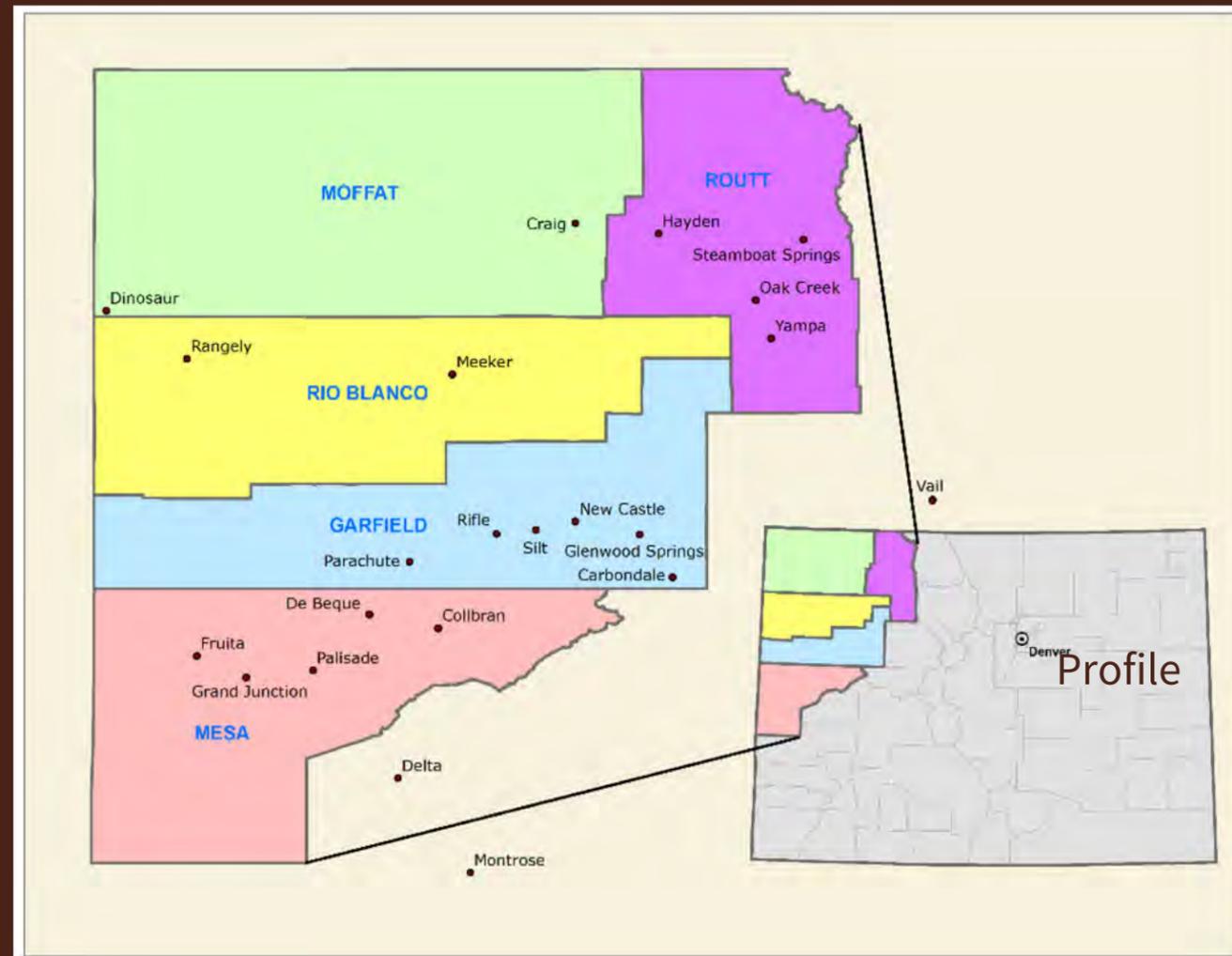


AGNC: ASSOCIATED GOVERNMENTS OF NORWEST COLORADO



**Comprehensive Economic Development
Strategy**

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Background Information



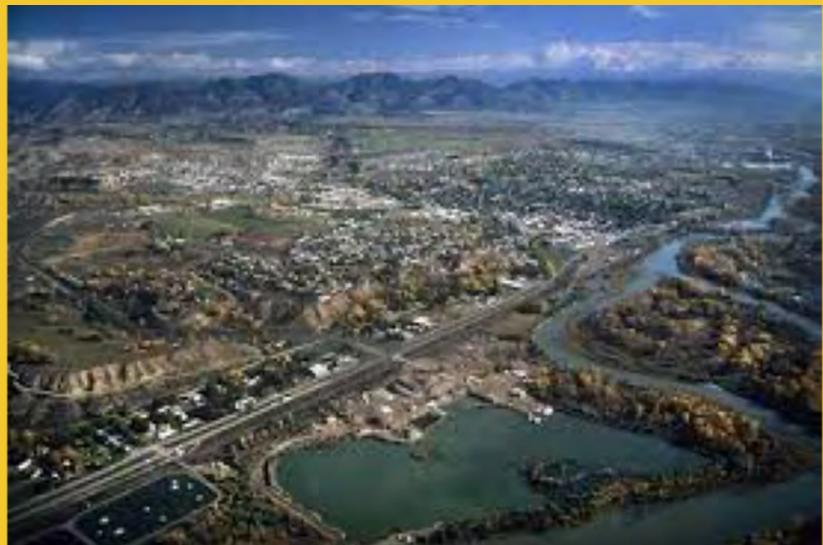
AGNC's Mission Statement:

The Associated Governments of Northwest Colorado (AGNC) is a council of governments representing cities and counties in northwest Colorado including the counties of Mesa, Garfield, Rio Blanco, Moffat and Routt. The mission of the AGNC is to communicate with, inform, and reflect the needs of its members and promote the values, industries and economies of Northwest Colorado.



To carry out our mission, AGNC conducts the following activities:

- Proactively pursues agreements between municipal and county governments in order to advance, educate, promote and negotiate positions at the state and federal level that will protect the character and development of the region represented;
- Provides forums for education, discussion and collaborative decision making for its members on regional and national issues;
- Assists the member's development and organizational goals and strategies;
- Initiates efforts to identify and efficiently utilize the resources in northwestern Colorado for the benefit of the region and its citizens;
- Continually monitors its member needs to determine the appropriate level and variety of services to be provided; and
- Continues its effective leadership to promote strong governmental relations on issues facing the region by maintaining a candid and open relationship with each of its members, state and federal lawmakers and state and federal agencies.



In 2015, the Economic Development Administration (EDA), USDA, Environmental Protection Agency, Department of Labor, and other Federal agencies began a program focused on coal reliant communities in response to economic impacts anticipated in coal communities as the national energy system shifts away from coal.

AGNC, Moffat County, Routt County, and Rio Blanco County participated in a regional meeting with federal and state agencies. During this initial meetings and on going discussions, EDA identified the lack of an official economic development district as a barrier to the region's ability to fully tap into federal resources.

Moffat County and Rio Blanco county each began the process of developing economic development plans to help them identify strategies for address their local economies, but they each felt that pursuing a designated economic development district for just their county was beyond their capacity.

AGNC determined that there was a benefit to the entire region, including improved coordination, ability to access resources, and scale from approaching designation as a five county partnership, and began working with EDA and its membership to begin the process of developing a Comprehensive Economic Development Strategy (CEDs) and to evaluate the organizational structure needs to meet EDA's requirements.

AGNC applied for a planning grant from EDA, and a matching grant from the Colorado Department of Local Affairs, and received funding in the fall of 2017 to begin the planning process.

If successfully designated as a Economic Development District, AGNC will add to its mission and focus regional economic development activities focused on improving the economy in each of the counties throughout the region.



The first step in moving forward to become an Economic Development District is to demonstrate that the region meets EDA's Economic Development District eligibility criteria. These criteria include:

- An unemployment rate that is, for the most recent 24-month period for which data are available, at least one percentage point greater than the national average unemployment rate.
- Per Capita income that is for the most recent period for which data is available, 80% or less of the of the national average per capita income.
- Special Need

AGNC anticipated having to build a case of “special need” as the region had historically been unable to meet the economic distress criteria due to the higher wages earned around the region by employees in the energy sector. As AGNC began digging into the data though, unfortunately, it became clear that the impact of the loss of jobs in several economic sectors including coal, oil and gas, and construction had already begun taking a toll on the region.

AGNC meets EDA's criteria for distress in three of the five AGNC counties, and almost meets the criteria in a fourth county. Two of the five counties within the region fall below EDA's criteria for Per Capita Income, and one of these counties has census tracts with unemployment significantly above the national average. **A third county is on the brink of falling below the threshold for Per Capita Income, and two census tracts with the fourth county fall below both the threshold for Per Capita Income and have unemployment rates significantly above the national average.**

Only one county within the region is experiencing relative economic health. However, this county has its own challenges associated with the disparity in cost of living often found in resort based communities including high cost of living.



In addition to three of the five counties comprising AGNC meeting the criteria for distress, there are several additional factors that point to the challenges that the region faces. AGNC as a region has not experienced economic recovery from the 2008 recession. Economic distress is now endemic in the region. The State of Colorado has not only recovered from the 2008 recession, but has become one of the best economies in the Country. This economic growth and prosperity has not yet found its way to northwest Colorado except in a few pockets within the region.

Additional Economic Distress Indicators:

The region as a whole has not returned to peak employment. The State of Colorado has not only returned to peak employment, but has exceeded peak employment by 304,531 additional jobs as of 2016. Statewide job growth has been 11.68%. The AGNC region remains down from peak employment by almost 7,000 jobs.

Wages remain under pressure with ongoing retraction of high paying jobs in coal/oil/gas. Three of the five counties have strong presence of coal mining jobs. Four of the five counties have a strong oil and gas presence. Job loss in these higher paying sectors continues while job growth is occurring in lower wage sectors such as retail.

Population growth has been relatively flat. Statewide population has grown since 2007 by 716,396 people or 15%. The AGNC region has grown by 22,135 people or 9.5%.

Local tax base in the region continues to experience significant downward pressure due to decreased activity in coal/oil/gas and changing consumer trends.

State Demographer: <https://demography.dola.colorado.gov/economy-labor-force/data/jobs-by-sector/#jobs-by-sector-naics>

See attached county profiles in the appendix.

Economic Development Agency

Mission:

To lead the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy.

U.S. ECONOMIC DEVELOPMENT ADMINISTRATION VALUE PROPOSITION STATEMENT

■ ***EDA Makes It Easier for Businesses to Start and Grow in the U.S.***

EDA's investments in planning, technical assistance, infrastructure and capacity building support business start-up and expansion to enable towns and cities all across the country to build strong, durable and resilient local economies that produce good wages for American workers.

■ ***EDA Matching Grants Start with Local Business Conditions and Needs – Not Washington's.***

Instead of a Washington-knows-best approach, EDA works hand-in-hand with local economic development partners to advance their locally-developed projects which are linked to the region's long-term, sustainable economic development strategy. Partnering with EDA, these priority projects often can be implemented in a short timeframe.

■ ***EDA Drives Innovation and Entrepreneurship Throughout Our Country, Especially in Our Manufacturing Sector, to Help U.S. Workers and Businesses Compete Globally.***

From grants that help build rail lines, improve wastewater treatment facilities, or construct buildings and roads – EDA invests in the critical infrastructure needed by businesses to locate or expand in the U.S., generating thousands of middle-class jobs in areas of the country that need them the most. EDA also makes strategic investments that equip American workers with the skills new or expanding businesses need to be successful.



ECONOMIC & DEMOGRAPHIC OVERVIEW



DISTRESS CRITERIA STATISTICAL REPORT

Reference Date: 10 / 2017 (All data elements refer to this date or earlier.)
 Region Consists of: Garfield Co. CO, Mesa Co. CO, Moffat Co. CO, Rio Blanco Co. CO, Routt Co. CO
 Report Date: 12/23/2017 11:34:45 PM

Economic Distress Criteria—Primary Elements

	Region	U.S.	Threshold Calculations
24-month Average Unemployment Rate (BLS) period ending October 2017	4.03	4.68	-0.65
2016 Per Capita Money Income (5-year ACS)	\$28,251	\$29,829	94.71%
2016 Per Capita Personal Income (BEA)	\$45,998	\$49,246	93.40%

At first glance it would appear that the AGNC region is performing well above U.S. averages. As discussed throughout this report, unemployment is a poor measure of distress due to the exodus of workforce following declines in several industries. This report will present various measures of distress demonstrating that the five county region of AGNC faces significant economic challenge region wide.

- **Moffat and Mesa County** have Per Capita Income that is less than 80% of the national average.
- **Rio Blanco County** is only .2% away from falling below the EDA distress criteria
- **Garfield County** has two census tracts that are less than 80% of the national average and have unemployment rates significantly higher than the US average.
- **Based on EDA criteria, the AGNC region **MEETS** the definition of distressed based on Per Capita Income and Unemployment in**

Economic Distress Criteria—Geographic Components

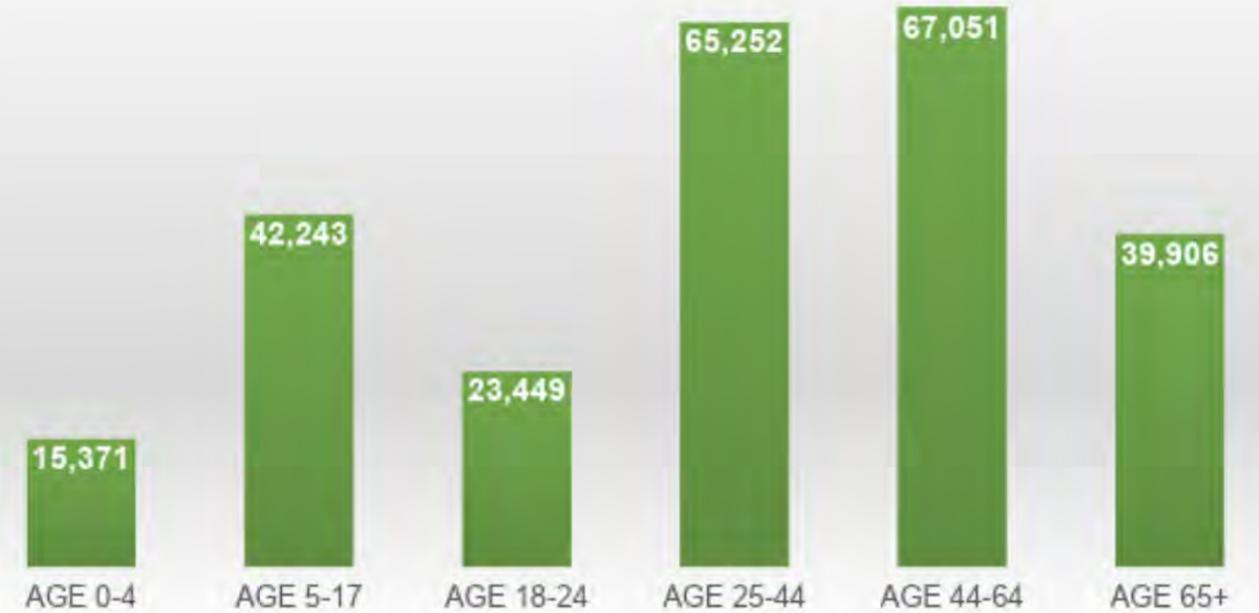
	24 Month Unemp	Threshold Calculation	BEA PCPI	Threshold Calculation	Census PCMI (2000)	Threshold Calculation	ACS 5-Year PCMI	Threshold Calculation
Garfield County, CO	3.22	-1.46	\$55,227	112.1	\$21,341	98.9	\$29,179	97.8
Mesa County, CO	4.72	0.04	\$39,118	79.4	\$18,715	86.7	\$26,731	89.6
Moffat County, CO	3.69	-0.99	\$39,244	79.7	\$18,540	85.9	\$26,344	88.3
Rio Blanco County, CO	4.61	-0.07	\$39,483	80.2	\$17,344	80.3	\$27,419	91.9
Routt County, CO	2.47	-2.21	\$71,167	144.5	\$28,792	133.4	\$36,692	123

Sources: U.S. Bureaus of Census, Labor Statistics, and Economic Analysis; Calculations generated by StatsAmerica.

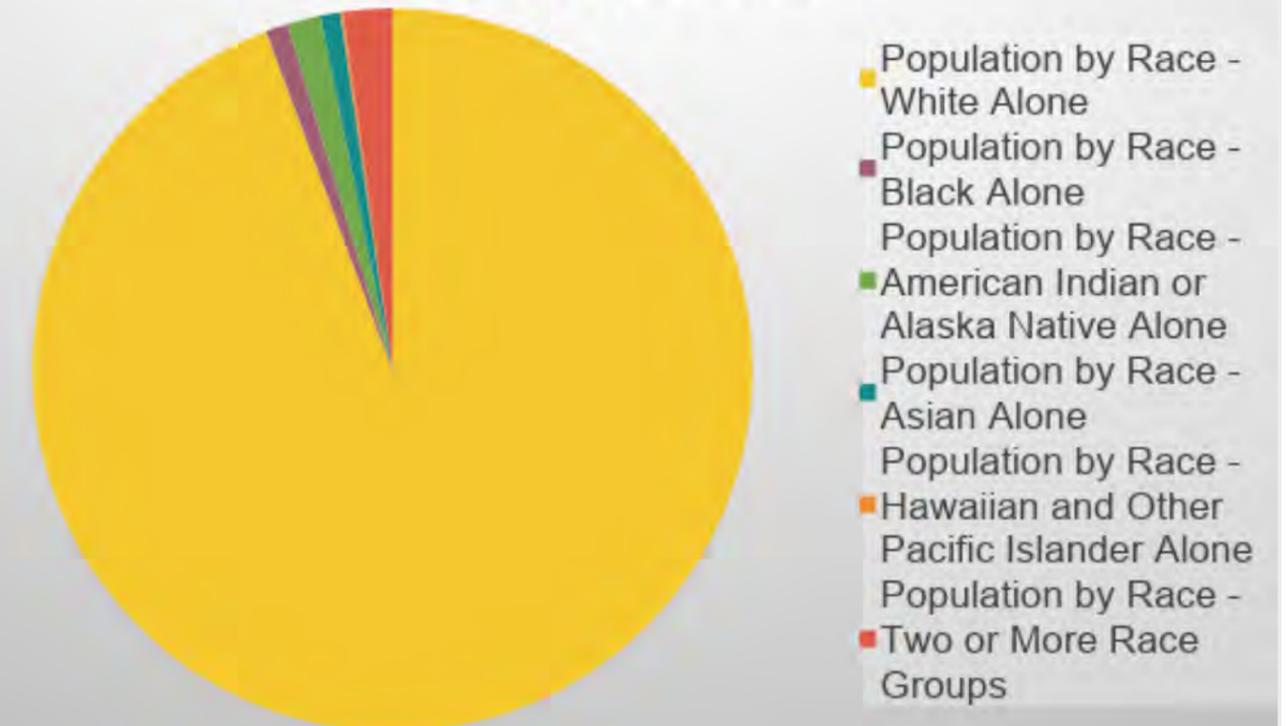
AGNC Fast Facts

- Total Population: 253,272
 - 4.7% Colorado's Population
- 17% Hispanic Population
 - 17% Colorado's Hispanic Population
- 94% White
 - 73.3% Colorado's White Population

AGE DISTRIBUTION

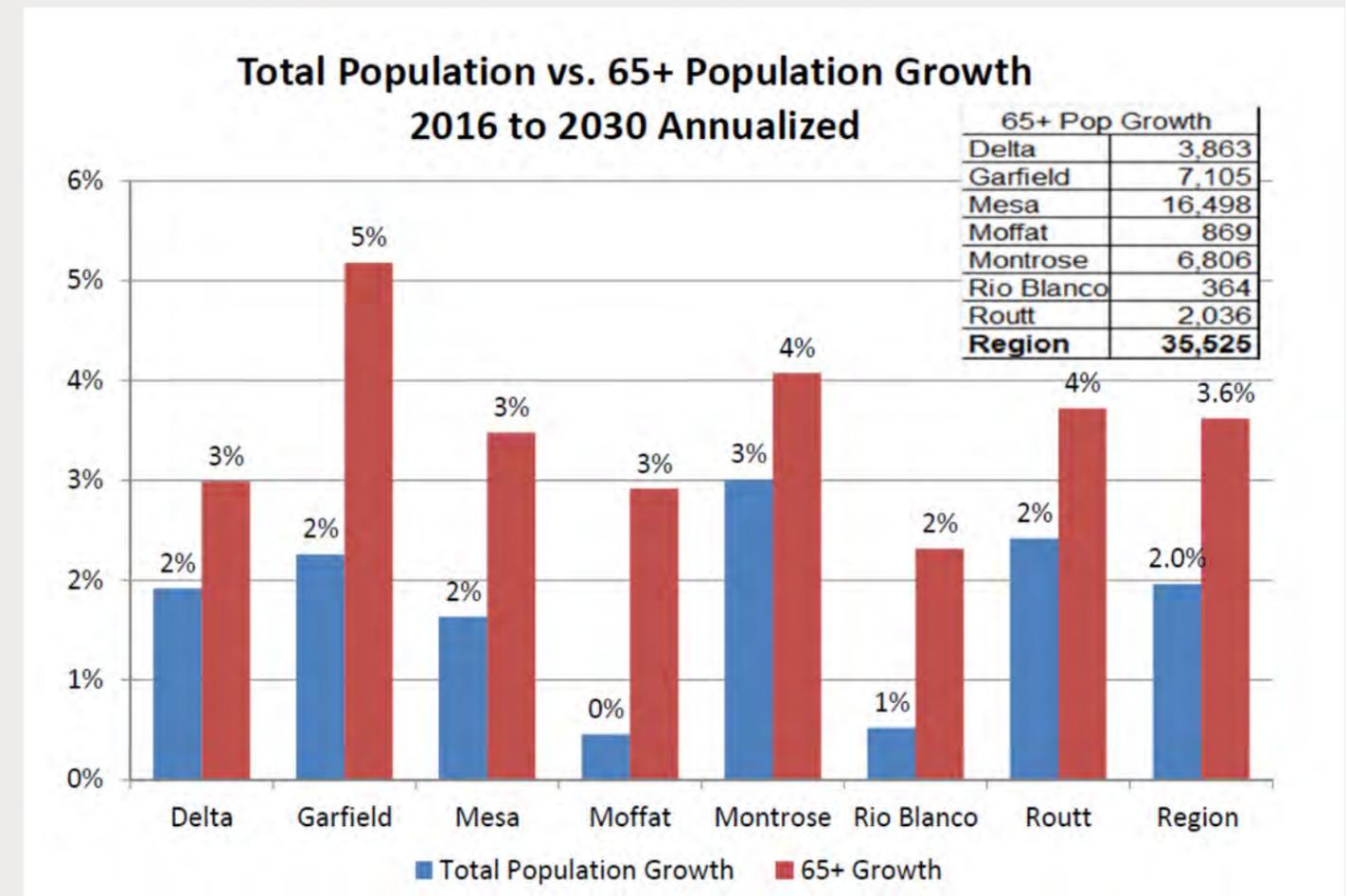
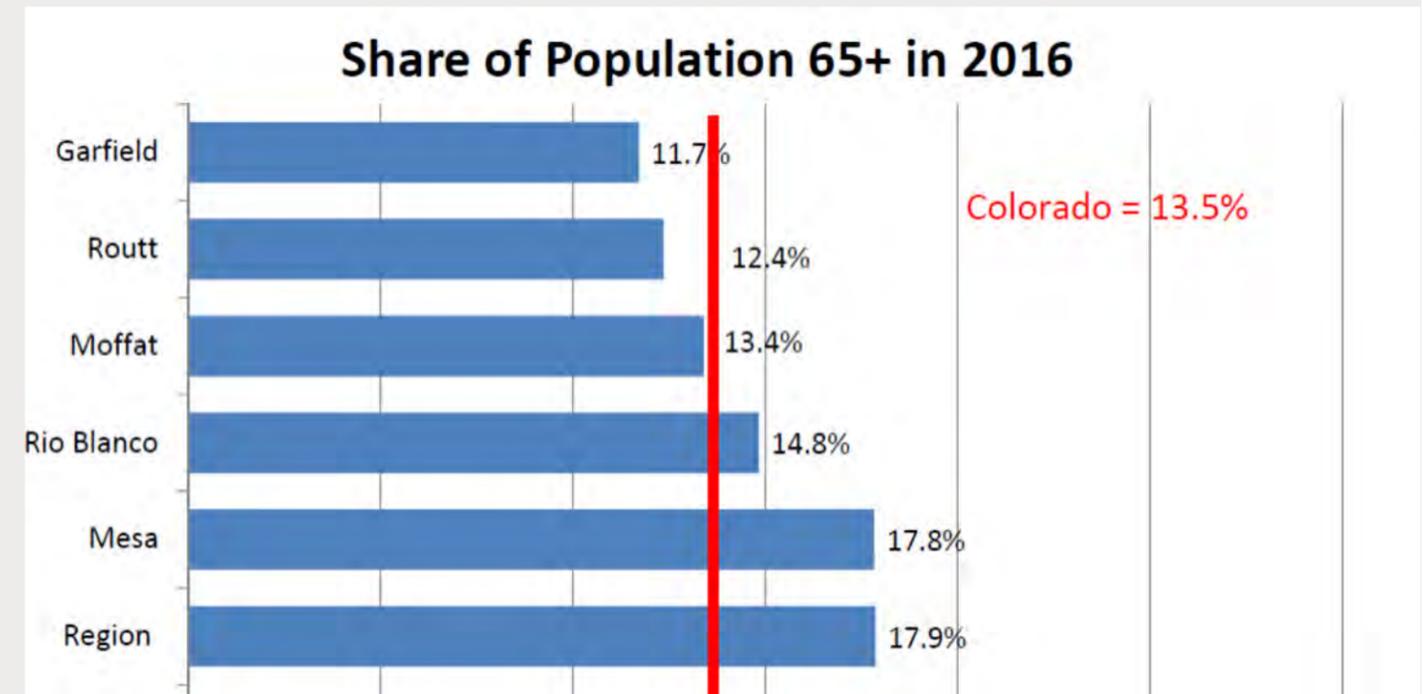


RACE DISTRIBUTION



Trends

- The region has a relatively young demographic, with the exception of Mesa County and Rio Blanco County. Consistent with statewide trends the region is expected to see significant growth in the 65+ share of the population as baby boomers age. This shift in the age distribution presents economic opportunities and challenges including shifts in consumer spending which can in turn impact local revenue generation, decrease in available work force to fill jobs, increased demand for healthcare services, increased demand for transportation services. Housing may also be impacted
- The retirement economy is an opportunity to grow economic activity around services, recreation, and other industries that are impacted by retiree spending.



Additional Trends

The AGNC region is experiencing similar trends in declining birth rates and fertility rates as the rest of the State of Colorado. Over time, a decrease in workforce as the population ages, the region faces the long-range challenge of maintaining a quality workforce. The region's economic policies are designed to help the region build vibrant communities that meet the needs of multiple generations, to help the region compete for, attract, and retain workforce. One factor contributing to declining birth and fertility rates across the region is a significant decrease in teenage births. Region wide, teenage births have declined by 57.8%.

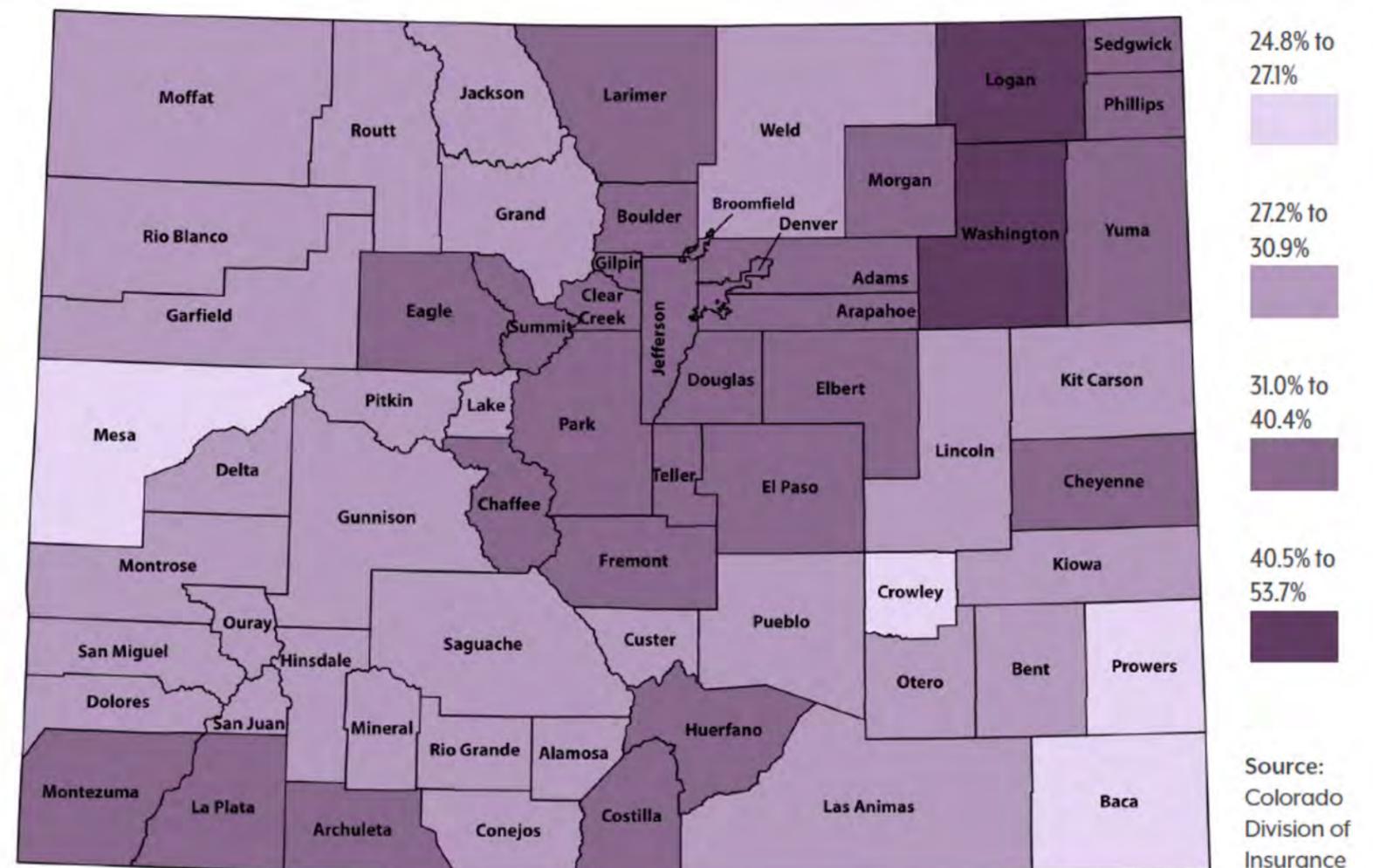
Healthcare & Mental Health Trends

Medicaid Rates: Approximately 24% of the region is covered by medicaid, which is similar to the level of medicaid coverage across the state. However, Mesa and Moffat Counties, both of which meet the criteria for distress have the highest medicaid rates at 30%.

Healthcare Coverage: Approximately 15% of the region is uninsured, which is higher than the state average of 8.2%.

Healthcare Costs: Healthcare costs have risen across the state. The AGNC region has experienced a 31%-40% increase in costs from 2007-2018. These cost increases are in addition to a higher cost market that has occurred across the mountain communities, including the AGNC region. These high costs help explain the high uninsured rates throughout the region..

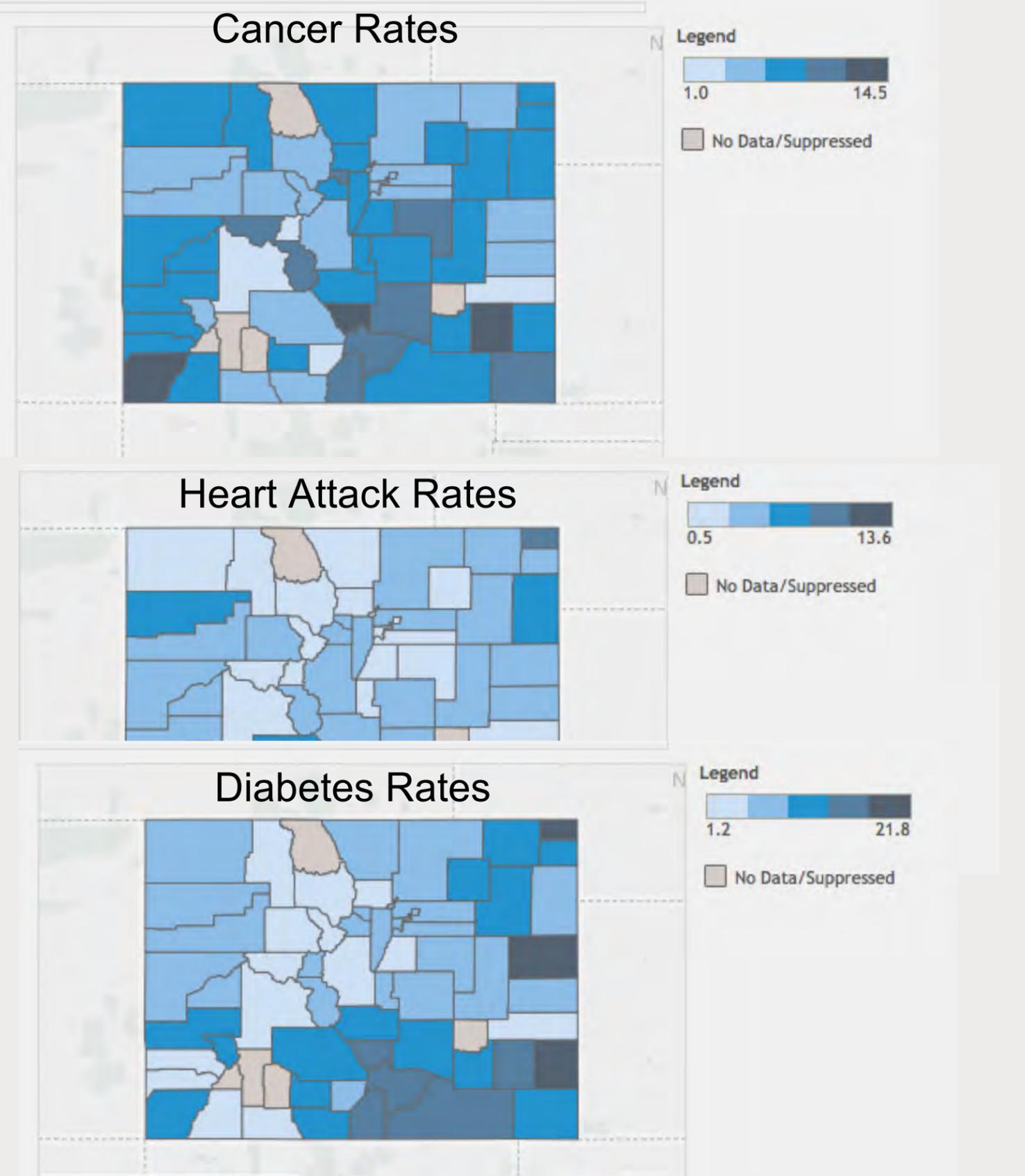
Map 1. Weighted Average Increase of Individual Market Premiums by County, 2017 to 2018



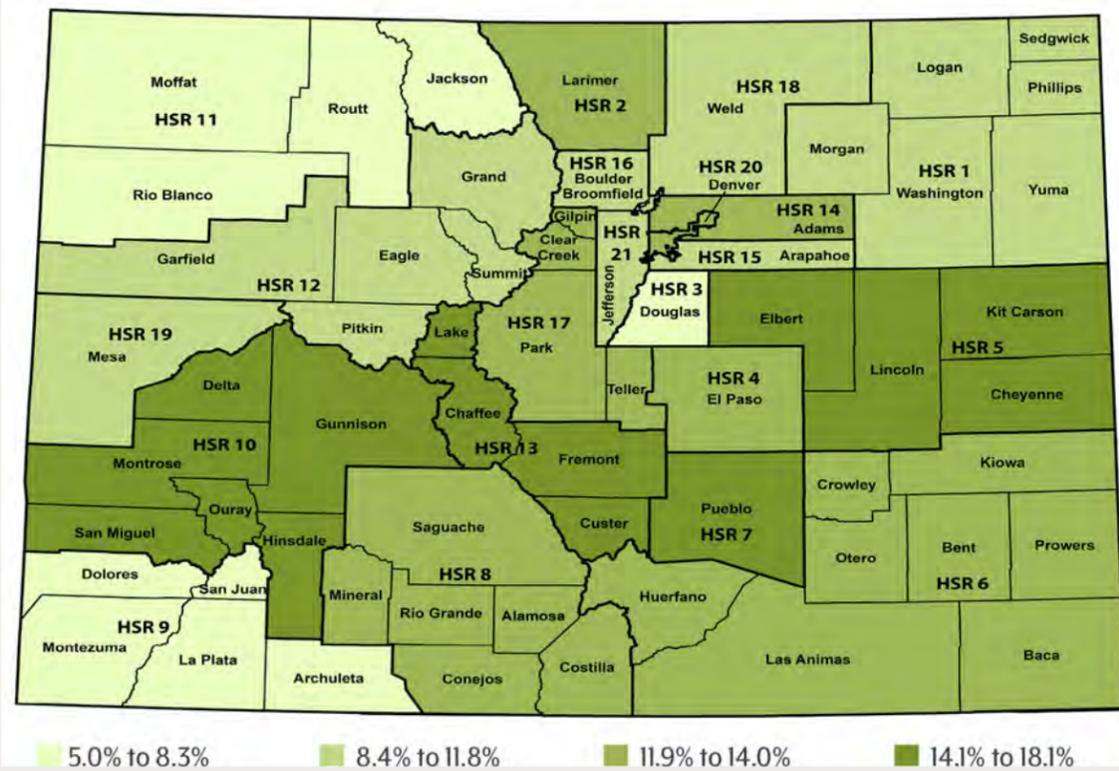
Cancer Rates: Cancer rates within the region range from slightly below to slightly above statewide averages.

Heart Disease: Heart attack rates similarly mirror statewide with all but Rio Blanco County hovering just below or just above state averages. Rio Blanco County has a heart attack rate that is double the statewide average.

Diabetes: Diabetes within the region also mirrors statewide averages, with counties within AGNC hovering just above or just below. Routt County has a lower rate of diabetes, with a rate of 2.7% vs. the statewide average of 6.9%



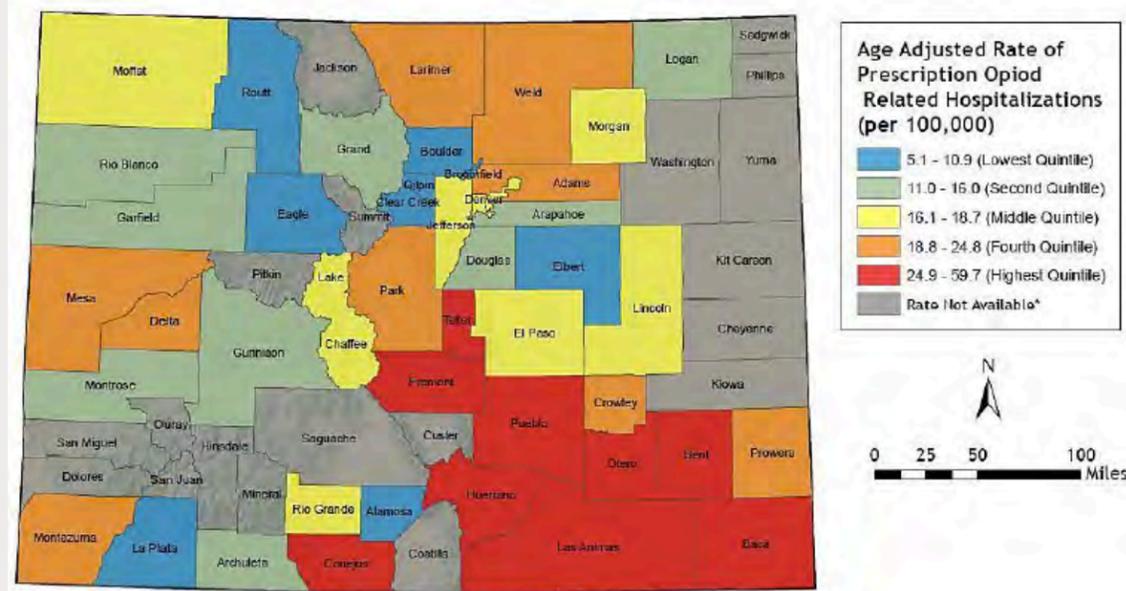
MAP 1. Percentage of Coloradans Reporting Poor Mental Health, by Region, 2017



Mental Health: Survey respondents across the state have self identified their level of mental health. The AGNC region has self reported better mental health than many other parts of the state. However, this report doesn't align with evidence regarding suicides within the region.

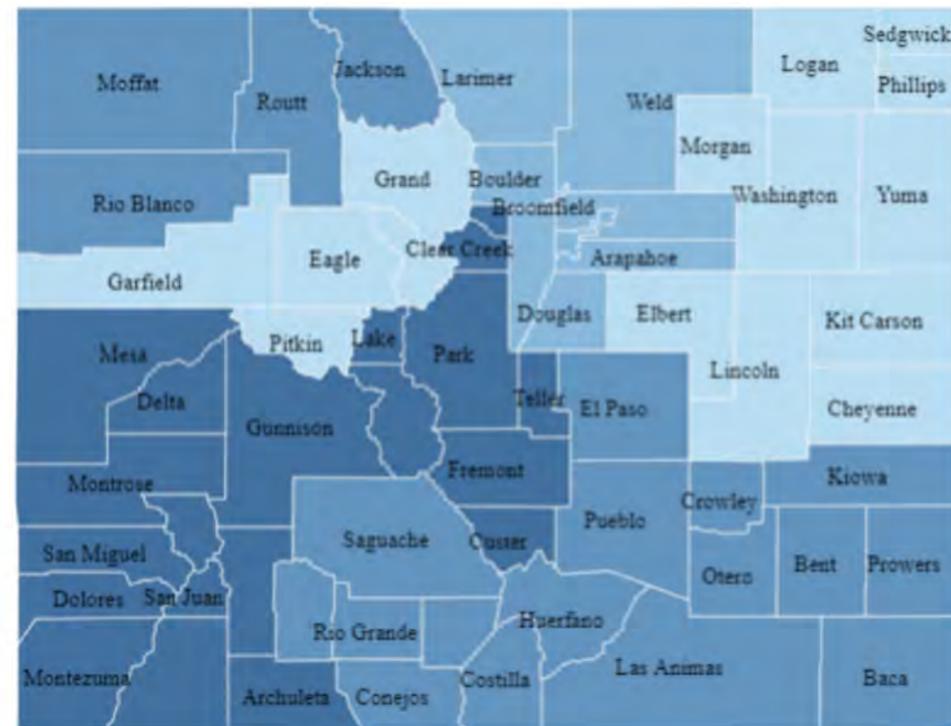
Drug, Alcohol: Opioid abuse throughout the region presents numerous challenges. Hospitalizations due to opioid overdose are increasing throughout the region with Mesa County, and Moffat County seeing the highest rates. Deaths from opioid overdoses are highest in Routt County and Moffat County.

Figure 5: Age-Adjusted Opioid Analgesic Hospitalization Rates by County, Colorado, 2012-2014

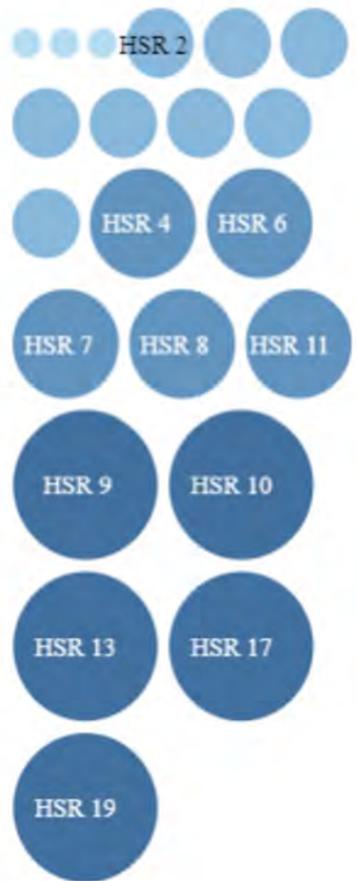


Opioid related use is not the only substance being abused within the region. Heavy alcohol consumption exceeds statewide averages in Routt and Garfield Counties. Marijuana use exceeds state average in these same counties. The remaining counties have averages lower than the state average, but tracking of these statistics can help the region understand its health/mental health needs.

In 2016, the southwest corner of the state had the highest rate of suicide. Mesa County had the highest rate of death by suicide, 34.7 per 100,000 residents.



Rate per 100,000
 11.5-14.0 14.1-20.9 21.0-27.7 27.8-34.7

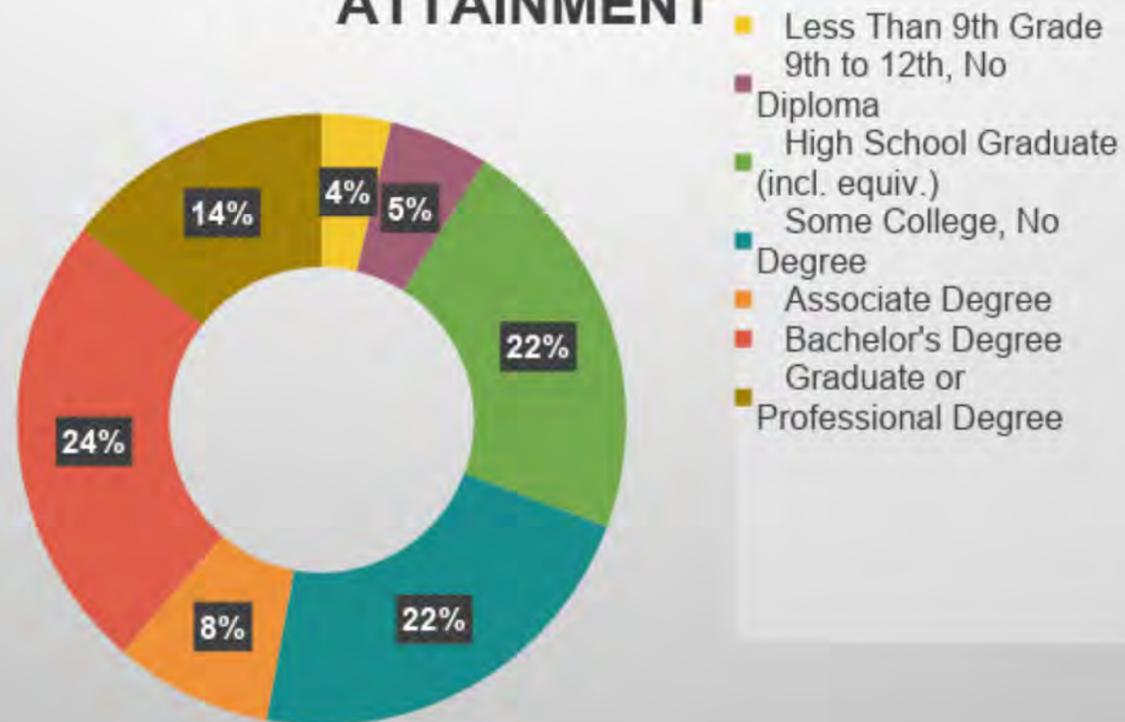


Suicide Rates: Access to mental health care remains a challenge in the region. One indicator of mental health needs is the regional suicide rates. Suicides have increased 68.2% across the region since 2006 compared to a statewide increase of 36.8%. The increase in suicide rates across the region are widely different, with Mesa County experiencing a 92% increase, and the other Counties experiencing significantly less of an increase. Mesa County actually has the highest rate of deaths by suicide for the entire state.

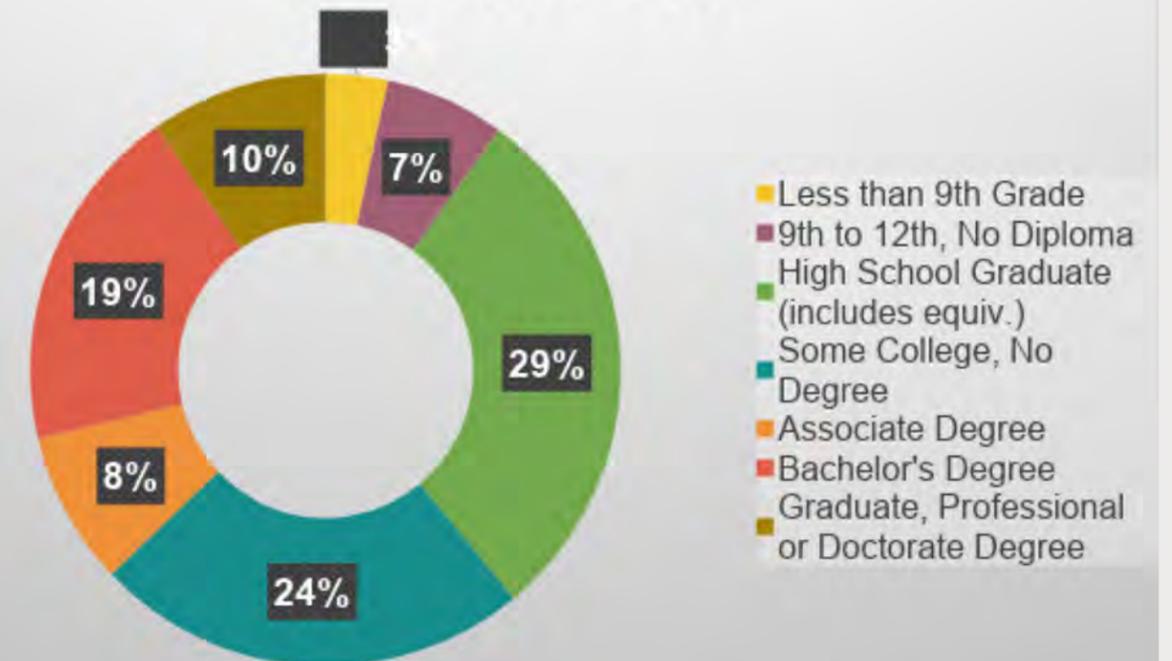
Education Trends

- AGNC region has a slightly higher percentage of high school graduates than the statewide average.
- The state on average has a higher percentage of degreed individuals than the AGNC region.

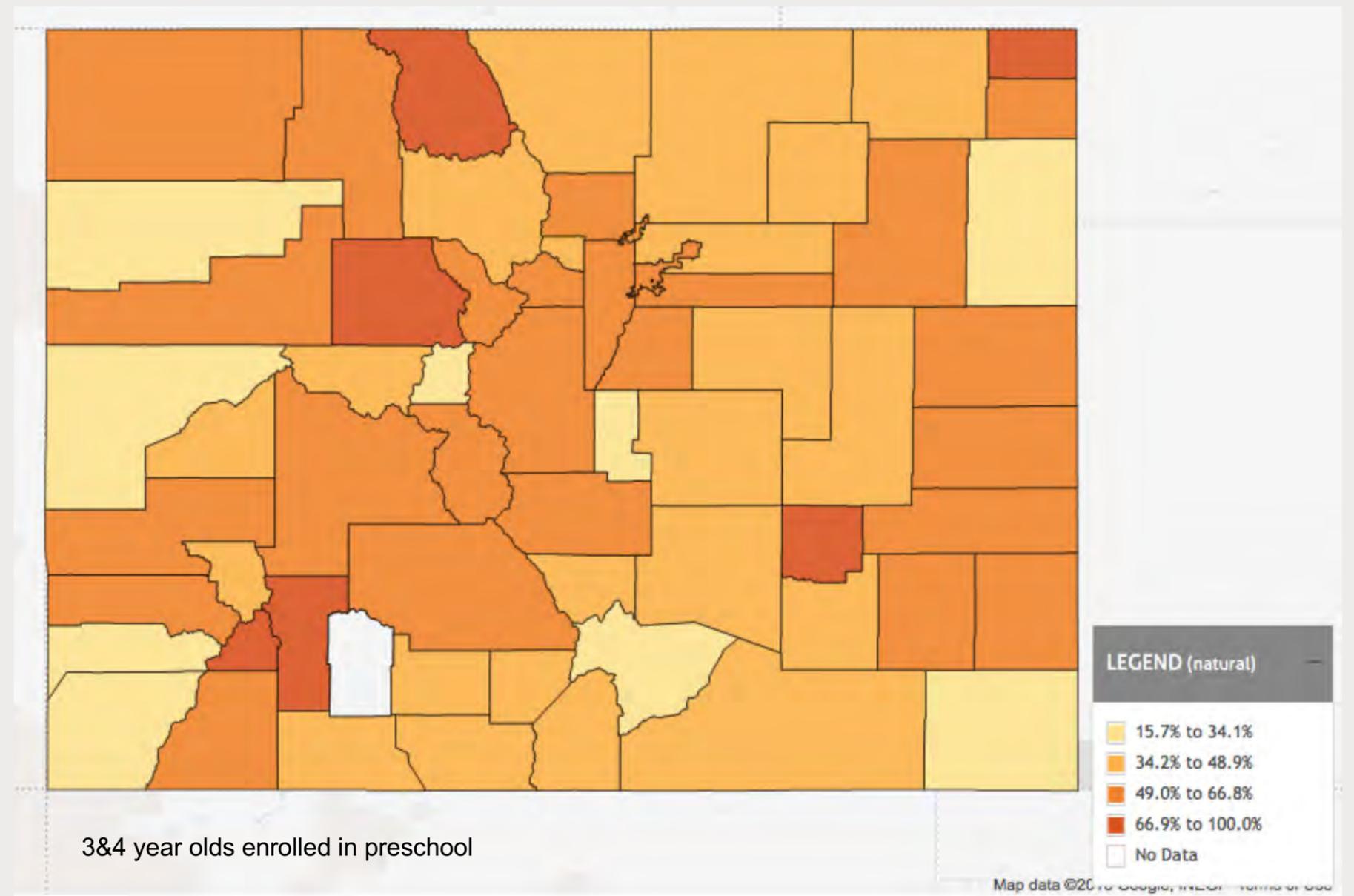
COLORADO EDUCATIONAL ATTAINMENT



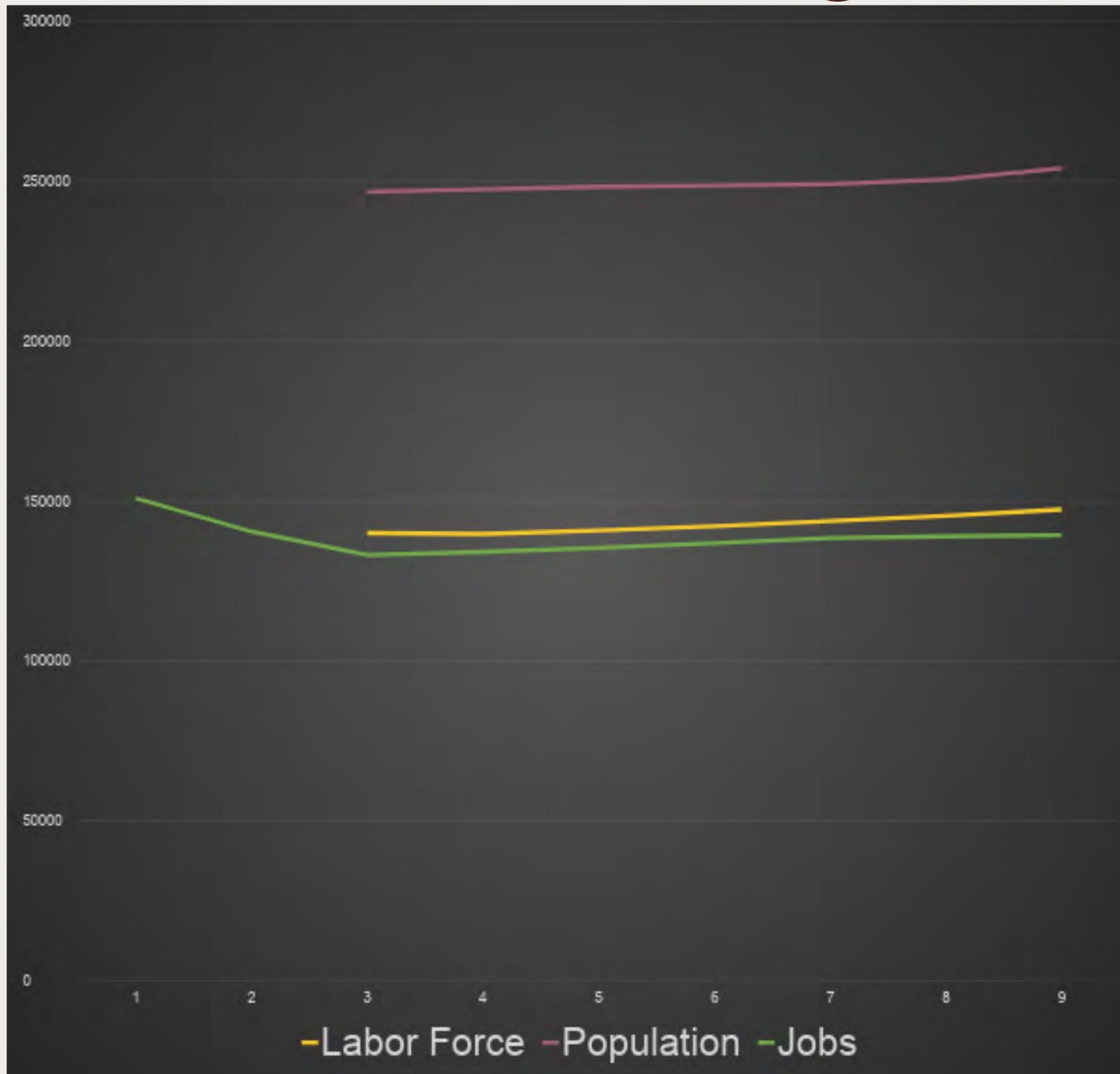
AGNC EDUCATIONAL ATTAINMENT



Routt, Moffat, and Garfield counties have preschool enrollment rates at or near the state average of 50%. Rio Blanco and Mesa Counties preschool enrollment is significantly lower than the state average. In general, access to daycare and preschool are critical economic development issues. Access to affordable daycare and preschool is critical to future economic development in the region.



Workforce & Demographic Trends

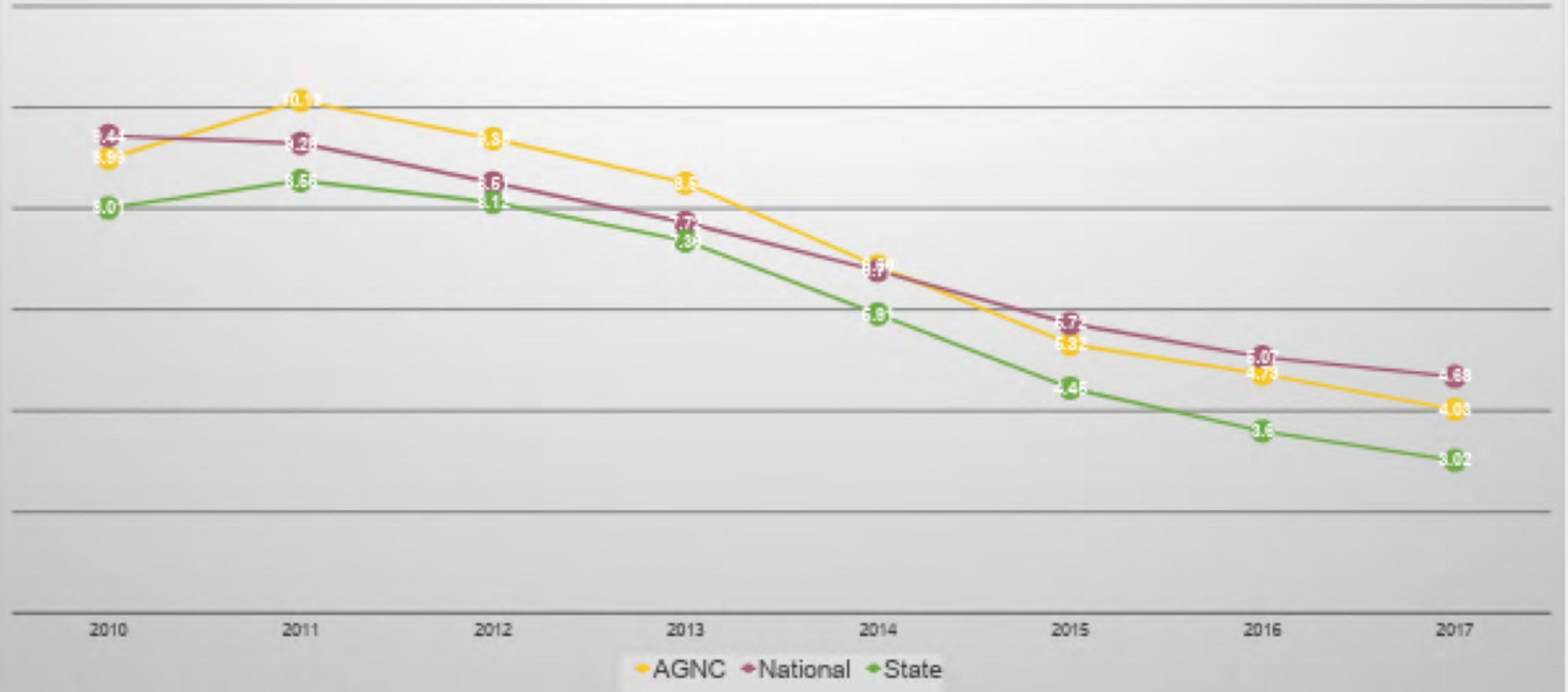


The five county AGNC region has experienced slight population growth since 2009 with a total population growth of 7,342 or 3%. The State of Colorado has experienced a growth rate of 8.8% for the same time period.

AGNC also saw a 5% increase in labor force and a 4% increase in total jobs.

However, the region has not regained peak employment. Comparatively, the State of Colorado experienced a 7% increase in labor force and a 14% increase in jobs, and has not only regained but exceeded prior peak employment.

Unemployment



Unemployment within AGNC has declined since the 2008 recession. Moffat and Mesa Counties experienced an exodus of work force, artificially lowering unemployment rates for those counties. Region wide, unemployment rates mirror national trends. However, the remainder of Colorado has experienced significant improvement in unemployment, which has outpaced improvement in the five county AGNC region.

Cluster Analysis by employment



The region's strongest traded economic sectors are Hospitality, Oil and Gas, Construction, and Coal Mining. Hospitality is one of the largest economic sectors, providing 6000+ jobs within the region. However; these tend to be lower wage and seasonal jobs. Mining, Oil and Gas, and Electric Power have a presence in all of the counties. These tend to be the highest paying jobs. Other higher paying sectors do not have a significant presence in the region.



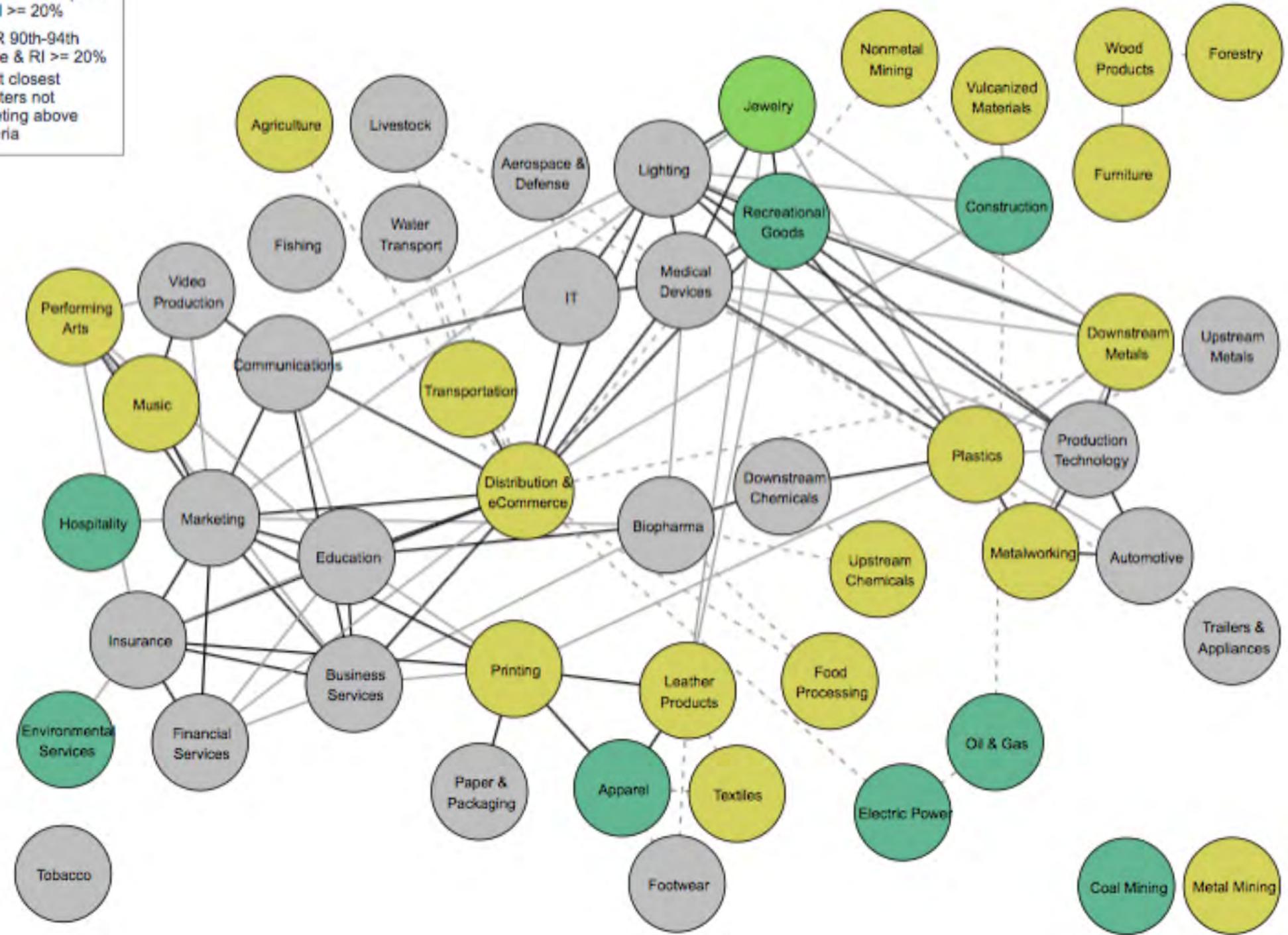
Cluster Specialization

- Strong clusters above 90th percentile specialization
- Strong clusters above 75th percentile specialization
- Other specialized clusters (LQ > 1.0)

- BCR >= 95th pctile & RI >= 20%
- BCR 90th-94th pctile & RI >= 20%
- Next closest clusters not meeting above criteria

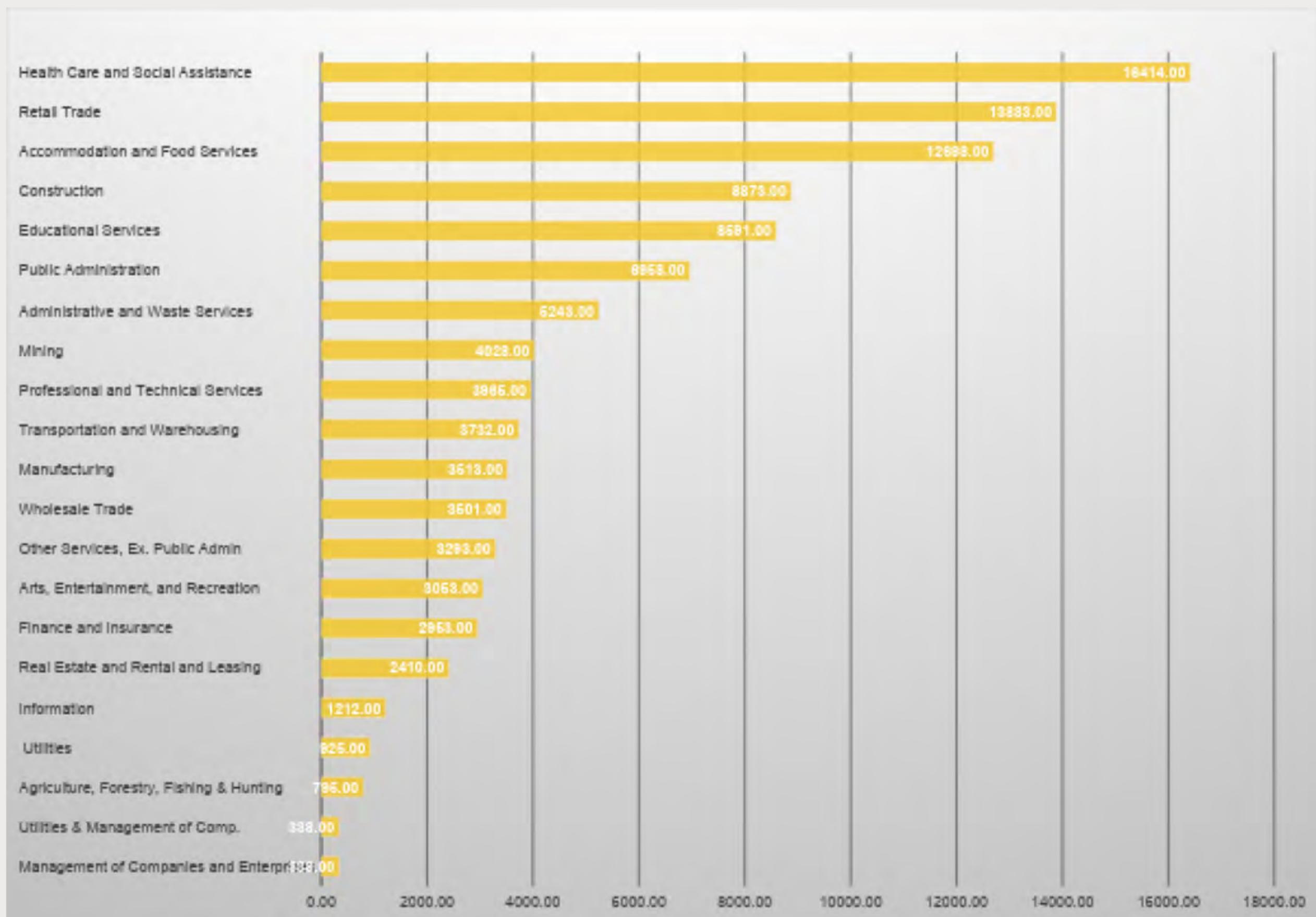
Cluster Linkages and Economic Diversification

AGNC by elyselucinda, 2015

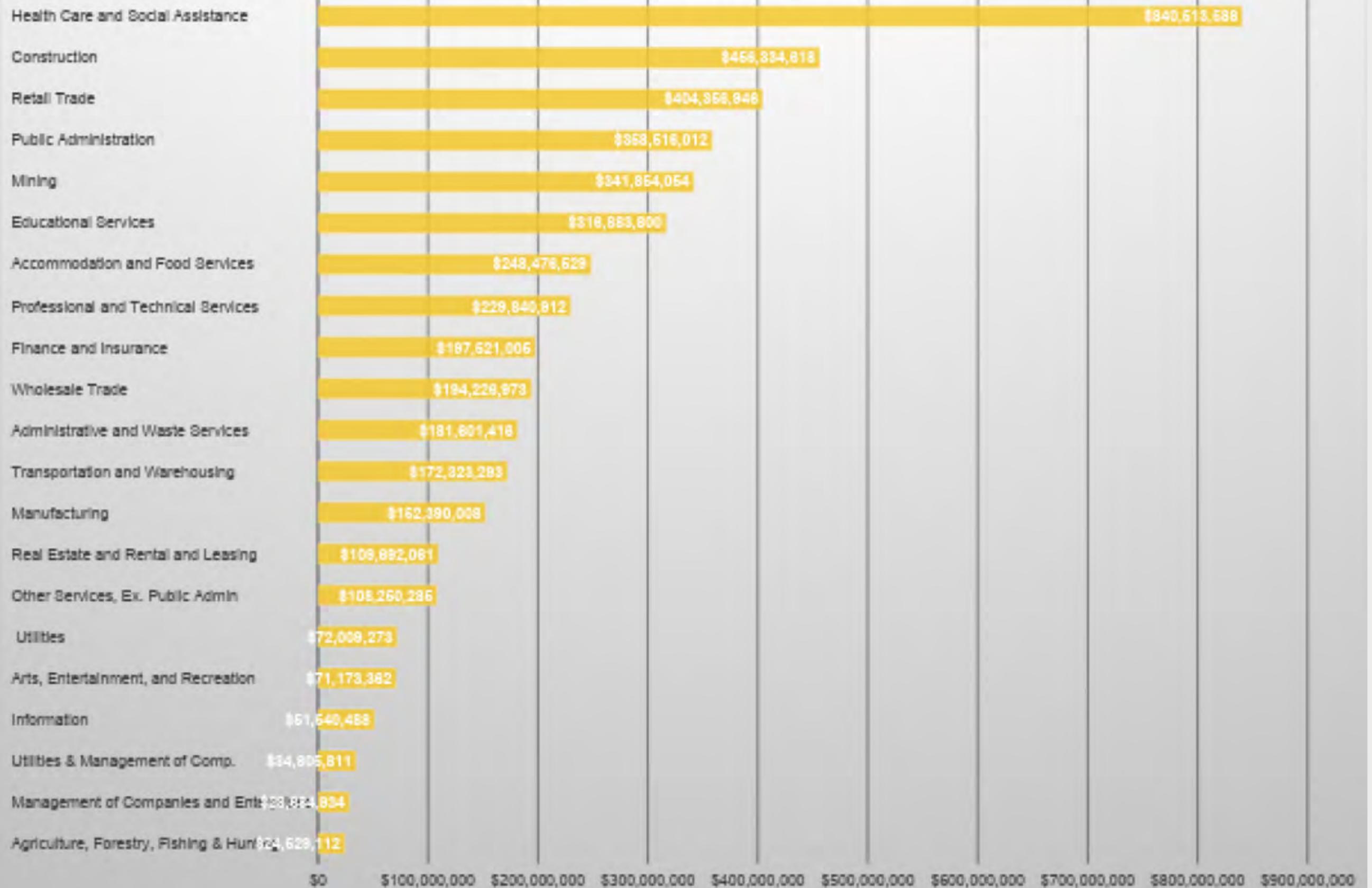


The region has several strong secondary clusters. These second tier clusters are diverse, and represent opportunities for economic growth and diversity.

The region does not have clusters in some of the higher wage earning industries, but does have cluster linkages to these industries.



Total Wages



	Weekly Wage		% ShareJobs	% Share Wages
Accommodation and Food Services	\$376			
Arts, Entertainment, and Recreation	\$448			
Retail Trade	\$560			
Agriculture, Forestry, Fishing & Hunting	\$593	Lowest	28%	16%
Other Services, Ex. Public Admin	\$632			
Administrative and Waste Services	\$666			
Educational Services	\$709	Low-Moderate	16%	13%
Information	\$818			
Manufacturing	\$834			
Real Estate and Rental and Leasing	\$875			
Transportation and Warehousing	\$888			
Health Care and Social Assistance	\$985			
Construction	\$989			
Public Administration	\$991	Moderate	40%	46%
Wholesale Trade	\$1,067			
Professional and Technical Services	\$1,115			
Finance and Insurance	\$1,286	Mod-High	10%	13%
Utilities	\$1,497			
Management of Companies and Enterprises	\$1,632			
Mining	\$1,632			
Utilities & Management of Comp.	\$1,980		5%	9%

Slightly more than 1/4 of the region's jobs are in the lowest earning wage sectors. These lower wage sectors account for 28% of jobs but only 16% of wages.

40% of the regions jobs and 46% of wages are in moderate paying sectors. Healthcare accounts for 15% of all jobs in the region.

Less than 15% of total jobs are in the highest paying sectors. These jobs though account for 22% of total wages.

The number of large establishments per 10,000 workers is significantly smaller than the number of small establishments region wide. County by County, there are more than twice as many non-employer firms than employer firms, producing revenue and driving economic activity.

Geography Name	Year	Small Establishments per 10,000 Workers
Custom Region	2015	879.75
Geography Name	Year	Small Establishments per 10,000 Workers
Garfield County, CO	2015	1,122.09
Mesa County, CO	2015	740.31
Moffat County, CO	2015	1,138.38
Rio Blanco County, CO	2015	1,078.13
Routt County, CO	2015	957.73

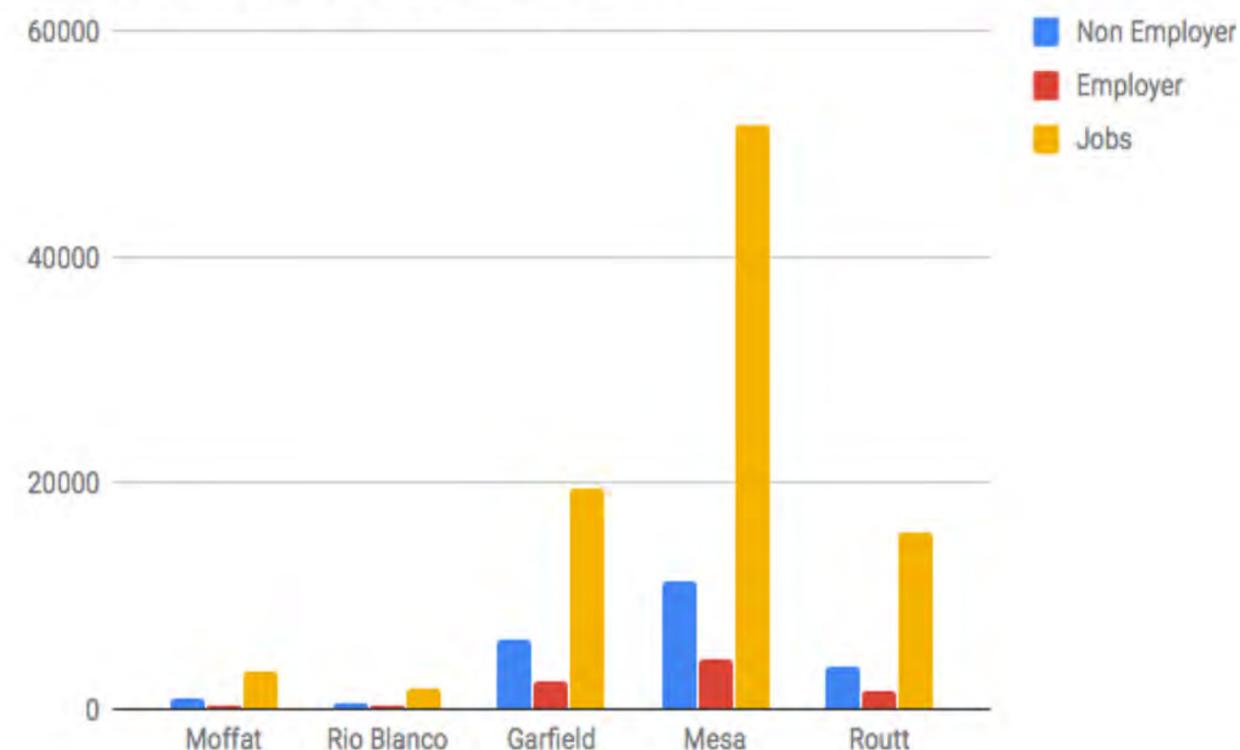
Source: U.S. Census Bureau

Geography Name	Year	Large Establishments per 10,000 Workers
Custom Region	2015	0.76
Geography Name	Year	Large Establishments per 10,000 Workers
Garfield County, CO	2015	0.51
Mesa County, CO	2015	0.77
Moffat County, CO	2015	0.00
Rio Blanco County, CO	2015	0.00
Routt County, CO	2015	1.28

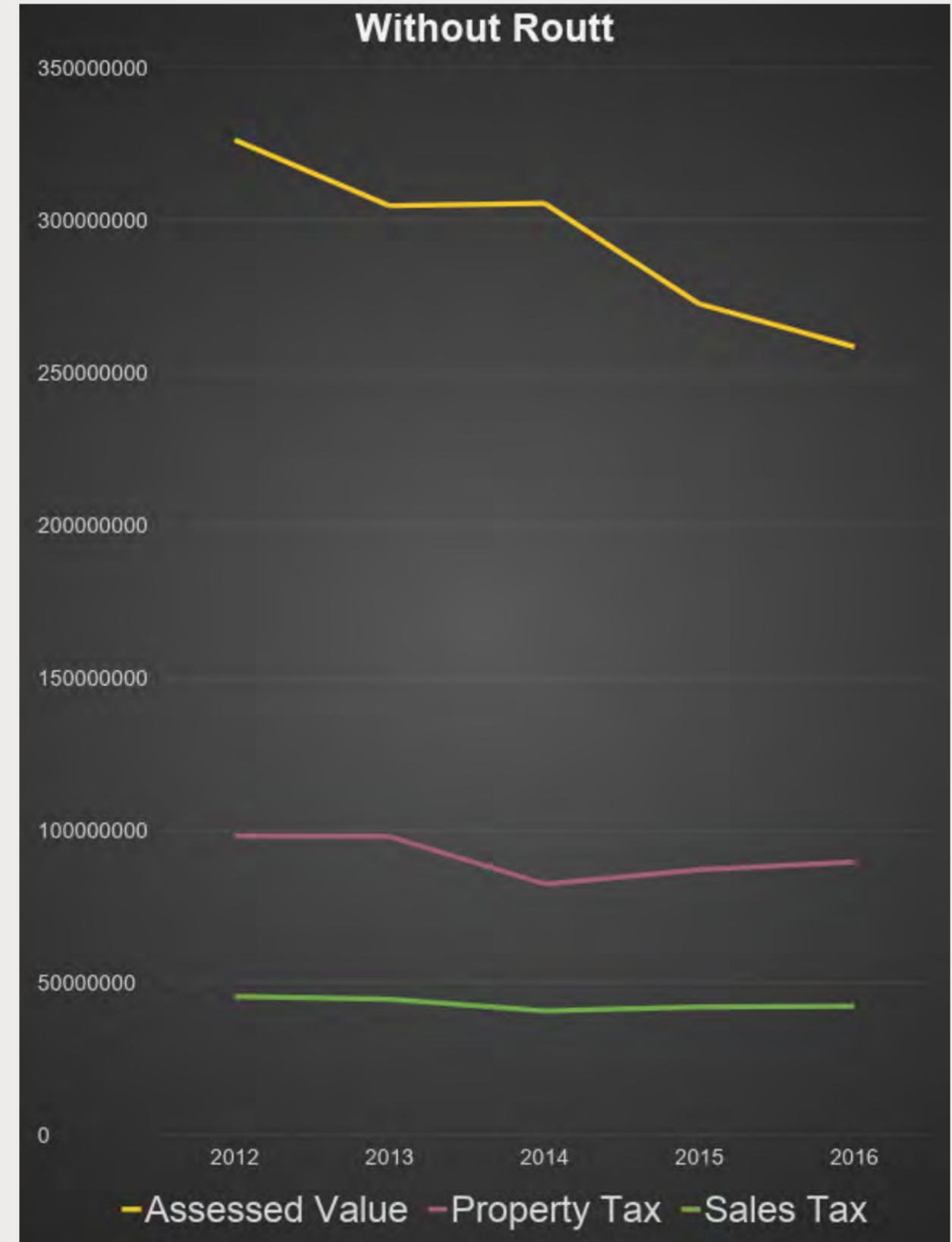
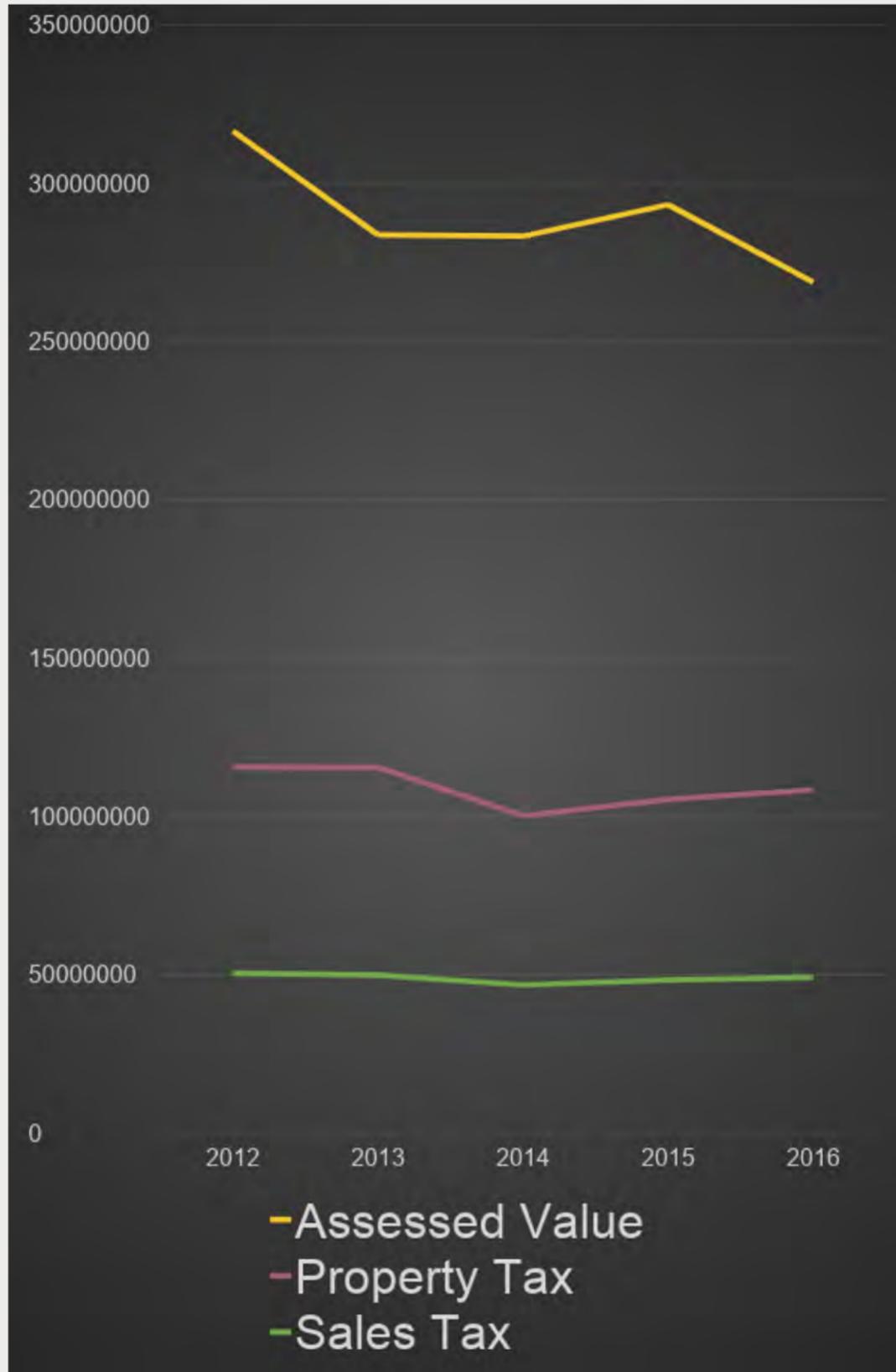
Source: U.S. Census Bureau

Entrepreneurship, small business, and sole proprietors are key element of the regional economy. Measuring the increase in the creation of new non-employer firms, and jobs created by local firms will be a key indicator of economic progress.

Non Employer, Employer and Jobs

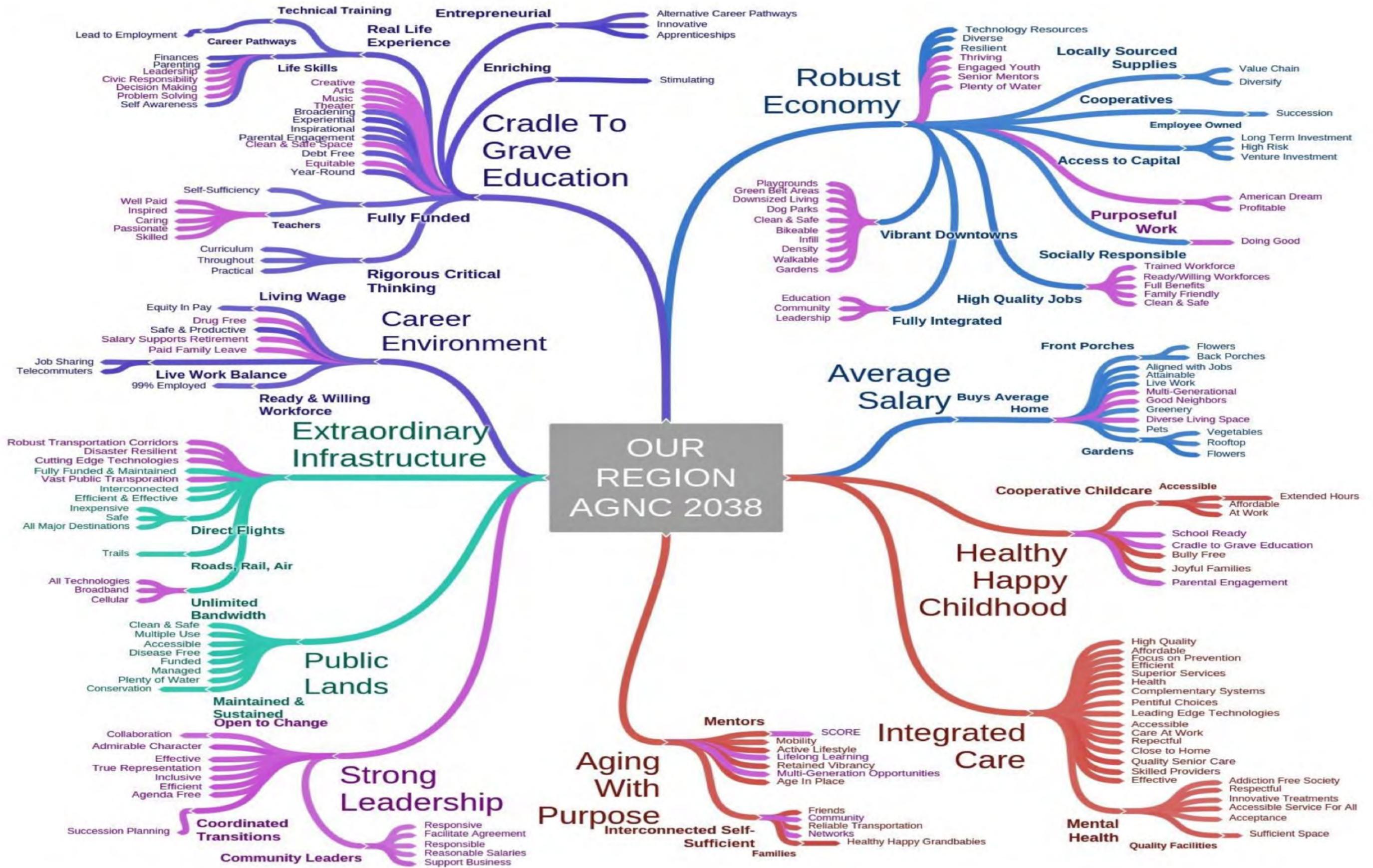


Tax Base



WE WILL NURTURE AND PROMOTE A REGIONAL, DIVERSE, RESILIENT AND ROBUST ECONOMY, FOSTERING A RANGE OF INDUSTRIES, EMPLOYMENT, AND RESOURCES RESULTING IN PROSPEROUS COMMUNITIES FOR TODAY AND TOMORROW'S RESIDENTS.

Vision Statement





GOALS & STRATEGIES

Summary

AGNC 2038 Vision & Goals

Vision: WE WILL NURTURE AND PROMOTE A REGIONAL, DIVERSE, RESILIENT AND ROBUST ECONOMY, FOSTERING A RANGE OF INDUSTRIES, EMPLOYMENT, AND RESOURCES RESULTING IN PROSPEROUS COMMUNITIES FOR TODAY AND TOMORROW'S RESIDENTS.

Robust
Economy

Healthy
Communities

Ready &
Willing
Workforce

Extraordinary
Infrastructure

Action Matrix

Associated Govts of NW Colorado

Date:

2018

<p>Goal: Robust Resilient Economy</p>	<p>The Vision</p> <p style="font-size: 0.8em;">Improve the economic ecosystem, create economic resiliency, and grow economic activity regionwide by supporting the diversification of economic industries, creating a business focused climate, maintaining and improving communities assets. Build on regional strengths including the region's access to public lands, health care, educational institutions, and diversity in communities.</p>
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Strategies - Actions targeted to accomplish the above goal

Timeline: Short Term = S Medium Term = M Long Term = L	Action Item	Measurement of Success*	Champion	Potential Partners/Contacts
	Business Retention & Expansion	Increase in the # of jobs created by local firms, increase in the # of non-employer firms.*		Rangely Chamber, Rifle Chamber & EDC, Fruita Chamber, A&B Banks, NWSBDC, GJ Business Incubator, Counties, Municipalities, EDCs, CRRO (DOLA)
	Improve access to business retention and expansion programs to retain existing businesses and jobs, and encourage business growth and job creation.	# of businesses utilizing SBDC		
	Support business diversity by working with the minority and women owned business community and other underserved markets	# of contacts with businesses within these categories		
	Provide a toolbox of resources to start, grow, and expand business.	Development of toolbox		
	Support key economic clusters by providing research and targeted industry assistance to grow and expand the jobs base.	# of new jobs within clusters		
	Encourage succession planning for small businesses through employee owned cooperatives	# of employee owned cooperatives created		
	Help identify higher education and certificate programs to drive educational programming that meets needs of regional businesses.			
	Provide training and resource support to assist businesses with emergency preparedness and disaster planning to improve the ability of a business to re-open following a disaster.	# of businesses with emergency plans		
	Entrepreneurial & Small Business Support	Increase in the # of jobs created by local firms, Increase in the # of non-employer firms.*		NWSBDC, GJ Business Incubator, Start Up Colorado, Colorado Lending Source,
	Support efforts to build the entrepreneurial ecosystem by investing in creation of robust entrepreneurial support systems and programs.			
	Support creation of a regional co-working network to provide opportunities for virtual workers and to attract location neutral workers	# of co-work spaces connected to network		
	Educate and market incentives and programs available to businesses (potentially a centralized source)			
	Quality education/coaching/mentoring opportunities for current businesses to scale up			
	Promote entrepreneurial development by assisting start-ups with navigating regulatory and permitting processes, offering small business assistance workshops, and market intelligence to provide a toolbox of resources to give regional businesses a competitive edge.	# of businesses utilizing SBDC		
	Grow the "maker movement" and increase access to co-working, innovation, and maker spaces.	#co-working, innovation, maker spaces in region		
	Utilize Maker Spaces for workforce development and training ("Maker Communities" is a growing movement) **GJBI is currently writing a white paper on this	# of businesses using Maker Spaces to train employees, # employees trained		
	Increased Economic Activity	Increase in GDP of the region*		Rangely Chamber, Town of Hayden, Rifle Chamber + EDC, EDCs, Municipalities, Counties, Manufactures Edge, OEDIT, GJ Incubator
	Implement or expand "buy local" campaigns			
	Capitalize the value chain to reduce export of economic activity outside of the region by implementing an import substitution strategy that links purchasers and suppliers in-region to prevent money "leaking" out of the region.			
	Diversify Economic Industries	#increased cluster activity as measured in the cluster tool available at statsamerica.org*		GJBI, Rangely CC, Town of Hayden, Steamboat Springs, Parachute
	Identify value added opportunities for natural resources, as industries are established or evolve. For example, collaborate with key industry, education, innovators and venture funds to determine new uses for coal.			
	Create a regional brand and market the region as a lower-cost higher quality of life alternative for Front Range businesses.			
	Capacity Building	Increase in State, Federal, Foundation Investment throughout the region*		

	Identify, engage, and educate communities on resources available from local/state/federal partners for business growth and expansion as well as economic development activity	# training opportunities		Rio Blanco County, DOLA, EDCs,
	Increase access to affordable, redundant, reliable broadband service	# businesses/homes connected to service		
	Support efforts to create regional marketing and promotions that showcase the region as a place to live, work, play.			
	Develop tools such as a regional database and website that can help the region evaluate trends, identify gaps, assess risk, and capitalize on opportunities on such topics as housing gaps, educational opportunities, workforce opportunities, infrastructure coordination, etc.			
	Develop a community toolkit for for economic development, business retention/expansion that addresses training for new staff, elected officials, and to aid private/public succession planning.			
	Economic Development Relationship to Community Development			
	Continually evaluate economic development needs and community development needs to identify areas of overlap and interplay. Work to ensure that economic development activity is aligned with community developer efforts.			Rangely Chamber, Rifle Chamber & EDC, Fruita Chamber, A&B Banks, NWSBDC, GJ Business Incubator, Counties, Municipalities, EDCs, CRRO (DOLA)
	Support efforts to build community assets, enhance downtowns, educational facilities/programs to ensure AGNC communities have the vitality necessary to attract private investment.			
	Jobs follow people. Ensure adequate housing, education, recreation, entertainment, healthcare resources are available to support community.			
	Complete a regional asset map to help raise awareness of each community's unique features, markets, opportunities, and challenges.			
	Access to Capital	Increase In Venture and Private Investment		
	Develop expanded access to capital resources to support local entrepreneurs and businesses with the funding needed to purchase equipment, inventory, and personnel to launch or expand business	# of businesses receiving loans/grants		Rifle RLF, Rangely RDF, GJBI, A & B Bank, Start Up Colorado, 4 Points Funding
	Work with communities to develop strategies for successful implementation of Opportunity Zones throughout the region	# projects approved		
	Expand opportunities for local investment in businesses	# investment funds available		

* Measures with a * beside them will be used for EDA reporting. Other measures of success will be utilized for internal performance tracking.

Action Matrix

Associated Govts of NW Colorado

Date: 2018

Goal:	Vibrant & Healthy Communities	The Vision Recognize that business and economic growth cannot be achieved or sustained without vibrant, healthy communities. Support activities and projects which improve the quality of AGNC's communities.
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Strategies - Actions targeted to accomplish the above goal

Timeline: Short Term = S Medium Term = M Long Term = L	Action Item	Measurement of Success	Champion	Potential Partners/Contacts
	Vibrant & Diverse Hometown	#Communities participating in state/federal programs*		Rio Blanco Rec Center; Chambers; BLM; Forest Service; CPW, City/County Rec directors
	Encourage participation in regional/state/federal programs designed to highlight community such as creative districts, main street program. Strengthen relationships with organizations that provide technical support for community revitalization including Downtown Colorado Inc, Department of Local Affairs, Community Builders, etc.			
	Recreation: Support development of regional recreational assets that can enhance community connectiveness, healthy lifestyles, regional connectivity, and make communities better communities for existing and future residents.			
	Increase investment in community asset maintenance and expansion by leveraging local investment with partner agency investment			
	Build programs, infrastructure, and services to support the region's Aging Population, to encourage baby boomers to "age in place". Encourage development of low maintenance housing options around the region, development of full-spectrum care facilities, and low cost alternatives to help seniors stay in their homes including home health care and home repair networks.			
	Access to Healthcare	Increase in % enrolled in healthcare (medicaid/private/employer), decrease in cost of health insurance*		GRHD, Rocky Mountain Health Plans, QHN (Dick Thompson), USDA, CO rural Health; Western Health Alliance
	Evaluate availability, continuity, and access to quality basic and specialized health care.			
	Identify the separate demographic sectors and their specific healthcare needs, specifically Veterans and a growing senior population.			
	Research reimbursement on telemedicine services an alternative/complementary healthcare.			
	Increase broadband capacity to accommodate emerging telemedicine and programming			
	Educate providers on telemedicine.			
	Work with health care partners to identify strategies to reduce the cost of health insurance and health care services region wide.			
	Affordable, attainable, workforce Housing	Increase in wages, increase in number of tax credit/affordable/attainable units built*		Housing Resources, KT Gazunis; DOLA Division of Housing
	Housing: Develop a better understanding of housing needs across the region and reduce the gap between available wages and housing costs. Improve the quality of housing through increased access to weatherization and efficiency programs.			
	Capacity Building			Rocky Mountain Health Plans (Patrick Gordon), Mesa County Public Health, Regional Health Connector(s), Rocky Mountain Health Foundation
	Develop indicators that can be tracked over time to demonstrate positive outcomes of investment by outside agencies and organizations in community projects.			
	Support development of strategic plans throughout the region to aid in coordination of regional priorities and projects.			
	Build relationships with local/state/federal/foundation partners			
	Evaluate succession planning efforts around the region, and identify strategies to help local governments, non-profits, and businesses duplicate successful plans.			
	Develop programs and training that strengthen the communication capability of regional non-profits and local governments.			
	Develop skills necessary to continue to promote collaborative partnerships between regional non-profits, and AGNC local governments.			
	Identify, engage, and educate communities on resources available from local/state/federal partners			

	Work with higher education programs around the region and state to increase training programs for all levels of healthcare.			
	Identify strategies to support creation of a Regional Healthcare Provider Recruitment Program			
	Celebrate Success	# Stories, blogs, media coverage, speaking engagements participated in		
	Tell the AGNC "story" often		AGNC	
	Disaster Preparedness	# Community with Hazard Mitigation Plans, Resiliency Plans, or other formal strategies		
	Assist communities in evaluating their risks for natural and human caused disasters, and developing plans for mitigation, response, and recovery.			NWCACC; Northwest Healthcare coalition; Red Cross; EPR
	Improve access to resources to support business planning around disaster response and recovery.			
	Healthy Community/Healthy Lifestyle			
	Ensure equal access to multi-use public lands to support healthy lifestyles			BLM, US Forest Service,
	Support clean air and water through infrastructure modernization efforts, monitoring/enforcement, and strengthened partnership with federal and state regulatory agencies.			
	Improved Mental Health Capacity	Decrease in suicide rates, decrease in opioid use	Mind Springs Health	
	Convene partners around behavioral health and substance use disorder crisis. Identify successful programs/strategies which could be replicated throughout the region.			
	Continue to monitor opioid related mental health issues, and work to develop strategies to reduce the impact of the opioid crisis on the region.			
	Develop a regional database that can be used to identify gaps in services including prevention, treatment, and recovery, and develop strategies to address.			
	Inventory facilities which provide prevention, treatment, or recovery services.			
	Expand sites and capacity to ensure access to mental health treatment, including recovery houses.			Rocky Mountain Health Plans, Regional Health Connector(s)
	Expand mental health "first-aid"			
	Expand positive psychology and resiliency programs throughout the region.			
	Increase access to resource officers and mental health providers in every middle and high school in the region.			
	Have a prescription take-back box in every pharmacy in NW Colorado			
	Leadership Development			
	Work with K-12 and higher educational institutions to develop leadership programs that connect community leaders and youth.			Colorado Workforce Youth Programs, Rio Blanco; Rise Above Colorado; CNCC Leadership; Communities that care; GJ Chamber Leadership; Grand Valley Leadership Academy
	Develop leadership programs that help identify future community leaders and provide education and training.			
	Provide training which emphasizes the roles and responsibilities, and strategies for effective participation on elected and appointed boards.			
	Homeless Care, Prevention, Service			
	Expand regional bed capacity and daytime respite for the region's homeless population in all counties especially for women/children/families.			
	Work with medical, mental health, and social services to provide services in shelters.			
	Gather data to identify why we have a growing homeless population			

Action Matrix

Associated Govts of NW Colorado
2018

Date: _____

Goal:	Ready and Willing Workforce	The Vision	Integrate job development with business creation and multi-generational education to create and attract a skilled and talented workforce that is prepared for 21 st century jobs.
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Strategies - Actions targeted to accomplish the above goal

Timeline: Term=M Long Term=L	Action Item	Measurement of Success	Champion	Potential Partners/Contacts
	Today's Workforce	Databook profiling the regional employment needs		Higher Education Institutions, K-12, Workforce Center, Chambers, EDCs, Business
SL	Support employer-driven agency inclusive workforce development strategies focused on the current and future needs of area employers including the ability to respond to the needs of individual employers. Ensure collaboration and coordination with high school and higher education.			
SL	Increase utilization and awareness of work-readiness programs including Work Keys to help identify shortages in soft skills and related preparation for successful careers. Market the availability of programs for students, employees, and employers.			
M	Identify gaps in career training across the region and support post-secondary career development in current and developing programs with increased regionalization of training programs			
	Work with higher education programs around the region and state to increase training programs for all levels of healthcare.			
	Work with higher education to develop a partnership with the Workforce Center to create an on campus presence with enhanced marketing of employment opportunities for graduates within the region.			
	Identify distance learning opportunities to address workforce needs of employers, and work to increase access and awareness.			
	Develop enhanced training opportunities for employers to help them take advantage of workforce location and workforce development programs.			
	Future Ready Workforce	Development of new creative partnerships	Western Slope Superintendents; Rural Alliance	Data Collector, Higher Education, K-12, Pre-K, Workforce, Businesses, Career Wise
S	Identify current STEAM education programs, and encourage prioritization of STEAM education programs			
S	Develop a program for interest and aptitude testing beginning in middle school, and increase access to eprogramming.			
S	Identify success stories in innovation practices in career development and look for opportunities to replicate. Tour successful programs like Warren Tech, and develop a catalogue of stories.			
M	Grow internship programs offered to high schoolers			
	Improve PreK-12 Outcomes	Improvement in scores, graduation rates*	Western Slope Superintendents; Rural Alliance	Pre-K, Daycare providers, Parents, Educators
	Identify gaps in and increase access to early childhood learning and daycare facilities	Increase in percentage of children under the age of 5 enrolled in preschool		
	Gather data for every school district for kindergarten preparedness, 4 th grade testing, graduation rates. Develop regional strategies and resources for improving outcomes across all ages.			
	Support school systems that integrate programs to increase parental engagement. Identify who are champions in parental engagement and develop lessons learned to be shared regionally.			
S	Strengthen access to technical education programs. Research successful models within and outside of the region and scale successful models to reach more students throughout the region. Identify who is providing tech ed programs and support, grow, promote their programs.			
	Reach out to businesses to donate used equipment to education programs to facilitate training.			
	Technology Job Growth	# Number of technology jobs and firms		EDCs, Workforce, Business, Broadband Providers, Higher Education, K-12, AGNC
SM	Identify gaps in broadband access, and develop partnerships to address.			
S	Develop a website that identifies virtual jobs and connects prospective employers and employees, and the Colorado Workforce Center to increase access to technology jobs throughout the region.		AGNC	
SM	Identify education programs available to aid and retrain displaced workers and students for success as a virtual worker. Identify successful programs, and increase the list of companies actively employing displaced workers.			
	Youth Retention	Increase in 18-30 years olds throughout the region*	HE Data Repository	Higher Education, K-12
M	Track students post-graduation and develop post-secondary career programs to understand where they are located and their outcomes to better understand how to encourage area youth to return to the region.			

Action Matrix

Associated Govts of NW Colorado

2018

Date: _____

SMART = Specific, Measurable, Achievable, Realistic, on a Timeline

Goal:	<h1 style="margin: 0;">Extraordinary Infrastructure</h1>	The Vision Ensure access to safe drinking water, protection of water quality through updated waste disposal systems, improved transportation resources, broadband, and access to quality recreation and entertainment.
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Strategies - Actions targeted to accomplish the above goal

Timeline Month/Year	Action Item	Measurement of Success	Champion	Potential Partners/Contacts
	Broadband Access	Increase in the number of AGNC communities designated as 1GB communities	Garfield County Rio Blanco County	Counties, NWCOG, Region 10, Region 9, Electric Coops, Anchor Institutions (Hospitals, Schools, Municipalities, Higher Education, K-12 Education), Cedar Networks, Mammoth
	Broadband: Continue to work to ensure access to broadband that is affordable, reliable, and redundant AND EXPANDABLE.			
	Support efforts to connect anchor institutions across the region.			
	Develop model conduit ordinances that can be adopted across the region to ensure installation of fiber and conduit in all road, water, and other projects to improve the ability for future expansion of broadband infrastructure.			
	Work with regional partners to identify opportunities for regional cooperation to reduce costs, and increase redundancy, such as partnering at the regional level to purchase backhaul service, or opportunities for shared towers/equipment.			
	Work with the NWCOG, Region, and Region 9's broadband programs to identify opportunities for coordination and cooperation across the western slope.			
	Continue the development of modern communications network that includes voice, data, and video and provide the resources necessary to maintain these networks			
	Work with regional economic development partners to develop economic development strategies to leverage the regional investment in broadband infrastructure.			
	Work with regional broadband partners to identify opportunities to develop strong partnerships for the governance/management of broadband systems across the region.			
	Provide the basic infrastructure necessary for the public, businesses, educational institutions, healthcare institutions, and local governments to expand access to a robust, reliable, affordable, redundant broadband network.			
	Capacity Building	Increase in capital plans, maintenance plans, asset management plans		DOLA, Government Finance Officers Association, Colorado County Managers Association, Trade Organizations, USDA, EDA, Municipalities, Counties, Special Districts
	Identify, engage, and educate communities on resources available from local/state/federal partners			
	Connect local governments with resources, training, and technical assistance to assist in developing budget tools and strategies to better plan for short and long term maintenance of existing infrastructure, and to better capture depreciation and replacement costs.			
	Connect local governments with resources, training, and technical assistance to help them evaluate long-term maintenance costs and develop plans to ensure adequate revenue streams for and maintenance of new infrastructure investment over time.			
	Develop tools such as a regional database and website that can help the region evaluate trends, identify gaps, assess risk, and capitalize on opportunities on such topics as housing gaps, educational opportunities, workforce opportunities, infrastructure coordination, etc.			
	Public Lands	Increase # of formal parking/access facilities	Garfield County	Counties, GOCO, BLM, US Forest Service, CPW, Municipalities, Transit Authorities, COPMOBA, COHVCO, Environmental Partners
	Improve access to public lands for multiple uses including recreation, timber, natural resource development, and hunting/fishing.			
	Support efforts to relocate BLM headquarters to the region, including identifying auxiliary business and infrastructure needs, and working in partnership with local governments, state government, and federal government partners to ensure necessary investment to support relocation occurs.			
	Develop a central data collection system to aid in improved forecasting of demographic data, economic trends, housing trends, etc.			
	Continue to support efforts to ensure revenue streams return to local governments from activity on federal and state lands (PILT, FML, Severance)			
	Regional Cooperation	Increase # of multi-jurisdictional projects		EVERYONE
	Convene regional partners and identify projects that can be enhanced through regional collaboration			

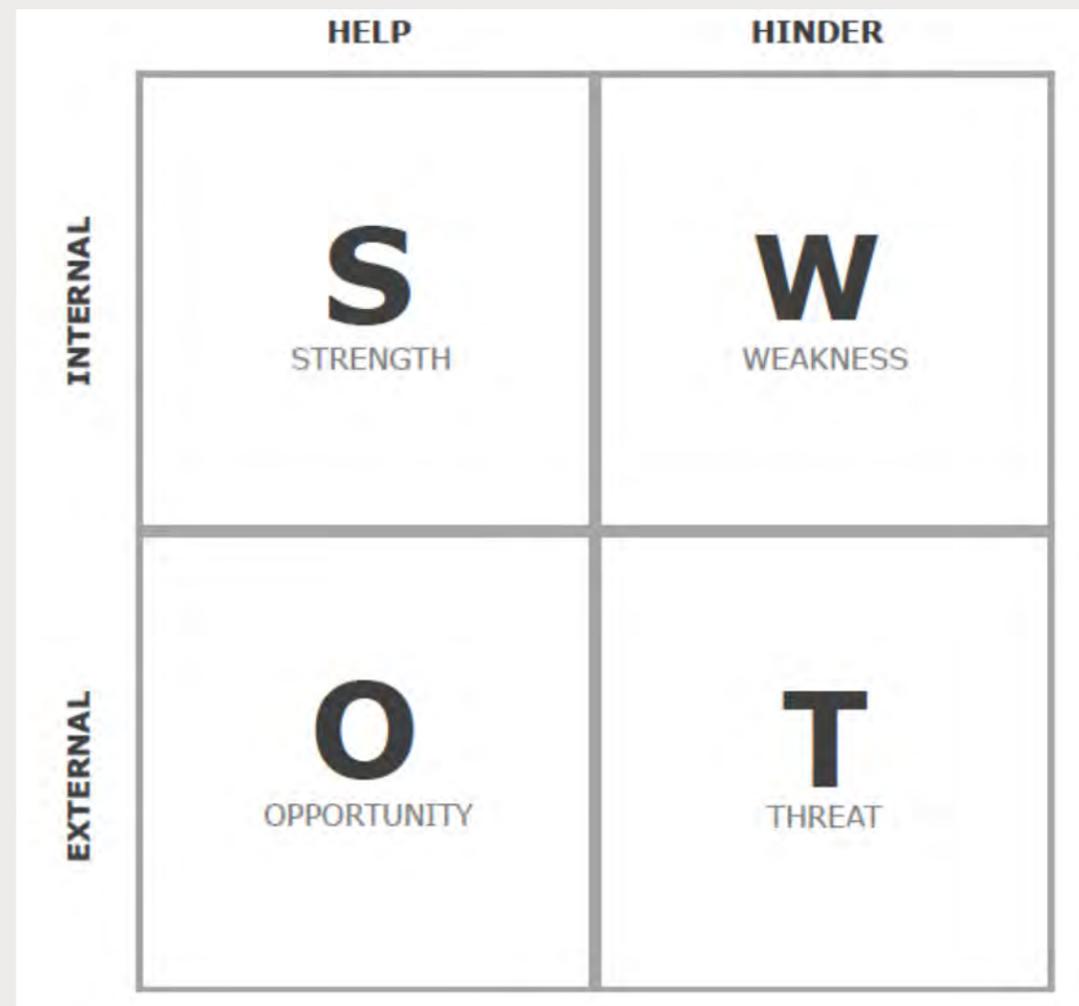
	Identify gaps in regional infrastructure, and address barriers to support regional projects.			
	Transportation Investment	Increase in state and federally funded projects	Art Riddle New Castle	Counties, GOCO, BLM, US Forest Service, CPW, CDOT-TPRs, CDOT-Bustang, Municipalities, Transit Authorities, Amtrack, COPMOBA, COHVCO
	Capitalize on the organization/coordination of each TPR in the region, and provide coordination between the TPRs to help identify opportunities for coordination between projects/investments throughout the region.			
	Support expansion of Bustang service and additional connections between all AGNC communities.			
	Work to identify strategies for replicating the successes of existing transit programs in Garfield, Mesa, and Routt counties to deploy rural transit to more communities in the region.			
	Support ongoing efforts to expand existing transit programs in Garfield, Mesa, and Routt counties as one strategy for moving the region's workforce between housing centers and employment centers.			
	Support coordination efforts between transportation and trail planning efforts around the region to identify opportunities to connection trail systems throughout the region.			
	Work to increase investment in the regions highways to ensure adequate access to all communities to support the movement of goods and people.			
	Work to increase the capacity of secondary regional routes to ensure alternative movement around the region in the vent of major interstate or highway closures			
	Increase access to the rail system for movement of goods and people.			
	Continue upgrade of the region's airports and expansion of air service in and out of the region.			
	Water Supply & Quality/Wastewater	Increase state and federal funding of projects on the Drinking Water and Waste Water Revolving Loan Fund Eligibility List		Conservation Districts, Water Providers, Municipalities, CDPHE, Colorado Basin Roundtables, Colorado Water Conservation Board
	Support local governments in the updating, maintenance, and expansion of water and wastewater systems.	# of new homes and water extensions completed, increased water sewer capacity.		
	Work with CDPHE, EPA, and other regulatory entities to implement common sense solutions to infrastructure challenges in order to reduce the fiscal impact to small communities for water/wastewater improvements.			
	Work with local governments to develop strategies to incentivize extension of water, sewer, transportation, storm drainage, and other critical infrastructure to encourage developers and private investment in housing starts and commercial/business development.	Reduction in unfunded maintenance.		
	Work with funding entities and local governments to develop an understanding of the region's current and forecasted housing needs, and to balance the need for development to pay its way with the need for housing of all types in each part of the region.			
	Support local governments efforts and build partnerships to address storm water run-off, including improved disaster preparedness for flood and storm water events.			
	Work with state, local, and federal partners to identify viable water storage projects. Provide support in working to identify barriers and solutions to move projects forward including increasing local capacity to complete necessary planning, engineering, financing, and permitting processes.	Increase of water storage		
	Housing, Commercial, Industrial Inventory	Creation of a regional database	Duncan McArther. City of Grand Junction Mike Samson. Garfield County	Garfield Housing Authority (KT Gazunis), Dan Caris City of Fruita, Colorado Mountain College, Northwestern Colorado Community College, Colorado Mesa University, School Districts, Trade Organizations, Local/Regional Banks, Colorado Housing Finance Authority, Office of Economic Development, USDA, Housing Authorities, Counties, Municipalities, DOLA
	Work with Technical Colleges, Business Entities, Businesses, K-12 educators to develop training programs and pipelines in all trades including construction, electrical, HVAC, plumbing, landscaping, etc.			
	Support efforts to free up capital and credit to support construction activity including housing starts and commercial construction.			
	Work to identify programs with CHFAA/USDA and other organizations that programs to provide access to capitalless housing quality, renovations, weatherization. Work with these agencies to modify existing programs for better effectiveness and penetration in rural communities.			
	Support local governments in reviewing and revamping local permitting processes to remove barriers that making permitting difficult.			
	Address all elements of community development and economic development identified in this plan to help create an environment attractive to private investment.			



SWOT ANALYSIS

SUMMARY

STRENGTHS WEAKNESSES OPPORTUNITIES THREATS SWOT Analysis



As part of the engagement process in creation of the AGNC CEDS, an assessment of the region internal and external influences were examined. These include internal strengths and weaknesses, and external opportunities and threats. This assessment helped shape the goals and strategies of the CEDS, by helping AGNC ideas common ground and challenges with opportunity for regional collaboration.

As part of the engagement process, AGNC met with economic developers, non-profits, businesses, and local community leaders throughout the process. The focus of many of these meetings was to identify common ground and unique attributes of each community. Through the process a SWOT Analysis was developed. Some communities may have a strength in a given area, while that same strength may be a weakness for another. Following is a summary of the discussion in each county, and a compilation of the region's collective discussion.



Moffat County

Moffat County has several strengths including its public lands, quality water and sewer service with excess capacity, an excellent hospital, and an excellent community college. Public lands support a significant portion of the County's economic activity through mineral extraction and tourism.

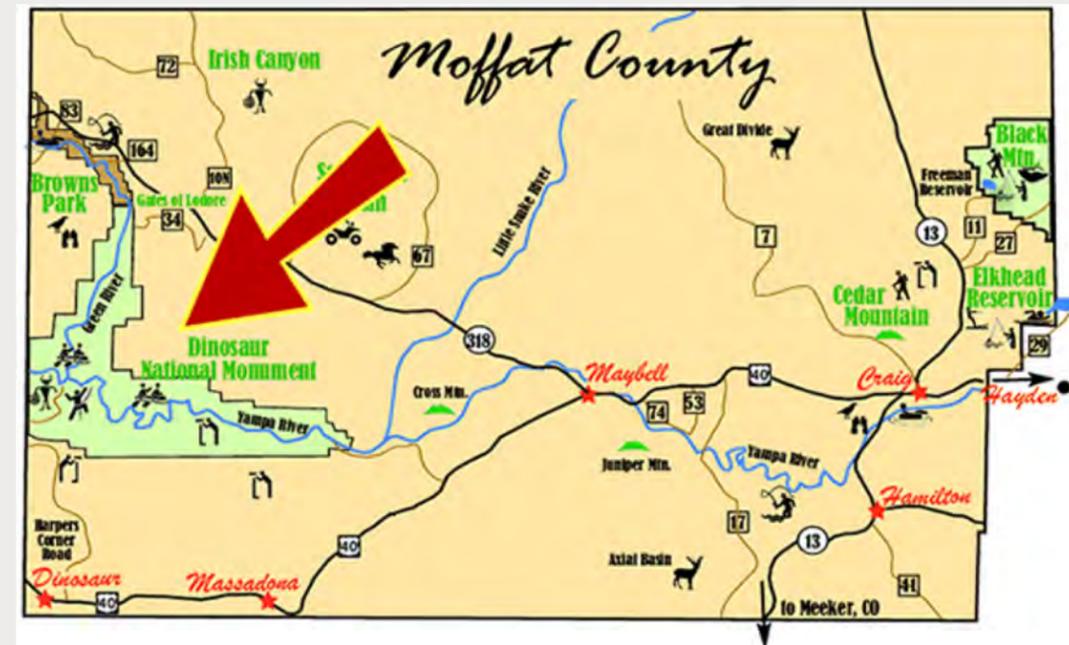
However, while the County has excellent public lands, infrastructure such as trails; camping, restrooms, and trailhead facilities are limited.

While the County has an excellent hospital, access to mental health services is a challenge. There are high rates of poverty in the County. The Town of Dinosaur of the Maybell community in particular have extremely high levels of poverty. More importantly, the county has lost significant ground in the terms of wages and total jobs, as demonstrated throughout this report.

One of Moffat County's greatest challenges is its own perception of itself. Community pride is low. Changing the County's own internal view of itself is an opportunity.

Additionally, access to broadband is a key limiting factor for the County and of utmost importance to address so the County can attract the kind of employers that will help the county retain and attract younger families.

The County has a diverse community with both retirees and an emerging "young" professional population. The County has the opportunity to find ways to bring young and old together through projects, and increase opportunities for younger families to move to the area. This can help grow the leadership base of the County.



Mesa County

Mesa County has the largest population within the region, and as the regional center, has the most diverse economy. Mesa County's strengths include Colorado Mesa University, whose programming and quality of education contribute significantly to the economy of the entire region. Additionally, Mesa County has three quality health care systems (St. Mary's, Community Hospital, Mindsprings), excellent developed recreational opportunities, a thriving agricultural industry with popular branding of both Palisade Peaches and Colorado Wine Country. The County is also home to the regional airport that has daily air service to major hubs in Salt Lake, Denver, Phoenix, and Houston. From an economic development standpoint, Mesa County has a "well-oiled" machine in its economic partnerships including the GJ Business Incubator, Grand Junction Economic Development Partnership, GJ Chamber of Commerce, Downtown Development Authority, and numerous partners.

Yet, Mesa County has some of the highest poverty rates in the region, perhaps simply because of its more urban character. There are gaps between employer needs and skill sets of employees, Mesa County also has one

Of the highest suicide rates in the Country, a school system that doesn't always meet the expectations of those looking to relocate, lack of housing (affordable/workforce),

The County has tremendous opportunities, and is actively pursuing those including growing its outdoor manufacturing base, leveraging the University's resources and community presence, and working to decrease the cost of transportation for manufacturers in the region through initiatives such as transloading facility along the rail line.



Rio Blanco County

Rio Blanco County has one of the highest percentages of public lands in the region (although each county has a strong public lands presence). As a result, a significant portion of the economy is driven by federal, state, and local government. A strength in Rio Blanco county is the coordination and collaboration between these entities, and a sense of responsiveness of these entities.

Rio Blanco has many challenges that come along with being dependent on public lands as a significant portion of their economy, including suffering the booms and busts of oil and gas and coal development. This includes housing shortages when things are booming and housing crashes when they are not. Lack of daycare has been an issue as well.

The County has invested significant effort in putting plans together to help it diversify its economy, and diversify how public lands benefit the county economically.

One of Rio Blanco's greatest opportunities is its own willingness to invest in itself. The County is just completing a broadband network that has put the County on the map as a 1 GIG county! They have built a new courthouse, new annex facility, updated the fairgrounds, completed a new hospital, upgraded the airports, and invested in downtown redevelopment.



Garfield County

Garfield County has one of the stronger economies with greater diversity within the region. However, the County is overly dependent on the extractive industry for its tax base, and while most of the communities across the County appear to be heading in positive directions, the City of Rifle has some of the highest unemployment within the region.

Garfield is one of the stronger economies because of its strong cultural heritage tourism base, a variety of recreational options including access to the Colorado River, trails, recreation centers, golfing, and of course recreation afforded from public lands. The county benefits from the presence of three community colleges, strong K-12 programs including partnerships with higher education, and community libraries in each community to name just a few examples. The region also has strong renewable energy partnerships, and a strong agricultural base.

As a transition county between resort communities, Garfield is faced with high construction costs, high housing costs, and high healthcare costs. With a strong tourism base, additional pressure on housing is mounting from the conversion of housing stock to VRBO (vacation rental by owner). There is a large disparity in wealth, and the need for

Garfield County has an opportunity to leverage its higher education resources, grow small business support networks, and expand access to broadband across the county.



Routt County

Just looking at the data, Routt County appears to be a shining exception of economic prosperity in the region. The County has numerous strengths that make it an attractive place for people to visit, start and expand business, and relocate to. The county is known for its world class ski area, hot springs, developed recreational assets, and investments in critical infrastructure like multi-modal transportation. Several communities within Routt County have active Main Street Programs, and the Yampa Valley Airport provides regional air service to major hubs including Denver and Salt Lake seasonally.

Routt has numerous challenges that need focused attention. With the growth in second home ownership, cost of services such as daycare and healthcare make it difficult for many employees to afford to live and work in Routt County. Housing is virtually unaffordable for the average employee, meaning employees live outside the area, putting pressure on the region's transportation system.

Routt County has numerous opportunities, but must work to address the growing gap between the workforce's needs and the costs of services and housing. Focusing on location neutral jobs which would require increased broadband capacity, increasing the multi-modal network to connect more of the region, and maintaining a balance between commercial and residential development are key opportunities for the County.



Regional Summary

STRENGTHS, WEAKNESS, OPPORTUNITY THREAT

STRENGTHS	WEAKNESS	OPPORTUNITY	THREAT
Strong Economic Development Focus	Deficient Economy	Economic Development Tools	Looming Government
Abundant Amenities & Place Makers	Disadvantaged Workforce	Tourism Possibilities	Impending Economic Adversities
Robust Social Networks	Untenable Jobs	Agricultural Society	Weakening Population & Workforce
Boundless Entrepreneurial Spirit	Insufficient Infrastructure	Exhilarating Technology Development	Nature Issues
Available Infrastructure	Deficient Amenities	Desirable Amenities & Services	
	Social Problems	Accommodating Infrastructure	
	Inaccessible Healthcare		
	Housing		

A detailed outline of the SWOT analysis is available in Appendix A

S W O T Analysis

Strengths

Strong Economic Development Focus

- ⇒ Local government support
- ⇒ Strong economic development organizations
- ⇒ Strong Chambers of Commerce
- ⇒ Willing economic developers with vision
- ⇒ Growing manufacturing sectors
 - Recreation/outdoor manufacturing focus
- ⇒ Plentiful natural resources
 - Coal, Natural Gas, Timber, Oil, LNG, Water, Direct Sunlight, Sodium Bicarbonate
 - Coal in region some of best quality in world
- ⇒ Strong emerging agricultural sectors
- ⇒ Some counties have plenty of available commercial and industrial properties
 - Mesa, Moffat, Rio Blanco
- ⇒ Rio Blanco has shovel ready sites
- ⇒ Engaged industry partners
 - Supportive of diversification
- ⇒ Responsive government agencies
 - Local, State, and Federal

Abundant Amenities & Place Makers

- ⇒ Open space
- ⇒ Public lands
- ⇒ Abundance of wildlife
- ⇒ Quality and Quantity of Water
- ⇒ Trail Systems
- ⇒ Outdoor Recreation Opportunities
 - Whitewater Parks, Fishing, Hunting, Rock Climbing, Hiking, Spelunking, Hot Springs
- ⇒ Appealing Niche and Lifestyle
- ⇒ Seclusion can be appealing
- ⇒ Stunning Landscapes
- ⇒ Cultural Lifestyle
- ⇒ Historical Assets
- ⇒ Heritage Resources
- ⇒ Working Landscapes
 - Ranching, Farming
- ⇒ Public Recreation centers
 - Fruita, Meeker, Rangely, Steamboat Springs, Carbondale, Glenwood Springs, and Battlement Mesa

- ⇒ Amphitheaters
 - Grand Junction, Rio Blanco, Routt County
- ⇒ Theaters and Event Centers
- ⇒ Olympic Training Centers
- ⇒ Low property tax
- ⇒ Low utility rates
- ⇒ Public Equestrian & Livestock Facilities
- ⇒ Plentiful businesses with public Wi-Fi
 - Helps location neutral workforce

Robust Social Networks

- ⇒ Healthcare improving regionally
 - Attracting retirees and new hospitals
 - Specialty services improving
- ⇒ Higher education
 - University including 4-year, Master's, & PhD programs
 - 3 community colleges with widespread service across region
 - High level of college degrees
 - Routt
- ⇒ Strong K-12 Education
 - Charter, Private, and Public Schools
 - Strong partnerships between K-12 and higher education providing concurrent/dual enrollment
 - CMC, CMU, CNCC
- ⇒ 4H, FFA Clubs
- ⇒ Career and technical education centers
- ⇒ Good Emergency services
- ⇒ Public safety and security
- ⇒ Plentiful non-profit organizations
 - Volunteer spirit

Boundless Entrepreneurial Spirit

- ⇒ Educated population/workforce
- ⇒ SBDC Services
- ⇒ Workforce improvement opportunities
 - Trainings, Workforce Centers, Etc.
- ⇒ Business Climate
- ⇒ Rio Blanco County designated a Certified Small Business Community

Available Infrastructure

- ⇒ Transportation
 - Airports
 - Grand Junction Regional Airport

- ▼ 3 major carriers, 2 commuter carriers
 - Regional Airports throughout Region
 - ▼ Both passenger and cargo
 - Flight Schools at CNCC and WCCC
 - Center of Excellence
 - Proximity to I-70
 - Railroad Lines
 - Public Bus Systems
- ⇒ Broadband in Rio Blanco
- ⇒ State of the art water treatment plant
 - Garfield and Moffat
- ⇒ Solar Farms
 - Garfield County
- ⇒ Fairgrounds

Weaknesses

Deficient Economy

- ⇒ High cost of living
 - Long commutes to/from work
 - Housing available is not aligned with the jobs available
- ⇒ High construction costs
- ⇒ Sales tax leakage
 - County-to-County and online
- ⇒ Decline in tax base
 - Commercial property tax
- ⇒ TABOR/Gallagher
- ⇒ Value chain being outsourced
- ⇒ Lack of affordable build-ready sites
- ⇒ Restrictive planning and zoning policies
- ⇒ Lack of CoWork spaces
- ⇒ Lack of access to venture capital and high-risk capital
- ⇒ High cost of capital
- ⇒ Lack of local support and funding for economic development entities
- ⇒ Fiercely independent spirit limits use of assistance and resources
- ⇒ Reliance on natural resources
 - Narrow sources for high paying jobs
- ⇒ Vulnerability to boom and bust cycles
- ⇒ Lack of collaboration and unified vision across organizations
- ⇒ Too much fluidity of local government administrators

Disadvantaged Workforce

- ⇒ Lack of Skilled Workforce
 - Unable to retain college graduates
 - Lack of Apprenticeships
- ⇒ Lack of technical training centers
 - Electricians, Plumbers, Welders, Machinists, Mechanics, Construction Trades, Engineering
- ⇒ Lack of vision in higher education
 - Lack of technology education
 - No video game design and virtual reality education
 - No software development programs
 - No electro mechanical systems programs
- ⇒ Cultural lack of recognition of the importance of post-secondary education
- ⇒ Shortage of Childcare
- ⇒ High Cost of Childcare
- ⇒ Lack of Hirable Applicants
 - Many cannot meet trifecta of employment
 - Background check, drug test, having a driver's license

Untenable Jobs

- ⇒ Service-Based Economy
 - Tourism/Recreation jobs causing low wages or tip income dependence lacking benefits
 - Seasonal Jobs
- ⇒ Jobs not matching population
- ⇒ Lack of middle income jobs
- ⇒ Lack of sustainable jobs
- ⇒ Lack of support for small businesses
- ⇒ Loss of quality jobs providing quality health insurance
 - Increased population on Medicaid
 - Aging population unable to retire from jobs offering quality benefits
- ⇒ Employer disconnect on importance of higher wages and better benefits
- ⇒ Lack of transportation options for commuters

Insufficient Infrastructure

- ⇒ Aging and inadequate infrastructure
 - Lack of maintenance
 - Broadband, Roads, Water systems
- ⇒ Lack of broadband
- ⇒ Lack of cellular coverage
- ⇒ Poor connectivity between counties

- Transportation corridors
 - State Highways 139, 13, 131, and 40
- Road Capacity
- Remoteness of Moffat, Rio Blanco, and Routt Counties
- Lack of Broadband
- ⇒ Lack of public transportation
- ⇒ EXTREME lack of direct flight destinations
- ⇒ Lack of active/alternative transportation
 - Pedestrian, bicycle trails
 - Sidewalks
 - Snow removal

Deficient Amenities

- ⇒ Lack of cultural and lifestyle amenities –
 - Aging downtown districts and main streets
 - Lack of downtown vibrancy
 - Lack of maintenance
- ⇒ Lack of indoor recreational opportunities Lack of indoor recreational facilities
- ⇒ Lacking funding for Heritage Resources
- ⇒ Lack of public radio
- ⇒ Lack of rest areas in Moffat

Social Problems

- ⇒ Lack of childcare
- ⇒ Lack of quality early childhood education
- ⇒ Lack of quality K-12 education
- ⇒ Lack of Boys and Girls Clubs and YMCAs
- ⇒ Aging population
 - Lack of senior services including adequate housing, amenities, and activities
- ⇒ Lower Birth Rates (On par with national and state statistics, though)
- ⇒ Lack of Diversity
 - Racial, Ethnic, Religious, Etc.
 - Lack of bilingual services
 - Lack of cultural sensitivity
- ⇒ High cost of higher education
 - Student Loans
 - Student Aid
- ⇒ No Resource Officers at schools
 - Rio Blanco County, South Routt and Hayden
- ⇒ Too much commuting for work
 - Long commutes to/from jobs create disfunction in families
- ⇒ Lack of leadership
 - Divided communities
 - Flow of information

- Discord among officials
- Fear to change
- Small town mentality
- Leadership succession planning of key positions
- Lack of youth and young adult leadership development
- ⇒ Lack of human capital capacity to address issues
- ⇒ Same people involved in everything
- ⇒ Lack of community pride
- ⇒ Lack of unbiased reporting in the media – efforts to enflame situations
- ⇒ Lack of cooperation in agriculture industry for food hub
- ⇒ Lack of direct flight destinations
- ⇒ Shortage of library hours/availability
 - Causing lack of access to computers and technology
- ⇒ Lack of overnight shelters
 - Homeless
 - Victims of domestic violence
- ⇒ Lack of family resource centers
- ⇒ Family resources not being utilized
- ⇒ Overcrowded jails

Inaccessible Healthcare

- ⇒ High cost of healthcare
- ⇒ High cost of health insurance
- ⇒ Not enough quality healthcare
- ⇒ Mental Health Issues
 - High Rates of Drug Use/Substance Use Disorders
 - Opiates, Marijuana, Methamphetamines, Prescription Pills, Alcohol
 - Shortage of detox beds
 - Patients being housed in jails and hospital beds without staffing or capacity to treat
 - Lack of transitional living facilities (Clean & Sober/halfway houses)
 - Rising Crime Rates
 - Domestic Violence
 - Cyber Bullying
 - High Suicide Rates
 - Lack of treatment for mental health issues
 - Lack of qualified mental health professionals
- ⇒ Lack of integration between traditional medicine and complimentary treatments
- ⇒ Lack of transportation to health appointments

Opportunities

Economic Development Tools

- ⇒ Willing economic developers with vision
- ⇒ Main Street Community
- ⇒ OEDIT
 - Rural Jump Start, Enterprise Zone, Blueprint 2.0
- ⇒ Urban Renewal Authority
- ⇒ Tax Increment Financing
- ⇒ Downtown Development Authorities
- ⇒ Creative Districts
- ⇒ Colorado Tourism Office
 - Rural tourism program funding and film board incentives to attract movie making
 - Colorado Rural Academy For Tourism (CRAFT)
- ⇒ Opportunity Zones
 - Craig, Meeker, 2 tracts in Glenwood Springs, and Silt (awaiting federal approval)
- ⇒ Rural Venture Fund
- ⇒ Foreign Trade Zone
 - Based in Grand Junction expanding 60 minutes/miles in each direction
- ⇒ DOLA 4R Program
 - REDI Grant
- ⇒ Room for Sustainable Growth
- ⇒ Large vacated commercial buildings
 - Repurpose buildings
 - Craig Station Unit 1
- ⇒ LNG Development
- ⇒ Jordan Cove
 - LNG international export facility located in Coos Bay, OR, supplied by Western Colorado natural gas
- ⇒ SBDC Buildout
- ⇒ Look at value chains for major sectors, fill the gaps
- ⇒ Regional County Collaboration
- ⇒ Large Hispanic population with connection to the entrepreneurial and start-ups.
- ⇒ Global trends
- ⇒ BLM move to Grand Junction
 - Other Federal Agencies that serve the west

- ⇒ Business Incubator System with focus on Tourism and Outdoor Recreation Industry
- ⇒ Utah rail line

Tourism Possibilities

- ⇒ History and Culture
 - Western, Native American, Dinosaur, Heritage
- ⇒ Trails
- ⇒ Outdoor Recreation
- ⇒ Clusters of recreational activities to market
- ⇒ Agritourism
- ⇒ Train
- ⇒ Arts
- ⇒ Ecotourism
- ⇒ Regional Tourism Marketing
- ⇒ Regional Tourism Collaboration
- ⇒ Event Tourism
 - Country Jam
 - Organized Competitive Events
 - Brewpub bottle release parties
- ⇒ Destination Mapping
- ⇒ Tour providers/Guides

Agricultural Society

- ⇒ Specialized foods
- ⇒ Emerging agricultural sectors
- ⇒ Value added
- ⇒ Local farm to table
 - Brewpub
- ⇒ Western Colorado Food Hub
- ⇒ Coalesce all Western Colorado to aggregate product, brand, and distribute to major markets including Denver and Salt Lake
- ⇒ Timber harvest and manufacturing homes

Exhilarating Technology Development

- ⇒ Drones
 - CNCC Drone Certification Program
 - Center of Excellence training programs
- ⇒ Energy
- ⇒ Aviation
- ⇒ Coding
- ⇒ Technological Advancements
- ⇒ Virtual Workers
- ⇒ Broadband
- ⇒ Software Development
- ⇒ Electromechanical Systems
- ⇒ Computer Science
- ⇒ Electrical Engineering

- ⇒ Carbon Fiber
- ⇒ CNCC developing 3D printing and design center

Desirable Amenities & Services

- ⇒ Streamlining permitting processes
- ⇒ Center of Excellence for Aerial Wildfire Fighting
- ⇒ South Routt has several similar small communities in close proximity
- ⇒ Historic arts district
- ⇒ Outdoor Recreation
- ⇒ CoWorking Spaces
- ⇒ Vast reserve of transferrable skills
- ⇒ Healthcare Services
 - VA Hub and Spoke Model
 - Telehealth
 - Pioneers, GRHD, and Craig Hospital creating coalition to fight opioid epidemic
 - Alternative mental health providers
- ⇒ Wolf Creek Reservoir – Under Development
- ⇒ Relatively disaster free
- ⇒ Population Growth
 - Front Range Exodus
 - Out of State Population Moving In
- ⇒ Higher Education programs on front range are oversubscribed and too expensive
- ⇒ Developing Trail Systems
 - Active/Alternative trails
 - Regional/Expansive
 - CDOT Collaboration
 - CPW Collaboration

Accommodating Infrastructure

- ⇒ Accessing federal infrastructure resources
- ⇒ Regional infrastructure authority
- ⇒ Expand corridor from I-70 to I-80 via Highway 13
- ⇒ County Road 5
- ⇒ Broadband
- ⇒ Public Transportation
- ⇒ Aviation Industry
 - Pilot training
 - Drone development
 - Aerospace
 - Parts manufacturing
 - Spaceport
 - Other aviation related businesses
- ⇒ OHV Trails
- ⇒ Collaboration with 7 County Infrastructure Coalition

Threats

Looming Government

- ⇒ Forgotten by the state and federal governments
- ⇒ Federal agencies that hinder development
- ⇒ Regulations
 - State and Federal
- ⇒ Lack of inclusion of rural America by state and federal governments
- ⇒ Procurement policies and priorities
- ⇒ Permit/License structure for motorized and non-motorized recreational users on public lands
- ⇒ Funding and Planning for transportation
 - State and Federal allocation of resources
- ⇒ Public land influence – Regulation and Wildlife
 - Wolves, Sage Grouse, Environmental Protection Plan
- ⇒ State process for federal mineral lease and severance tax payments to communities of impact
- ⇒ Allocation of severance tax dollars to non-impacted communities
- ⇒ State legislature sweeping severance tax dollars to balance the budget
- ⇒ Decreasing assessed valuation
- ⇒ Lack of government management of public lands which lead to risk of fire and subsequent flooding
- ⇒ Regulatory barriers to natural resource economy
 - Agriculture sectors
 - Natural gas
 - Coal
- ⇒ Regulatory issues around drone technology
- ⇒ FAA regulations for commercial pilots
 - Required hours for commercial flight time
 - Pilot leakage from rural to urban centers
- ⇒ Sales tax leakage
 - Online and Physical
 - Amazon, eBay, etc.
- ⇒ TABOR & Gallagher = loss of property tax revenue
- ⇒ Free riders on public roads not contributing to construction or maintenance of roads
 - Inadequate Gas Taxes and Fees
 - Electric cars
 - Bicycles
- ⇒ Transportation maintenance costs and revenues
- ⇒ Capacity and maintenance of highways 13 and 139

- ⇒ Dependence upon county road 5 for oil and gas development
 - ⇒ State Education System
 - ⇒ Cost of health insurance
 - ⇒ FCC Broadband Map
 - Barrier to federal funding
- Plants

Impending Economic Adversities

- ⇒ Vacation Rentals by Owner
 - Short term rentals affecting long term rental housing
- ⇒ Commercial buildings turned into timeshares
 - Routt County
- ⇒ Housing not in alignment with jobs available
 - Barrier to bringing in the right services
- ⇒ Unit 1 closure at Craig Station Power Plant by 2025
- ⇒ Boom & Bust Cycle
- ⇒ Weather
 - Snowpack
 - Water Storage

Weakening Population & Workforce

- ⇒ Immigration Controls affecting ag and tourism economies
 - Losing workforce
- ⇒ Visas/Immigrant Labor
- ⇒ Declining Population – out-migration of youth and skilled workers
- ⇒ Aging population
- ⇒ Divided region
 - Preservationists/Conservationists
- ⇒ Anti-agriculture movement
- ⇒ High Poverty Rates
 - Welfare
 - Recipients not coming back to workforce

Nature Issues

- ⇒ Natural Disasters
 - Fire
 - Floods
 - Drought
- ⇒ Water Diversion away from Western Slope interests
- ⇒ Invasive Species
 - Aquatic Threats
 - Algae
 - Mussels
 - Trees

Appendices

- Appendix A List of Attendees & Meeting dates
- Appendix B Committee List, Board List
- Appendix C County Profiles
- Appendix D Regional Plan Comparison Summary
- Appendix E County Opioid Reports

Appendix A

1st Regional CEDS Attendees

Andrea Stewart
 Angie Anderson
 Betsy Bair
 Bonnie Petersen
 Carole Boughton
 Cheryl Burns
 Danielle Lendriet

Duncan McArthur
 Elyse Casselberry
 Frank Moe
 Frank Moe
 George Rossman

Janet Aluise
 Jeff Rector
 Jessica Valand
 JoBeth Tupa
 Jon Maraschin
 JORGE PANTOJA
 Kasey Nispel
 Kate Gazunis
 Katelin Cook
 Kathy Powell-Case
 Katie Mackley
 Kent Carson
 Kevin Batchelder
 Konnie Billgren
 Krista Ubersox
 Kristen Cole
 KT Gazunis
 Lance Stewart
 Lani Kitching
 Lisa Hatch
 Mathew Mendisco
 Michael Anton
 Michael Langhorne
 Michelle Balleck
 Mike Samson
 Monty Rutherford
 Nathan Lindquist
 Nicole Christianson
 Nina Anderson
 Pamela Woods
 Pattie Snidow
 Rich Burns
 Richard Ott
 Robert Amick
 Robin Brown
 Robin Haney
 Ron Arellano
 Shannon Wadas
 Shannon Kyle
 Stuart McArthur
 Tammie Delaney
 Tawny Halandras
 Thea Chase
 Tiffany Pehl
 Trent Hyatt
 Trent Thompsonson
 Trish Thibodo

Rio Blanco Ceds Attendees

Anthony Mazzola
 Bill Ekstrom
 Bonnie Petersen
 Cheryl McDonald
 Chris Selle
 Curtis Keetch
 Dan Conrado

Jane Turnburke
 Jennifer O'Hearon
 Joyce Key
 Julie Drake
 Katelin Cook

Keely Winger
 Kent Walter
 Lisa Hatch
 Margie Joy
 Michelle Landa
 Niki Turner
 Pattie Snidow
 Peter Brixius
 Renae Neilson
 robert amick
 SARAH NIELSESN
 Scott Nielsen
 Scott Meszaros
 Sean VonRoenn
 Teresia Reed
 Tiffany Pehl
 Trish Thibodo
 Trudy Burri
 Wendy Gutierrez

Garfield CEDS Attendees

Angie Sprang
 Ben Miller
 Bonnie Petersen
 Colin Wilhlem
 Damon Arredondo
 Dana Wood
 Emily Hisele

Jenn Ooton
 Jim Coombs
 Joe Carpenter
 Joni Bates
 Joshua Williams

Kasey Nispel
 Katie Mackley
 Keith Lammy
 Kevin Batchelder
 Kevin Hettler
 Kristine Llacuna
 Lauralee Patton
 Michael Langhorne
 Mike Samson
 Natalie Bowman
 Nate Simmons
 Nita Smith
 Pamela Woods
 Pamela Snidow
 Robin Haney
 Sally brands
 Scott Eden
 Shannon Kyle
 Shannon Stowe
 sheryl Bower
 Stuart McArthur
 Susan Nichols-Alvis
 Tamara Degler
 Theresa Wagenman
 Tiffany Pehl
 Trent Hyatt

Moffat CEDS Attendees

Adam Cozens
 Amanda Arnold
 Andrea Camp Craig City Council Member Business Owner
 Bonnie Petersen
 Chris Jones
 Chris Nichols
 Christian Dufresne
 Moffat County Tourism Association Board Member & Business Owner
 Cindy Looper Business Owner
 Darcy Owens-Trask
 David Ulrich
 Don Cook Moffat County Commissioner
 Desiree Moore
 Tri-State Generation & Transmission Association Senior External Affairs
 Drew Kramer
 Erica Tieppo Yampa Valley Brewing Company- Owner
 Frank Moe Moffat County Commissioner & Business Owner
 Janell Oberlander
 Jeff Comstock Moffat County Natural Resources Director
 Jim Stoddard
 JoBeth Tupa
 John Ponikvar City of Craig Mayor & Business Owner
 Kathy Powell-Case
 Ken Wergin Community Member
 Liane Daviskling
 Michelle Perry Balleck
 Mike Foreman
 Neil Folks
 Pattie Snidow
 Ray Beck
 Renee Campbell
 Sarah Colding
 Sasha Nelson Craig Press Reporter
 Shannon Moore Moffat County Tourism Association Board President
 Tammie Thompson Booker
 Tiffany Pehl
 Tom Kleinschnitz
 Trish Thibodo

2nd Regional CEDS Attendees

Konnie Billgren
 Dan Caris
 Jon Maraschin
 Renelle Lott
 Kevin Batchelder
 Dean Kinkel
 Angie Sprang
 sheryl bower
 Nina Anderson
 Tammie Delaney
 Ron Slinger
 Mike Samson
 Bonnie Petersen
 Elyse Casselberry
 Keely Winger
 Mary Cornforth
 Trent Hyatt
 Sue Samaniego
 Katherine Gazunis
 Krista Ubersox
 Curtis Keetch
 Vic Walker
 Danielle Lendriet
 Joe Livingston
 Shannon Kyle
 Stacey Mascarenas
 Jenn Ooton
 Kasey Nispel
 Jennifer Seal
 Joan Bates
 Derek Biddle
 Stuart McArthur
 Kent Carson
 Lisa Hatch
 Kristine Llacuna
 Michael Langhorne
 Shannon Wadas
 sheryl bower
 Jesse Redmond
 Katelin Cook
 Konnie Billgren
 George Rossman
 Tiffany Pehl
 Denyce Abbott
 Kirstie Aragon
 Melissa Ippolito
 Bob Rankin
 Jeff Rector
 Dennis Webb
 John Justman

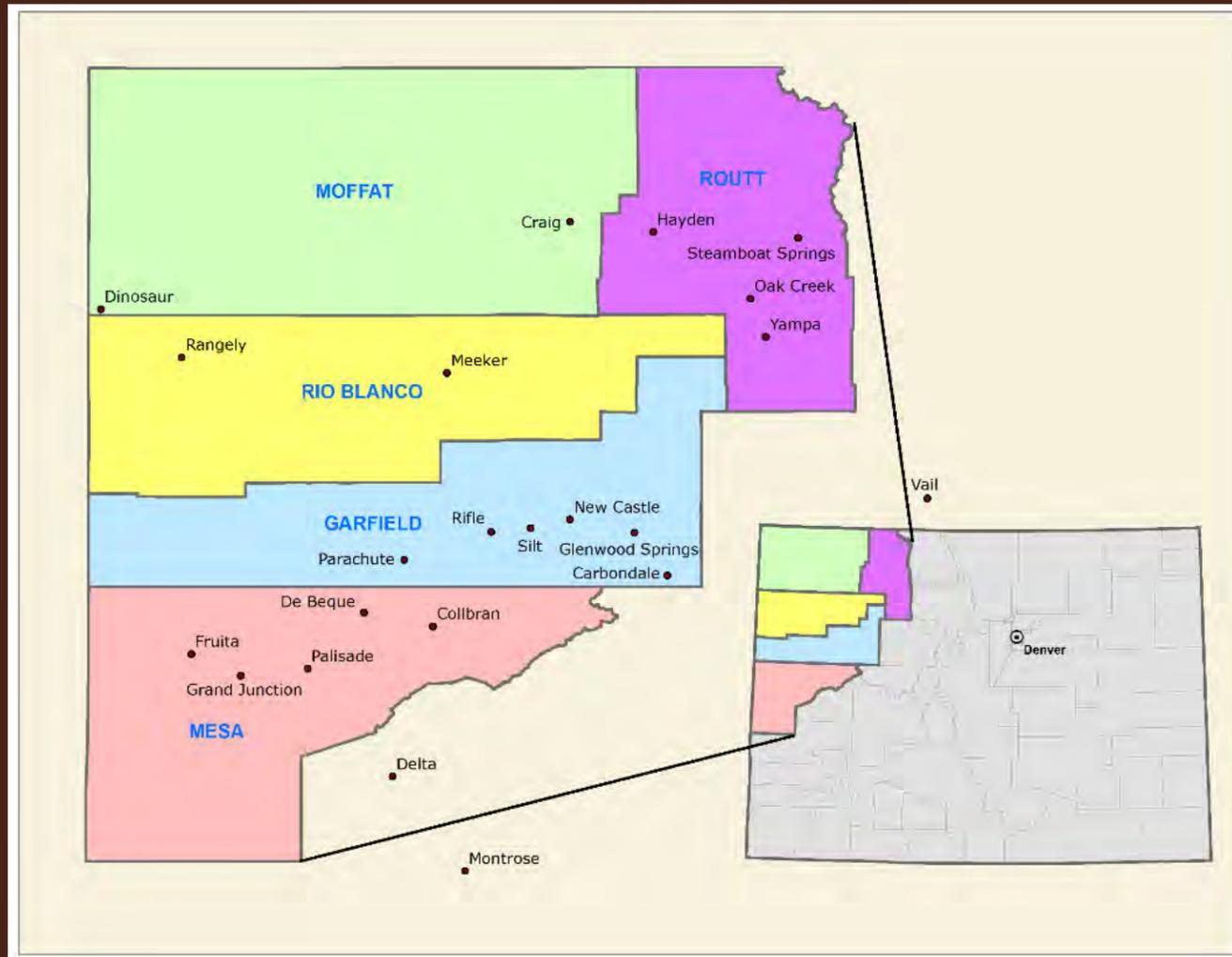
Routt CEDS Attendees

Angela Mackey
 Bonnie Petersen
 Christy Sinner
 Dan Weinheimer
 Heidi Mendisco
 Heidi Breidert
 John Bristol
 Kristi Brown
 Libby Christensen
 Mathew Mendisco
 Michele Meyer
 Nancy B Kramer
 Pattie Snidow
 Sandy Hall
 Sarah Jones
 Tammie Delaney
 Tiffany Pehl
 Todd Hagenbuch
 Vic Walker
 Winnie DelliQuadri

Mesa CEDS Attendees

Angela Padalecki
 Betsy Bair
 Betsy Bair
 Bonnie Petersen
 Brandon Stam
 Brad McCloud
 C.J. Rhyne
 Carol Skubic
 David Ludlam
 Derek Wagner
 Duncan McArthur
 Elizabeth Fogarty
 Elyse Casselberry
 Jorge Pantoja
 juliann Adams
 Karen Harkin
 Karen Troester
 kent Carson
 Monty Rutherford
 Nina Anderson
 Pattie Snidow
 Rich Keller
 Rick Taggart
 Shannon Wadas
 Steven Acquafresca
 Tiffany Pehl

Appendix C



MESA COUNTY

Intent of this report

Provide a defensible case to EDA that Region 11 meets the established criteria for distress to qualify the Region to apply to become an Economic Development District.

Establishment of baseline data that can easily be monitored and tracked over time using tools and data available utilizing tools through Stats America, Community Survey, Bureau Labor Statistics, and the Colorado State Demographer.



EDA Distress Criteria

- An unemployment rate that is, for the most recent 24-month period for which data are available, at least one percentage point greater than the national average unemployment rate.
 - *Currently National Unemployment Rate is 4.68%*
- Per Capita income that is for the most recent period for which data is available, 80% or less of the of the national average per capita income.
- Special Need

DISTRESS CRITERIA STATISTICAL REPORT

Reference Date: 10 / 2017 (All data elements refer to this date or earlier.)

Region Consists of: Mesa Co. CO

Report Date: 12/29/2017 3:42:25 PM

Economic Distress Criteria—Primary Elements

	Region	U.S.	Threshold Calculations
24-month Average Unemployment Rate (BLS) period ending October 2017	4.72	4.68	0.04
2016 Per Capita Money Income (5-year ACS)	\$26,731	\$29,829	89.61%
2016 Per Capita Personal Income (BEA)	\$39,118	\$49,246	79.43%

Mesa County has lost ground in Per Capita Income in comparison to the National Per Capita Income. In 2008, Mesa County was at 92.29% of the National Per Capita Income. Per Capita Income has declined post recession to 79.43% Poverty rates have grown 36.4% since 2000. This report will explore the data that is contributing to the decline in the Mesa County economy and subsequent increase in key distress measures.

- Mesa County Per Capita Income is 79.43% of the National Per Capita Income.
- Mesa County's 24 Month Average Unemployment Rate is slightly lower than the National Average at 4.72%.
- Based on EDA criteria, Mesa County **MEETS** the definition of distressed based on Per Capita Income.

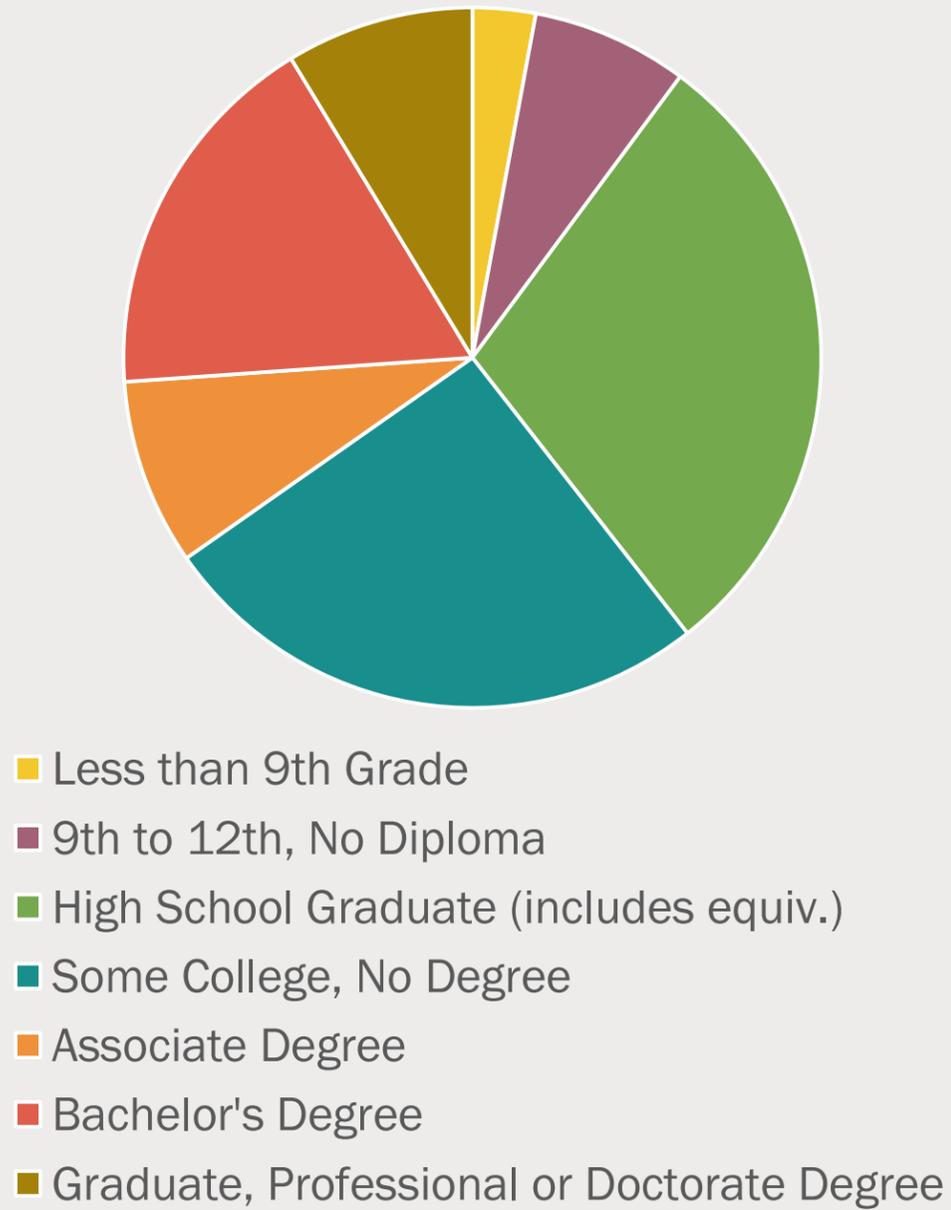
Poverty Estimates	Rate	Rank in U.S.	Percent Change	Rank in U.S.
Poverty Rate in 2016	15.0	<u>1,535</u>	--	--
	In 2000 11.0	<u>1,890</u>	36.4 %	<u>735</u>
Poverty Rate for Children under 18 in 2016	17.8	<u>2,065</u>	--	--
	In 2000 15.3	<u>1,947</u>	16.3 %	<u>1,942</u>

Source: U.S. Census Bureau

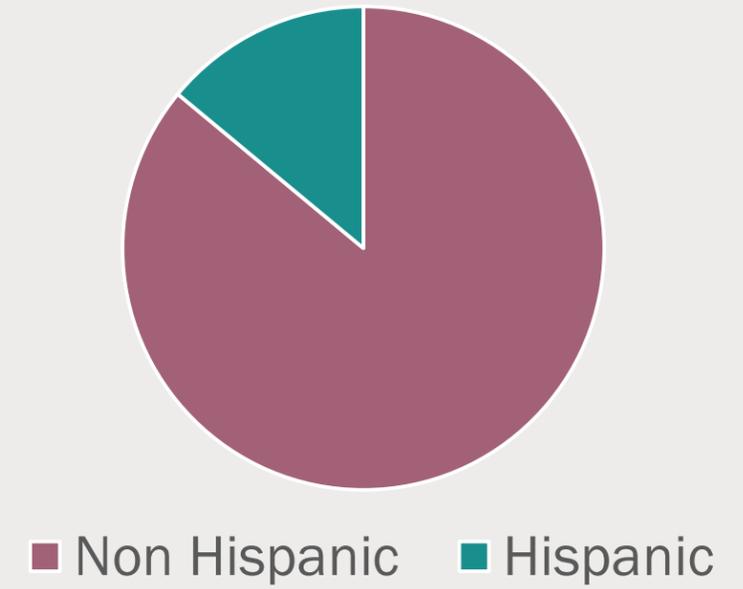
Mesa County Fast Facts

■ Total Population: 150,083

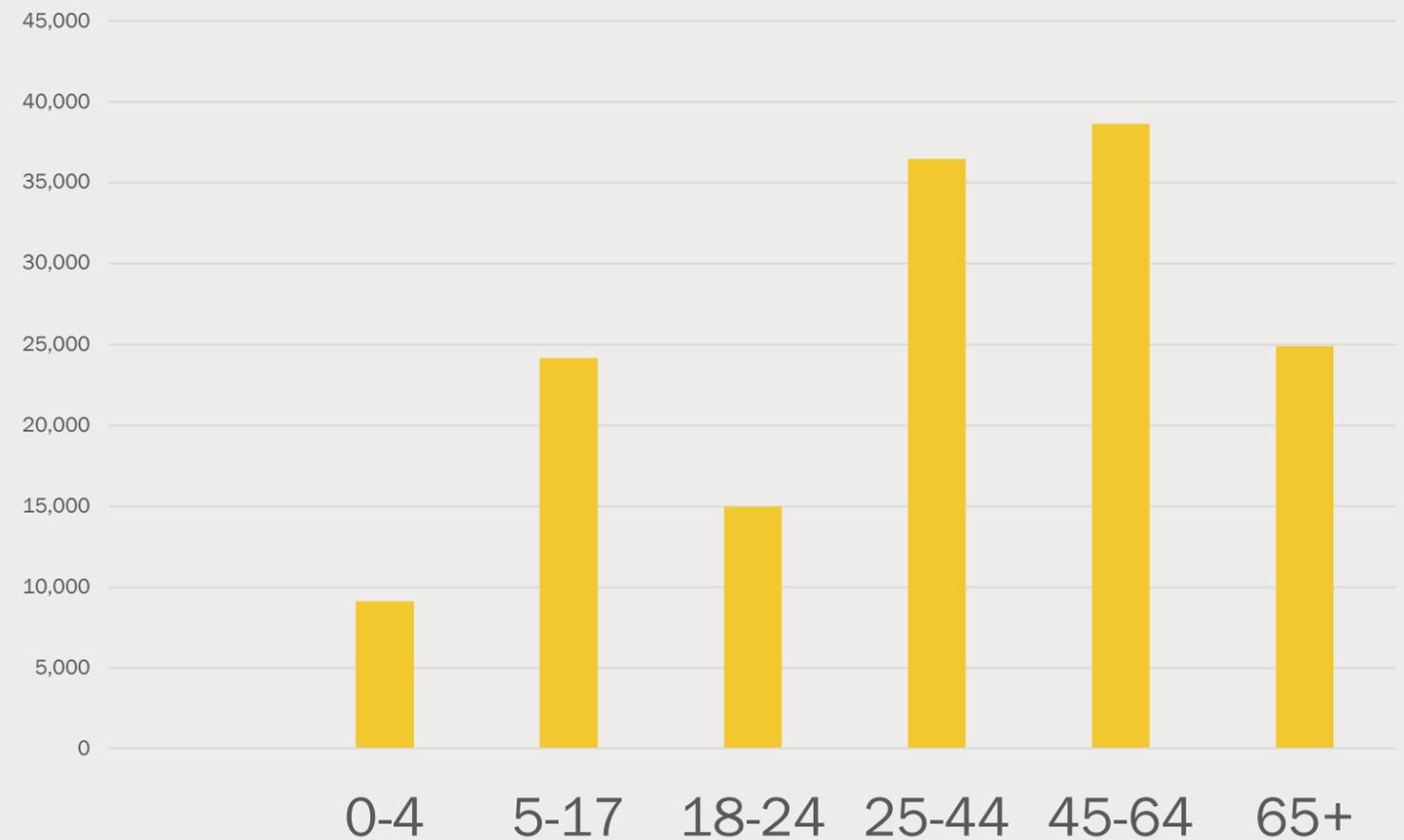
Education



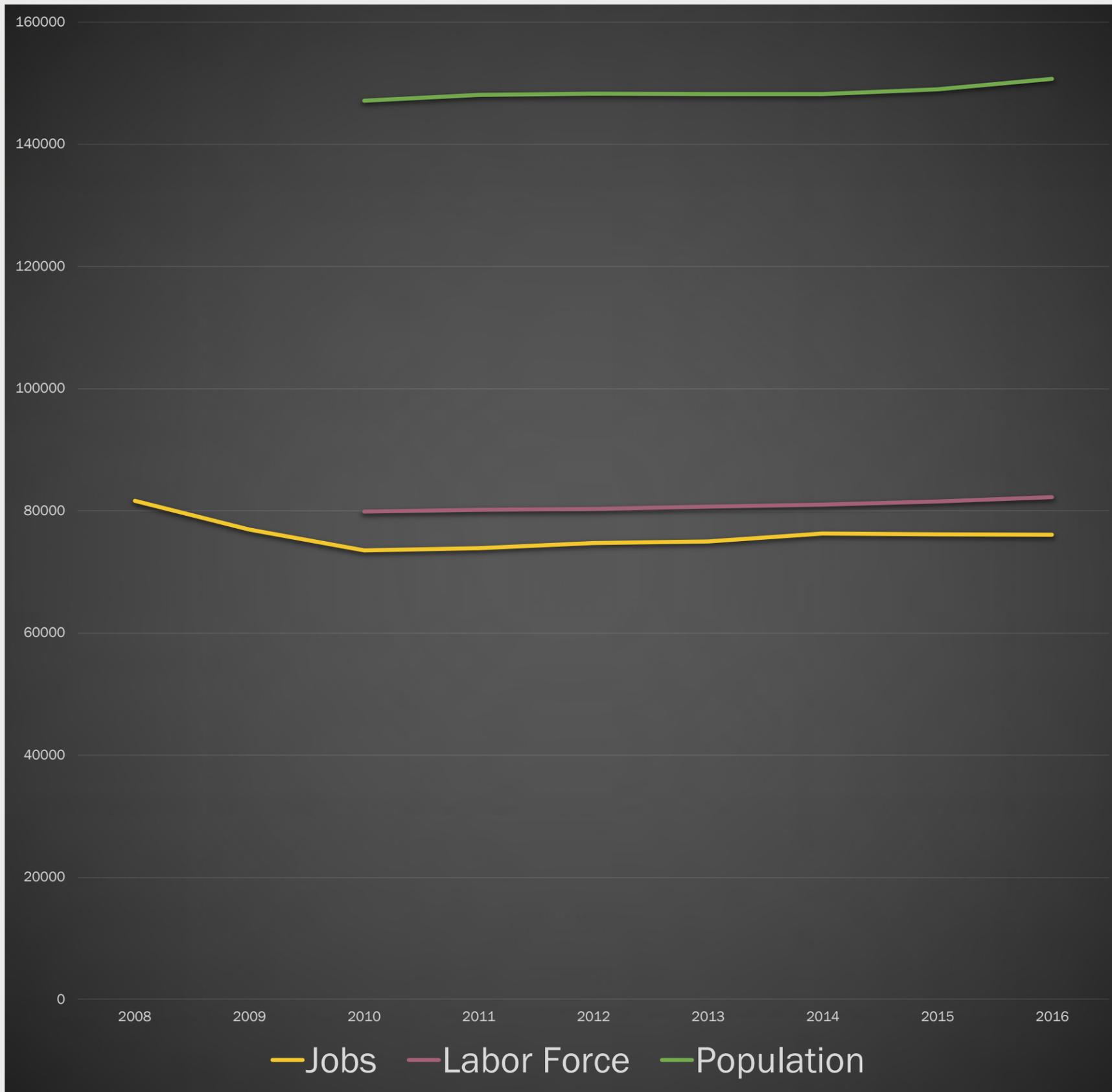
Race



Age Distribution

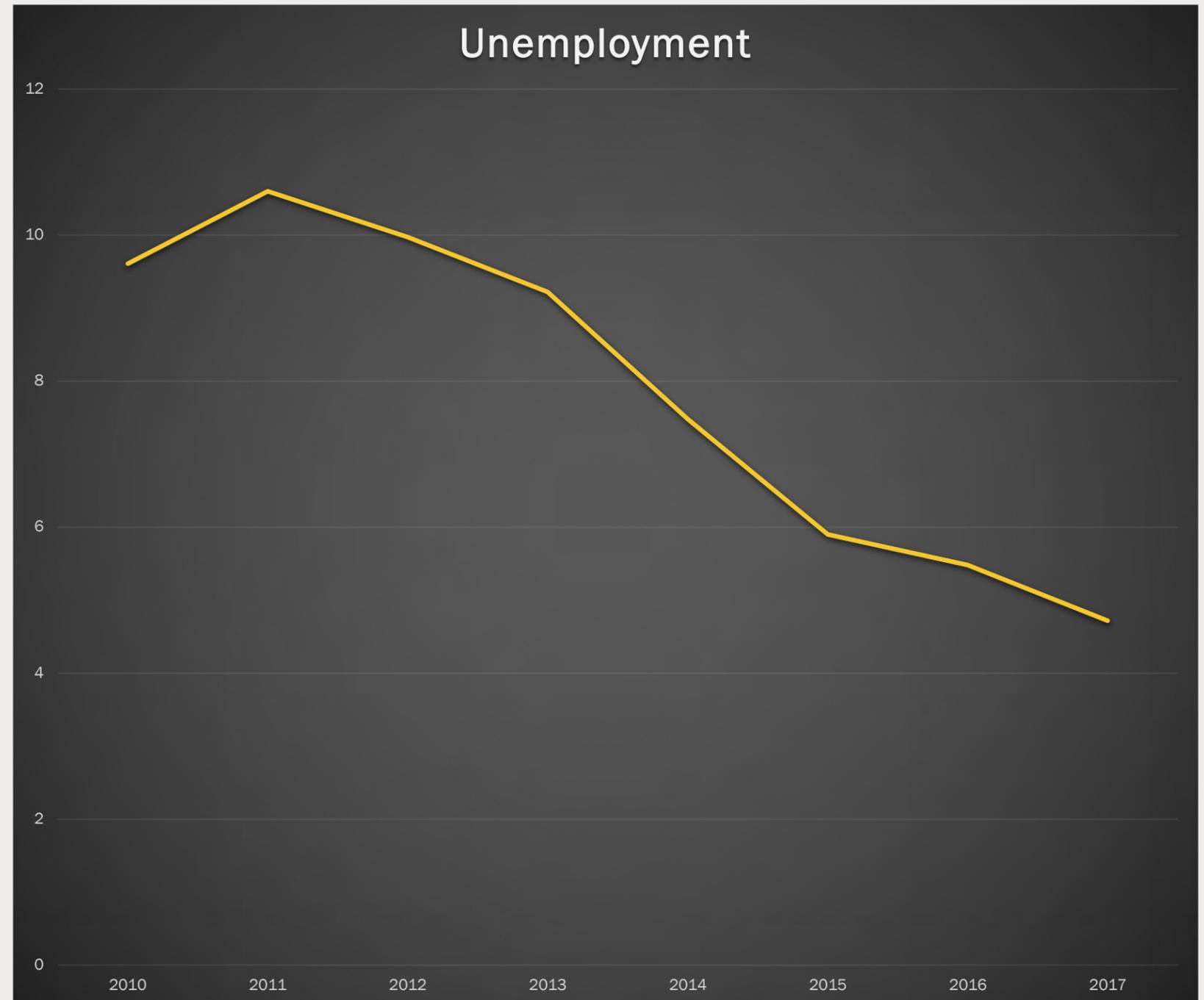


Workforce & Demographic Trends



Mesa County has experienced a slight increase in population since 2010 of 3,576 or a growth rate of 2%. The County has experienced a corresponding increase in workforce. Post recession, the County lost 8,118 jobs. Some growth in total jobs has occurred over the last few years, but the County remains down 5,545 jobs from peak employment.

At the same time that job loss begins to occur between 2009-2012, the County's unemployment levels begin to climb. Unlike other parts of the region, Mesa County does not experience a significant decrease in workforce during the recession. Unemployment in Mesa County was among the highest in the region during the recession. Over time jobs are slowly returning, but work force is also slowly increasing.

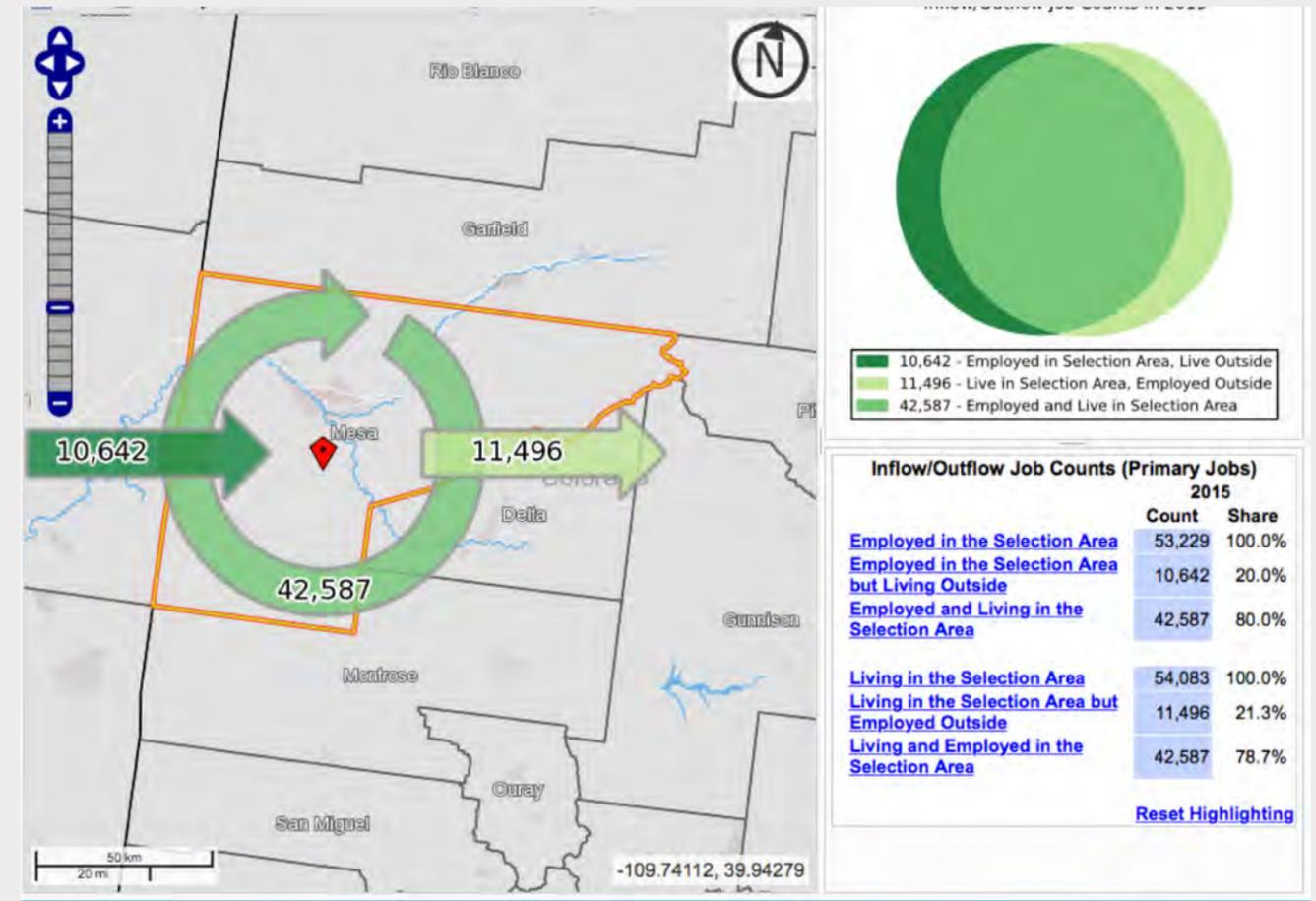


Commuting Patterns

Knowing that Mesa County has more workforce than available total jobs, it makes sense that workers are finding employment in neighboring counties.

Mesa County is also importing workers from neighboring communities.

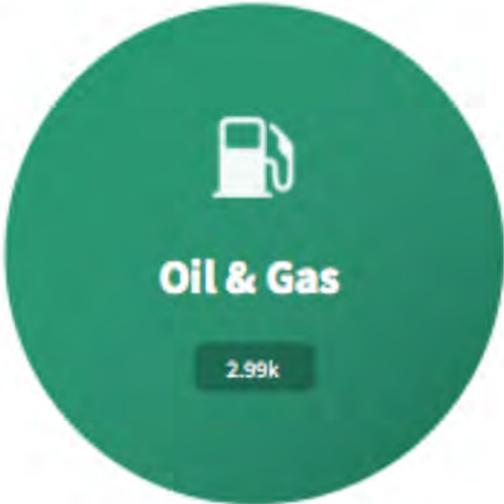
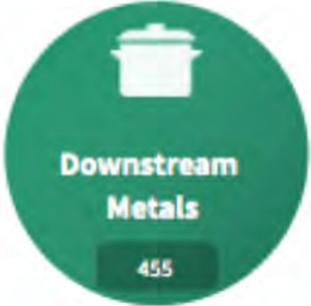
There are more jobs and more work force in Mesa County than represented by these commuting patterns.



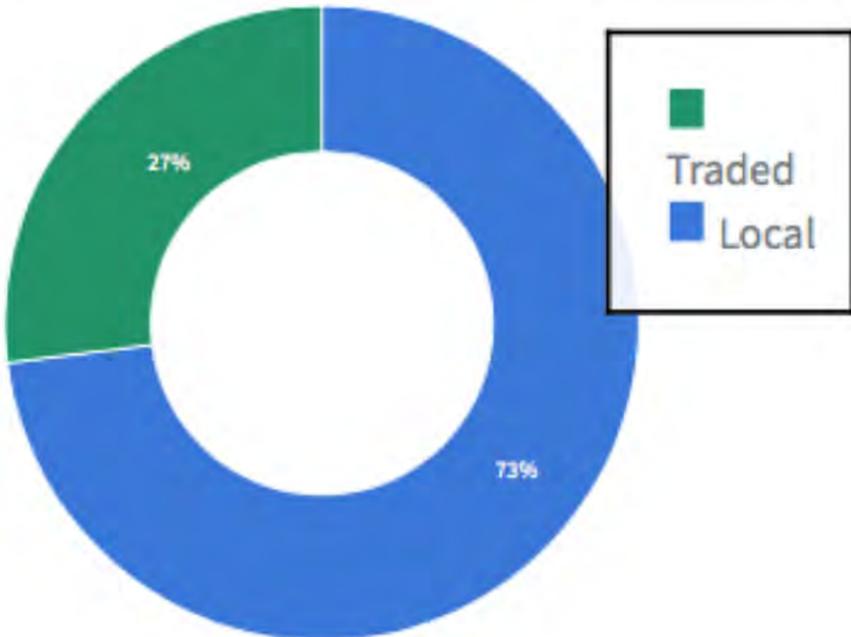
Cluster Analysis

Cluster Portfolio, 2015

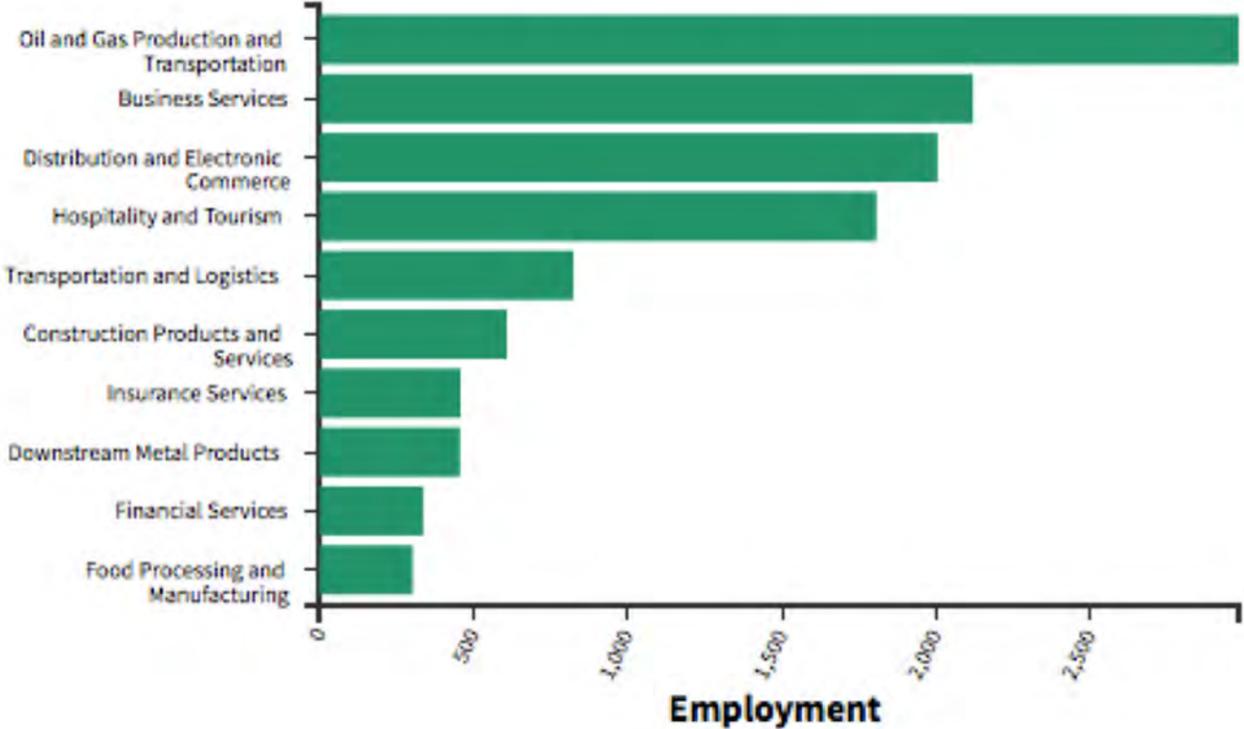
4
Traded
Clusters



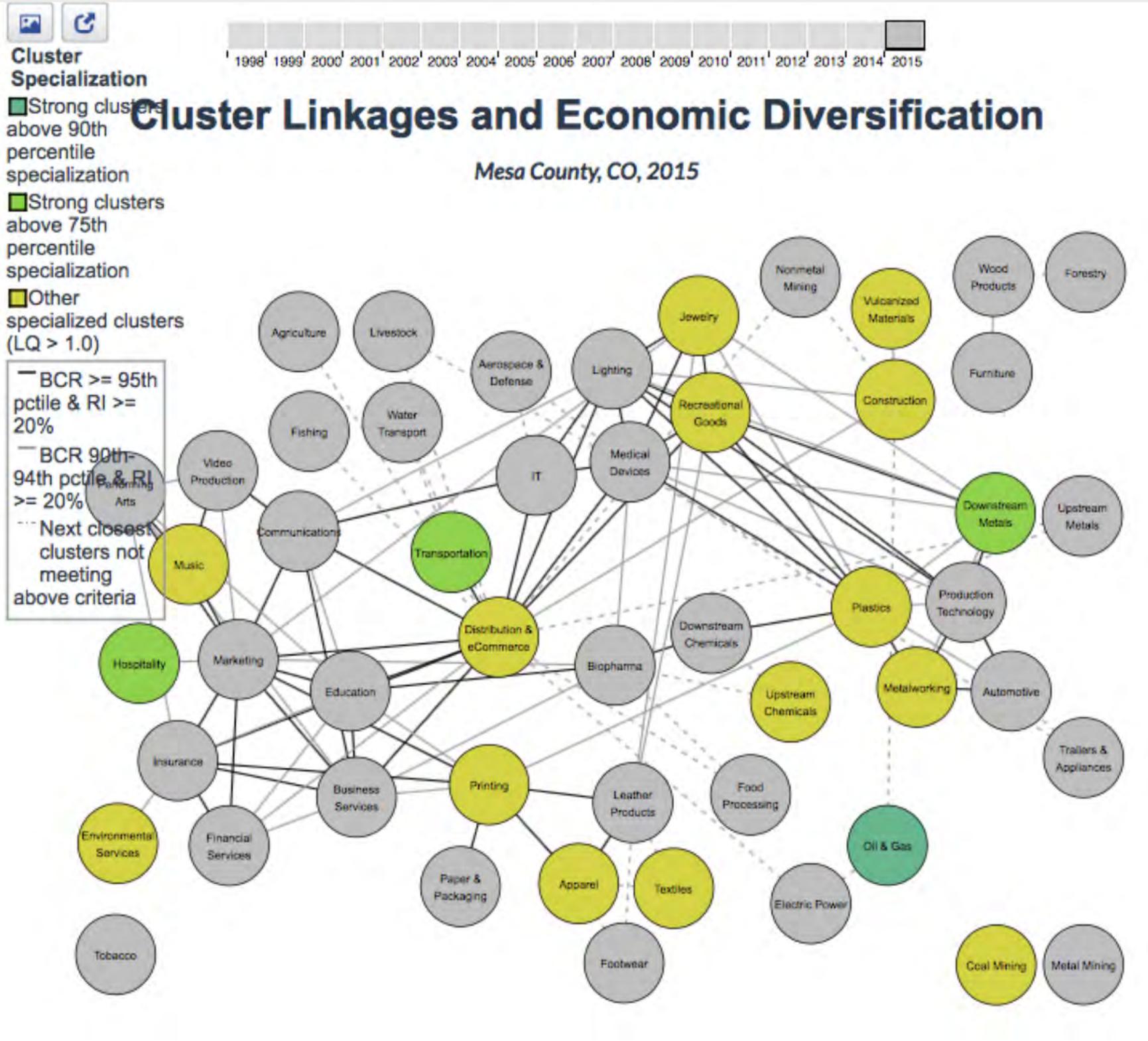
Traded vs. Local Clusters



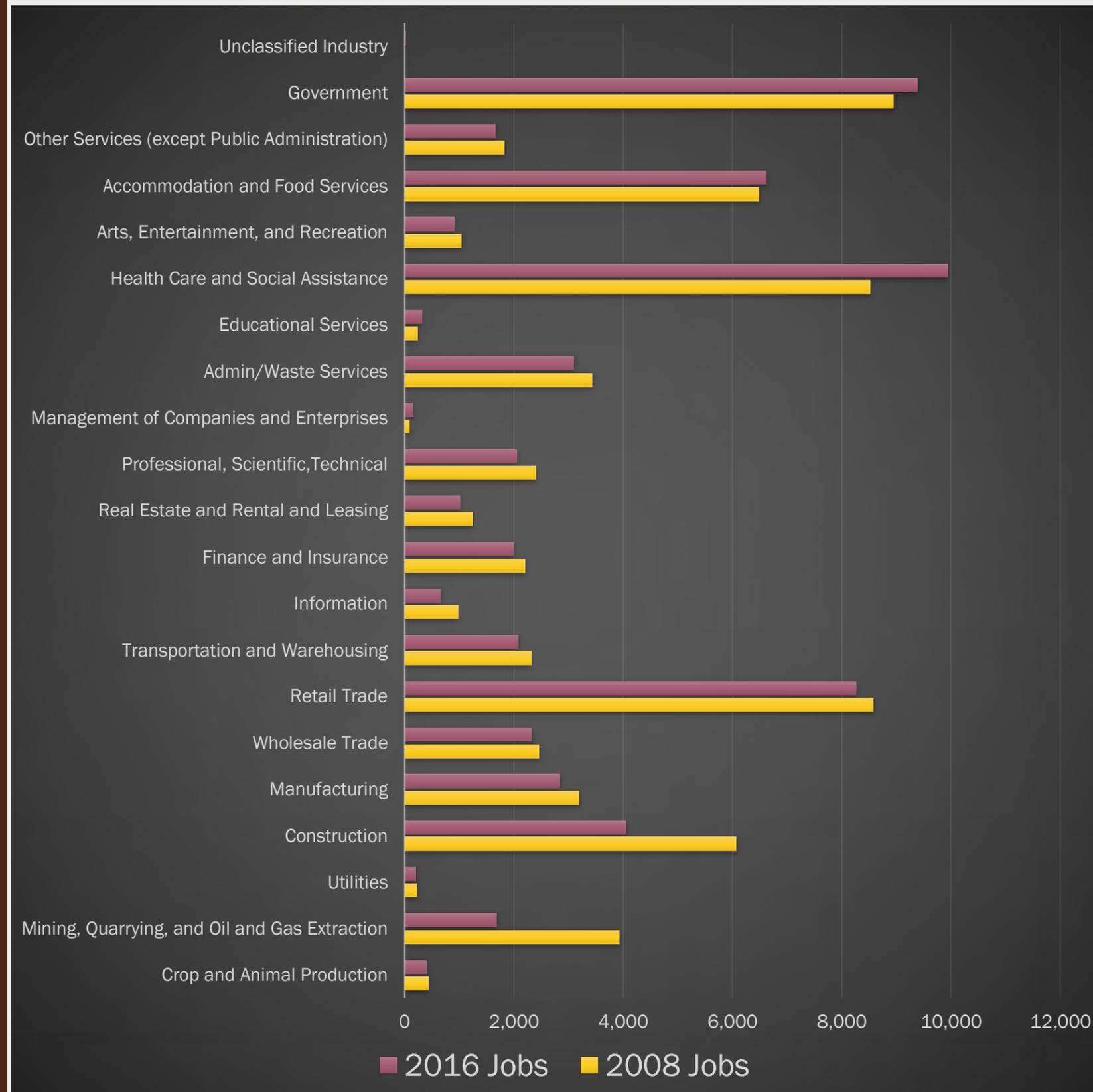
Top Clusters by Employment



Cluster Analysis: Linkages



Job LOSS/GAIN by Sector

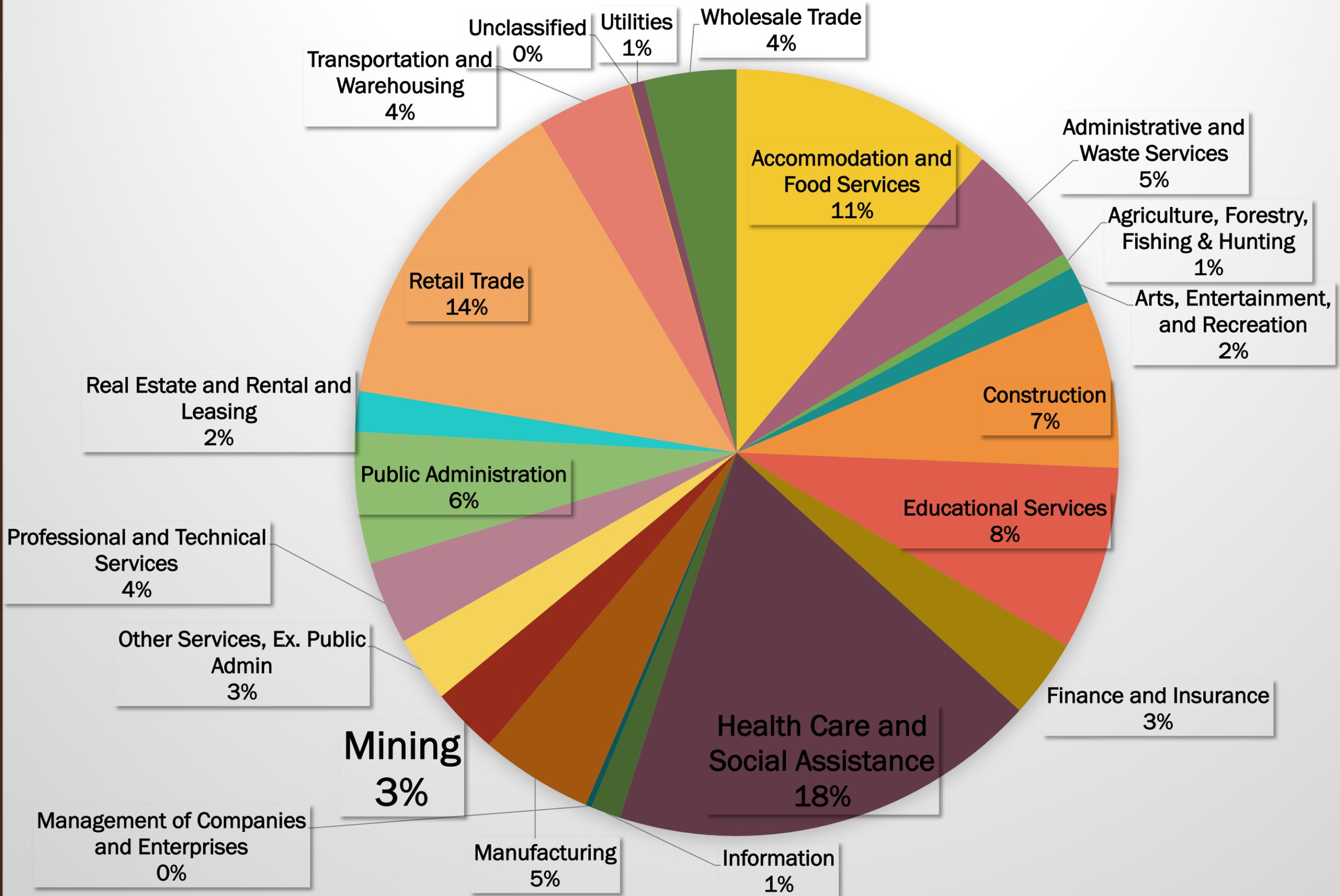


Since peak employment in 2008, all but five sectors have lost jobs including losses in the county's top economic clusters. Healthcare and Government are the stand outs each seeing a growth of 14% and 5% respectively. Oil and Gas has seen a 57% decline in total jobs. Oil and Gas jobs are the highest paying wages by economic cluster.

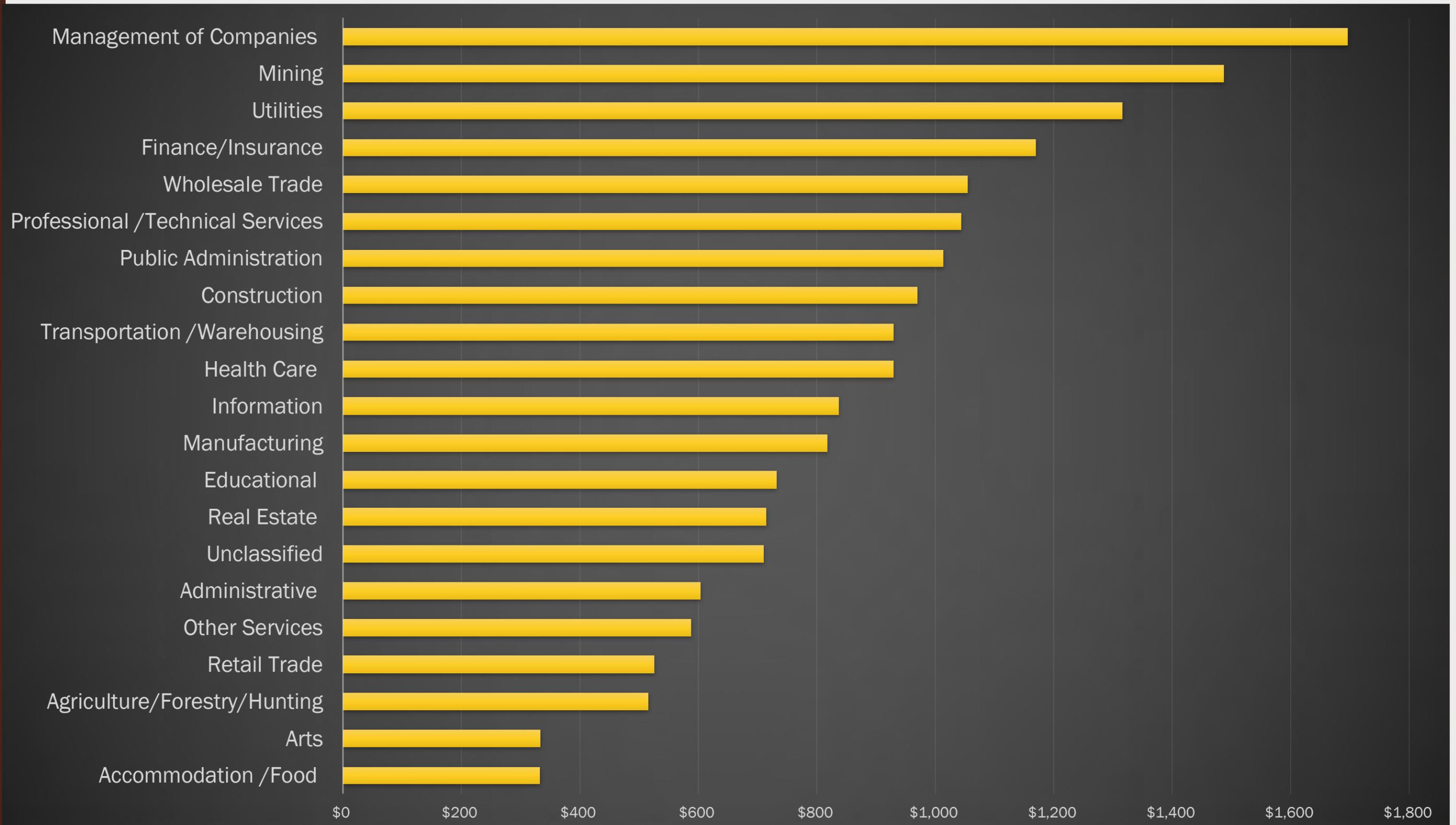
Mesa County has seen a significant increase in poverty and a significant decrease in Per Capita Income, all of which are explained by the significant loss of jobs within the Oil & Gas sectors.



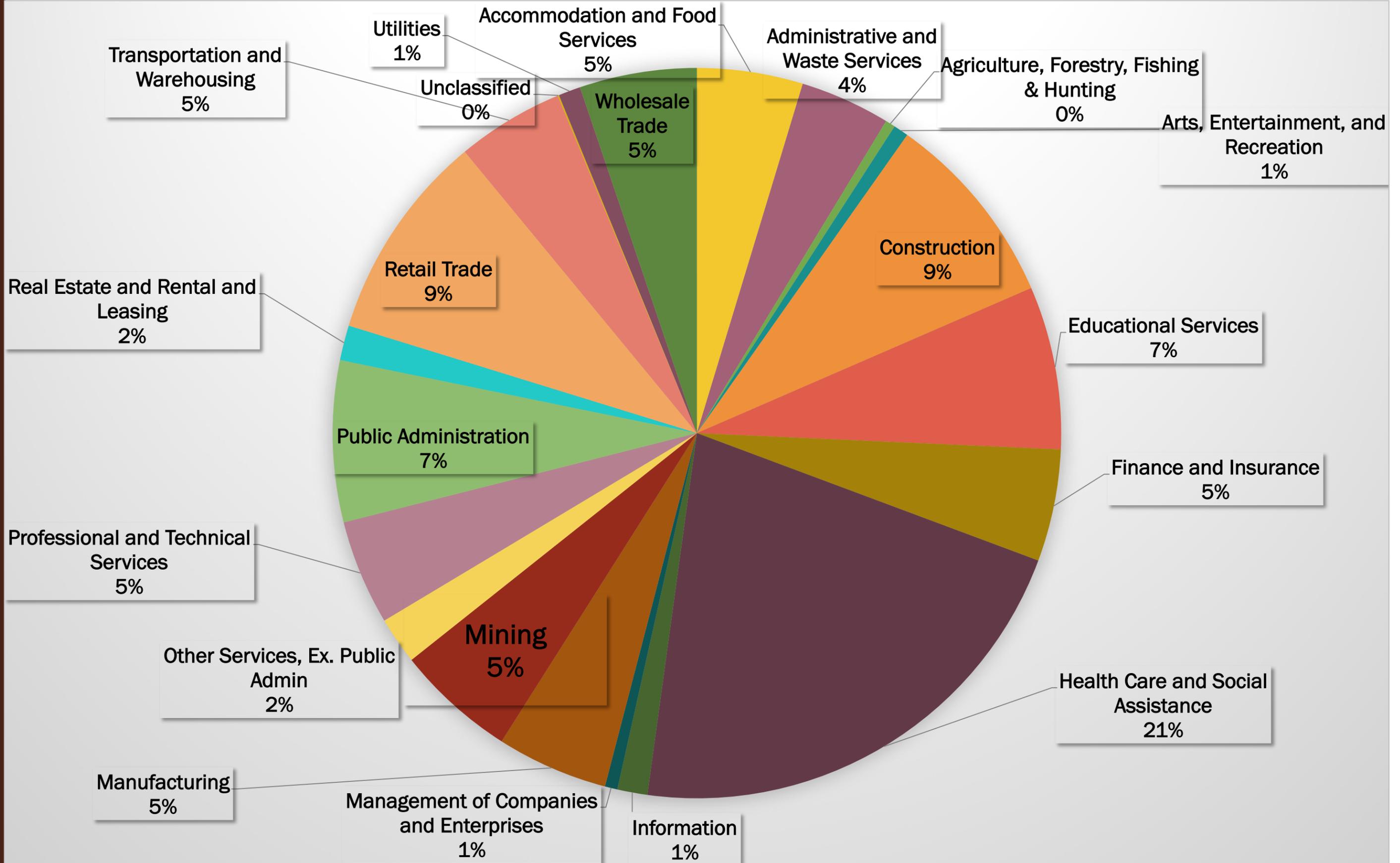
Share of Jobs by Industry



Wages by Industry



Share of Wages by Industry



Mesa County's Per Capita Income has fallen since 2009. Oil & Gas has been a significant portion of the Mesa county economy. There are approximately 50% fewer oil and gas today than in 2009. Mining contributes 3% jobs today and 5% of total wages. The decline in Per Capita Income and increase in poverty in the region is likely attributable to the loss of jobs in the oil and gas industry, though losses in other key industries such as construction are possible contributors.

The county does have some other higher paying sectors, but these sectors do not contribute significantly to total jobs, and are actually similar in their size and contribution as oil & gas including wholesale trade, finance/insurance, utilities, transportation/warehousing, professional/technical, public administration, and manufacturing.

The clear standout is healthcare. Healthcare contributes 18% of jobs but 21% of wages. Other industries that have a higher share of jobs are lower wage paying including retail and accommodations/food.



Employer & Non Employer Firms:

Non-employer firm data provides a snap shot into sole proprietor activity

Non-employer firms represent sole proprietors and other firms that do not have employees. Non-employer firms represent about 72% of all firms in Mesa County.

Nonemployer firms	11,373
Revenue of nonemployer firms (\$1,000)	\$489,718
Revenue per nonemployer firm (\$1,000)	\$43
Total number of employers and nonemployers	15,777

Employer establishments	4,404
Total employment of employers	51,843
Total annual payroll of employers (\$1,000)	\$2,056,564
Average employment per employer	12
Average payroll per employee	\$39,669
Population per employer	34

Agriculture

- 2016: 2190 Jobs
- 2010: 1840 Jobs
- Average Wage: \$515
- 2012 Market Value: \$84,582,000

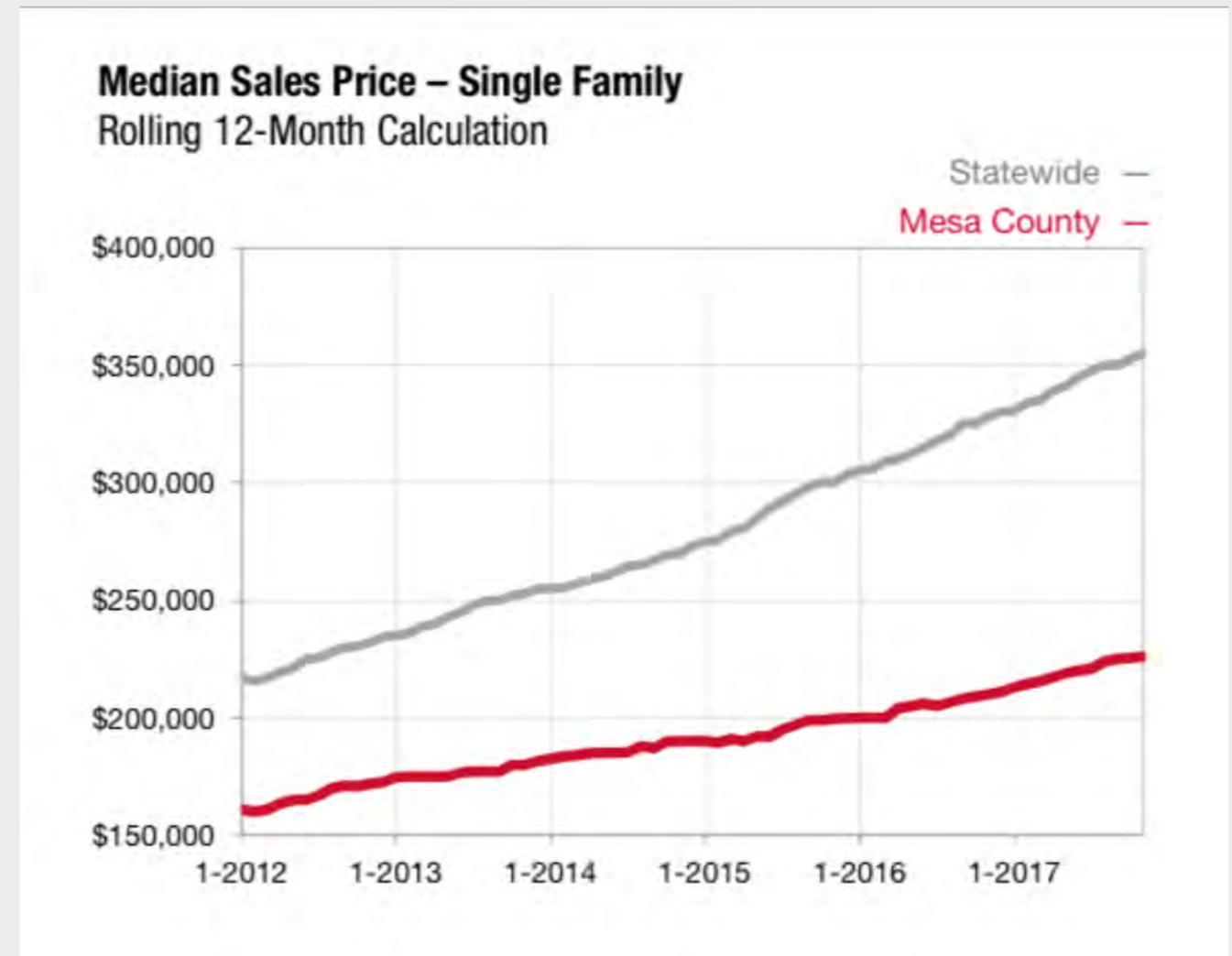
Mesa County has a strong agricultural industry including traditional and specialty ag. The USDA AG Census is conducted every five years. Between 2007 and 2012, Mesa County saw an increase in agricultural market value, an increase in the number of farms, and an increase in the farmed acreage. From 2010 to 2016 the County also saw an increase in ag related jobs. Agriculture statewide is experiencing challenges as commodity prices drop. An increase in total agriculture related jobs is a positive sign that Mesa County's specialty crops such as wine, peaches, and hops may be helping Mesa County during a time when agriculture is otherwise struggling. New USDA Census data will be available in 2019.

Housing

- In 2017 the Median Sales Price of a single family residence was \$224,000.
- The Median Household Income for Mesa County is \$50,070
- An income of about \$69,109 is needed to purchase a home in the median price range.
- Housing prices have increased in Mesa County though not at the same rates as the State as a whole.

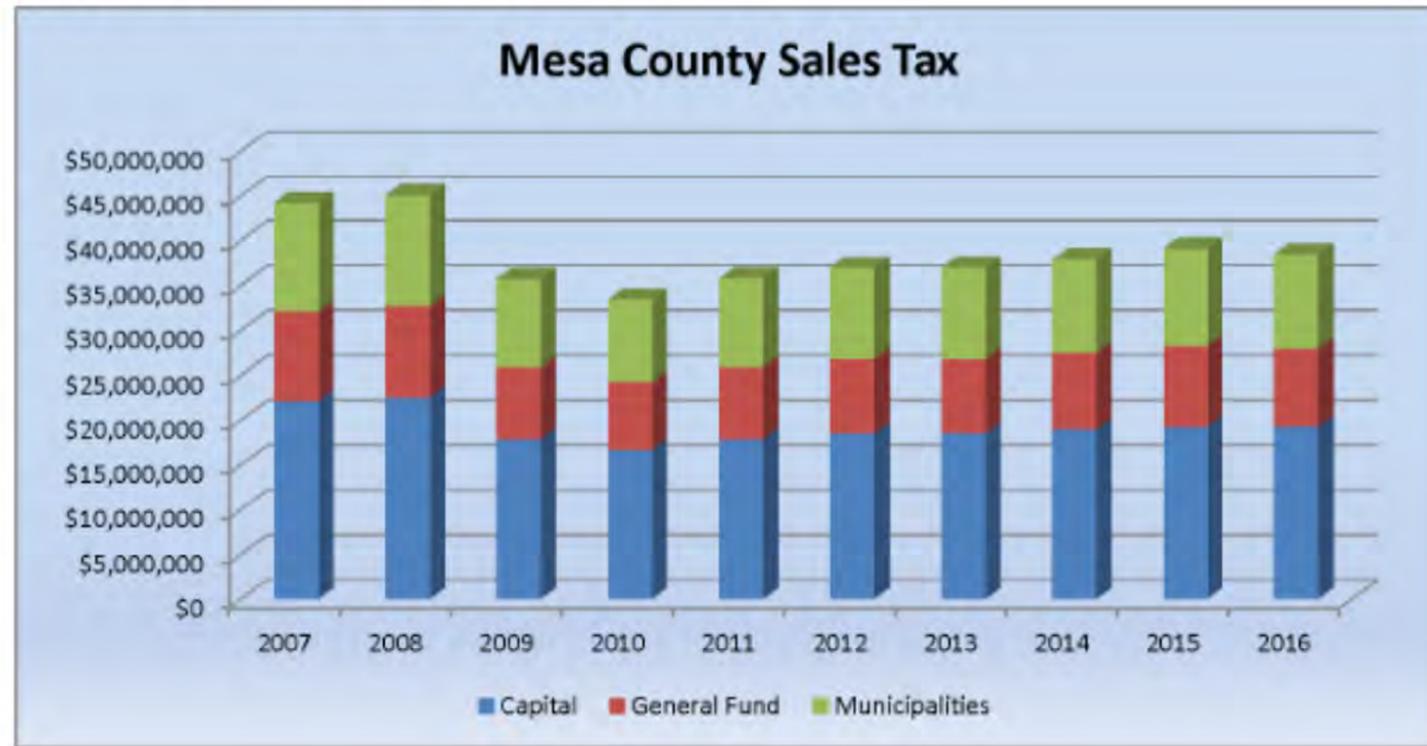
Single Family Key Metrics	November			Year to Date		
	2016	2017	Percent Change from Previous Year	Thru 11-2016	Thru 11-2017	Percent Change from Previous Year
New Listings	215	238	+ 10.7%	3,820	4,025	+ 5.4%
Sold Listings	232	197	- 15.1%	2,785	3,129	+ 12.4%
Median Sales Price*	\$216,500	\$224,000	+ 3.5%	\$210,000	\$227,000	+ 8.1%
Average Sales Price*	\$236,966	\$251,249	+ 6.0%	\$239,417	\$252,297	+ 5.4%
Percent of List Price Received*	97.8%	97.9%	+ 0.1%	97.8%	98.5%	+ 0.7%
Days on Market Until Sale	98	92	- 6.1%	99	90	- 9.1%
Inventory of Homes for Sale	862	785	- 8.9%	--	--	--
Months Supply of Inventory	3.4	2.8	- 17.6%	--	--	--

* Does not account for seller concessions and/or down payment assistance. | Activity for one month can sometimes look extreme due to small sample size.



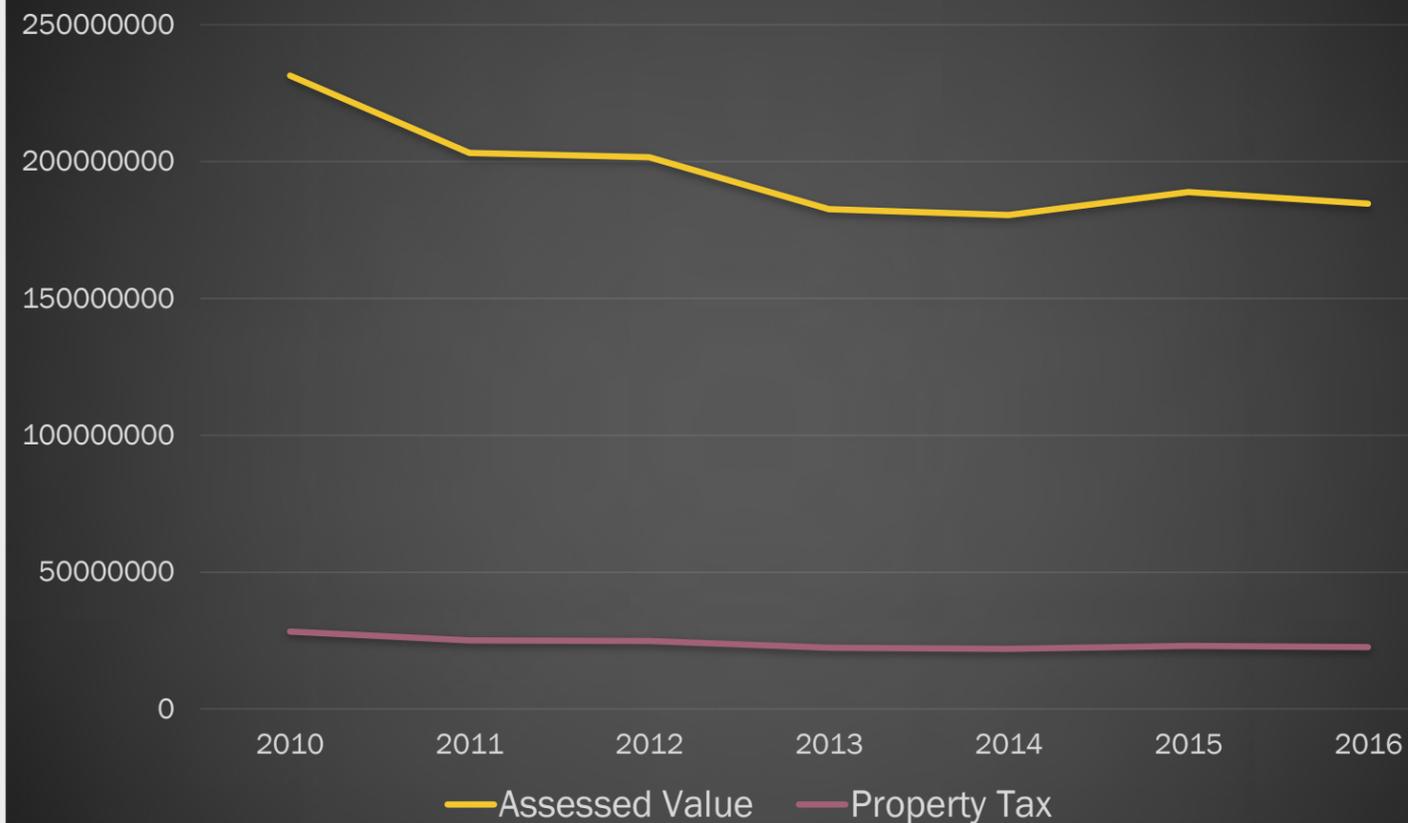
Tax Base

Mesa County Sales Tax



Since 2010 Mesa County has experienced a steady decline in assessed value and property tax. Sales tax has recovered only slightly, and as remained basically flat since 2011.

In 2016, Mesa County's top 6 of the top 10 taxpayers are connected to the energy industry either through oil and gas or utilities. Continued decline in activity from these sectors will continue to put significant strain on the local tax base.

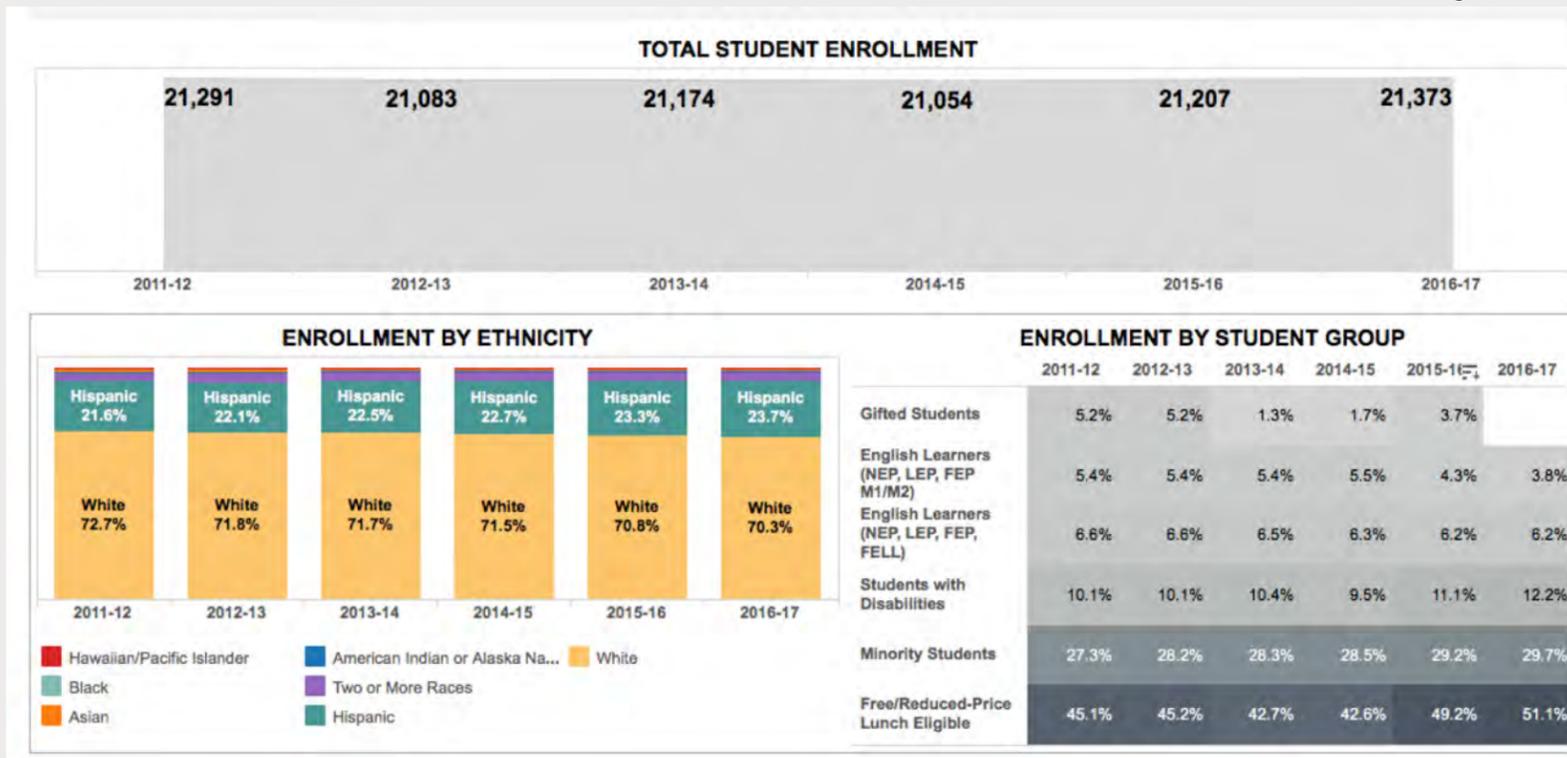


2016 TOP 10 ASSESSMENTS

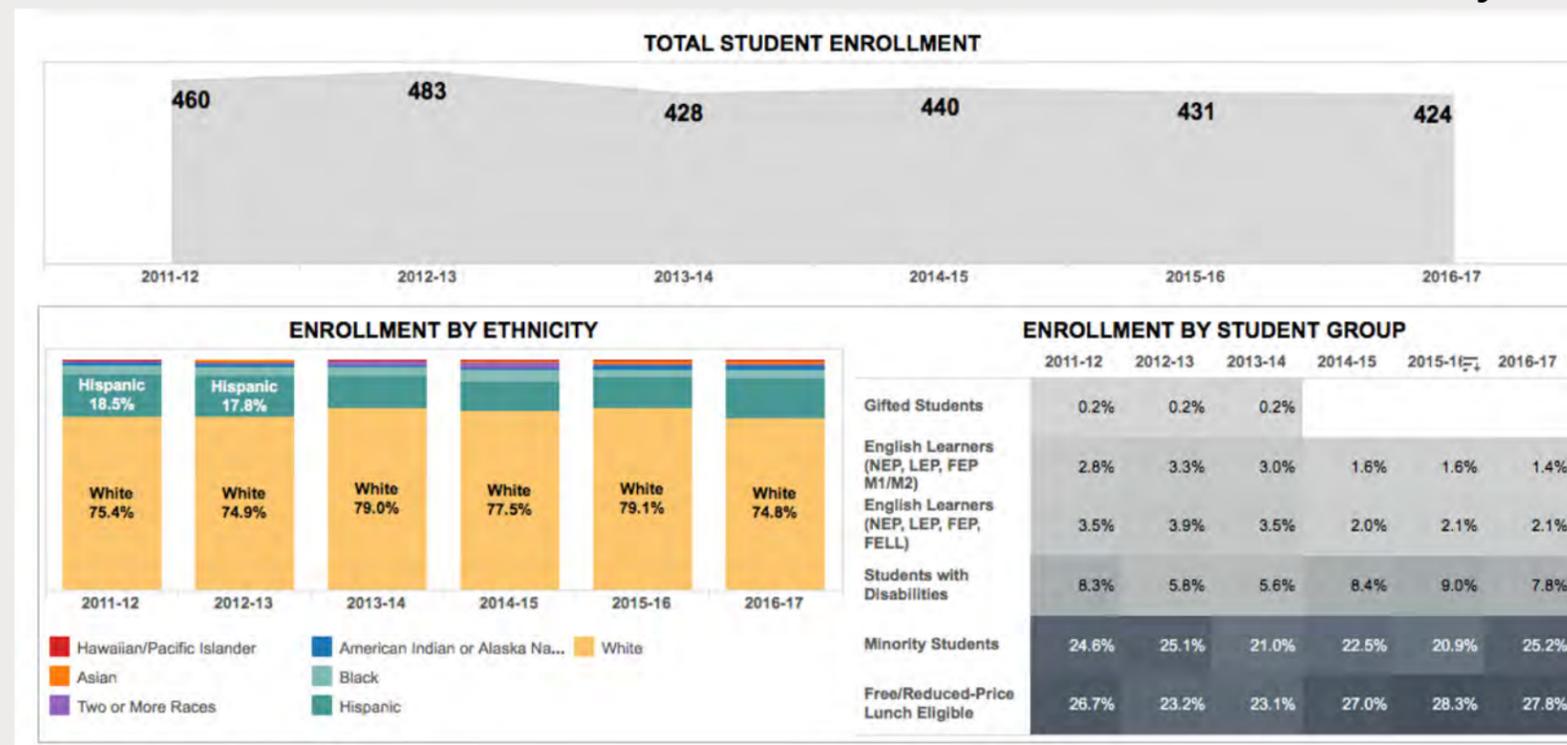
Owner	Assessed Value
PUBLIC SERVICE COMPANY OF COLORADO	\$ 51,286,800
LARAMIE ENERGY, LLC 10433	\$ 28,520,800
UNION PACIFIC RAILROAD COMPANY RR361	\$ 26,095,400
QWEST CORPORATION TL393	\$ 19,343,700
GRAND VALLEY POWER LINES INC ER073	\$ 13,684,000
NABORS LUX FINANCE 2	\$ 11,534,820
LARAMIE ENERGY, LLC 10433	\$ 11,385,920
ENTERPRISE GAS PROCESSING LLC	\$ 10,077,340
SG INTERESTS I LTD	\$ 9,853,490
SM MESA MALL LLC	\$ 9,825,690

Education

Mesa County 51



Plateau Valley

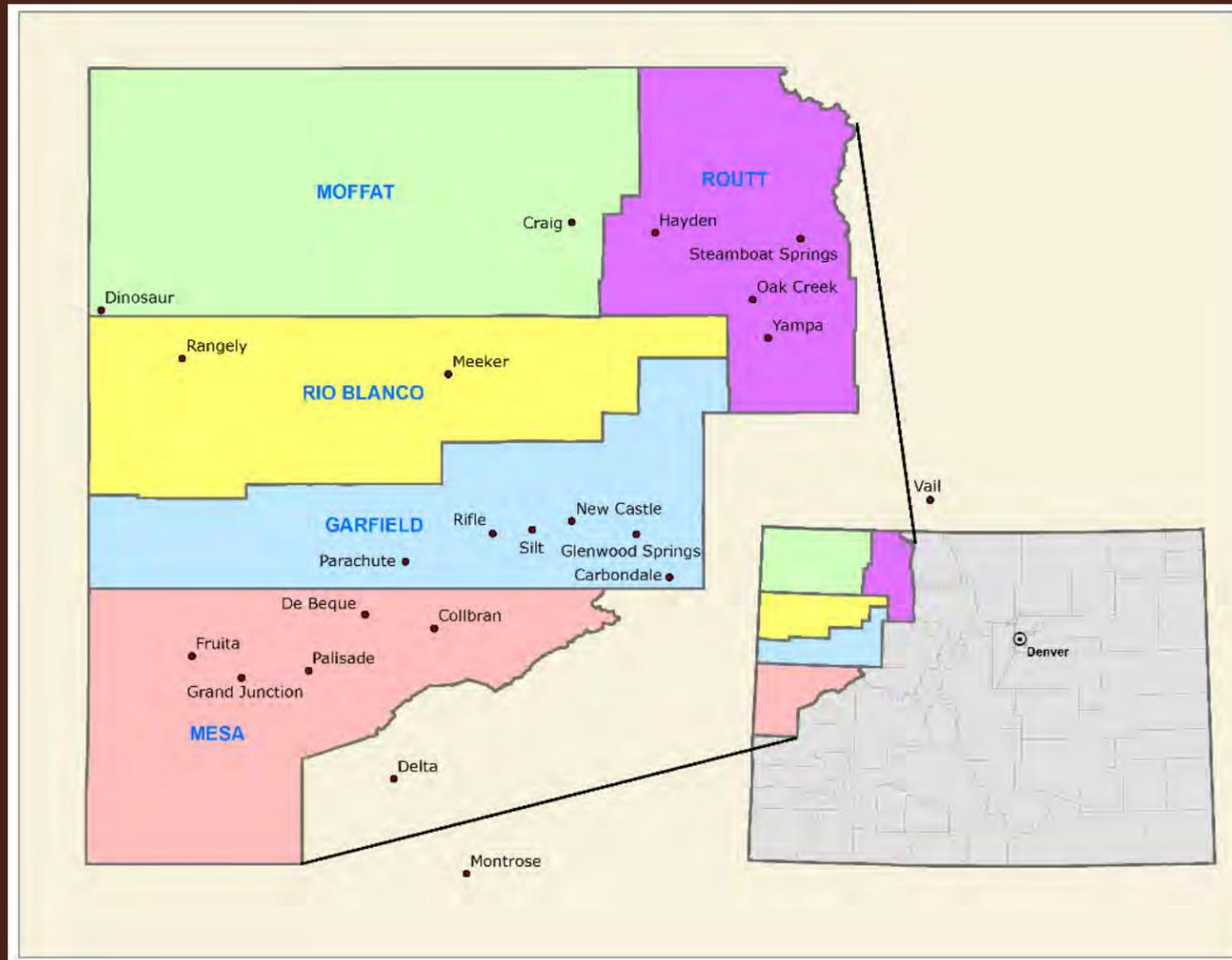


- Mesa County Valley 51 School District has had essentially flat enrollment since 2010 with only an increase of 82 students. During this same period of time, free and reduced lunch percentages have increased from 45.1% to 51.1%. (1)

- Plateau Valley School District has seen fluctuating student enrollment, with an overall decline since 2012. Free and reduced lunch have fluctuated with a low of 23.1% and a high of 28.3%.

Conclusions

- Mesa County meets EDA's criteria for distress based on per capita income that is at least 80% less than the national average.
- Mesa County has diversity in its economic sectors, but needs to focus on and grow jobs in those sectors with strong wages.
- Mesa County has not experienced economic recovery from the 2008 recession.
 - *The County has not returned to peak employment*
 - *Wages continue to decline*
 - *Poverty continues to increase*
- Colorado as a whole has not only recovered from the recession but has excelled with job growth, growth in wages, and population growth. These trends are not reflected in Mesa County.
- Mesa County remains dependent on the oil & gas industry for much of its tax base. Diversification of its tax base is necessary to maintain revenues to keep up with service and infrastructure demands.



GARFIELD COUNTY

Intent of this report

- Provide a defensible case to EDA that Region 11 meets the established criteria for distress to qualify the Region to apply to become an Economic Development District.
- Establishment of baseline data that can easily be monitored and tracked over time using tools and data available utilizing tools through Stats America, Community Survey, Bureau Labor Statistics, and the Colorado State Demographer.

EDA Distress Criteria

- An unemployment rate that is, for the most recent 24-month period for which data are available, at least one percentage point greater than the national average unemployment rate.
 - *Currently National Unemployment Rate is 4.68%*
- Per Capita income that is for the most recent period for which data is available, 80% or less of the of the national average per capita income.
- Special Need

DISTRESS CRITERIA STATISTICAL REPORT

Reference Date: All data is from Census ACS Estimates
 Region Consists of: 08045951600, 08045951701, 08045951702, 08045951802, 08045951803, 08045951804, 08045951901, 08045951902, 08045952001, 08045952002, 08045952100
 Report Date: 1/9/2018 6:38:54 PM

Economic Distress Criteria—Primary Elements

	Region	U.S.	Threshold Calculations
2016 Unemployment Rate (5-Year ACS)	6.2	7.4	-1.2
2016 Per Capita Money Income (5-Year ACS)	\$29,179	\$29,829	97.82%

Economic Distress Criteria—Geographic Components

	Unemp. Rate 2016 ACS	Threshold Calculation	PCMI 2016 ACS	Threshold Calculation
Tract 9520.02 Garfield, CO	9.0	1.6	\$23,686	79.4
Tract 9518.03 Garfield, CO	3.6	-3.8	\$26,684	89.5
Tract 9518.02 Garfield, CO	5.2	-2.2	\$38,142	127.9
Tract 9519.02 Garfield, CO	4.0	-3.4	\$31,038	104.1
Tract 9518.04 Garfield, CO	5.4	-2	\$36,406	122
Tract 9520.01 Garfield, CO	13.5	6.1	\$23,804	79.8
Tract 9521.00 Garfield, CO	4.4	-3	\$30,313	101.6
Tract 9517.01 Garfield, CO	3.0	-4.4	\$34,751	116.5
Tract 9519.01 Garfield, CO	7.6	0.2	\$25,986	87.1
Tract 9516.00 Garfield, CO	7.5	0.1	\$30,913	103.6
Tract 9517.02 Garfield, CO	6.7	-0.7	\$25,682	86.1

Sources: U.S. Bureaus of Census, Labor Statistics, and Economic Analysis; Calculations generated by StatsAmerica.

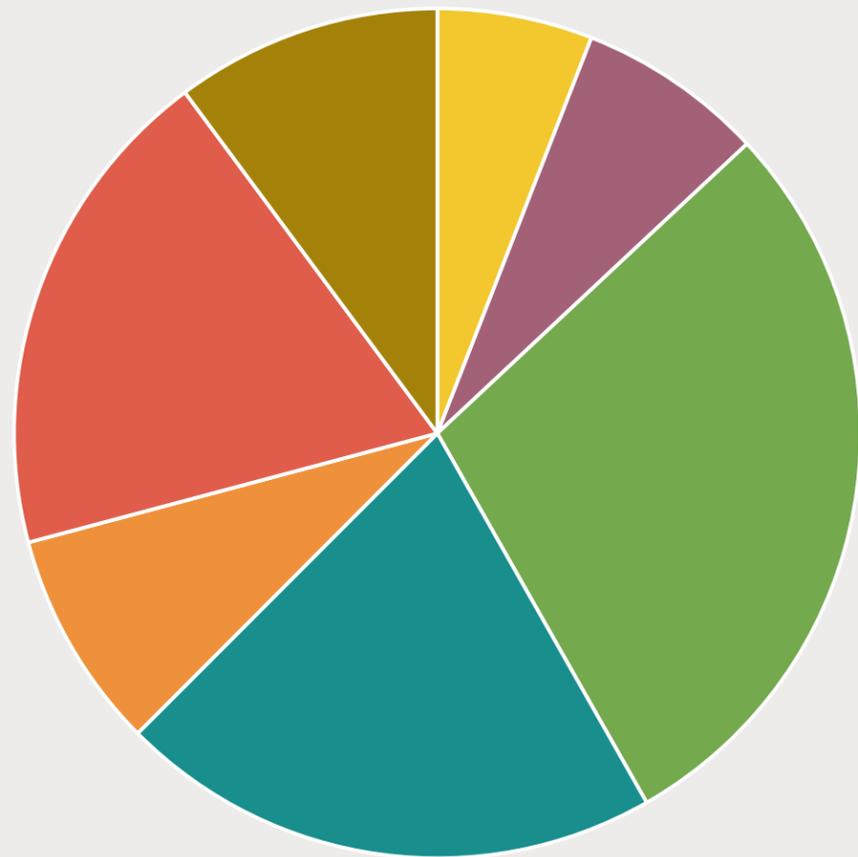
- Garfield County’s unemployment rate is below the national average. HOWEVER; two census tracts, near Rifle, exceed the national unemployment rate drastically at 13.5% and 9%.
- The County’s Per Capita Income is above the national Per Capital Income. HOWEVER: two census tracts, near Rifle, fall below the 80% threshold to meet EDA criteria.
- Based on additional data, the County faces challenges that are not fully reflected in the data and should be considered when considering Garfield County as a distressed County. These additional data points are presented throughout this report.

Based on EDA criteria, Garfield County **MEETS** the definition of distressed based on unemployment and Per Capita Income within Census Tract 9520.02 and Tract 9520.01.

Garfield County Fast Facts

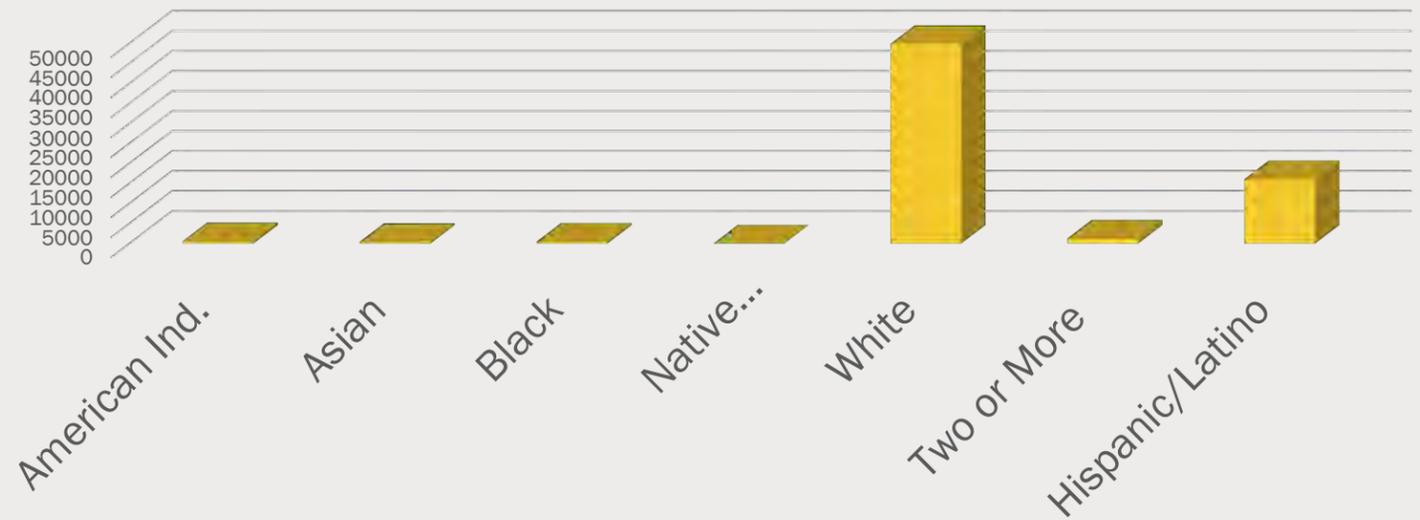
■ Total Population: 58,887

Education

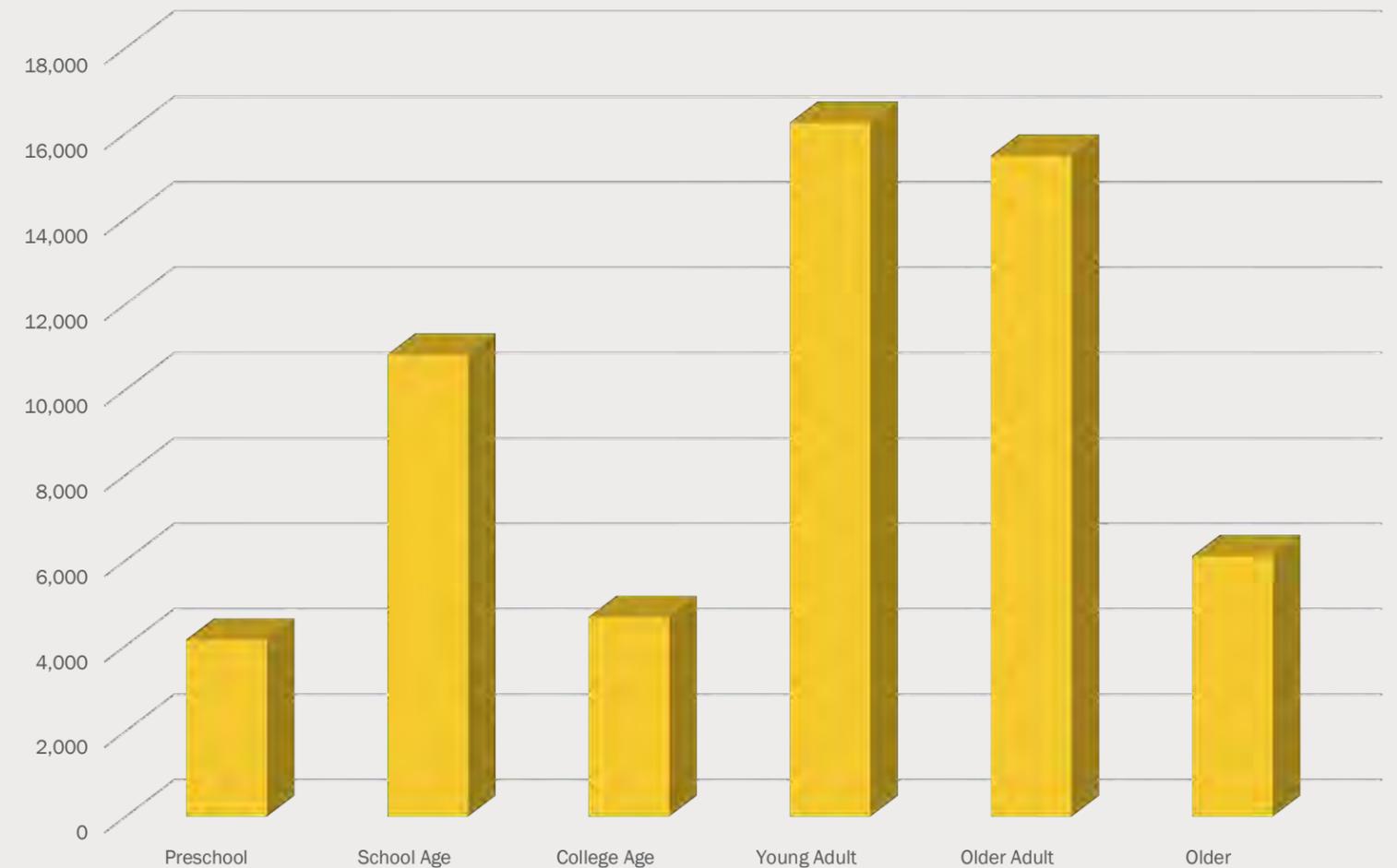


- Less than 9th Grade
- 9th to 12th, No Diploma
- High School Graduate (includes equiv.)
- Some College, No Degree
- Associate Degree
- Bachelor's Degree
- Graduate, Professional or Doctorate Degree

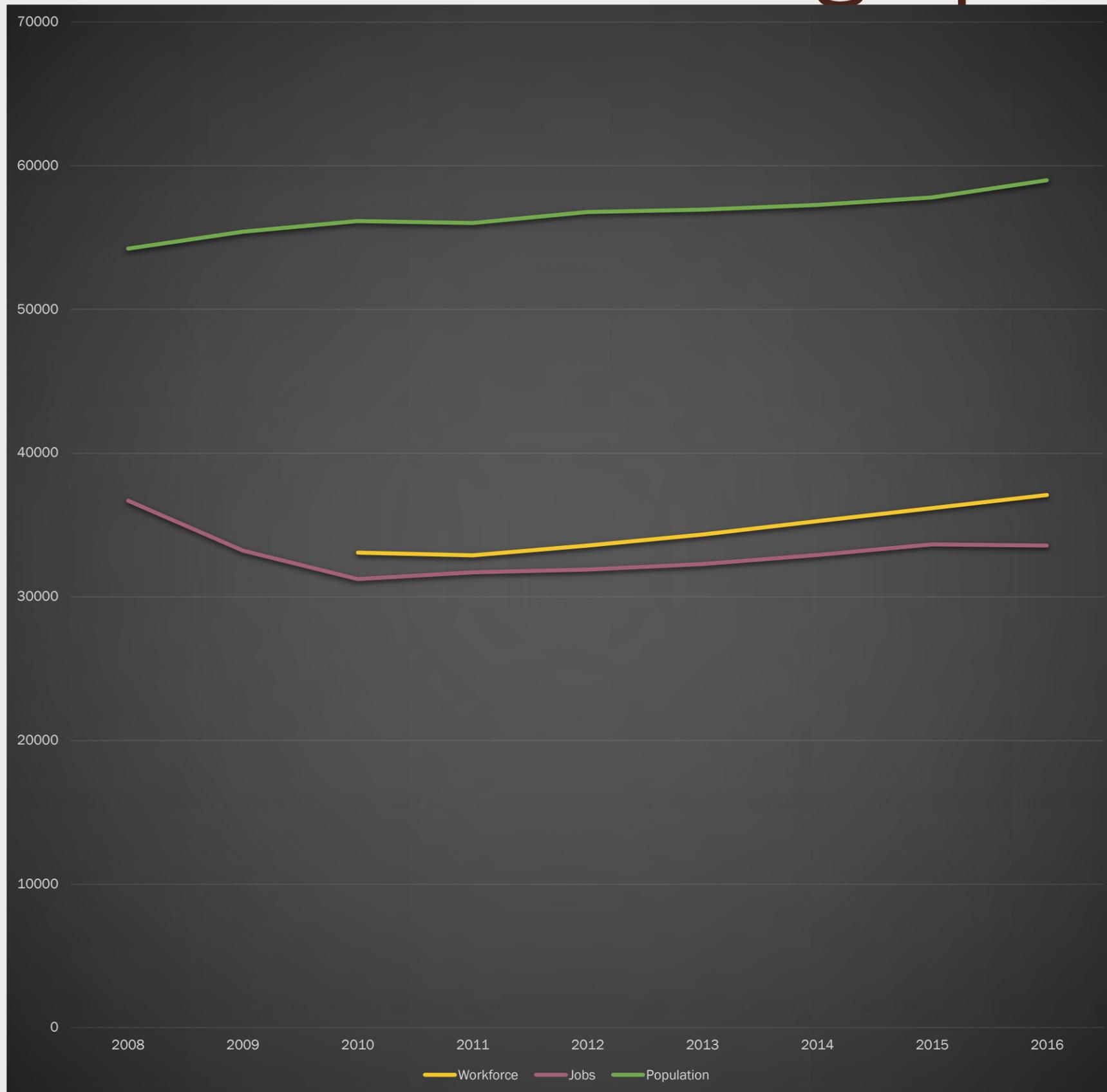
Race



Age



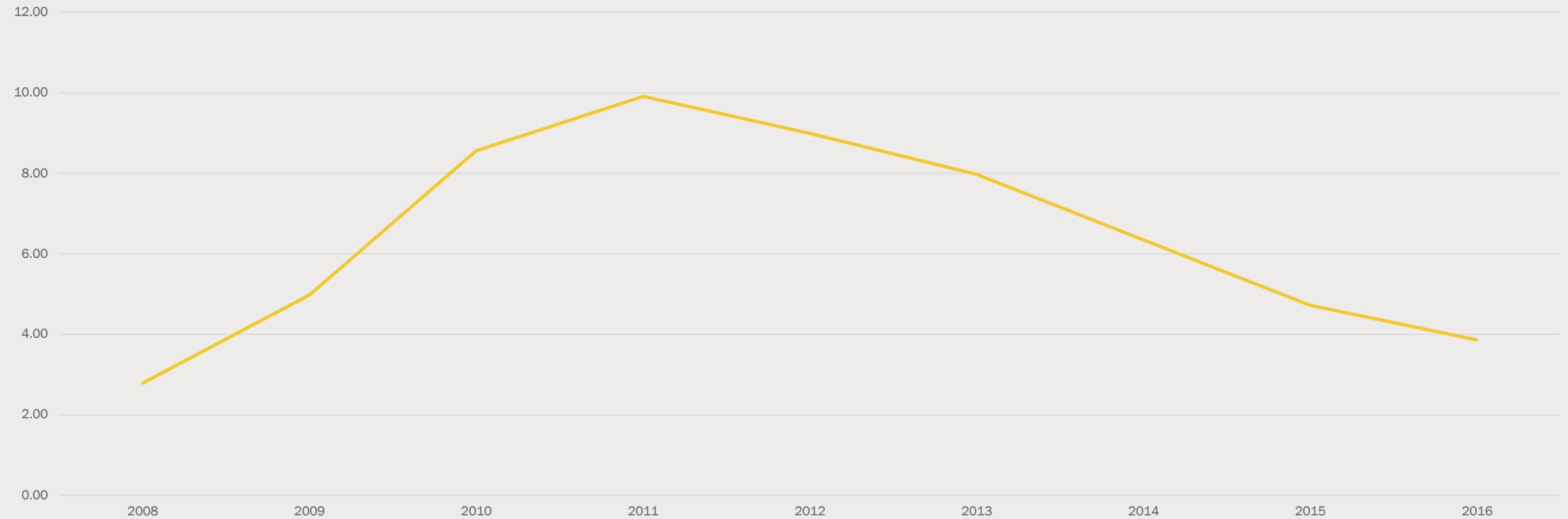
Workforce & Demographic Trends



Garfield County has seen an increase in workforce and population since 2008. While the county is experiencing job growth, the County has not returned to peak employment following the recession.

The County has more workforce than available jobs suggesting that workforce is seeking jobs outside the County.

Unemployment

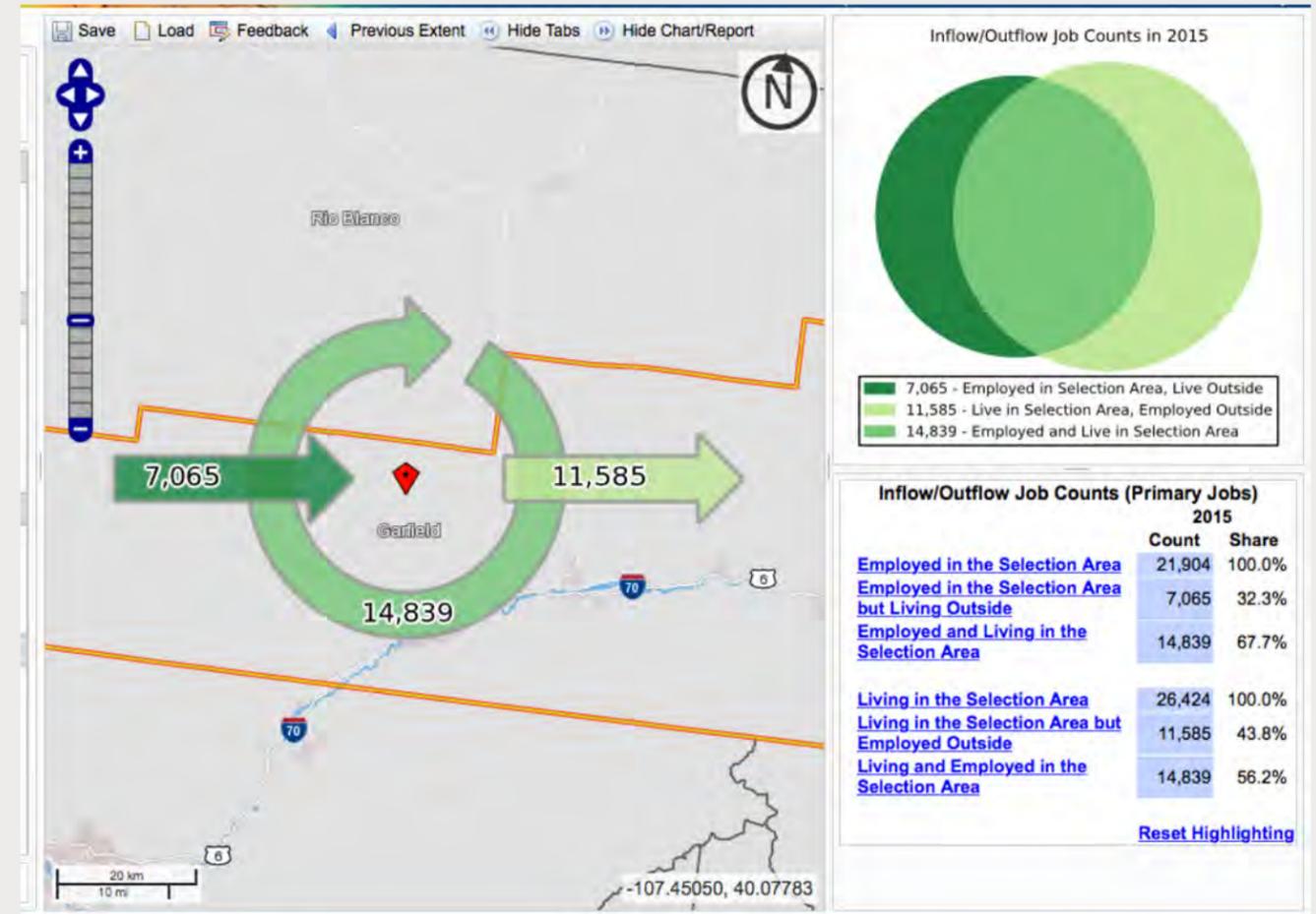


Garfield County has seen a steady decline in unemployment since peaking in 2011. The County's overall average unemployment is low, however; unemployment in the western side of the County, specifically around the Rifle area, is significantly higher than elsewhere in the County and exceeds the national average.

Commuting Patterns

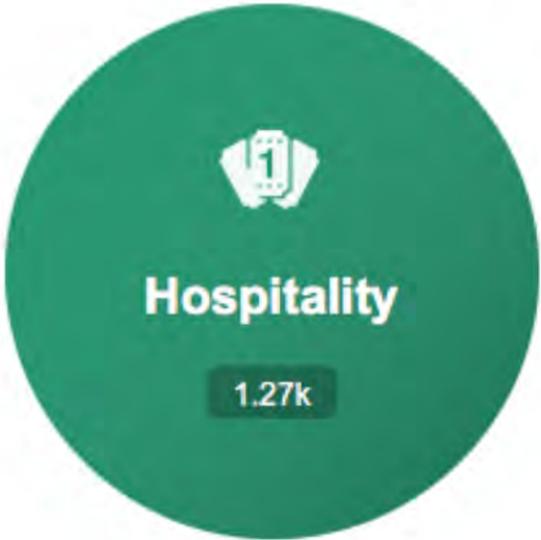
Garfield County exports a significant number of workers.

The County also imports many workers with only 67.7% of jobs being held by residents of Garfield County.

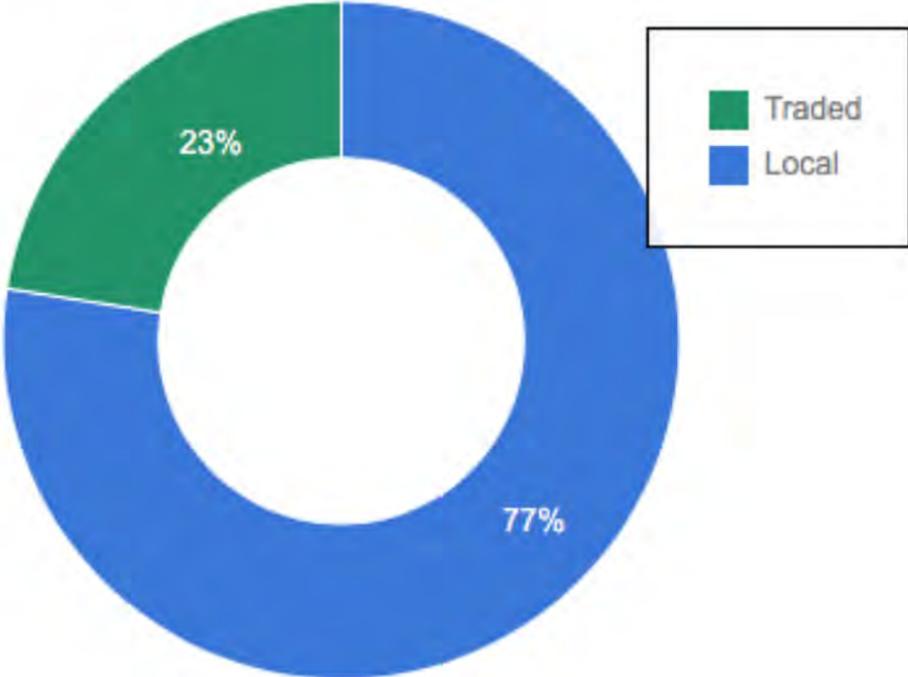


Cluster Analysis

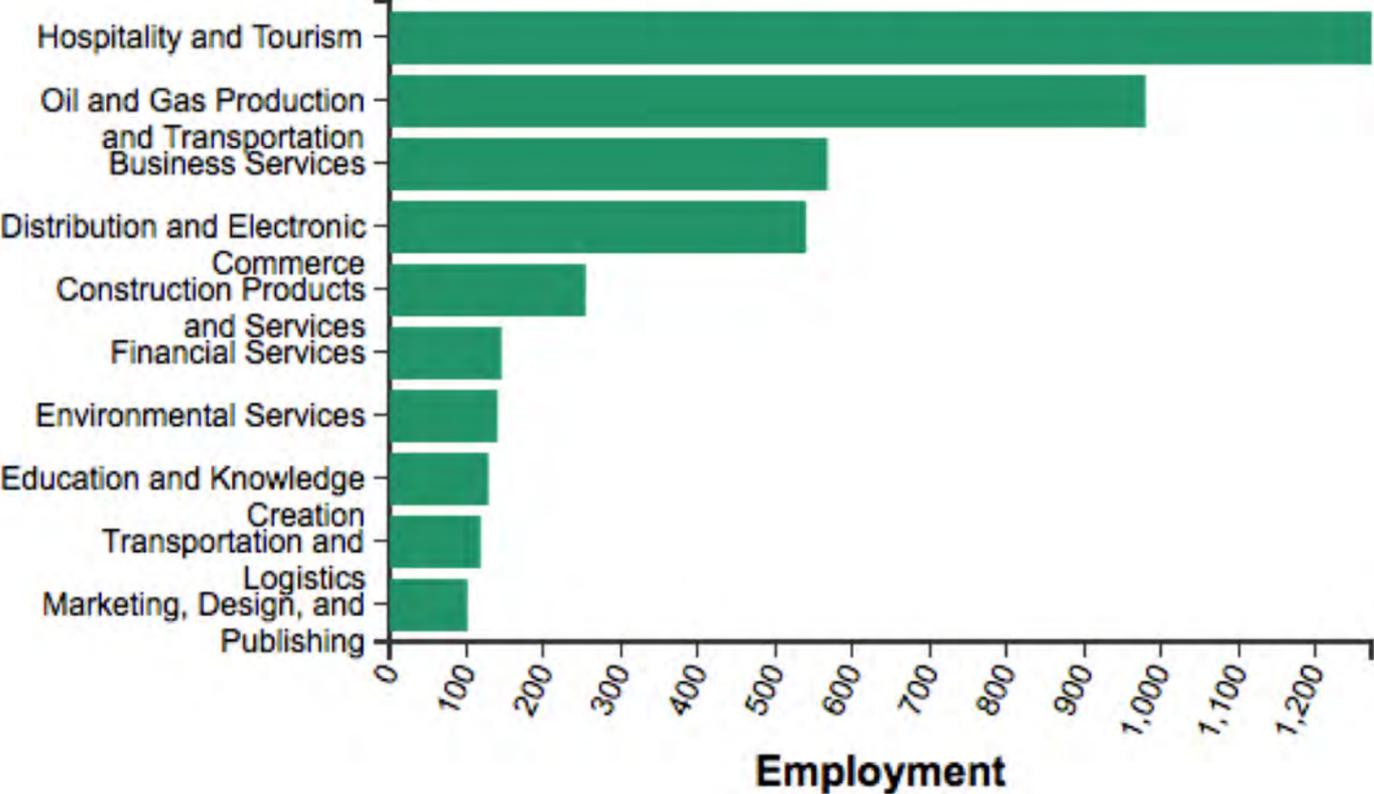
4
Traded
Clusters



Traded vs. Local Clusters



Top Clusters by Employment



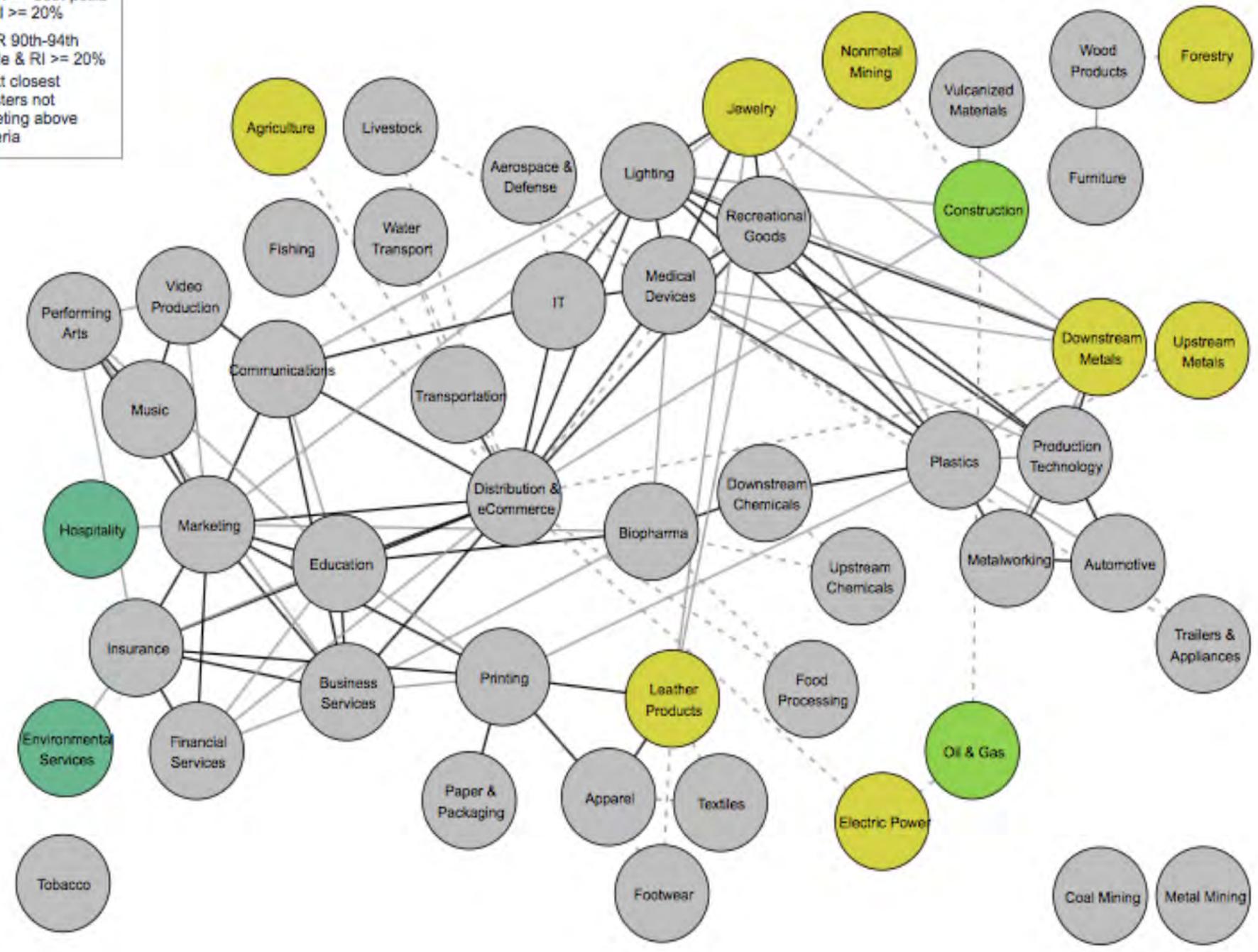


- Cluster Specialization**
- Strong clusters above 90th percentile specialization
 - Strong clusters above 75th percentile specialization
 - Other specialized clusters (LQ > 1.0)

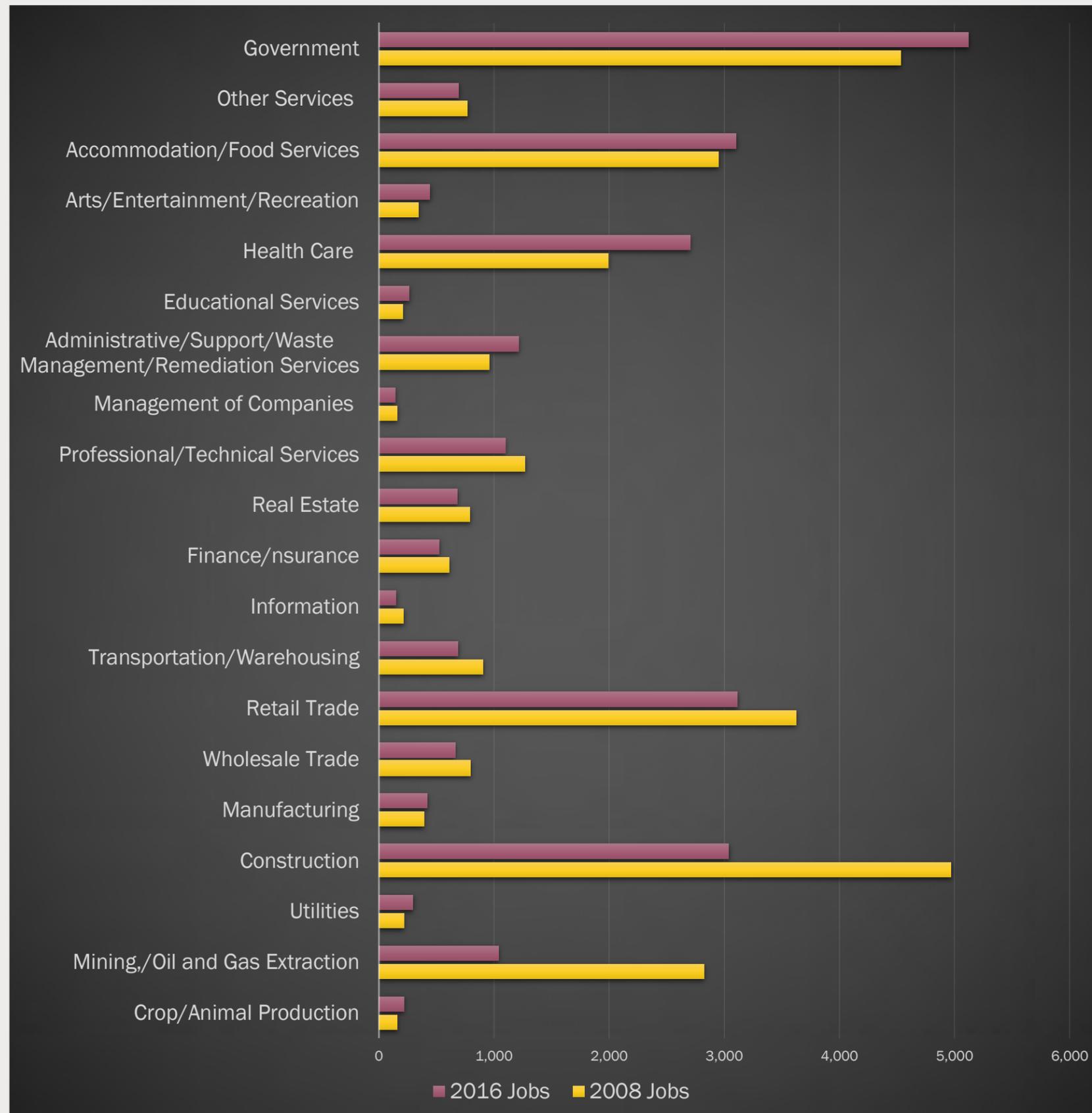
Cluster Linkages and Economic Diversification

Garfield County, CO, 2015

- BCR >= 95th pctile & RI >= 20%
- BCR 90th-94th pctile & RI >= 20%
- Next closest clusters not meeting above criteria



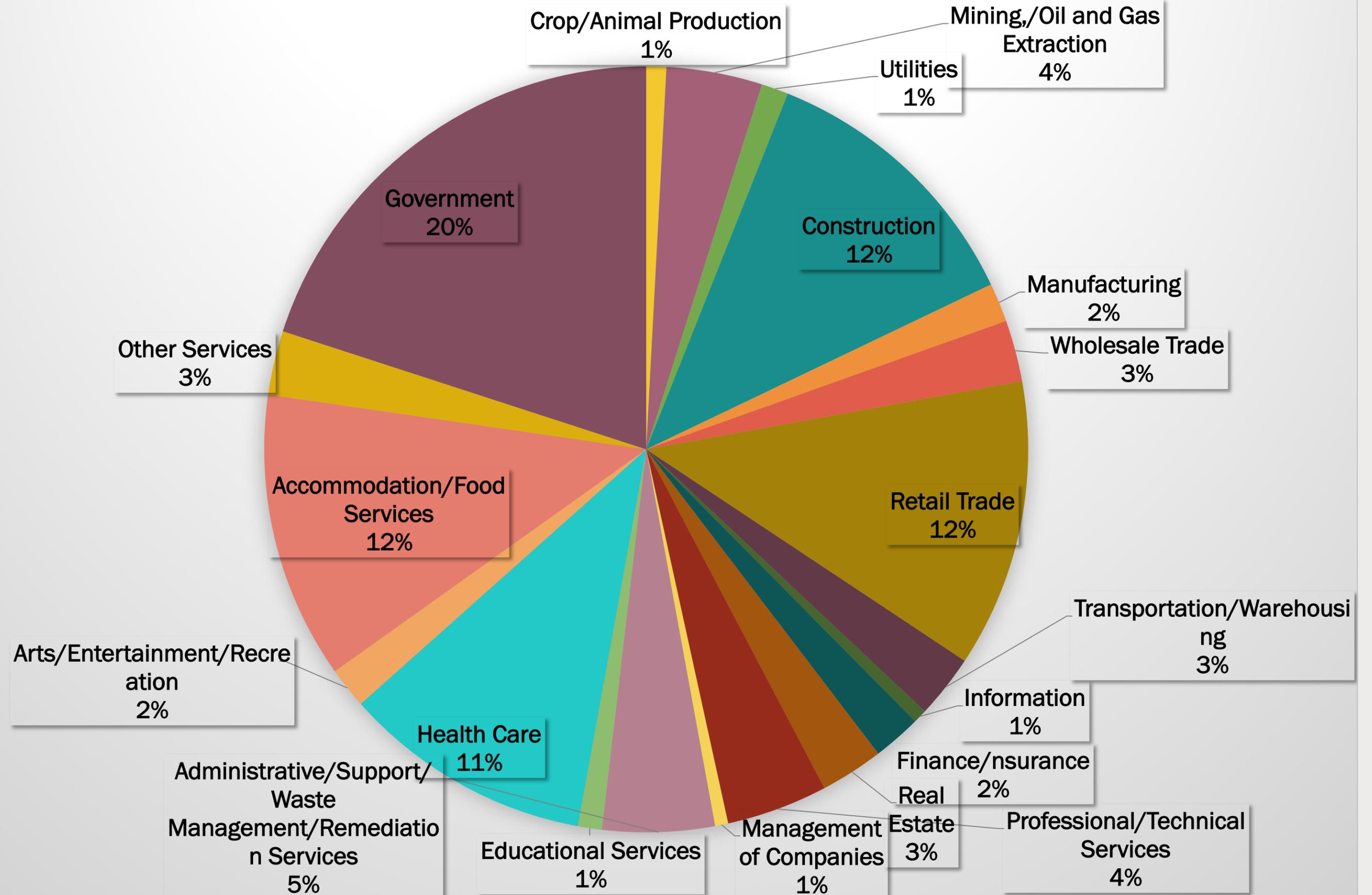
Job LOSS/GAIN by Sector



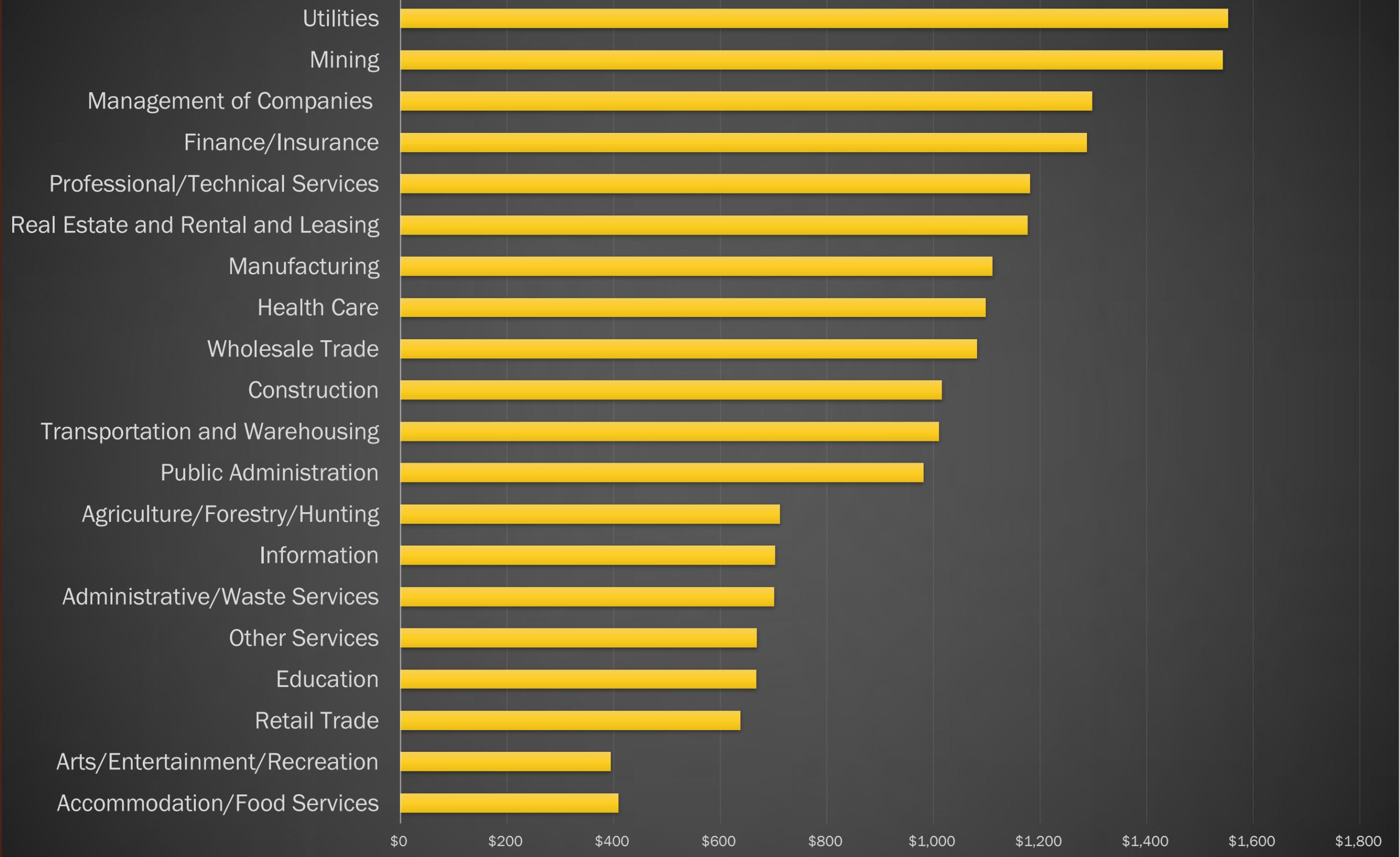
Garfield County has yet to regain peak employment, however; the County has seen positive job growth. The majority of that growth has occurred in Government, Health Care, Accommodations/Food Services, Retail and Administrative/Support/Waste Services. Slight growth has been seen in Utilities.

The jobs that have replaced lost jobs in Construction and Oil & Gas are primarily Accommodations/Food Service and Retail. These are the lowest wage earnings jobs in the County. Gains in Government have occurred too. These jobs are in the moderate wage range.

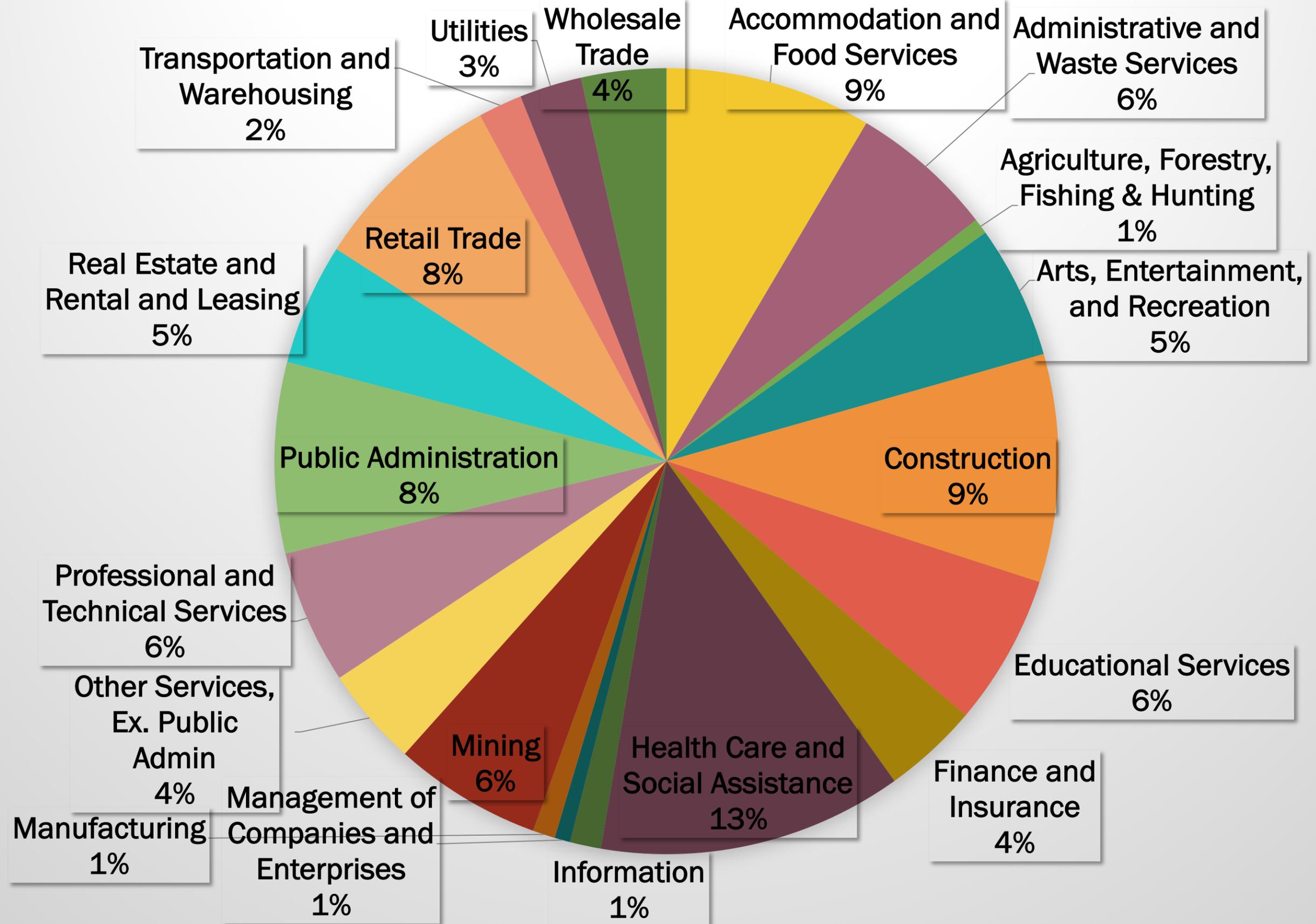
Share of Jobs by Industry



Wages by Industry



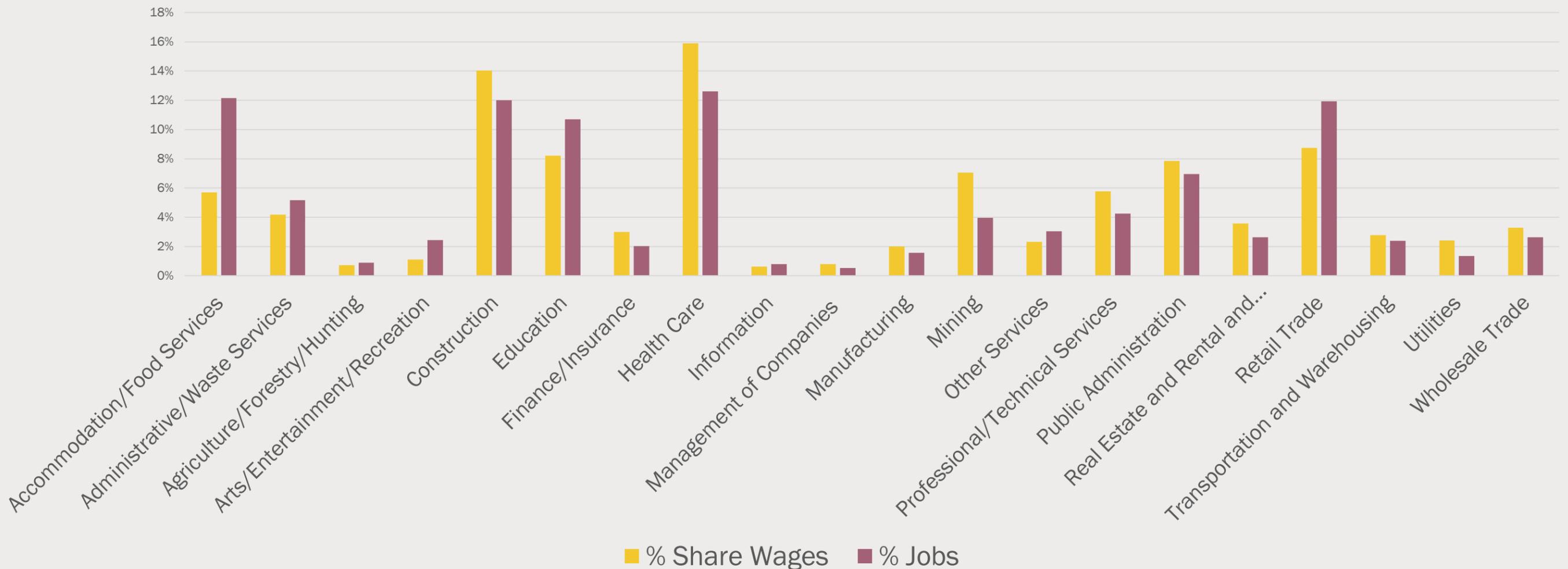
Share of Wages by Industry



The median family income in Garfield County is \$69,161 and the average wage per Garfield County job is \$46,684.

Construction accounts for 12% of total jobs but carries a slightly larger share of wages at 14%. Healthcare accounts for 13% of jobs but carries 16% of wages. Mining accounts for 4% of jobs and 7% of wages.

On the other side, Accommodations/Food Service accounts for 12% of the jobs but provides only 6% of wages. Retail Trade provides 12% of jobs and 9% of wages.



Employer & Non Employer Firms:

Non-employer firm data provides a snap shot into sole proprietor activity

Non-employer firms represent sole proprietors and other firms that do not have employees. Non-employer firms represent about 72% of all firms in Garfield County.

Nonemployer firms	6,108
Revenue of nonemployer firms (\$1,000)	\$304,584
Revenue per nonemployer firm (\$1,000)	\$50
Total number of employers and nonemployers	8,521

Employer establishments	2,413
Total employment of employers	19,633
Total annual payroll of employers (\$1,000)	\$924,244
Average employment per employer	8
Average payroll per employee	\$47,076
Population per employer	24

Agriculture

- 2016: 711 Jobs
- 2010: 659 Jobs
- Average Wage: \$711
- 2012 Market Value: \$22,670,000

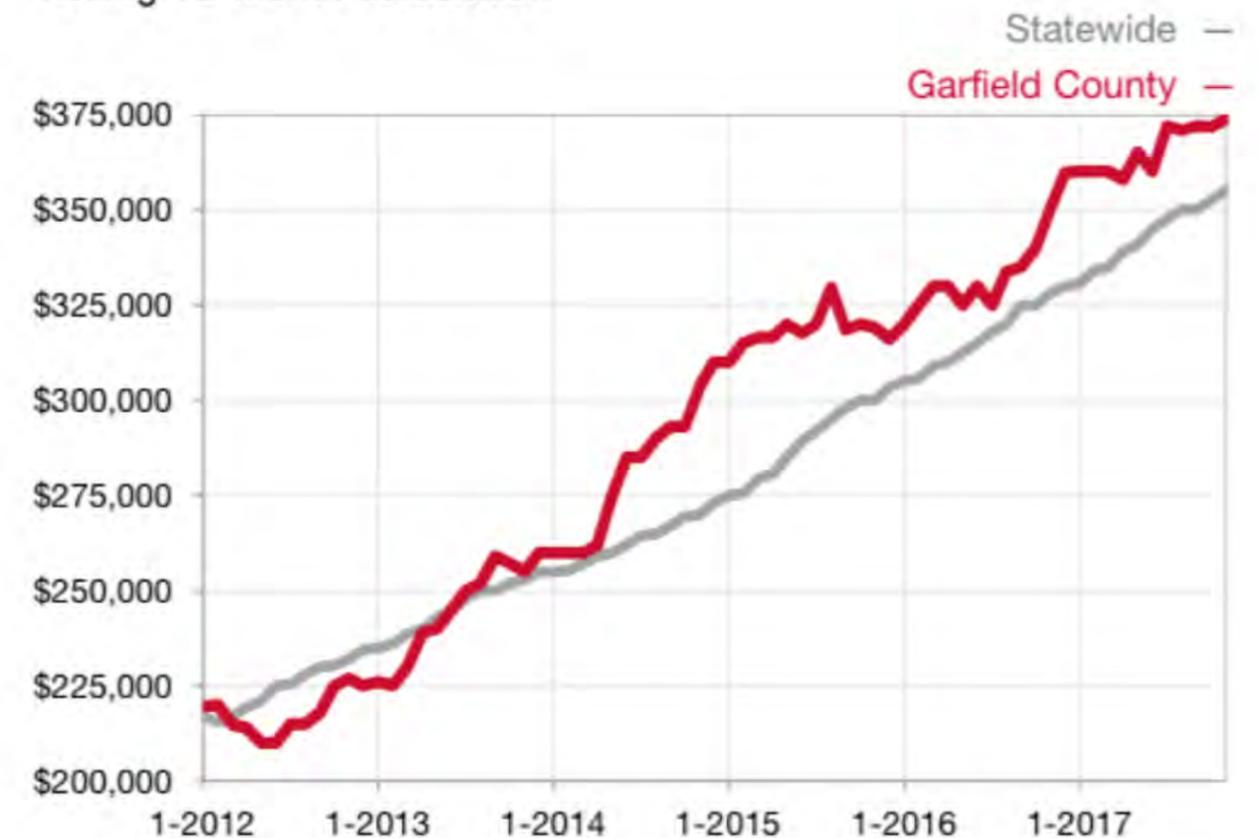
The USDA AG Census is conducted every five years. Between 2007 and 2012, Garfield County saw a slight increase in agricultural market value, an increase in the number of farms by two, but a decrease in the farmed acreage. From 2010 to 2016 the County also saw a slight increase in ag related jobs. Agriculture statewide is experiencing challenges as commodity prices drop. New USDA Census data will be available in 2019.

Housing

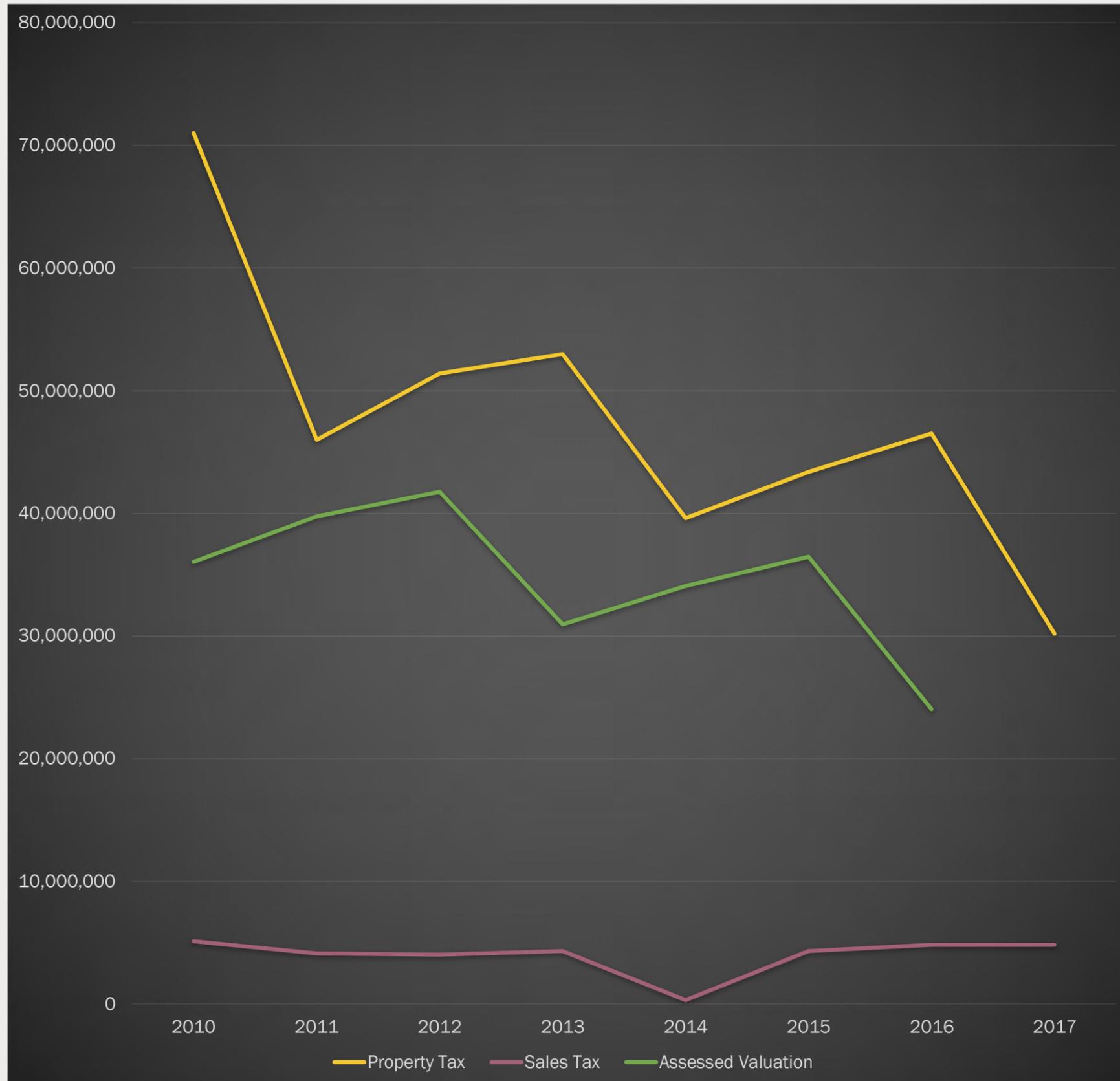
Single Family	November			Year to Date		
	2016	2017	Percent Change from Previous Year	Thru 11-2016	Thru 11-2017	Percent Change from Previous Year
New Listings	73	46	-37.0%	1,001	1,004	+0.3%
Sold Listings	61	57	-6.6%	669	670	+0.1%
Median Sales Price*	\$385,000	\$420,000	+9.1%	\$358,000	\$373,750	+4.4%
Average Sales Price*	\$482,511	\$441,376	-8.5%	\$424,564	\$435,722	+2.6%
Percent of List Price Received*	97.1%	97.7%	+0.6%	97.7%	97.6%	-0.1%
Days on Market Until Sale	103	63	-38.8%	94	77	-18.1%
Inventory of Homes for Sale	341	273	-19.9%	--	--	--
Months Supply of Inventory	5.6	4.6	-17.9%	--	--	--

- In 2017 the Median Sales Price of a single family residence was \$435,722.
- The Median Household Income for Garfield County is \$69,161
- An income of about \$134,429 is needed to purchase a home in the median price range.
- Garfield County's median income is 1.9 times lower than the necessary average income.
- Garfield County housing values are increasing at a pace similar to the rest of the state.
- Affordability of housing is a key economic issue for Garfield County

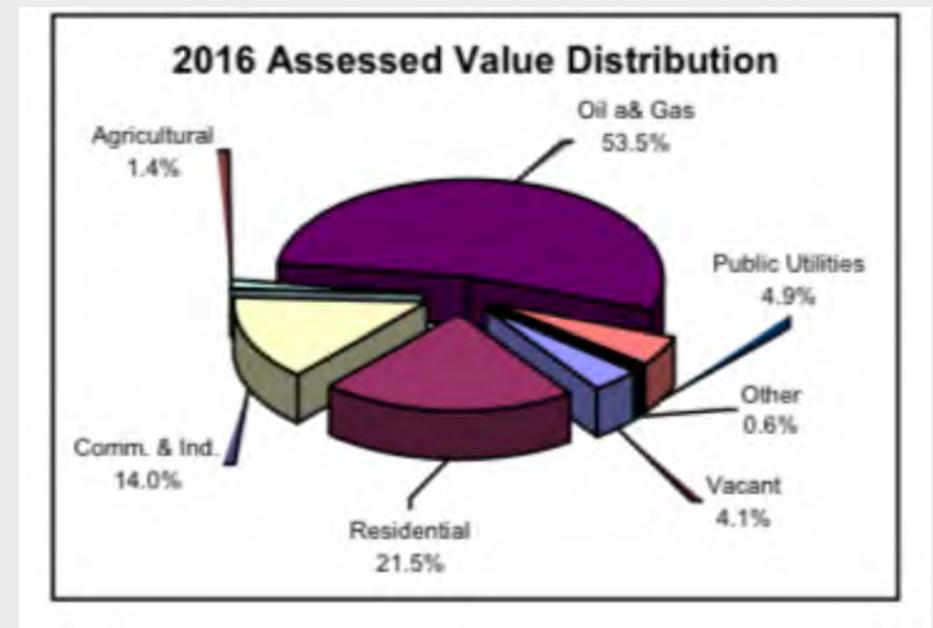
Median Sales Price – Single Family
Rolling 12-Month Calculation



Tax Base

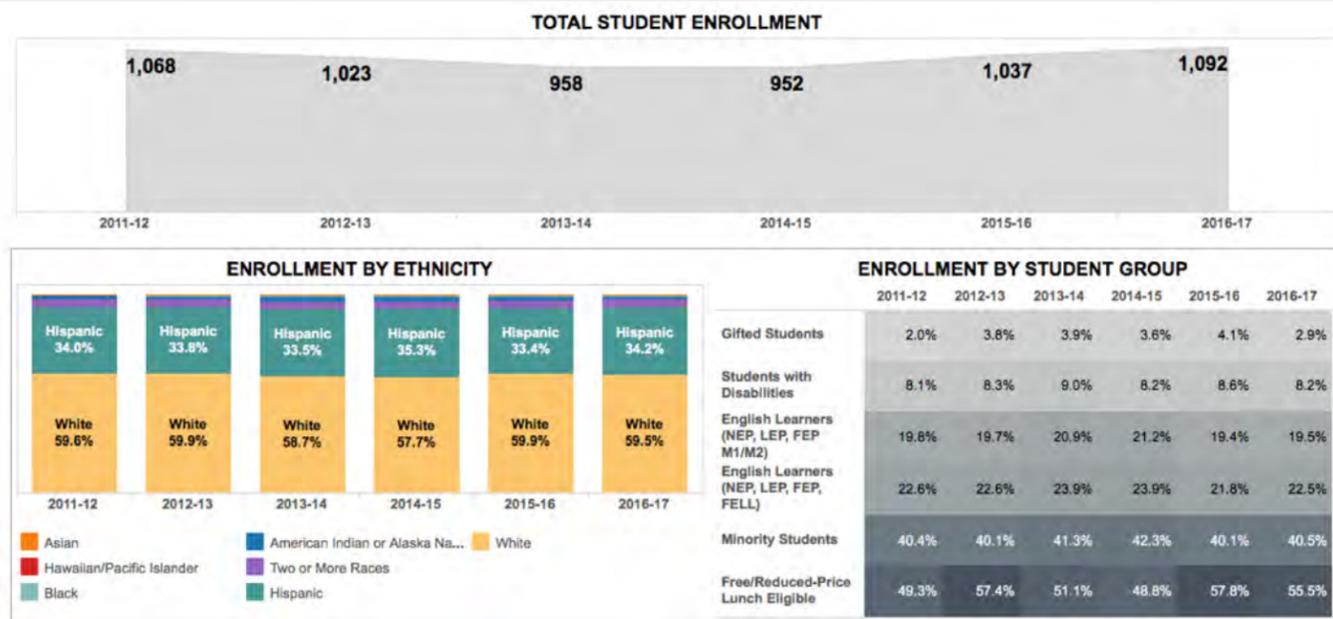


Garfield County has seen a drastic decrease in property taxes and assessed valuation. 53.3% of the County's assessed value is directly connected to Oil & Gas. Much of this value is based on oil and gas production as well as commodities prices. Wells lose production capability over time. New wells are not being drilled as frequently as in the past to keep total production up. Commodities prices remain low. These elements combine and result in reduced value for oil and gas production and therefore reduced property tax collection.



EDUCATION

Garfield 16



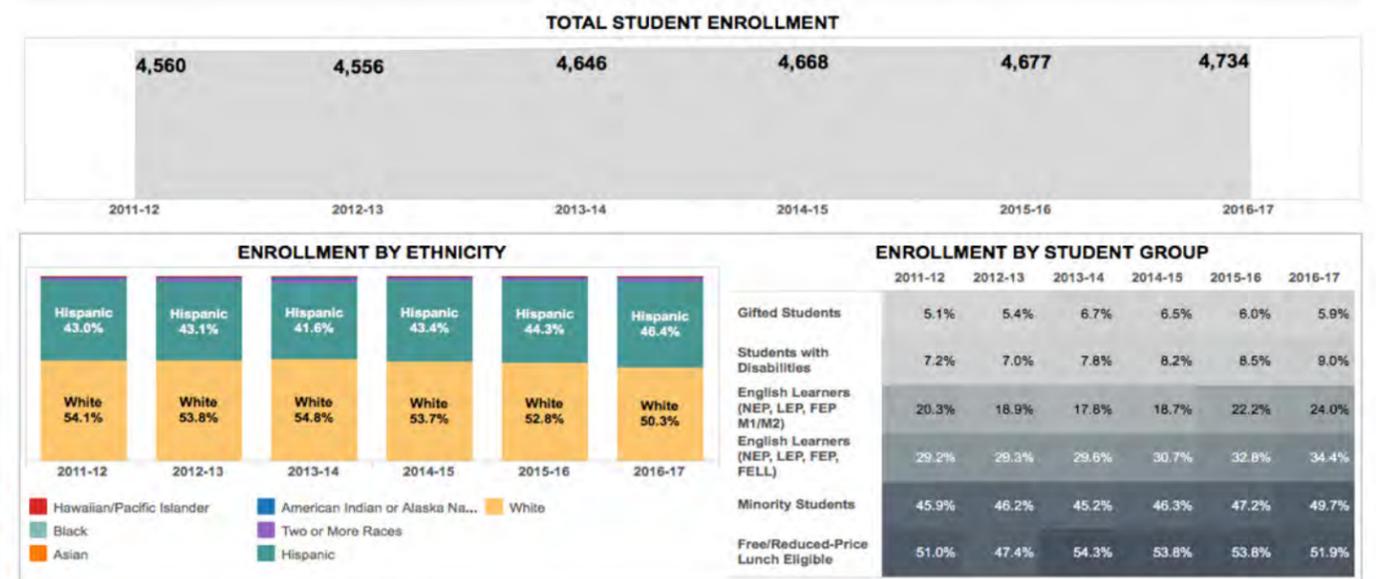
Attendance and Mobility Rates
 The rates displayed here reflect information collected by CDE's Data Services Unit, which is published on the CDE Education Statistics page. The orange lines indicate the overall state rates for each year. Mobility rates reflect revised calculation methodology implemented in 2013. See here for additional details: <https://www.cde.state.co.us/cdereval/mobility-stabilitycurrent>



Garfield County schools have more diversity in Hispanic and non Hispanic students compared to other counties in the region.

Both school districts in the County have large portions of the student population qualifying for free and reduced lunch, which is an indicator of poverty. Many of Garfield County's jobs are in those lower paying sectors such as accommodations/food/retail.

Garfield 2

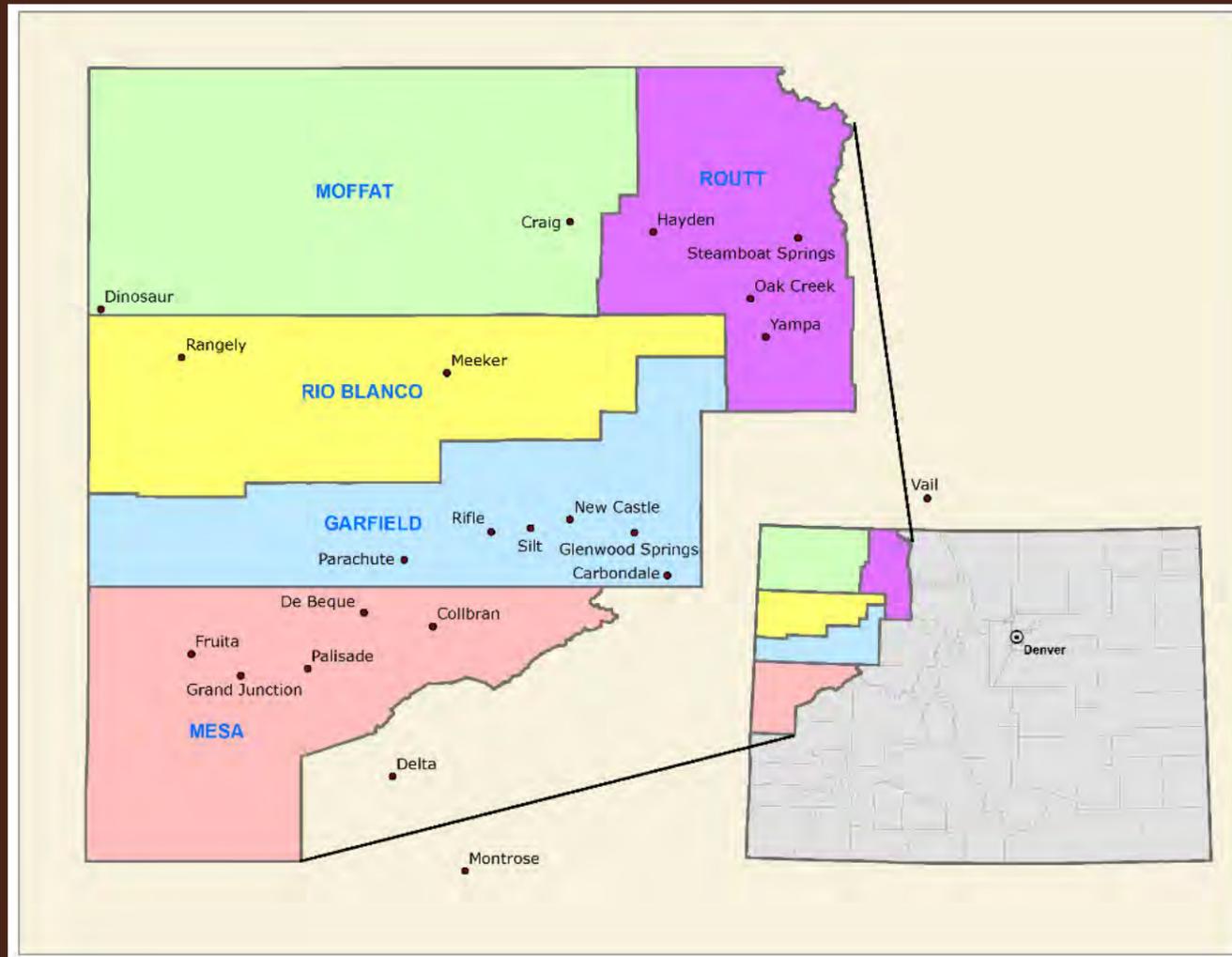


Attendance and Mobility Rates
 The rates displayed here reflect information collected by CDE's Data Services Unit, which is published on the CDE Education Statistics page. The orange lines indicate the overall state rates for each year. Mobility rates reflect revised calculation methodology implemented in 2013. See here for additional details: <https://www.cde.state.co.us/cdereval/mobility-stabilitycurrent>



Conclusions

- Garfield County has a relatively diverse economy, but is showing signs of distress especially around the Rifle area.
- Housing costs exceed what an average family can afford.
- Job gains in Garfield County since 2008 have been in lower wage sectors. However, Per Capita income has increased since 2008 suggesting that income/wealth is coming from other sources such as investment, retirement, etc.
- Garfield County's tax base is at risk based on retraction in the oil and gas industry.



MOFFAT COUNTY

Intent of this report

- Provide a defensible case to EDA that Region 11 meets the established criteria for distress to qualify the Region to apply to become an Economic Development District.
- Establishment of baseline data that can easily be monitored and tracked over time using tools and data available utilizing tools through Stats America, Community Survey, Bureau Labor Statistics, and the Colorado State Demographer.

EDA Distress Criteria

- An unemployment rate that is, for the most recent 24-month period for which data are available, at least one percentage point greater than the national average unemployment rate.
 - *Currently National Unemployment Rate is 4.68%*
- Per Capita income that is for the most recent period for which data is available, 80% or less of the of the national average per capita income.
- Special Need

DISTRESS CRITERIA STATISTICAL REPORT

Reference Date: 12 / 2017 (All data elements refer to this date or earlier.)
 Region Consists of: Moffat Co. CO
 Report Date: 2/23/2018 1:57:17 PM

Economic Distress Criteria—Primary Elements

	Region	U.S.	Threshold Calculations
24-month Average Unemployment Rate (BLS) period ending December 2017	3.62	4.61	-0.99
2016 Per Capita Money Income (5-year ACS)	\$26,344	\$29,829	88.32%
2016 Per Capita Personal Income (BEA)	\$39,244	\$49,246	79.69%

Moffat County has lost ground in Per Capita Income in comparison to the National Per Capita Income. In 2008, Moffat County was at 84.31% of the National Per Capita Income compared to 79.69% today. Poverty rates have grown 30.3% since 2000. This report will explore the data that is contributing to the decline in the Moffat County economy and subsequent increase in key distress measures.

- Moffat County Per Capita Income is 79.69% of the National Per Capita Income.
- Moffat County's 24 Month Average Unemployment Rate is lower than the National Average at 3.62%.
- Based on EDA criteria, Moffat County **MEETS** the definition of distressed based on Per Capita Income.

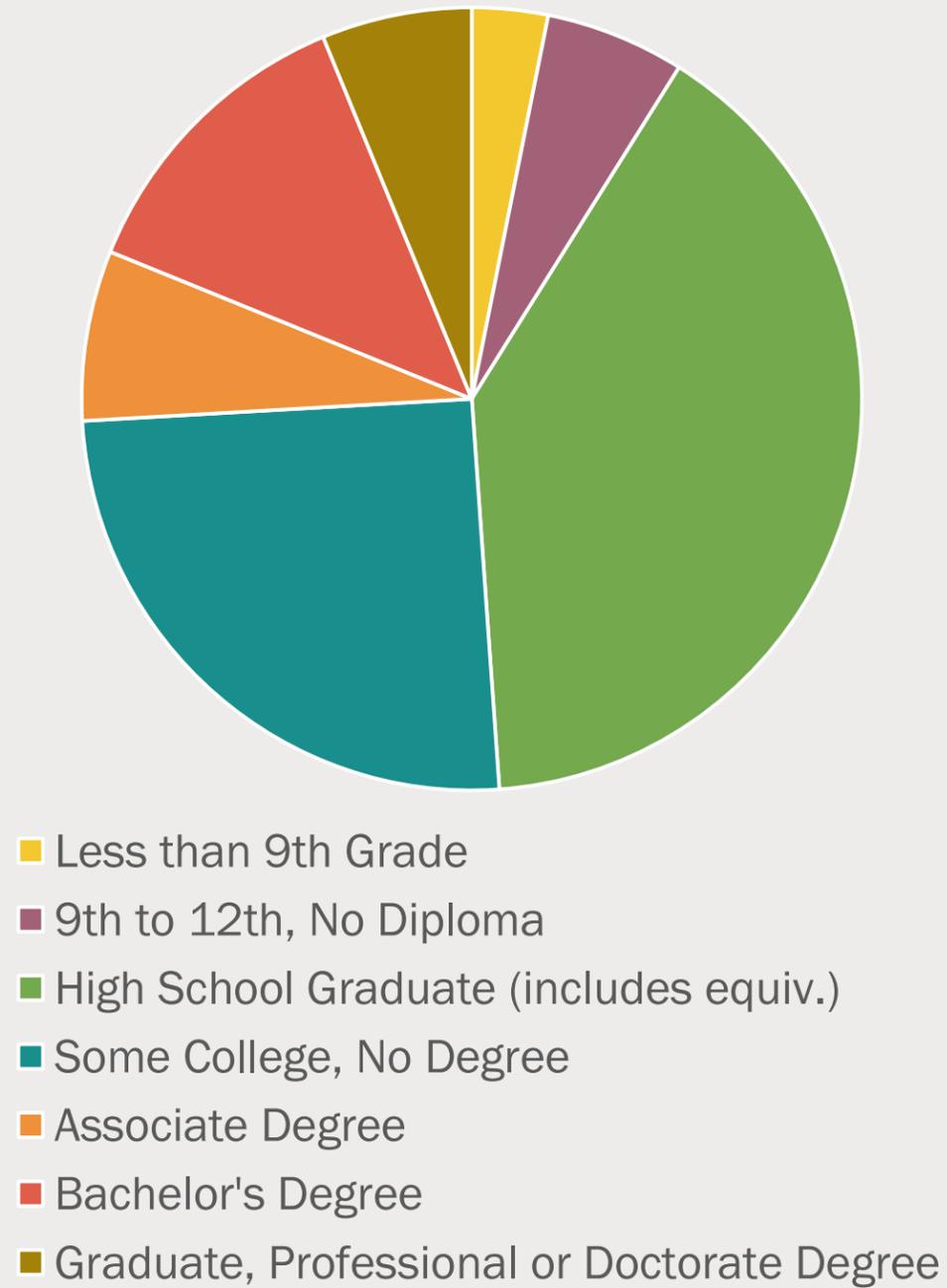
Poverty Estimates	Number	Rank in U.S.	Percent Change	Rank in U.S.
Poverty Rate in 2016	12.9	<u>1,984</u>	--	--
In 2000	9.9	<u>2,187</u>	44.9 %	<u>1,032</u>
Poverty Rate for Children under 18 in 2016	16.9	<u>2,173</u>	--	--
In 2000	12.0	<u>2,481</u>	38.5 %	<u>659</u>

Source: U.S. Census Bureau

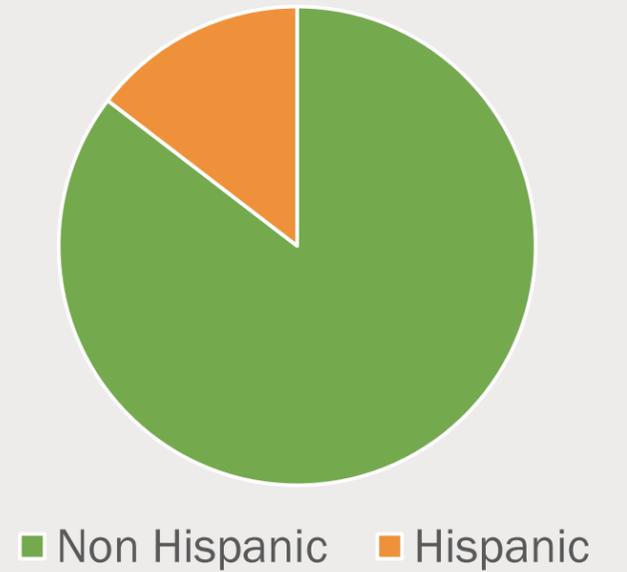
Moffat County Fast Facts

■ Total Population: 13,109

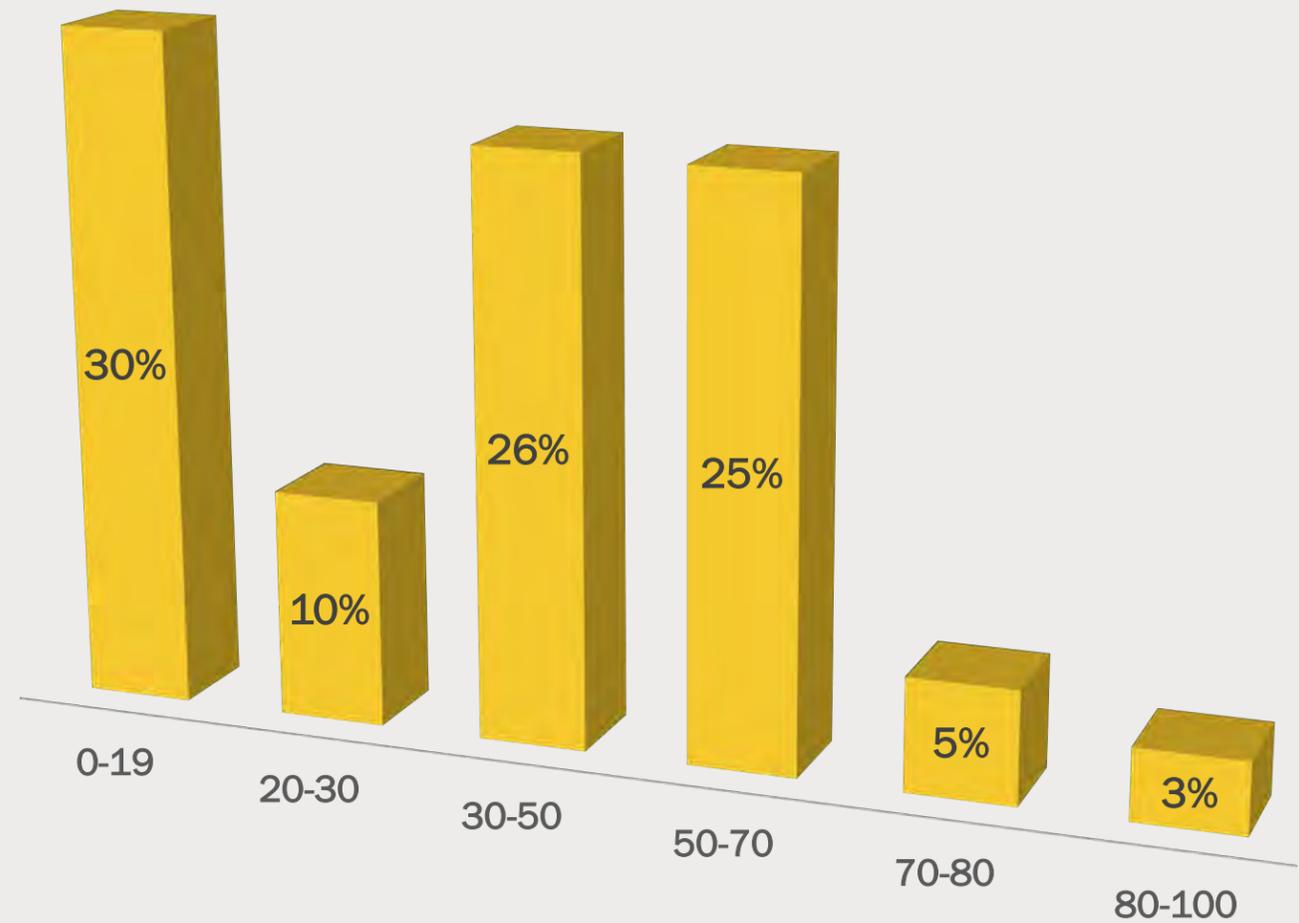
Education



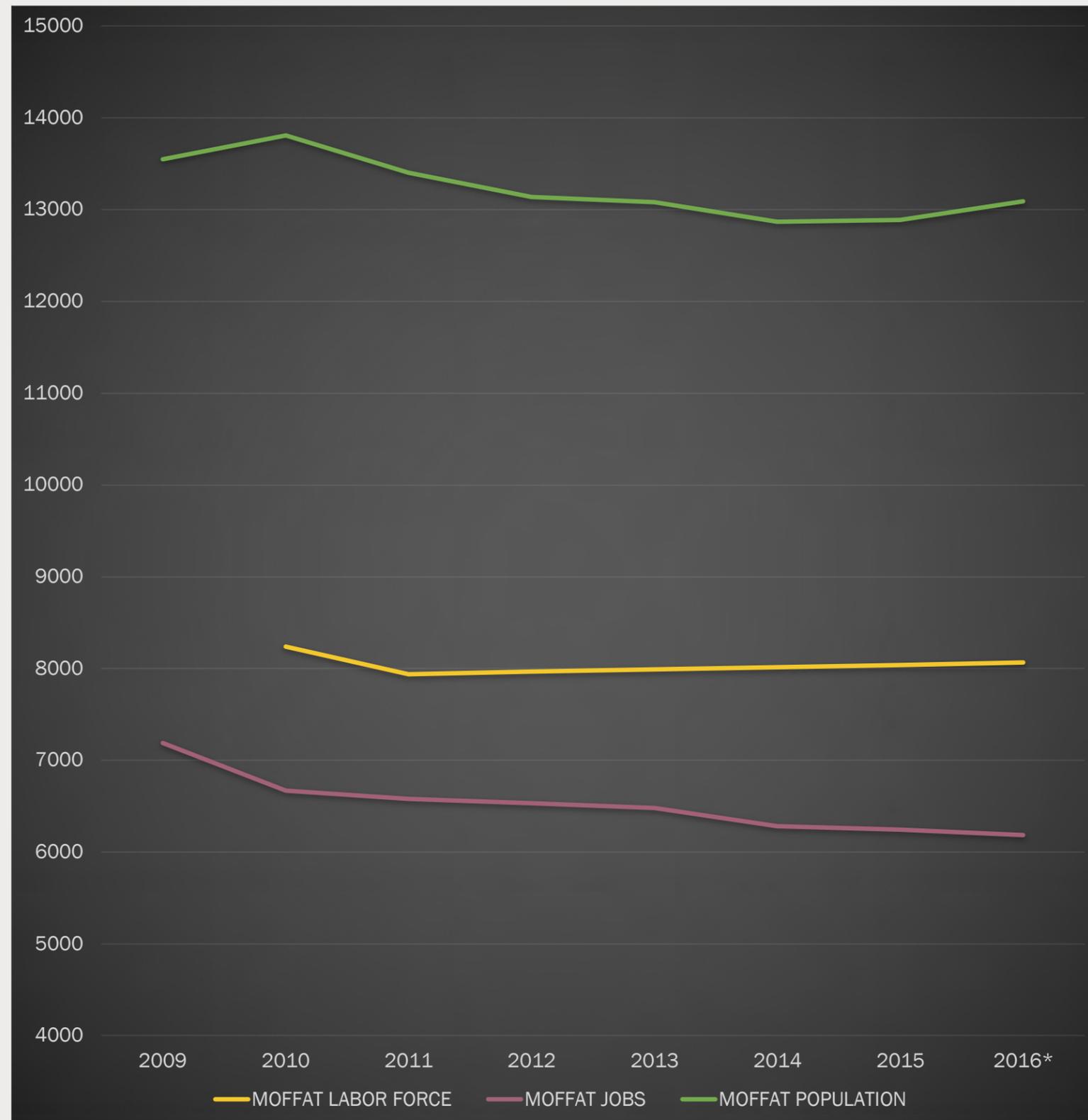
Race



Age Distribution



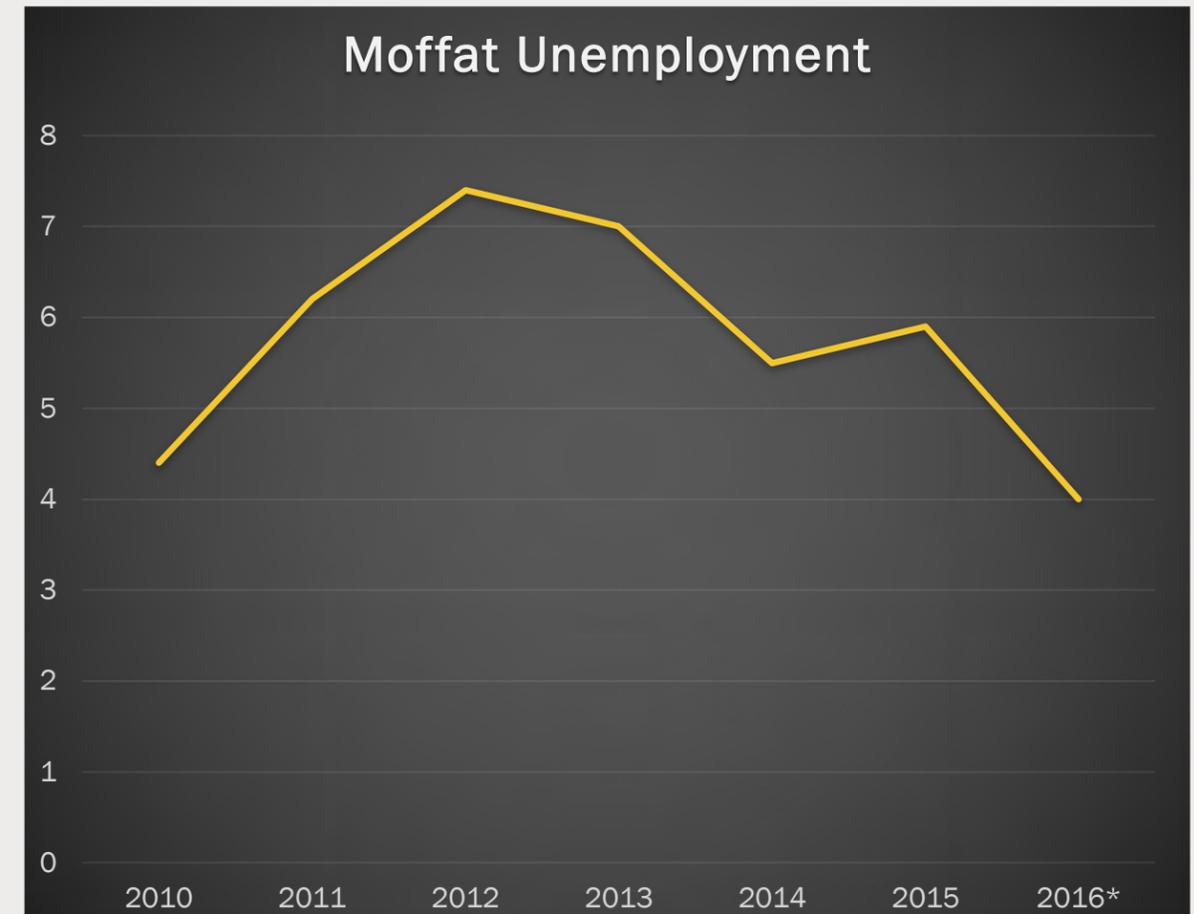
Workforce & Demographic Trends



Moffat County has experienced a decline in population since 2010. In the same time period, the County has lost both work force and total jobs. The County's work force decreased by 274 jobs between 2010-2013. Workforce increased slightly between 2013-2016, but overall work force remains below 2010 numbers by 173. In the same time period, the County's total jobs decreased from peak in 2009 by 1003.

Meanwhile, the County's population has decreased from peak by 719 people. There has been a slight increase in population in 2015-2016, but the County has not reached peak population again, and jobs continue to decline.

At the same time that job loss begins to occur between 2009-2013, the County's unemployment levels begin to climb. As population begins to move out, the unemployment rates begin decreasing steadily in 2013. There are fewer jobs and fewer people looking for those jobs than previous. Had residents remained in the area, more people would be looking for work, which in turn would have kept the unemployment rates higher.



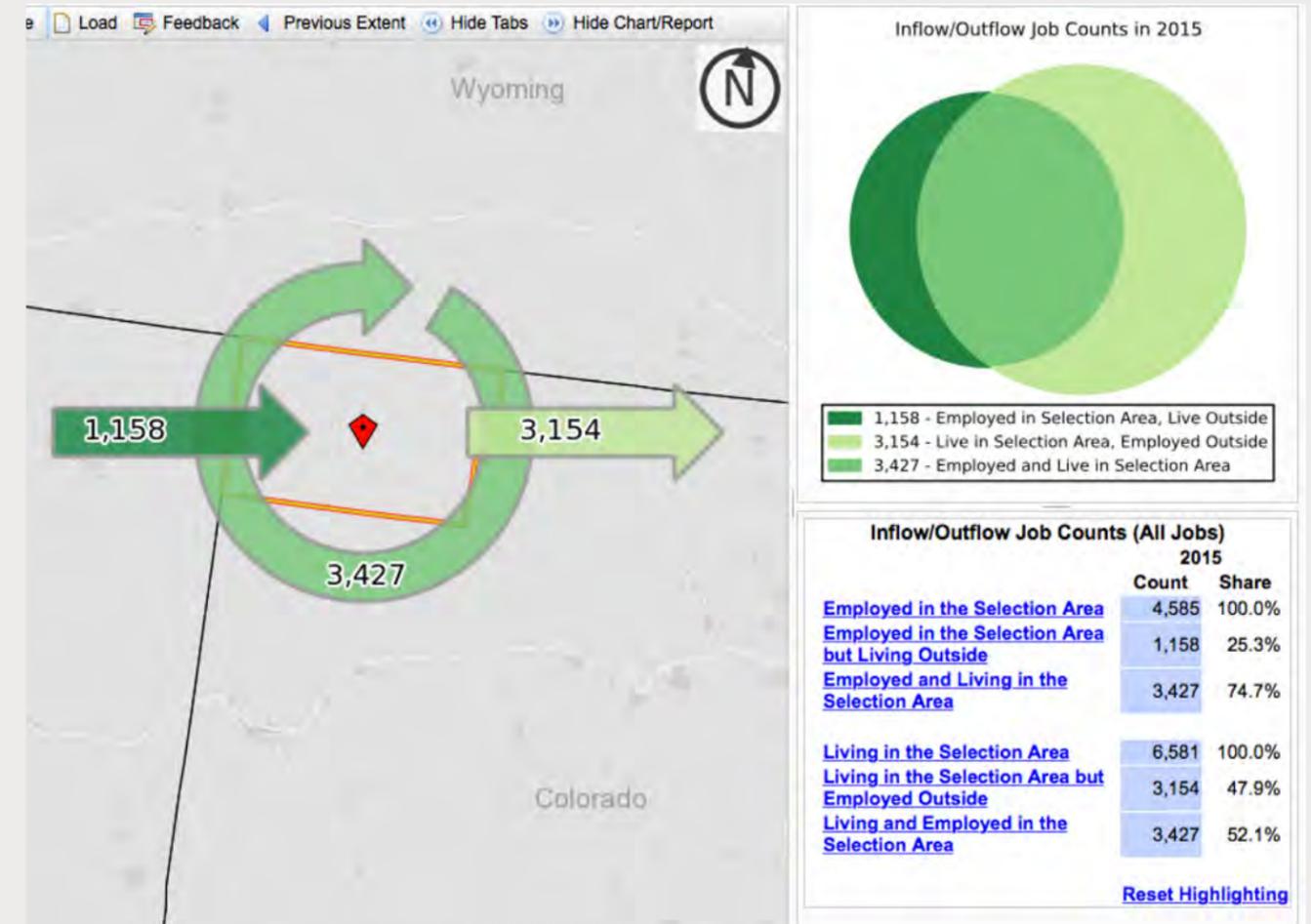
Moffat County has more labor force than available jobs. Unemployment though is low. Moffat County residents are finding work outside of Moffat County, creating commuting patterns with its neighbors to the north, east, south, and west.

Commuting Patterns

Knowing that Moffat County has more workforce than available total jobs, it makes sense that workers are finding employment in neighboring counties.

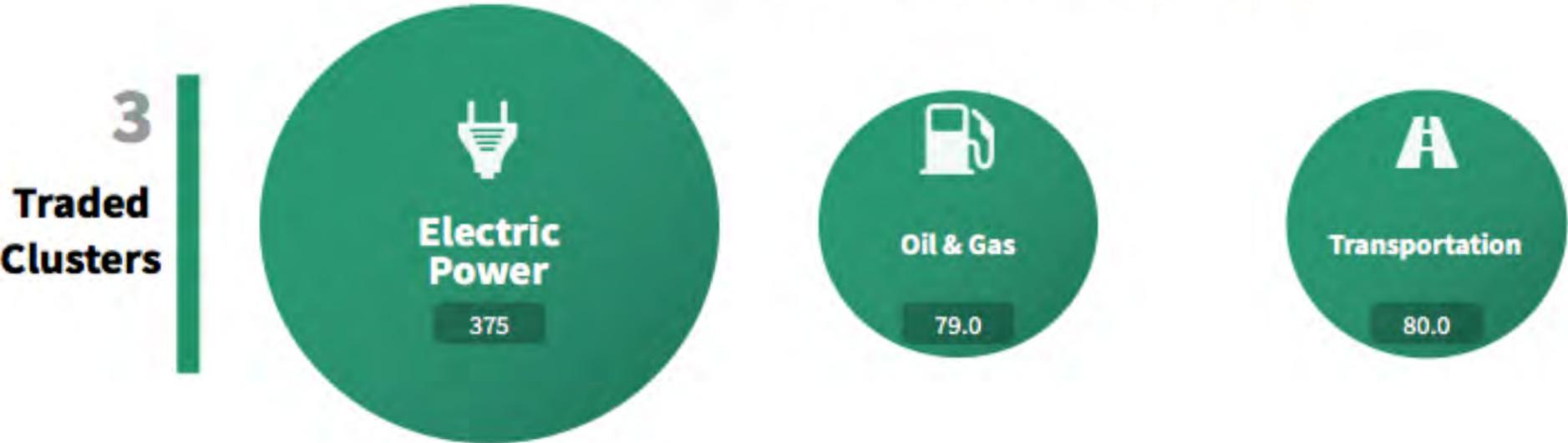
Moffat County is also importing workers from neighboring communities.

A little less than half of Moffat County's work force leaves the county for employment. A little more than half of the work force lives and works in Moffat County, and more than 1,000 jobs are filled by workers commuting into Moffat County.

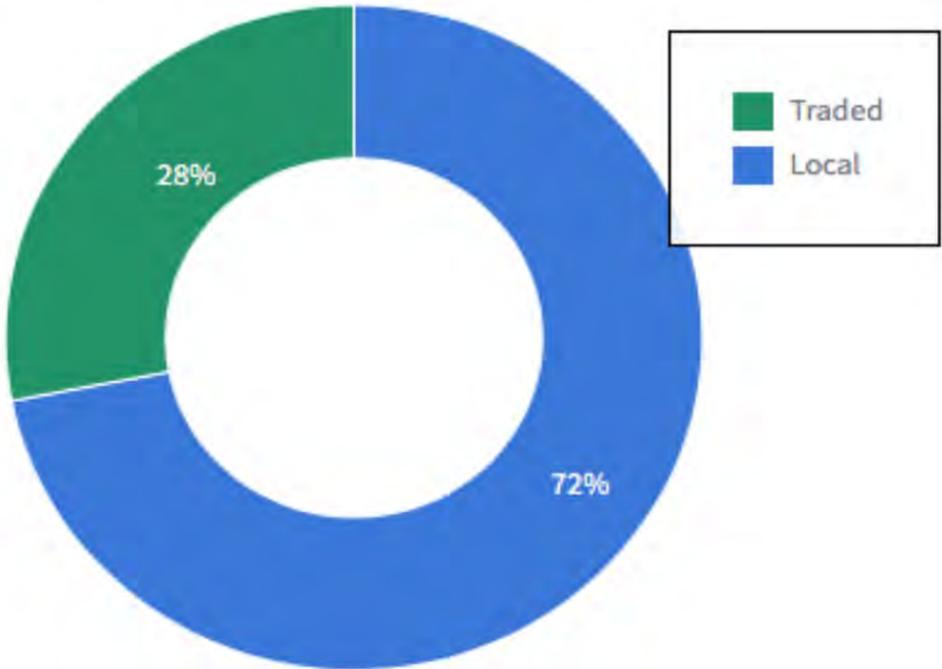


Cluster Analysis

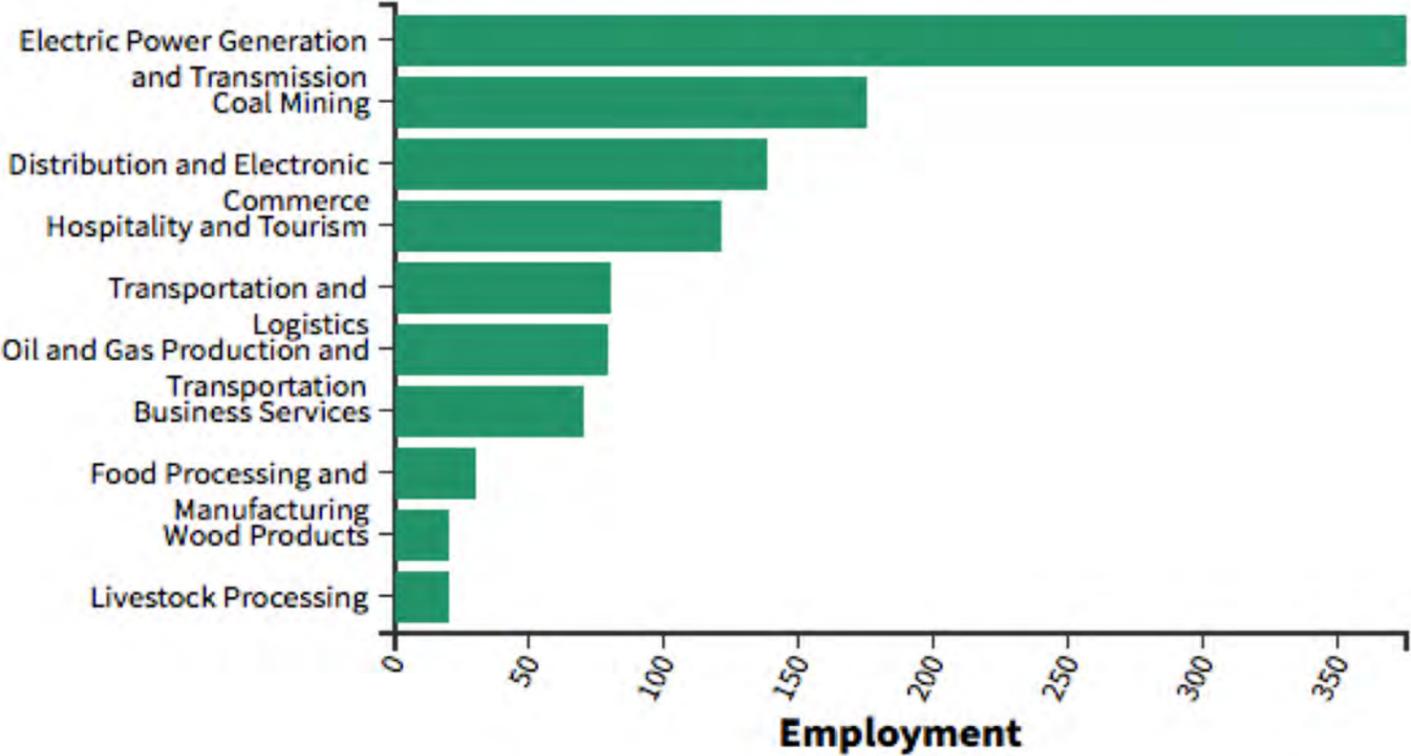
Cluster Portfolio, 2015



Traded vs. Local Clusters



Top Clusters by Employment

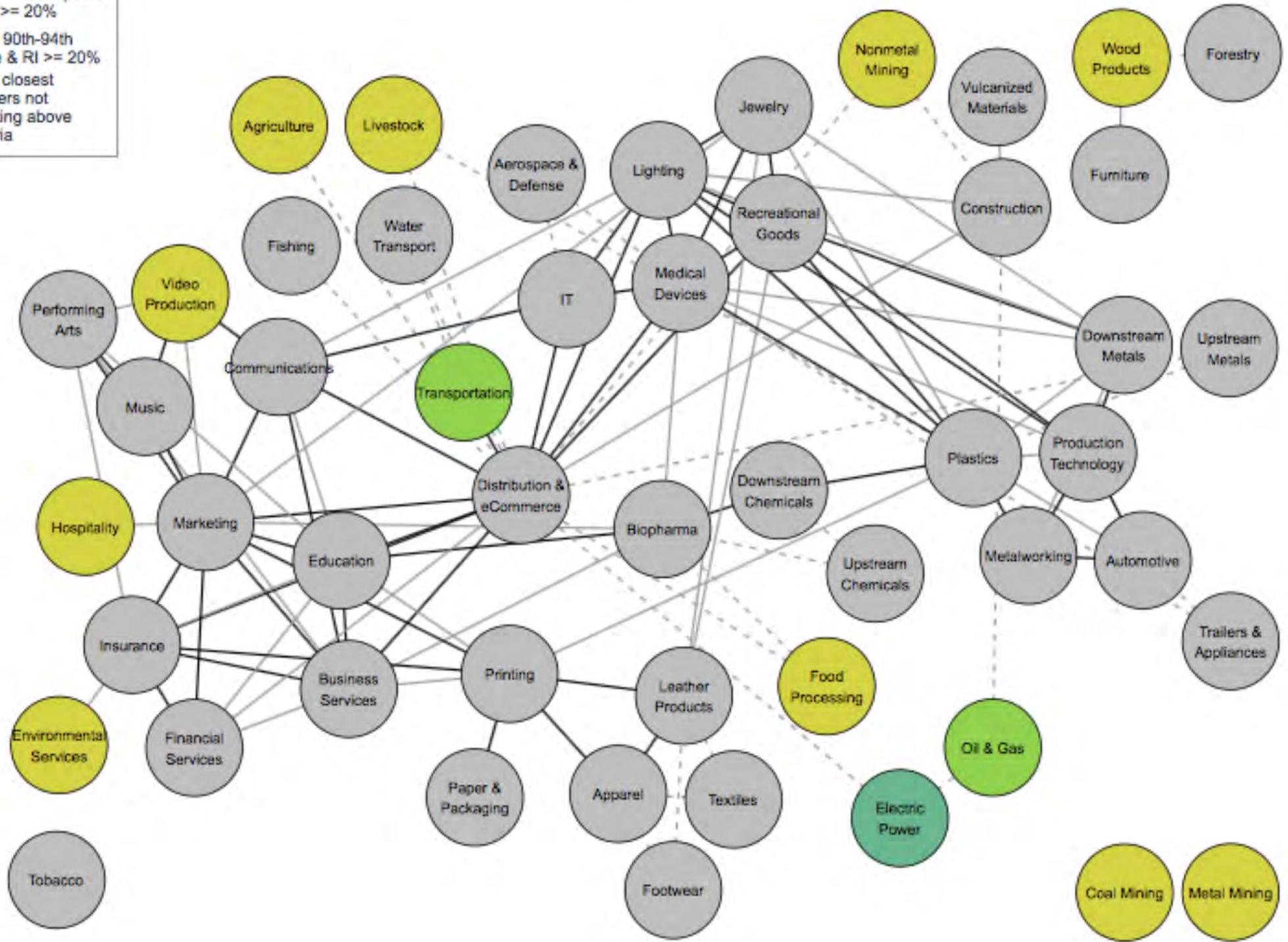


Cluster Linkages and Economic Diversification

Moffat County, CO, 2015

- Strong clusters above 90th percentile specialization
- Strong clusters above 75th percentile specialization
- Other specialized clusters (LQ > 1.0)

- BCR >= 95th pctile & RI >= 20%
- BCR 90th-94th pctile & RI >= 20%
- Next closest clusters not meeting above criteria



2 Colorado Coal-Fired Power Units To Close In Clean-Air Deal

September 1, 2016 at 4:36 pm

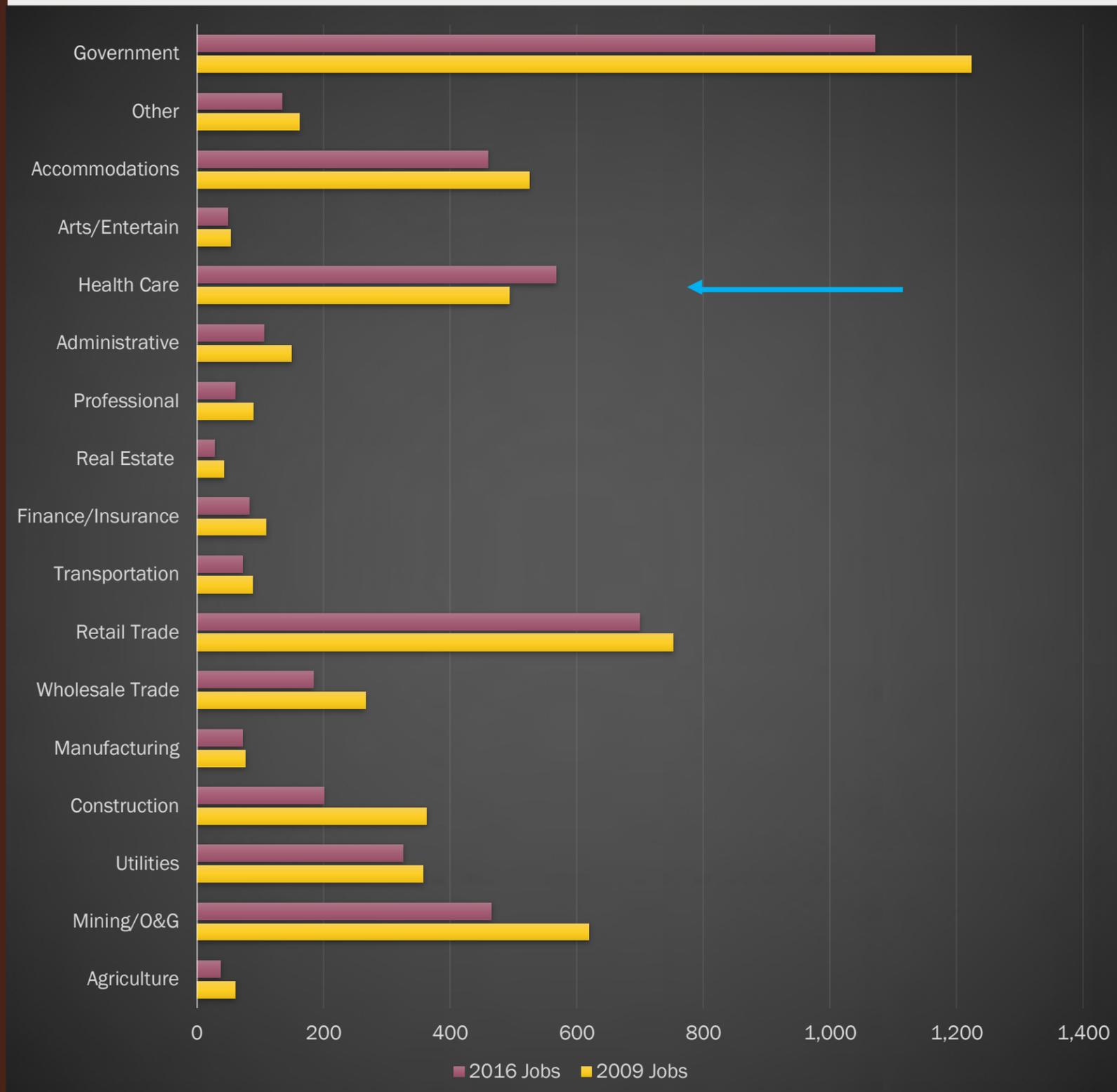
Unit 1 of the coal-fired Craig Station power plant will shut down by the end of 2025, but two other units will keep operating with new technology to [reduce pollution](#), Boughey said.

About 283 people [work](#) at the plant, but Tri-State doesn't yet know how many jobs will be eliminated, he said. Tri-State operates Craig Station, but other utilities own shares of the plant.

Moffat County is highly dependent upon the electric generation industry. The highest paying jobs and largest employers are all associated with the electric generation industry either directly or indirectly. Coal mining jobs and electric generation jobs rise and fall together. The anticipate closure of Unit 1 at the Craig Station owned by Tri-State will have a trickle down effect on all remaining industries within Moffat County. The Electric Power cluster is directly related to the other strongest clusters in Moffat County. Loss in jobs in this sector will have a significant impact. The industry has already experienced a decline in total jobs since 2009. Evidence of an eroding economy and increase in poverty is clear.

Job LOSS by Sector

8



Since peak employment in 2009, all sectors have lost jobs with the exception of healthcare. Gains in healthcare have been nominal at 74 jobs.

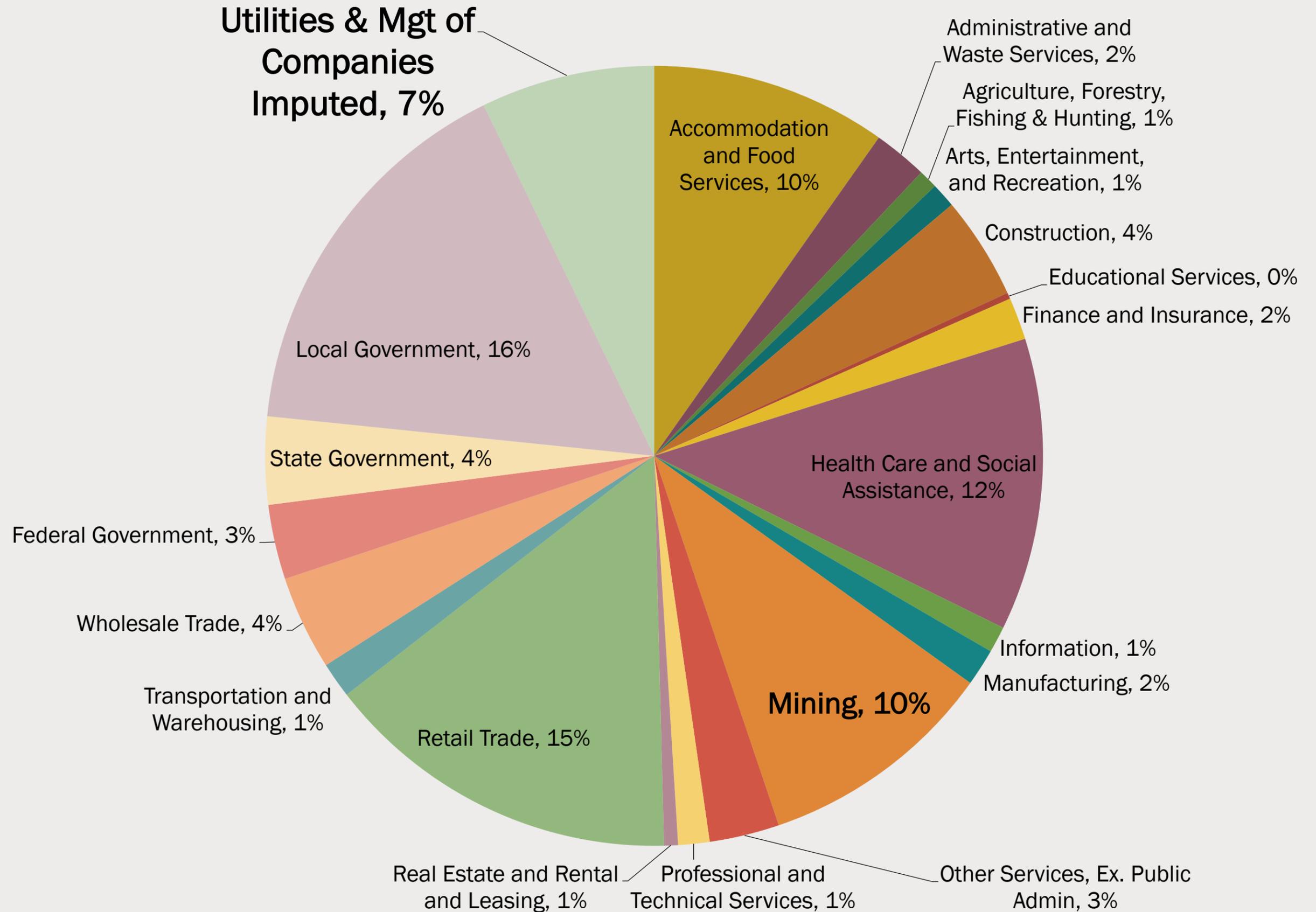
The industries with greatest total jobs lost are:

- Construction -162 Jobs
- Mining -154 Jobs
- Wholesale -82
- Government -152 Jobs

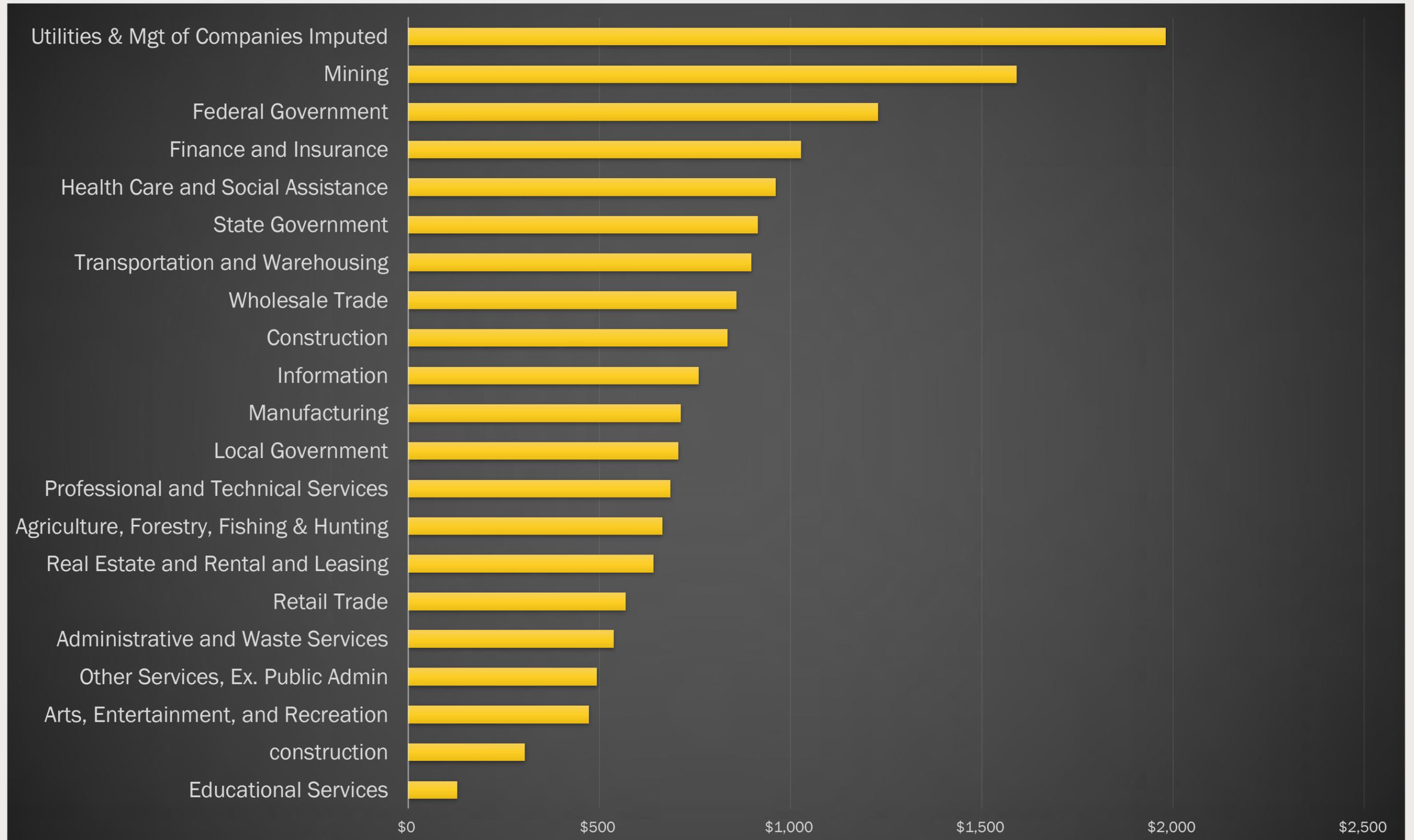
The County's largest sectors are Government, Retail Trade, Healthcare, Mining, Accommodations, and Utilities. However, combined, mining and utilities are the second largest with a combined 789 jobs.

Share of Jobs by Industry

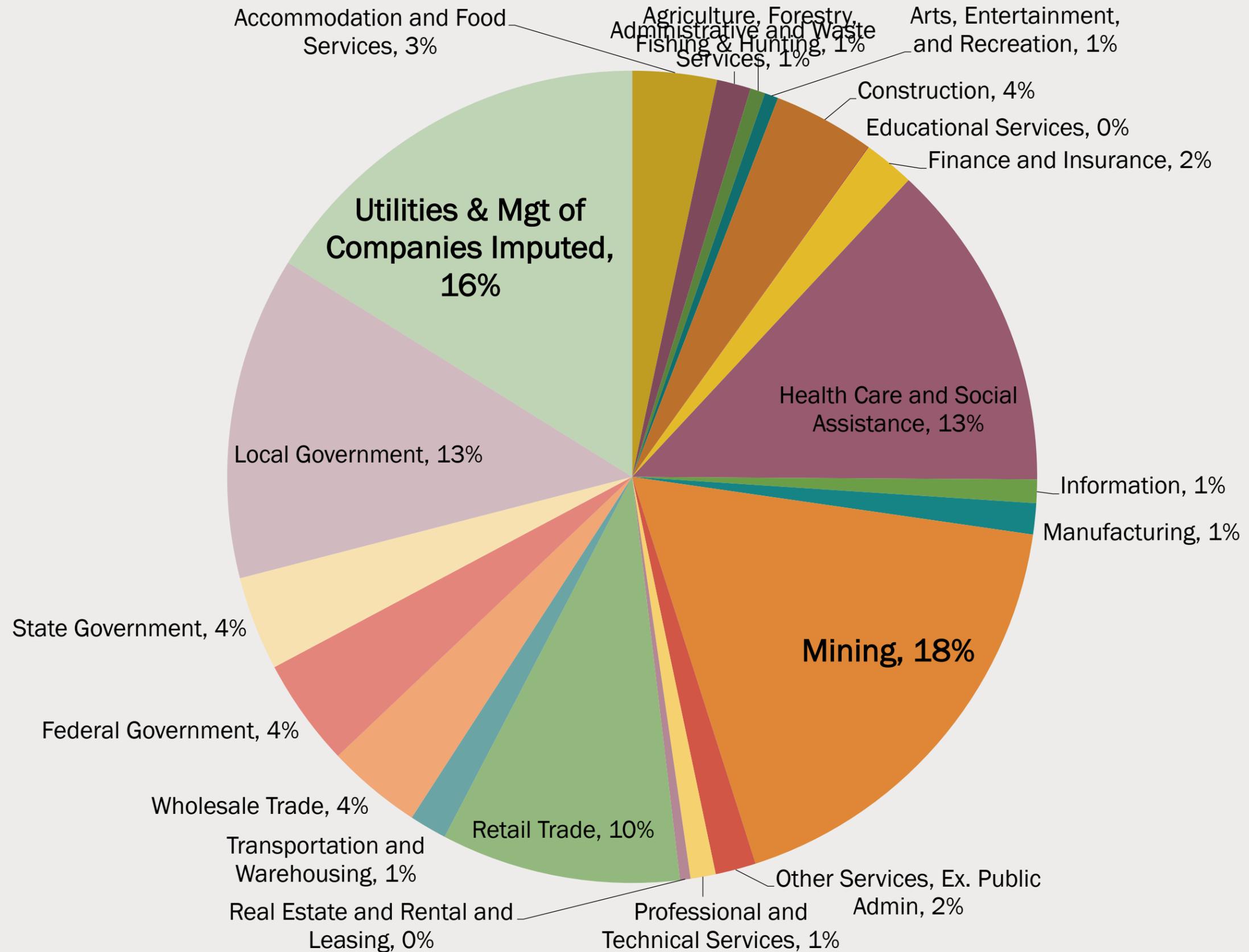
9



Wages by Industry

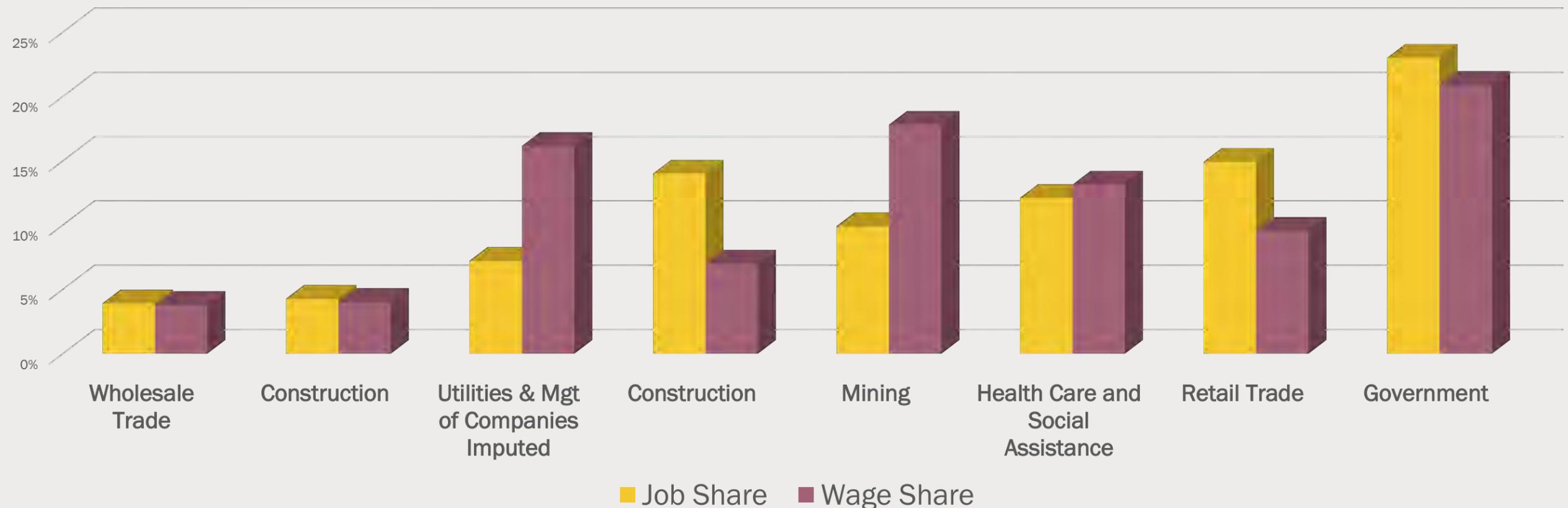


Share of Wages by Industry



Moffat County's Per Capita Income is bolstered by higher wage paying jobs in mining, utilities, management of companies, government, and healthcare. Coal mining jobs provide coal to the energy generation facilities in the region. Jobs in both sectors rise and fall together. Mining accounts for 14% of total jobs, but 18% of wages. Utilities and management of companies account for 7% of jobs but 16% of wages. Combined, these two sectors account for 34% of wages. Total average wages would be 20%, or \$179 lower per week if wages from the mining and utilities industry are subtracted out.

Government accounts for 23% of jobs and 21% of wages. Continued loss of jobs in these three sectors will put downward pressure on Moffat County's economy leading to increased rates of poverty and decreased Per Capita Income. Government jobs are at risk when jobs in the energy sector decline. The tax base erodes putting pressure on local government. Reduction in work force becomes necessary in the face of declining revenues, and demand for government jobs related to things like inspections are no longer necessary.



Employer & Non Employer Firms:

Non-employer firm data provides a snap shot into sole proprietor activity

Non-employer firms represent sole proprietors and other firms that do not have employees. Non-employer firms represent about 70% of all firms in Moffat County.

Nonemployer firms	984
Revenue of nonemployer firms (\$1,000)	\$39,268
Revenue per nonemployer firm (\$1,000)	\$40
Total number of employers and nonemployers	1,396

Employer establishments	412
Total employment of employers	3,382
Total annual payroll of employers (\$1,000)	\$150,315
Average employment per employer	8
Average payroll per employee	\$44,446
Population per employer	32

Mining, Quarrying, and Oil and Gas Extraction

- Data on jobs and wages listed in this report for mining include coal mining, quarrying, and oil/gas.
- There are an average 464 jobs in this sector.
- 76% of these jobs, or 352, are Coal Mining Jobs associated with the Colowyo and Trapper mines. There are an additional 248 jobs associated with Twenty Mile in Routt. Some of the 248 Routt jobs are likely held by Moffat residents.

Agriculture

- 2016: 432 Jobs
- 2010: 405 Jobs
- Average Wage: \$664
- 2012 Market Value: \$26,944,000

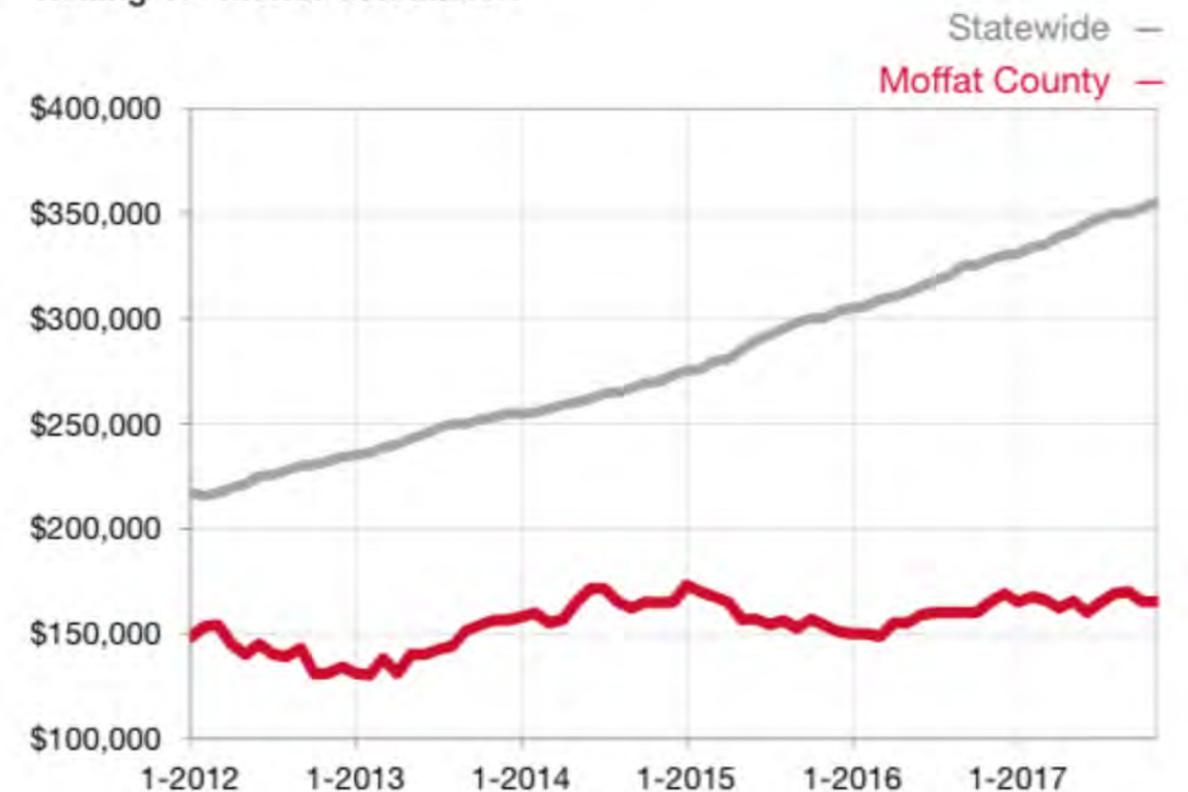
The USDA AG Census is conducted every five years. Between 2007 and 2012, Moffat County saw a decrease in agricultural market value, a decrease in the number of farms, but an increase in the farmed acreage. From 2010 to 2016 the County also saw an increase in ag related jobs. Agriculture statewide is experiencing challenges as commodity prices drop. An increase in total agriculture related jobs is a positive sign. New USDA Census data will be available in 2019.

Housing

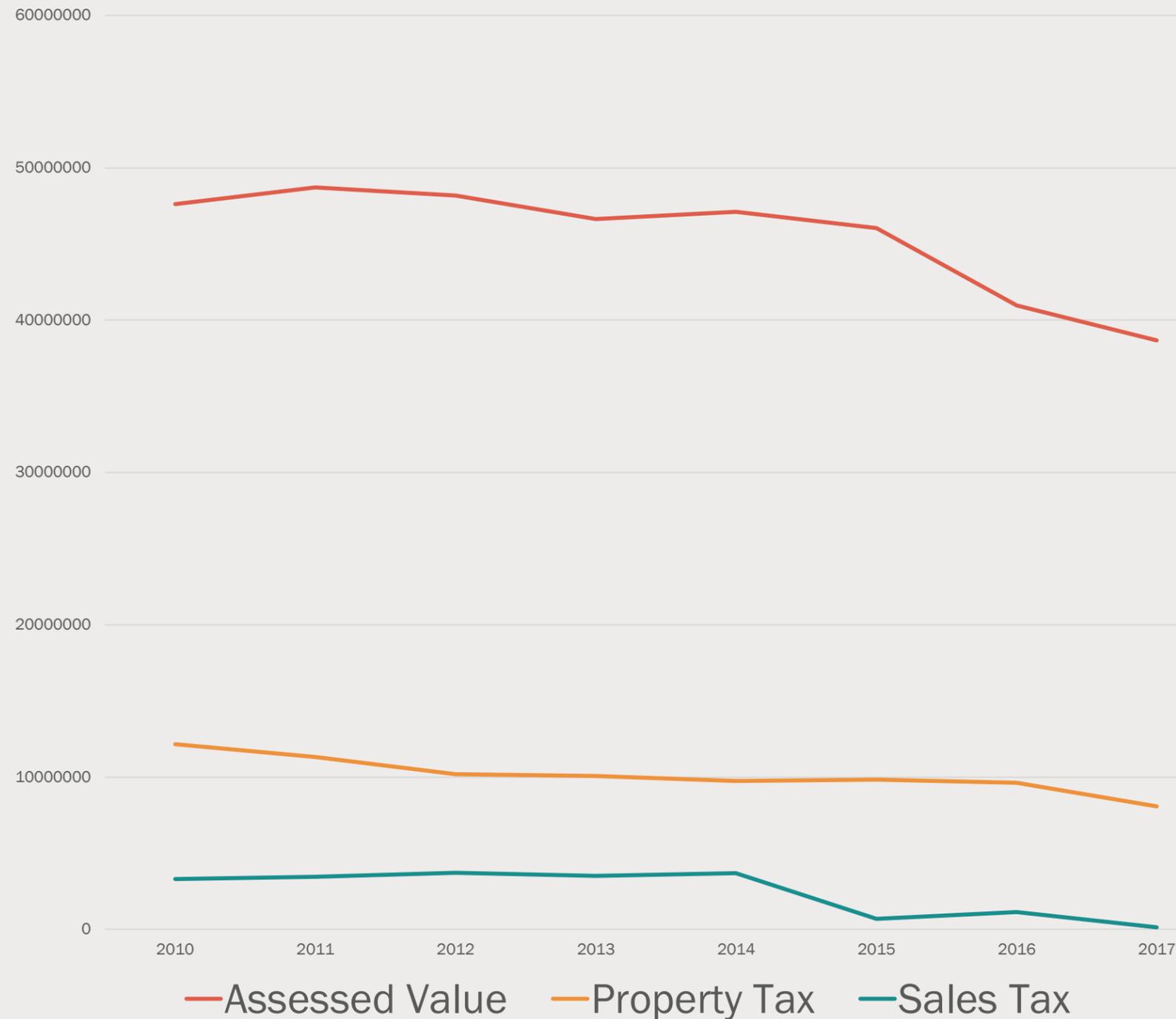
- In 2017 the Median Sales Price of a single family residence was \$176,750 and the average was \$173,963.
- The Median Household Income for Moffat County is \$53,664
- An income of about \$54,531 is needed to purchase a home in the median price range.
- Moffat County's median income is about 2% lower than the necessary average income.
- Housing prices have remained relatively flat in Moffat County compared to strong growth in housing costs Statewide.
- Moffat County has relatively affordable housing. This is possibly an economic advantage, but puts the County at risk of becoming a bedroom community to larger more economically prosperous neighbors as workers are priced out of near by housing markets.

Single Family Key Metrics	November			Year to Date		
	2016	2017	Percent Change from Previous Year	Thru 11-2016	Thru 11-2017	Percent Change from Previous Year
New Listings	17	24	+ 41.2%	295	321	+ 8.8%
Sold Listings	26	22	- 15.4%	193	235	+ 21.8%
Median Sales Price*	\$178,750	\$176,750	- 1.1%	\$166,000	\$165,000	- 0.6%
Average Sales Price*	\$213,356	\$173,963	- 18.5%	\$179,383	\$172,168	- 4.0%
Percent of List Price Received*	96.1%	96.3%	+ 0.2%	95.7%	96.1%	+ 0.4%
Days on Market Until Sale	122	113	- 7.4%	128	137	+ 7.0%
Inventory of Homes for Sale	168	106	- 36.9%	--	--	--
Months Supply of Inventory	9.9	5.2	- 47.5%	--	--	--

Median Sales Price – Single Family
Rolling 12-Month Calculation



Tax Base

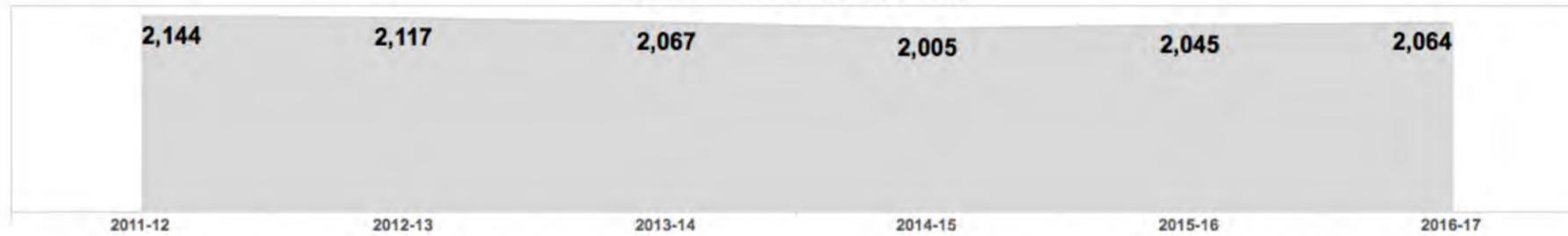


Since 2010 Moffat County has experienced a steady decline in assessed value, property and sales tax. In 2016, all of Moffat County's top 10 taxpayers are connected to the energy industry either through mining or production. A decline in activity from these activities will put significant strain on the local tax base.

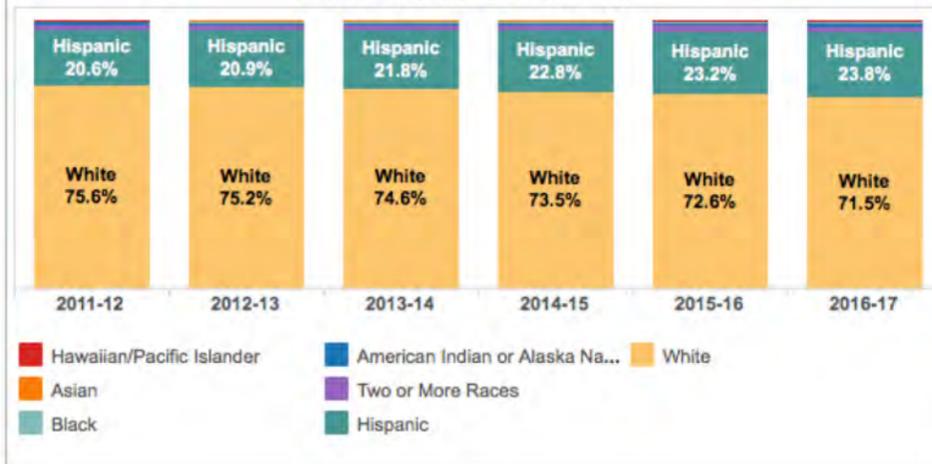
Company Name	Assessed Valuation	Tax Dollars
Tri-State Generation & Transmission Association	\$99,752,200	\$6,376,827
Pacificorp - Electric	\$22,873,000	\$1,463,437
Trapper Mining, Inc	\$17,448,404	\$1,116,316
Rockies Express Pipeline, LLC	\$17,839,000	\$1,046,489
Public Service (Xcel)	\$15,972,400	\$1,019,634
Wexpro Company Public Service Company of CO	\$17,260,271	\$1,012,539
ColoWyo Coal Company, LP	\$16,868,457	\$993,239
Wyoming Interstate Company	\$16,323,000	\$957,654
Salt River Project	\$8,464,700	\$541,580
Overland Pass Pipeline	\$6,240,600	\$366,150
TOTAL	\$239,042,032	\$14,839,865

EDUCATION

TOTAL STUDENT ENROLLMENT



ENROLLMENT BY ETHNICITY



ENROLLMENT BY STUDENT GROUP

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Gifted Students	3.3%	4.8%	4.8%	4.7%	5.1%	4.9%
Students with Disabilities	9.8%	9.3%	9.0%	9.3%	9.2%	11.1%
English Learners (NEP, LEP, FEP M1/M2)	10.5%	9.9%	10.4%	11.3%	11.3%	11.0%
English Learners (NEP, LEP, FEP, FELL)	13.0%	12.8%	13.4%	14.0%	14.0%	13.7%
Minority Students	24.4%	24.8%	25.4%	26.5%	27.4%	28.5%
Free/Reduced-Price Lunch Eligible	41.7%	43.6%	44.0%	42.8%	42.2%	42.8%

- Moffat County has seen a corresponding decline in school enrollment, which mirrors the decline in overall population since 2010. Since 2011, the school has lost a total of 80 students. During this same period of time, free and reduced lunch percentages have increased from 41.7% to 42.8%.

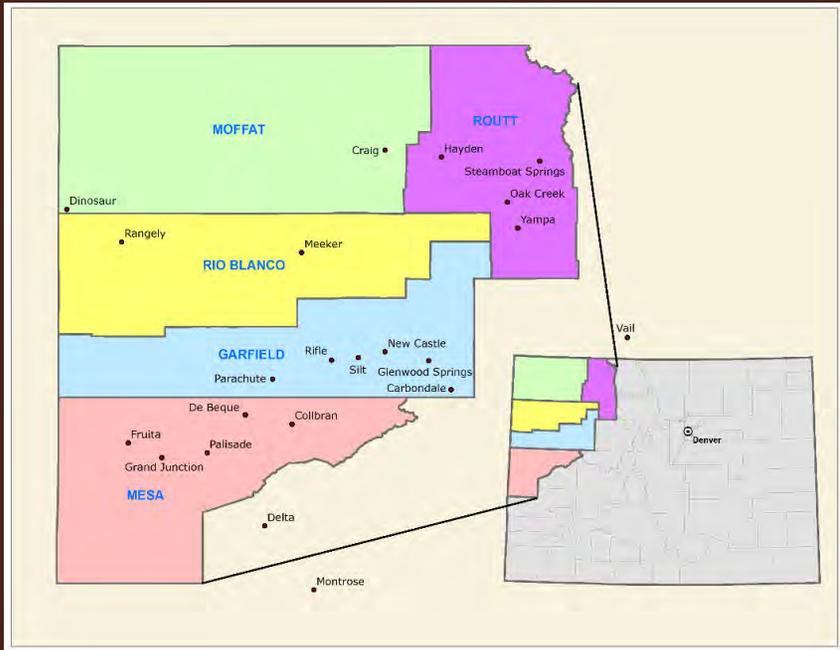
- Other coal dependent communities in Colorado, where mining jobs have been lost, have seen an increase in free and reduced lunch percentages by greater than 10% after the loss of coal mining jobs in the community.

Observations

- Unemployment rates are not the best indicator for economic distress in small rural counties highly dependent on one or more large employers. When job loss occurs, there are few options for workers, so they tend to leave the community. This reduces the number of workers looking for jobs, and thereby lowers the unemployment rate.
- The County's unemployment rate does not reflect the out migration and continued decline in jobs that has occurred.
- With total jobs down, and if out migration had not happened, the unemployment rate would be higher.

Conclusions

- Moffat County meets EDA's criteria for distress based on per capita income that is at least 80% less than the national average.
- Moffat County has not experienced economic recovery from the 2008 recession.
 - *The County has not returned to peak employment*
 - *Wages continue to decline*
 - *Population continues to decline*
 - *Poverty continues to increase*
- Colorado as a whole has not only recovered from the recession but has excelled with job growth, growth in wages, and population growth. These trends are not reflected in Moffat County.
- The closure of Unit 1 at Craig Station will impact wages and employment in multiple industry sectors in Moffat County.



ROUTT COUNTY

Intent of this report

- Provide a defensible case to EDA that Region 11 meets the established criteria for distress to qualify the Region to apply to become an Economic Development District.
- Establishment of baseline data that can easily be monitored and tracked over time using tools and data available utilizing tools through Stats America, Community Survey, Bureau Labor Statistics, and the Colorado State Demographer.

EDA Distress Criteria

- An unemployment rate that is, for the most recent 24-month period for which data are available, at least one percentage point greater than the national average unemployment rate.
 - *Currently National Unemployment Rate is 4.68%*
- Per Capita income that is for the most recent period for which data is available, 80% or less of the of the national average per capita income.
- Special Need

DISTRESS CRITERIA STATISTICAL REPORT

Reference Date: 11 / 2017 (All data elements refer to this date or earlier.)
 Region Consists of: Routt Co. CO
 Report Date: 1/4/2018 2:55:13 PM

Economic Distress Criteria—Primary Elements

	Region	U.S.	Threshold Calculations
24-month Average Unemployment Rate (BLS) period ending November 2017	2.46	4.65	-2.19
2016 Per Capita Money Income (5-year ACS)	\$36,692	\$29,829	123.01%
2016 Per Capita Personal Income (BEA)	\$71,167	\$49,246	144.51%

- Routt’s unemployment rate is significantly lower than the national rate.
- The County’s Per Capita Income is significantly above the national Per Capital Income.
- Based on EDA criteria, Routt County **DOES NOT MEET** the definition of distressed based on Per Capita Income.

Poverty Estimates	Rate	Rank in U.S.	Percent Change	Rank in U.S.
Poverty Rate in 2016		7.2	--	--
	In 2000	6.2	16.1 %	<u>1,916</u>
Poverty Rate for Children under 18 in 2016		8.3	--	--
	In 2000	7.7	7.8 %	<u>2,392</u>

Source: U.S. Census Bureau

DISTRESS CRITERIA STATISTICAL REPORT

Reference Date: All data is from Census ACS Estimates
 Region Consists of: 08107000100, 08107000200, 08107000300, 08107000400, 08107000500, 08107000600, 08107000700, 08107000800
 Report Date: 2/23/2018 4:56:58 PM

Economic Distress Criteria—Primary Elements

	Region	U.S.	Threshold Calculations
2016 Unemployment Rate (5-Year ACS)	4.1	7.4	-3.3
2016 Per Capita Money Income (5-Year ACS)	\$36,692	\$29,829	123.01%

Economic Distress Criteria—Geographic Components

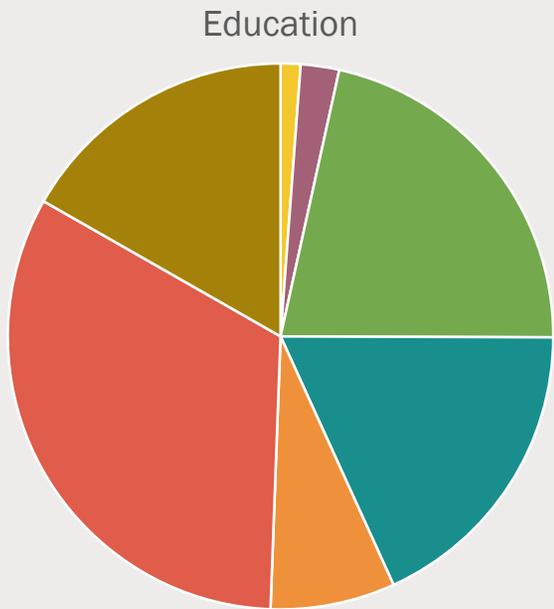
	Unemp. Rate 2016 ACS	Threshold Calculation	PCMI 2016 ACS	Threshold Calculation
Tract 0008.00 Routt, CO	4.4	-3	\$30,034	100.7
Tract 0004.00 Routt, CO	4.3	-3.1	\$34,369	115.2
Tract 0003.00 Routt, CO	4.1	-3.3	\$38,722	129.8
Tract 0007.00 Routt, CO	5.7	-1.7	\$36,653	122.9
Tract 0005.00 Routt, CO	4.5	-2.9	\$40,115	134.5
Tract 0001.00 Routt, CO	1.6	-5.8	\$39,874	133.7
Tract 0002.00 Routt, CO	1.4	-6	\$25,729	86.3
Tract 0006.00 Routt, CO	3.0	-4.4	\$42,837	143.6

Sources: U.S. Bureaus of Census, Labor Statistics, and Economic Analysis; Calculations generated by StatsAmerica.

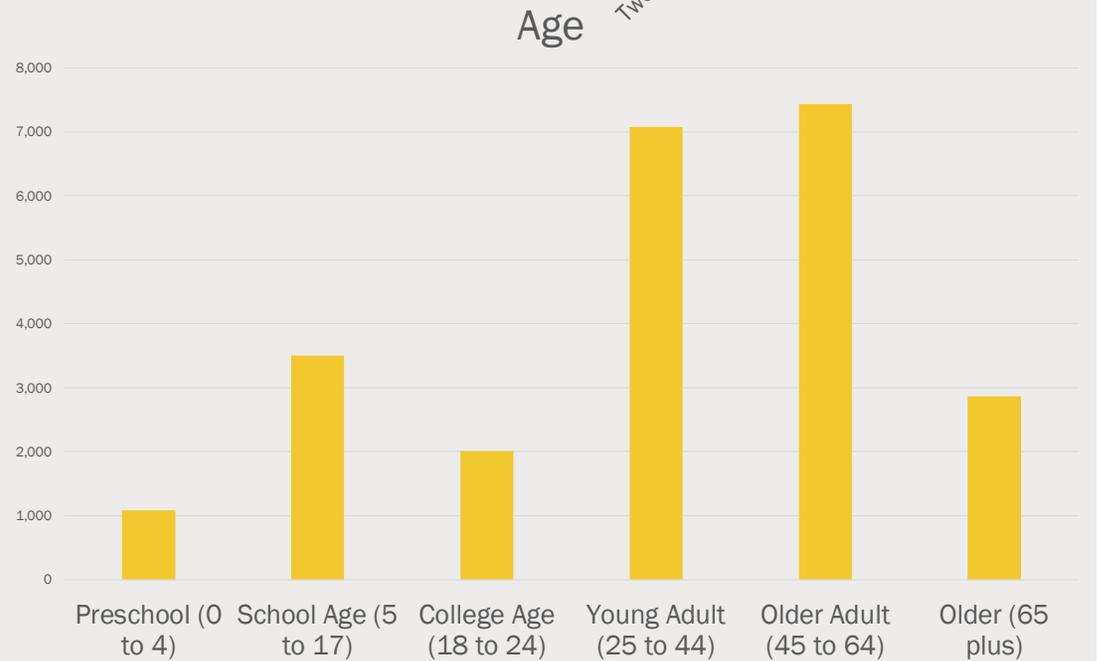
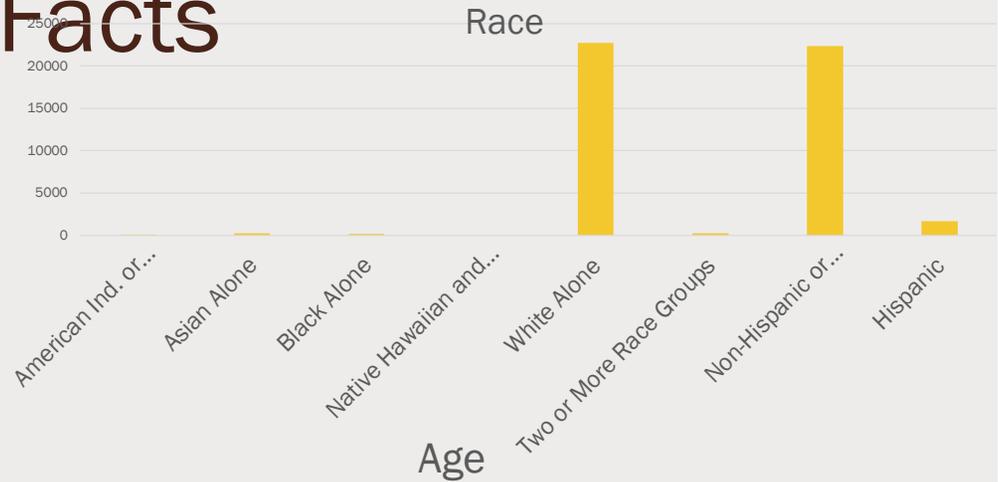
Distress report for Routt County by Census Tract.

Routt County Fast Facts

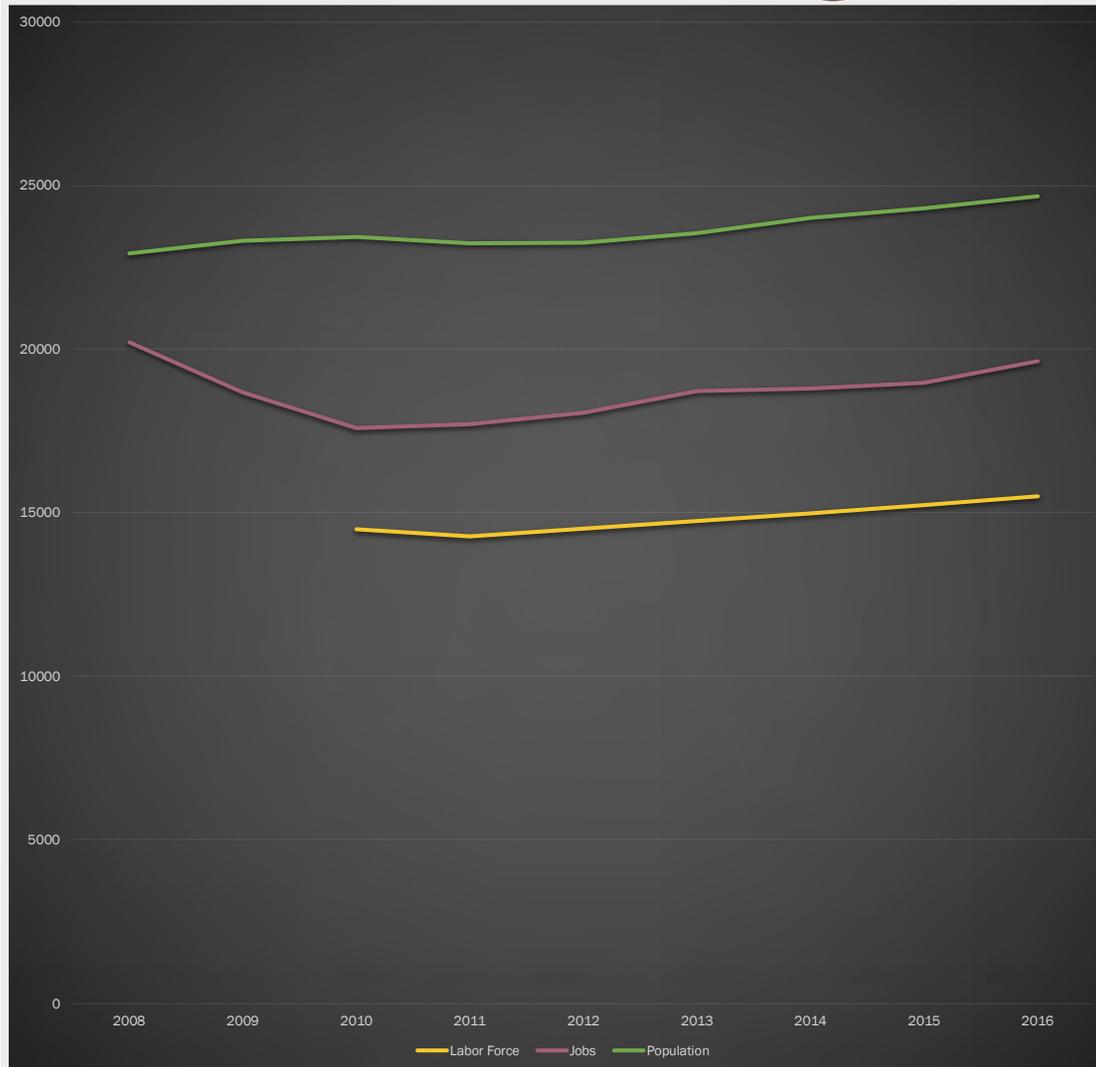
■ Total Population: 24,648



- Less than 9th Grade
- 9th to 12th, No Diploma
- High School Graduate (includes equiv.)
- Some College, No Degree
- Associate Degree
- Bachelor's Degree
- Graduate, Professional or Doctorate Degree

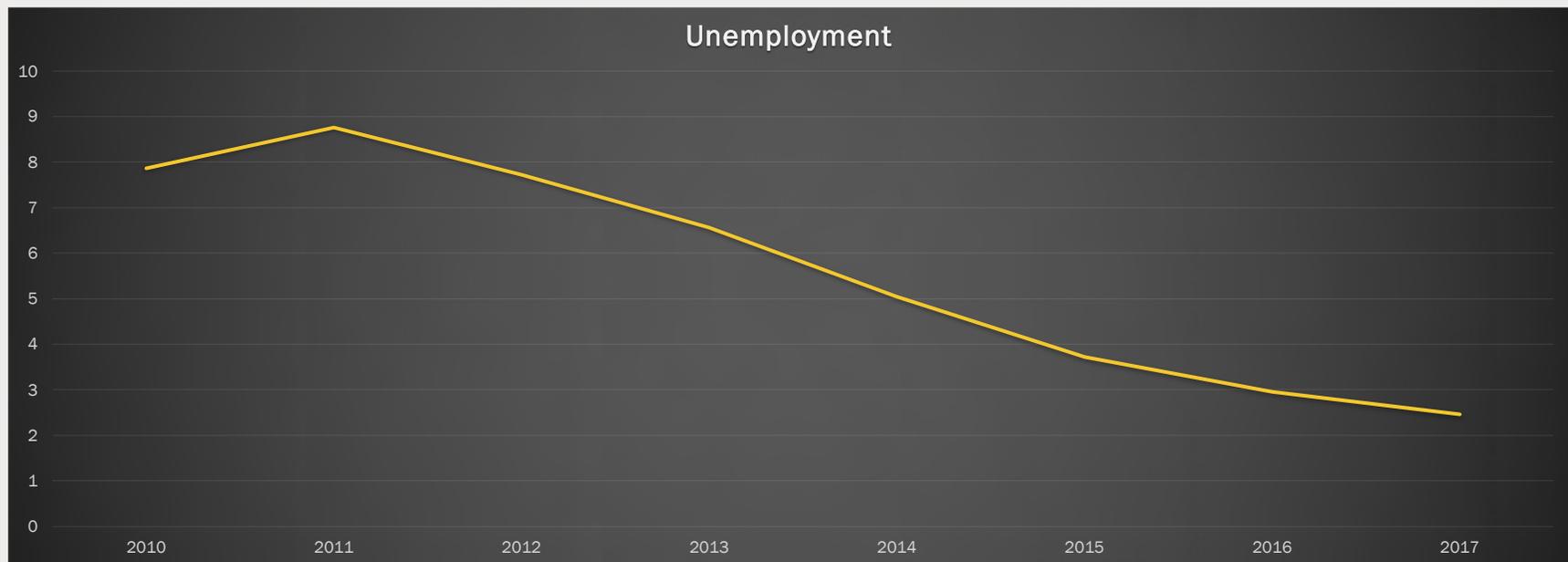


Workforce & Demographic Trends



Routt County has seen an increase in jobs, population and labor force since the recession. Peak employment has not yet been reached .

There are more jobs in Routt County than there is workforce. Routt County is importing many of its workers.



Routt County is seeing a steady decline in unemployment after an initial spike during the recession. Current unemployment rates are well below the national averages and the current State rate of 2.9%.

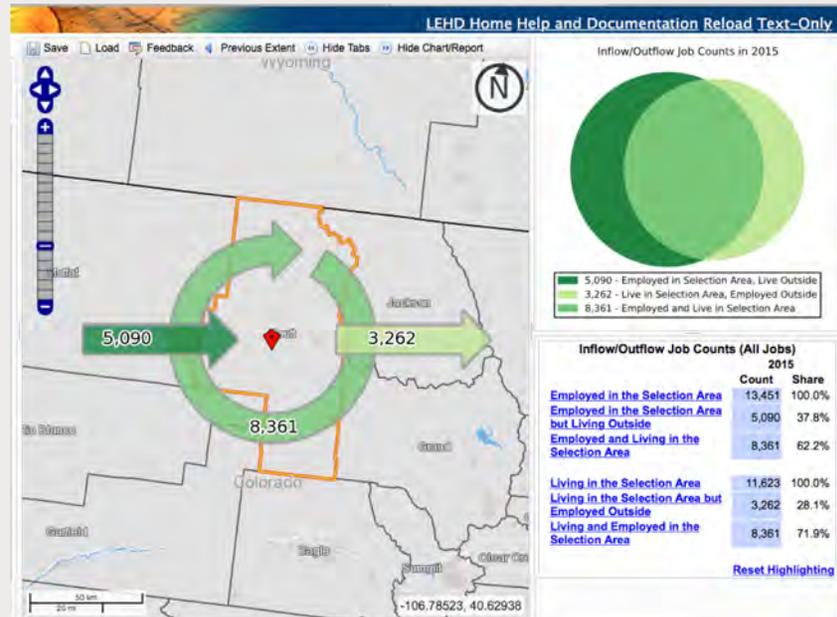
Routt County is performing quite well from an economic standpoint. However, there are other challenges created from a growing economy that will be evaluated in the remainder of this profile.

Commuting Patterns

Routt County imports a significant number of jobs.

There are 4,127 more jobs available in Routt County than there is work force.

There is almost 1 job for every residence of the County, including those 0-16 years old and those retired.

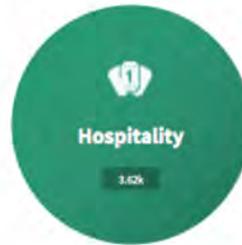


Cluster Analysis

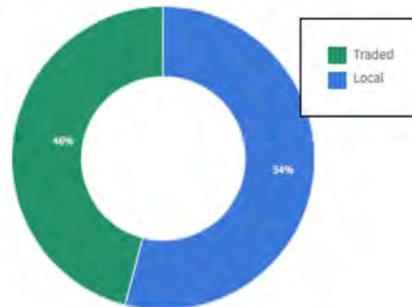
Cluster Portfolio, 2015

The Cluster Portfolio page illustrates the strongest **2** traded clusters in this region, as well as its top performing traded and local clusters. Click the link below to view the full set of charts.

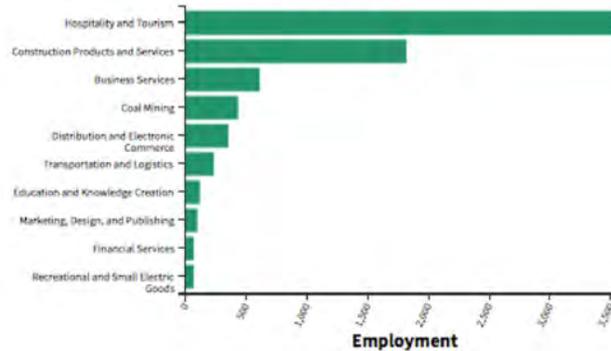
2
Traded
Clusters



Traded vs. Local Clusters



Top Clusters by Employment



[DIVE INTO THIS REGION'S CLUSTERS](#) →

Cluster Specialization

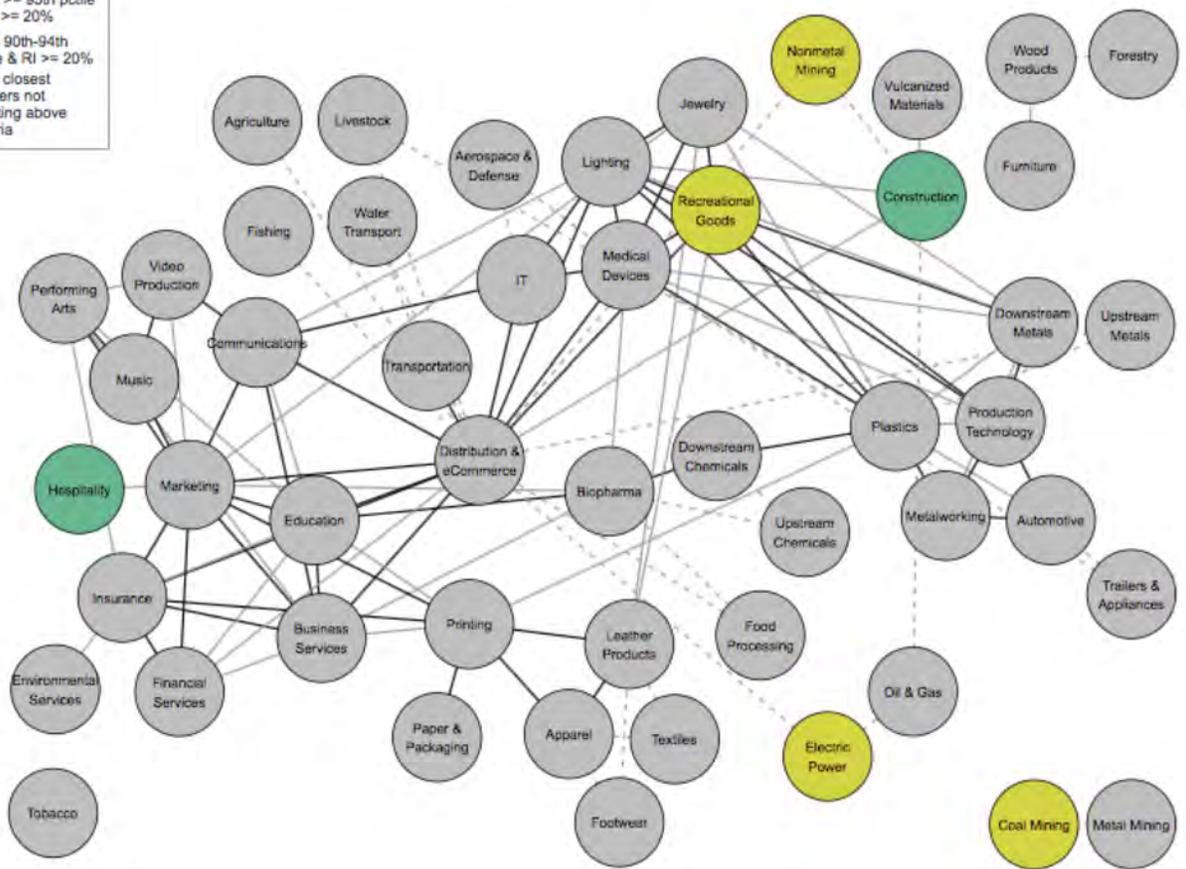
- Strong clusters above 90th percentile specialization
- Strong clusters above 75th percentile specialization
- Other specialized clusters (LQ > 1.0)

- BCR >= 95th pctile & RI >= 20%
- BCR 90th-94th pctile & RI >= 20%
- - - Next closest clusters not meeting above criteria

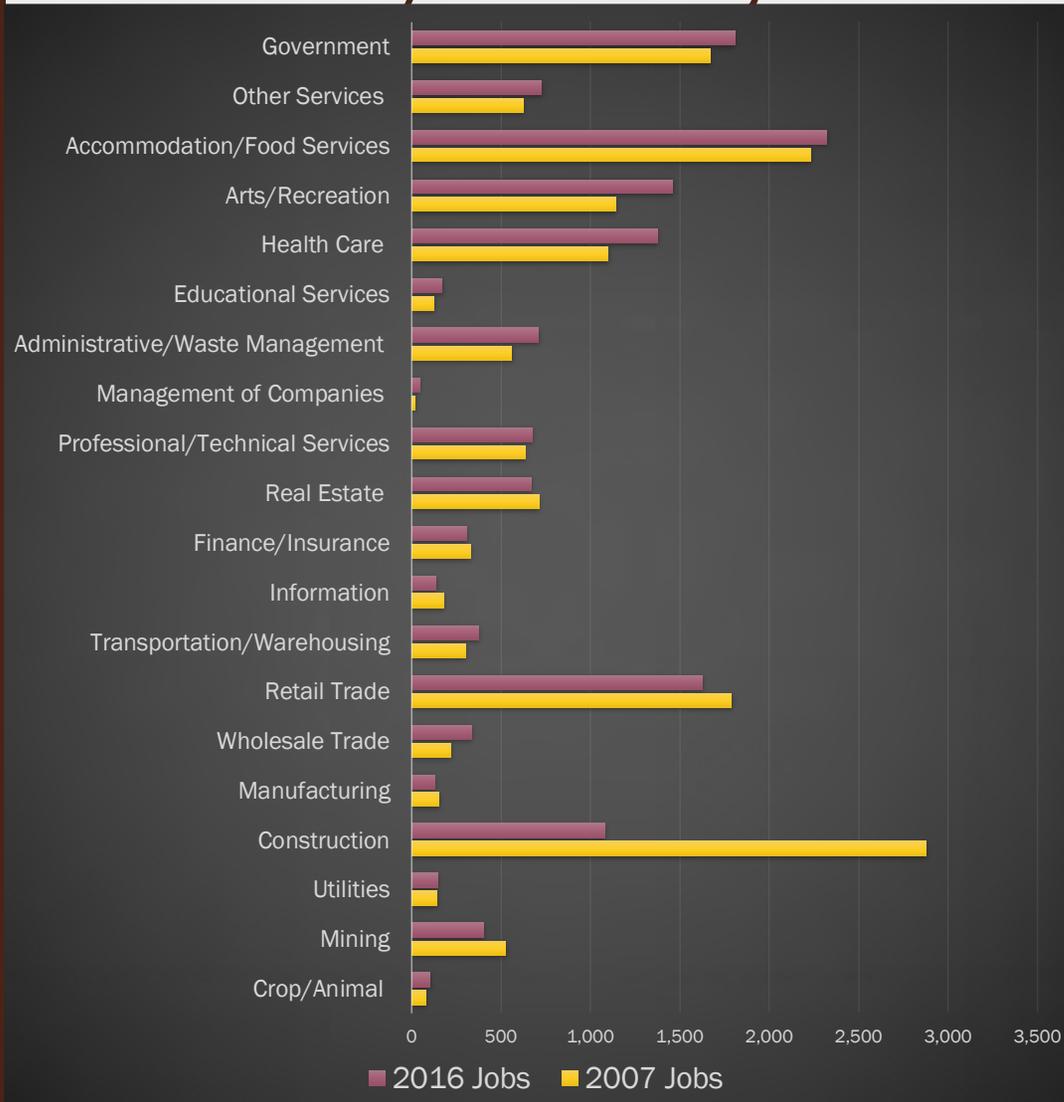


Cluster Linkages and Economic Diversification

Routt County, CO, 2015



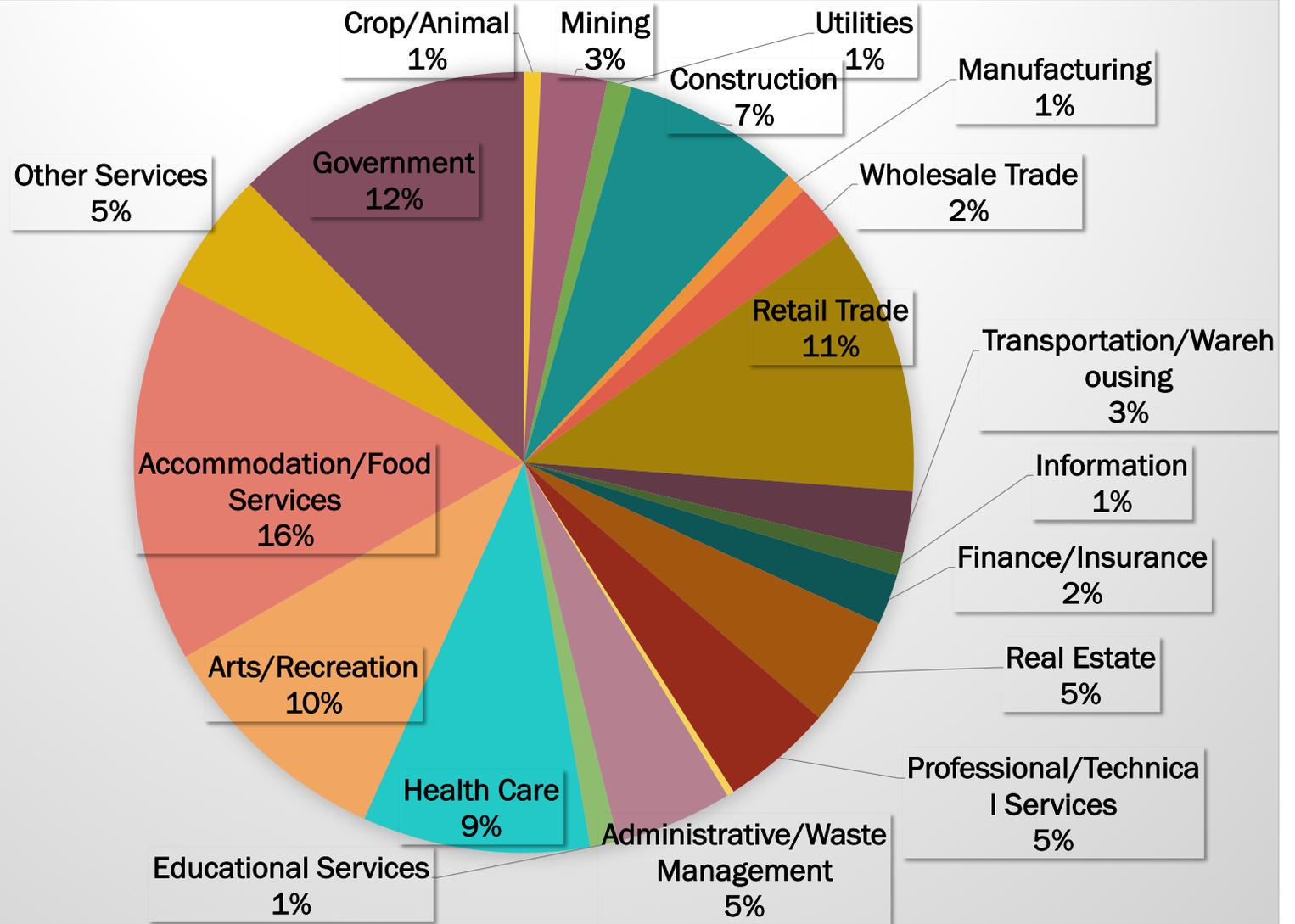
Job LOSS/GAIN by Sector



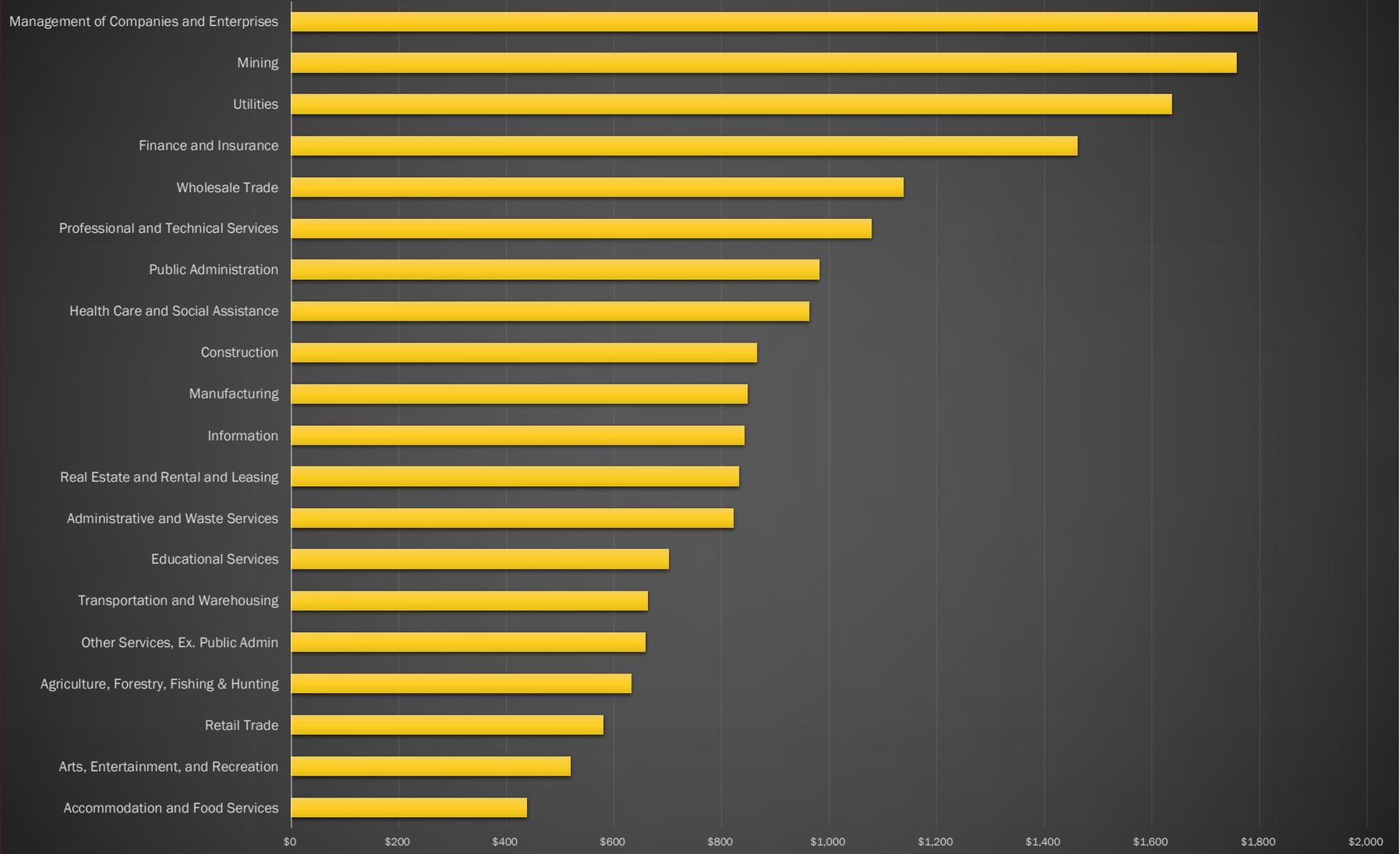
Routt County is just shy of regaining peak employment. The County had 15,402 jobs in 2007 and remains shy of regaining peak employment by 815 jobs. The County has not recovered construction jobs or mining jobs.

The County has seen growth in several sectors that have moderate wages including government, health care, and professional/technical services.

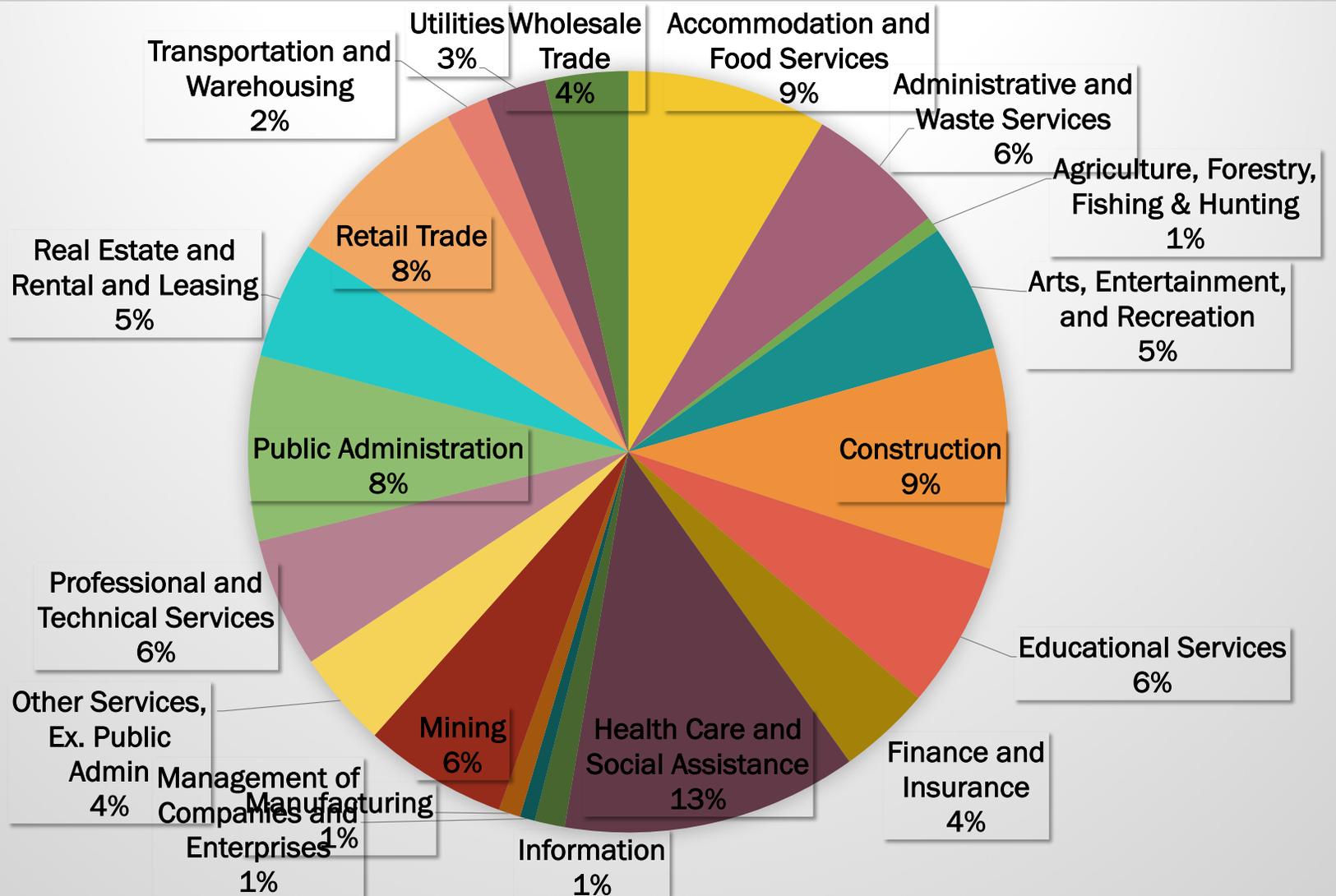
Share of Jobs by Industry



Wages by Industry



Share of Wages by Industry

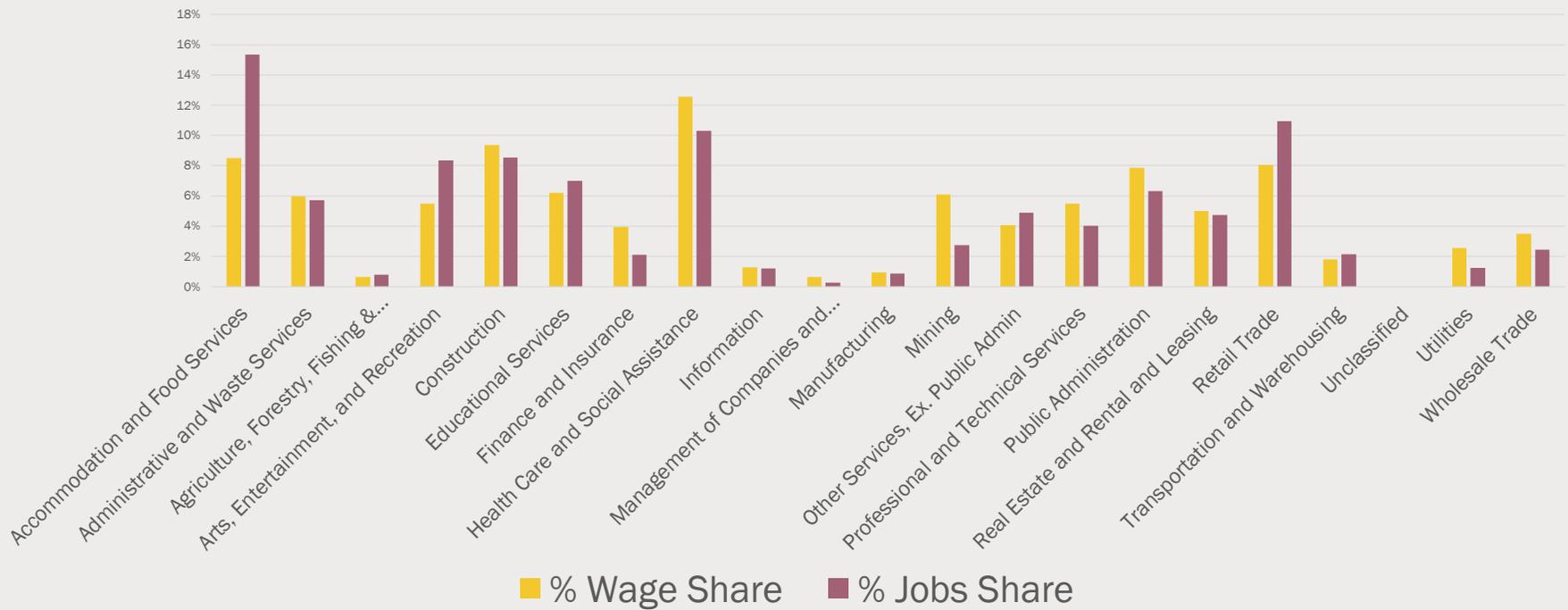


The median family income in Routt County is \$71,322 and the average wage per Routt County job is \$43,249.

The County’s share of jobs and wages are balanced out for the most part. The County does have a high concentration of tourism related jobs in accommodations/food services and in retail where wage share is lower.

There is a higher percentage of wage share in a few industry compared to employment including construction, health care, mining, professional services, real estate, utilities, and whole sale trade.

Looking at the distribution of wages and jobs though across all sectors, there appears to be more balance with no industry overly dominating either category.



Mining, Quarrying, and Oil and Gas Extraction

- Data on jobs and wages listed in this report for mining include coal mining, quarrying, and oil/gas.
- There are an average 400 jobs in this sector.
- There are approximately 248 jobs associated with Twenty Mile Coal Mine in Routt. Some of the 400 jobs are likely held by Moffat or other neighboring county residents.

Agriculture

- 2016: 626 Jobs
- 2010: 712 Jobs
- Average Wage: \$631
- 2012 Market Value: \$46,460,000

Routt County has a relatively strong agriculture industry. The county experienced a decline in agriculture jobs since 2010, but an increase in market value and total acres farmed. Livestock sales account for 83% of all market value. Agriculture statewide is experiencing challenges as commodity prices drop.

New USDA Census data will be available in 2019.

Housing

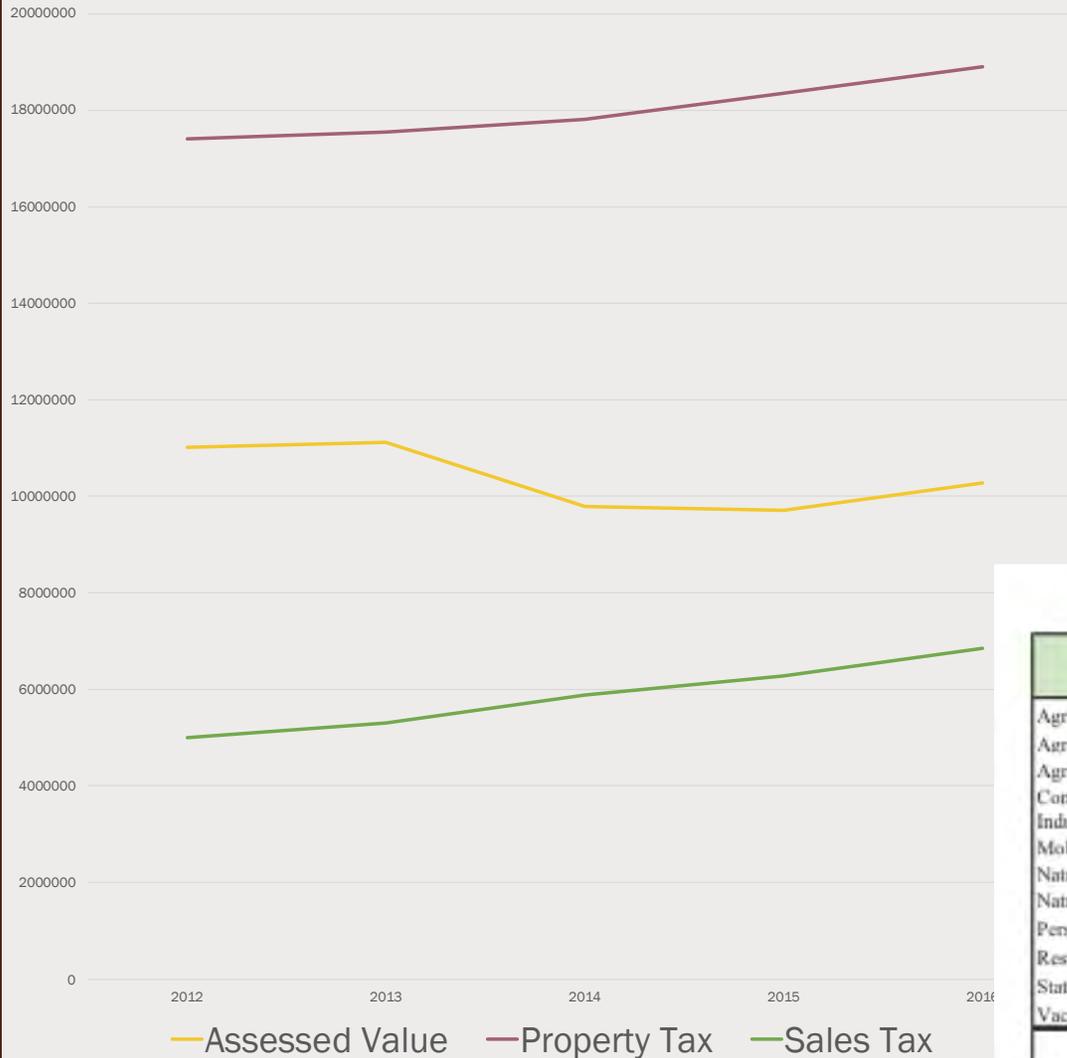
- In 2017 the Median Sales Price of a single family residence was \$555,000.
- The Median Household Income for Routt County is \$71,322
- An income of about \$171,229 is needed to purchase a home in the median price range.
- Routt County's median income is 2.4 times lower than the necessary average income.
- Housing prices continue to increase.

Single Family Key Metrics	November			Year to Date		
	2016	2017	% Change Nov/Nov/2016	Thru 11-2016	Thru 11-2017	% Change Nov/Nov/2016
New Listings	28	21	-25.0%	562	523	-6.9%
Sold Listings	36	26	-27.8%	340	373	+9.7%
Median Sales Price*	\$470,000	\$561,000	+19.4%	\$522,450	\$555,000	+6.2%
Average Sales Price*	\$748,141	\$654,005	-12.6%	\$689,298	\$692,314	+0.4%
Percent of List Price Received*	96.6%	95.0%	-1.7%	96.0%	95.9%	-0.1%
Days on Market Until Sale	122	128	+4.9%	111	101	-9.0%
Inventory of Homes for Sale	230	177	-23.0%	--	--	--
Months Supply of Inventory	7.5	5.4	-28.0%	--	--	--

Median Sales Price – Single Family
Rolling 12-Month Calculation



Tax Base



Routt County is seeing a gradual increase in assessed valuation, property taxes, and sales taxes.

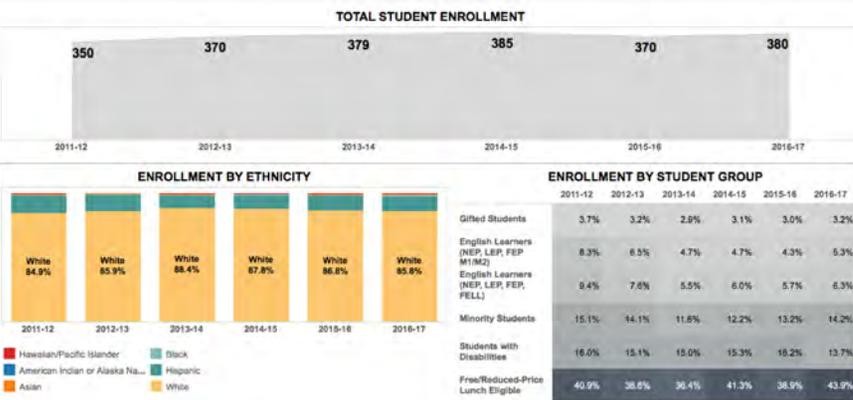
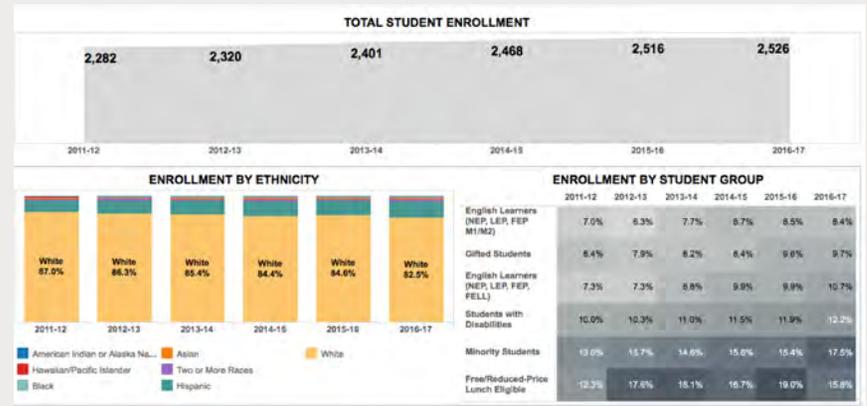
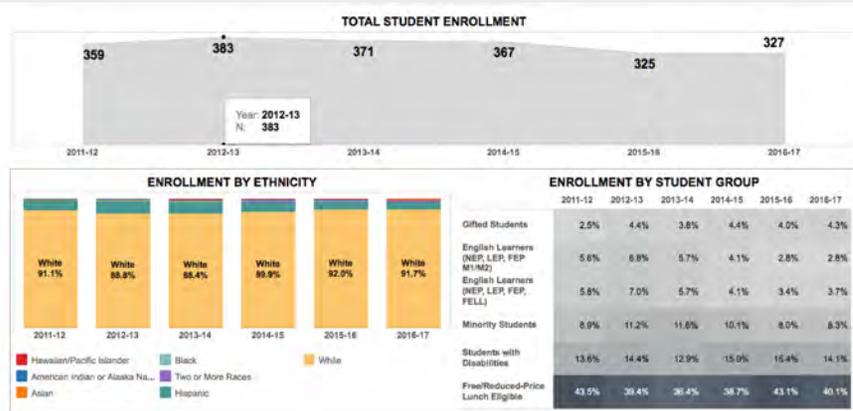
The County gets its largest share of property taxes from Residential property. As the Residential Assessment Rate adjusts down due to Gallagher, the County can anticipate downward pressure on their property tax base.

* (Includes All Towns, Schools, Libraries, Special Districts, plus Senior & Veteran Exemptions paid from State funds)

2016 COUNTY VALUATION BY PROPERTY CLASSIFICATION	
Agricultural Land	\$12,132,790
Agricultural Residences (includes Mobiles on AG land)	\$26,683,740
Agricultural Outbuildings	\$13,144,650
Commercial	\$202,283,790
Industrial	\$5,438,360
Mobile Homes (structures only- no land included)	\$1,362,910
Natr'l Resources: Production Accts, & non-producing Severed Mins.	\$16,540,130
Natr'l Resources: Pers. Prop. used in Production (Coal and O&G)	\$19,224,760
Personal Property: (Residential & Commercial Equip./Furnishings)	\$25,123,080
Residential Properties (Land & Improvements)	\$541,582,020
State Assessed Property (Includes State Assessed Pers. Prop.)	\$115,370,600
Vacant Land	\$98,610,580
TOTALS:	\$1,077,497,410

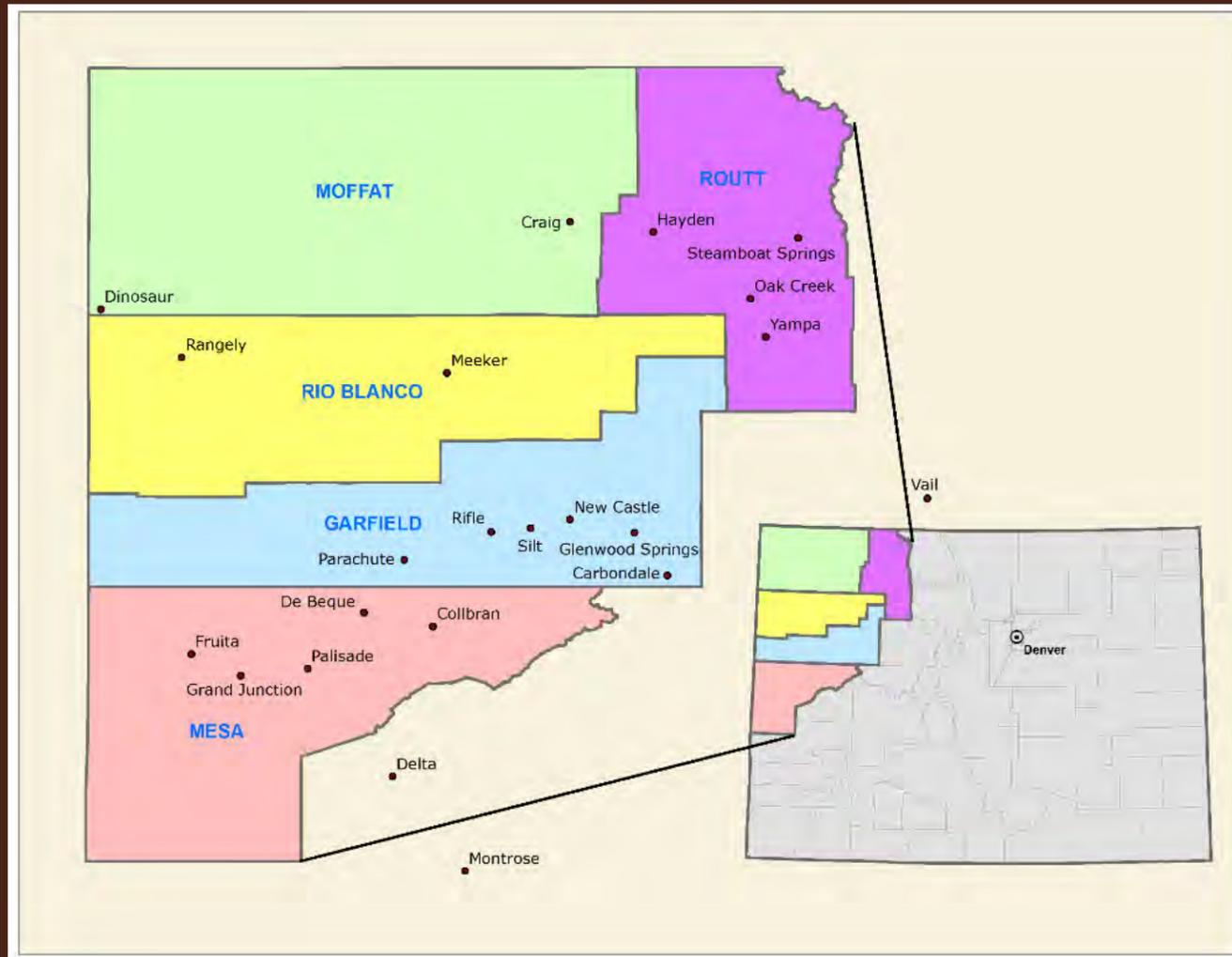
EDUCATION

The school districts in Routt County have relatively stable student populations, and very little fluctuation in free and reduced lunch. There is a significant difference in the number of students that qualify for free and reduced lunch between the Steamboat Springs school district those in Hayden and South Routt.



Conclusions

- Routt County has one of the strongest economies in the region, but few strong clusters. Anticipated job loss in mining and utility jobs will put downward pressure on the County's overall wages and per capita income. However, Routt County will likely not feel the impact to the same degree that neighboring counties more dependent on mining and utilities will.
- Routt County has a significant disparity in poverty rates between Steamboat Springs and other communities as evidenced by the free and reduced lunch data.
- Workforce housing and increased commuting patterns are two of Routt County's greatest challenges. As a resort based economy, Routt County faces challenges unique in the region.



RIO BLANCO COUNTY

Intent of this report

Provide a defensible case to EDA that Region 11 meets the established criteria for distress to qualify the Region to apply to become an Economic Development District.

Establishment of baseline data that can easily be monitored and tracked over time using tools and data available utilizing tools through Stats America, Community Survey, Bureau Labor Statistics, and the Colorado State Demographer.



EDA Distress Criteria

- An unemployment rate that is, for the most recent 24-month period for which data are available, at least one percentage point greater than the national average unemployment rate.
 - *Currently National Unemployment Rate is 4.68%*
- Per Capita income that is for the most recent period for which data is available, 80% or less of the of the national average per capita income.
- Special Need

DISTRESS CRITERIA STATISTICAL REPORT

Reference Date: 11 / 2017 (All data elements refer to this date or earlier.)
 Region Consists of: Rio Blanco Co. CO
 Report Date: 1/4/2018 1:01:07 PM

Economic Distress Criteria—Primary Elements

	Region	U.S.	Threshold Calculations
24-month Average Unemployment Rate (BLS) period ending November 2017	4.56	4.65	-0.09
2016 Per Capita Money Income (5-year ACS)	\$27,419	\$29,829	91.92%
2016 Per Capita Personal Income (BEA)	\$39,483	\$49,246	80.17%

Rio Blanco County is showing signs of distress, though the indicators have them slightly above EDA thresholds. In 2008 Rio Blanco County's Per Capita Income was at 99.62% of the U.S. Since that time Per Capita Income has fallen to 80.17% of the U.S. Rio Blanco County is heavily dependent upon Oil & Gas as well as Coal mining. Declines in both of these sectors are evident in all Rio Blanco data.

- Rio Blanco County Per Capita Income is 80.17% of the National Per Capita Income or .17% away from meeting the EDA distress criteria.
- The County's 24 Month Average Unemployment Rate is slightly lower than the National Average of 4.65.
- **Based on EDA criteria, Rio Blanco County DOES NOT MEET the definitions of distress.**

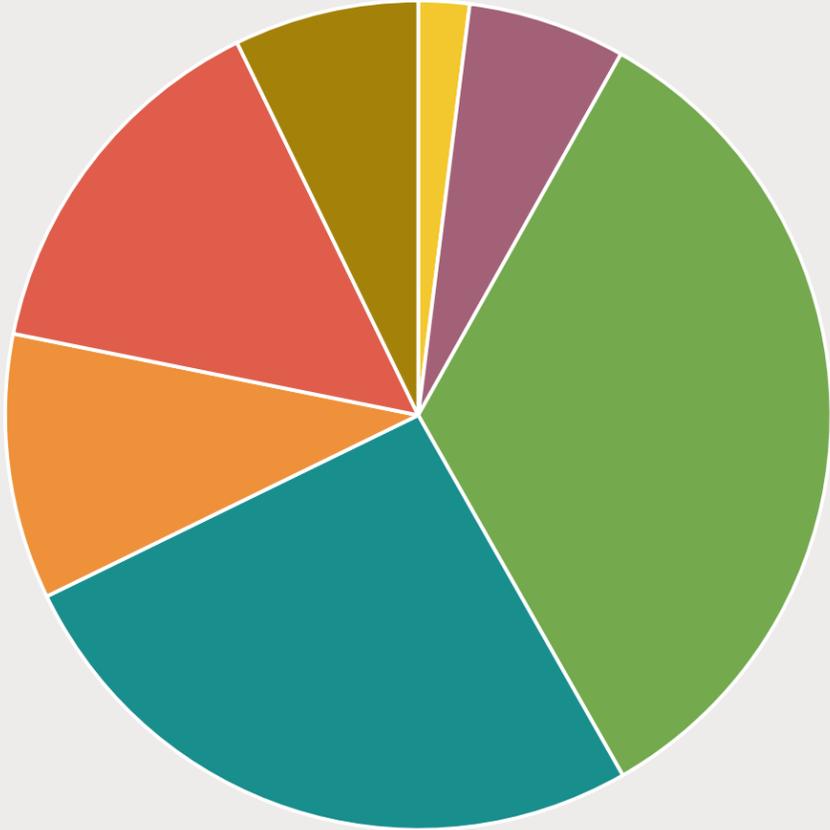
Poverty Estimates	Rate	Rank in U.S.	Percent Change	Rank in U.S.
Poverty Rate in 2016	9.5	2,744	--	--
	In 2000 10.1	2,132	-5.9 %	2,877
Poverty Rate for Children under 18 in 2016	10.7	2,898	--	--
	In 2000 14.3	2,112	-25.2 %	3,072

Source: U.S. Census Bureau

Rio Blanco County Fast Facts

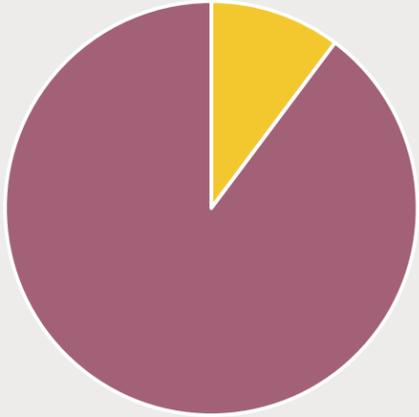
■ Total Population: 6,658

Education



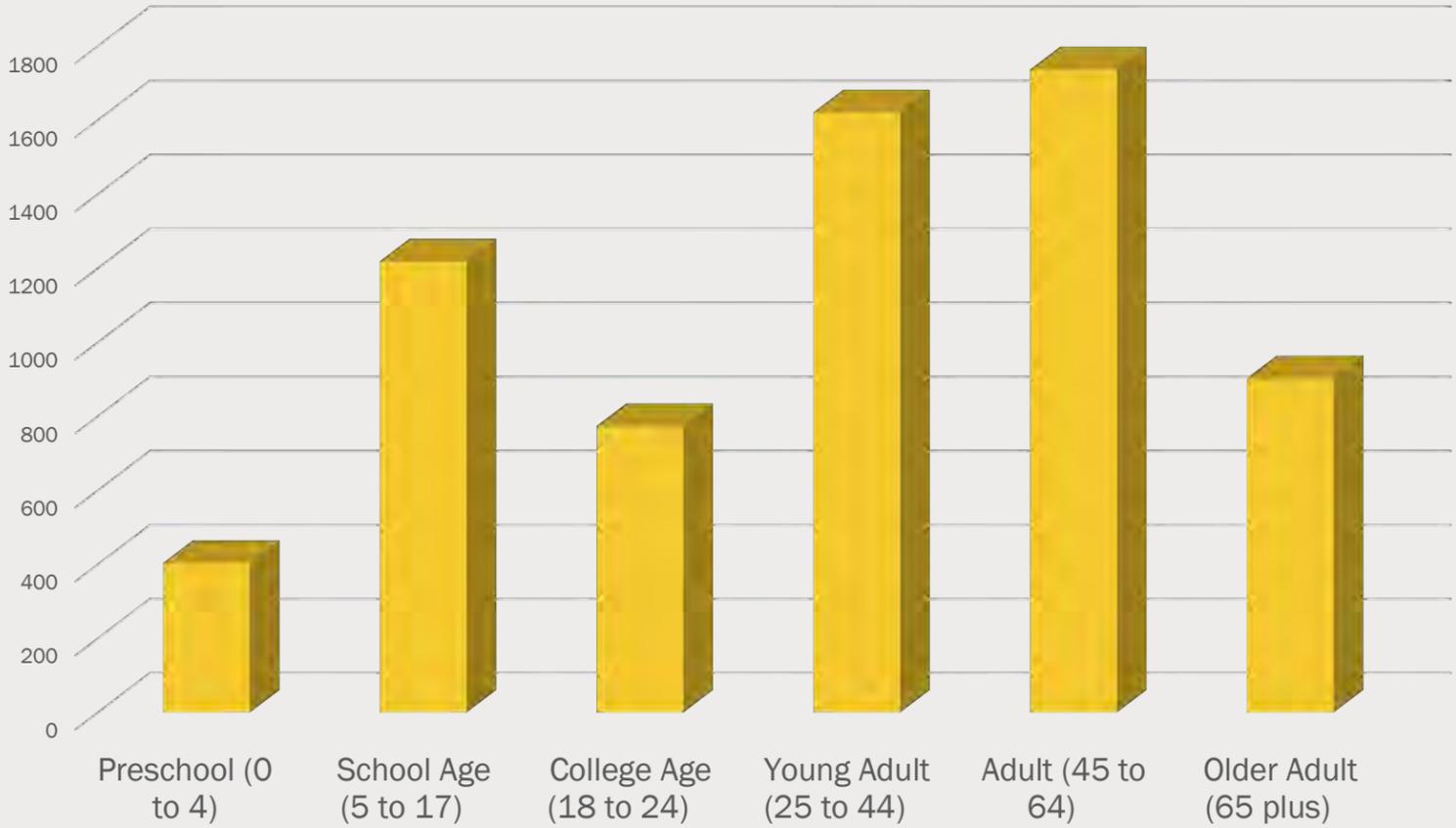
- Less Than 9th Grade
- 9th to 12th, No Diploma
- High School Graduate (incl. equiv.)
- Some College, No Degree
- Associate Degree
- Bachelor's Degree
- Graduate or Professional Degree

Hispanic/Non-Hispanic

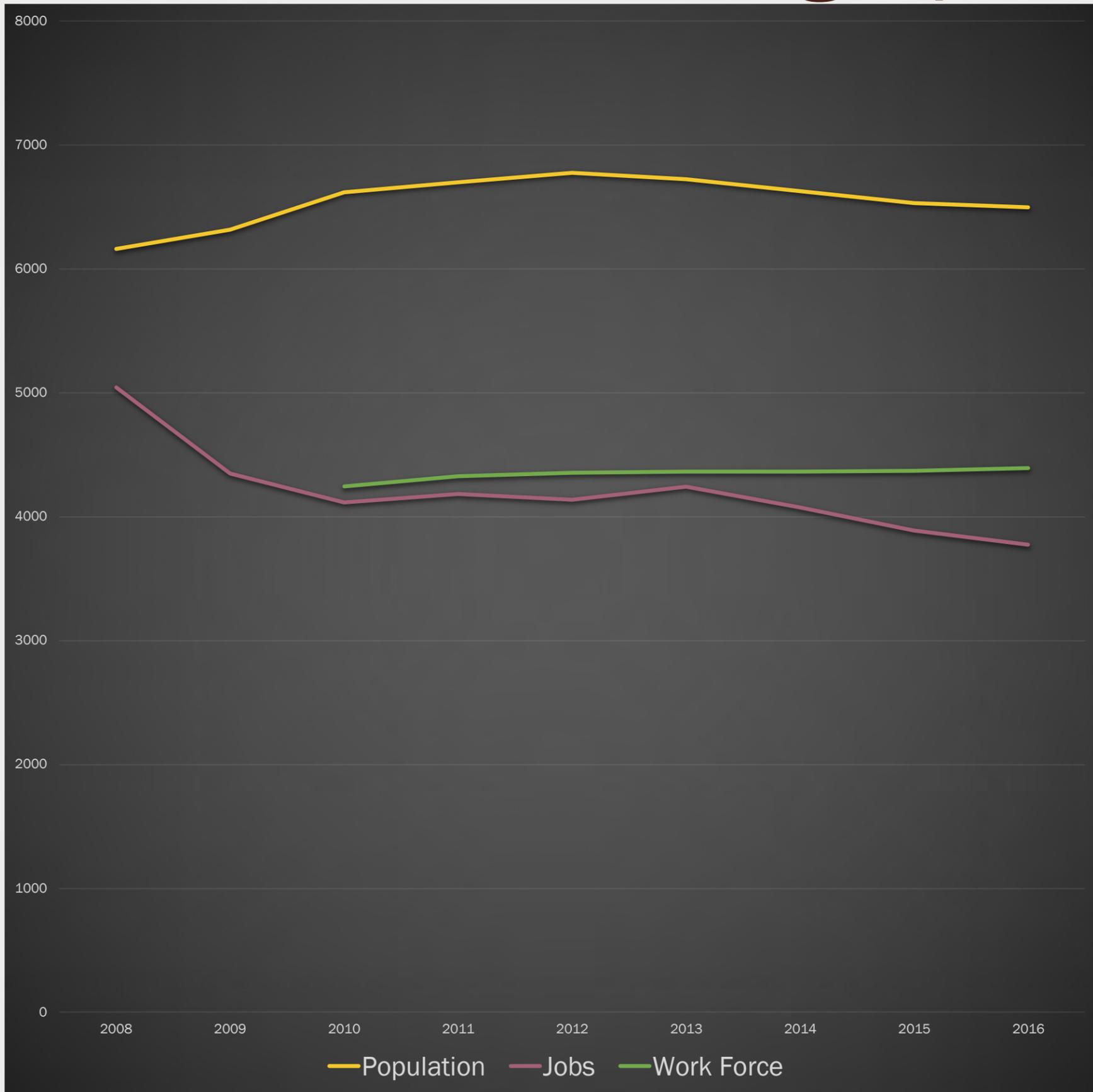


- Hispanic
- Non-Hispanic

Age

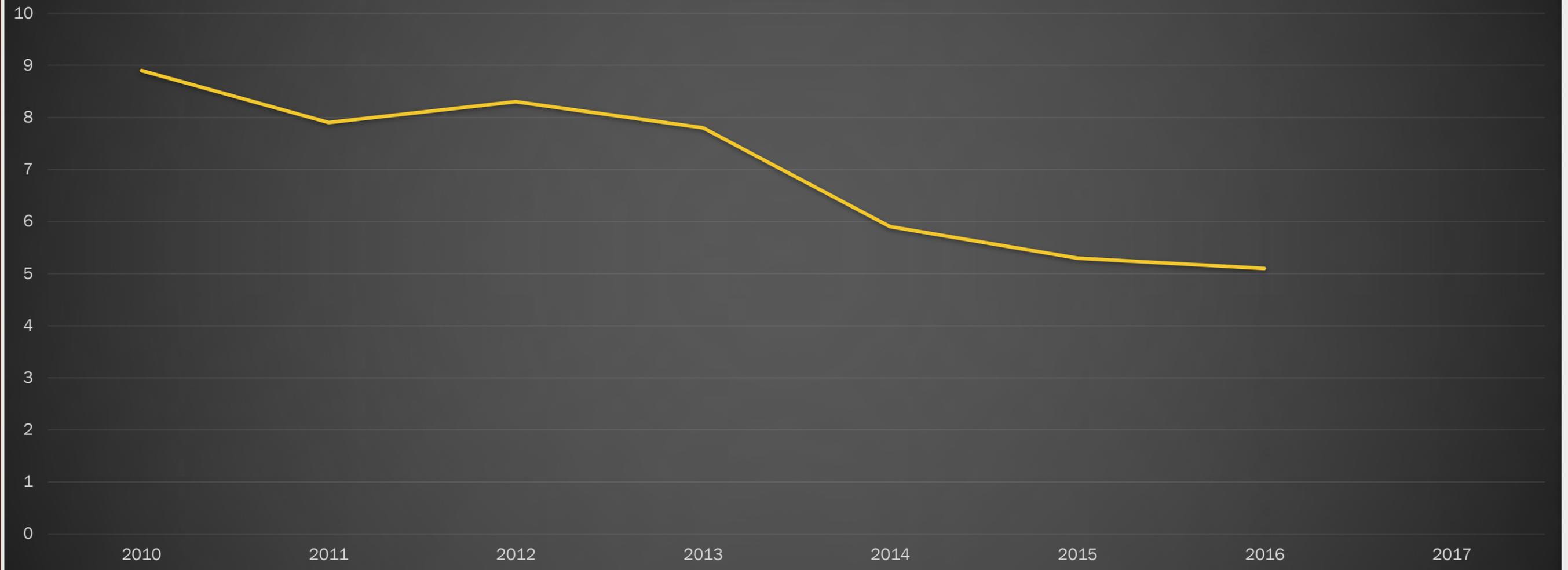


Workforce & Demographic Trends



Rio Blanco County has experienced a decline in jobs since 2008 and has yet to see positive job growth let alone a return to peak employment. Jobs have decreased by 25%.

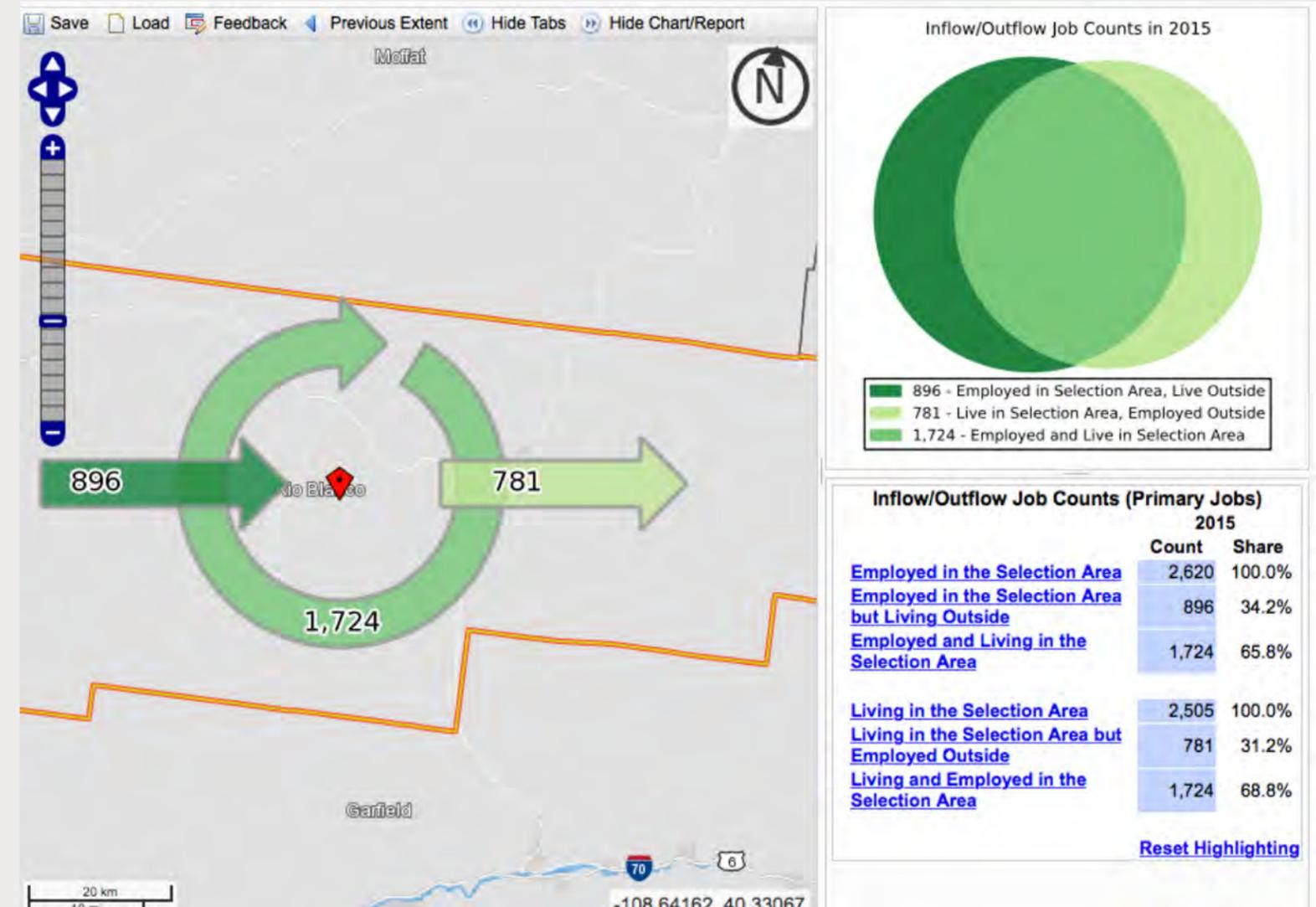
Unemployment



The unemployment picture in Rio Blanco is complicated. Population has declined overall, jobs have declined overall. In small rural community's, unemployment does not typically rise when jobs are lost because the workforce leaves the area. Rio Blanco has lost population, but not at the same rates as other counties in the region. Rio Blanco has retained more of its work force than other small communities. While unemployment has decreased overall, the unemployment rate has remained higher, and is the second highest overall in the Region second only to Mesa County.

Commuting Patterns

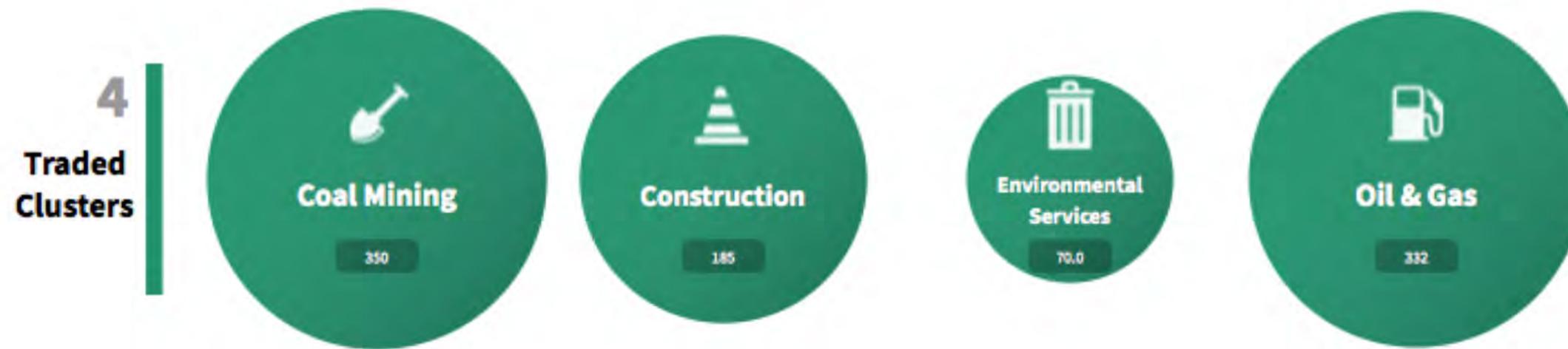
Rio Blanco County shares workforce with surrounding counties. Approximately 1,724 workers live and work in Rio Blanco County. Approximately 896 workers commute into the area, and 781 commute out of the area.



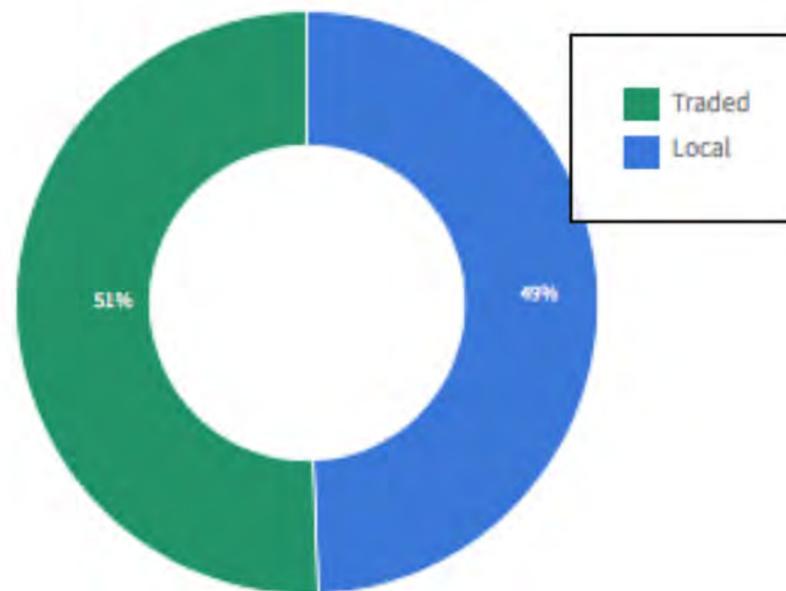
Cluster Analysis

Cluster Portfolio, 2015

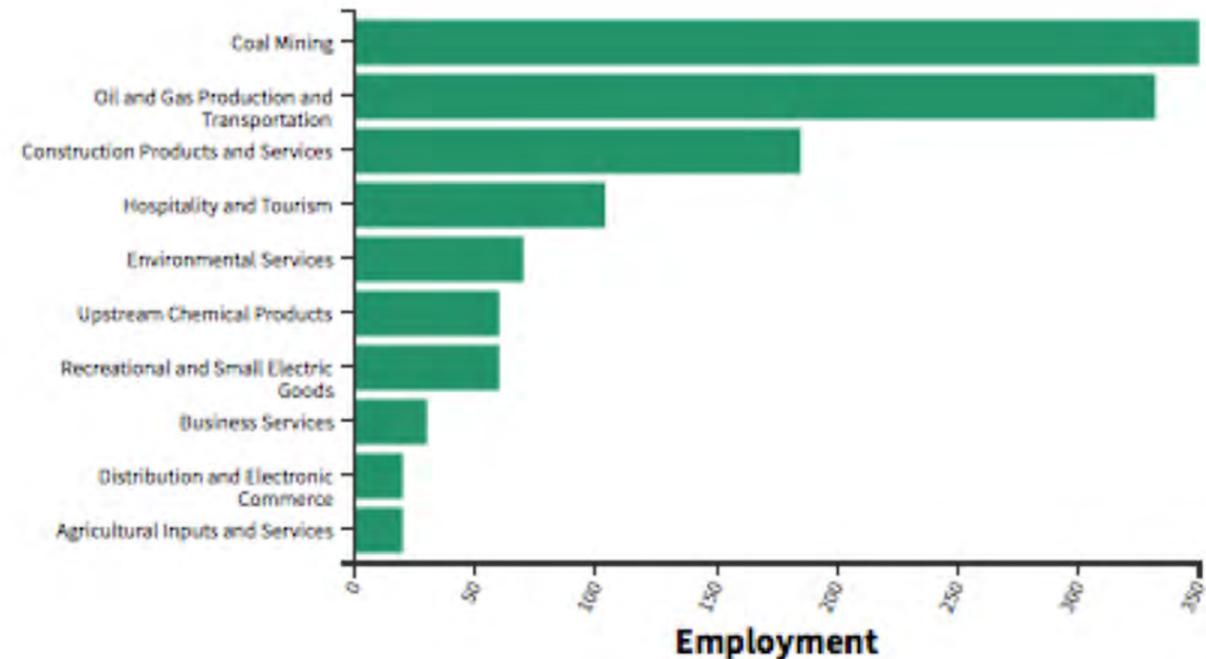
The Cluster Portfolio page illustrates the strongest [i](#) traded clusters in this region, as well as its top performing traded and local clusters. Click the link below to view the full set of charts.



Traded vs. Local Clusters



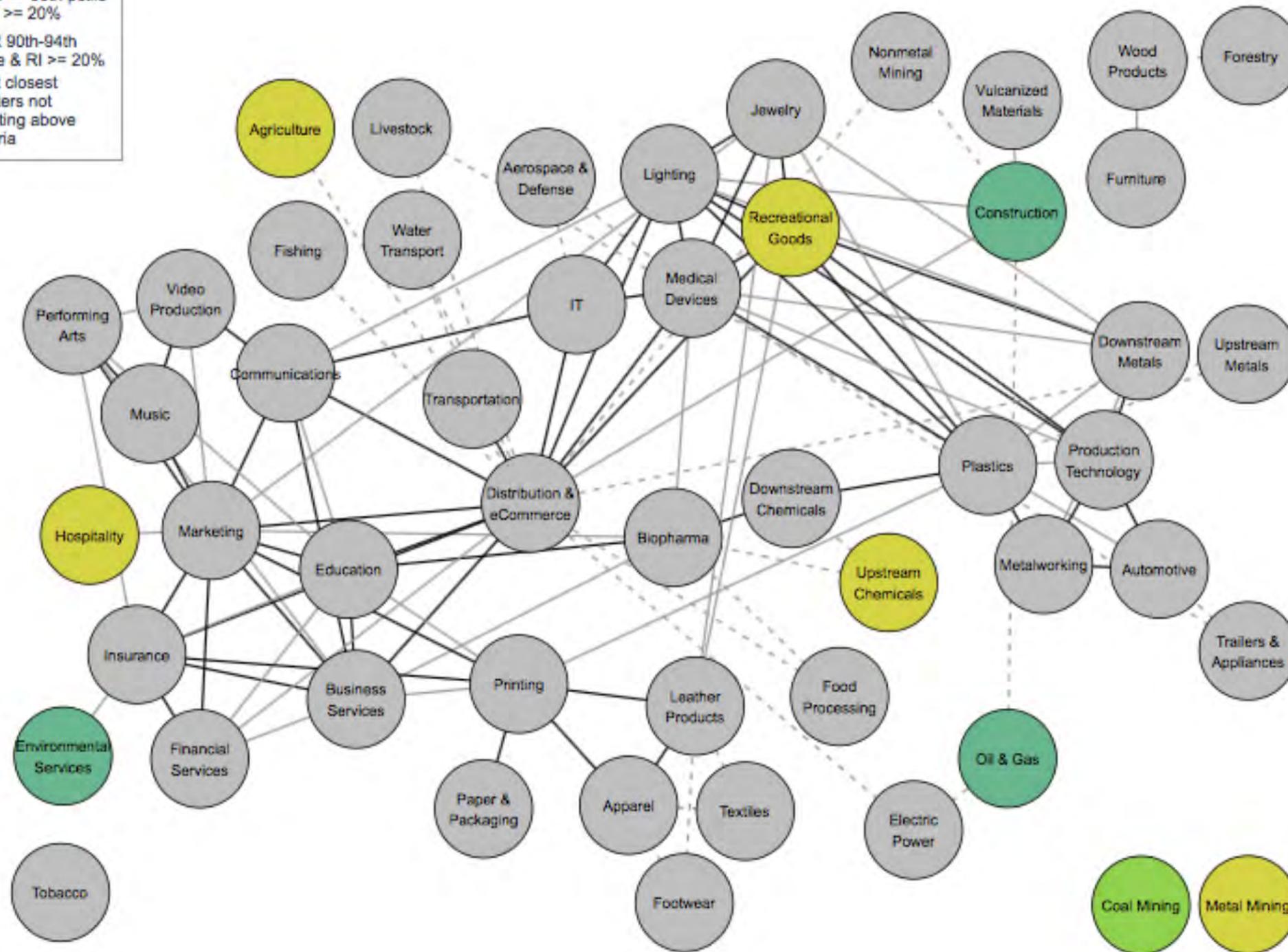
Top Clusters by Employment



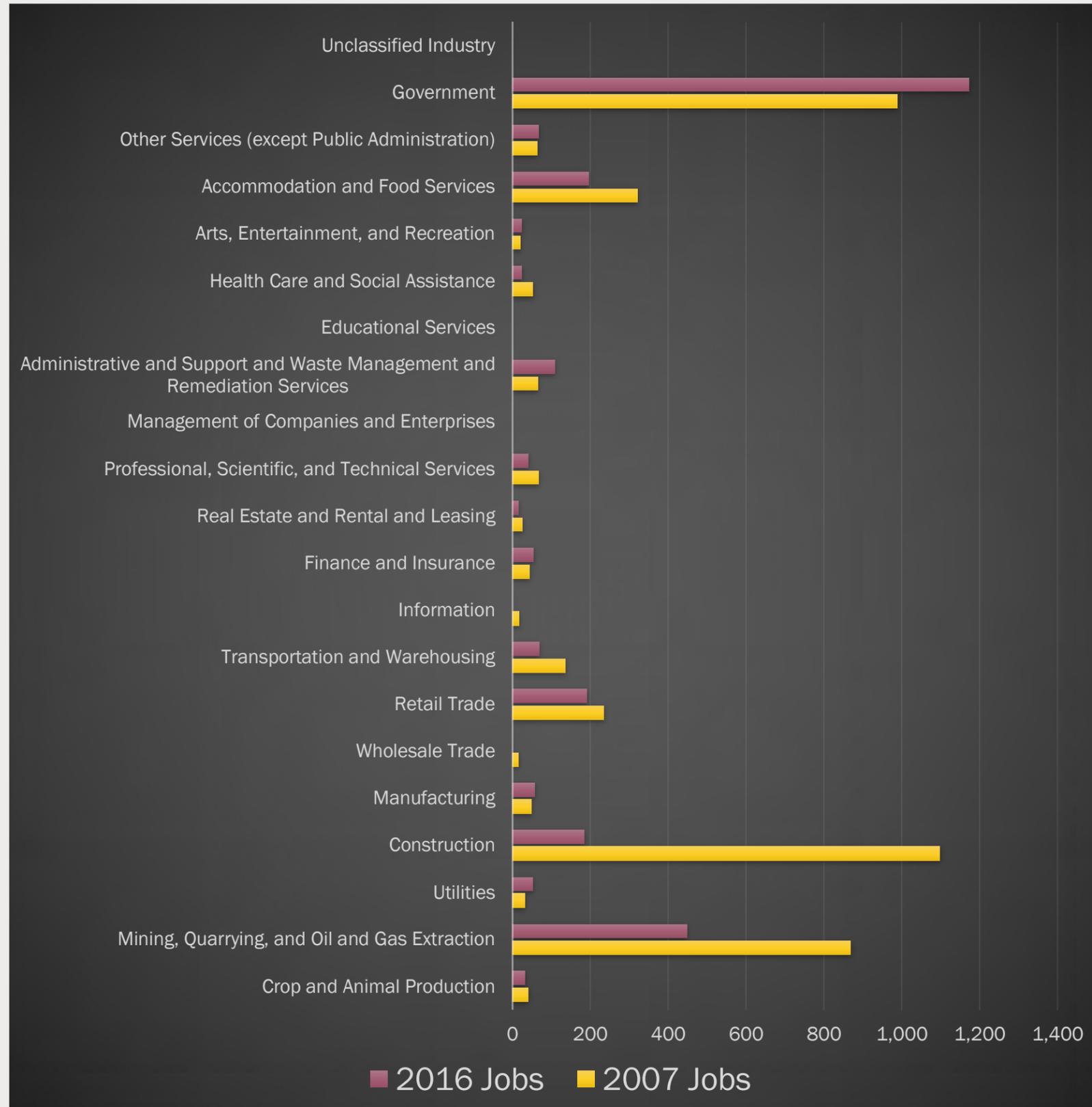
Cluster Linkages and Economic Diversification

Rio Blanco County, CO, 2015

- 90th percentile specialization
 - Strong clusters above 75th percentile specialization
 - Other specialized clusters (LQ > 1.0)
-
- BCR >= 95th pctile & RI >= 20%
 - - - BCR 90th-94th pctile & RI >= 20%
 - · · Next closest clusters not meeting above criteria

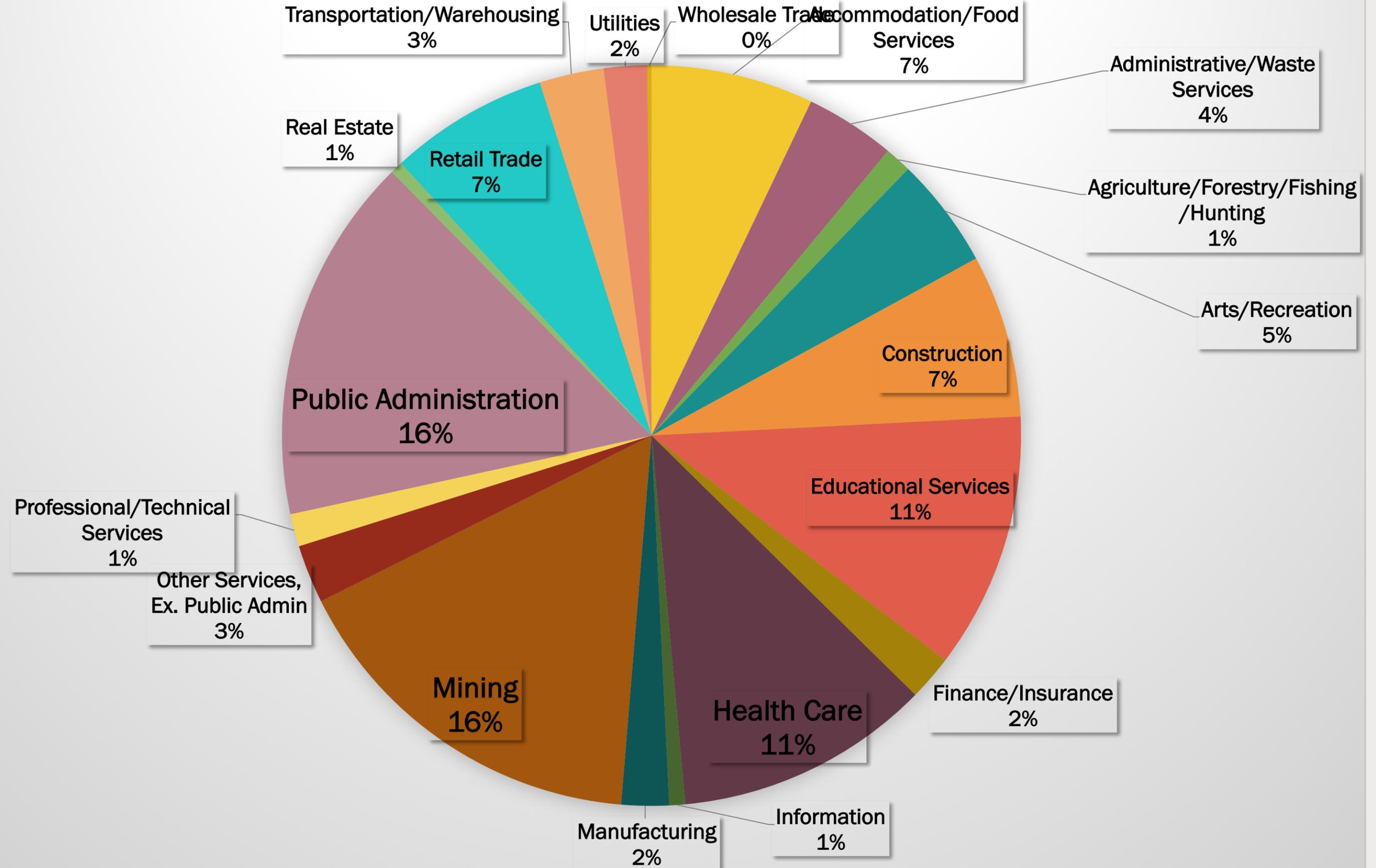


Job LOSS/GAIN by Sector

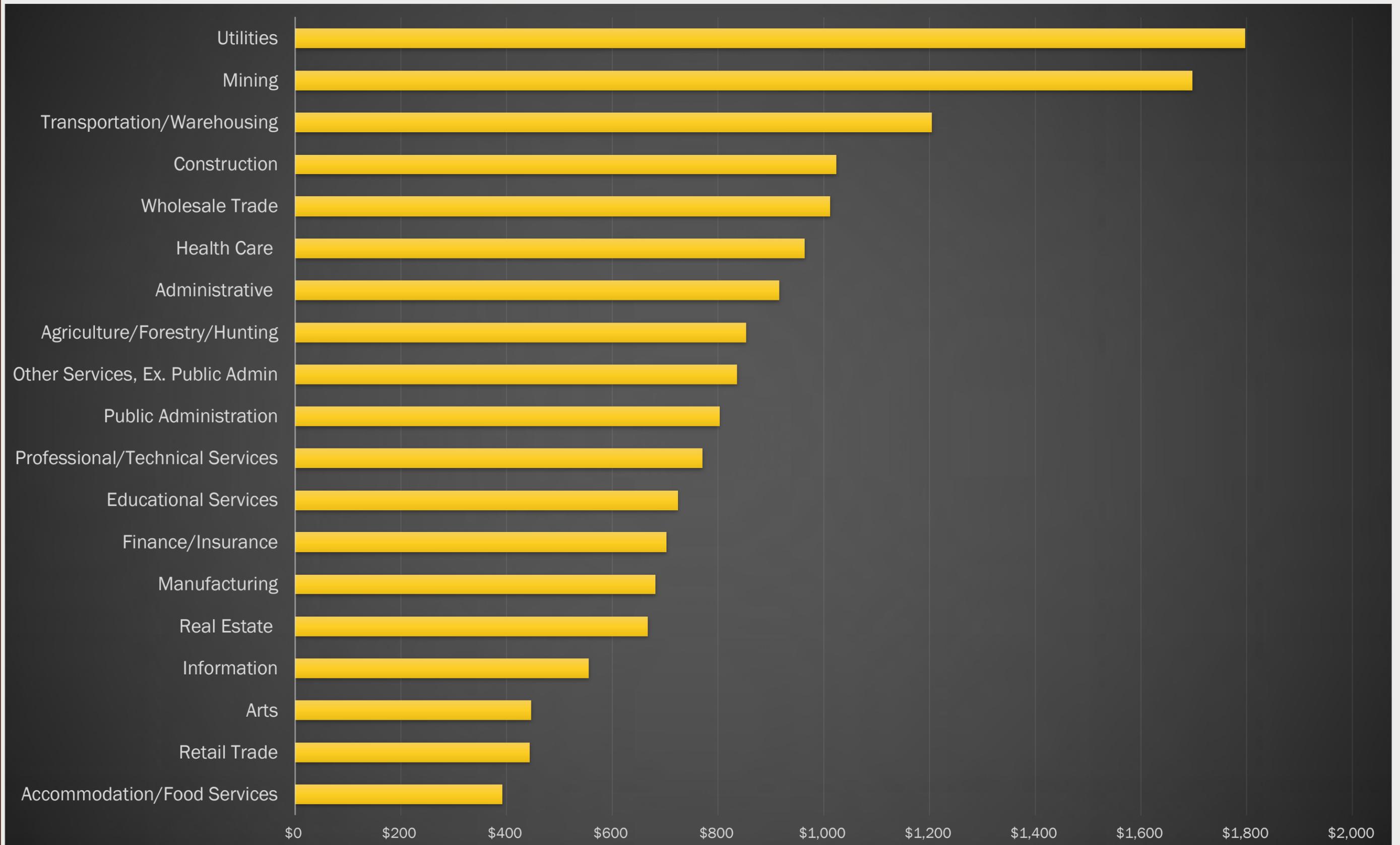


Government and administrative support are the only sectors to gain jobs since peak employment in 2007. Construction has declined by 83%, Mining (includes O&G) 49%, Utilities by 59%, and Healthcare by 54%. The decline in healthcare is surprising given that healthcare is strong in all other counties in the region.

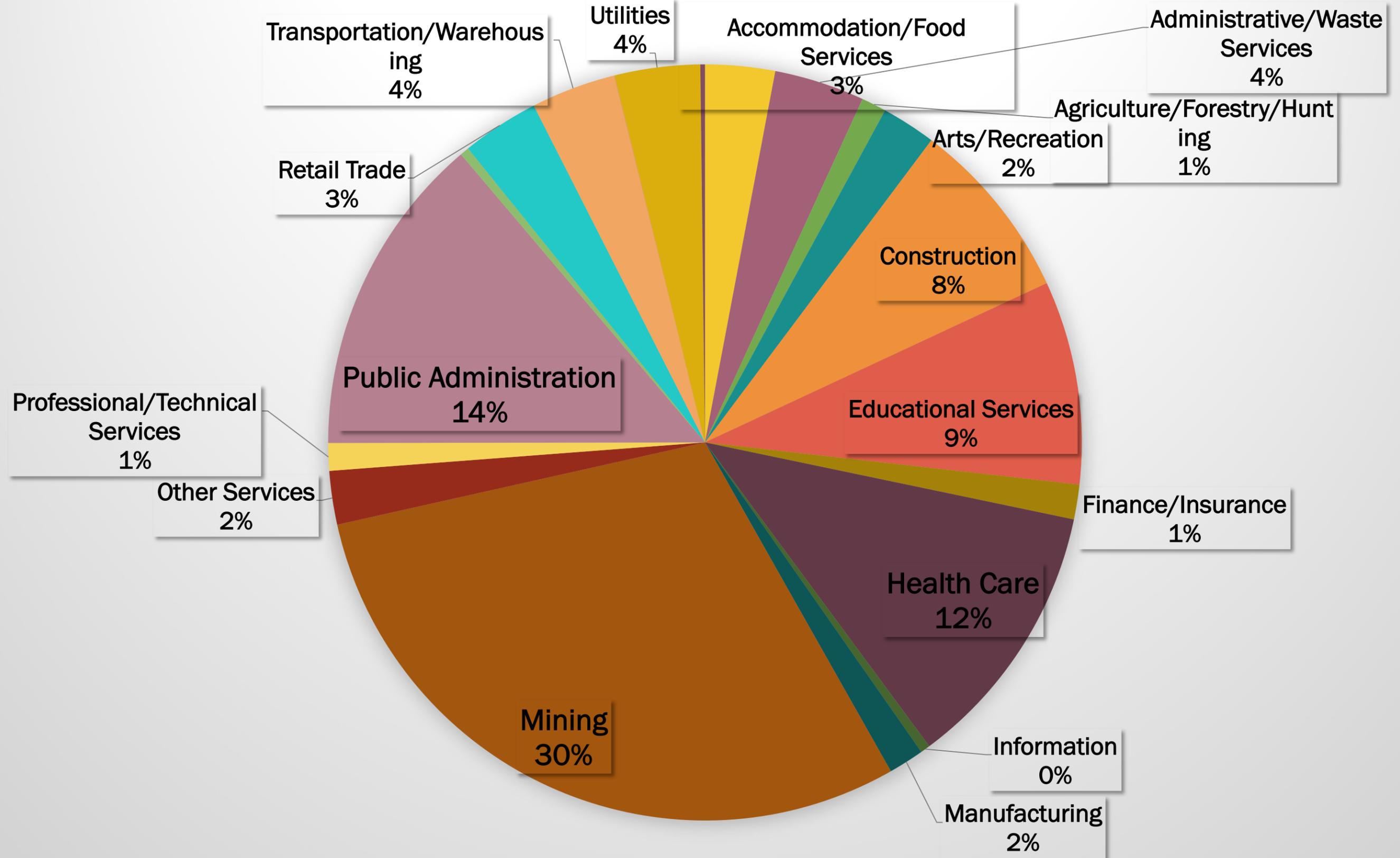
Share of Jobs by Industry



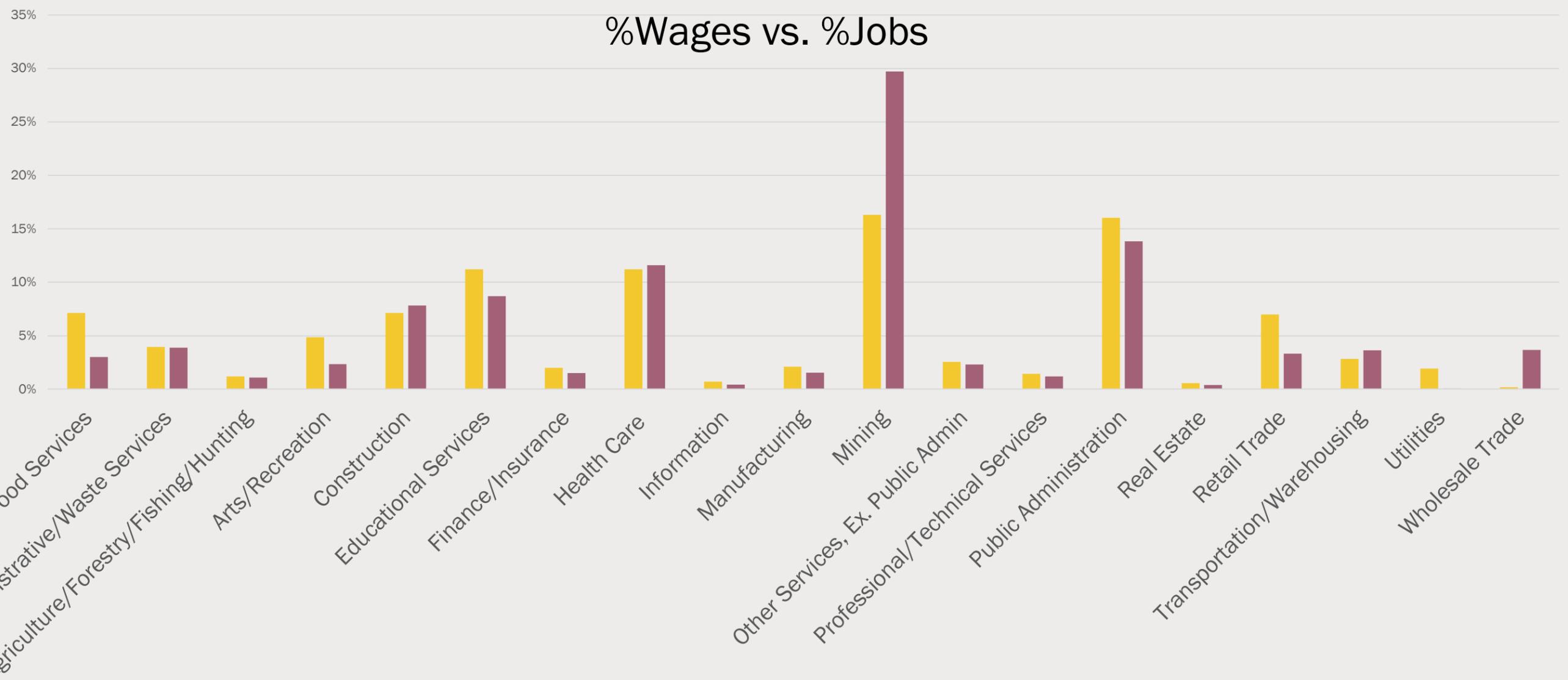
Wages by Industry



Share of Wages by Industry



Rio Blanco’s comparison of percentage of job share to percentage of wage share looks much different than the rest of the region. Mining jobs, which include oil and gas, coal, and non-metal mining jobs; account for 30% of all wages but only 16% of jobs. Mining typically carries a higher share of wages compared to jobs, but this difference is very pronounced in Rio Blanco county. Public Administration typically provides a higher share of wages than jobs, but in Rio Blanco Public Administration accounts for a higher share of jobs but not a stronger share of wages. Lastly, healthcare typically carries a higher share of wages than jobs. While this holds true in Rio Blanco, the difference is not as pronounced.



Mining, Quarrying, and Oil and Gas Extraction

- Data on jobs and wages listed in this report for mining include coal mining, quarrying, and oil/gas.
- There are an average 447 jobs in this sector.
- Approximately 32% of these jobs are Coal Mining Jobs associated with the Deserado Mine.
- Per Rio Blanco County Economic Development, 70 Rio Blanco County residents are employed at Deserado and 49 Rio Blanco County residents are employed at Colowyo.

Agriculture

- 2016: 426 Jobs
- 2010: 367 Jobs
- Average Wage: \$852
- 2012 Market Value: \$24,412,000

Rio Blanco County has a relatively strong agriculture industry. Wages in this sector are stronger than in surrounding communities. This is due in part to livestock sales representing 83% of total 2012 market value. The average market value per farm was \$77,995 compared to just \$37,360 in Mesa County.

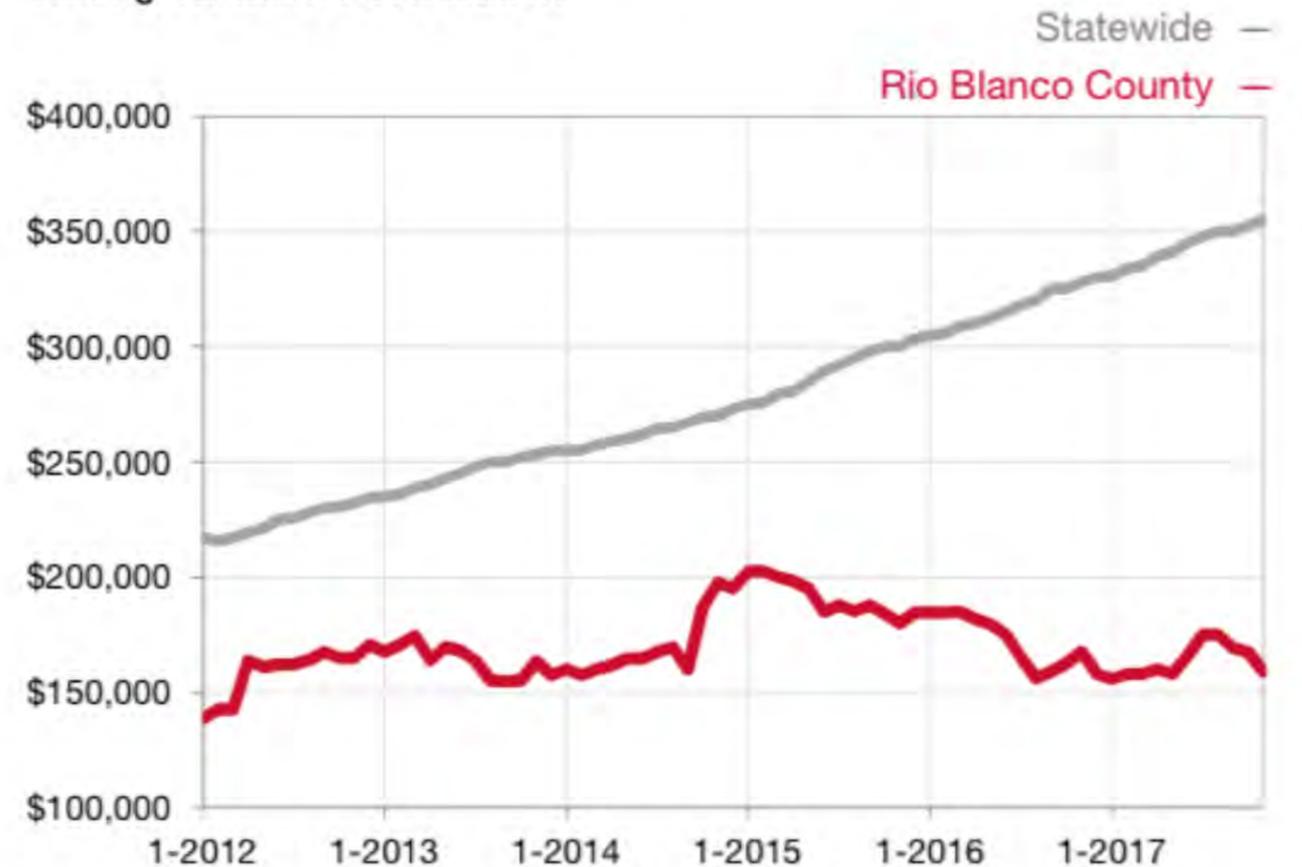
Agricultural wage data includes forestry, fishing, and hunting as well. Wages may also be higher for this sector in Rio Blanco County because of the strong presence of forestry, hunting, and fishing .

Housing

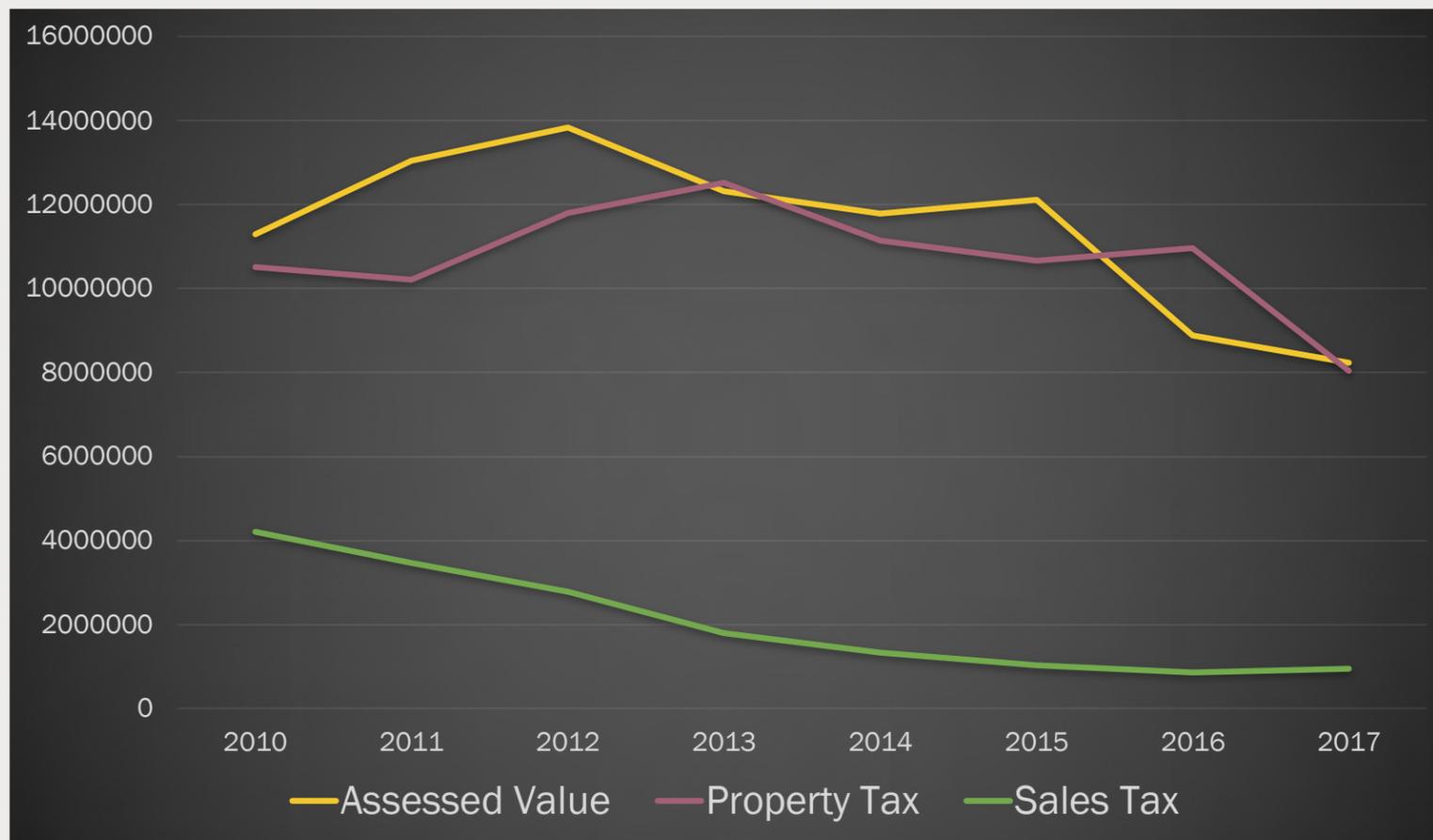
- In 2017 the Median Sales Price of a single family residence was \$167,125 up 2.8% from the previous year.
- The Median Household Income for Rio Blanco County is \$58,980.
- An income of about \$51,562 is needed to purchase a home in the median price range.
- Rio Blanco County has relatively affordable housing and average incomes that are sufficient to afford a home. This is likely a competitive advantage moving forward.
- Rio Blanco would be at risk of losing this competitive advantage if mining related jobs continue to retract thereby lowering the median household income.

Single Family Key Metrics	November			Year to Date		
	2016	2017	Percent Change from Previous Year	Thru 11-2016	Thru 11-2017	Percent Change from Previous Year
New Listings	6	6	0.0%	120	134	+ 11.7%
Sold Listings	3	4	+ 33.3%	64	64	0.0%
Median Sales Price*	\$215,000	\$107,500	- 50.0%	\$162,500	\$167,125	+ 2.8%
Average Sales Price*	\$205,000	\$117,750	- 42.6%	\$193,713	\$185,356	- 4.3%
Percent of List Price Received*	94.5%	93.9%	- 0.6%	91.7%	94.2%	+ 2.7%
Days on Market Until Sale	253	30	- 88.1%	173	126	- 27.2%
Inventory of Homes for Sale	76	60	- 21.1%	--	--	--
Months Supply of Inventory	12.3	10.4	- 15.4%	--	--	--

Median Sales Price – Single Family
Rolling 12-Month Calculation



Tax Base



Consistent with the remainder of the region, Rio Blanco is seeing a steady decline in tax base and assessed value.

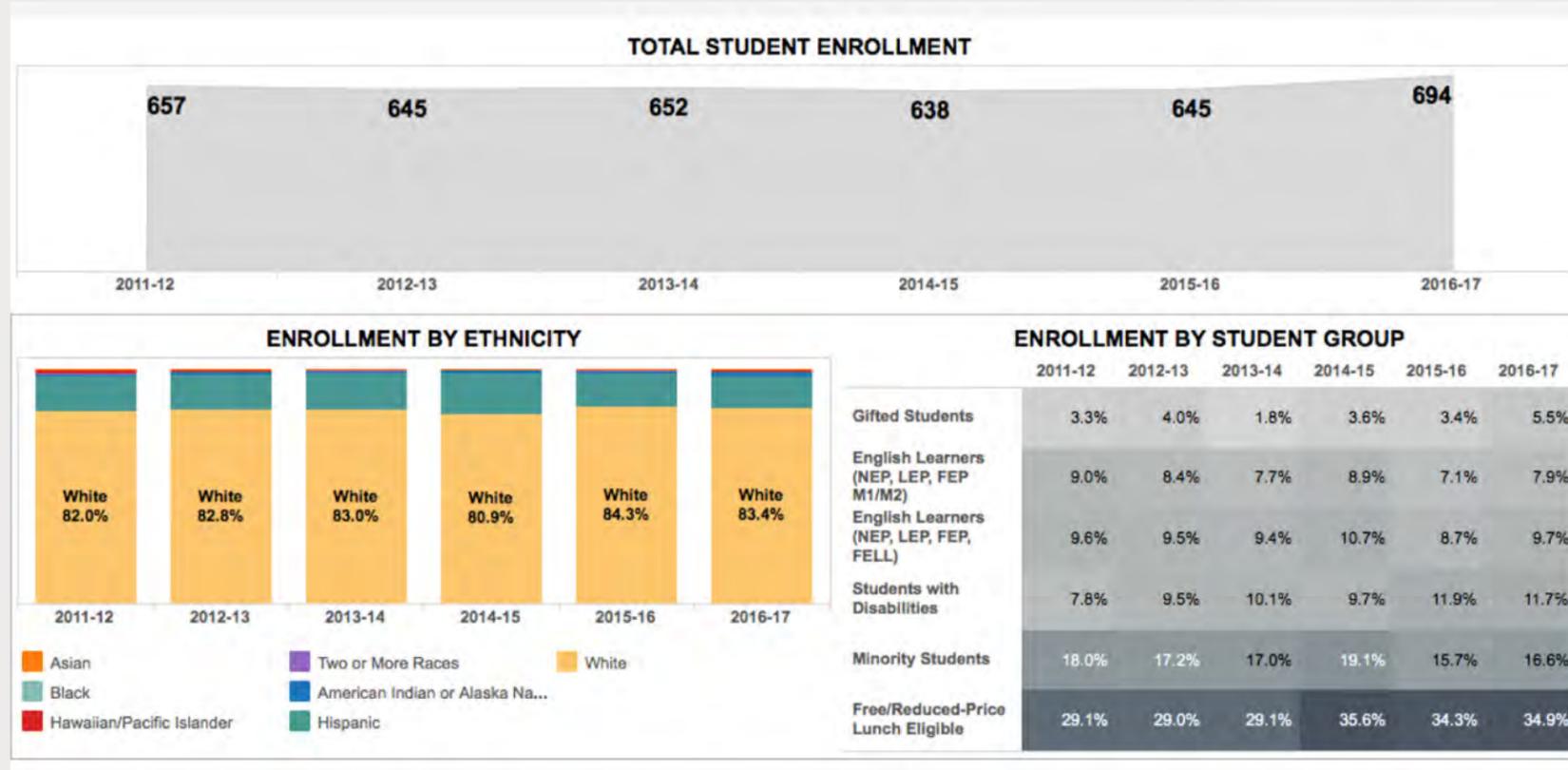
Rio Blanco's tax base is at significant risk. Oil & Gas accounts for 43% of Rio Blanco County's assessed value, down 33% since peaking in 2007. Much of this value is based on oil and gas production as well as commodities prices. Wells lose production capability over time. New wells are not being drilled as frequently as in the past to keep total production up. Commodities prices remain low. These elements combine and result in reduced value for oil and gas production, and in turn put additional downward pressure on the tax base.

Rio Blanco's challenge is to not only diversify its economy, but to also diversify its tax base so it is less dependent on oil and gas. All of the County's top 10 tax paying entities are related to oil and gas.

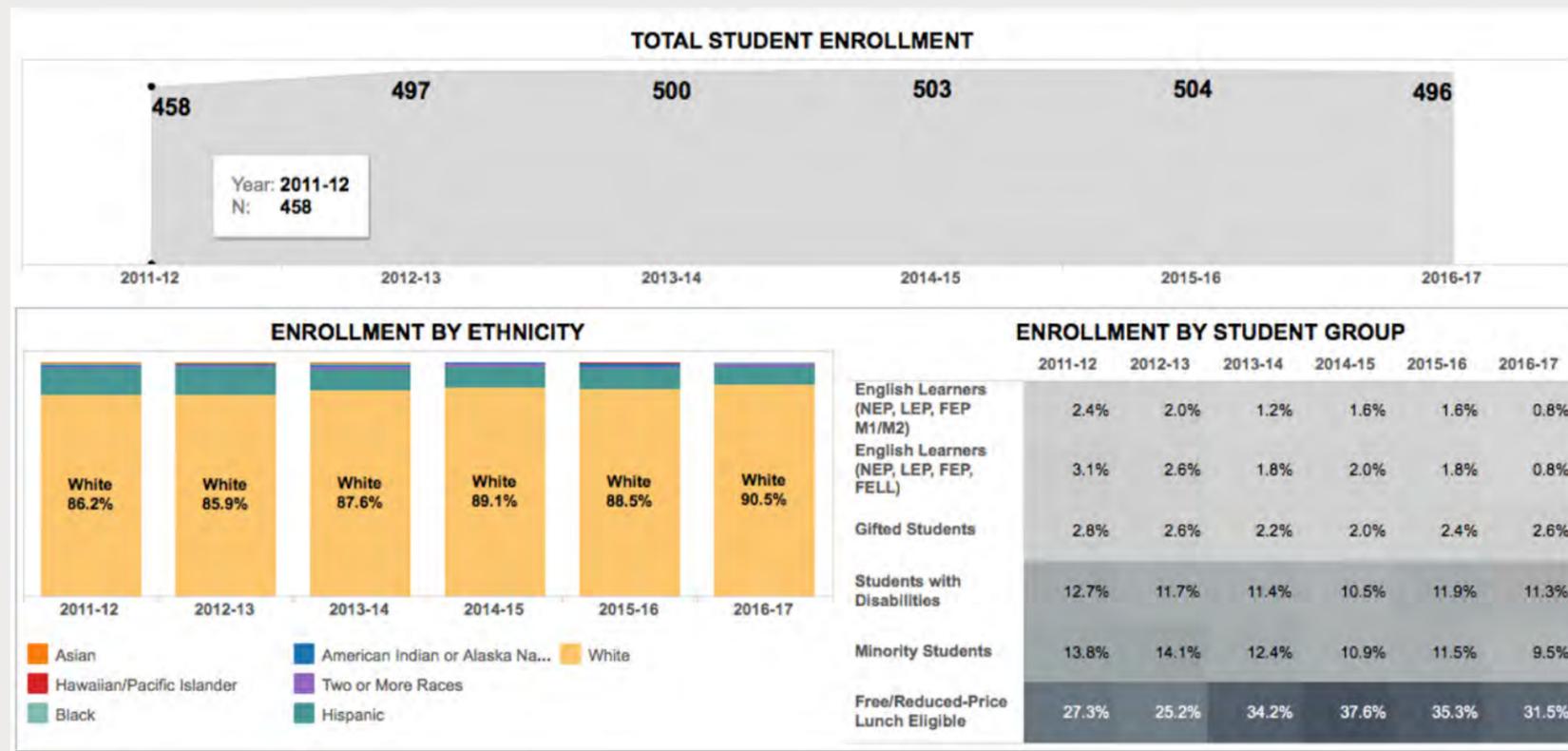
2017 TOP TEN ASSESSED VALUE	
	ASSESSED VALUE
Enterprise Gas Processing, LLC	216,681,180
Chevron U.S.A. Inc.	120,765,310
Willow Creek	75,143,520
XTO Energy, Inc.	65,809,680
TEP Rocky Mountain, LLC	43,468,190
Bargath, LLC	23,053,060
APR Rangely Production, LLC	18,192,880
Blue Mountain Energy, Inc.	17,255,240
EnCana Oil & Gas (USA) Inc.	13,346,270
Rockies Epress Pipeline	11,626,100
Top Ten Total Assessed:	605,341,430
Top Ten =	74% of Total County Assessed Value

Education

Meeker RE1



Rangely RE4



- Rio Blanco County schools have seen relatively stable enrollment in schools while other counties experience declining enrollment.
- Both school districts have seen an increase in free and reduced lunch. This is an indicator of poverty.
- Both school districts are also seeing a decrease in the diversity of the student population.

Conclusions

- Rio Blanco County is on the cusp of major economic hardship.
- Rio Blanco County's wage portfolio is overly dependent on mining, which includes coal and oil/gas jobs.
- Since 2008 the County has seen a decline in its Per Capita Income as jobs in high wage earning sectors have declined.
- Diversification of the Rio Blanco economy is essential.
- Rio Blanco County has not experienced economic recovery from the 2008 recession.
 - *The County has not returned to peak employment*
 - *Population continues to decline*
- Colorado as a whole has not only recovered from the recession but has excelled with job growth, growth in wages, and population growth. These trends are not reflected in Rio Blanco County.
- The closure of Unit 1 at Craig Station in Moffat County will impact wages and employment in Rio Blanco County.

Appendix D

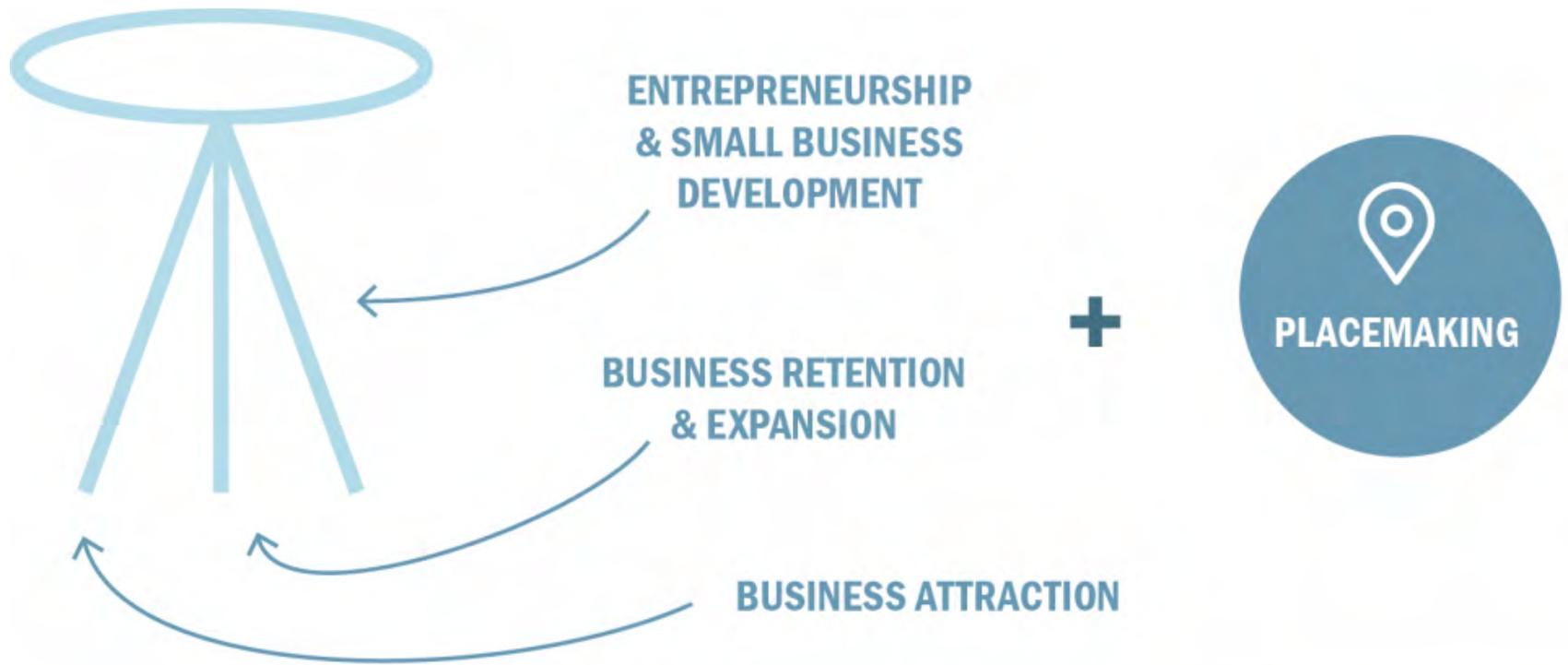
Associated Governments of Northwest Colorado:

Overview of existing plans

Over the past five years, several counties and communities within the AGNC region have put together local economic development plans, or have addressed elements of economic development in other planning efforts such as updates to comprehensive plans.

The intent of this review is to provide a framework that can be built upon to develop a region wide Comprehensive Economic Development Strategy (CEDS) for AGNC.

Rio Blanco and Moffat County have completed plans within the last twelve to twenty-four months. The AGNC CEDS process can build off of these plans, and others, rather than duplicate these local efforts. Other counties have a variety of plans and strategies that can help inform the process. Most of these plans focus on four elements of economic development. Moving forward the CEDS plan should focus on goals and strategies that can help AGNC think strategically about these four elements of economic development as depicted below:



Plans Reviewed

The following existing plans were compiled and reviewed.

Community	Plan/Information
Rio Blanco County	Blueprint Marketing Strategy, Blueprint Branding Strategy, Phase 1-4 Better City Studies, Community Builder (Adventure EDU), Blueprint Tourism Work Plan,
Moffat County	Comprehensive Economic Development Strategy, 2035 My Vision My Voice, Yampa White River SET Plan, Broadband Plan
Routt County	Steamboat 2011 Economic Development Policy, Hayden OEDIT Recommendations, Routt County Vision 2030, Yampa White River SET, 2009 Hayden Revitalization Plan, 2007 Vision 2030, 2005 Hayden Comprehensive Plan, 2005 Hayden 3 Mile Plan, Where My Heart Is video, Hayden Wayfinding
Garfield County	County Profile, Comprehensive Plan, Community Profiles, Website, Broadband Plan, Rifle Energy Village, RREDC Website, Parachute Comprehensive Plan, Parachute DCI Downtown Report,
Mesa County	Broadband Plan, GJEP Website, Chamber Website,

Community

Plan/Information

Region 11

Blueprint 1.0

Regional Economic Development Goals & Strategies,

Following is a summary of the goals most commonly identified in local plans, which collectively may be a good starting point for development of a regional CEDS. This list is not inclusive of all ideas and projects, but attempts to identify concepts from existing plans that can be applied to any project, as opposed to being project specific.

Using these goals and categories as a framework, the CEDS can then focus on specific strategies that can be implemented and tracked over time.

	Entrepreneurship Small Business Development	Business Retention Expansion	Business Attraction	Community Development/Place Making/Asset Development
GOAL	Strengthen Regional Workforce	Strengthen Regional Workforce	Strengthen Regional Workforce	Strengthen Regional Workforce
GOAL	Cultivate sustainable solutions	Cultivate sustainable solutions	Cultivate sustainable solutions	Cultivate sustainable solutions
GOAL	Maintain a strong and diverse economic base	Maintain a strong and diverse economic base	Maintain a strong and diverse economic base	
GOAL	Increase economic diversity	Increase economic diversity	Increase economic diversity	
GOAL	Increase average compensation	Increase average compensation	Increase average compensation	
GOAL	Identify complimentary chains (supply, labor) and identify strategies to build from	Identify complimentary chains (supply, labor) and identify strategies to build from	Identify complimentary chains (supply, labor) and identify strategies to build from	

GOAL	Expand Economic Development	Expand Economic Development	Expand Economic Development	
GOAL	Create new jobs that are preferably manufacturing based	Create new jobs that are preferably manufacturing based	Create new jobs that are preferably manufacturing based	
GOAL	Contribute to strong local economic base	Contribute to strong local economic base	Contribute to strong local economic base	
GOAL	Attract, Retain, Grow Business	Attract, Retain, Grow Business	Attract, Retain, Grow Business	
GOAL	Establish Economic Resilience	Establish Economic Resilience	Establish Economic Resilience	Establish Economic Resilience
GOAL	Think long term act short term	Think long term act short term	Think long term act short term	Think long term act short term
GOAL				Re-design and enhance downtown

				Promote increased use of existing assets
GOAL				Preserve Protect City Assets
GOAL	Leadership development			Leadership development
GOAL				Increase entertainment/events
GOAL				Address Housing
GOAL				Get on the same page
GOAL				Expand Infrastructure
GOAL	Build a business-friendly environment	Build a business friendly environment	Build a business friendly environment	Build a business friendly environment

GOAL	Recruit grow and retain business	Recruit grow and retain business	Recruit grow and retain business	
GOAL	Increase access to capital	Increase access to capital	Increase access to capital	
GOAL	Create and market a stronger Colorado Brand			
GOAL	Educate and train the workforce of the future	Educate and train the workforce of the future	Educate and train the workforce of the future	
GOAL	Cultivate innovation & technology	Cultivate innovation & technology	Cultivate innovation & technology	
GOAL				Preserve, maintain and enhance working ranches and promote agriculture as an economic base; support a sustainable and diverse economy that includes ranching, farming, agri-tourism and the harvesting of natural resource products.

GOAL

Promote local products and diverse markets for local agriculture and natural resource products.

GOAL

We will nurture and promote a regional, diverse, and sustainable economy, fostering a range of industries, employment, and resources and resulting in a variety of products and services. This will be provided by resources, initiatives for businesses, land use options, and transportation.

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GOAL

Increase broad-band capacity through public private partnerships.

GOAL	Ensure county-wide cell-phone coverage.		
GOAL	Pursue new technology, new industry sectors (e.g. location neutral businesses such as software programming, financial services, bio-tech industries), new energy economy (bio-fuels, waste to energy, etc.) in order to develop a diverse economy.		
GOAL	Provide economic education that includes economic trending, research and bringing new information from the region's businesses.	Provide economic education that includes economic trending, research and bringing new information from the region's businesses.	Provide economic education that includes economic trending, research and bringing new information from the region's businesses.

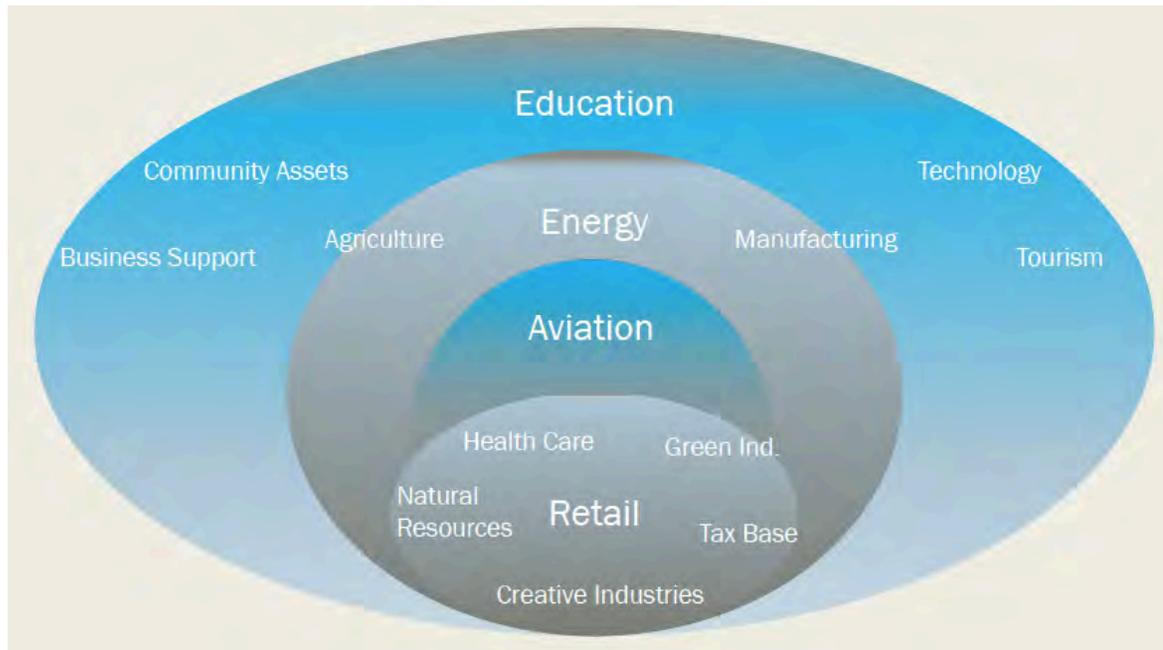
GOAL	Advocate for workforce attraction and retention including workforce housing, international workers, and more.	Advocate for workforce attraction and retention including workforce housing, international workers, and more.	Advocate for workforce attraction and retention including workforce housing, international workers, and more.
GOAL	Implement entrepreneurial advocacy and seek adaptive zoning that enables entrepreneurial activities.		Implement entrepreneurial advocacy and seek adaptive zoning that enables entrepreneurial activities.
GOAL		Foster an educational climate that creates access to a variety of 21st century educational opportunities from early childhood education through lifelong learning.	

GOAL	Encourage economic development that builds from our natural and historical resources and our western heritage.	Encourage economic development that builds from our natural and historical resources and our western heritage.	Encourage economic development that builds from our natural and historical resources and our western heritage.	Encourage economic development that builds from our natural and historical resources and our western heritage.
GOAL				Encourage and foster local gathering places.
GOAL				Develop affordable and accessible early childhood care and educational options in our communities
GOAL				Promote a multi-generational community that connects families of diverse socio-economic levels in

order to maintain the Yampa Valley as a "great place to raise kids."

Regional Analysis: Strategies

To get a better sense of where economic development strategies in the CEDS could focus, a county by county review of strategies has been completed.



Many counties are focusing either on specific sectors, or on resources and support for all sectors. To help get a sense of the economic activity taking place across the region, an analysis of what topics, issues, activities, or targeted sectors was completed.

County

Economic Sector/Activity

Moffat

Manufacturing, Business Support, Tourism, Ag, Community Assets, Tax Base, Technology, Education, Energy

Rio Blanco

Manufacturing, Business Support, Tourism, Ag, Community Assets, Aviation, Technology, Education, Energy, Natural Resource, Retail

Routt

Business Support, Tourism, Community Assets, Technology, Education, Green Industry, Creative Industry

Garfield

Manufacturing, Business Support, Tourism, Ag, Community Assets, Tax Base, Aviation, Education, Energy, Green Industry, Creative Industry, Health Care, Retail

Mesa

Manufacturing, Business Support, Tourism, Ag, Community Assets, Aviation, Technology, Education, Energy, Healthcare

This review helps to identify quickly common ground, versus unique approaches within the region. The targeted economic sectors/activities in the outer ring of the graphic have five counties that have incorporated these concepts into their plans. Four counties are focused on the sectors/activities in the second ring. The inner ring represents one to two counties.

All five counties have identified a need to work on education, business support, community development/assets, technology, and tourism as part of their economic development plans. The Counties are applying different strategies to each of these issues to address their broader goals of economic diversification, leadership development, business attraction/recruitment, etc. Arguably, these five focus areas can be applied across all aspects of economic development and across any economic "sector". These focus areas might be good goals and/or strategies for the CEDS. Work focused in these five areas are independent of specific economic sectors, are complimentary to one another, and can be expanded to address specific needs of any community or economic sector.

Education:

Goals and strategies identified around education mostly focus on growing or creating higher education programs designed around either existing economic sectors or desired sectors. For



example, several counties have strong regional airports. Aviation is a growing industry. Creating training programs in the aviation industry can help strengthen a community's work force, which in turn may help the area recruit aviation businesses. Likewise, training programs can help develop local work force skills to support existing aviation business.

Some counties have simply identified a need to support the local higher education institutions in the region with broad goals. Lacking in most of the regional plans is a

focus on K-12 education. Quality schools and day care are essential "assets" for attracting families and new businesses. Development of a quality K-12 program tends to be addressed more under policies related to community development, but might stand out more if incorporated into an overarching education goal for the region.

Business Support:

All five counties have developed or are in the process of strengthening their business support resources. There are a lot of different strategies around business support, with a focus on either growing existing businesses or encourage the creation of new businesses. These activities vary county to county. Business support strategies can be used across the economic development spectrum to encourage entrepreneurship/small business development, business retention/expansion, and business recruitment. Business support also crosses all industries. Business support services are one way that non-profits and local government can play a significant role in economic development. Business support programming is a good strategy to support both existing businesses, foster a start-up environment, and to help recruit new business.



Placemaking/Community Development/Community Assets

One of the foundations of economic development is that economic development should support the quality of life of a community. Places that are vibrant, fun, and support community's members needs such as access to quality healthcare, affordable housing, quality child care, education, employment, recreation, clean water, and clean air are places that are attractive for economic activity. Maintaining a community's assets, growing its resources, protecting and preserving a community's uniqueness,



are all key aspects of economic development. The five counties in the AGNC region have identified numerous economic development activities focused on either improving infrastructure or improving access to assets.

Community Development is also important to economic development because it helps a community ensure it has adequate infrastructure such as roads, industrial parks, water, and sewer to support the business and industry the community needs. A

good first step for each community and the region is to assess its business infrastructure, and identify opportunities to address deficiencies at the regional level. Broadband infrastructure is a good example of a regional deficiency that may take regional cooperation to generate solutions that bring affordable, redundant, and reliable internet to each community within the region.

Technology:

All five counties have identified technology in various plans as a top economic development focus. Technology means several things, but can be broken down into two basic components; ensuring access to infrastructure including redundant, reliable, affordable broadband, as well as looking at



CallCenterInnovation
BroadbandNetwork
DataCenter
Training
Broadband
LocationNeutral

strategies to leverage broadband infrastructure access into the technology sector. Over the past several years many of the counties have engaged in regional planning to identify strategies for improving infrastructure in the region. Some counties are now

working on implementing those plans. As each county successfully increases its access to broadband, shifting focus on how to leverage the investment in infrastructure will be critical. For the purposes of the CEDS, there is an element to “technology” that is about developing, maintaining, and enhancing the infrastructure necessary to support technology as an economic sector. Distinguishing between development of technology infrastructure and growing technology as an industry may be appropriate for planning purposes.

Tourism:

Tourism is strong in each county within the region, with tourism assets often contributing to a county’s overall quality of life for residents too. Tourism is a double-edged sword in economic development. On one hand tourism generates significant economic activity, and supports the local tax base through generation of sales, lodging, and other taxes. Jobs associated with tourism though tend to have lower wages and are often seasonal. Tourism is also the “initial sell” for a community. A community’s tourist assets that attract visitors can also become a draw to attract families that might

be location neutral for their employment, retiring seniors who generate their own economic activity for an area, or potential businesses that may want to relocate. In some of the region tourism dominates the local economy to the point that pressures on housing and transportation are created, forcing work force to live outside of the area in more affordable locations. Tourism should be looked at through this double lens. Growth in tourism can help improve quality of life, but should be developed to support year round employment. As tourism grows, communities should be proactive in addressing challenges like housing and



transportation. For the purposes of the CEDS, there is an element to “tourism” that is about developing, maintaining, and enhancing the infrastructure necessary to support tourism as an economic sector, covered under community development/place making. Distinguishing between development of tourism-based assets and growing tourism as an industry may be appropriate for planning purposes.

Regional Analysis: Focus Sectors

While each county shares common ground broadly on what they are focusing on, there is diversity in how each county focuses its attention. For example, all counties are targeting manufacturing, but some counties are focused on the outdoor industry, other counties are focused on niche markets. All counties are investing in business support. Some counties are focusing on innovation while other counties are focused on developing programs to improve access to capital for businesses.

Within many plans completed within the region, in addition to identifying goals and strategies, many plans also target specific economic sectors to focus economic development activity on. These economic sectors can be broadly categorized as manufacturing, tourism, agriculture, aviation, technology, energy including the green industry, healthcare, retail, and the creative industries. The creative industry combines many sub-sectors into a new category, and is gaining popularity at the state and national level to evaluate how ingenuity drives local economies. To date two counties have a formal and established focus on the creative industries. This might be an area to evaluate at a regional level.

Counties have identified economic sectors to focus on for a variety of reasons, sometimes because there is an existing network of similar businesses. Some communities might have infrastructure that is attractive to a particular industry that the county would like to attract. And finally, economic sectors like technology, are simply the



future. Growing technology jobs and businesses will help the region be competitive.

Some economic sectors may interrelate with other sectors such as manufacturing. There are opportunities to grow manufacturing across multiple sectors including the outdoor industry, medical industry, textile industry, and other niche markets.

Moving forward, the CEDS should evaluate how the goals and strategies developed support each of the different economic sectors being focused on region wide. For example, if the goal is to diversity the economy, a strategy may be to recruit or expand manufacturing businesses. An action item may be to identify supply chains of existing manufactures or businesses and determine if there are specific manufacturing needs not being met in the community.

ADDITIONAL EXAMPLES OF ECONOMIC SECTOR ACTIVITIES:

Agriculture



Energy



Healthcare, Retail,
Green Industry,
Creative Industry



Aviation



Example of How to Combine Existing Plan info into potential CEDS:

Goal:	Education	Business Support	Community Development	Technology
Strengthen Regional Work Force	<p>Strategy:</p> <p>Support creation of industry focused certificate or training programs through higher education institutions</p>	<p>Strategy:</p> <p>Identify work force training needs and target educational programs.</p>		<p>Strategy:</p> <p>Support creation of industry focused certificate or training programs through higher education institutions.</p>
	<p>Action Item:</p> <p>Conduct a regional survey of businesses to identify work force training needs.</p>	<p>Action Item:</p> <p>Meet with regional higher education institutions to identify existing training available to address business needs. Identify strategies to address needed training not currently offered</p>		<p>Action Item:</p> <p>Work with regional higher education institutions to offer classes across the region utilizing online platforms.</p>

Goal:

Education

Business Support

Community
Development

Technology

Build a Business-
Friendly
Environment

Strategy:
**Monitor and
participate in
legislation
relevant to the
region**

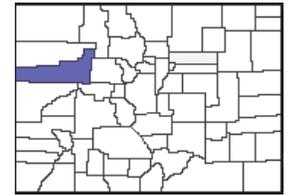
**Strategy: Create
a strong
“customer
service for
businesses”
model with local
governments**

Strategy:
**Educate local
governments on
economic
development
mission**

Appendix E

Garfield County Prescription Drug Profile

Population in 2015: 58,082
Health Statistics Region: 12
County Designation: Rural



Overview

Nationally and in Colorado, opioid use disorders have emerged as a significant public health concern. Nearly 224,000 Coloradans misuse prescription drugs each year. In nearly every year for the last 15 years, Colorado's drug overdose rate was significantly higher than the national rate and opioid related overdoses represent a large portion of those deaths. In Colorado, prescription opioid related overdoses have quadrupled since 2000.⁸

This profile summarizes controlled substance prescriptions that Garfield County residents received from 2014-2016, prescribing practices and patient behaviors, population-level healthcare encounters and deaths related to opioid overdose among Garfield County residents. This information is from several sources: The Colorado Prescription Drug Monitoring Program (PDMP), emergency department visit and hospital discharge databases and death certificates.

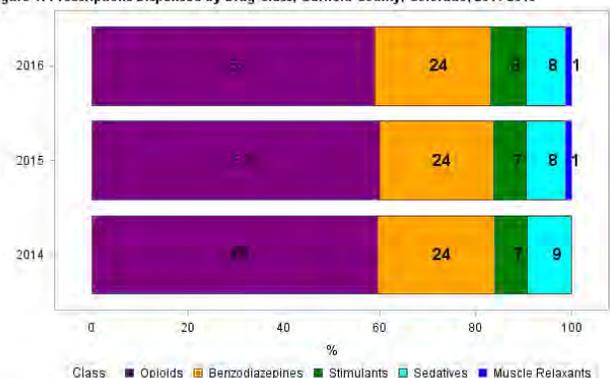
The Colorado PDMP is a secure database that collects information on schedule 2-5 controlled substance prescriptions dispensed by Colorado pharmacies. The PDMP compiles information on patients, prescribers, pharmacies, and the medications prescribed and dispensed. Prescribers and pharmacists registered with the Drug Enforcement Administration (DEA) and the PDMP can access patient information to make informed decisions and ensure appropriate prescribing and dispensing practices. The PDMP is available to the following Colorado licensed individuals: pharmacists, physicians, physician assistants, advanced practice nurses, dentists, podiatrists, optometrists and veterinarians.¹

In 2014, Colorado legislators passed a bill that aligned Colorado's PDMP with best practice strategies², such as mandating registration for prescribers and pharmacies, daily reporting by pharmacies for dispensed controlled substances, allowing prescribers to delegate access to PDMP records and allowing the Colorado Department of Public Health and Environment to access PDMP data to provide population-level results. In compliance with this legislation, this report describes population-level data on the prescribing and dispensing of controlled substances, with a focus on opioid prescriptions (also known as opioid analgesics or pharmaceutical opioids), from the Colorado PDMP for Garfield County residents.

Dispensed Prescriptions

Controlled substances collected by the PDMP are categorized into five classes: opioids, benzodiazepines, stimulants, sedatives and muscle relaxants. Figure 1 illustrates the amount of schedule 2-4 controlled substances by drug class dispensed to Garfield County residents from 2014-2016. Opioids represented a majority of prescriptions dispensed, and benzodiazepines represented a quarter of prescriptions.

Figure 1: Prescriptions Dispensed by Drug Class, Garfield County, Colorado, 2014-2016



Schedule 2-4 Controlled Substances

Muscle Relaxants were not included as a class in 2014

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies
Analysis by: Colorado Department of Public Health and Environment, 2016



Prescription Recipients

The attributes related to controlled substances differ greatly for each county due to variation in prescribing and dispensing practices within the state. Table 1 describes general characteristics of controlled substance prescriptions dispensed to Garfield County residents. In 2016, Garfield County prescribers wrote 74 percent of the prescriptions dispensed to county residents and 84 percent of prescriptions were dispensed within the county. However, the county of residence may differ from the counties where the prescriptions were obtained. For instance, prescribers in the neighboring county of Mesa wrote 10 percent of prescriptions and pharmacies in Mesa County dispensed 11 percent of prescriptions dispensed to Garfield County residents.

Table 1: Characteristics of Controlled Substance Prescriptions Dispensed, Garfield County, Colorado, 2014-2016

Characteristics	2014	2015	2016
Number of Prescriptions Dispensed	62,284	65,285	63,826
Number of Unique Patients	12,720	13,222	13,198
Number of Unique Prescribers	1,584	1,957	2,029
Number of Unique Pharmacies	371	403	421
Estimated Median Distance Traveled by the Patient to the Prescriber (miles)	12.9	11.3	11.
Estimated Median Distance Traveled by the Patient to the Pharmacy (miles)	0	0	0

Schedule 2-4 Controlled Substances

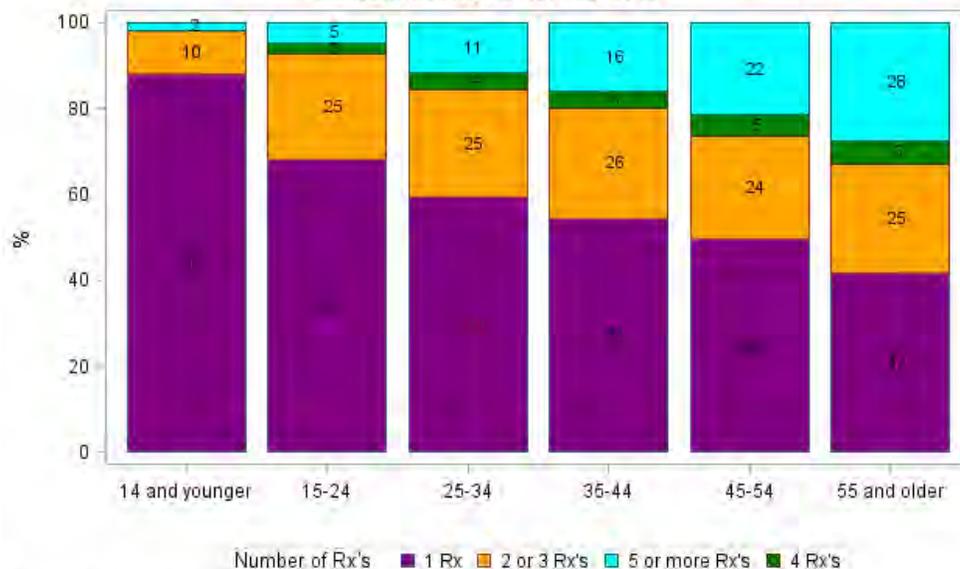
In 2014 NPI was used to identify unique prescribers and pharmacies as DEA numbers were not available until 2015

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Although some might have legitimate reasons for receiving multiple prescriptions, research has suggested that increasing numbers of prescriptions per individual are associated with increased risk of substance use disorders.³ Figure 2 describes the number of opioid prescriptions per patient, by age group. In 2016, the number of prescriptions per recipient ranged from 1 to 97 (median=1.0; mean=3.6) and the number of opioid prescriptions per patient increased with age.

Figure 2: The Number of Opioid Prescriptions Dispensed Per Patient by Age Group, Garfield County, Colorado, 2016



Schedule 2-4 Opioid Prescriptions

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Prescription rates indicate the volume of controlled substance prescriptions per 1,000 residents. Figure 3 shows prescription rates for three major drug classes by year and Table 2 shows aggregated state level data. Excluding the increase in the opioid prescription rate in 2015, prescription rates in Garfield County remained relatively stable in the three-year period.

Figure 3: Prescription Rates per 1,000 Residents by Major Drug Class, Garfield County, Colorado, 2014-2016

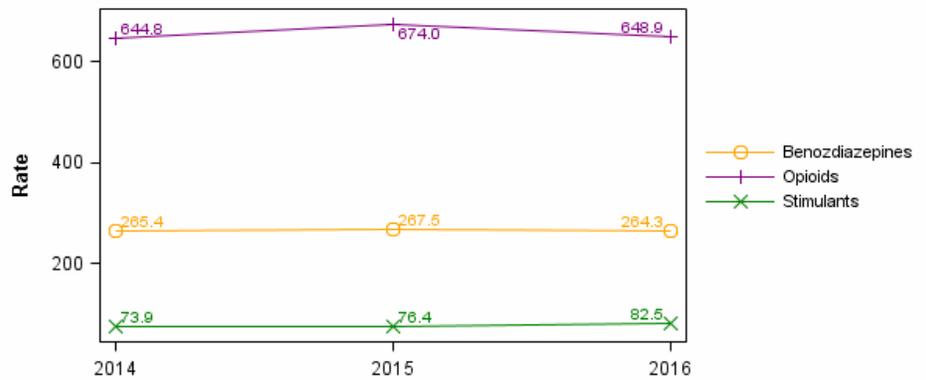


Table 2: Prescription Rates per 100,000 Residents by Drug Class, Colorado, 2014-2016

Drug Class	2014	2015	2016
Opioids	754.2	795.7	765.4
Benzodiazepines	337.3	326.8	316.2
Stimulants	142.1	147.7	160.5

Schedule 2-4 Controlled Substances

*2016 population estimates were not available, therefore 2015 estimates were used

Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Population-Level Indicators of Prescribing Practices and Patient Behaviors

The information on controlled substances in the PDMP is useful in identifying prescribing practices and patient behaviors that can increase risk for overdose.^{2,4} According to the CDC, potential risk factors for prescription drug misuse include high-dose prescribing, multiple provider episodes, long duration opioids, and overlapping opioid and benzodiazepine prescriptions.⁴ Understanding these risk factors may help providers better assist their patients in pain management while also protecting their health and safety. These measures are provided in Table 3 and explained in further detail on the following page.

Table 3: High Risk Prescribing Practices and Patient Behaviors, 2014-2016

PDMP Indicator	2014		2015		2016	
	Garfield	CO	Garfield	CO	Garfield	CO
Percent of patients receiving more than 90 morphine milligram equivalents	8.4%	10.3%	7.6%	8.9%	6.8%	8.7%
Percent of patients receiving more than 120 morphine milligram equivalents	4.7%	6.3%	4.1%	5.5%	3.8%	5.2%
*Rate of multiple provider episodes per 100,000 residents	26.1	60.8	19.8	43.1	15.5	32.0
Percent of patients prescribed long duration opioids who were opioid-naïve	20.6%	16.0%	19.9%	15.3%	16.6%	13.5%
Percent of patient prescription days with overlapping opioid prescriptions	19.7%	22.3%	17.8%	21.6%	17.7%	21.2%
Percent of patient prescriptions days with overlapping opioid and benzodiazepine prescriptions	12.0%	12.1%	11.6%	11.9%	11.9%	11.3%

Schedule 2-4 Controlled Substances

Excludes Buprenorphine and other drugs commonly used for treatment

*2016 rates are calculated with 2015 population estimates as 2016 estimates are not yet available

Annual rates are based on the average of two biannual rates; Annual percentages are based on average of quarterly percentages

Data Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Data Analysis by: Colorado Department of Public Health and Environment, 2016



PDMP Indicator Definitions

Percent of Patients Receiving High Dosage Prescriptions

Morphine is considered the standard measure for managing pain and is therefore used as a reference for calculating opioid prescription doses. Higher dosages are associated with an increased risk of opioid use disorder and overdose.^{4,5} In 2014, the Colorado Quad-Regulator Boards of Dental, Medical, Nursing, and Pharmacy suggested limiting dosages to less than 120 mg morphine equivalents (MME) per day to reduce negative outcomes⁵, and in 2016, the Center for Disease Control and Prevention's (CDC) prescribing guidelines recommended opioid dosages should not exceed 90 MME per day.⁶ Although there is variability regarding safe dosage thresholds, assessing dosage can help to identify problematic prescribing practices and patients who may be at risk for substance use disorders.



Table 4: Estimated Doses for Commonly Prescribed Opioids

	Oxycodone	Hydrocodone
90 MME	60 mg	90 mg
120 MME	80 mg	120 mg

Rate of Multiple Provider Episodes (MPEs)

The use of multiple prescribers and pharmacies is associated with high risk drug-related behaviors and adverse events. The number of prescribers and pharmacies a patient visits is often used as a proxy measure for “doctor shopping”.^{4,6} The CDC definition was used for this report which defines MPE as receiving opioid prescriptions from five or more prescribers and pharmacies in a six-month period.



Percent of Patients Prescribed Long Acting/ Extended Release (LA/ER) Opioids who were Opioid-Naïve

Opioid naïve patients may be more vulnerable to adverse effects of LA/ER opioids such as respiratory depression and overdose. For this metric, opioid naïve refers to patients who did not fill an opioid prescription in the previous 60 days. Time-scheduled opioids are associated with greater total average daily dosages and increased risk for long term use.^{4,6}



Percent of Patient Prescription Days with Overlapping Prescriptions

Both benzodiazepines and opioids are central nervous system depressants that can compromise the respiratory system. Benzodiazepines enhance the effects of opioids so the concurrent use of benzodiazepines and opioids can increase the risk of adverse events.^{4,6,7} This indicator measures the duration of overlapping prescriptions. Longer duration of overlapping prescriptions may raise concerns of the potential drug interactions and resulting side effects.



Morbidity and Mortality

While many people benefit from opioids for pain management, increased use of prescription pain relievers has led to increases in associated morbidities and mortalities, including opioid use disorder and overdose. Opioid overdose related emergency department (ED) visits, hospitalizations and fatal overdoses have increased nationally and in Colorado over the last decade.^{3,4,8}

Emergency Department Visits Related to Prescription Opioid Overdose

From 2012-2014, Coloradans made 2,404 visits per year to ED's related to prescription opioid poisoning.⁹ Throughout the state, ED visit rates per 100,000 county residents ranged from 4.1 in Routt County to 96 in Huerfano County (Figure 4). In Garfield County from 2012-2014, there were 20 ED visits involving prescription opioids. Of the 64 Colorado counties, 28 were suppressed due to small sample sizes. Garfield County had an ED visit rate in the second quintile range.

Garfield County Opioid ED Visit Statistics

Rank: 24/36

Count: 20

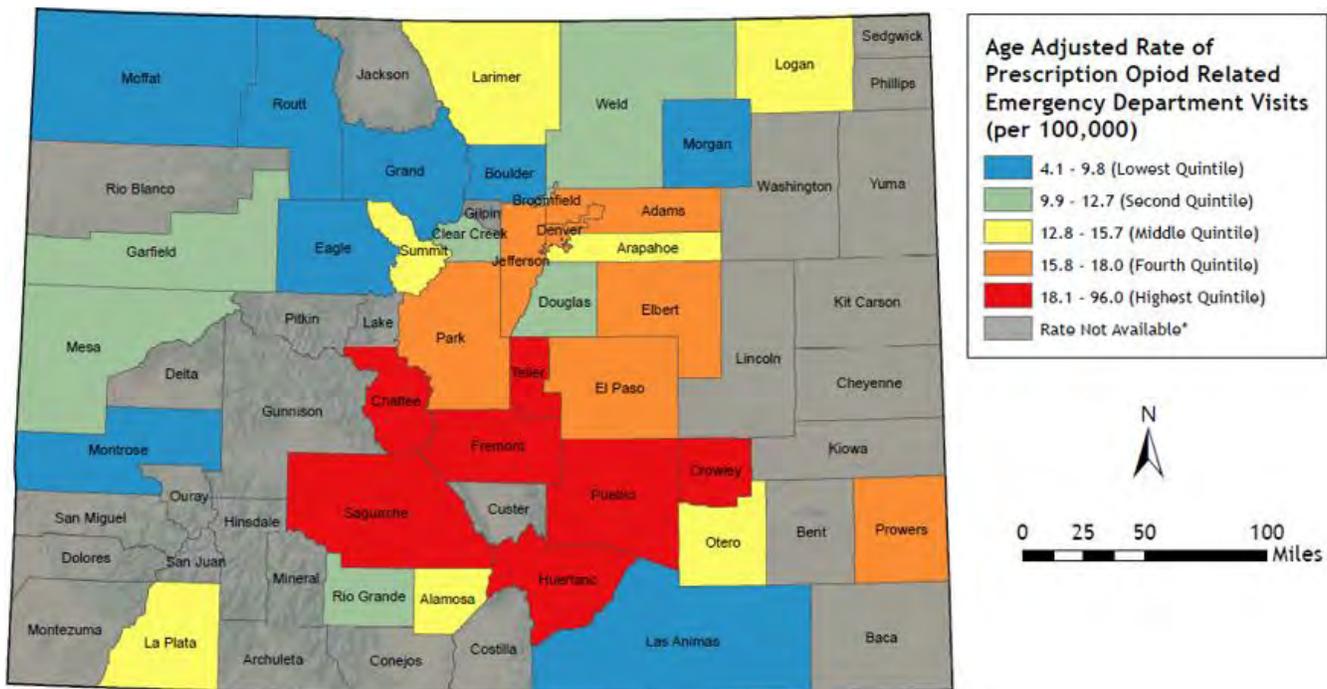
Crude Rate: 11.7

Age-Adjusted Rate (CI):

12.3 (6.7-17.8)

Colorado Age-Adjusted Rate (CI): 15.2 (14.6-15.8)

Figure 4: Age-Adjusted Opioid Analgesic ED Visit Rates by County, Colorado, 2012-2014



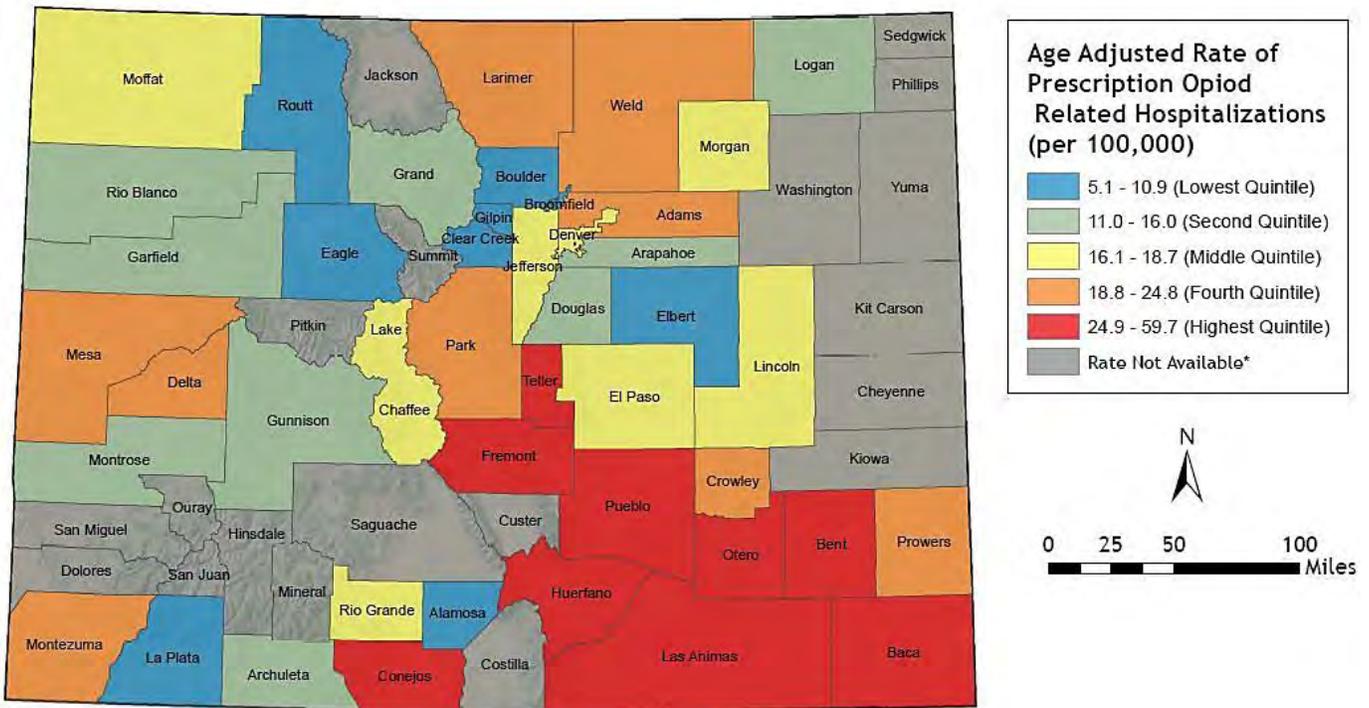
Hospitalization Data Related to Prescription Opioid Overdose

In 2013, 21 percent of the drug poisoning hospitalizations in Colorado were related to prescription opioid poisoning.⁹ Figure 5 shows hospitalization rates involving prescription opioid poisonings from 2012-2014. In Colorado, opioid related hospitalization rates per 100,000 county residents ranged from 5.1 in Clear Creek County to 59.7 in Huerfano County. Garfield County experienced 20 hospitalization visits related to prescription opioids in the three-year period. Excluding the 19 counties where data were suppressed, Garfield County ranked 36th out of the 45 remaining counties.

Garfield County Opioid Hospitalization Statistics

Rank: 36/45
 Count: 20
 Crude Rate: 11.7
 Age-Adjusted Rate (CI): 11.3 (6.6-16.8)
 Colorado Age-Adjusted Rate (CI): 18.6 (18.9-20.1)

Figure 5: Age-Adjusted Opioid Analgesic Hospitalization Rates by County, Colorado, 2012-2014



Death Certificate Data Related to Prescription Opioid Overdose

In Colorado in 2015, 37 percent of all drug poisoning deaths involved prescription opioids. Opioid related poisoning deaths tripled from 1.9 in 2000 to 5.8 per 100,000 in 2015.^{8,9} Figures 6 and 7 describe prescription opioid mortality rates in Colorado from 2013-2015. Opioid mortality rates in the state ranged from 2.7 per 100,000 in Park County to 13.5 per 100,000 in Las Animas County (Figure 6). Garfield County had the second lowest opioid-related death rates in the state.

Garfield County Opioid Death Statistics

Rank: 24/26

Count: 5

Crude Rate: 2.9

Age-Adjusted Rate (CI): 2.9 (0.9-5.9)

Colorado Age-Adjusted Rate (CI): 5.8 (5.4-6.1)

Figure 6: Age-Adjusted Opioid Analgesic Death Rates by County, Colorado, 2013-2015

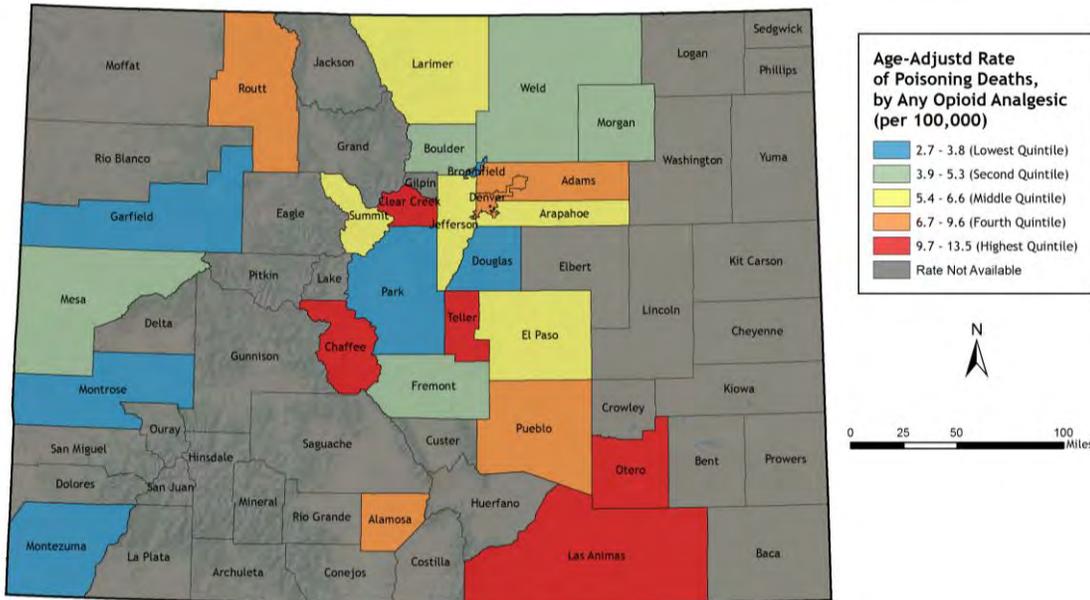
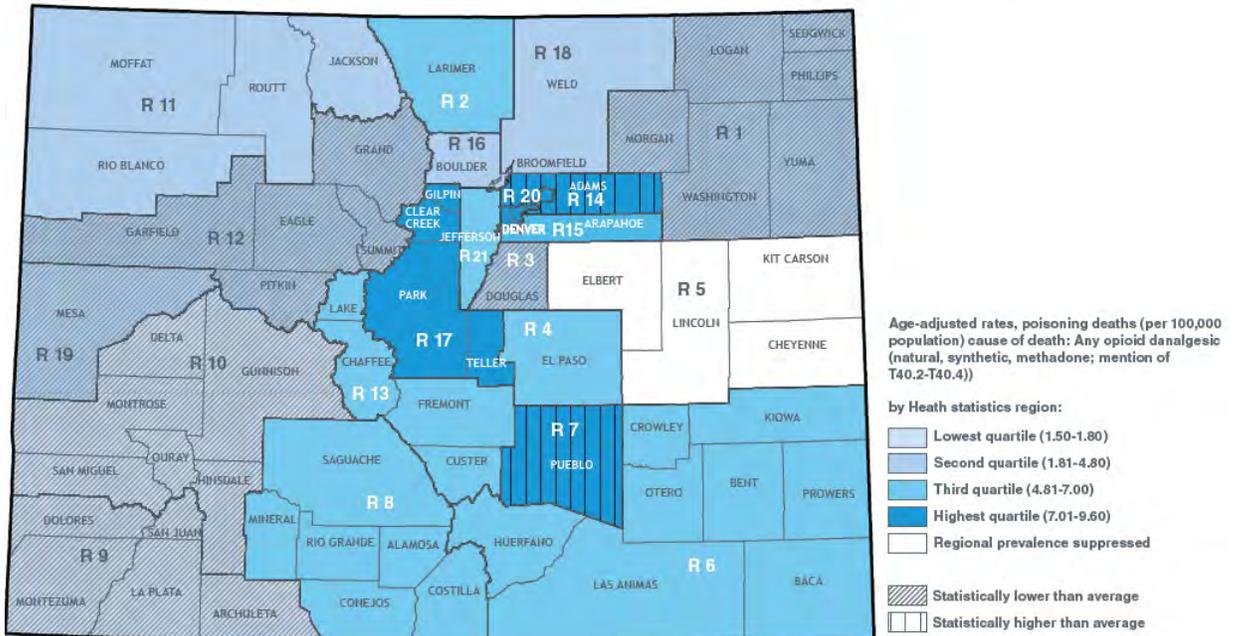


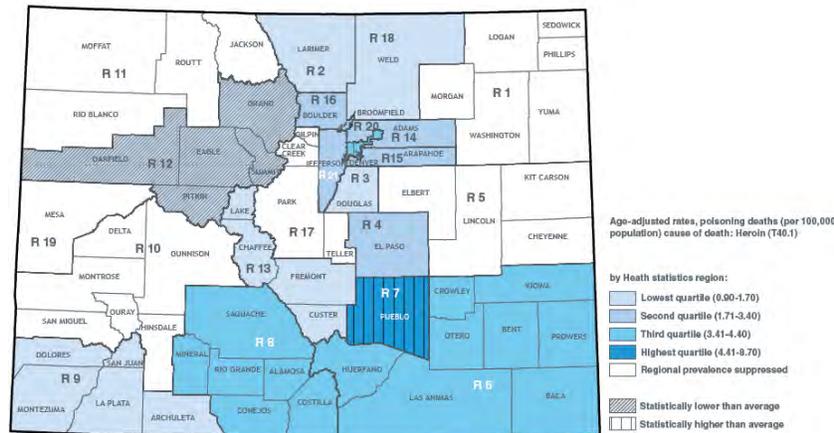
Figure 7: Age-Adjusted Opioid Analgesic Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Heroin-Related Overdose Death Rates

The prevalence of heroin, an illicit opiate, is also increasingly prevalent in Colorado. As heroin use increases, so do the adverse effects associated with heroin use and addiction. The rate of heroin related deaths has increased from 0.8 deaths per 100,000 in 2000 to 2.9 per 100,000 in 2015. According to the Denver Metro Treatment Client Survey, 70 percent of survey respondents reported that prescription painkillers played a role in their decision to use heroin.¹⁰ Figure 8 shows heroin related mortality rates in Colorado by Health Statistics Region from 2013 to 2015⁸.

Figure 8: Age-Adjusted Heroin Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Data Limitations

Data in this report should be interpreted with caution for several reasons. First, the accuracy of the indicators based on PDMP data is limited by the completeness and quality of the data when entered into the system. Another limitation of using the PDMP for population-level analyses is that it does not include provider type or information on the patient's medical condition. In addition, the indicators do not capture whether the dispensed medications were taken as prescribed or taken by the prescribed patient. This report references specific thresholds for indicators using absolute values which results in identifying patients at risk for substance use disorder or overdose, whether or not that is true. It should be noted that not all individuals who breach the threshold are at risk for substance use disorder or overdose and those below the threshold may still be at risk. Therefore, interpretation of these measures are limited due to the lack of contextual information regarding the prescriptions. A more comprehensive approach and complete evaluation of the economic, environmental and societal influences is necessary to appropriately interpret PDMP data and put the opioid epidemic into context.

Hospitalization and emergency department data are obtained through medical billing codes, which vary in their completeness. These records may not provide all information regarding the specific drug or drugs that were associated with a non-fatal overdose. Further, the required billing codes for hospitalization and emergency department visits changed in 2015, and as CDPHE continues to refine the case definitions with the new coding scheme, only 2012-2014 data were used in these analyses. These data represent health care encounters, not individuals.

Lastly, limitations of death certificate data may result in reporting bias. Deaths reported as multi-drug toxicity lack the specificity to know exactly what substance caused death. CDPHE does not collect toxicology reports for unintentional overdose deaths and therefore cannot determine whether drugs that were not indicated on the certificate represent negative test results or whether the drug was not part of the testing.

Conclusion

The PDMP is a critical tool in the fight to protect health and safety of Coloradans while supporting clinical practice. Although use of the PDMP is not mandatory for prescribers, in 2014 Colorado physicians queried 414,549 patient records. In 2016, the number of queries increased 64 percent to 681,348, demonstrating the value of the PDMP as a clinical decision making tool.

Prescription drug misuse is a public health crisis and the PDMP is one tool that can be used to evaluate initiatives designed to change patient and provider behavior to reduce prescription drug misuse and the associated adverse health outcomes. However, the misuse of prescription drugs is a multidimensional problem. A balanced approach to this work includes an understanding of the need to preserve access to medications for the management of care and meeting patient expectations while decreasing the misuse and diversion of controlled substances.

Additional Data Resources

Violence and Injury Prevention Network: <http://vipreventionnetworkco.com/p/prescription-drug-overdose.html>
Colorado Consortium for Prescription Drug Abuse Prevention: <http://www.corxconsortium.org/>
Colorado Prescribing Guidelines: https://www.colorado.gov/pacific/dora/Medical_News
CDC Prescribing Guidelines: <http://dx.doi.org/10.15585/mmwr.rr6501e1>
Take Meds Seriously: <http://takemedseriously.org/>
Rise Above Colorado: <https://www.riseaboveco.org/>

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2. Clark T, Eadie J, Knue P, Kreiner P, Strickler G. Prescription drug monitoring programs: an assessment of the evidence for best practices. Boston, Massachusetts: PDMP Center of Excellence, 2012. http://www.pewtrusts.org/~/media/assets/0001/pdmp_update_1312013.pdf. Accessed January 19, 2016.
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5. Prescription Drug Monitoring Program- Training and Technical Assistance Center (PDMP TTAC). Morphine Milligram Equivalents Calculator. http://www.pdmpassist.org/pdf/bja_performance_measure_aid_mme_conversion_tool.pdf. Published May 1, 2013. Accessed January 19, 2016.
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9. Take Meds Seriously. The Problem: Colorado Statistics. <http://takemedseriously.org/the-problem/colorado-statistics/>. Accessed January 19, 2016.
10. Colorado Consortium of Prescription Drug Abuse Prevention. Heroin In Colorado: Preliminary Assessment. 2017. <http://www.corxconsortium.org/wp-content/uploads/Heroin-in-Colorado-FINAL-4.3.17.pdf>

Contact Information

Colorado Department of Public Health and Environment
Violence and Injury Prevention-Mental Health Promotion Branch
Prescription Drug Overdose Prevention Unit
<https://www.colorado.gov/cdphe/pdo-prevention>
Email: cdphe_PDOinfo@state.co.us

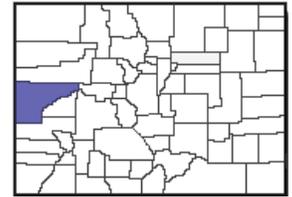


Mesa County Prescription Drug Profile

Population in 2015: 149,249

Health Statistics Region: 19

County Designation: Urban



Overview

Nationally and in Colorado, opioid use disorders have emerged as a significant public health concern. Nearly 224,000 Coloradans misuse prescription drugs each year. In nearly every year for the last 15 years, Colorado's drug overdose rate was significantly higher than the national rate and opioid related overdoses represent a large portion of those deaths. In Colorado, prescription opioid related overdoses have quadrupled since 2000.⁸

This profile summarizes controlled substance prescriptions that Mesa County residents received from 2014-2016, prescribing practices and patient behaviors, population-level healthcare encounters and deaths related to opioid overdose among Mesa County residents. This information is from several sources: The Colorado Prescription Drug Monitoring Program (PDMP), emergency department visit and hospital discharge databases and death certificates.

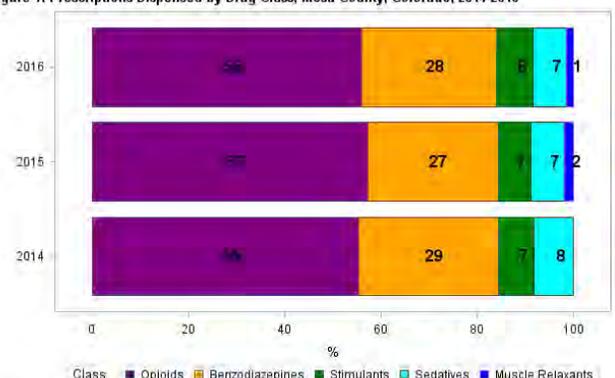
The Colorado PDMP is a secure database that collects information on schedule 2-5 controlled substance prescriptions dispensed by Colorado pharmacies. The PDMP compiles information on patients, prescribers, pharmacies, and the medications prescribed and dispensed. Prescribers and pharmacists registered with the Drug Enforcement Administration (DEA) and the PDMP can access patient information to make informed decisions and ensure appropriate prescribing and dispensing practices. The PDMP is available to the following Colorado licensed individuals: pharmacists, physicians, physician assistants, advanced practice nurses, dentists, podiatrists, optometrists and veterinarians.¹

In 2014, Colorado legislators passed a bill that aligned Colorado's PDMP with best practice strategies², such as mandating registration for prescribers and pharmacies, daily reporting by pharmacies for dispensed controlled substances, allowing prescribers to delegate access to PDMP records and allowing the Colorado Department of Public Health and Environment to access PDMP data to provide population-level results. In compliance with this legislation, this report describes population-level data on the prescribing and dispensing of controlled substances, with a focus on opioid prescriptions (also known as opioid analgesics or pharmaceutical opioids), from the Colorado PDMP for Mesa County residents.

Dispensed Prescriptions

Controlled substances collected by the PDMP are categorized into five classes: opioids, benzodiazepines, stimulants, sedatives and muscle relaxants. Figure 1 illustrates the amount of schedule 2-4 controlled substances by drug class dispensed to Mesa County residents from 2014-2016. Opioids represented a majority of prescriptions dispensed, followed by benzodiazepine prescriptions.

Figure 1: Prescriptions Dispensed by Drug Class, Mesa County, Colorado, 2014-2016



Schedule 2-4 Controlled Substances
Muscle Relaxants were not included as a class in 2014
Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies
Analysis by: Colorado Department of Public Health and Environment, 2016



Prescription Recipients

The attributes related to controlled substances differ greatly for each county due to variation in prescribing and dispensing practices within the state. Table 1 describes general characteristics of controlled substance prescriptions dispensed to Mesa County residents. In 2016, Mesa County prescribers wrote 92 percent of the prescriptions dispensed to Mesa County residents. Pharmacies in Mesa County dispensed 95 percent of prescriptions dispensed. The remaining prescriptions were written and dispensed by neighboring counties.

Table 1: Characteristics of Controlled Substance Prescriptions Dispensed, Mesa County, Colorado, 2014-2016

Characteristics	2014	2015	2016
Number of Prescriptions Dispensed	242,445	267,338	258,991
Number of Unique Patients	43,919	46,542	45,397
Number of Unique Prescribers	3,040	3,568	3,459
Number of Unique Pharmacies	563	602	590
Estimated Median Distance Traveled by the Patient to the Prescriber (miles)	5.1	5.1	5.0
Estimated Median Distance Traveled by the Patient to the Pharmacy (miles)	2.2	3.0	2.7

Schedule 2-4 Controlled Substances

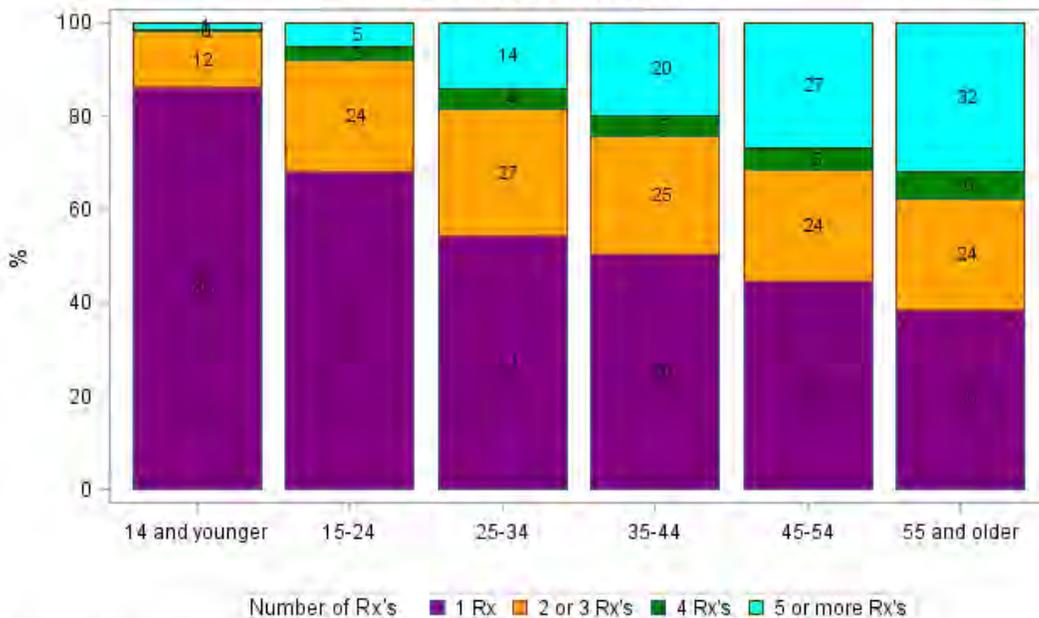
In 2014 NPI was used to identify unique prescribers and pharmacies as DEA numbers were not available until 2015

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Although some might have legitimate reasons for receiving multiple prescriptions, research has suggested that increasing numbers of prescriptions per individual are associated with increased risk of substance use disorders.³ Figure 2 describes the number of opioid prescriptions per patient, by age group. In 2016, the number of prescriptions per recipient ranged from 1 to 145 (median=2.0; mean=4.2) and the number of opioid prescriptions per patient increased with age.

Figure 2: The Number of Opioid Prescriptions Dispensed Per Patient by Age Group, Mesa County, Colorado, 2016



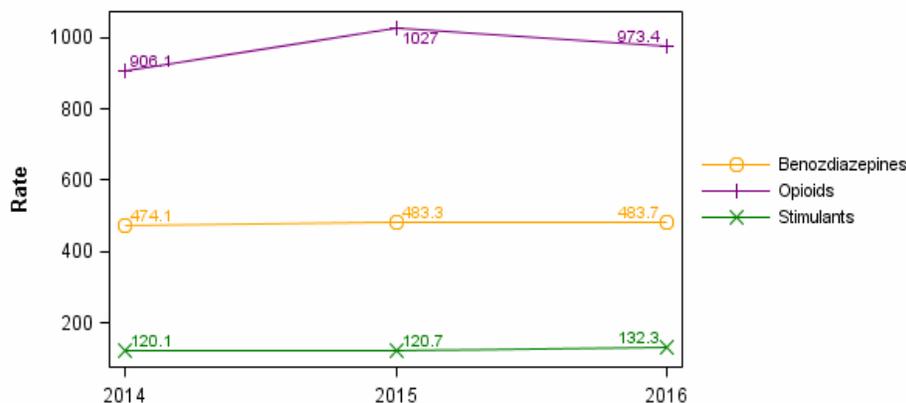
Schedule 2-4 Opioid Prescriptions

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Prescription rates indicate the volume of controlled substance prescriptions per 1,000 residents. Figure 3 shows prescription rates for three major drug classes by year and Table 2 shows aggregated state level data. Opioid prescription rates in Mesa County peaked in 2015 while prescription rates for benzodiazepines and stimulants remained relatively stable. Compared to the state, Mesa County had elevated opioid and benzodiazepine prescription rates.

Figure 3: Prescription Rates per 1,000 Residents by Major Drug Class, Mesa County, Colorado, 2014-2016



Drug Class	2014	2015	2016
Opioids	754.2	795.7	765.4
Benzodiazepines	337.3	326.8	316.2
Stimulants	142.1	147.7	160.5

Schedule 2-4 Controlled Substances

*2016 population estimates were not available, therefore 2015 estimates were used

Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies
Analysis by: Colorado Department of Public Health and Environment, 2016

Population-Level Indicators of Prescribing Practices and Patient Behaviors

The information on controlled substances in the PDMP is useful in identifying prescribing practices and patient behaviors that can increase risk for overdose.^{2,4} According to the CDC, potential risk factors for prescription drug misuse include high-dose prescribing, multiple provider episodes, long duration opioids, and overlapping opioid and benzodiazepine prescriptions.⁴ Understanding these risk factors may help providers better assist their patients in pain management while also protecting their health and safety. These measures are provided in Table 3 and explained in further detail on the following page.

Table 3: High Risk Prescribing Practices and Patient Behaviors, 2014-2016

PDMP Indicator	2014		2015		2016	
	Mesa	CO	Mesa	CO	Mesa	CO
Percent of patients receiving more than 90 morphine milligram equivalents	9.0%	10.3%	8.4%	8.9%	7.9%	8.7%
Percent of patients receiving more than 120 morphine milligram equivalents	5.2%	6.3%	4.8%	5.5%	4.5%	5.2%
*Rate of multiple provider episodes per 100,000 residents	46.1	60.8	36.2	43.1	16.1	32.0
Percent of patients prescribed long duration opioids who were opioid-naïve	17.9%	16.0%	18.3%	15.3%	15.0%	13.5%
Percent of patient prescription days with overlapping opioid prescriptions	19.1%	22.3%	18.5%	21.6%	17.6%	21.2%
Percent of patient prescriptions days with overlapping opioid and benzodiazepine prescriptions	13.1%	12.1%	12.8%	11.9%	12.7%	11.3%

Schedule 2-4 Controlled Substances

Excludes Buprenorphine and other drugs commonly used for treatment

*2016 rates are calculated with 2015 population estimates as 2016 estimates are not yet available

Annual rates are based on the average of two biannual rates; Annual percentages are based on average of quarterly percentages

Data Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the

Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Data Analysis by: Colorado Department of Public Health and Environment, 2016



PDMP Indicator Definitions

Percent of Patients Receiving High Dosage Prescriptions

Morphine is considered the standard measure for managing pain and is therefore used as a reference for calculating opioid prescription doses. Higher dosages are associated with an increased risk of opioid use disorder and overdose.^{4,5} In 2014, the Colorado Quad-Regulator Boards of Dental, Medical, Nursing, and Pharmacy suggested limiting dosages to less than 120 mg morphine equivalents (MME) per day to reduce negative outcomes⁵, and in 2016, the Center for Disease Control and Prevention's (CDC) prescribing guidelines recommended opioid dosages should not exceed 90 MME per day.⁶ Although there is variability regarding safe dosage thresholds, assessing dosage can help to identify problematic prescribing practices and patients who may be at risk for substance use disorders.



Table 4: Estimated Doses for Commonly Prescribed Opioids

	Oxycodone	Hydrocodone
90 MME	60 mg	90 mg
120 MME	80 mg	120 mg

Rate of Multiple Provider Episodes (MPEs)

The use of multiple prescribers and pharmacies is associated with high risk drug-related behaviors and adverse events. The number of prescribers and pharmacies a patient visits is often used as a proxy measure for “doctor shopping”.^{4,6} The CDC definition was used for this report which defines MPE as receiving opioid prescriptions from five or more prescribers and pharmacies in a six-month period.



Percent of Patients Prescribed Long Acting/ Extended Release (LA/ER) Opioids who were Opioid-Naïve

Opioid naïve patients may be more vulnerable to adverse effects of LA/ER opioids such as respiratory depression and overdose. For this metric, opioid naïve refers to patients who did not fill an opioid prescription in the previous 60 days. Time-scheduled opioids are associated with greater total average daily dosages and increased risk for long term use.^{4,6}



Percent of Patient Prescription Days with Overlapping Prescriptions

Both benzodiazepines and opioids are central nervous system depressants that can compromise the respiratory system. Benzodiazepines enhance the effects of opioids so the concurrent use of benzodiazepines and opioids can increase the risk of adverse events.^{4,6,7} This indicator measures the duration of overlapping prescriptions. Longer duration of overlapping prescriptions may raise concerns of the potential drug interactions and resulting side effects.



Morbidity and Mortality

While many people benefit from opioids for pain management, increased use of prescription pain relievers has led to increases in associated morbidities and mortalities, including opioid use disorder and overdose. Opioid overdose related emergency department (ED) visits, hospitalizations and fatal overdoses have increased nationally and in Colorado over the last decade.^{3,4,8}

Emergency Department Visits Related to Prescription Opioid Overdose

From 2012-2014, Coloradans made 2,404 visits per year to ED's related to prescription opioid poisoning.⁹ Throughout the state, ED visit rates per 100,000 county residents ranged from 4.1 in Routt County to 96 in Huerfano County (Figure 4). In Mesa County from 2012-2014, there were 54 ED visits involving prescription opioids. Of the 64 Colorado counties, 28 were suppressed due to small sample sizes. Mesa County had the 22nd highest ED visit rate in the state, placing it in the second quintile range.

Mesa County Opioid ED Visit Statistics

Rank: 22/36

Count: 54

Crude Rate: 12.1

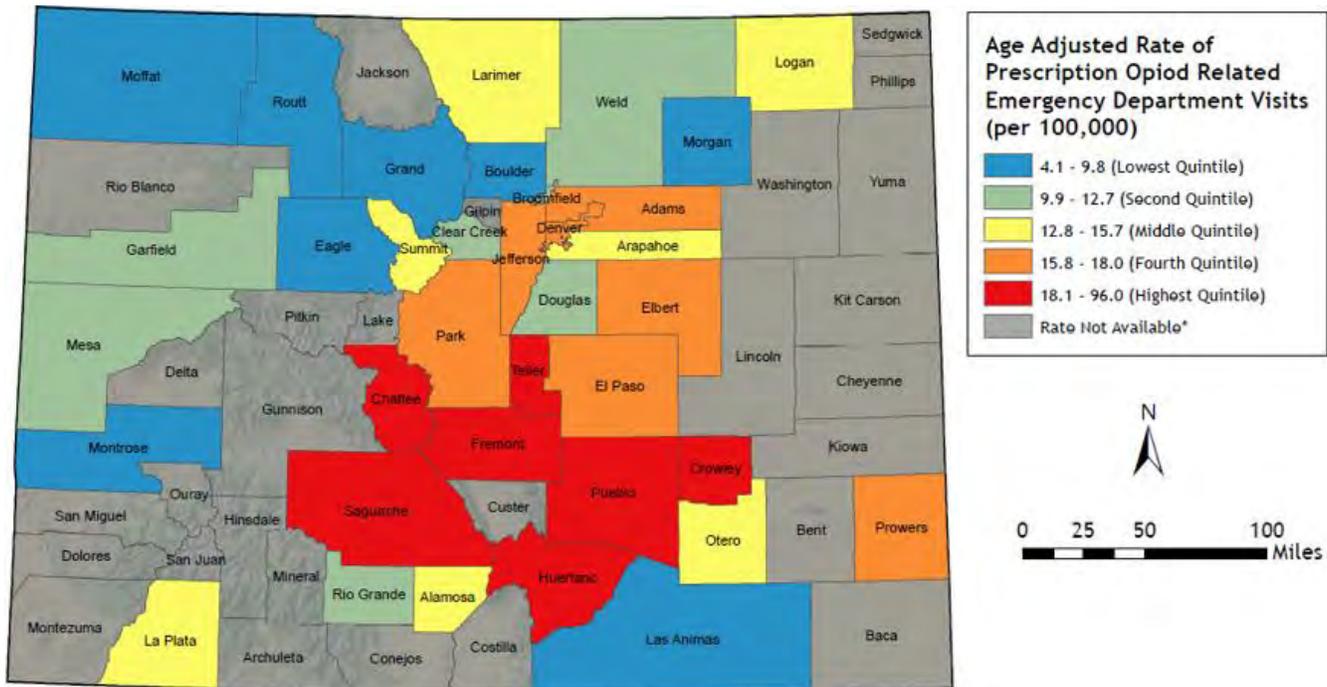
Age-Adjusted Rate (CI):

12.7 (9.2-16.1)

Colorado Age-Adjusted Rate

(CI): 15.2 (14.6-15.8)

Figure 4: Age-Adjusted Opioid Analgesic ED Visit Rates by County, Colorado, 2012-2014



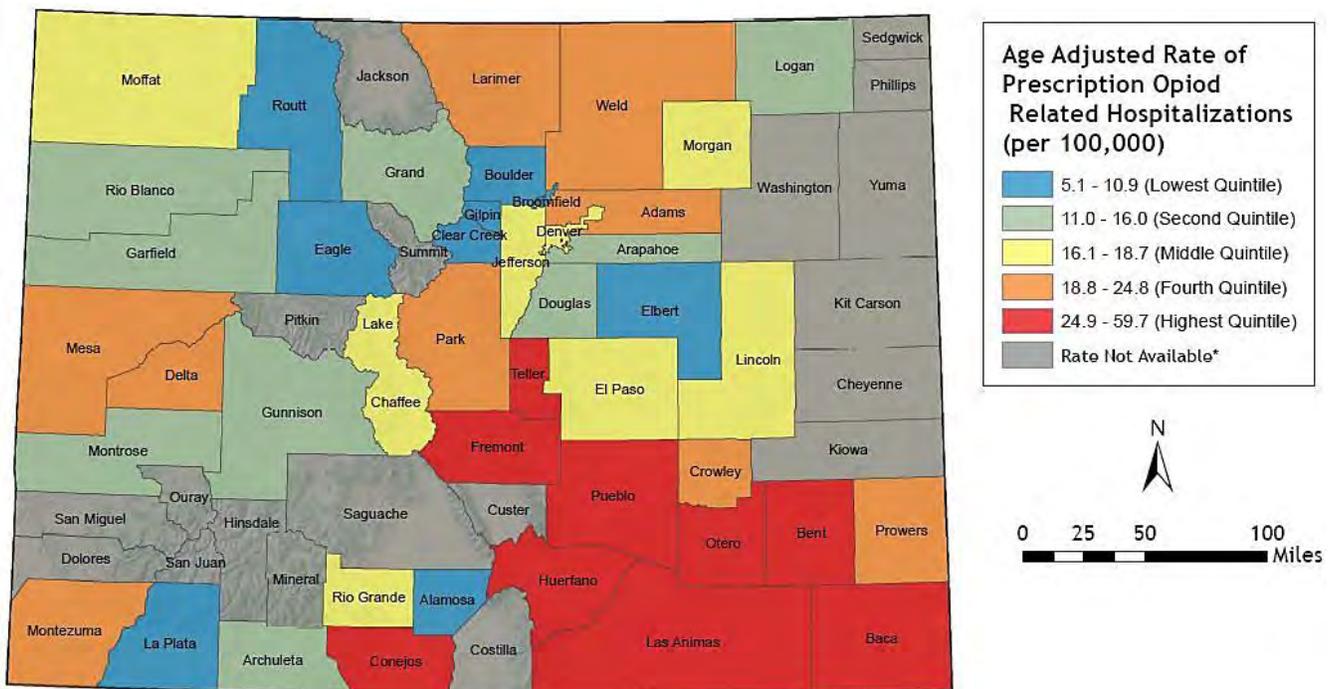
Hospitalization Data Related to Prescription Opioid Overdose

In 2013, 21 percent of the drug poisoning hospitalizations in Colorado were related to prescription opioid poisoning.⁹ Figure 5 shows hospitalization rates involving prescription opioid poisonings from 2012-2014. In Colorado, opioid related hospitalization rates per 100,000 county residents ranged from 5.1 in Clear Creek County to 59.7 in Huerfano County. Mesa County experienced 117 hospitalization visits related to prescription opioids in the three-year period. Excluding the 19 counties where data were suppressed, Mesa County had the 10th highest rate in the state.

Mesa County Opioid Hospitalization Statistics

Rank: 10/45
 Count: 117
 Crude Rate: 26.3
 Age-Adjusted Rate (CI): 24.8 (21.7-30.9)
 Colorado Age-Adjusted Rate (CI): 18.6 (18.9-20.1)

Figure 5: Age-Adjusted Opioid Analgesic Hospitalization Rates by County, Colorado, 2012-2014



Death Certificate Data Related to Prescription Opioid Overdose

In Colorado in 2015, 37 percent of all drug poisoning deaths involved prescription opioids. Opioid related poisoning deaths tripled from 1.9 in 2000 to 5.8 per 100,000 in 2015.^{8,9} Figures 6 and 7 describe prescription opioid mortality rates in Colorado from 2013-2015. Opioid mortality rates in the state ranged from 2.7 per 100,000 in Park County to 13.5 per 100,000 in Las Animas County (Figure 6). Mesa County had one of the lowest rates in the state.

Mesa County Opioid Death Statistics

Rank: 20/26

Count: 18

Crude Rate: 4.0

Age-Adjusted Rate (CI): 4.0 (2.0-5.9)

Colorado Age-Adjusted Rate (CI): 5.8 (5.4-6.1)

Figure 6: Age-Adjusted Opioid Analgesic Death Rates by County, Colorado, 2013-2015

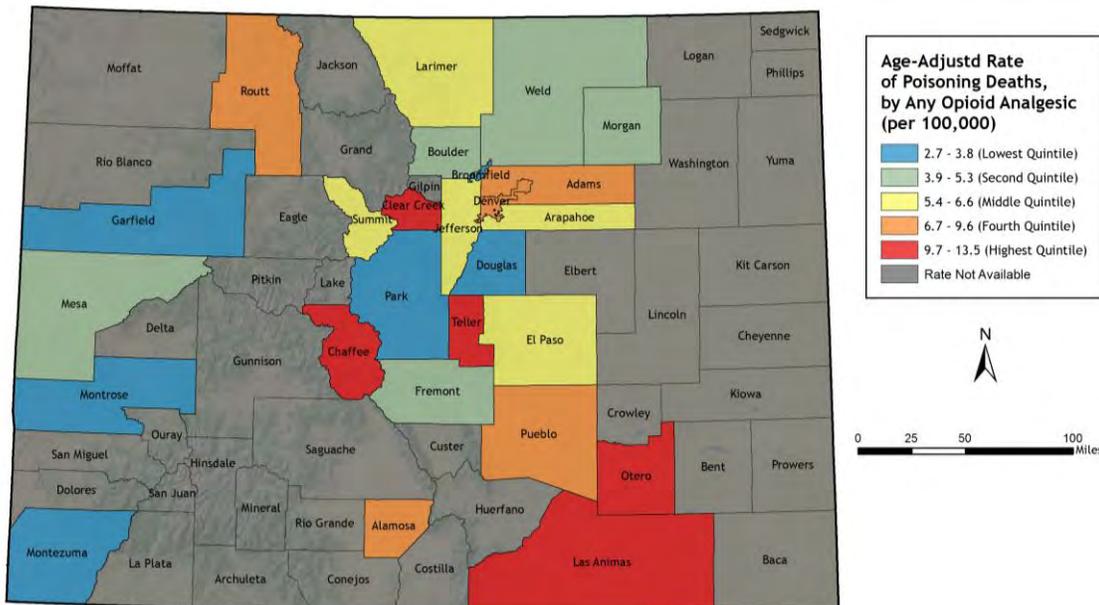
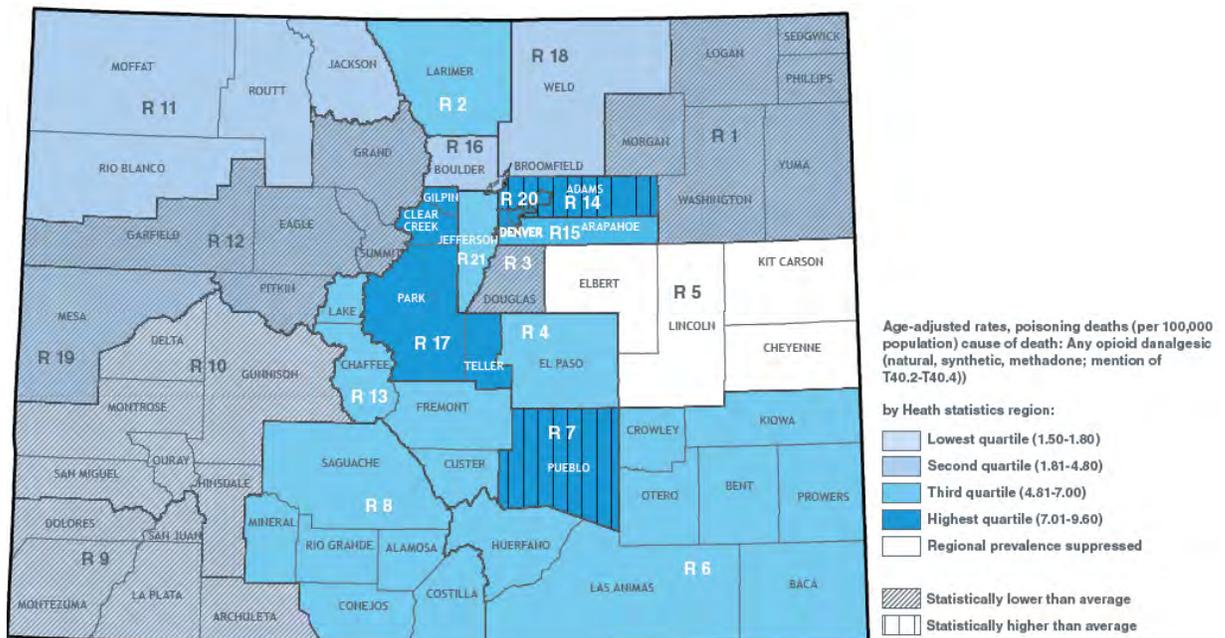


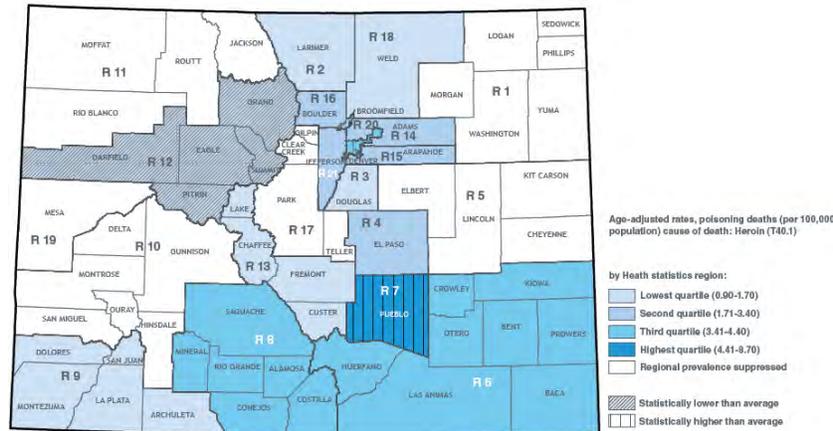
Figure 7: Age-Adjusted Opioid Analgesic Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Heroin-Related Overdose Death Rates

The prevalence of heroin, an illicit opiate, is also increasingly prevalent in Colorado. As heroin use increases, so do the adverse effects associated with heroin use and addiction. The rate of heroin related deaths has increased from 0.8 deaths per 100,000 in 2000 to 2.9 per 100,000 in 2015. According to the Denver Metro Treatment Client Survey, 70 percent of survey respondents reported that prescription painkillers played a role in their decision to use heroin.¹⁰ Figure 8 shows heroin related mortality rates in Colorado by Health Statistics Region from 2013 to 2015⁸.

Figure 8: Age-Adjusted Heroin Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Data Limitations

Data in this report should be interpreted with caution for several reasons. First, the accuracy of the indicators based on PDMP data is limited by the completeness and quality of the data when entered into the system. Another limitation of using the PDMP for population-level analyses is that it does not include provider type or information on the patient's medical condition. In addition, the indicators do not capture whether the dispensed medications were taken as prescribed or taken by the prescribed patient. This report references specific thresholds for indicators using absolute values which results in identifying patients at risk for substance use disorder or overdose, whether or not that is true. It should be noted that not all individuals who breach the threshold are at risk for substance use disorder or overdose, and those below the threshold may still be at risk. Therefore, interpretation of these measures are limited due to the lack of contextual information regarding the prescriptions. A more comprehensive approach and complete evaluation of the economic, environmental and societal influences is necessary to appropriately interpret PDMP data and put the opioid epidemic into context.

Hospitalization and emergency department data are obtained through medical billing codes, which vary in their completeness. These records may not provide all information regarding the specific drug or drugs that were associated with a non-fatal overdose. Further, the required billing codes for hospitalization and emergency department visits changed in 2015, and as CDPHE continues to refine the case definitions with the new coding scheme, only 2012-2014 data were used in these analyses. These data represent health care encounters, not individuals.

Lastly, limitations of death certificate data may result in reporting bias. Deaths reported as multi-drug toxicity lack the specificity to know exactly what substance caused death. CDPHE does not collect toxicology reports for unintentional overdose deaths and therefore cannot determine whether drugs that were not indicated on the certificate represent negative test results or whether the drug was not part of the testing.

Conclusion

The PDMP is a critical tool in the fight to protect health and safety of Coloradans while supporting clinical practice. Although use of the PDMP is not mandatory for prescribers, in 2014 Colorado physicians queried 414,549 patient records. In 2016, the number of queries increased 64 percent to 681,348, demonstrating the value of the PDMP as a clinical decision making tool.

Prescription drug misuse is a public health crisis and the PDMP is one tool that can be used to evaluate initiatives designed to change patient and provider behavior to reduce prescription drug misuse and the associated adverse health outcomes. However, the misuse of prescription drugs is a multidimensional problem. A balanced approach to this work includes an understanding of the need to preserve access to medications for the management of care and meeting patient expectations while decreasing the misuse and diversion of controlled substances.

Additional Data Resources

Violence and Injury Prevention Network: <http://vipreventionnetworkco.com/p/prescription-drug-overdose.html>
Colorado Consortium for Prescription Drug Abuse Prevention: <http://www.corxconsortium.org/>
Colorado Prescribing Guidelines: https://www.colorado.gov/pacific/dora/Medical_News
CDC Prescribing Guidelines: <http://dx.doi.org/10.15585/mmwr.rr6501e1>
Take Meds Seriously: <http://takemedseriously.org/>
Rise Above Colorado: <https://www.riseaboveco.org/>

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9. Take Meds Seriously. The Problem: Colorado Statistics. <http://takemedseriously.org/the-problem/colorado-statistics/>. Accessed January 19, 2016.
10. Colorado Consortium of Prescription Drug Abuse Prevention. Heroin In Colorado: Preliminary Assessment. 2017. <http://www.corxconsortium.org/wp-content/uploads/Heroin-in-Colorado-FINAL-4.3.17.pdf>

Contact Information

Colorado Department of Public Health and Environment
Violence and Injury Prevention-Mental Health Promotion Branch
Prescription Drug Overdose Prevention Unit

<https://www.colorado.gov/cdphe/pdo-prevention>

Email: cdphe_PDOinfo@state.co.us

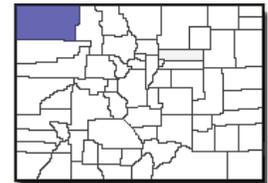


Moffat County Prescription Drug Profile

Population in 2015: 12,923

Health Statistics Region: 11

County Designation: Frontier



Overview

Nationally and in Colorado, opioid use disorders have emerged as a significant public health concern. Nearly 224,000 Coloradans misuse prescription drugs each year. In nearly every year for the last 15 years, Colorado's drug overdose rate was significantly higher than the national rate and opioid related overdoses represent a large portion of those deaths. In Colorado, prescription opioid related overdoses have quadrupled since 2000.⁸

This profile summarizes controlled substance prescriptions that Moffat County residents received from 2014-2016, prescribing practices and patient behaviors, population-level healthcare encounters and deaths related to opioid overdose among Moffat County residents. This information is from several sources: The Colorado Prescription Drug Monitoring Program (PDMP), emergency department visit and hospital discharge databases and death certificates.

The Colorado PDMP is a secure database that collects information on schedule 2-5 controlled substance prescriptions dispensed by Colorado pharmacies. The PDMP compiles information on patients, prescribers, pharmacies, and the medications prescribed and dispensed. Prescribers and pharmacists registered with the Drug Enforcement Administration (DEA) and the PDMP can access patient information to make informed decisions and ensure appropriate prescribing and dispensing practices. The PDMP is available to the following Colorado licensed individuals: pharmacists, physicians, physician assistants, advanced practice nurses, dentists, podiatrists, optometrists and veterinarians.¹

In 2014, Colorado legislators passed a bill that aligned Colorado's PDMP with best practice strategies², such as mandating registration for prescribers and pharmacies, daily reporting by pharmacies for dispensed controlled substances, allowing prescribers to delegate access to PDMP records and allowing the Colorado Department of Public Health and Environment to access PDMP data to provide population-level results. In compliance with this legislation, this report describes population-level data on the prescribing and dispensing of controlled substances, with a focus on opioid prescriptions (also known as opioid analgesics or pharmaceutical opioids), from the Colorado PDMP for Moffat County residents.

Dispensed Prescriptions

Controlled substances collected by the PDMP are categorized into five classes: opioids, benzodiazepines, stimulants, sedatives and muscle relaxants. Figure 1 illustrates the amount of schedule 2-4 controlled substances by drug class dispensed to Moffat County residents from 2014-2016. Opioids represented more than half of all prescriptions dispensed, and benzodiazepines represented about a quarter of prescriptions. Since 2014, the percentage of benzodiazepine prescriptions decreased.

Figure 1: Prescriptions Dispensed by Drug Class, Moffat County, Colorado, 2014-2016



Schedule 2-4 Controlled Substances
Muscle Relaxants were not included as a class in 2014.
Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies
Analysis by: Colorado Department of Public Health and Environment, 2016



Prescription Recipients

The attributes related to controlled substances differ greatly for each county due to variation in prescribing and dispensing practices within the state. Table 1 describes general characteristics of controlled substance prescriptions dispensed to Moffat County residents. In 2016, Moffat County prescribers wrote 48 percent of the 23,698 prescriptions dispensed to county residents and 84 percent of prescriptions were dispensed within the county. However, the county of residence may differ from the counties where the prescriptions were obtained. For instance, prescribers in Denver wrote 34 percent of the prescriptions dispensed and pharmacies in Mesa County dispensed eight percent of prescriptions dispensed to Moffat County residents.

Table 1: Characteristics of Controlled Substance Prescriptions Dispensed, Moffat County, Colorado, 2014-2016

Characteristics	2014	2015	2016
Number of Prescriptions Dispensed	22,029	23,460	23,698
Number of Unique Patients	4,083	4,138	4,225
Number of Unique Prescribers	696	944	926
Number of Unique Pharmacies	213	277	243
Estimated Median Distance Traveled by the Patient to the Prescriber (miles)	16.1	36.9	36.9
Estimated Median Distance Traveled by the Patient to the Pharmacy (miles)	0	0	0

Schedule 2-4 Controlled Substances

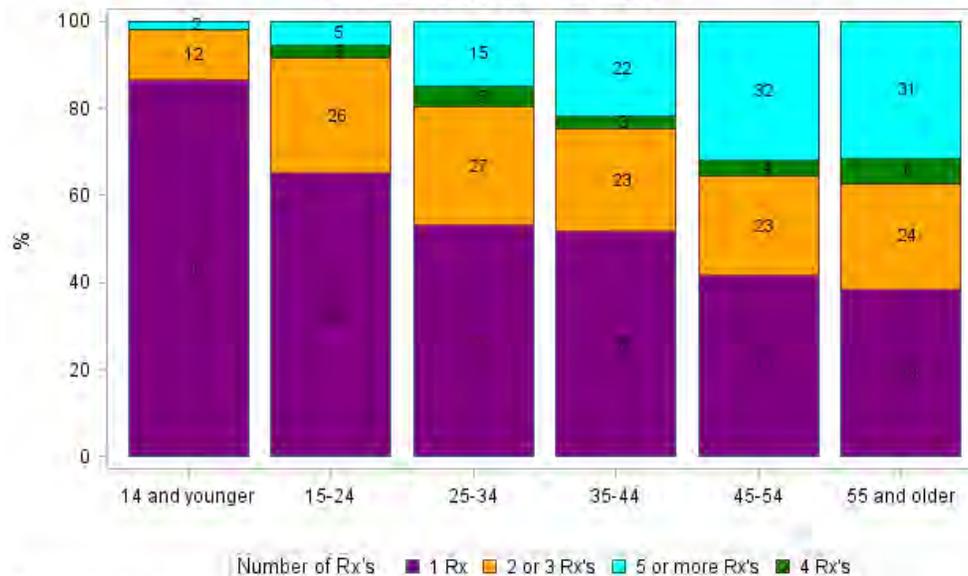
In 2014 NPI was used to identify unique prescribers and pharmacies as DEA numbers were not available until 2015

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Although some might have legitimate reasons for receiving multiple prescriptions, research has suggested that increasing numbers of prescriptions per individual are associated with increased risk of substance use disorders.³ Figure 2 describes the number of opioid prescriptions per patient, by age group. In 2016, the number of opioid prescriptions per recipient ranged from 1 to 67 (median=2.0; mean=4.1) and increased with age.

Figure 2: The Number of Opioid Prescriptions Dispensed Per Patient by Age Group, Moffat County, Colorado, 2016



Schedule 2-4 Opioid Prescriptions

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Prescription rates indicate the volume of controlled substance prescriptions per 1,000 residents. Figure 3 shows prescription rates for three major drug classes by year and Table 2 shows aggregated state level data. Opioid and stimulant prescription rates increased in the three-year period. Compared to the state, Moffat County had elevated opioid and benzodiazepine prescription rates. In 2015 and 2016, there were at least one opioid prescription for every Moffat County resident.

Figure 3: Prescription Rates per 1,000 Residents by Major Drug Class, Moffat County, Colorado, 2014-2016

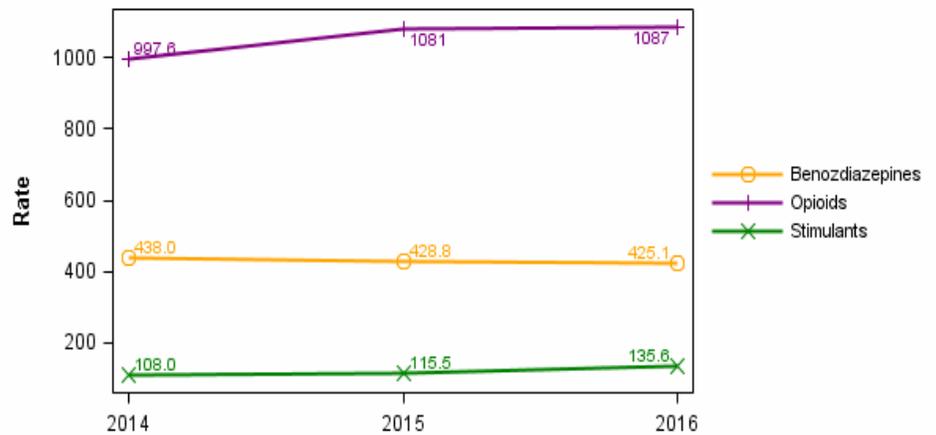


Table 2: Prescription Rates per 100,000 Residents by Drug Class, Colorado, 2014-2016

Drug Class	2014	2015	2016
Opioids	754.2	795.7	765.4
Benzodiazepines	337.3	326.8	316.2
Stimulants	142.1	147.7	160.5

Schedule 2-4 Controlled Substances

*2016 population estimates were not available, therefore 2015 estimates were used

Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies
Analysis by: Colorado Department of Public Health and Environment, 2016

Population-Level Indicators of Prescribing Practices and Patient Behaviors

The information on controlled substances in the PDMP is useful in identifying prescribing practices and patient behaviors that can increase risk for overdose.^{2,4} According to the CDC, potential risk factors for prescription drug misuse include high-dose prescribing, multiple provider episodes, long duration opioids, and overlapping opioid and benzodiazepine prescriptions.⁴ Understanding these risk factors may help providers better assist their patients in pain management while also protecting their health and safety. These measures are provided in Table 3 and explained in further detail on the following page.

Table 3: High Risk Prescribing Practices and Patient Behaviors, 2014-2016

PDMP Indicator	2014		2015		2016	
	Moffat	CO	Moffat	CO	Moffat	CO
Percent of patients receiving more than 90 morphine milligram equivalents	10.2%	10.3%	10.4%	8.9%	9.1%	8.7%
Percent of patients receiving more than 120 morphine milligram equivalents	5.4%	6.3%	5.4%	5.5%	5.4%	5.2%
*Rate of multiple provider episodes per 100,000 residents	50.4	60.8	19.4	43.1	15.5	32.0
Percent of patients prescribed long duration opioids who were opioid-naïve	13.7%	16.0%	12.0%	15.3%	10.7%	13.5%
Percent of patient prescription days with overlapping opioid prescriptions	21.1%	22.3%	20.6%	21.6%	20.5%	21.2%
Percent of patient prescriptions days with overlapping opioid and benzodiazepine prescriptions	15.4%	12.1%	15.5%	11.9%	15.1%	11.3%

Schedule 2-4 Controlled Substances

Excludes Buprenorphine and other drugs commonly used for treatment

*2016 rates are calculated with 2015 population estimates as 2016 estimates are not yet available

Annual rates are based on the average of two biannual rates; Annual percentages are based on average of quarterly percentages

Data Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Data Analysis by: Colorado Department of Public Health and Environment, 2016



PDMP Indicator Definitions

Percent of Patients Receiving High Dosage Prescriptions

Morphine is considered the standard measure for managing pain and is therefore used as a reference for calculating opioid prescription doses. Higher dosages are associated with an increased risk of opioid use disorder and overdose.^{4,5} In 2014, the Colorado Quad-Regulator Boards of Dental, Medical, Nursing, and Pharmacy suggested limiting dosages to less than 120 mg morphine equivalents (MME) per day to reduce negative outcomes⁵, and in 2016, the Center for Disease Control and Prevention's (CDC) prescribing guidelines recommended opioid dosages should not exceed 90 MME per day.⁶ Although there is variability regarding safe dosage thresholds, assessing dosage can help to identify problematic prescribing practices and patients who may be at risk for substance use disorders.



Table 4: Estimated Doses for Commonly Prescribed Opioids

	Oxycodone	Hydrocodone
90 MME	60 mg	90 mg
120 MME	80 mg	120 mg

Rate of Multiple Provider Episodes (MPEs)

The use of multiple prescribers and pharmacies is associated with high risk drug-related behaviors and adverse events. The number of prescribers and pharmacies a patient visits is often used as a proxy measure for “doctor shopping”.^{4,6} The CDC definition was used for this report which defines MPE as receiving opioid prescriptions from five or more prescribers and pharmacies in a six-month period.



Percent of Patients Prescribed Long Acting/ Extended Release (LA/ER) Opioids who were Opioid-Naïve

Opioid naïve patients may be more vulnerable to adverse effects of LA/ER opioids such as respiratory depression and overdose. For this metric, opioid naïve refers to patients who did not fill an opioid prescription in the previous 60 days. Time-scheduled opioids are associated with greater total average daily dosages and increased risk for long term use.^{4,6}



Percent of Patient Prescription Days with Overlapping Prescriptions

Both benzodiazepines and opioids are central nervous system depressants that can compromise the respiratory system. Benzodiazepines enhance the effects of opioids so the concurrent use of benzodiazepines and opioids can increase the risk of adverse events.^{4,6,7} This indicator measures the duration of overlapping prescriptions. Longer duration of overlapping prescriptions may raise concerns of the potential drug interactions and resulting side effects.



Morbidity and Mortality

While many people benefit from opioids for pain management, increased use of prescription pain relievers has led to increases in associated morbidities and mortalities, including opioid use disorder and overdose. Opioid overdose related emergency department (ED) visits, hospitalizations and fatal overdoses have increased nationally and in Colorado over the last decade.^{3,4,8}

Emergency Department Visits Related to Prescription Opioid Overdose

From 2012-2014, Coloradans made 2,404 visits per year to ED's related to prescription opioid poisoning.⁹ Throughout the state, ED visit rates per 100,000 county residents ranged from 4.1 in Routt County to 96 in Huerfano County (Figure 4). In Moffat County from 2012-2014, there were three ED visits involving prescription opioids. Of the 64 Colorado counties, 28 were suppressed due to small sample sizes. Moffat County had the fifth lowest ED visit rate in the state.

Moffat County Opioid ED Visit Statistics

Rank: 32/36

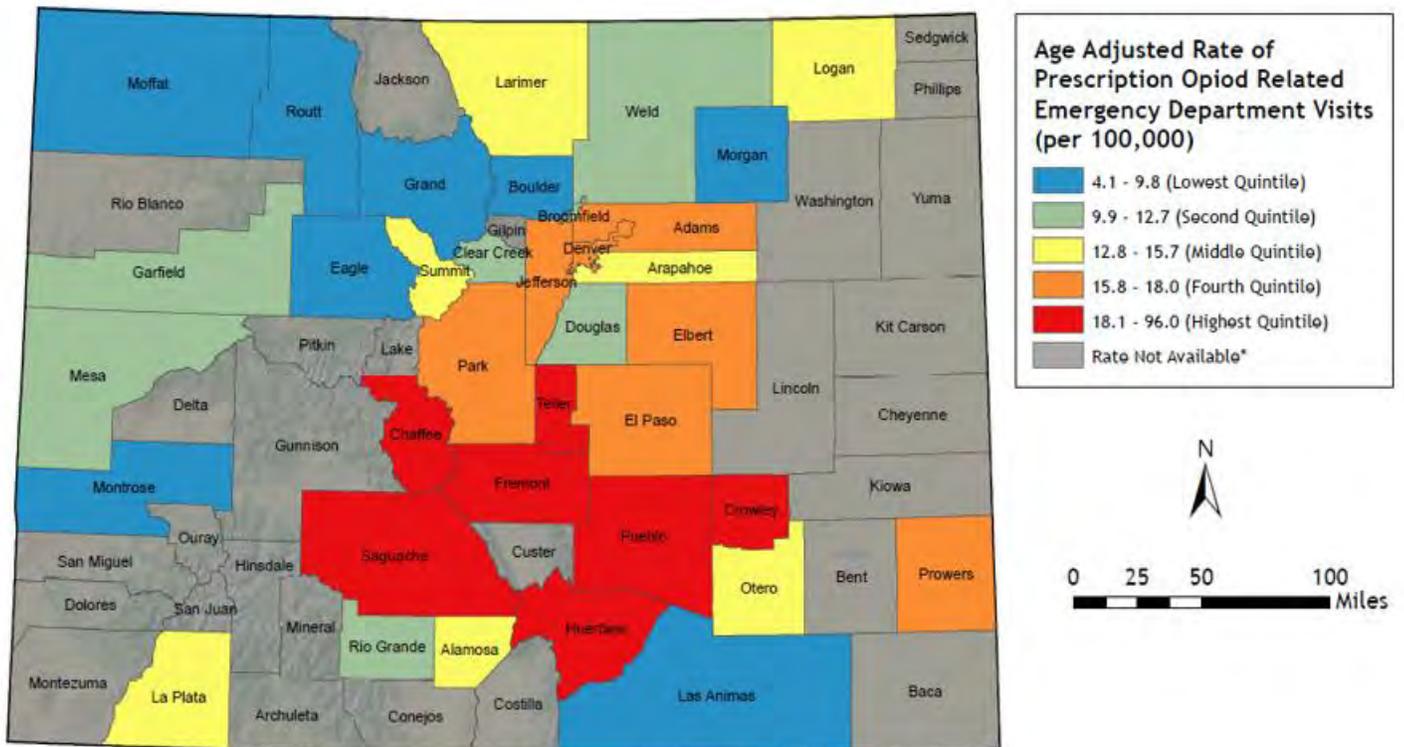
Count: 3

Crude Rate: 7.7

Age-Adjusted Rate (CI): 8.3 (1.7-19.7)

Colorado Age-Adjusted Rate (CI): 15.2 (14.6-15.8)

Figure 4: Age-Adjusted Opioid Analgesic ED Visit Rates by County, Colorado, 2012-2014



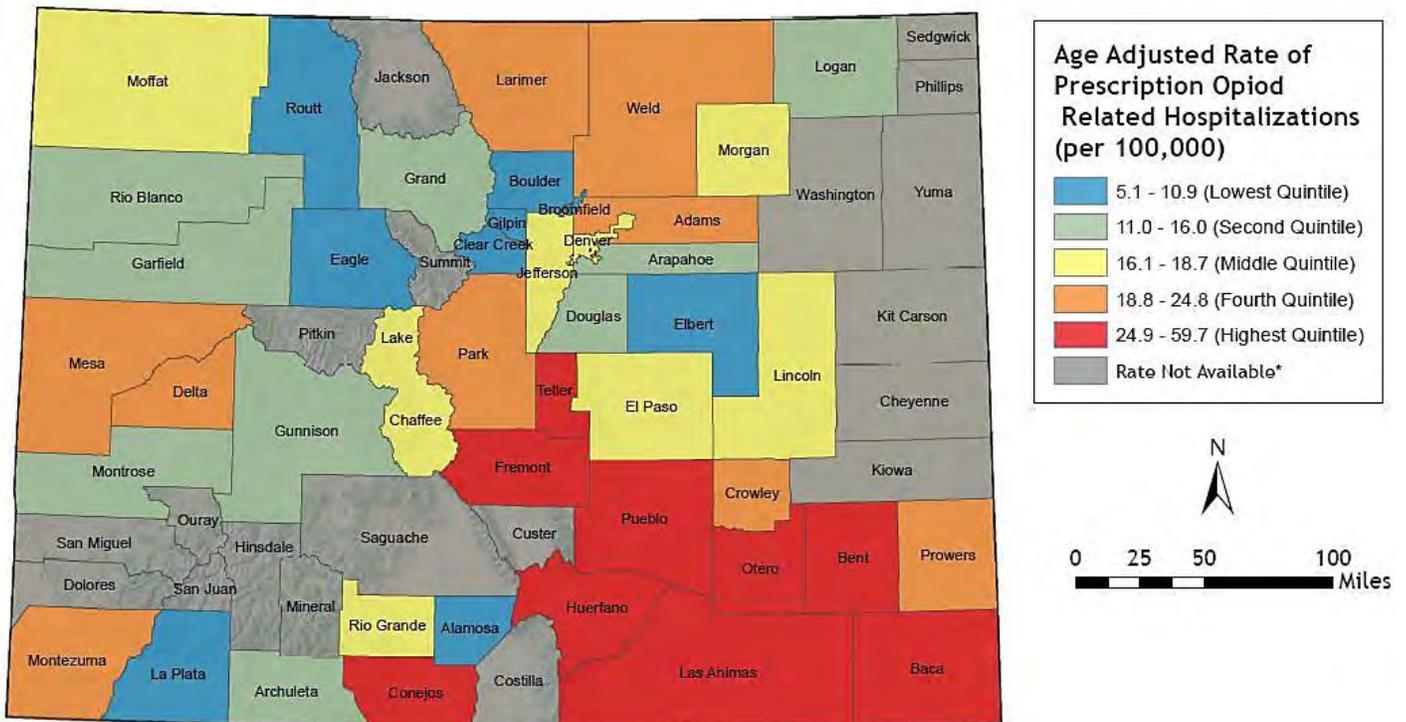
Hospitalization Data Related to Prescription Opioid Overdose

In 2013, 21 percent of the drug poisoning hospitalizations in Colorado were related to prescription opioid poisoning.⁹ Figure 5 shows hospitalization rates involving prescription opioid poisonings from 2012-2014. In Colorado, hospitalization rates per 100,000 county residents ranged from 5.1 in Clear Creek County to 59.7 in Huerfano County. Moffat County experienced eight hospitalization visits related to prescription opioids in the three-year period. Excluding the 19 counties where data were suppressed, Moffat County had the 21st highest rate, placing it in the middle quintile range and even with the state rate.

Moffat County Opioid Hospitalization Statistics

Rank: 21/45
 Count: 8
 Crude Rate: 20.5
 Age-Adjusted Rate (CI): 18.4 (7.4-34.3)
 Colorado Age-Adjusted Rate (CI): 18.6 (18.9-20.1)

Figure 5: Age-Adjusted Opioid Analgesic Hospitalization Rates among Colorado Residents, Colorado, 2012-2014



Death Certificate Data Related to Prescription Opioid Overdose

In Colorado in 2015, 37 percent of all drug poisoning deaths involved prescription opioids. Opioid related poisoning deaths tripled from 1.9 in 2000 to 5.8 per 100,000 in 2015.^{8,9} Figures 6 and 7 describe prescription opioid mortality rates in Colorado from 2013-2015. Opioid mortality rates ranged from 2.7 per 100,000 in Park County to 13.5 per 100,000 in Las Animas County (Figure 6). Moffat County was one of the 38 counties where county level data were suppressed due to small sample sizes. Region 11 however, had a rate in the second quartile (Figure 7).

Moffat County Opioid Death Statistics

Suppressed

Colorado Age-Adjusted Rate (CI): 5.8 (5.4-6.1)

Figure 6: Age-Adjusted Opioid Analgesic Death Rates by County, Colorado, 2013-2015

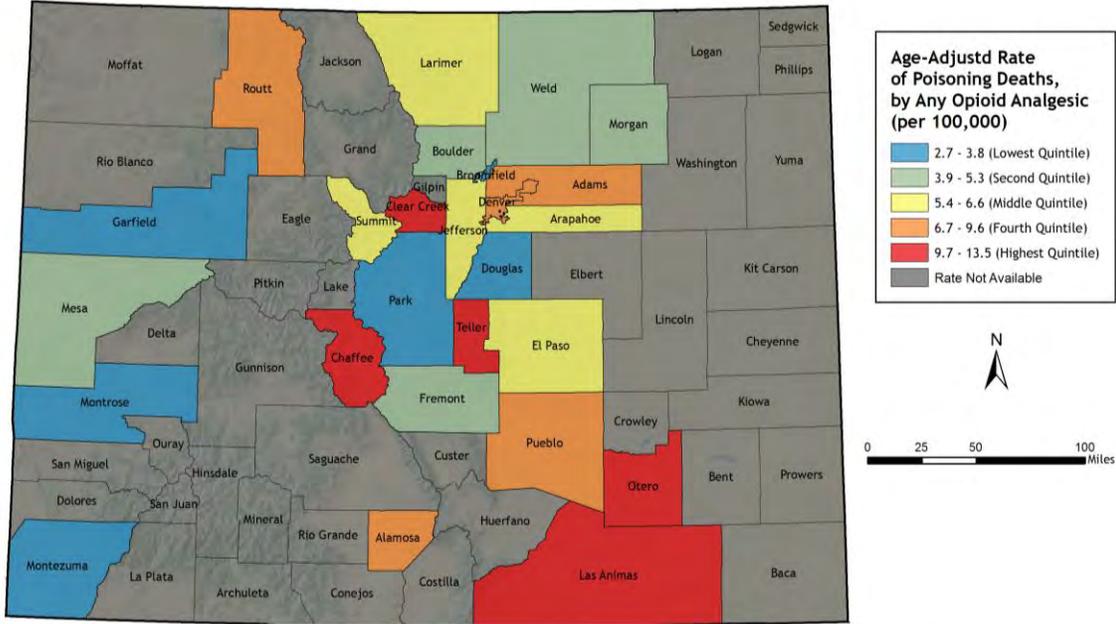
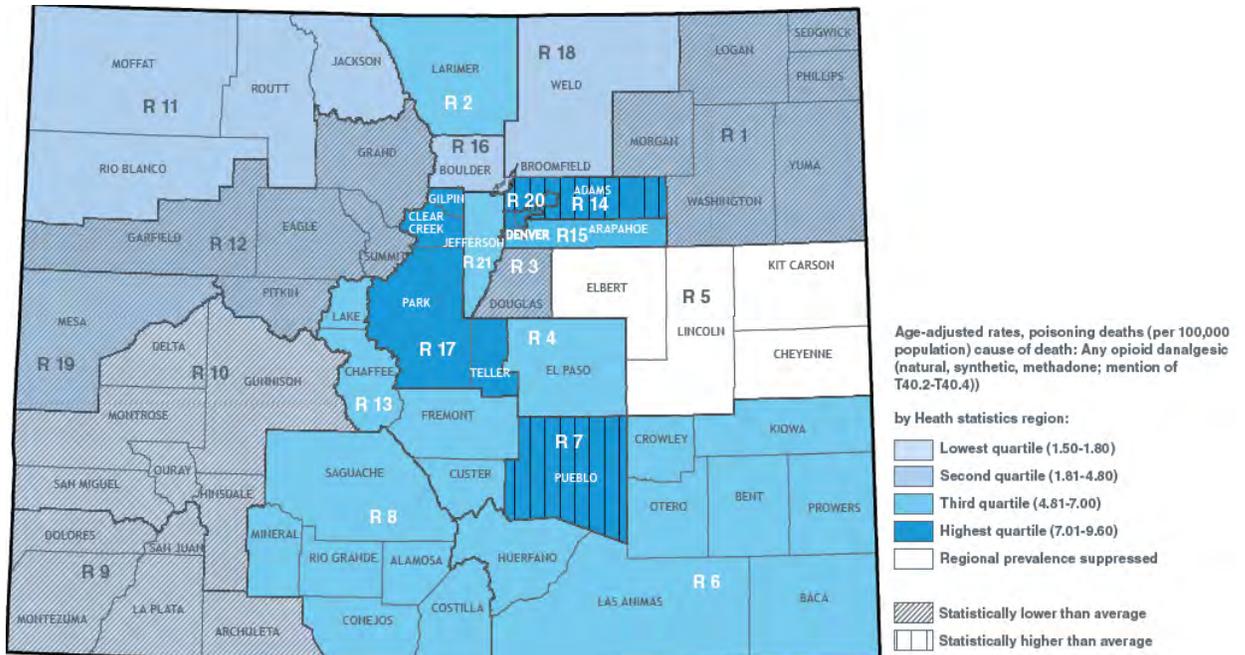


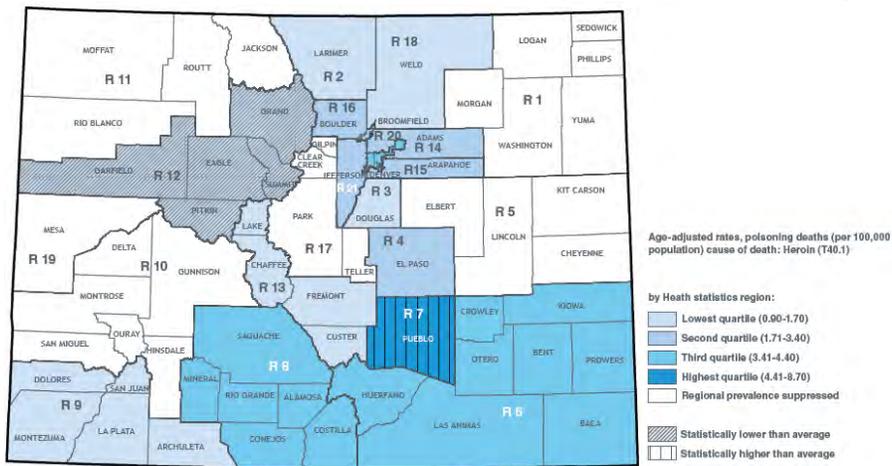
Figure 7: Age-Adjusted Opioid Analgesic Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Heroin-Related Overdose Death Rates

The prevalence of heroin, an illicit opiate, is also increasingly prevalent in Colorado. As heroin use increases, so do the adverse effects associated with heroin use and addiction. The rate of heroin related deaths has increased from 0.8 deaths per 100,000 in 2000 to 2.9 per 100,000 in 2015. According to the Denver Metro Treatment Client Survey, 70 percent of survey respondents reported that prescription painkillers played a role in their decision to use heroin.¹⁰ Figure 8 heroin related mortality rates in Colorado by Health Statistics Region from 2013 to 2015⁸.

Figure 8: Age-Adjusted Heroin Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Data Limitations

Data in this report should be interpreted with caution for several reasons. First, the accuracy of the indicators based on PDMP data is limited by the completeness and quality of the data when entered into the system. Another limitation of using the PDMP for population-level analyses is that it does not include provider type or information on the patient's medical condition. In addition, the indicators do not capture whether the dispensed medications were taken as prescribed or taken by the prescribed patient. This report references specific thresholds for indicators using absolute values which results in identifying patients at risk for substance use disorder or overdose, whether or not that is true. It should be noted that not all individuals who breach the threshold are at risk for substance use disorder or overdose and those below the threshold may still be at risk. Therefore, interpretation of these measures are limited due to the lack of contextual information regarding the prescriptions. A more comprehensive approach and complete evaluation of the economic, environmental and societal influences is necessary to appropriately interpret PDMP data and put the opioid epidemic into context.

Hospitalization and emergency department data are obtained through medical billing codes, which vary in their completeness. These records may not provide all information regarding the specific drug or drugs that were associated with a non-fatal overdose. Further, the required billing codes for hospitalization and emergency department visits changed in 2015, and as CDPHE continues to refine the case definitions with the new coding scheme, only 2012-2014 data were used in these analyses. These data represent health care encounters, not individuals.

Lastly, limitations of death certificate data may result in reporting bias. Deaths reported as multi-drug toxicity lack the specificity to know exactly what substance caused death. CDPHE does not collect toxicology reports for unintentional overdose deaths and therefore cannot determine whether drugs that were not indicated on the certificate represent negative test results or whether the drug was not part of the testing.

Conclusion

The PDMP is a critical tool in the fight to protect health and safety of Coloradans while supporting clinical practice. Although use of the PDMP is not mandatory for prescribers, in 2014 Colorado physicians queried 414,549 patient records. In 2016, the number of queries increased 64 percent to 681,348, demonstrating the value of the PDMP as a clinical decision making tool.

Prescription drug misuse is a public health crisis and the PDMP is one tool that can be used to evaluate initiatives designed to change patient and provider behavior to reduce prescription drug misuse and the associated adverse health outcomes. However, the misuse of prescription drugs is a multidimensional problem. A balanced approach to this work includes an understanding of the need to preserve access to medications for the management of care and meeting patient expectations while decreasing the misuse and diversion of controlled substances.

Additional Data Resources

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References

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Contact Information

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Prescription Drug Overdose Prevention Unit
<https://www.colorado.gov/cdphe/pdo-prevention>
Email: cdphe_PDOinfo@state.co.us

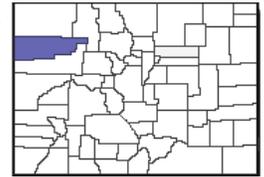


Rio Blanco County Prescription Drug Profile

Population in 2015: 6,459

Health Statistics Region: 11

County Designation: Frontier



Overview

Nationally and in Colorado, opioid use disorders have emerged as a significant public health concern. Nearly 224,000 Coloradans misuse prescription drugs each year. In nearly every year for the last 15 years, Colorado's drug overdose rate was significantly higher than the national rate and opioid related overdoses represent a large portion of those deaths. In Colorado, prescription opioid related overdoses have quadrupled since 2000.⁸

This profile summarizes controlled substance prescriptions that Rio Blanco County residents received from 2014-2016, prescribing practices and patient behaviors, population-level healthcare encounters and deaths related to opioid overdose among Rio Blanco County residents. This information is from several sources: The Colorado Prescription Drug Monitoring Program (PDMP), emergency department visit and hospital discharge databases and death certificates.

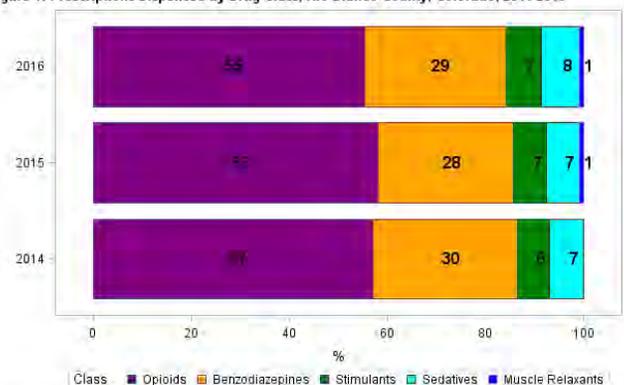
The Colorado PDMP is a secure database that collects information on schedule 2-5 controlled substance prescriptions dispensed by Colorado pharmacies. The PDMP compiles information on patients, prescribers, pharmacies, and the medications prescribed and dispensed. Prescribers and pharmacists registered with the Drug Enforcement Administration (DEA) and the PDMP can access patient information to make informed decisions and ensure appropriate prescribing and dispensing practices. The PDMP is available to the following Colorado licensed individuals: pharmacists, physicians, physician assistants, advanced practice nurses, dentists, podiatrists, optometrists and veterinarians.¹

In 2014, Colorado legislators passed a bill that aligned Colorado's PDMP with best practice strategies², such as mandating registration for prescribers and pharmacies, daily reporting by pharmacies for dispensed controlled substances, allowing prescribers to delegate access to PDMP records and allowing the Colorado Department of Public Health and Environment to access PDMP data to provide population-level results. In compliance with this legislation, this report describes population-level data on the prescribing and dispensing of controlled substances, with a focus on opioid prescriptions (also known as opioid analgesics or pharmaceutical opioids), from the Colorado PDMP for Rio Blanco County residents.

Dispensed Prescriptions

Controlled substances collected by the PDMP are categorized into five classes: opioids, benzodiazepines, stimulants, sedatives and muscle relaxants. Figure 1 illustrates the amount of schedule 2-4 controlled substances by drug class dispensed to Rio Blanco County residents. Opioids represented more than half of all prescriptions dispensed, and benzodiazepines represented 30 percent of the prescriptions dispensed. The percentage of opioids and benzodiazepines decreased in the three-year period.

Figure 1: Prescriptions Dispensed by Drug Class, Rio Blanco County, Colorado, 2014-2016

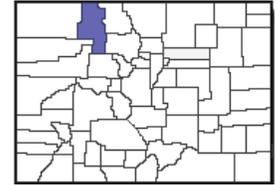


Schedule 2-4 Controlled Substances
Muscle Relaxants were not included as a class in 2014
Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies
Analysis by: Colorado Department of Public Health and Environment, 2016



Routt County Prescription Drug Profile

Population in 2015: 24,103
Health Statistics Region: 11
County Designation: Rural



Overview

Nationally and in Colorado, opioid use disorders have emerged as a significant public health concern. Nearly 224,000 Coloradans misuse prescription drugs each year. In nearly every year for the last 15 years, Colorado's drug overdose rate was significantly higher than the national rate and opioid related overdoses represent a large portion of those deaths. In Colorado, prescription opioid related overdoses have quadrupled since 2000.⁸

This profile summarizes controlled substance prescriptions that Routt County residents received from 2014-2016, prescribing practices and patient behaviors, population-level healthcare encounters and deaths related to opioid overdose among Routt County residents. This information is from several sources: The Colorado Prescription Drug Monitoring Program (PDMP), emergency department visit and hospital discharge databases and death certificates.

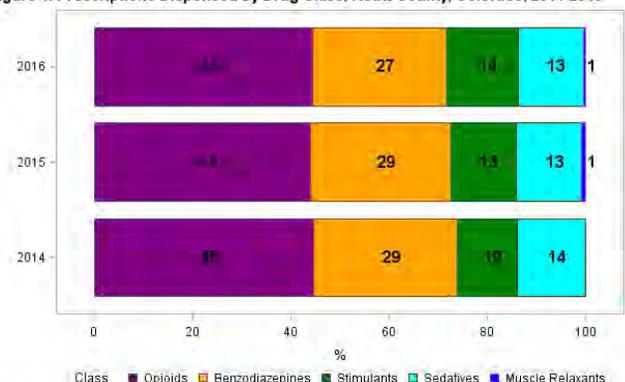
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Dispensed Prescriptions

Controlled substances collected by the PDMP are categorized into five classes: opioids, benzodiazepines, stimulants, sedatives and muscle relaxants. Figure 1 illustrates the amount of schedule 2-4 controlled substances by drug class dispensed to Routt County residents from 2014-2016. Opioids represented almost half of all prescriptions dispensed, and benzodiazepines represented about 30 percent of prescriptions. The percentage of benzodiazepine prescriptions decreased while stimulant prescriptions increased in the three-year period.

Figure 1: Prescriptions Dispensed by Drug Class, Routt County, Colorado, 2014-2016



Schedule 2-4 Controlled Substances
Muscle Relaxants were not included as a class in 2014
Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies
Analysis by: Colorado Department of Public Health and Environment, 2016



Prescription Recipients

The attributes related to controlled substances differ greatly for each county due to variation in prescribing and dispensing practices within the state. Table 1 describes general characteristics of controlled substance prescriptions dispensed to Routt County residents. In 2016, Routt County prescribers wrote 82 percent of the 33,826 prescriptions dispensed to county residents and 90 percent of prescriptions were dispensed within the county. However, the county of residence may differ from the counties where the prescriptions were obtained. For instance, the remaining prescriptions dispensed to Routt County residents were prescribed and dispensed in neighboring counties.

Table 1: Characteristics of Controlled Substance Prescriptions Dispensed, Routt County, Colorado, 2014-2016

Characteristics	2014	2015	2016
Number of Prescriptions Dispensed	34,404	32,973	33,826
Number of Unique Patients	7,252	6,861	7,114
Number of Unique Prescribers	1,168	1,416	1,346
Number of Unique Pharmacies	342	360	355
Estimated Median Distance Traveled by the Patient to the Prescriber (miles)	1.4	1.4	1.4
Estimated Median Distance Traveled by the Patient to the Pharmacy (miles)	1.4	1.4	1.4

Schedule 2-4 Controlled Substances

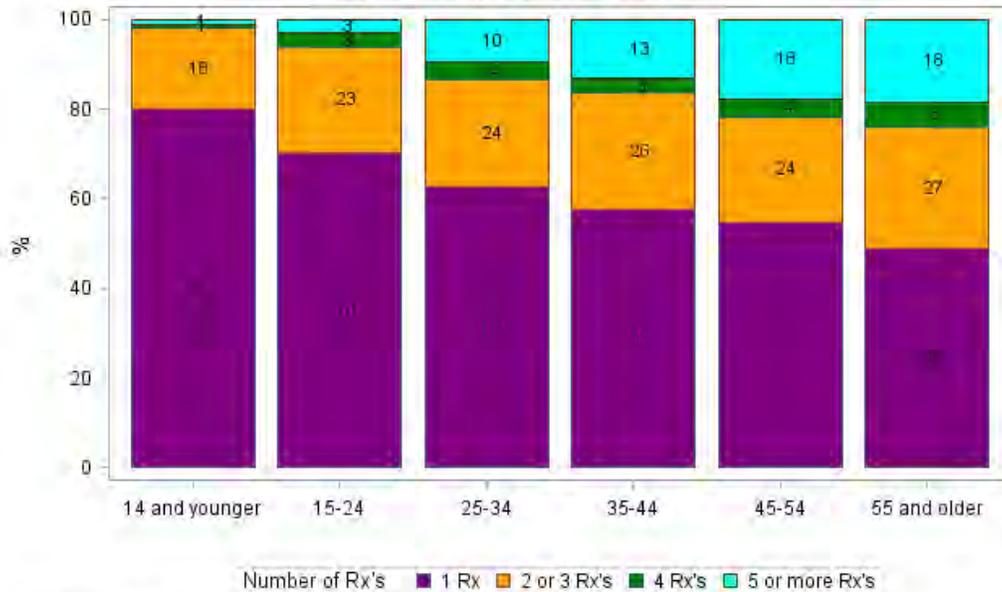
In 2014 NPI was used to identify unique prescribers and pharmacies as DEA numbers were not available until 2015

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Although some might have legitimate reasons for receiving multiple prescriptions, research has suggested that increasing numbers of prescriptions per individual are associated with increased risk of substance use disorders.³ Figure 2 describes the number of opioid prescriptions per patient, by age group. In 2016, the number of opioid prescriptions per recipient ranged from 1 to 73 (median=1.0; mean=3.1) and increased with age.

Figure 2: The Number of Opioid Prescriptions Dispensed Per Patient by Age Group, Routt County, Colorado, 2016



Schedule 2-4 Opioid Prescriptions

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Prescription rates indicate the volume of controlled substance prescriptions per 1,000 residents. Figure 3 shows prescription rates for three major drug classes by year and Table 2 shows aggregated state level data. Opioid prescription rates in Routt County peaked in 2014 and stimulant prescription rates increased every year in the three-year period. Compared to the state, Routt County had elevated prescription rates for benzodiazepines and stimulants.

Figure 3: Prescription Rates per 1,000 Residents by Major Drug Class, Routt County, Colorado, 2014-2016

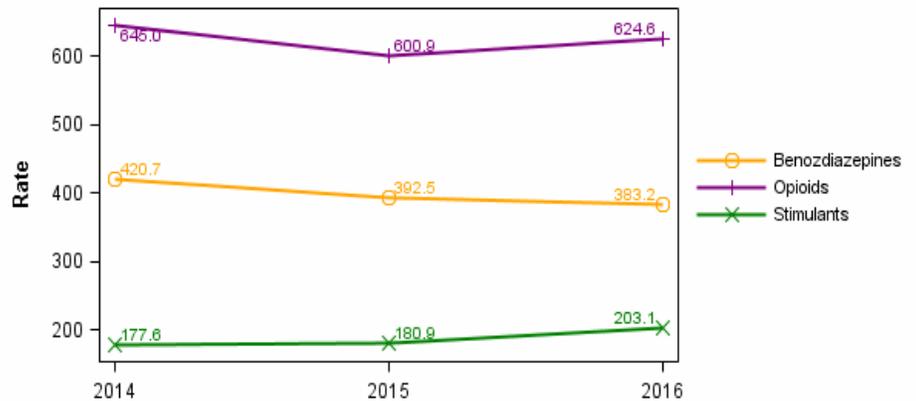


Table 2: Prescription Rates per 100,000 Residents by Drug Class, Colorado, 2014-2016

Drug Class	2014	2015	2016
Opioids	754.2	795.7	765.4
Benzodiazepines	337.3	326.8	316.2
Stimulants	142.1	147.7	160.5

Schedule 2-4 Controlled Substances

*2016 population estimates were not available, therefore 2015 estimates were used

Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Population-Level Indicators of Prescribing Practices and Patient Behaviors

The information on controlled substances in the PDMP is useful in identifying prescribing practices and patient behaviors that can increase risk for overdose.^{2,4} According to the CDC, potential risk factors for prescription drug misuse include high-dose prescribing, multiple provider episodes, long duration opioids, and overlapping opioid and benzodiazepine prescriptions.⁴ Understanding these risk factors may help providers better assist their patients in pain management while also protecting their health and safety. These measures are provided in Table 3 and explained in further detail on the following page.

Table 3: High Risk Prescribing Practices and Patient Behaviors, 2014-2016

PDMP Indicator	2014		2015		2016	
	Routt	CO	Routt	CO	Routt	CO
Percent of patients receiving more than 90 morphine milligram equivalents	10.1%	10.3%	9.1%	8.9%	8.6%	8.7%
Percent of patients receiving more than 120 morphine milligram equivalents	4.9%	6.3%	4.5%	5.5%	4.3%	5.2%
*Rate of multiple provider episodes per 100,000 residents	21.0	60.8	18.7	43.1	14.5	32.0
Percent of patients prescribed long duration opioids who were opioid-naïve	27.3%	16.0%	26.9%	15.3%	27.7%	13.5%
Percent of patient prescription days with overlapping opioid prescriptions	18.1%	22.3%	19.1%	21.6%	19.0%	21.2%
Percent of patient prescriptions days with overlapping opioid and benzodiazepine prescriptions	12.4%	12.1%	11.8%	11.9%	11.5%	11.3%

Schedule 2-4 Controlled Substances

Excludes Buprenorphine and other drugs commonly used for treatment

*2016 rates are calculated with 2015 population estimates as 2016 estimates are not yet available

Annual rates are based on the average of two biannual rates; Annual percentages are based on average of quarterly percentages

Data Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the

Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Data Analysis by: Colorado Department of Public Health and Environment, 2016

PDMP Indicator Definitions

Percent of Patients Receiving High Dosage Prescriptions

Morphine is considered the standard measure for managing pain and is therefore used as a reference for calculating opioid prescription doses. Higher dosages are associated with an increased risk of opioid use disorder and overdose.^{4,5} In 2014, the Colorado Quad-Regulator Boards of Dental, Medical, Nursing, and Pharmacy suggested limiting dosages to less than 120 mg morphine equivalents (MME) per day to reduce negative outcomes⁵, and in 2016, the Center for Disease Control and Prevention's (CDC) prescribing guidelines recommended opioid dosages should not exceed 90 MME per day.⁶ Although there is variability regarding safe dosage thresholds, assessing dosage can help to identify problematic prescribing practices and patients who may be at risk for substance use disorders.



Table 4: Estimated Doses for Commonly Prescribed Opioids

	Oxycodone	Hydrocodone
90 MME	60 mg	90 mg
120 MME	80 mg	120 mg

Rate of Multiple Provider Episodes (MPEs)

The use of multiple prescribers and pharmacies is associated with high risk drug-related behaviors and adverse events. The number of prescribers and pharmacies a patient visits is often used as a proxy measure for “doctor shopping”.^{4,6} The CDC definition was used for this report which defines MPE as receiving opioid prescriptions from five or more prescribers and pharmacies in a six-month period.



Percent of Patients Prescribed Long Acting/ Extended Release (LA/ER) Opioids who were Opioid-Naïve

Opioid naïve patients may be more vulnerable to adverse effects of LA/ER opioids such as respiratory depression and overdose. For this metric, opioid naïve refers to patients who did not fill an opioid prescription in the previous 60 days. Time-scheduled opioids are associated with greater total average daily dosages and increased risk for long term use.^{4,6}



Percent of Patient Prescription Days with Overlapping Prescriptions

Both benzodiazepines and opioids are central nervous system depressants that can compromise the respiratory system. Benzodiazepines enhance the effects of opioids so the concurrent use of benzodiazepines and opioids can increase the risk of adverse events.^{4,6,7} This indicator measures the duration of overlapping prescriptions. Longer duration of overlapping prescriptions may raise concerns of the potential drug interactions and resulting side effects.



Morbidity and Mortality

While many people benefit from opioids for pain management, increased use of prescription pain relievers has led to increases in associated morbidities and mortalities, including opioid use disorder and overdose. Opioid overdose related emergency department (ED) visits, hospitalizations and fatal overdoses have increased nationally and in Colorado over the last decade.^{3,4,8}

Emergency Department Visits Related to Prescription Opioid Overdose

From 2012-2014, Coloradans made 2,404 visits per year to ED's related to prescription opioid poisoning.⁹ Throughout the state, ED visit rates per 100,000 county residents ranged from 4.1 in Routt County to 96 in Huerfano County (Figure 4). In Routt County from 2012-2014, there were 4 ED visits involving prescription opioids. Of the 64 Colorado counties, 28 were suppressed due to small sample sizes. Routt County had the lowest ED visit rate in the state.

Routt County Opioid ED Visit Statistics

Rank: 36/36

Count: 4

Crude Rate: 5.7

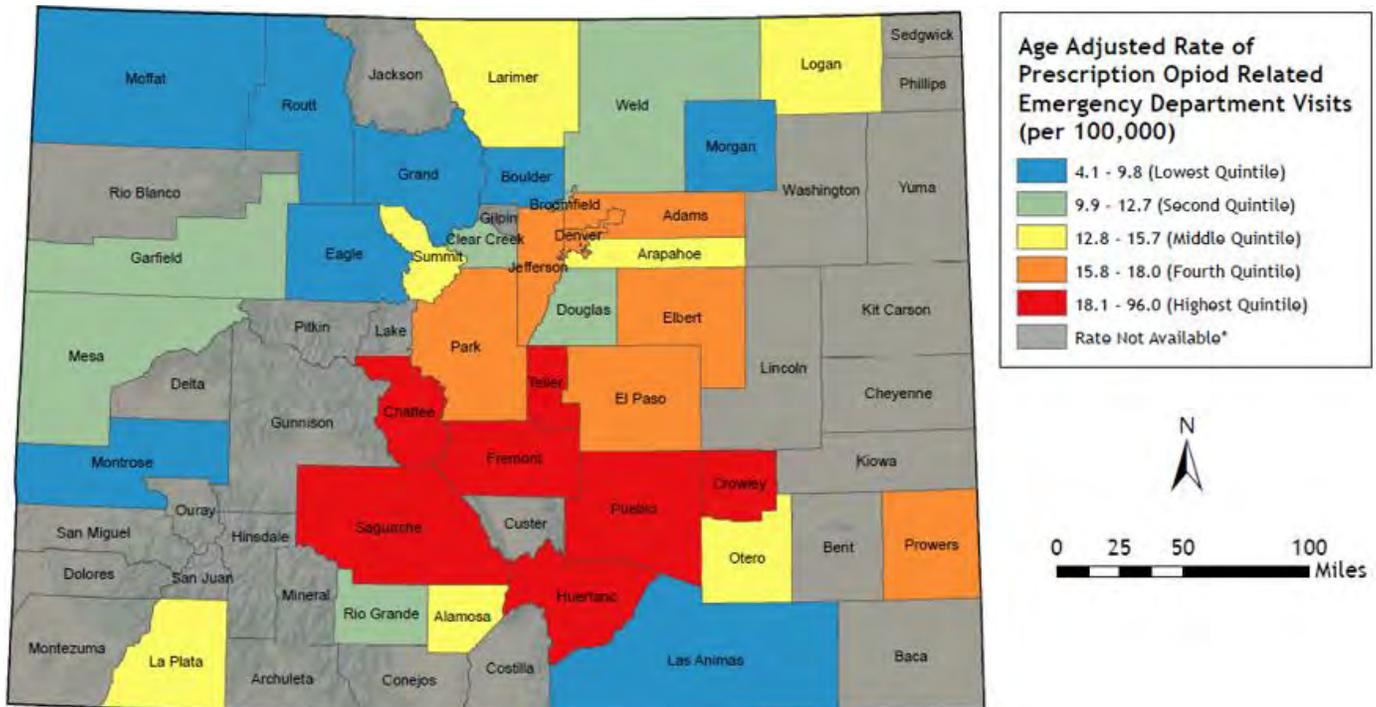
Age-Adjusted Rate (CI):

4.1 (0.7-10.1)

Colorado Age-Adjusted Rate

(CI): 15.2 (14.6-15.8)

Figure 4: Age-Adjusted Opioid Analgesic ED Visit Rates by County, Colorado, 2012-2014



Hospitalization Data Related to Prescription Opioid Overdose

In 2013, 21 percent of the drug poisoning hospitalizations in Colorado were related to prescription opioid poisoning.⁹ Figure 5 shows hospitalization rates involving prescription opioid poisonings from 2012-2014. In Colorado, hospitalization rates per 100,000 county residents ranged from 5.1 in Clear Creek County to 59.7 in Huerfano County. Routt County experienced 8 hospitalization visits related to prescription opioids in the three-year period. Excluding the 19 counties where data were suppressed, Routt County ranked 40th out of the 45 remaining counties, placing it in the second quintile.

Routt County Opioid Hospitalization Statistics

Rank: 40/45

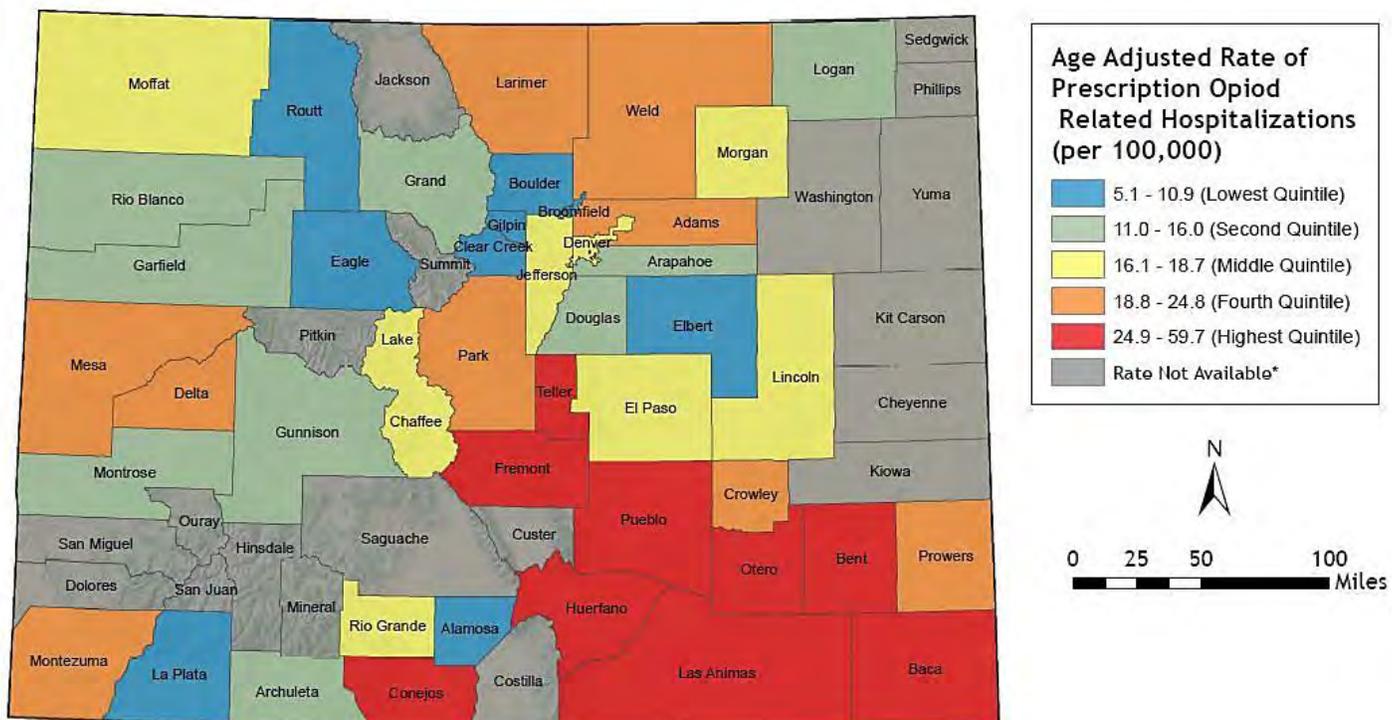
Count: 8

Crude Rate: 11.3

Age-Adjusted Rate (CI): 10.4 (4.2-19.3)

Colorado Age-Adjusted Rate (CI): 18.6 (18.9-20.1)

Figure 5: Age-Adjusted Opioid Analgesic Hospitalization Rates by County, Colorado, 2012-2014



Death Certificate Data Related to Prescription Opioid Overdose

In Colorado in 2015, 37 percent of all drug poisoning deaths involved prescription opioids. Opioid related poisoning deaths tripled from 1.9 in 2000 to 5.8 per 100,000 in 2015.^{8,9} Figures 6 and 7 describe prescription opioid mortality rates in Colorado from 2013-2015. Opioid mortality rates in the state ranged from 2.7 per 100,000 in Park County to 13.5 per 100,000 in Las Animas County (Figure 6). Routt County was one of 26 counties where enough data were available. Routt had the 10th highest opioid-related death rate in the state.

Routt County Opioid Death Statistics

Rank: 10/26

Count: 6

Crude Rate: 8.4

Age-Adjusted Rate (CI): 7.4 (2.4-15.1)

Colorado Age-Adjusted Rate (CI): 5.8 (5.4-6.1)

Figure 6: Age-Adjusted Opioid Analgesic Death Rates by County, Colorado, 2013-2015

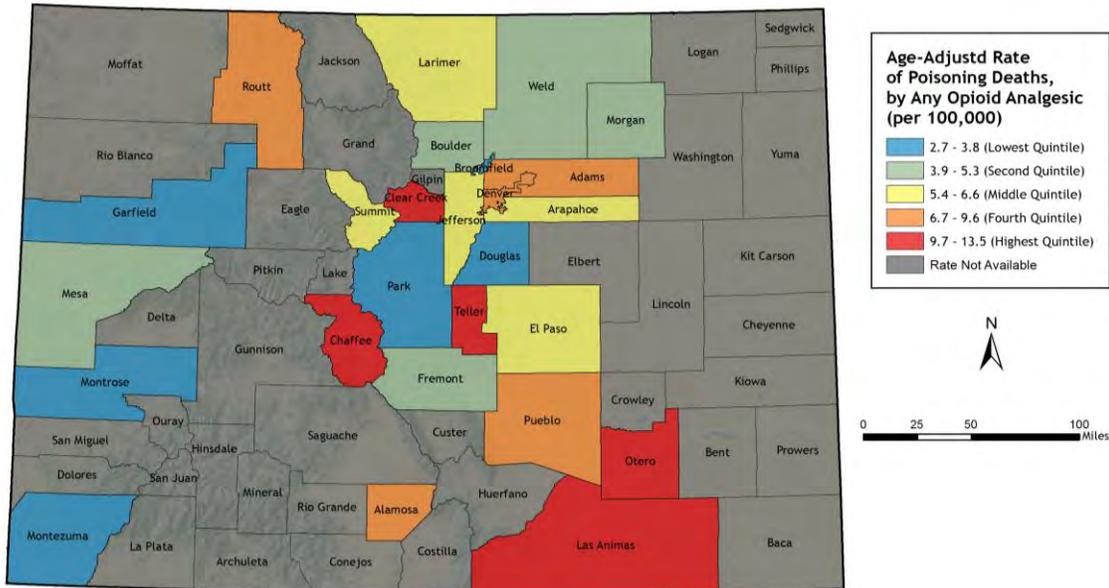
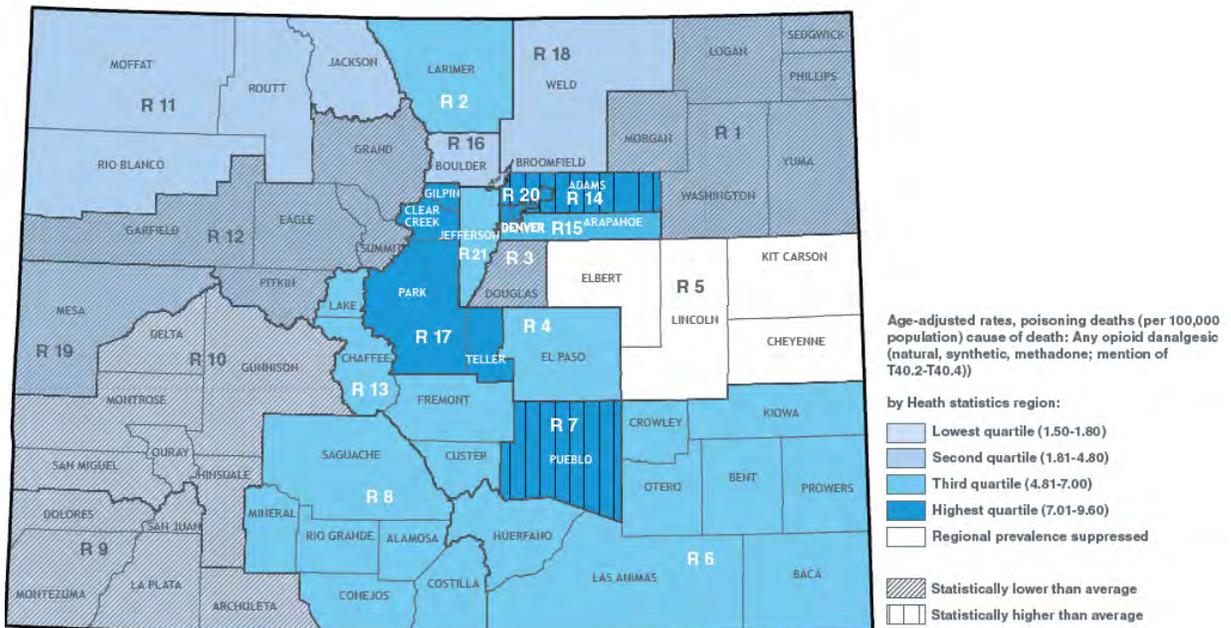


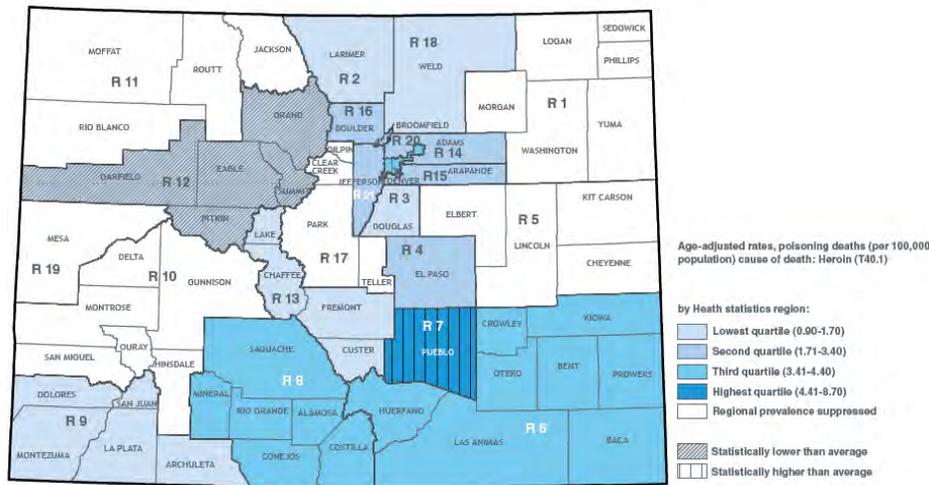
Figure 7: Age-Adjusted Opioid Analgesic Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Heroin-Related Overdose Death Rates

The prevalence of heroin, an illicit opiate, is also increasingly prevalent in Colorado. As heroin use increases, so do the adverse effects associated with heroin use and addiction. The rate of heroin related deaths has increased from 0.8 deaths per 100,000 in 2000 to 2.9 per 100,000 in 2015. According to the Denver Metro Treatment Client Survey, 70 percent of survey respondents reported that prescription painkillers played a role in their decision to use heroin.¹⁰ Figure 8 shows heroin related mortality rates in Colorado by Health Statistics Region from 2013 to 2015.⁸

Figure 8: Age-Adjusted Heroin Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Data Limitations

Data in this report should be interpreted with caution for several reasons. First, the accuracy of the indicators based on PDMP data is limited by the completeness and quality of the data when entered into the system. Another limitation of using the PDMP for population-level analyses is that it does not include provider type or information on the patient's medical condition. In addition, the indicators do not capture whether the dispensed medications were taken as prescribed or taken by the prescribed patient. This report references specific thresholds for indicators using absolute values which results in identifying patients at risk for substance use disorder or overdose, whether or not that is true. It should be noted that not all individuals who breach the threshold are at risk for substance use disorder or overdose and those below the threshold may still be at risk. Therefore, interpretation of these measures are limited due to the lack of contextual information regarding the prescriptions. A more comprehensive approach and complete evaluation of the economic, environmental and societal influences is necessary to appropriately interpret PDMP data and put the opioid epidemic into context.

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Lastly, limitations of death certificate data may result in reporting bias. Deaths reported as multi-drug toxicity lack the specificity to know exactly what substance caused death. CDPHE does not collect toxicology reports for unintentional overdose deaths and therefore cannot determine whether drugs that were not indicated on the certificate represent negative test results or whether the drug was not part of the testing.

Conclusion

The PDMP is a critical tool in the fight to protect health and safety of Coloradans while supporting clinical practice. Although use of the PDMP is not mandatory for prescribers, in 2014 Colorado physicians queried 414,549 patient records. In 2016, the number of queries increased 64 percent to 681,348, demonstrating the value of the PDMP as a clinical decision making tool.

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Rise Above Colorado: <https://www.riseaboveco.org/>

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Prescription Recipients

The attributes related to controlled substances differ greatly for each county due to variation in prescribing and dispensing practices within the state. Table 1 describes general characteristics of controlled substance prescriptions dispensed to Rio Blanco County residents. In 2016, Rio Blanco County prescribers wrote 63 percent of all prescriptions dispensed to county residents and 67 percent of prescriptions were dispensed within the county. However, the county of residence may differ from the counties where the prescriptions were obtained. For instance, prescribers in the neighboring county of Mesa wrote 13 percent of the prescriptions dispensed and pharmacies in Garfield County dispensed 15 percent of the prescriptions dispensed to Rio Blanco County residents.

Table 1: Characteristics of Controlled Substance Prescriptions Dispensed, Rio Blanco County, Colorado, 2014-2016

Characteristics	2014	2015	2016
Number of Prescriptions Dispensed	8,342	9,087	9,349
Number of Unique Patients	1,704	1,706	1,736
Number of Unique Prescribers	487	630	652
Number of Unique Pharmacies	115	119	141
Estimated Median Distance Traveled by the Patient to the Prescriber (miles)	40.2	45.4	0
Estimated Median Distance Traveled by the Patient to the Pharmacy (miles)	0	0	0

Schedule 2-4 Controlled Substances

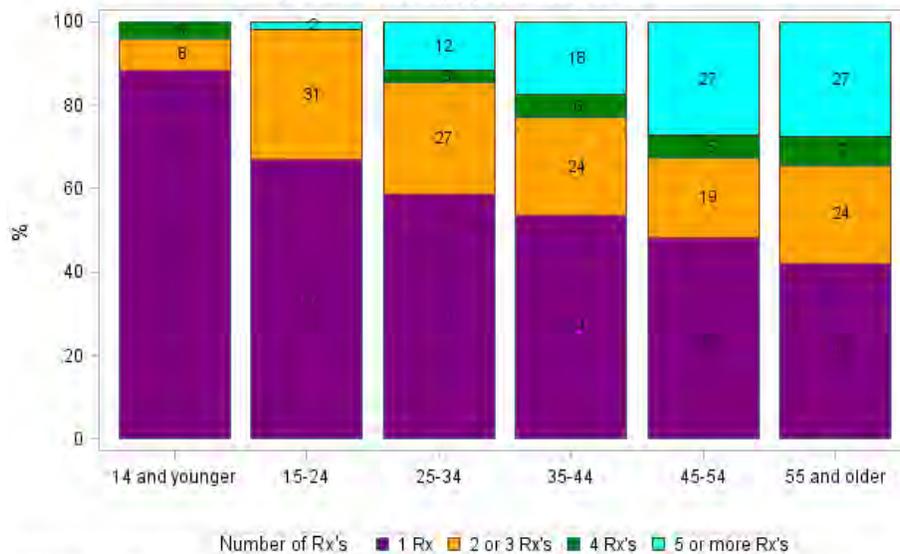
In 2014 NPI was used to identify unique prescribers and pharmacies as DEA numbers were not available until 2015

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Although some might have legitimate reasons for receiving multiple prescriptions, research has suggested that increasing numbers of prescriptions per individual are associated with increased risk of substance use disorders.³ Figure 2 describes the number of opioid prescriptions per patient, by age group. In 2016, the number of opioid prescriptions per recipient ranged from 1 to 56 (median=2.0; mean=3.8) and generally increased with age.

Figure 2: The Number of Opioid Prescriptions Dispensed Per Patient by Age Group, Rio Blanco County, Colorado, 2016



Schedule 2-4 Opioid Prescriptions

Data Source: Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Prescription rates indicate the volume of controlled substance prescriptions per 1,000 residents. Figure 3 shows prescription rates for three major drug classes by year and Table 2 shows aggregated state level data. Prescription rates increased for all three drug classes in the three-year period. Compared to the state, Rio Blanco County had elevated opioid and benzodiazepine prescription rates.

Figure 3: Prescription Rates per 1,000 Residents by Major Drug Class, Rio Blanco County, Colorado, 2014-2016

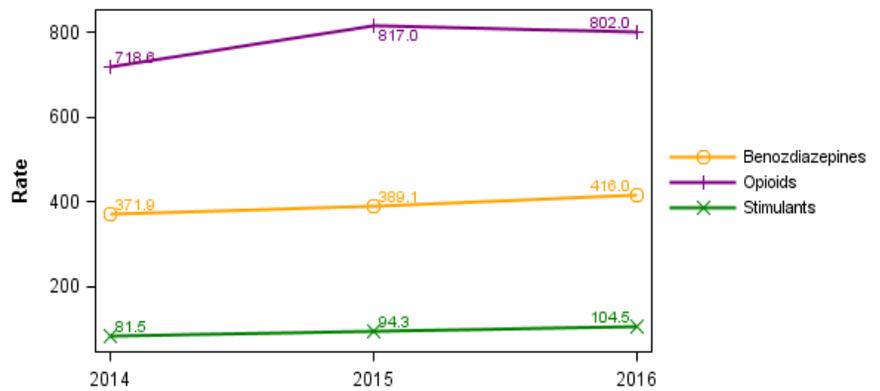


Table 2: Prescription Rates per 100,000 Residents by Drug Class, Colorado, 2014-2016

Drug Class	2014	2015	2016
Opioids	754.2	795.7	765.4
Benzodiazepines	337.3	326.8	316.2
Stimulants	142.1	147.7	160.5

Schedule 2-4 Controlled Substances

*2016 population estimates were not available, therefore 2015 estimates were used

Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Analysis by: Colorado Department of Public Health and Environment, 2016

Population-Level Indicators of Prescribing Practices and Patient Behaviors

The information on controlled substances in the PDMP is useful in identifying prescribing practices and patient behaviors that can increase risk for overdose.^{2,4} According to the CDC, potential risk factors for prescription drug misuse include high-dose prescribing, multiple provider episodes, long duration opioids, and overlapping opioid and benzodiazepine prescriptions.⁴ Understanding these risk factors may help providers better assist their patients in pain management while also protecting their health and safety. These measures are provided in Table 3 and explained in further detail on the following page.

Table 3: High Risk Prescribing Practices and Patient Behaviors, 2014-2016

PDMP Indicator	2014		2015		2016	
	Rio Blanco	CO	Rio Blanco	CO	Rio Blanco	CO
Percent of patients receiving more than 90 morphine milligram equivalents	7.8%	10.3%	5.4%	8.9%	5.2%	8.7%
Percent of patients receiving more than 120 morphine milligram equivalents	4.0%	6.3%	3.0%	5.5%	2.4%	5.2%
*Rate of multiple provider episodes per 100,000 residents	15.1	60.8	38.7	43.1	7.6	32.0
Percent of patients prescribed long duration opioids who were opioid-naïve	20.1%	16.0%	17.3%	15.3%	18.1%	13.5%
Percent of patient prescription days with overlapping opioid prescriptions	19.7%	22.3%	18.4%	21.6%	18.3%	21.2%
Percent of patient prescriptions days with overlapping opioid and benzodiazepine	15.0%	12.1%	16.8%	11.9%	16.4%	11.3%

Schedule 2-4 Controlled Substances

Excludes Buprenorphine and other drugs commonly used for treatment

*2016 rates are calculated with 2015 population estimates as 2016 estimates are not yet available

Annual rates are based on the average of two biannual rates; Annual percentages are based on average of quarterly percentages

Data Source: Vital Statistics Program, Colorado Department of Public Health and Environment and the

Colorado Prescription Drug Monitoring Program, Colorado Department of Regulatory Agencies

Data Analysis by: Colorado Department of Public Health and Environment, 2016

PDMP Indicator Definitions

Percent of Patients Receiving High Dosage Prescriptions

Morphine is considered the standard measure for managing pain and is therefore used as a reference for calculating opioid prescription doses. Higher dosages are associated with an increased risk of opioid use disorder and overdose.^{4,5} In 2014, the Colorado Quad-Regulator Boards of Dental, Medical, Nursing, and Pharmacy suggested limiting dosages to less than 120 mg morphine equivalents (MME) per day to reduce negative outcomes⁵, and in 2016, the Center for Disease Control and Prevention's (CDC) prescribing guidelines recommended opioid dosages should not exceed 90 MME per day.⁶ Although there is variability regarding safe dosage thresholds, assessing dosage can help to identify problematic prescribing practices and patients who may be at risk for substance use disorders.



Table 4: Estimated Doses for Commonly Prescribed Opioids

	Oxycodone	Hydrocodone
90 MME	60 mg	90 mg
120 MME	80 mg	120 mg

Rate of Multiple Provider Episodes (MPEs)

The use of multiple prescribers and pharmacies is associated with high risk drug-related behaviors and adverse events. The number of prescribers and pharmacies a patient visits is often used as a proxy measure for “doctor shopping”.^{4,6} The CDC definition was used for this report which defines MPE as receiving opioid prescriptions from five or more prescribers and pharmacies in a six-month period.



Percent of Patients Prescribed Long Acting/ Extended Release (LA/ER) Opioids who were Opioid-Naïve

Opioid naïve patients may be more vulnerable to adverse effects of LA/ER opioids such as respiratory depression and overdose. For this metric, opioid naïve refers to patients who did not fill an opioid prescription in the previous 60 days. Time-scheduled opioids are associated with greater total average daily dosages and increased risk for long term use.^{4,6}



Percent of Patient Prescription Days with Overlapping Prescriptions

Both benzodiazepines and opioids are central nervous system depressants that can compromise the respiratory system. Benzodiazepines enhance the effects of opioids so the concurrent use of benzodiazepines and opioids can increase the risk of adverse events.^{4,6,7} This indicator measures the duration of overlapping prescriptions. Longer duration of overlapping prescriptions may raise concerns of the potential drug interactions and resulting side effects.



Morbidity and Mortality

While many people benefit from opioids for pain management, increased use of prescription pain relievers has led to increases in associated morbidities and mortalities, including opioid use disorder and overdose. Opioid overdose related emergency department (ED) visits, hospitalizations and fatal overdoses have increased nationally and in Colorado over the last decade.^{3,4,8}

Emergency Department Visits Related to Prescription Opioid Overdose

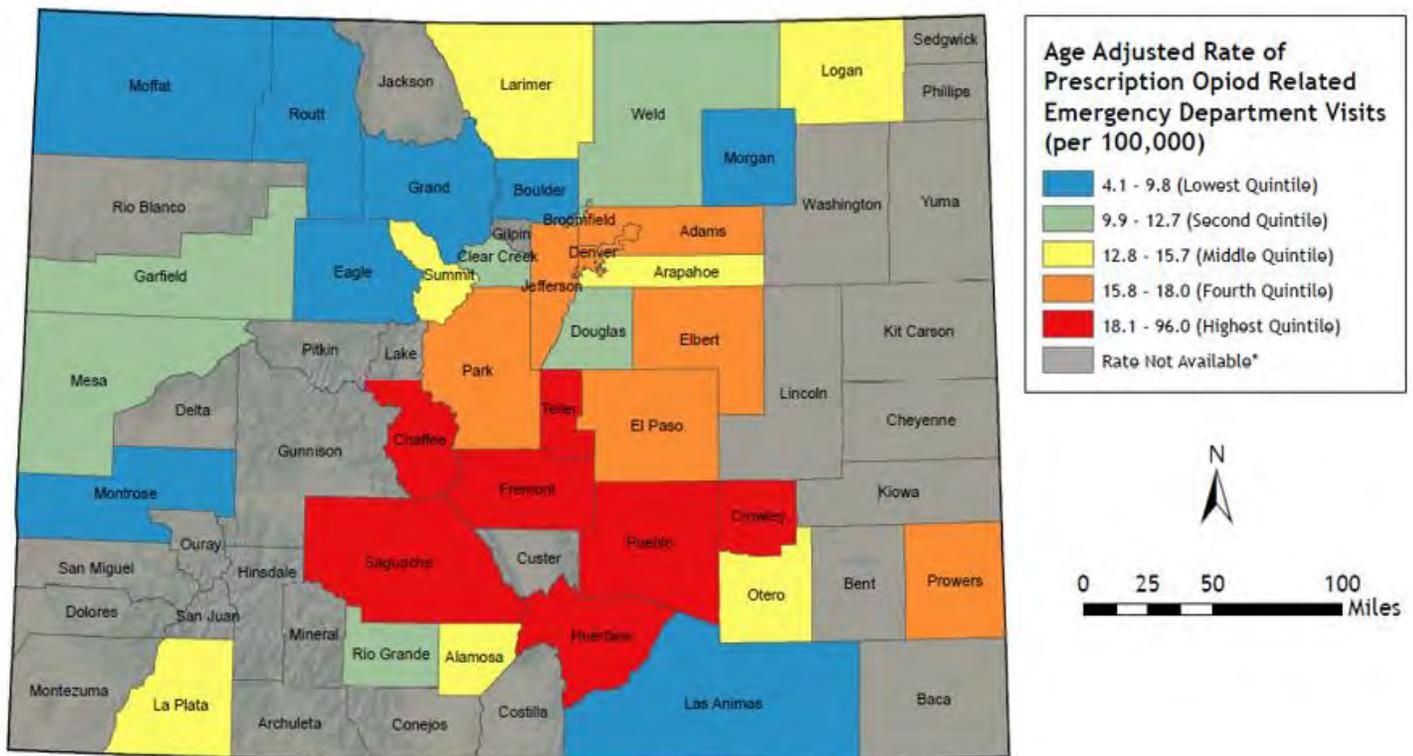
From 2012-2014, Coloradans made 2,404 visits per year to ED's related to prescription opioid poisoning.⁹ Throughout the state, ED visit rates per 100,000 county residents ranged from 4.1 in Routt County to 96 in Huerfano County (Figure 4). Rio Blanco County was one of the 28 counties where county level data were suppressed due to small sample sizes.

Rio Blanco County ED Visit Statistics

Suppressed

Colorado Age-Adjusted Rate (CI): 15.2 (14.6-15.8)

Figure 4: Age-Adjusted Opioid Analgesic ED Visit Rates by County, Colorado, 2012-2014



Hospitalization Data Related to Prescription Opioid Overdose

In 2013, 21 percent of the drug poisoning hospitalizations in Colorado were related to prescription opioid poisoning.⁹ Figure 5 shows hospitalization rates involving prescription opioid poisonings from 2012-2014. In Colorado, hospitalization rates per 100,000 county residents ranged from 5.1 in Clear Creek County to 59.7 in Huerfano County. Rio Blanco County experienced three hospitalization visits related to prescription opioids in the three-year period. Excluding the 19 counties where data were suppressed, Rio Blanco County ranked 32nd, placing it in the second quintile range.

Rio Blanco County Opioid Hospitalization Statistics

Rank: 32/45

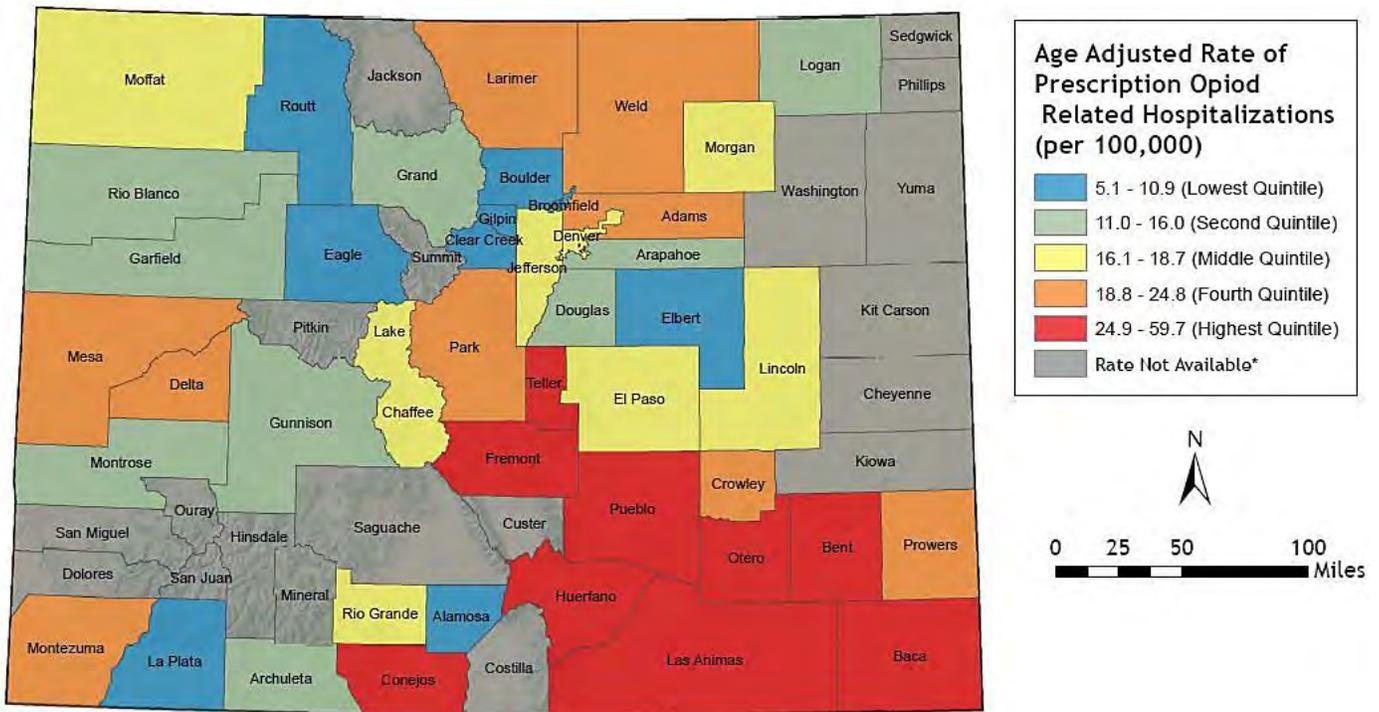
Count: 3

Crude Rate: 14.9

Age-Adjusted Rate (CI): 13.6 (2.3-34.5)

Colorado Age-Adjusted Rate (CI): 18.6 (18.9-20.1)

Figure 5: Age-Adjusted Opioid Analgesic Hospitalization Rates by County, Colorado, 2012-2014



Death Certificate Data Related to Prescription Opioid Overdose

In Colorado in 2015, 37 percent of all drug poisoning deaths involved prescription opioids. Opioid related poisoning deaths tripled from 1.9 in 2000 to 5.8 per 100,000 in 2015.^{8,9} Figures 6 and 7 describe prescription opioid mortality rates in Colorado from 2013-2015. Opioid mortality rates in the state ranged from 2.7 per 100,000 in Park County to 13.5 per 100,000 in Las Animas County (Figure 6). Rio Blanco was one of 38 counties where county level data were unavailable. Region 11, however had a rate in the lowest quartile (Figure 7).

Rio Blanco County Opioid Death Statistics

Suppressed

Colorado Age-Adjusted Rate (CI): 5.8 (5.4-6.1)

Figure 6: Age-Adjusted Opioid Analgesic Death Rates by County, Colorado, 2013-2015

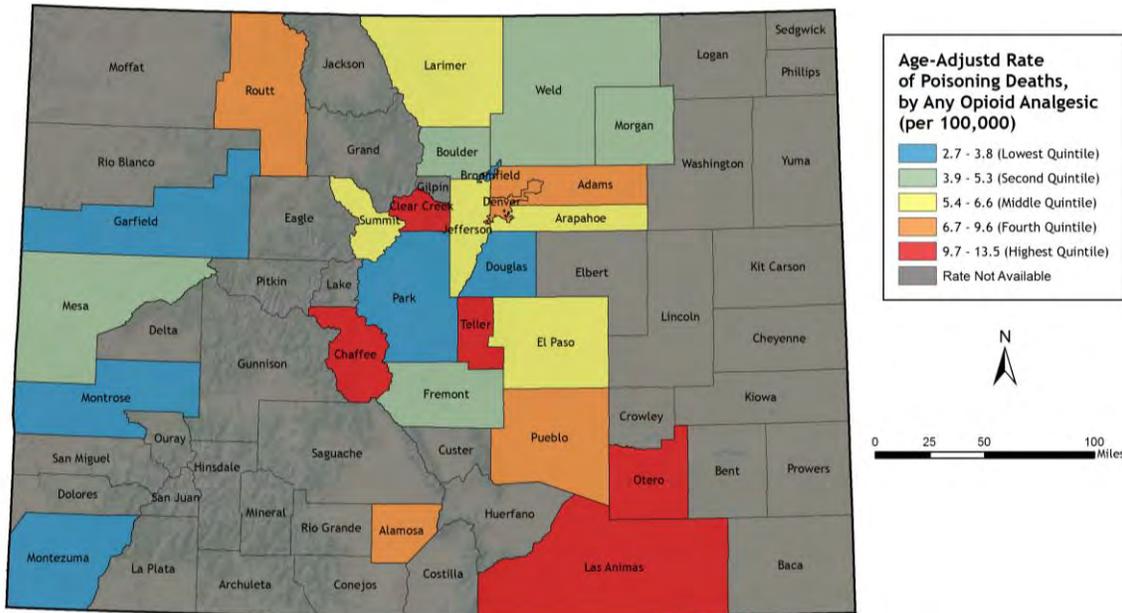
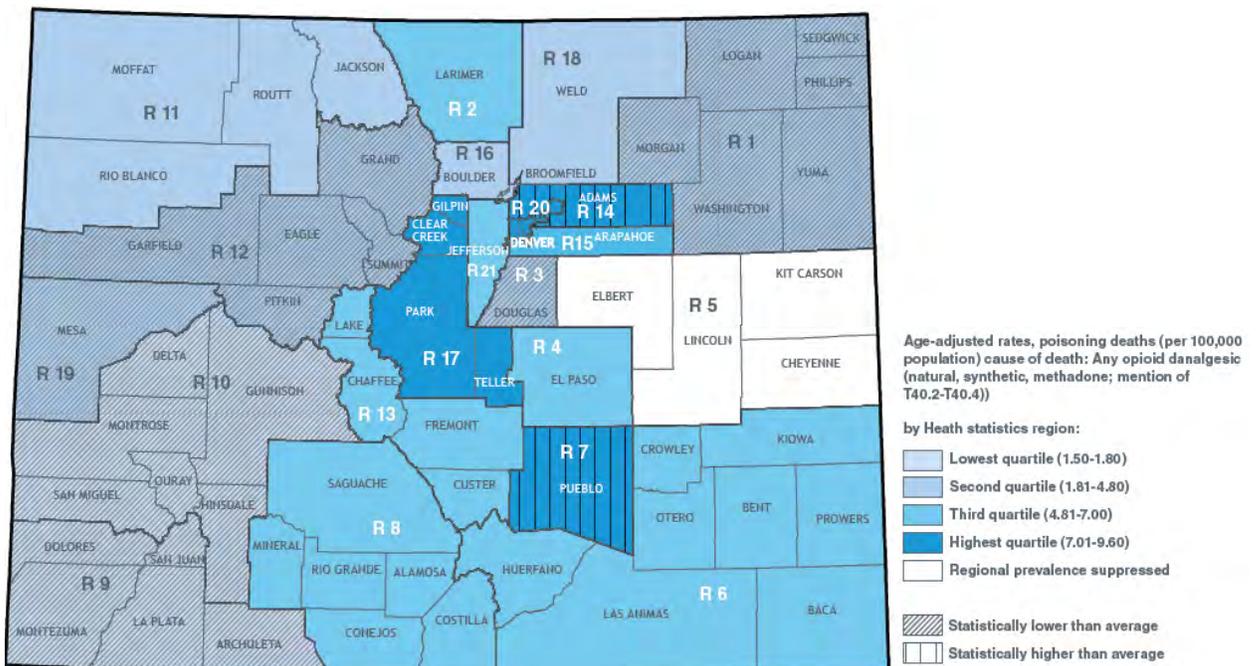


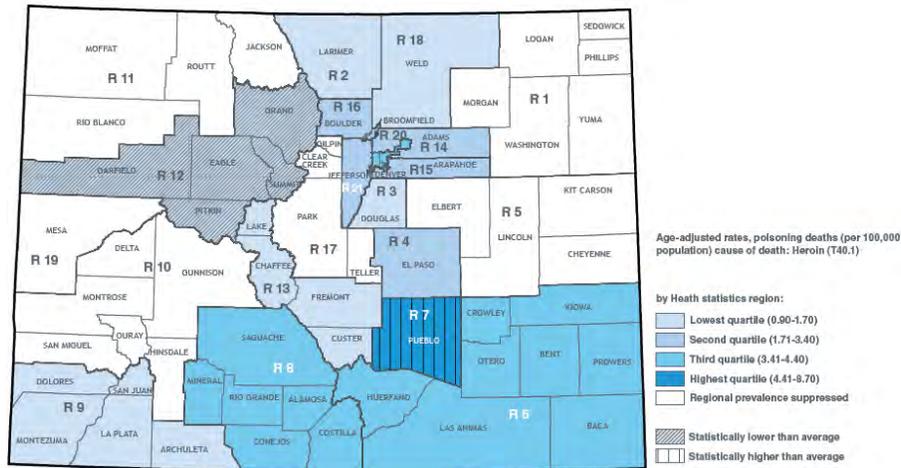
Figure 7: Age-Adjusted Opioid Analgesic Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Heroin-Related Overdose Death Rates

The prevalence of heroin, an illicit opiate, is also increasingly prevalent in Colorado. As heroin use increases, so do the adverse effects associated with heroin use and addiction. The rate of heroin related deaths has increased from 0.8 deaths per 100,000 in 2000 to 2.9 per 100,000 in 2015. According to the Denver Metro Treatment Client Survey, 70 percent of survey respondents reported that prescription painkillers played a role in their decision to use heroin.¹⁰ Figure 8 shows heroin related mortality rates in Colorado by Health Statistics Region from 2013 to 2015⁸.

Figure 8: Age-Adjusted Heroin Related Overdose Death Rates by Health Statistics Region, Colorado, 2013-2015



Data Limitations

Data in this report should be interpreted with caution for several reasons. First, the accuracy of the indicators based on PDMP data is limited by the completeness and quality of the data when entered into the system. Another limitation of using the PDMP for population-level analyses is that it does not include provider type or information on the patient's medical condition. In addition, the indicators do not capture whether the dispensed medications were taken as prescribed or taken by the prescribed patient. This report references specific thresholds for indicators using absolute values which results in identifying patients at risk for substance use disorder or overdose, whether or not that is true. It should be noted that not all individuals who breach the threshold are at risk for substance use disorder or overdose and those below the threshold may still be at risk. Therefore, interpretation of these measures are limited due to the lack of contextual information regarding the prescriptions. A more comprehensive approach and complete evaluation of the economic, environmental and societal influences is necessary to appropriately interpret PDMP data and put the opioid epidemic into context.

Hospitalization and emergency department data are obtained through medical billing codes, which vary in their completeness. These records may not provide all information regarding the specific drug or drugs that were associated with a non-fatal overdose. Further, the required billing codes for hospitalization and emergency department visits changed in 2015, and as CDPHE continues to refine the case definitions with the new coding scheme, only 2012-2014 data were used in these analyses. These data represent health care encounters, not individuals.

Lastly, limitations of death certificate data may result in reporting bias. Deaths reported as multi-drug toxicity lack the specificity to know exactly what substance caused death. CDPHE does not collect toxicology reports for unintentional overdose deaths and therefore cannot determine whether drugs that were not indicated on the certificate represent negative test results or whether the drug was not part of the testing.

Conclusion

The PDMP is a critical tool in the fight to protect health and safety of Coloradans while supporting clinical practice. Although use of the PDMP is not mandatory for prescribers, in 2014 Colorado physicians queried 414,549 patient records. In 2016, the number of queries increased 64 percent to 681,348, demonstrating the value of the PDMP as a clinical decision making tool.

Prescription drug misuse is a public health crisis and the PDMP is one tool that can be used to evaluate initiatives designed to change patient and provider behavior to reduce prescription drug misuse and the associated adverse health outcomes. However, the misuse of prescription drugs is a multidimensional problem. A balanced approach to this work includes an understanding of the need to preserve access to medications for the management of care and meeting patient expectations while decreasing the misuse and diversion of controlled substances.

Additional Data Resources

Violence and Injury Prevention Network: <http://vipreventionnetworkco.com/p/prescription-drug-overdose.html>
Colorado Consortium for Prescription Drug Abuse Prevention: <http://www.corxconsortium.org/>
Colorado Prescribing Guidelines: https://www.colorado.gov/pacific/dora/Medical_News
CDC Prescribing Guidelines: <http://dx.doi.org/10.15585/mmwr.rr6501e1>
Take Meds Seriously: <http://takemedseriously.org/>
Rise Above Colorado: <https://www.riseaboveco.org/>

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Contact Information

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Prescription Drug Overdose Prevention Unit
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