UNIVERSITY OF COLORADO BOULDER LEEDS SCHOOL OF BUSINESS

# COLORADO BUSINESS REVIEW

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IN THIS ISSUE



# San Luis Valley: Energizing with Sunshine

*Rachel Baird*

There's a new type of farm in the San Luis Valley, and it's producing on a scale no one anticipated.

Driving along State Highway 17, the Sangre de Cristo mountains rise in sharp relief to the stark, arid landscape of the San Luis Valley, the largest alpine valley in North America. Center-pivot irrigation circles dot the landscape representing the principal exports of the valley: potatoes, grain, and alfalfa. At the intersection of Lane 8 North another type of farm shimmers in the distance.

Two of Alamosa County's utility-scale solar installations, Sun Edison and Greater Sandhill, sit along a road that could arguably be called the highest-density utility-scale solar farm installation in Colorado. Lane 8 North boasts three operating farms covering a cumulative 600 acres and producing 57.2 megawatts (MW) of electricity. A fourth farm, Cogentrix, located 6 miles south, is the only concentrating photovoltaic solar plant in Colorado, with panels towering 50 feet above the valley floor. The impressive array of over 500 dual-axis tracking units has become somewhat of a tourist attraction and is affectionately called "star wars" by the locals. A fifth farm by SunPower, the largest to date, at 49.5 MW, is currently under construction and infusing the local economy with hundreds of jobs.

The San Luis Valley was identified as the state's optimal area for solar development by the National Renewable Energy Laboratory in Golden, Colo. With a photovoltaic solar resource that makes the region on par with the most productive areas of California and Arizona, the valley's 7,500-feet-plus elevation gives the area an even greater advantage. Higher elevations yield direct normal irradiance (DNI), or the amount of solar radiation per unit area at unparalleled efficiency. Word spread and developers began approaching Alamosa County in 2007.

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*Photo courtesy of Juan Altamirano.*

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COLORADO BUSINESS REVIEW

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## From the Editor

This issue of the *CBR* highlights the economy of southern and southeastern Colorado, which comprises 15 counties. Together, these counties account for approximately 27,000 square miles, or about 26% of Colorado's total area, and just over 5% of the state's population. Government, Health Care and Social Assistance, Retail Trade, and Accommodation and Food Services were the largest employment sectors in the area in 2014.

The articles in the issue, primarily written by industry leaders, provide insight into the region's economy, focusing on key industries and unique innovations and challenges facing southern Colorado communities.

Please contact me at 303-492-1147 with questions or comments.

*Richard L. Wobbekind*

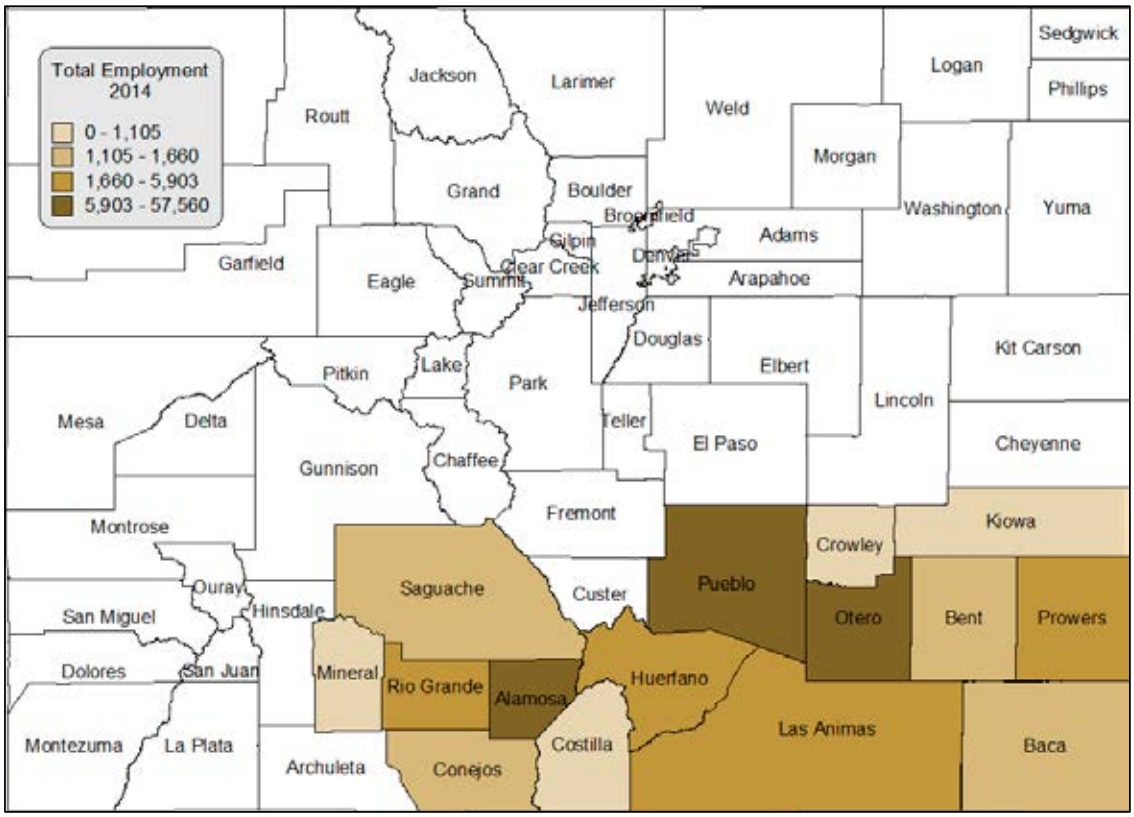
# The Economy of Southern and Southeastern Colorado

*Jackson Rueter*

Southern Colorado is home to 5.1% of Colorado's population according to 2014 estimates by the State Demography Office (SDO), but accounts for only 3.8% of Colorado's jobs. The region's population is older than the state's, with a smaller proportion of people in the 0–19, 20–39, and 40–59 age ranges. Nearly one-quarter of the population is age 60 and older compared to 18.5% at the state level. Southern Colorado seems to have greater employment stability than the state and nation. While the area has not grown as fast as the state or nation following the recession, the impact of the recession on the area was not as strong. In 2014, employment grew 0.5%, a rebound from consecutive losses in 2012 and 2013 of 0.6% and 0.2%, respectively. The data for the two most recent quarters (Q4 2014 and Q1 2015) have been stronger than usual, with Southern Colorado remaining above 1% in year-over-year employment growth for six straight months—the first time since February 2008. Unemployment in the Southern Colorado region was 4.8% in September 2015, with Baca County posting the lowest rate, at 1.7%. Unemployment declined year-over-year every month in 2014 and has continued through the first nine months of 2015. The three industries that dominate the region are Government, Health Care and Social Assistance, and Retail Trade, accounting for roughly 54% of jobs.

Southern and Southeastern Colorado ("Southern Colorado") comprises 15 counties: Alamosa, Baca, Bent, Conejos, Costilla, Crowley, Huerfano, Kiowa, Las Animas, Mineral, Otero, Prowers, Pueblo, Rio Grande, and Saguache, corresponding to four SDO planning regions: 6, 7, 8, and 14. These counties account for roughly one-quarter of Colorado's total area. Pueblo County makes up over half (58.9%) of Southern Colorado's population according to the SDO's 2014 July populations estimates. As a region, Southern Colorado's population declined 0.1% year-over-year in 2014, likely due to the population loss in two-thirds of the counties in the region, outweighing the slow growth of counties that did have population increases. For comparison, statewide population increased 1.6%. Crowley

**SOUTHERN COLORADO EMPLOYMENT, 2014**




**Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, (QCEW).**

County experienced the fastest population growth in the region from 2013 to 2014 according to SDO estimates, increasing 5.1%, and was followed by Costilla (0.4%), Pueblo (0.3%), and Alamosa (0.3%) counties. Mineral County saw the fastest year-over-year decline in population, decreasing 4.1%, and was followed by Bent (2.8%) and Las Animas (2.2%) counties.

Employment in the region accounts for 3.8% of total employment in Colorado. Year-over-year growth in the region has been slower than the state since the beginning of 2011, and was 0.5% in 2014 compared to 3.5% statewide. The Pueblo Metropolitan Statistical Area (MSA) has seen greater job growth than the region but is still under the statewide rate, growing 1.7% year-over-year in 2014. Southern Colorado employment has also grown more slowly when compared to the state, with compound annual growth rates (CAGRs) of 0.1% over the last 10 years, -0.1% over the last 5 years, and -0.3% over the last 3 years according to data from the Bureau of Labor Statistics (BLS), Quarterly Census of Employment and Wages (QCEW). For comparison, Colorado employment growth rates were 1.2% over the last 10 years, 1.9% over the last 5 years, and 3% over the last 3 years.

Southern Colorado employment contains a higher concentration of government jobs than the state. Nearly one-quarter of jobs in Southern Colorado were government jobs in 2014 (24.4%) compared to 16.1% for the state. Southern Colorado recorded a higher concentration of state and local government employment relative to the state as a whole, and a lower concentration of federal government employment. State government jobs made up 7.1% of the southern region's jobs compared to 3.8% for Colorado in 2014. Local government made up 14.7% of jobs in Southern Colorado while statewide local government accounted for 10.1% of jobs. Colorado had a higher concentration of federal government employment, 2.2%, compared to Southern Colorado, with 1.8%. Private employment for Colorado in 2014 accounted for 83.9% of state jobs while they only made up 75.6% of employment in Southern Colorado.

The largest sectors in the region in 2014 were Government, Health Care and Social Assistance, Retail Trade, and Accommodation and Food Services, with 22,947, 16,122, 11,533, and 8,788 jobs, respectively. Together, these four industries accounted for 63.3% of regional employment in 2014. The three smallest sectors were Management of Companies and Enterprises, Educational Services, and Mining, recording 302, 414, and 666 jobs, respectively. These industries made up only 1.5% of total employment in the region in 2014. Coming out of the recession, Professional and Technical Services has shown the most growth, posting a five-year CAGR of 5.9% through 2014. Mining was a close second, recording a five-year CAGR of 5.8%, and Management of Companies and Enterprises was third, with 2.9%. The sectors that experienced the lowest five-year CAGR—Information; Real Estate, Rental, and

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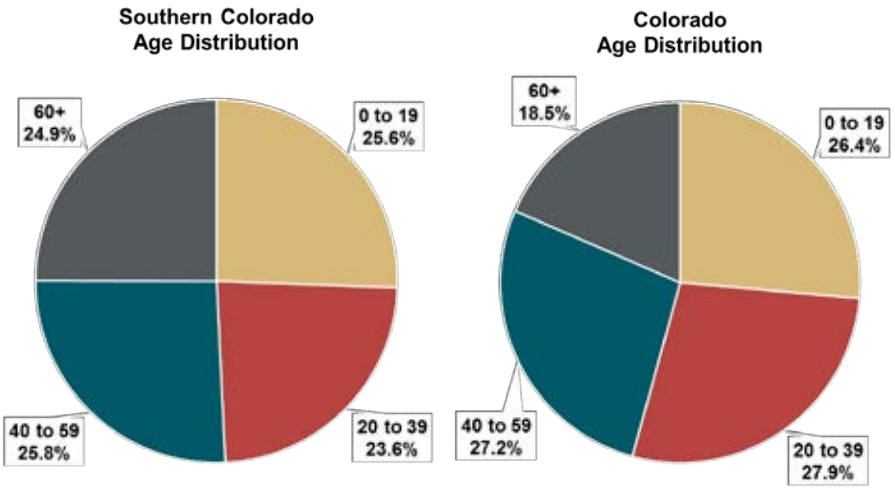
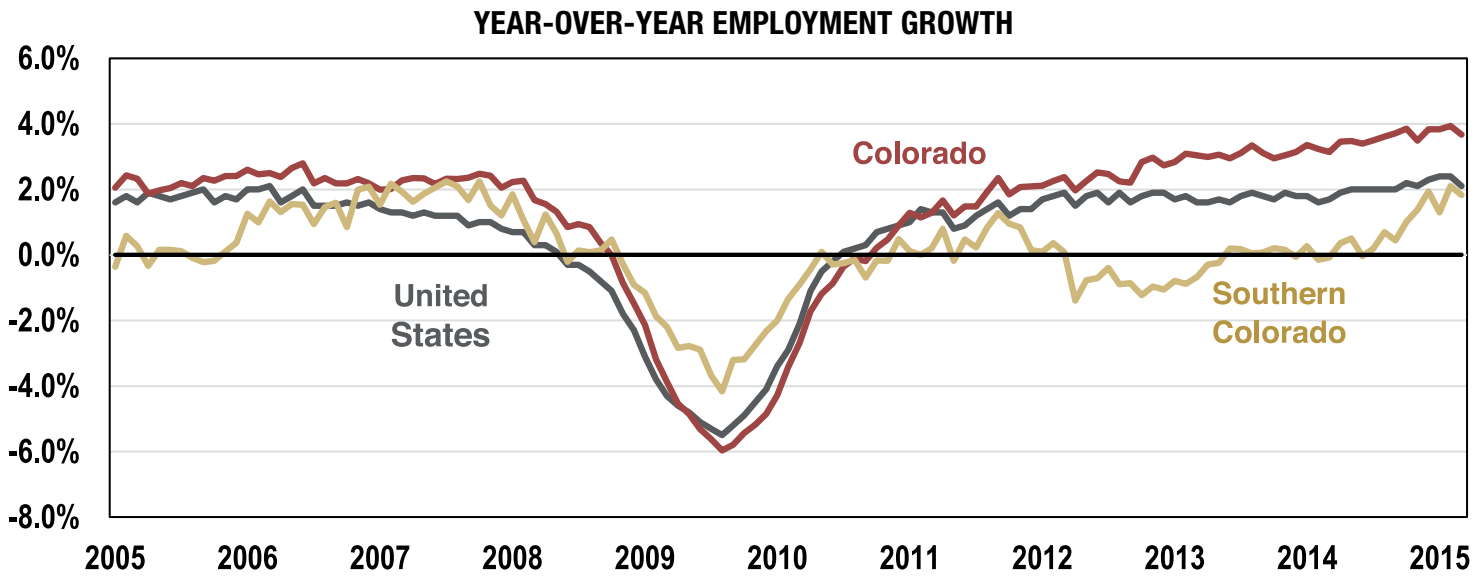



**Source: State Demography Office, July 2014 Estimates.**




**Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, (QCEW).**

# Recreation at Altitude

*Adams State University Cycling Team training at the Stone Quarry. Photo courtesy of Marty Asplin.*

*Marty Asplin*

The San Luis Valley is an arid valley in the south central part of Colorado. It is surrounded by the San Juan Mountains on the west with the Continental Divide and the Sangre de Cristo Mountains on the east with seven of Colorado's fourteeners. The floor of the valley is at an average of 7,500 feet in elevation and about 3,000 square miles of surface area with agriculture as the primary industry and over 1,000,000 acres of federal lands. Looking at Colorado's future water issues and the resulting impacts on farms caused local leaders to turn their attention to the wealth of federal lands for an alternative revenue stream.

On the western side of the valley, as you come up off the floor, you will find a plethora of high desert canyons that eventually end at alpine terrain. For eight years, citizen-driven efforts, working in harmony with the Bureau of Land Management (BLM) and its recreation specialists and land use professionals, identified some spectacular and challenging trail opportunities. These then proceeded through the federal system of Archeology, Biology, and the National Environmental Policy Act, and received final approval to be included in the bureau's Travel Management Plan. The trails were then laid out to make the least intrusive presence, utilizing slick rock at every opportunity and incorporating what can only be called aesthetic use of the natural features.

These are purpose-built trails using the most sustainable design technologies available. There have been tens of thousands of hours put in by funded Southwest Conservation Corps crews, which comprise college-age youth from around the United States; veterans from recent wars who are working for "Veterans Green Jobs"; cycling, lacrosse, cross country, and other teams from Adams State University; and volunteers from every walk of life and profession. With the assistance of Volunteers for Outdoor Colorado, weekend events have drawn attendees from the Front Range, Utah, and New Mexico, as well as bike manufacturers who wanted to test out their new lines on untried trails.

The BLM calculated that each of these trail systems will draw 500–1,000 unique visitors a year and up to 7,500–10,000 user days. This is spawning new economic development, such as micro-breweries, hotels, restaurants, bike shops, a custom titanium bike manufacturer, and, of course, bike repair shops and health care practices. A trail showcase was held recently in Del Norte, Colo., where the invited writers and bloggers stayed free and were led on tours by some of the best of the local shredders. One writer related his experience as one of the "10 best kept secrets in the Mountain Biking world."

One of the areas worked on, improved, upgraded, and made more user friendly involved taking a long established rock climbing area in Penitente Canyon that had some "built by others" trails around it and reworking the trails to create the Penitente Canyon Recreation Area. Riders and hikers need to pay attention and not let the big views of the Great Sand Dunes National Park and the 14,000-foot peaks across the valley distract them from the ground at their feet. This area is the site of The Twelve Hours of Penitence endurance race held on October 18. The approximately 17-mile loop race was held in desert canyons, some grasslands, and rocky alpine terrain that tested the mettle of mountain bikers and teams of mountain bikers. There was a cap of 150 riders this first year, with a cap of 175 and 200 riders the next two years, respectively. The press

and officials who reserved early again received hospitality at the restored 1874 Windsor Hotel in nearby Del Norte.

The Middle Frisco Creek Trail takes riders and hikers up to a cirque just below 13,000-foot Bennet Peak. This is top-notch alpine riding. Other areas of note are the Lime Kiln area with miles of single track, two track, and big rides, as well as Bishop Rock, which is an open play area. Bishop Rock is a 40-acre rock dome containing bowls, jumps, and drops, and you can ride anywhere in it…literally. There are no trails. The Stone Quarry area is named for the large, old stone quarries that supplied rock for many of the commercial buildings and homes in Del Norte and nearby Monte Vista. This area has some new purpose-built trails through, over, and around large boulder canyons that give a feeling of complete isolation to the rider or hiker with occasional pop-out points with tremendous views of the valley. The Prong-horn Ridgeline is approved and funded, and is scheduled to be built during the summer of 2016. The goal is to be able to wake up in the morning, eat breakfast, ride 100 miles never touching the same area twice, and end up back in town at a brew pub.

The addition of this well-built and sustain-able summer recreation is a great complement to the winter recreation at Wolf Creek Ski Area that receives Colorado's highest snow totals and is just west about 40 minutes. The valley is also home to the Rio Grande that is being restored its grandeur. It is home to designated Gold Medal fishing areas, recreation uses, and, of course, irrigation for the valley floor.

Whether you are a cyclist, runner, hiker, climber, or other outdoor discipline participant, this is rural Colorado at its finest.

*Marty Asplin was the Mayor Pro Tem for Del Norte for nine years and is now the Co-Director of Upper Rio Grande Economic Development, as well as Del Norte Trails Organization. He may be contacted at marty@urg-ed.com.*

*Afghanistan veterans working for Veterans Green Jobs building a ramp. Photo courtesy of Marty Asplin.*

# Hidden Treasure in the San Luis Valley

*Jim Ehrlich*

The majestic beauty of the high alpine desert in south central Colorado—known as the San Luis Valley—is the heart of potato country in Colorado. The potato (*Solanum tuberosum*) is a herbaceous annual that grows up to 3 feet tall and produces a tuber, also called a potato. The potato is so rich in starch that it ranks as the world's fourth-most important food crop, after corn, wheat, and rice. The potato belongs to the Solanaceae—or "nightshade"—family of flowering plants and shares the genus *Solanum* with at least 1,000 other species, including tomato and eggplant. Potatoes have been grown in the San Luis Valley since the 1860s when Spanish settlers introduced them to the region. Potatoes originate from the high mountains of the Peruvian Andes where Spanish conquistadores discovered their importance and returned to Spain with not only gold but tuber treasure.

In 2014, Colorado ranked fifth nationally in the production of potatoes, with 92% of the crop produced in the San Luis Valley. Over 90% of the potatoes grown in the San Luis Valley are sold on the fresh market, making Colorado the second-largest producer of fresh potatoes in the country. More than 160 potato growers farm in the region and planted 55,000 acres of potatoes in 2014. The majority of the crop is russet potatoes but the area also produces red, yellow, white, fingerling, and other specialty potatoes, with over 100 different varieties grown annually.

Farming at a base elevation of 7,600 feet poses challenges to area farmers but potatoes are well suited to the warm days and cool nights of the valley, with daily temperature swings of 40 degrees the norm. The abundance of sunny days and this ideal temperature range create the perfect environment for potato cultivation. Being surrounded by the San Juan and Sangre de Cristo Mountains creates isolation, and cold winter temperatures prevent many diseases and insects from becoming established in the area, giving area farmers an advantage over other potato growing regions in the country. For example, the fungal disease Late Blight, which caused the Irish potato famine in the 1840s does not exist in the San Luis Valley but is a major problem for most of the United States. The San Luis Valley has a quarantine to prevent the introduction of the disease and has been able to keep the disease from becoming established, saving growers thousands of dollars annually. Planting takes place in April to mid-May with harvest beginning in mid-September and wrapping up in October. At harvest the crop is stored in state of the art storage bins. To insure the highest quality these bins area maintained at 38–40º Fahrenheit and 95% humidity so that the crop can be marketed well into the summer months.

Agriculture is the economic engine of the San Luis Valley and potatoes play a major role. Market prices fluctuate but the typical annual value of the potato crop ranges between $180 and $220 million, with the cumulative impact on the region estimated at three times this value. After producing an average crop of 20–21 million cwt, the potatoes must be packaged for consumer use. With 20 potato packing sheds in the region, the industry provides more than 600 year-round jobs in addition to many temporary jobs during the planting and harvest seasons.

The region has a federal and state marketing order that requires all potatoes to be inspected and meet strict size and grade standards. This ensures consistent and high quality for customers but reduces the quantity of the marketable crop. Off-grade potatoes are used by two potato dehydrator manufacturers located in Center and livestock operations though out the region as feed. With per capita potato consumption in the Unites States at 111 pounds, the

*Photo courtesy of Ron Crowther.*

San Luis Valley typically produces enough potatoes to feed 18–19 million people annually. On a sunny winter day it is typical for 150 semi-trailer loads of potatoes to leave the area destined almost anywhere in the continental United States.

Despite the successful heritage of potato production in the San Luis Valley growers face some challenges. Farming in an area that receives on average seven inches of precipitation annually requires a reliable source of irrigation for crops. For decades growers have relied on underground aquifers that have been fed by the runoff from the surrounding mountain ranges for an abundant water supply. But with prolonged drought over many years the underground aquifer that has always been a huge asset has been over mined. Growers in the region recognized the severity of the issue after the epic drought of 2002 and have since worked collectively with the Colorado Division of Water Resources to reduce pumping. Legislation has allowed the creation of water subdistricts where growers are taxing their own water use and using the revenue to incentivize reduced pumping scenarios, including land retirement. Pumping has already been reduced over 20% from 2002 levels but greater reduction is needed to create a sustainable irrigation supply for the future. Farming at high altitude somewhat limits the crops valley farmers can grow, creating less opportunity to respond to market forces. An increase in Potato Virus Y within the region has become an issue for many, in particular the certified potato seed industry, but growers are proactively working on solutions.

The potato industry is a key sector of agriculture in the San Luis Valley and Colorado. Potato growers in the valley are innovative and cooperate together extremely well, leading the industry to believe the future will be bright.

*Jim Ehrlich is the Executive Director of the Colorado Potato Administrative Committee and may be contacted at jehrlich@coloradopotato.org.*

*Potato harvest in the San Luis Valley. Photo courtesy of Ron Crowther.*

# Manufacturing Spurs Economic Growth in La Junta

*Ryan Stevens*

When you hear the names La Junta and Rocky Ford most people think of cattle, watermelon, cantaloupe, and other produce but southeast Colorado has a growing manufacturing sector that is continuing to gain strength after some devastating business closures in the mid-2000s. Otero County is home to many industry mainstays, such as Innovative Water, Oliver Manufacturing, DeBourgh All American Lockers, Falcon Industries, and Lewis Bolt & Nut Company. This eclectic mix of manufacturers has regained many of the jobs that the sector had lost since 2000 but it is still only 85% of where it once was. Despite not reaching the previous employment numbers, the manufacturing industry has increased overall payroll by about 33% during this time.

*Sprout Tiny Homes built in La Junta's industrial park. Photo by Diane Graham.*

Over the last 24 months, Otero County has seen its largest industrial employer, Lewis Bolt & Nut Company, expand from 220 employees to 320 employees. The bolt and nut manufacturer for the rail industry continues to expand and add buildings at its operation at the industrial park as well as at its site at the La Junta rail yard. However, growth doesn't come without problems. A shortage of production workers means that hiring has to be done outside of the region. New people who are moving into the area are starting to have an effect on the real estate market as well. With a stagnant market, there has been some contraction in La Junta's real estate market. Housing has become a concern for manufacturers that are hiring people from outside of the area. New hires are moving to town and staying at hotels because there are few rental homes on the market. This is a stark contrast to just 12 months ago when there was excess inventory on the rental market.

During this two-year time period, La Junta has also seen the addition of Sprout Tiny Homes at La Junta's 1,600 acre industrial park, Whole Hemp Company lease a vacant Walmart building, and Miller International bring the promise of a brewery in a building that was occupied by a firm that employed 250 people.

Sprout Tiny Homes started its production in La Junta in February 2014. The tiny homebuilder has been making huge strides since it opened the doors by changing the way tiny homes are built. Rod Stambaugh, the company CEO, developed a vision for the company that has communities like Walsenburg, Salida, and Buena Vista interested in the tiny home movement to help provide affordable, upscale housing to local workforces. The Walsenburg project will start with 28 houses on a three-acre lot. Sprout Tiny Homes has also enjoyed great success and exposure at the Tiny Home Jamboree in Colorado Springs, where 40,000 people attended the three-day event and saw Rod and his crew assemble a tiny home over the course of the jamboree. The event helped Sprout Tiny Homes gain exposure in local media and national media alike with a featured story in the *New Yorker*. Sprout Tiny Homes is also looking for ways to help communities

that have suffered a horrible tragedy. Currently, the tiny homebuilder is working with Lake County, Calif., to arrange housing for those affected by the recent fires. Sprout has added 15 jobs to the La Junta economy with the possibility for more as the number of housing developments continues to grow.

Whole Hemp Company opened its doors in Colorado Springs in 2014 and quickly started building partnerships to grow its business. One of those partnerships was with Diamond A Farms in Otero County. Whole Hemp extracts cannabidiol (CBD) oil from hemp plants for use as an ingredient in products such as tinctures, vape pens, and others. The company was looking for a place where it could expand and be close to its farming partner. La Junta fit the bill. Not only did La Junta and Otero County have the space for the company to expand, it also has a moratorium on marijuana, hemp's psychoactive cousin. This moratorium meant that Whole Hemp would not be competing with marijuana companies for warehouses or acreage, and there was little worry of cross-pollination, which could ruin an entire hemp crop. The company secured a lease with an option to buy a 70,000-square-foot vacant Walmart building. The building had been sitting empty for about 12 years, since Walmart expanded and built a Super Walmart. Since leasing the building, Whole Hemp has invested over a half a million dollars in building improvements and has started installing state-of-the-art equipment to help dry the plant material and extract the CBD oils from the crops it plants. The pilot year was a huge success, with just over 100 acres harvested and plans for acreage in the thousands in 2016. Whole Hemp Company currently employs 20 workers at its La Junta facility with plans to hire more in the coming months as the indoor grow operation and greenhouses are installed.

Miller International, commonly known for Cinch Jeans and Cruel Girl apparel brands, purchased a vacant pickle plant with 115,000 square feet of space in September 2014. One of Miller International's brands, Gold Buckle Brewing, has plans to turn the property into a brewery. To help ensure those plans, Miller International also purchased the Durango Brewing Company, which is close to brewing capacity at its current facility. The plan is that the facility in La Junta will be able to add production space for Gold Buckle Brewing's expansion plans. The brewery equipment has an expected delivery date in October, with plans to install the equipment over the last quarter of 2015 and first quarter of 2016.

*Hemp fields growing in Otero County. Photo by Tisha Cassida.*

La Junta Economic Development continues to pursue manufacturers that will help diversify the local economy. Small rural towns like La Junta and Rocky Ford have a hard time weathering the storm when a large business closes its doors. By diversifying the economy with many smaller manufacturers that have the potential to grow, the region has adopted a strategy that will help smooth out the economic peaks and valleys that it once faced and provide economic stability to its residents.

*Ryan Stevens is the Executive Director of Economic Development and is responsible for the recruitment, retention, and expansion of businesses for the City of La Junta. He may be reached at Ryan.Stevens@ojc.edu or 719-671-9499.*

## San Luis Valley: Energizing with Sunshine *continued from page 1*

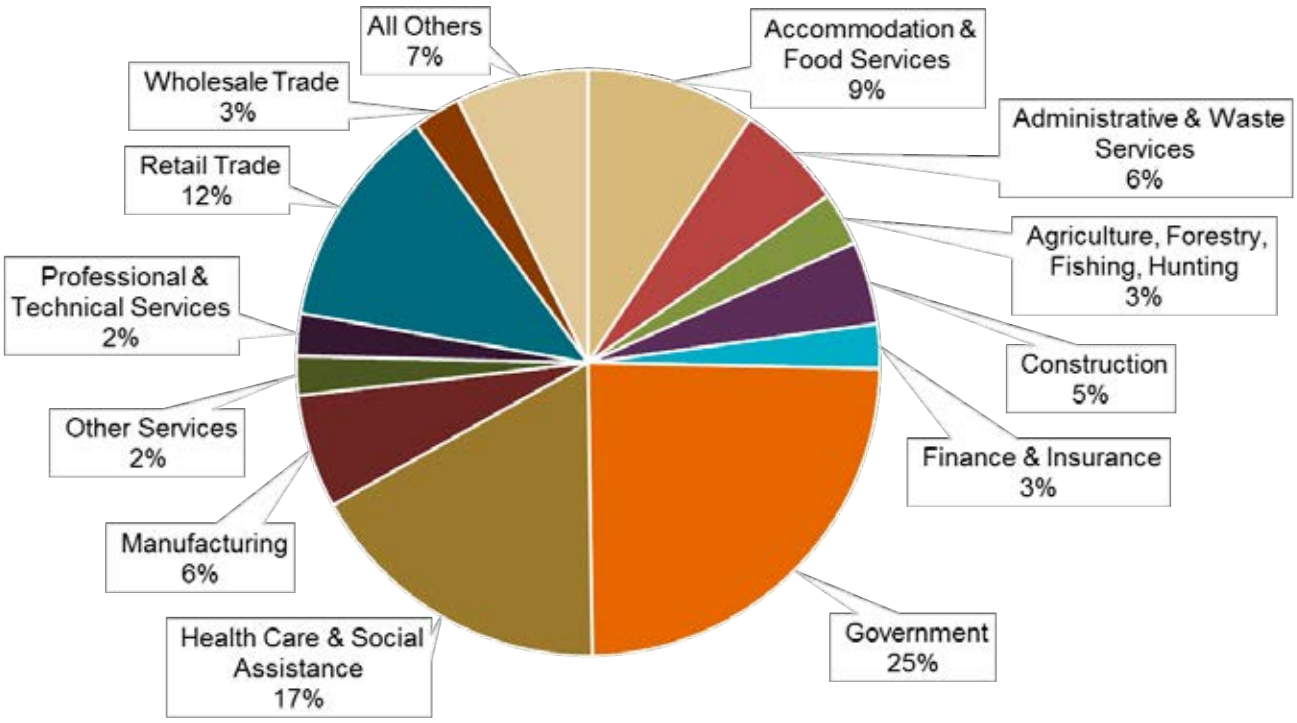
The installations span 1,143 acres and when SunPower is operational in 2016, they will produce 136.7 MW of electricity. That's enough electricity to power 22,418 homes—more than every home in the San Luis Valley or approximately 1% of homes in Colorado. And here's the key: the energy is not intended for the sparsely populated valley but for the Front Range, where energy needs are highest. It's getting energy out of the valley that has become the single-greatest obstacle for what would otherwise be a booming industry.

The existing transmission lines in the north end of the valley over Poncha Pass lack redundancy and leave the region susceptible to power outages. A downed line could be deadly in the -37° winter nights or ruinous during a growing season that relies heavily on electric irrigation systems. A joint venture between Xcel Energy and Tri-State Generation to upgrade the 69 kV Poncha lines is moving steadily toward fruition, having completed the requisite National Environmental Policy Act (NEPA) study through public lands earlier this year. In 2011, controversial plans to install a 230 kV line over La Veta Pass to the east ended in a stalemate. Local environmental groups and hedge fund billionaire Louis Bacon, owner of the Trinchera Ranch that would be bisected by the proposed line, deadlocked with Tri-State and Xcel over the feasibility and necessity of the $150 million project. Bacon went on to create the largest conservation easement in Colorado on his 172,000-acre ranch, potentially quashing all future transmission projects. Without new lines or upgrades, the valley's capacity has dwindled to approximately 50 MW.

Developers continue to be optimistic about the potential in the valley; two companies are currently going through the Alamosa County permitting process. The Investment Tax Credit, the federal tax credit that has driven utility-scale solar development in recent years, expires on December 31, 2016. Despite time and transmission constraints, companies are eager to complete the 1041 permit application process. There are currently 130 MWs of locally permitted projects waiting to compete in the next renewable energy request for proposals (RFP) offered by Xcel or Tri-State. A local permit helps companies better position themselves for a power purchase agreement (PPA) and also insures their competitiveness if proposed infrastructure upgrades increase transmission capacity.

The 1974 Colorado House Bill 1041 gave local governments authority over development projects that have statewide impact. Commonly referred to as 1041 powers, Alamosa County adopted 1041 Regulations for Areas and Activities of State Interest in 2009. The 1041 permit process allows the county to require a more robust application process, including a full environmental impact study. Alamosa County also requires applicants to enter into a decommissioning agreement and hires a third-party consultant to help determine nonsalvageable dismantling costs

**2014 INDUSTRY COMPOSITION OF SOUTHERN COLORADO**




**Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, (QCEW).**

to the county if the project were to fail. The security funds are either placed in trust or in the form of a performance bond, guaranty, or irrevocable letter of credit. These funds helped ease community members concerns over early projects. The technology was unfamiliar, and it was feared that abandoned solar fields would permanently blight the landscape, and local taxpayers would inevitably bear the cost of removal.

Community response to the projects in Alamosa County has been warm compared to neighboring counties where permitting utility-scale solar has often become a contentious, drawn-out battle. Despite interest in other communities and public lands, the only utility-scale installations in the valley are located in Alamosa County. During the first permitting processes, concerns from neighbors ranged from the depletion of limited water resources to the loss of productive farmland and jobs and the effect on viewshed and wildlife. Issues were addressed in both the public hearing forum and a series of open houses hosted by the solar developers to familiarize the public with each project. The open houses, which at first could barely be contained in commissioner's chambers, have become small events attended primarily by local leaders, the press, and a few neighbors. The community at large now seems confident the proposals offer more benefits than harm.

Positive impacts of the projects are wide ranging. After intensive water use for dust abatement during construction, the solar projects use a fraction of the water of their agricultural predecessors, effectively taking lands already slated for retirement in a critical water management area out of production. Property taxes for the solar farms have jumped as much as 20 times their original value, with an average contribution of $5,892 per MW.  Utility-scale solar has undoubtedly been an economic boon for Alamosa County. Producing clean energy, these solar farms allow the land to remain productive and ensure a bright future in the valley.

*Photo courtesy of Juan Altamirano.*

*Rachel Baird is the Deputy Land Use Administrator for Alamosa County. She may be reached at rbaird@alamosacounty.org.*

## The Economy of Southern and Southeastern Colorado *continued from page 3*

Leasing; and Agriculture, Forestry, Fishing, and Hunting—were down 4.4%, 2.6%, and 2.3%, respectively. These sectors represent 4.9% of regional employment through 2014, employing 4,620 people.

Wages in Southern Colorado are lower than in Colorado and have also increased at a slower pace than the state in two of the last three years (2012 and 2014). Average annual pay in the Southern Colorado region is $36,526 based on data from the BLS for 2014. Colorado's average annual wage is $52,723. Pueblo, Las Animas, and Crowley counties had the highest average annual pay in the region in 2014, at $38,900, $38,007, and $36,686, respectively, though they remain below the state average. Year-over-year growth in average annual pay in 2014 was 3.3% compared to 3.6% growth at the state level. Huerfano County has seen the greatest increases in average annual pay, climbing 4.5% year-over-year in 2014, followed by Pueblo, at 3.9%, and Alamosa and Baca, which recorded 3.3% growth each.

Retail sales in April 2015 totaled $226.8 million, increasing from $210.6 million in April 2014, and making up 3.2% of total net taxable retail sales in Colorado. Year-over-year retail sales growth in Southern Colorado was 7.7%, outpacing statewide growth of 6.2%. The increase in retail sales was largely due to growth in the largest three counties in terms of total retail sales: Pueblo (7.3%), Alamosa (10.7%), and Las Animas (14.5%). Pueblo County alone accounts for 68.3% of Southern Colorado's retail sales, and the top three counties make up 81.7% of all retail sales in the region.

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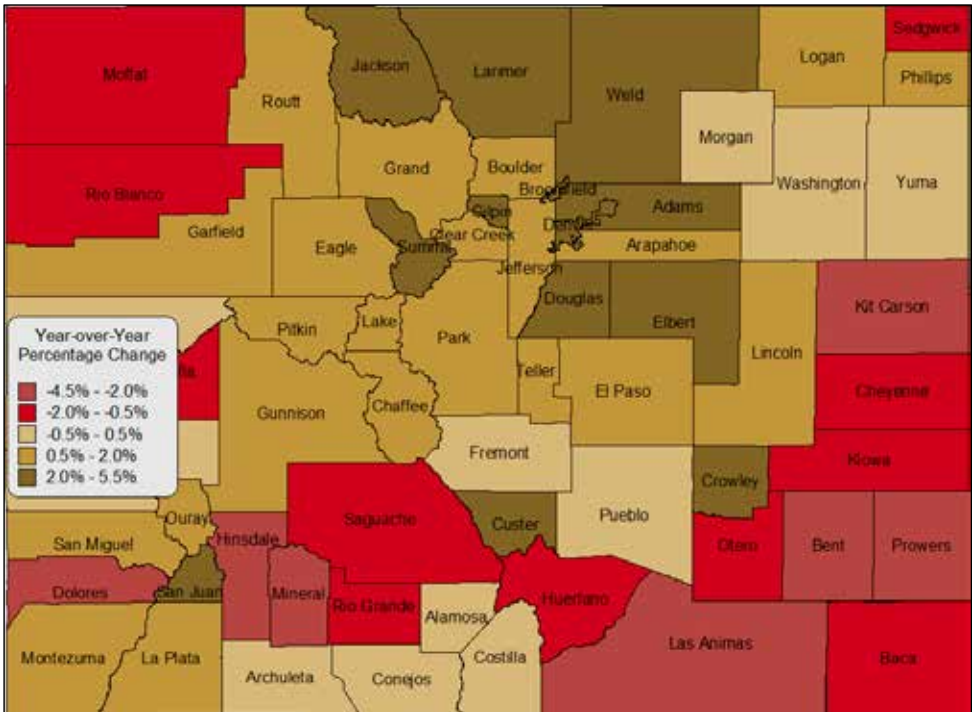
### COLORADO POPULATION CHANGE, 2013–2014




**Source: State Demography Office, July 2014 Estimates.**