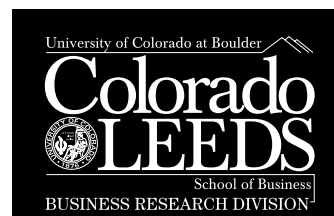
According to Economic Modeling Specialists, Inc., projected growth in healthcare employment for Adams County from 2006–2016 is one of the highest in Colorado and is in the top tier of counties nationwide. Healthcare jobs are projected to increase 33% statewide and 22% nationwide. Healthcare is so significant an industry to the growth of Adams County that work on this pipeline is now a priority activity for ACEC and is supported by grants from the Colorado Health Foundation and the Anschutz Family Foundation.

For 2004–2007, ACED announced a projected 5,300 new healthcare jobs and 6,512 additional supporting jobs, for a total of 11,812 new jobs. Another increase in

healthcare jobs is expected in Adams County through 2016, boosting total jobs in the field to 19,601.

In addition to rapid job growth, ACEC announced \$1.9 billion in capital investments for new or expanded healthcare facilities from 2004–2007.

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Think Broadly.  
Act Boldly.



# Workforce Development in Colorado

## From the Editor

The articles in this issue highlight the exciting developments taking place in the nexus between the Colorado workforce centers, the educational system, and economic development organizations. New partnerships are helping meet current and future business staffing needs by training the state's workforce.

## Colorado Business Economic Outlook Forum

Mark your calendar to attend the 45<sup>th</sup> annual Colorado Business Economic Outlook Forum. This half-day event will be held Monday, December 7, at the Grand Hyatt Hotel, 1740 Welton, in downtown Denver. A networking reception will follow the forecast and discussion breakout sessions. There is no charge for this event, and no RSVP is necessary. Visit <http://leeds.colorado.edu/outlook> for more information.

As always, please contact me at 303-492-1147 with any questions or comments.

—Richard Wobbekind

Patrick Holwell

## Current Labor Market Situation

Businesses everywhere in the United States are struggling to stay competitive in a global economy, and many continue to shed jobs. Since May 2008, the U.S. Bureau of Labor Statistics reports the United States has lost over 6.4 million jobs, Colorado more than 114,000 jobs, and the Denver Metropolitan Area just over 67,000. Colorado may be showing some early signs of recovery, but the climbing national unemployment rate is a concern, with more than 14.8 million people jobless, and some areas of the country showing double-digit unemployment rates. (U.S. unemployment was 9.7% as of August 2009.)

Against this backdrop, the U.S. government has invested unprecedented financial resources to stimulate the economy. These monies are being distributed through a broad array of enhanced services in communities designed to create 35 million jobs over the next two years through stimulating key regional industry sectors. Colorado has received more than \$2.76 billion of the expected \$3.65 billion, including \$260 million of a total \$345 million for workforce development efforts throughout the state.

## Workforce Development in Colorado

It is now generally recognized that if the United States is to remain competitive in a global economy, its workforce must be managed to ensure that a continuous supply of skilled workers is ready to fill critical occupations in key industries.

The nation's workforce development system adds value to the economy in two ways. First, since all unemployed workers must register in the system to collect unemployment checks, the system has workers on inventory at every educational attainment and occupational skill level.

Second, workforce regions work with industry leaders, chambers of commerce, and economic development offices to determine those occupations that are hardest for businesses to fill, and provide individual training accounts through a variety of federally funded job training programs. The programs train unemployed workers in skill sets for these occupations so they are available to meet business demand.

The workforce system thus joins higher education and K-12 as part of the nation's training pipeline infrastructure critical to ongoing economic vitality and global competitiveness. Most, but not

all, individual training accounts conducted through the workforce system network are in middle-skilled jobs, requiring a vocational certificate, associate level degree, or medium/long-term on-the-job training. The workforce system can also meet current needs for more advanced occupational skill sets through its inventory of skilled workers.

Workforce development services in Colorado are delivered locally through nine workforce regions. The mission of the state's workforce regions is to ensure that the workforce system meets the productivity needs of a market-driven economy, supports economic development, and develops a highly diverse workforce through partnerships between business, labor, education, and government.

## Labor Supply: Occupational Skills and Educational Attainment

Arapahoe/Douglas Works serves workforce development needs in Arapahoe and Douglas counties. According to data Arapahoe/Douglas Works collected in September 2009 from Connecting

## Metro Denver Area Skilled Workforce Inventory September 2009

Occupational Family	Workforce Inventory
Administrative Support	50,533
Sales	20,459
Construction/Extraction	17,307
Management	15,077
Production	13,784
Transportation	12,759
Food Service	12,398
Business & Finance	9,137
Building, Grounds Maintenance	8,962
Installation/Maintenance	7,407
Computer	6,485
Arts, Design	6,130
Healthcare Support	5,197
Engineering	4,802
Personal Service	3,912
Education	3,907
Social Services	2,879
Protective Services	2,862
Healthcare Practitioner	2,698
Legal	1,606
Sciences	1,301

Source: Connecting Colorado.



Colorado (the Colorado workforce development system's internal job seeker and job listing database), job seekers on the rolls of the workforce development system in Colorado totaled 205,105. In the Denver-Aurora Metropolitan Area (MSA), which includes Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties, 119,630 job seekers were on workforce development rolls.

Arapahoe/Douglas Works tracks labor supply and demand data in the Denver-Aurora Metropolitan Statistical Area (MSA). The table on page 2 shows the inventory of skilled workers on Metro Denver workforce rolls in August 2009 by occupation family. Though the unemployment rate in the multicounty region dipped to 7.4% in August, the inventory has workers skilled in virtually every occupation yet to be reabsorbed into the metro labor market.

Some examples of highly skilled Denver-Aurora Metro workforce inventory include:

- 624 applications software engineers
- 70 computer security specialists
- 30 biomedical engineers
- 353 registered nurses
- 535 technical sales representatives
- 41 water and wastewater plant operators

Both Denver-Aurora MSA and Colorado enjoy a highly skilled labor force with educational attainment significantly above the national average. Indeed, 19.5% of available skilled workers in the Denver Metro area have a bachelor's degree, 12.4% have earned an associate-level degree, and nearly 6% possess a master's degree.

### Labor Demand: Current Hiring Patterns in the Denver-Aurora Metropolitan Area

Arapahoe/Douglas Works also tracks regional month-over-month hiring patterns by occupation family and industry sector. Between January and June this year, the Denver-Aurora Metro Area saw net increases in unemployed workers in every occupation family. Beginning in July and increasing in August, a net increase in hiring occurred in 11 occupational families. Construction occupations had the largest net hiring (562), followed by Transportation occupations (156) and Food Preparation and Serving occupations (100).


The table at the right shows the number of jobs listed with Denver-Aurora MSA workforce

centers in August. Since only 38% of all job openings are listed, and the workforce system has, at best, an estimated 5% market share of all listed jobs, it can be inferred that there is substantial unfilled demand for skilled labor in a variety of industries in the Denver-Aurora MSA.

### Regionalism

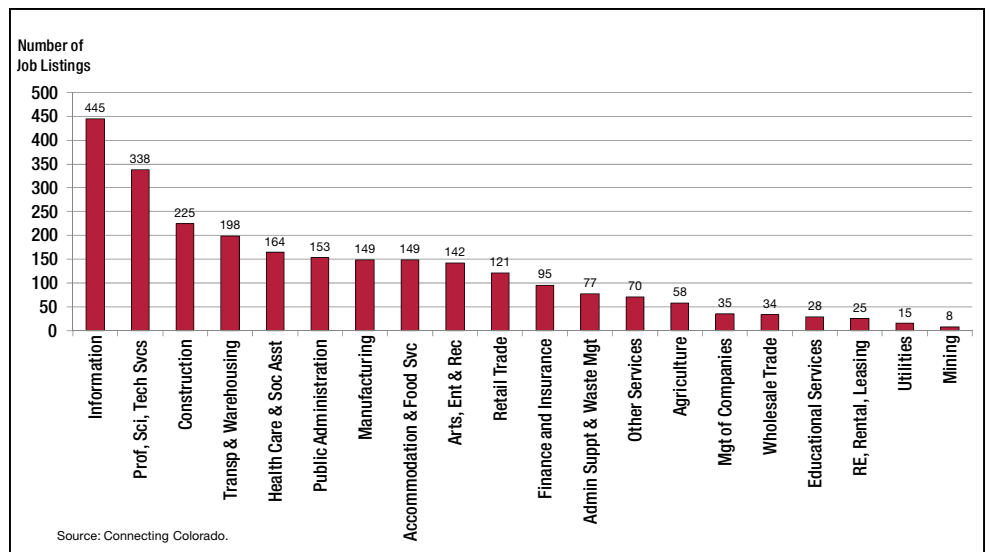
Colorado's workforce system is dedicated to matching its supply of skilled workers to unfilled demand for skilled labor in key regional industry sectors. In addition, it helps businesses in key regional industries stay competitive by providing individual training

accounts to unemployed workers in skill areas critical to labor demand.

To this end, workforce regions in the state have joined with K-12, higher education, economic development, chambers of commerce, and industry associations to strengthen Colorado's training pipeline infrastructure. Data such as that presented in this article help workforce regions contribute to joint ventures designed to keep Colorado's key industry sectors competitive and thriving. 

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## Workforce Center Job Listings by Industry, Denver-Aurora Metro Area August 2009



# Bridging Workforce and Economic Development

Geniphyr Ponce-Pore

The changes brought by the current global economic crisis have impacted everyone in some way; how we have responded will determine how we emerge. For those of us who are doing economic and workforce development work at Ground Zero in this economic and jobs crisis, the demand to interpret, learn, and adapt is immediate. At the Larimer County Workforce Center, we have integrated workforce and economic development, so we can see the economy as a whole. We have spent the last year working to serve our growing caseload, while examining how we can respond more strategically to the challenges of today's economy. To this end, conversations with the community and our partners have led us to the following actions:

- Expanded our focus beyond job seekers to include businesses and our municipal and regional economic development partners. The community wants the workforce system to be a partner in solving today's workforce issues and strategically planning for what business will need.
- Contracted with economists to provide high-quality, real-time data that offer insight into industry concentrations, occupational clusters, and the dynamic between our economies and our workforce.
- Improved communication with economic development, which will encourage more powerful and relevant results.

This past year, the message we received from businesses is that one of the best ways to help them grow is to work with the community to create a

skilled and ready workforce. Companies need able and ready people who will add value to their business. We found that in order for our companies to grow and thrive, they need community partners and advocates. Businesses are looking for help, and they are pleased to see the workforce system move into a more proactive and strategic position to support them.

To better position the workforce system in Colorado to do this work, the Colorado Department of Labor and Employment (CDLE), in partnership with the Larimer County Workforce Center and the Boulder County Workforce, took three critical actions. We started by hiring professional economists to develop a profile of Colorado's industries and employment by county and regionally. Second, the economists were asked to train workforce center staff to understand the economic data and to learn how it can inform a strategy for building on strengths, identifying trends, and filling gaps. Third, CDLE made available to every workforce center an economic and workforce development modeling tool, EMSI. Representatives from EMSI then provided training for deploying and integrating the tool into each workforce center program.

To develop the profile of state industries and employment, CDLE contracted with Mr. Gary Horvath, Managing Director of the Business Research Division in the Leeds School of Business; Dr. Martin Shields, Regional Economist with Colorado State University; and Dr. Tom Zvirlein, Economist from the University of Colorado at Colorado Springs. They used EMSI to produce, for the first time, a profile of Colorado's industries and occupations. The common metrics, time periods, language, and benchmark analysis they created helps workforce centers operate across county lines, identify opportunities to collaborate regionally, share resources, and find common solutions.

The next step was training workforce staff—who have access to EMSI at their desktops—to use the tools and information to gain a deeper insight into local economies, industries, and employment trends. Industry clusters or occupational concentrations can now be more easily identified. We can provide better guidance to job seekers, better advice to our economic development partners, and better strategic planning for businesses.

Workforce centers are in the process of learning to utilize the tools to best serve their communities. Larimer County purchased EMSI prior to CDLE, which has enabled us to conduct more in-depth training. In addition, we have partnered with



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# Workforce Centers, Educators, Economic Developers Partners for a Strong Colorado Workforce

Gary Horvath

This past summer the Colorado Workforce System released a report, *Colorado Workforce Data Mining Project* (available on the BRD website, <http://leeds.colorado.edu/brd>), which summarizes the industries, occupations, and economic factors that drive each of the state's 64 counties. The report, prepared by the BRD and peers at the University of Colorado at Colorado Springs and Colorado State University, provides a snapshot of similarities, differences, and challenges of each county and workforce region.

The report illustrates how different industries and occupations are important to the state economy. By highlighting individual county and regional strengths, it is easy to find other regions with similar strengths. The ultimate goal of the ongoing project is to foster partnerships between economic developers, workforce centers, educators, and the private sector in regions with similar strengths.

Historically, government agencies, analysts, and economic developers have identified, tracked, and reported industry or cluster performance based on the North American Industrial Classification System (NAICS) codes. Industry size, concentration, wages, and growth rates are then used to establish policy. Colorado economic development officials have identified tourism, aerospace, biosciences, and renewable energy as targeted clusters for the state.

While NAICS provides a useful segmentation for industry, workforce centers and educational organizations are focused on training workers for specific occupations. These occupations are defined by Standard Occupational Classification (SOC) codes.

The focus of workforce centers and the educational system has at times been reactionary, concentrating on the immediate needs of the local business community. It is important to address both the current and future needs of the private sector, emphasizing key skill sets that allow workers to adapt to rapidly changing work environments. Future training programs may concentrate on specific skills, such as those needed by a clean-room technician. With minimal adaptations, such a program would provide workers with a broader set of job opportunities that would allow them to seek employment with aerospace, photonics, nanotechnology, renewable energy, or bioscience companies.

To effectively understand a state or local economy, it is necessary to analyze the relationship between industries and occupations (see the charts on the back panel). From an industry perspective, Government is the largest two-digit NAICS sector in terms of employment. About 18% of the total workforce is employed in the sector, which includes federal, state, and local



employees. Roughly half of the government workers hold positions in K-12 or higher education, which is driven by increased population.

The Retail Sector employs approximately 11% of all employees. Government leaders pay close attention to retail sales as sales taxes are a significant source of revenue for the state and local coffers.

The advanced technology (AT) cluster is comprised of subsectors of the Manufacturing, Information, and Professional Technical Services Sectors, which account for 17% of total state employment. Emerging technologies, such as photonics, nanotechnology, biosciences, aerospace, and renewable energy, are included in the cluster, and are significant because many AT companies create primary jobs. The cluster both supports and benefits from the research conducted in the federal labs and state research universities.

In addition, the tourism cluster (Accommodations and Food Services and Arts, Entertainment, and Recreation) accounts for 12% of total employment. Health Care accounts for 9% of employment; Financial Activities, 4%; and Energy, 2%. The remaining eight categories, while small, combined represent 28% of total employment.


From an occupational perspective, about one-third of total jobs can be classified as basic business occupations (management, operations, maintenance, and administrative assistance). These occupations provide the leadership and foundation for many companies and are obviously critical to all industries in Colorado.

Approximately 13% of occupations in three SOC categories are closely tied to the tourism sector. An additional 11% are sales-related, with a significant portion in retail sales. In many counties, retail occupations are associated with tourism occupations.

CONTINUED ON PAGE 6

the Northern Colorado Economic Development Corporation to share licensing and costs. This has effectively strengthened our partnership as we use the same language and tools when meeting with businesses that wish to expand or relocate to the area.


EMSI offers critical insight into the dynamics of local economies and benchmarks the local economies against the state and the nation. We can now see our strengths and challenges, and respond faster, with more clarity, and in new ways. This tool provides a crosswalk between economic development data and workforce development efforts.

This year, the Colorado workforce system transitioned to a more integrated approach, bringing together economic and workforce development in a whole new way. Henry Ford once said, “Coming together is a beginning; keeping together is progress; working together is success.” We call success a collaboration that engages business, economic development, and workforce development communities, along with the educational system, in finding solutions. We work at it every day. 

**Geniphr Ponce-Pore is the Program Manager of Business and Enterprise with the Larimer County Workforce Center. She may be reached at [gponcepore@larimer.org](mailto:gponcepore@larimer.org).**

Three SOC categories, or about 11% of total occupations, focus on computer science, production, engineering, and math, and are closely connected to the AT cluster. Finally, roughly 8% of all jobs are tied to healthcare and 6% are related to public and private education. Eight SOC categories account for the remaining 19% of employment.

This overview shows that various industries and occupations play important, yet different, roles in the economy. As the state moves out of the recession, it is essential that strong growth occur in primary industries and occupations, or in those that export sales nationally or globally. Primary industries typically have higher than average levels of compensation. In turn, they drive growth indirectly in other sectors, such as retail, transportation, and personal services.

To ensure the efficient growth of all these industries, it is necessary for strong partnerships to be formed between the private sector, government agencies, economic developers, and P-20 educators. These partnerships are essential if Colorado is to efficiently meet current and future workforce needs. 

**Gary Horvath ([Gary.Horvath@Colorado.EDU](mailto:Gary.Horvath@Colorado.EDU)) is the Managing Director of the BRD.**

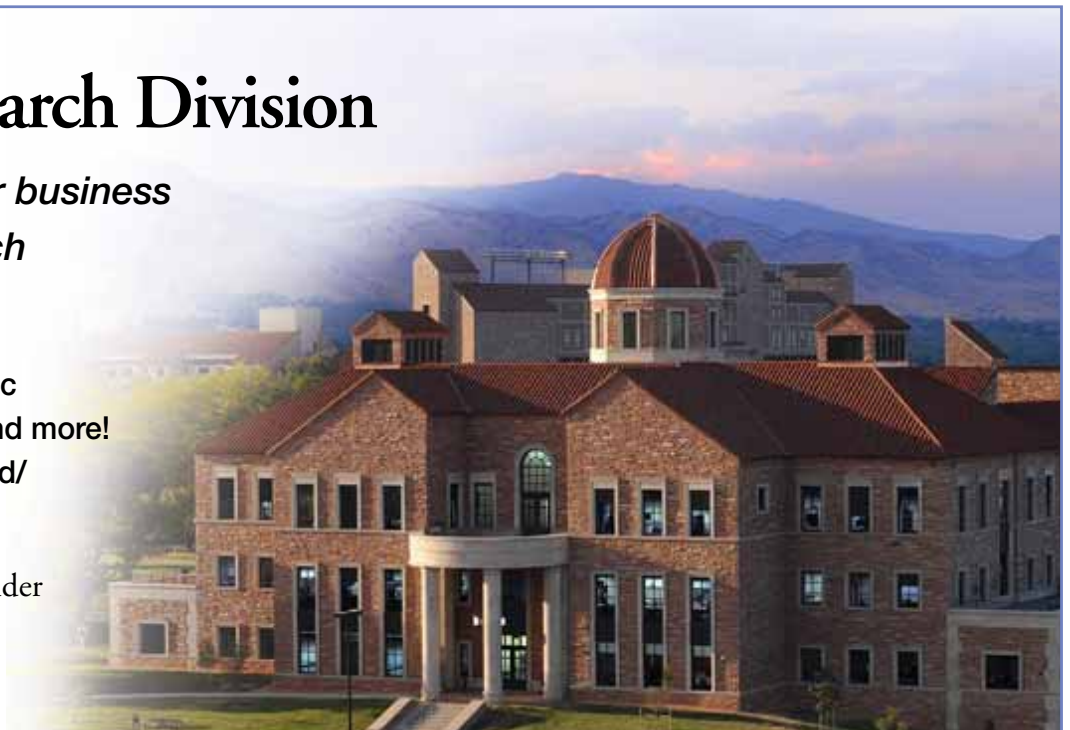
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“A major element of Adams County’s growth strategy is to educate and train our local workforce to fill the many new healthcare jobs that result from the exciting growth in hospitals, clinics, and physician practices,” said Sandra Steiner, executive director of the Adams County Education Consortium.

Adams County is fortunate to have a large percentage of the population interested in the healthcare field. However, space for the clinical work that is required for certification and licensure in this field continues to bottleneck efforts to greatly expand instructional opportunities for more students. Additional obstructions include a shortage of available instructors and a student body that needs to be better screened to determine whether they are aware of the demands of the industry. To address these issues, let’s look at the onset of the student career interest pipeline.

With a six-year history in student career pipeline exploration, ACEC convenes the Adams County Commissioners’ Career Expo for county 8<sup>th</sup> graders. Annually 20% of the 4,800-5,000 students who participate articulate an interest in healthcare.

Building on that initial introduction, high school students have the chance to participate in Experience 9 to 5™. This program allows students in self-selected, multidistrict cohort groups the chance to spend up to 12 contact hours with professionals in a specific field. This year nearly 100 students are enrolled in one of eight different healthcare tracks, such as nursing, hospitals, holistic health, EMS, organ donation, OSHA safety, and lab/research. To help students better identify their “fit” in this profession, all are offered the chance to take a healthcare self-reflection assessment and receive career coaching advice based on the results. The expected outcome is fewer dropouts in healthcare courses due to a better understanding of the demands of the field by all students.


High school students in four districts are able to take healthcare courses. In the county, more than 200 of these students are enrolled as medical prep or certified nursing assistant students. Area community colleges, which provide the next tier of study for students, have significant wait lists. Both educational levels are facing a bottleneck of students with interests relative to program space available.

To ensure a locally trained, available, skilled workforce for these new opportunities, ACEC has joined two other agencies in an effort to increase the number of clinical locations and begin to build a database of qualified healthcare instructors. The Colorado Center for Nursing Excellence and the Central Colorado Area Health Education Center represent the nursing and allied health occupations in this important work.



The Colorado Health Foundation and the Anschutz Family Foundation provided funding to ACEC for two full-time employees to recruit clinical locations to meet the needs of the underserved in our community. For the next two years, they will work to create at least 80 new sites for students and collect contact information of professionals with proper certifications and an interest in teaching. Through these efforts, the grant seeks to generate a process for the development of new sites that can serve as a model for all of Colorado.

“When you’re one of the fastest-growing counties in Colorado, you have to expect that growth will bring new residents, new jobs, and new needs,” said Alice J. Nichol, chair of the Board of County Commissioners. “The explosive growth in healthcare facilities provides a major boost to our economy with jobs and capital investment, and substantially adds to the quality of life for everyone in Adams County.”

These efforts work to maximize this opportunity. 

**To learn more about ACEC, please go to [www.AdamsCountyEducation.org](http://www.AdamsCountyEducation.org).**

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## COLORADO BUSINESS ECONOMIC OUTLOOK FORUM

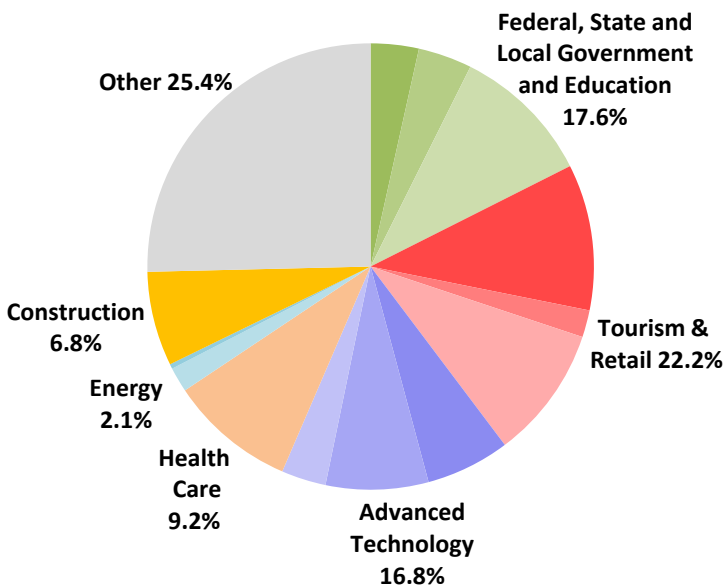
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### Colorado Industries and Occupations Categories and Clusters 2008

Industries



Occupations

