

THE BANK OF STAR VALLEY
2019
STAR VALLEY ECONOMIC
AND
DEMOGRAPHIC REVIEW
August 2019





Summary

Star Valley's economy has been steadily growing for the last decade. Economic indicators for the area are currently strong. The population is growing at a rate of approximately 0.9%. Unemployment is very low at 3.1% and there is evidence of increasing household income. Housing prices are also rising which is promising for current home owners. These factors come together and point to a growing economy for Star Valley for 2019.

The U.S. economy is also strong and is setting records for continuous GDP growth now with 121 months of continuous growth. The national unemployment rate is 3.6%, income is increasing, and people are joining the workforce with a positive outlook for the future. However, some economic indicators are now starting to show signs of slowing. Real GDP for the second quarter of 2019 has fallen to around 2.1%. Trade wars are continuing with the U.S. threatening \$400 billion in additional tariffs on China's products in the next few months. The FED has moved to an accommodative monetary policy, recently reducing interest rates in order to reach inflation targets and encourage investment.

A looming economic issue for Lincoln County and Wyoming is the uncertainty that is facing the energy industries. Wyoming is the largest producer of coal in the U.S, and coal provides one of the largest revenue streams for local and state governments. The continuing downturn in coal will have ramifications for Wyoming governmental units and citizens. The state is currently facing many coal mine closures and bankruptcies as well as the pending closure of coal fired power plants. There is uncertainty in the oil markets which is also a major funding source for Wyoming's economy. Wyoming is trying to diversify into renewable energy avenues such as wind, but will still face a structural and financial struggle within the coming years.

Tourism remains strong in the state. Parks in the state captivated over a quarter of a million people in just the first quarter of 2019. Tourism is partly why Star Valley and Teton County are continuing to see growth in their communities and economies. Tourism will continue to grow in the area if the economy continues to be strong and people have money to go on vacations.

The quiet little community of Star Valley is rapidly changing. With positive economic conditions, beautiful outdoor amenities, good people, and the small-town American feel, people continue to move here with a desire to raise their families or enjoy peace and quiet in retirement years. There continues to be a positive long-term outlook for Star Valley for 2019 and beyond.

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A SPECIAL THANKS:

In order to gain a more complete picture of the economic condition of Star Valley, the Bank of Star Valley relies on many individuals, businesses, and government entities to provide information and data. The Bank wants to express its sincere gratitude to all those who helped provide the information and data and thank them for their time, assistance, and patience.

Lincoln County School District #2

Thayne Senior Center

Salt River Senior Center

Kemmerer Senior Center

1st Bank/Glacier

Aviat Aircraft

Freedom Arms

J.R. Simplot

Lincoln County Government

Lower Valley Energy

Lincoln Self Reliance

Silver Star Communications

Polyguard & RMP Mobile

Wells Fargo

PC Industries

Star Valley Medical Center

Star Valley Independent

Lincoln County Assessor

Lincoln County Planning and Zoning

Town of Afton

Town of Alpine

Town of Thayne



Town of Alpine
Town of Star Valley Ranch
Jackson Hole Real Estate Associates
Alliance Title
Local Landlords
Big Country Realty
Advantage Realty
Jackson Hole Daily
Call Ready Mix and Lumber
Evergreen
Jenkins Lumber

This analysis was a collaborative effort by Derrick Wolfley, Special Projects Assistant, Marcus Weber, Bank of Star Valley Vice President, and Rod Jensen, Bank of Star Valley President



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2019

STAR VALLEY

ECONOMIC and

DEMOGRAPHIC REVIEW

INTRODUCTION

The following document is The Bank of Star Valley's 2019 Economic and Demographic Review. The purpose of this review is to document relevant demographic and economic data of the Star Valley, Wyoming, and Idaho geographic area, which constitutes The Bank of Star Valley's Community Reinvestment Act market.

The Bank of Star Valley is dedicated to serving the northern half of Lincoln County, Wyoming, and the Star Valley areas of Caribou and Bonneville Idaho Counties. This report reviews general demographic dynamics, employment, income levels, cost-of-living considerations, national and state economic trends, as well as real estate market trends.

The Bank shares this report with the public by posting the report on the Bank's website, www.bosv.com. Readers should exercise care in relying upon the findings of this report, as they may reflect unintended biases and potential misinterpretation of the data by the authors. A regional economic study, due to the complexity of the subject and its infinite scenarios, is by its very nature limited in scope.

The Bank of Star Valley retains ownership of this document including the data and analysis contained herein.

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POPULATION

Population growth directly impacts, and is positively correlated with, the overall economic vitality of a community. Economic growth is enhanced by corresponding increases in human capital, diversity of perspectives, aggregate community wealth, aggregate income, consumer spending power, and the increased demand for goods and services. The higher demand for goods and services tends to increase the demand for labor resulting in the creation of employment opportunities, which again, potentially encourages further population growth. On the other hand, population stagnation and/or reduction has an opposite, negative effect on overall economic conditions.

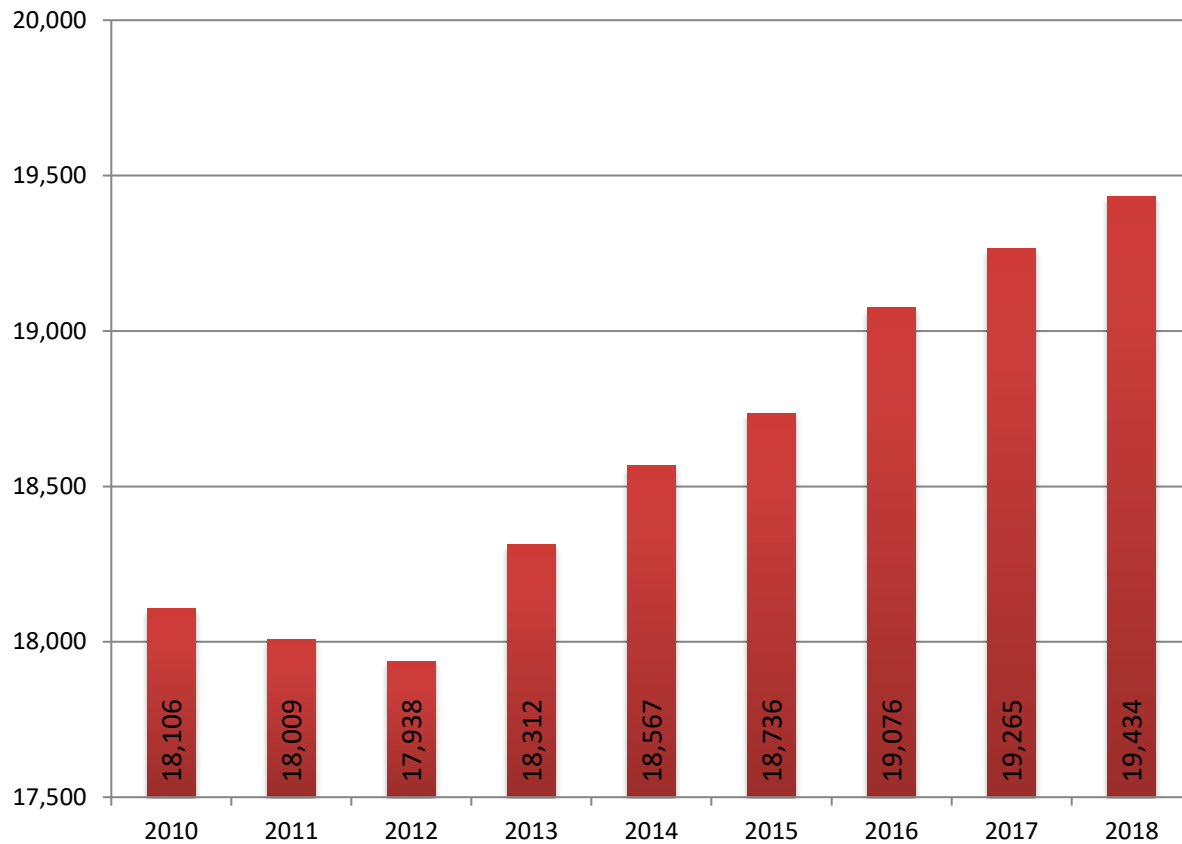
The Wyoming Economic Analysis Division (EAD) estimates that between 2017 and 2018 there was an increase in Lincoln County population of 0.90%, or 169 people. This 0.90% growth rate was the highest rate of growth for any Wyoming County and was just below the 1.00% growth rate Lincoln County experienced from 2016 to 2017. According to EAD estimates the population of Lincoln County has increased by 1,328 people since the 2010 census. This constitutes a 7.33% population increase over the eight-year period of 2010 to 2018, or an annualized population growth rate of 0.92%.

Wyoming's population shrank slightly with a -0.2% decline during the same period of 2017 to 2018 making this the third consecutive year of statewide population shrinkage. The decrease in Wyoming's population is likely contributed to by the uncertainty currently surrounding the energy markets. While oil and natural gas have seen some growth over the last year, the coal industry has been plagued with bankruptcies, mine closures and the growing probability of existing coal power plants being phased out as early as 2025. Thirteen of the twenty-three counties in Wyoming experienced a decrease in population.

Historically, EAD estimated that Lincoln County's population declined between 2010 and 2012, following the Great Recession of 2008. The Great Recession impacted the Star Valley economy very hard resulting in an estimated decline in the general real estate market values of approximately 30% and high unemployment. However, EAD estimations indicate that the area population began to grow again beginning around 2013, and the rate of population growth has been steady and relatively strong in recent years. The graph below depicts EAD's population estimations from 2010 to 2018 for Lincoln County.



Lincoln County Population



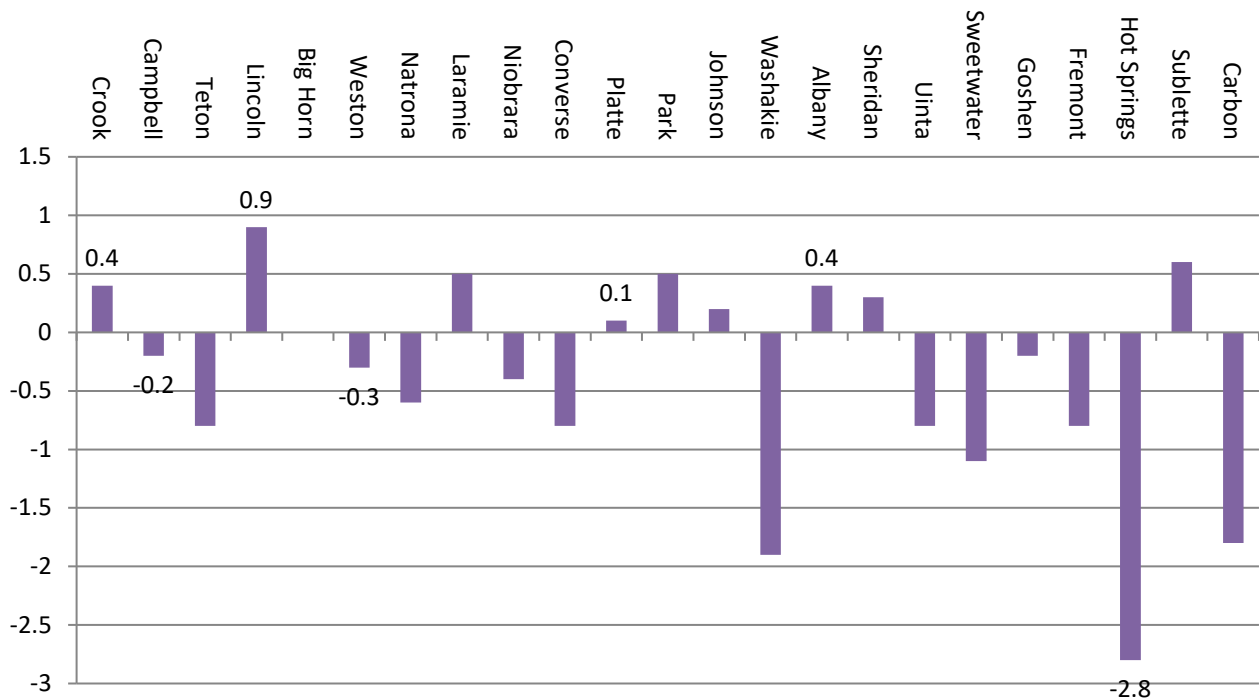
Source: State of Wyoming Department of Administration and Information Economic Analysis Division

As previously indicated, negative population growth has been a problem for many counties in Wyoming with 2017-2018 being no exception. Fifty-six percent of the counties in Wyoming experienced negative population growth between 2017 and 2018. Hot Springs County experienced the highest population loss with a rate of -2.80%. This rate for Hot Springs County is better than the 2016-2017 population loss of -5.20% which occurred in Campbell County.

Lincoln County's solid growth rate contributes to a healthy economic foundation for the Star Valley area. The growth rate of all Wyoming counties for the period of 2017 to 2018 is shown in the graph below.



% Change in Population 2017-2018

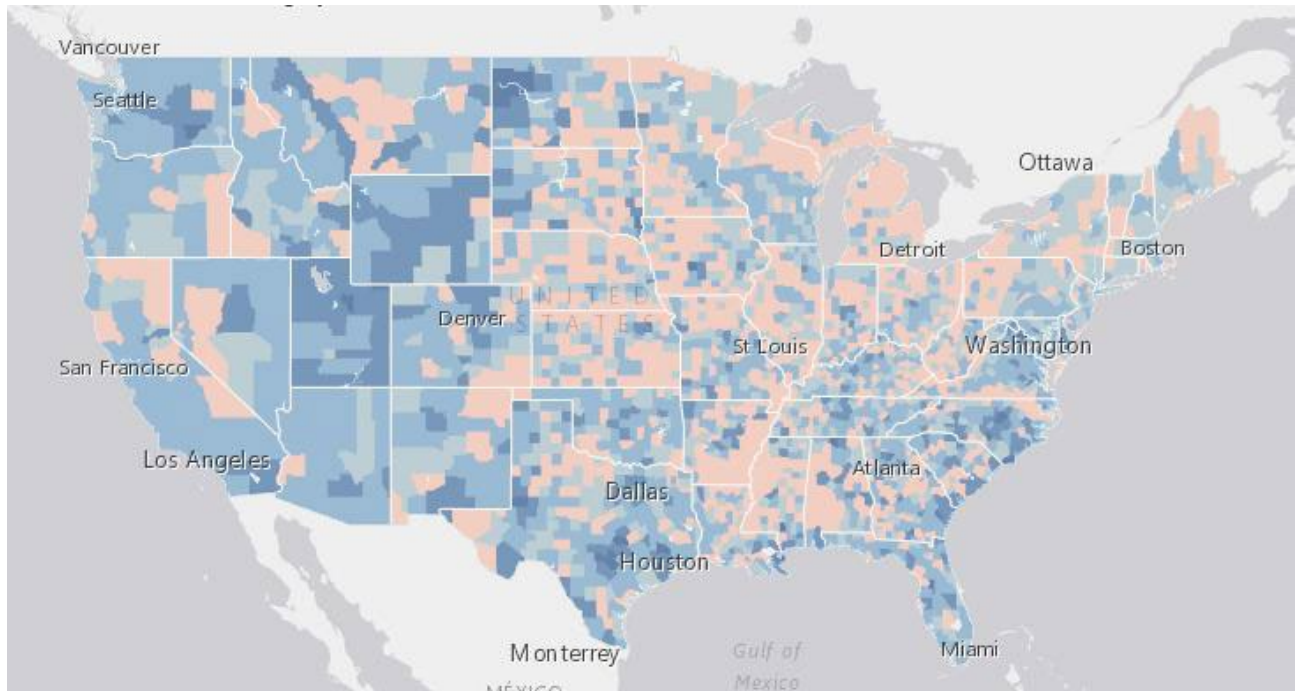


Source: State of Wyoming Department of Administration and Information Economic Analysis Division

The Wyoming rural counties which are currently experiencing a decline in population are mirroring an ongoing trend of rural population decrease across the nation. This trend may become a long-term issue for Wyoming as the state mainly consists of rural areas, not to mention that the state has a very small population base to begin with.

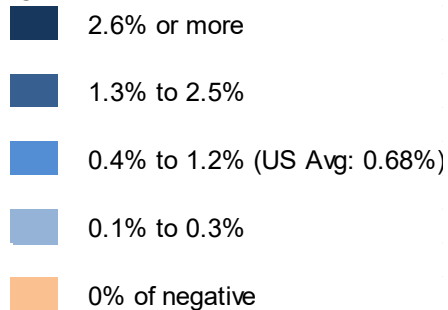
The following graphic of the continental U.S. provided by ArcGIS.com, illustrates the negative growth rate of many rural counties. The red color denotes “0% or negative” growth. Much of the U.S. rural heartland is experiencing a loss of population as younger people choose to migrate to urban areas to pursue educational, social, and employment opportunities that are lacking in rural areas. This out-migration is leaving behind a decreasing and aging rural population. This results in the loss of employment opportunities, the closure of small businesses, and a negative long-term economic outlook for these rural areas.





USA Projected Population Growth 2012-2017

Counties



Source: ArcGIS.com

The United States is not unique in this population shift from rural to urban areas. As Stephen Davies noted in *The Wealth Explosion*, “The United Nations now estimates that sometime in 2006 the majority of the world’s population was urbanized for the first time in human history.”

The areas showing population growth, as denoted by the darker blue shades on the above map, are predominately around the West Coast, East Coast, and the Rocky Mountain regions. Wyoming, being part of the Rocky Mountain region, potentially has a brighter demographic future than its neighboring states to the east. However, neighboring Bear Lake County, Idaho has many of the amenities of the Star Valley area but has been consistently experiencing population loss.

Wyoming's population increases and decreases have largely followed the boom and bust cycles that prevail in the mineral and energy sectors. Over the past decades Wyoming has seen periods of population growth when energy prices are high and is now in a period of population decline following depressed energy prices and growing uncertainty in the coal sector.

There has been a structural economic change taking place in Star Valley over the last 15 years. For many years since its settlement, Star Valley was predominately agriculturally based, with beef and dairy operations being the dominate economic engine. The economy slowly transitioned into a light manufacturing and industrial economy with the introduction of the timber industry, aviation manufacturing, phosphate mining, as well as other small manufacturing business. Over the past 15 years, the economic base has been undergoing another transition as many self-sufficient, retired, and/or affluent people are choosing to invest in Star Valley and are making it their primary or secondary home. This is in part driven by technological change including internet and computing power as many people can work out of their homes.

As to the emerging trend of affluent population growth, most of the upper-net worth population growth over the last 40 years took place in the Jackson market, not Star Valley. However, with Jackson's soaring cost-of-living, Wyoming's low tax rate, Star Valley's natural amenities including three national forests, fisheries, and strong infrastructure, a growing number of affluent individuals have been purchasing housing and investing in property in Star Valley. The result has been the creation of areas within Star Valley which are unique, exclusive, and provide the opportunity for more of these people to move here. Examples of such areas are the Double L. Ranch, the Afton Airpark, and the Alpine Airpark. Further, large areas of the Valley have been purchased by affluent individuals with extensive work having been performed to enhance housing as well as fisheries and wildlife habitat for recreational purposes. Private jet traffic in and out of the valley's two airports is now commonplace.

The upper-end developments are growing in Star Valley, attracting successful and talented individuals to Star Valley which is adding exponentially to the human capital resources of the area. Further, this growth creates new demand for goods and services, corresponding to enhanced employment opportunities and the general overall long-term economic growth of the valley.



STAR VALLEY WYOMING POPULATION ESTIMATE

The Bank created a population estimation model in 1994 to support its chartering process. To date, the model has proven to be remarkably accurate. The model was originally developed to forecast the Star Valley population based on the 1990 census and has been updated to include the 2000 and 2010 census results. The Bank continues to utilize the model to estimate the current as well as the future Star Valley population through 2030.

One metric used in past models has been the State of Wyoming's growth rate as a scenario to represent a potential growth rate in Star Valley. However because Wyoming's recent population growth has been negative, the authors felt that the probability of this happening in Star Valley in the current environment was very low. Therefore, Wyoming's current negative growth rate was not used as a factor in this year's model.

The authors utilized four scenarios to predict Star Valley's future population growth.

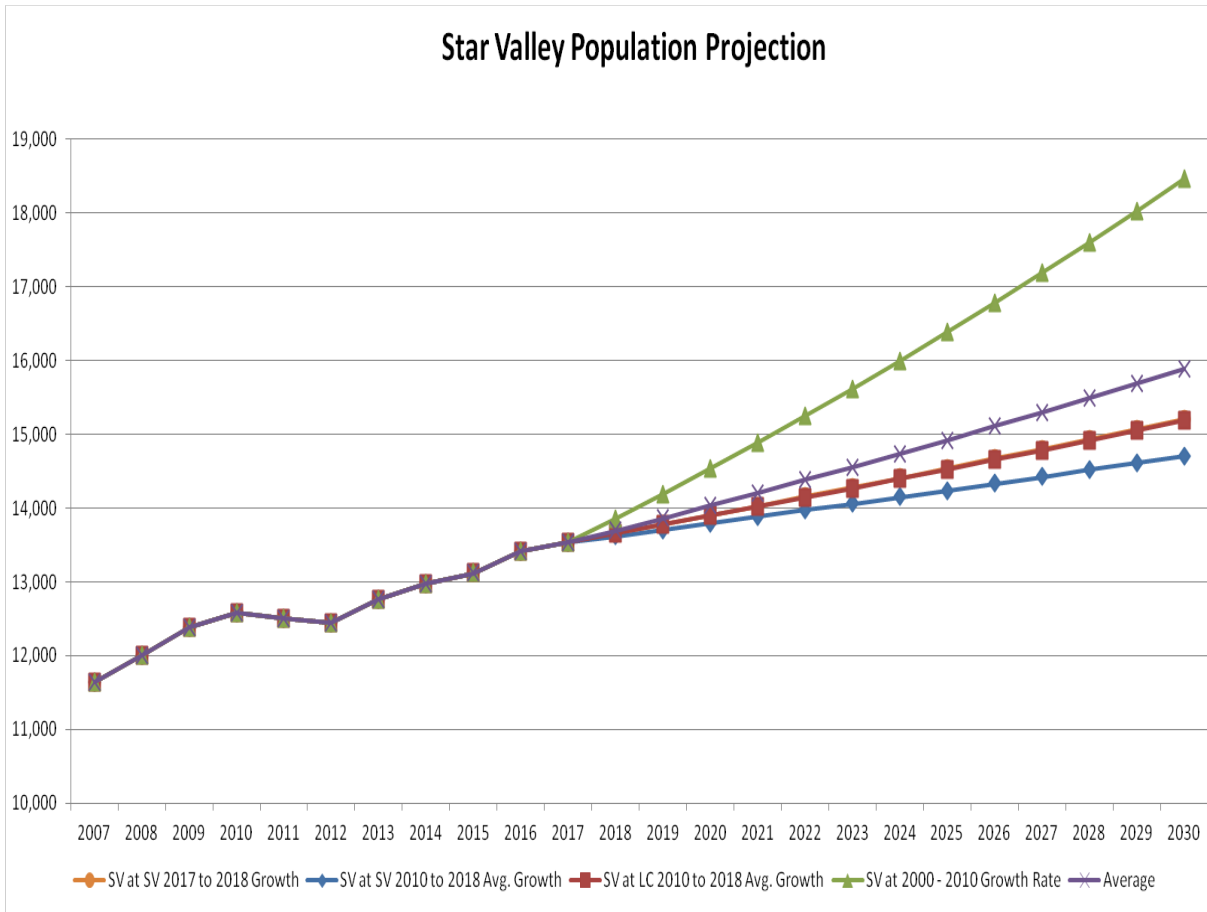
- Star Valley population growth at the same rate as it realized between the most recent period of 2017 to 2018, which was 0.90%.
- Star Valley population average annual growth at the same rate realized between the periods of 2010 to 2018, which was 0.64% (low-end constraint).
- Star Valley population growth at the 2010 to 2018 annual Lincoln County growth rate adjusted for the higher growth rate realized in Northern Lincoln County – resulting in an estimated growth rate of 0.89%.
- Star Valley population growth at the average annual rate the area experienced from 2000 to 2010, which was 2.42% (high-end constraint).

The authors utilized an average of the four growth scenarios to represent a preferred indicator for the highest probability for future population. It is estimated that Star Valley's population, as of year-end 2018, was approximately 13,696 – approximately 70% of the total Lincoln County population.

As for potential future population growth, the high growth rate scenario indicates that in 2020, the Star Valley population may be as high as 14,600 individuals, and the low growth rate scenario forecasts a population of at least 13,800 individuals. Based upon the model results, it is projected that the valley's population will continue to grow to an estimated 16,000 in 2030. Bottom line, it is going to continue to get more crowded in this small valley.

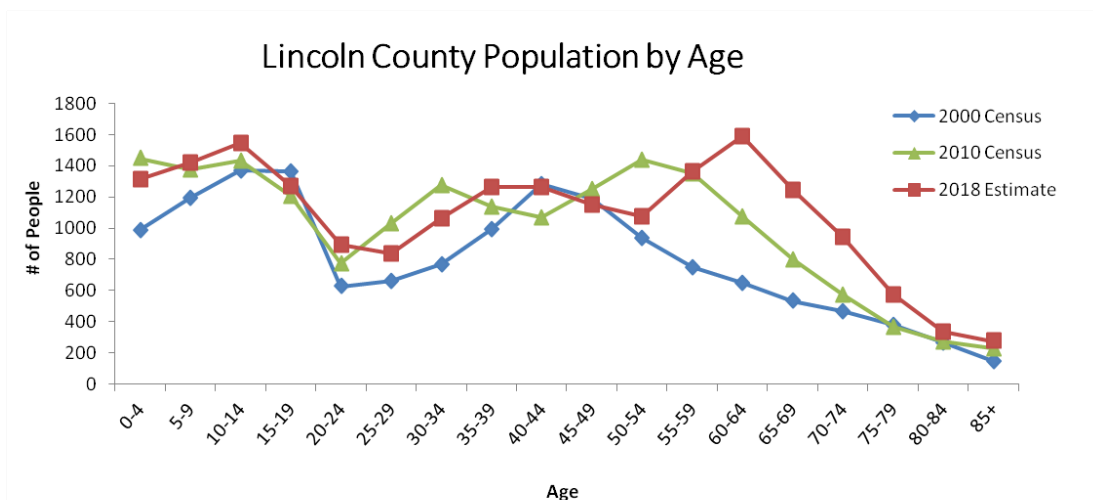
The bank will be able to obtain an accurate count of Star Valley residents in 2021 when the 2020 census data is released. This will allow the bank to check the accuracy of the model and also recalibrate it for the 2020 - 2030 time periods. Below is the graph of the Star Valley population projections derived by the current model.





POPULATION COMPOSITION

Total Lincoln County population segmented by age groupings for the years 2000, 2010 (U.S. Census counts), and 2018 (EAD Estimates) are shown below.



Source: United States Census Bureau

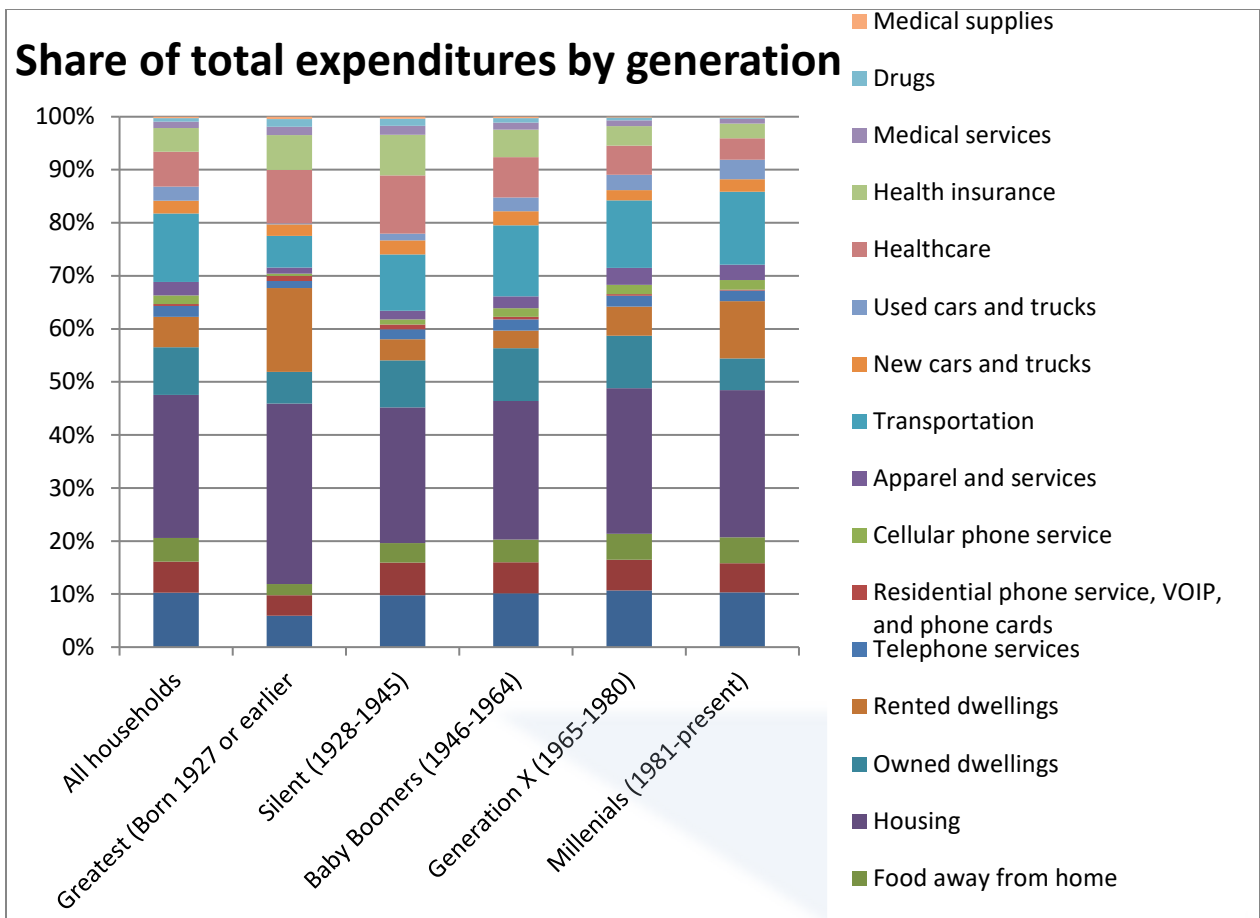


Lincoln County's population demographic is not static and therefore the graph does not simply move to the right over time. Rather, the population is being impacted by births, deaths, and in and out migration. Between the 2010 census and the 2018 estimate, there have been population declines in two critical age groups – the '25-34-year olds' and the '50-54-year olds'. The individuals which constitute these age groups tend to be more risk tolerant, more likely to have entrepreneurial tendencies, and typically have children in the household. The decrease in the size of both age group populations is of concern. Many Star Valley businesses are older-well established businesses and exhibit slower employment growth. There is a general lack of new or start-up businesses. The authors feel that the decrease in these two age groups is directly related to the current lack of higher skilled employment opportunities in Star Valley. Further, the lack of new start-up businesses in the area is in mirroring an apparent declining entrepreneurial spirit nationwide. (For an excellent discussion of the declining entrepreneurial spirit see Tyler Cowen's book *The Complacent Class*.)

The largest demographic increase in Star Valley is in the "55 and over" population. This age shift affects the economy of Lincoln County as it modifies the goods and services demanded. Many people in this older age range have selected Star Valley as a place to retire, and not to actively participate in the workforce. These aging individuals demand, in aggregate, more health care services than other age groups. This increase in demand has been a driver for the local economy as it adds opportunities for medical and retirement service related jobs to the market.

The chart below, created by the Bank using 2017 data from the Bureau of Labor Statistics, shows the spending characteristics of various age groups. Younger individuals unsurprisingly spend a large portion of their income on housing, food, transportation, and healthcare. These expenses account for approximately 70% of income for the millennial generation with the smallest being healthcare. Conversely, the older generation spends a much larger amount on healthcare and housing. The most likely explanations of the increase in housing spending for older individuals could be the need for some type of assisted living, or the purchase of a dream home.

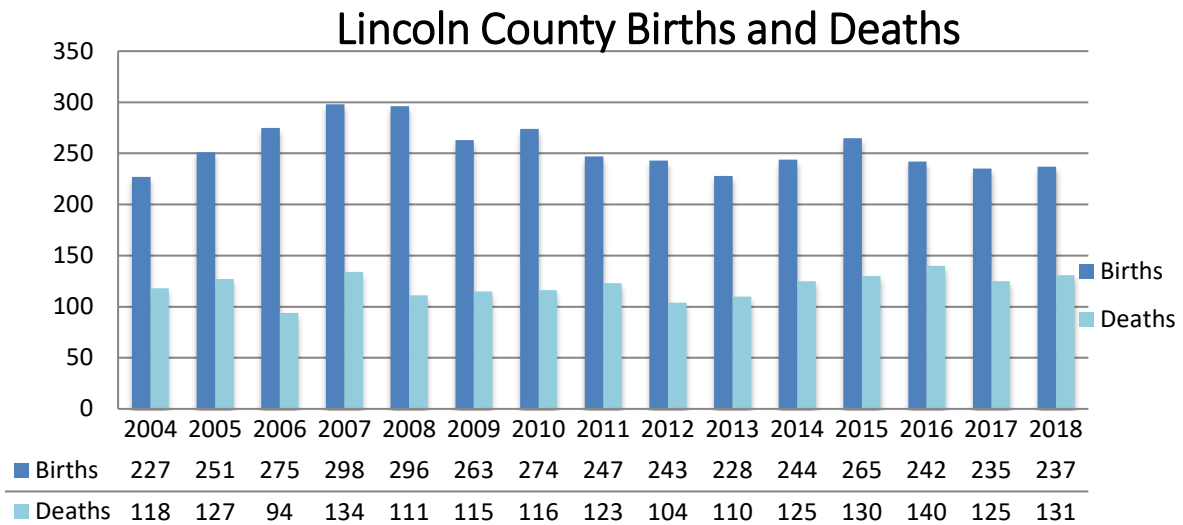




Source: Bureau of Labor Statistics

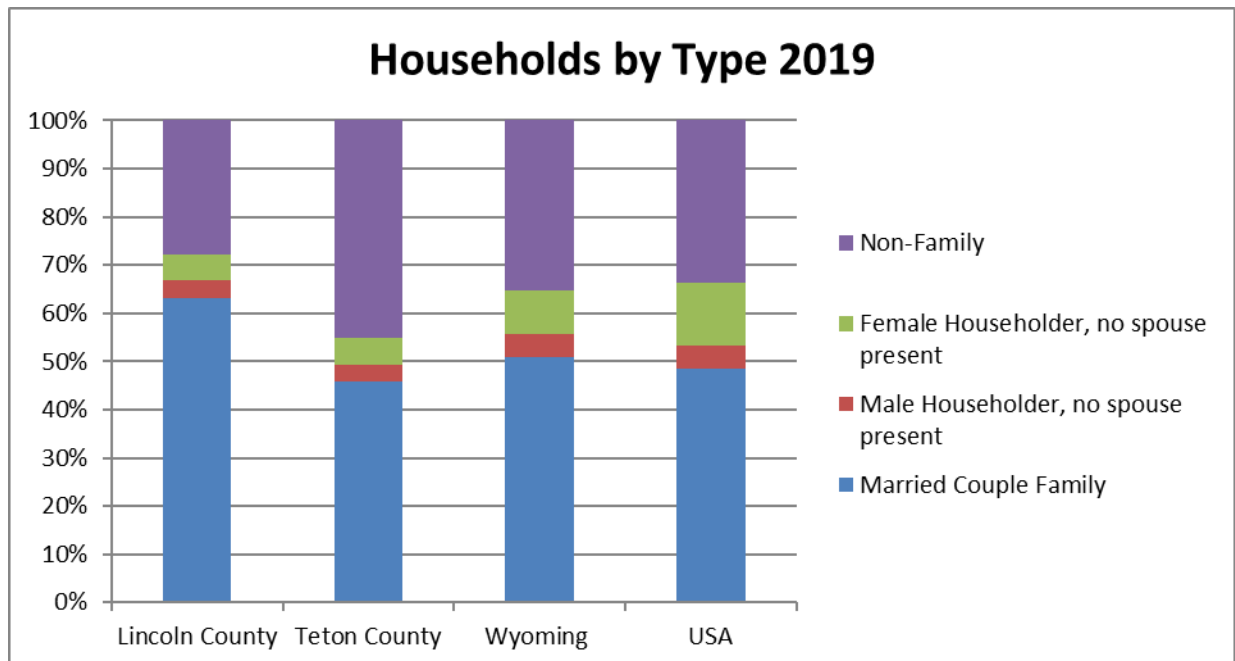
According to the Wyoming Department of Health, there was an increase in both the number of births and deaths in Lincoln County in 2018. The total number of deaths was 131, and the number of births was 237; an increase of 6 deaths and 2 births from 2017.

The trend of births and deaths between the years of 2004 to 2018 is shown below.



Source: Wyoming Department of Health

Both SuburbanStats.org and the U.S. Census Bureau perform an estimate of the population by household types. They estimate the number of family, or two parent, led homes, single parent homes, and non-family households. Below is a comparison of the family types for the United States (U.S. Census Bureau), Wyoming (SuburbanStats.org), Teton County (SuburbanStats.org), and Lincoln County (SuburbanStats.org) for 2019.



Source: U.S. Census Bureau and SuburbanStats.org



Lincoln County dominates the selected entities in the number of married couple family households at 63.17%. Further, Lincoln County married couple family households increased 4.37% from the 2018 percentage of 58.80% but is still below the peak realized in 2015 of 65.30% . Married couple family households is one of Star Valley’s foundational human capital assets. Married couple households are less likely to fall under the poverty line than single parent homes. Also, married couple households are more likely to remain in the area longer, being less transient than non-family households which tend to be more mobile. Following Lincoln County in the percent of married couple households is the State of Wyoming with 50.92%, the United States with 48.42% and Teton County with 45.71%.

About 9.08% of households in Lincoln County are single parent households, which is less than the 11.71% of single parent homes in 2018. The percentage of Lincoln County single parent households is significantly lower than the 18.02% of single parent households for the United States.

Lincoln County also has the lowest percentage of non-family households, or single individuals with no children, at 27.75%. Teton County had the most non-family homes with a total of 44.97%. The low single-family number of households in Lincoln County is greatly influenced by the large number of young people who graduate from Star Valley High School and then pursue higher education and career aspirations outside of the area – confirming the unfortunate fact that Star Valley, much like the rest of rural America, continues to export its youth.

The United States Census Bureau estimates the number of persons living within each respective household in a given area. The averages for the U.S., Teton County, and Lincoln County are shown below. Of the groups in this review, Lincoln County has the highest number of persons per household. However, considering a growing aging population in Star Valley, which typically constitutes a 1 to 2-person household, this is a clear indication that the families which do have children in the household tend to have more children than the peers.

Persons Per Household

U.S.	2.58
Wyoming	2.47
Teton County	2.51
Lincoln County	3.21

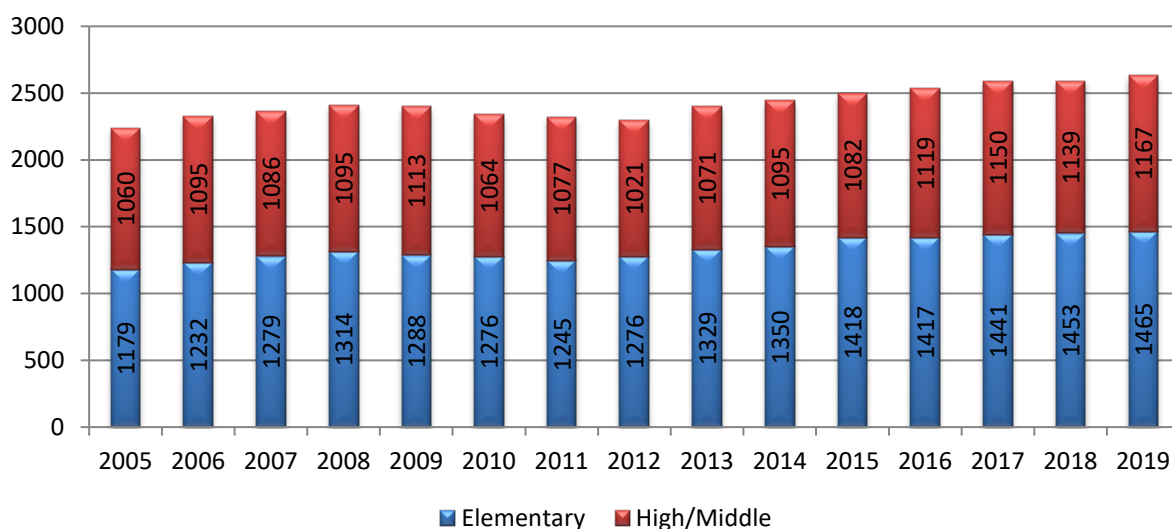
Source: U.S. Census Bureau



EDUCATION

Star Valley's total student enrollment is another population metric. Since 2012 there has been a continuing positive trend in student population, with 2019 having the highest student enrollment with 2,632 students. The 2019 enrollment showed an increase of 40 students over 2018 enrollment. This is a dramatic increase from the 1 student increase between 2017 and 2018. This increase in enrollment could be due to a combination of two factors being, many the people moving into Star Valley have children in their household and/or the larger Star Valley household size. Either way, as school funding is largely based on enrollment, the growing population of students is good news for Lincoln County School District #2.

Star Valley Student Population

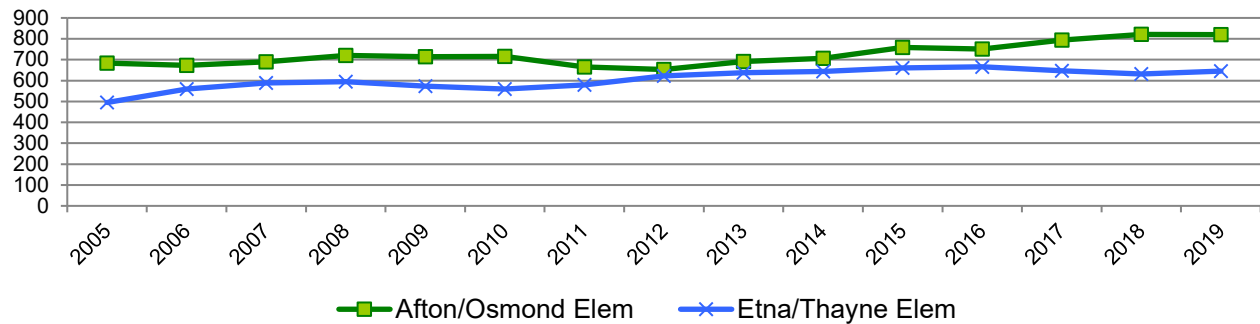


Source: Lincoln County School District #2

Elementary school enrollment provides a reliable source to determine the general area in Star Valley where the households with children reside (assuming constant household size exists through-out Star Valley). This metric is illustrated by comparing the number of elementary students attending schools in the upper (south) and lower (north) valley areas – both of which have elementary (K – 6 grade) schools. Historically, the upper valley elementary schools have had higher student populations. In 2012 the two areas nearly met with equal student populations. Since 2012 there had been a trend away from this regional equality in the number of students, with a growing majority of K-6 grade students in the upper valley. However, for the most recent period, the upper valley schools had a decrease of one student bringing the upper valley to 820 enrolled students. The lower valley schools saw an increase of thirteen students, for 645 enrolled students.



Star Valley Student Population



Source: Lincoln County School District #2

The level of educational attainment, which is an indication of the productive quality of human capital, is an important economic growth indicator. According to the 2018 data Lincoln County has more high school graduates relative to Wyoming and the United States. However, it has the lowest percentage of college graduates compared to the nation, the state, and Teton County as depicted in the table below.

Educational attainment	Lincoln County	Teton County	Wyoming	United States
High School Graduate or Higher	92.90%	95.10%	92.80%	87.30%
Bachelor's Degree or Higher	20.50%	54.10%	26.70%	30.90%

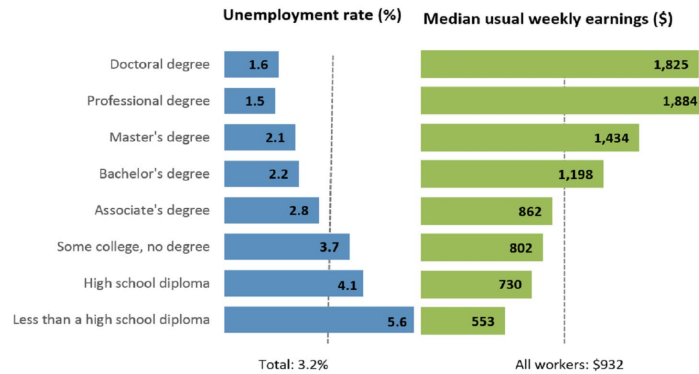
Source: U.S. Census Bureau

The relatively low percentage of individuals in Star Valley holding a bachelor's degree or higher is concerning as statistics clearly indicate that higher levels of education are strongly correlated with lower unemployment and higher salary levels. Just like the rest of rural America, the demand for higher degree jobs in Star Valley is lower than in more densely populated areas. As discussed previously, many Star Valley High School graduates leave the valley soon after graduating to pursue education and employment opportunities elsewhere, and unfortunately most of these great individuals do not return.

The graph below, provided by the U.S. Bureau of Labor Statistics, shows the correlation between higher education, greater earnings, and lower unemployment rates for 2018 (most recent information). Considering the implications of the impact of education attainment on income, and the lower level of overall educational achievement among the general Star Valley population, area income levels would be expected to be lower, an issue discussed later.



Unemployment rates and earnings by educational attainment, 2018



Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
Source: U.S. Bureau of Labor Statistics, Current Population Survey.

Source: U.S. Bureau of Labor Statistics, Current Population Survey

DOMICILE LOCATION

When analyzing the valley's population growth, it's interesting to attempt to identify where in the valley the growth is occurring. One way to attempt to distinguish where the growth is occurring is by examining the growth of the incorporated towns under an assumption that they serve as a proxy for the county areas surrounding them. The table below reports the 2018 EAD population estimates of Thayne, Alpine, Star Valley Ranch, and Afton.

Star Valley Population by Community

	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	Change in # People	Growth Rate
Thayne	341	366	360	356	362	364	376	367	382	383	1	0.29%
Alpine	550	828	822	814	835	845	852	855	866	878	12	2.18%
SV Ranch	776	1,503	1,492	1,489	1,523	1,541	1,546	1,570	1,581	1,597	16	2.06%
Afton	1,818	1,916	1,911	1,908	1,947	1,968	1,965	1,995	2,005	2,006	1	0.06%

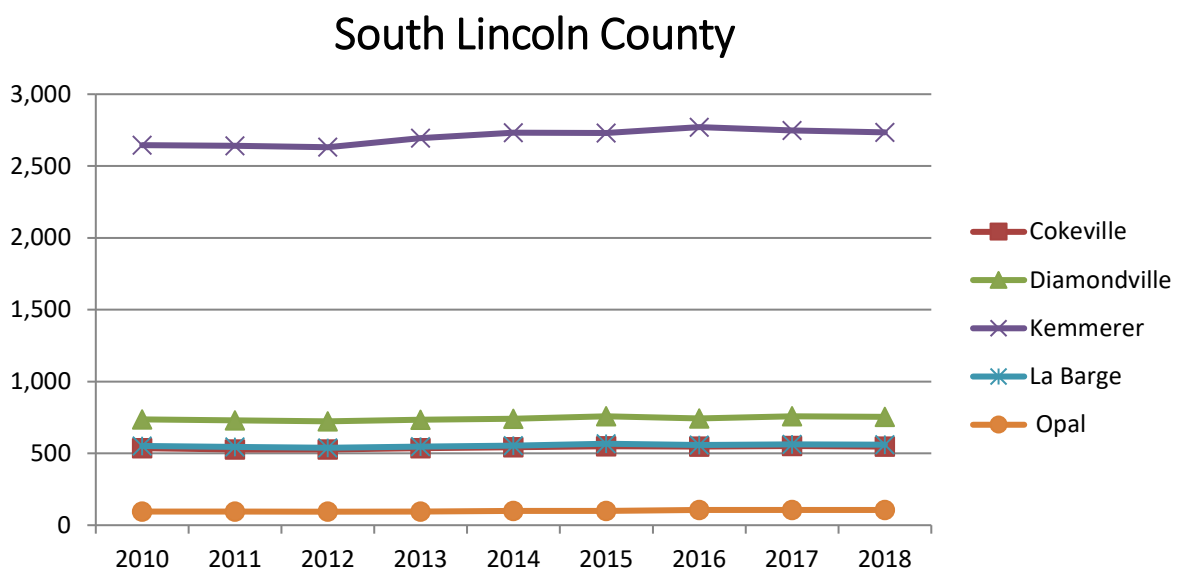
Source: State of Wyoming Department of Administration and Information Economic Analysis Division

Remember that these estimates are based upon a statistical estimation by EAD, and therefore, they are not an exact census count. However, based on this EAD data, Afton only added one person to its population. The towns found in the lower valley (Thayne, Alpine, and Star Valley Ranch) realized population growth of 29 persons. At the same time, all the towns in Star Valley realized their respective all-time high population estimates. It is estimated that Star Valley's population grew by approximately some 120 individuals in 2018 – and the towns grew by 30 individuals, so nearly 75% of the population growth is in the county – non-incorporated areas of the valley.



Due to the challenges facing the coal industry, the population of Kemmerer and Diamondville has become a point of interest. According to estimates by the EAD, the population of southeast Lincoln County is nearly stagnant – confirming the authors’ belief that most of the growth in Lincoln County is occurring in the Star Valley area. The population in the southern half of the county has been challenged by the closing of PacifiCorp Naughton Plant Unit 3, and the bankruptcy of Westmoreland Coal. The coal mine and the adjacent power plant are major employers for the area, leaving residents uncertain about their future. The mine was released from its responsibilities to retired miners by bankruptcy court; leaving many residents in the southern half of the county without healthcare or other benefits further straining the population of the area. The coal mine has been sold to its creditors who have placed it under the management of a Canadian company which has historically specialized in mine clean up adding further uncertainty as to what the future holds.

The coal mine in Kemmerer has employed approximately 300 people, so its bankruptcy struggles combined with reports of the other Naughton power plant units possibly closing by 2025 will have a significant impact on the economy and population of the Kemmerer and Diamondville areas. The following graph represents the population estimates for the incorporated towns in Southern Lincoln County.



Source: State of Wyoming Department of Administration and Information Economic Analysis Division

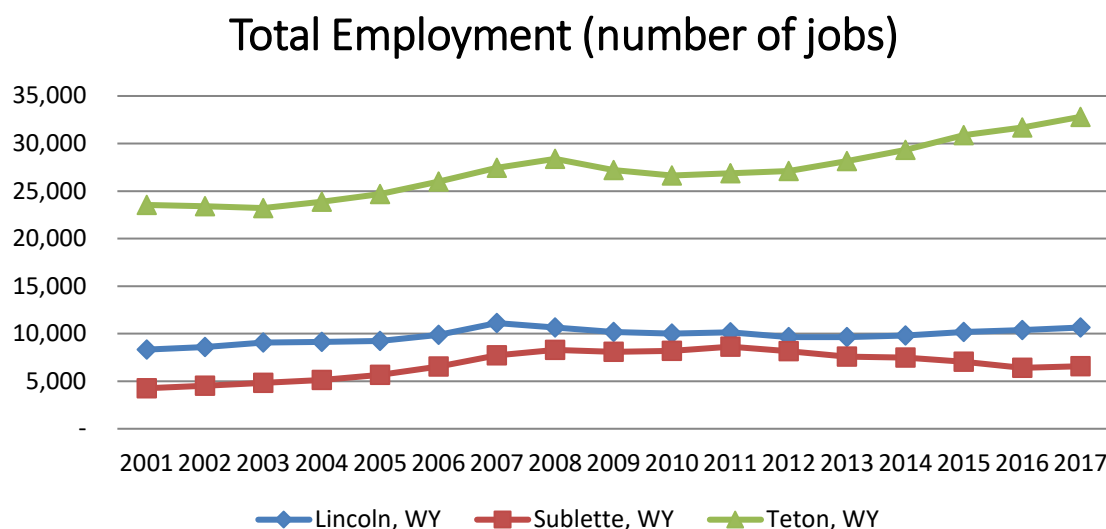
The population estimations being created by EAD for South Lincoln County are influenced by population growth statistics which occurred before the energy downturn in the coal market that began in 2014. Thus, the authors feel that population changes in this area may be seeing increasingly negative pressure which is not being reflected in the data. If this is the case, and



Lincoln County population is growing in aggregate, then the population of Star Valley is likely increasing faster than anticipated by EAD or the authors. If such is the case, it will be documented through the 2020 U.S. census.

EMPLOYMENT AND WAGES

The U.S. Department of Commerce provides information on the labor market for each county in the United States. The labor force is a count of both full-time and part-time employment for wage/salary employment as well as proprietors' employment for an area. Note that the labor market may include jobs for which a person residing in another area fills. The graph below shows the total employment trend for Lincoln, Teton, and Sublette counties.



Source: Bureau of Economic Analysis

Lincoln County's labor force reached 10,646 in 2017, an all time high. This is the seventh time it has exceeded 10,000 participants. Overall, the total labor force had remained fairly consistent in Lincoln County since 2001, staying close to 10,000 with marginal annual increases or decreases, but it is now realizing a slow growth trend which began in 2012. While the growth in employment in Lincoln County is positive, the slow rate of growth in number of jobs helps explain the underlying reason for the loss of the 20 to 30-year-old demographics as these younger - career aspiring individuals leave the area in pursuit of higher education, employment, and careers elsewhere.

Sublette County, a neighboring highly energy dependent county, experienced a slight increase in employment with 6,580 jobs in 2017 up from 6,398 of 2016. Sublette had steadily decreasing employment since 2011. However, with the 2017 gain Sublette area employment may be heading toward a more stable status. Teton County, a tourism and recreational based economy,



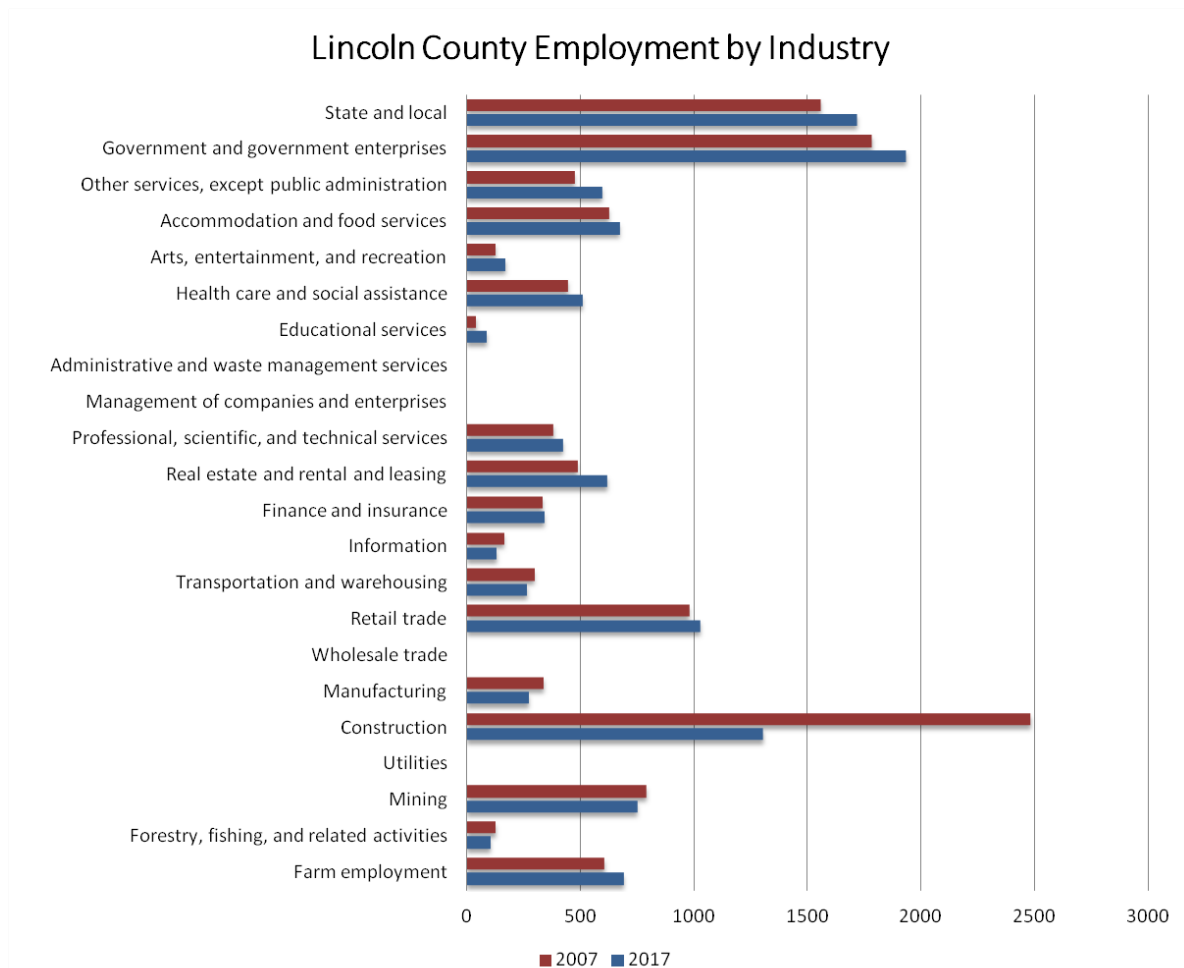
continues to realize a constant upward trend in the number of jobs, ending 2017 with 32,683 jobs. This is an interesting statistic considering that the number of 2017 reported jobs is larger than the total estimated 2017 Teton County population of 23,265, or a shocking 1.40 jobs per resident. If the number of jobs in Teton County is in fact correct and given that no area has a 100% labor force participation rate, Teton County imports a considerable percent of its employment base daily including commuting from surrounding areas, being principally Star Valley and Victor/Driggs.

While analyzing the labor market, it is helpful to break the labor market down by each industry to provide insight into the dominant sectors. To give perspective, 2007, or pre-recession employment by industry are compared with the most current numbers available, which are for 2017.

The industry that was impacted the hardest over the period of time in review was construction. In 2007, Lincoln County had a construction labor force of 2,484. It has since drastically dropped with 2017 showing 1,306 jobs or just over half the number realized in 2007. Though construction is far below its 2007 level, it has been seeing growth in recent years.

Many of the other industries in Lincoln County are nearly back to, or exceeding the pre-recession numbers. There has been growth in government, accommodation, health care, and education service jobs over the last few years. Mining, it is important to note, does show a decline in jobs over the period in review. Given that these numbers are from 2017, they do not fully incorporate the impact of the troubles facing the power plant and coal mine in the Kemmerer area, and potential job loss.





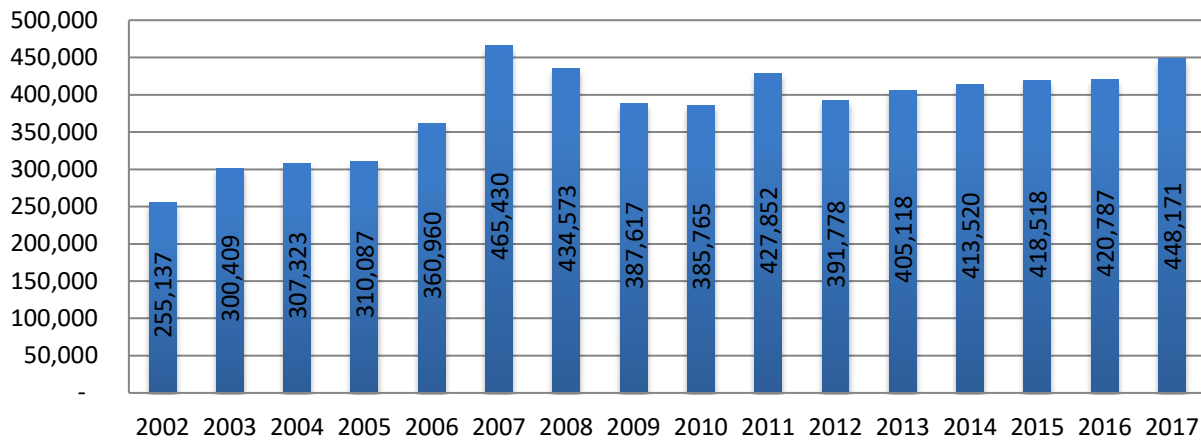
Source: Bureau of Labor Statistics

Workers all agree that recurring paychecks, and the size of those paychecks, are very significant bottom-line factors for their well-being. Earnings are also an important economic indicator because earnings are an essential foundation to support consumer consumption, which is the primary engine of the U.S. economy. In the U.S., consumer spending is estimated to constitute approximately 68% of total national gross domestic product (GDP).

The chart below represents Lincoln County gross employment earnings for the last 15 years. It illustrates the same trend as the previously discussed labor force graph with a large peak in earnings in 2007, at \$465,430,000, and then shows the negative impact of the Great Recession. Beginning in 2012, there has been an upward trend in Lincoln County aggregate earnings, ending 2017 at \$448,171,000. This is \$27,384,000 more than 2016 and only \$17,259,000 below the peak realized in 2007. Total employment earnings increased 0.65% from 2016 to 2017. If wages did grow by a similar percentage during 2018 Lincoln County will surpass its pre-recession total earnings.



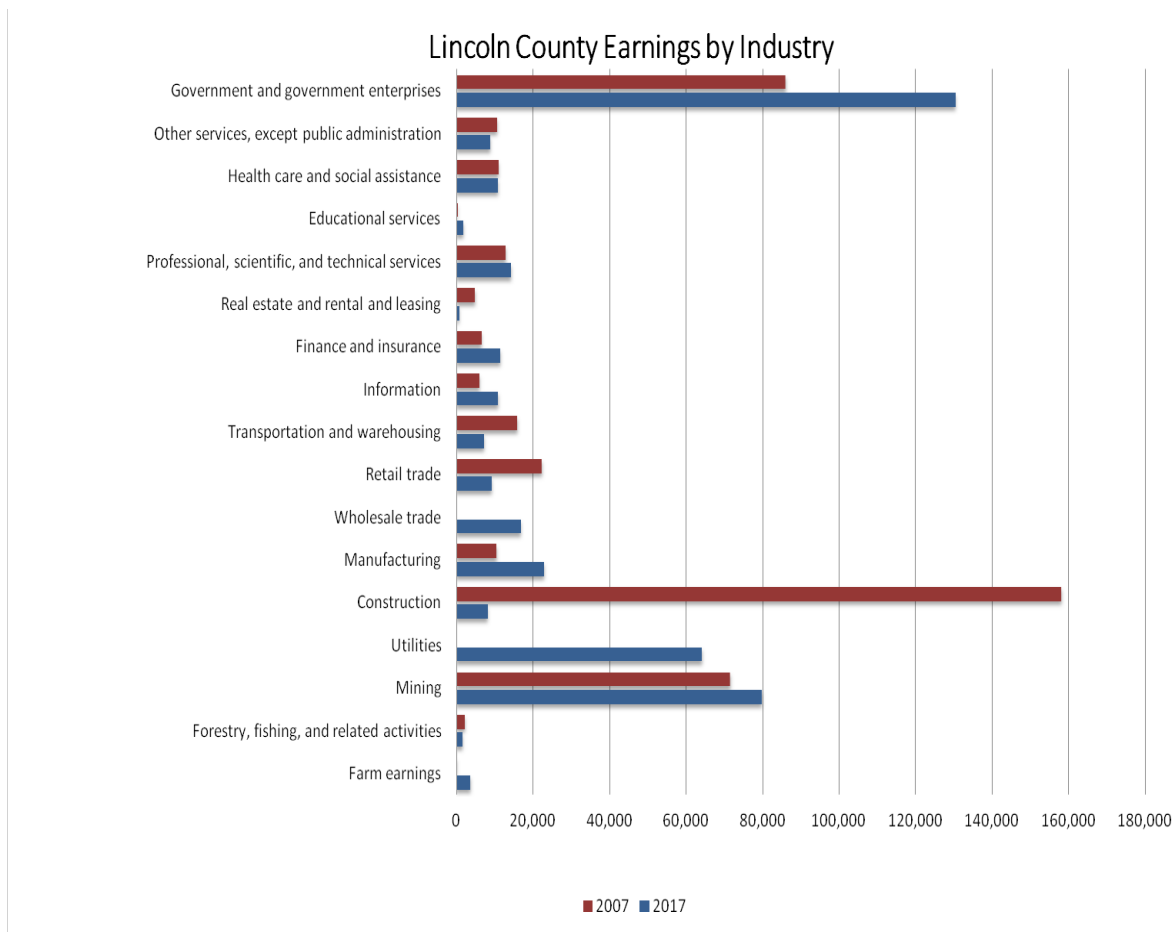
Lincoln County Earnings (In Thousands)



Source: Bureau of Economic Analysis

EARNINGS BY INDUSTRY

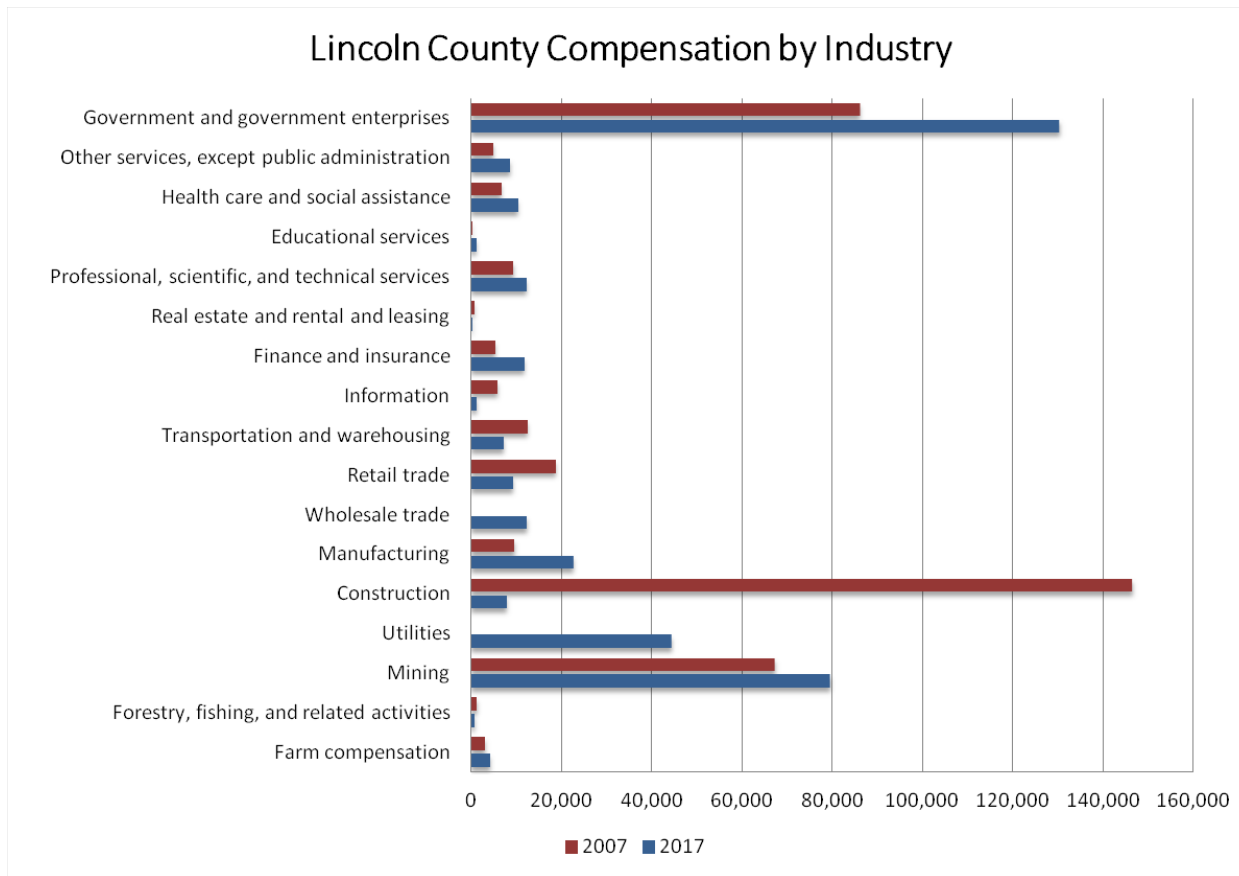
The following chart shows earnings by industry for Lincoln County. Again, the most current data from 2017 is compared to the pre-recession numbers of 2007. Consistent with the previously discussed changes in the labor force, the largest change in earnings is in the construction industry. Although construction earnings experienced a large decline after the recession, it remains one of the largest industries in Lincoln County. Besides construction almost all other industries, except mining, have reached or surpassed their 2007 level. There is also a very large increase in the government earnings for Lincoln County.



Source: Bureau of Economic Analysis

PERSONAL COMPENSATION BY INDUSTRY

Personal compensation by industry is calculated by dividing the total compensation per industry by the number of employees in that respective industry. The purpose of this statistic is to get an estimate of an average wage earned per industry. Because the calculation of this number is not highly detailed, these results should only be used in examining overall trends.



Source: Bureau of Economic Analysis

Again construction has experienced a very large decline over the period in review, while government related jobs experienced the largest increase. It is felt by the authors that these two segments are currently reversing course as construction projects are currently strong, while the State of Wyoming and Lincoln County are attempting reduce its expenditures, including the number of government employees and wages, to meet future expected budget constraints.

PER CAPITA INCOME

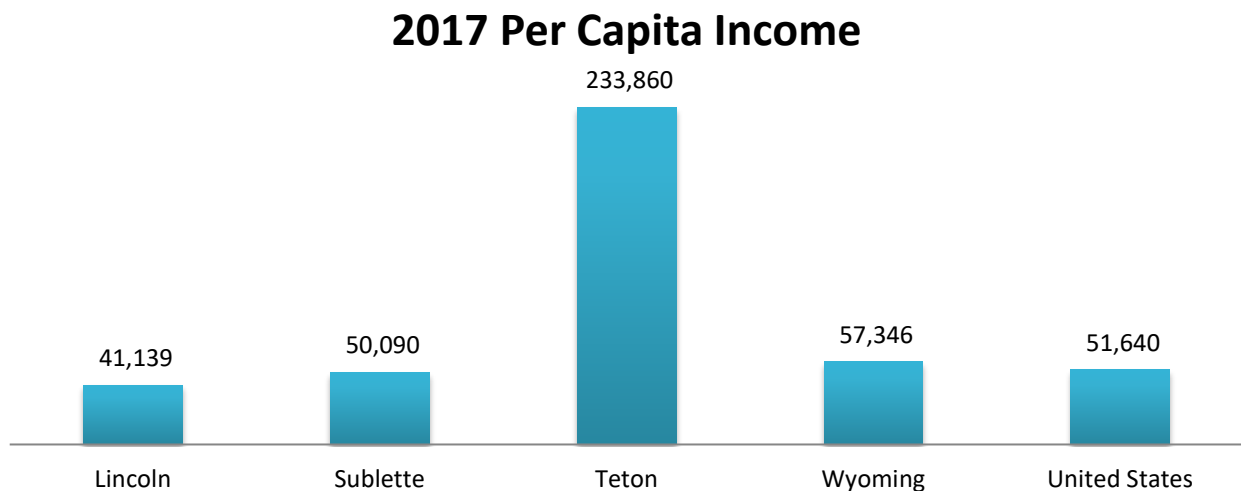
Per capita income is calculated by dividing total area income by total population. This key economic indicator allocates aggregate income into a per-individual (capita) basis in a given area. Per capita income is often used as a high-level indication of overall economic health and a potential measure of the quality of life.

The most recent statistics at the county level are for 2017. Using this data, the chart below compares the 2017 per capita income of Lincoln, Teton, Sublette Counties, The State of Wyoming, and the United States. As has been the fact for over 20 years now, Teton County's per capita income is much higher than that of the surrounding areas and the nation. Aside



from the Teton County outlier, the other areas report per capita income between \$41,139 and \$57,346. Though Lincoln County has surpassed \$40,000, up from \$39,357 in 2016, it, unfortunately, has the lowest reported per capita income at \$41,139.

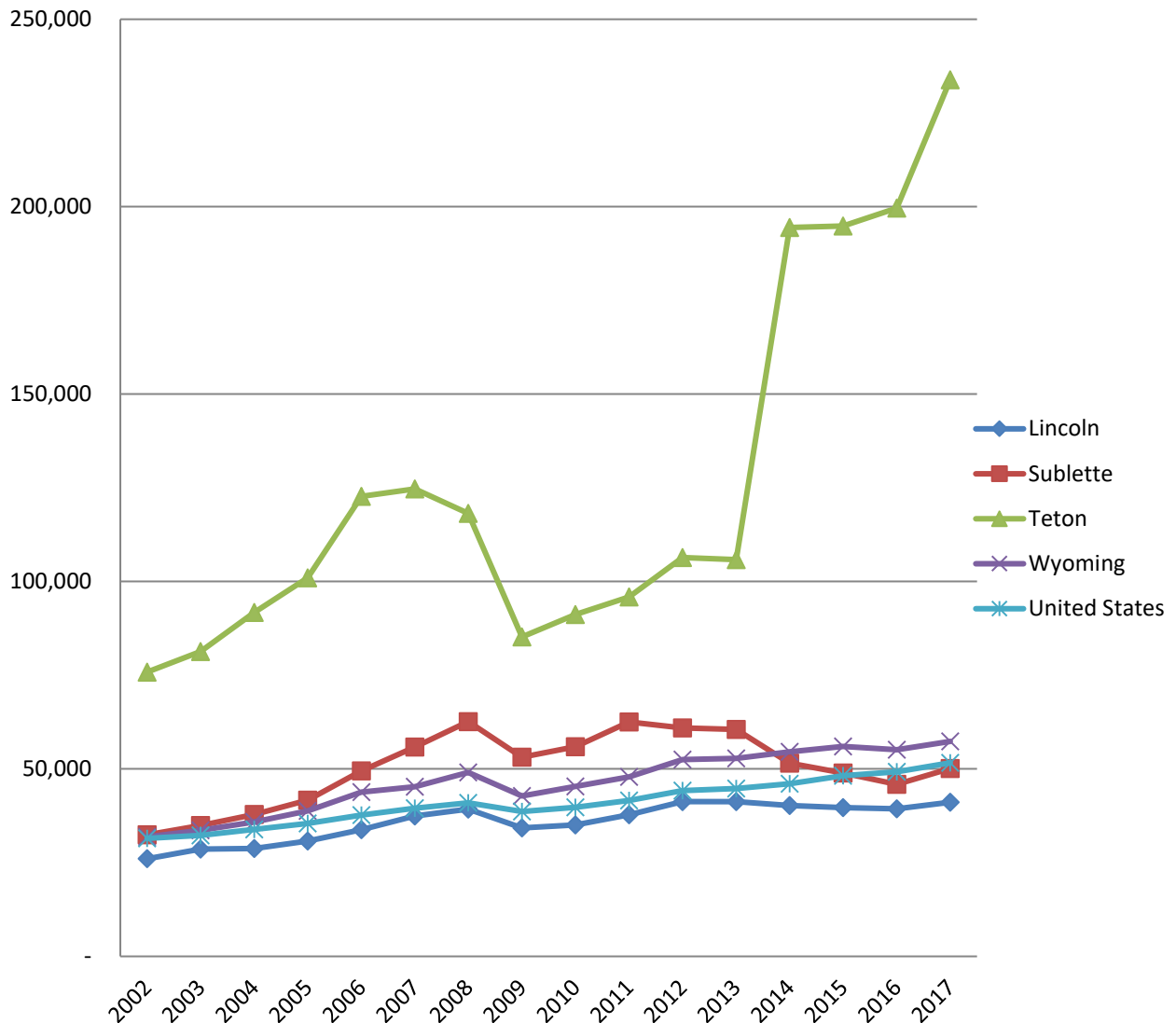
Lincoln County's per capita income is a full \$8,951 below its closest peer, Sublette County. This statistic is concerning since Lincoln County lagged behind Sublette County by \$6,506 in 2016. This means that the surrounding areas not only have higher per capita income, but their wages and other sources of income relative to population size are also growing at a faster rate.



Source: Bureau of Economic Analysis

Historically, based on per capita income, Lincoln County has lagged behind the neighboring counties, the State of Wyoming, and the United States as is indicated in the following graph. This indicates that on average, Lincoln County residents have less spending power on an individual resident basis than the people in neighboring counties, the state, or the nation.

Historical Per Capita Income



Source: Bureau of Economic Analysis

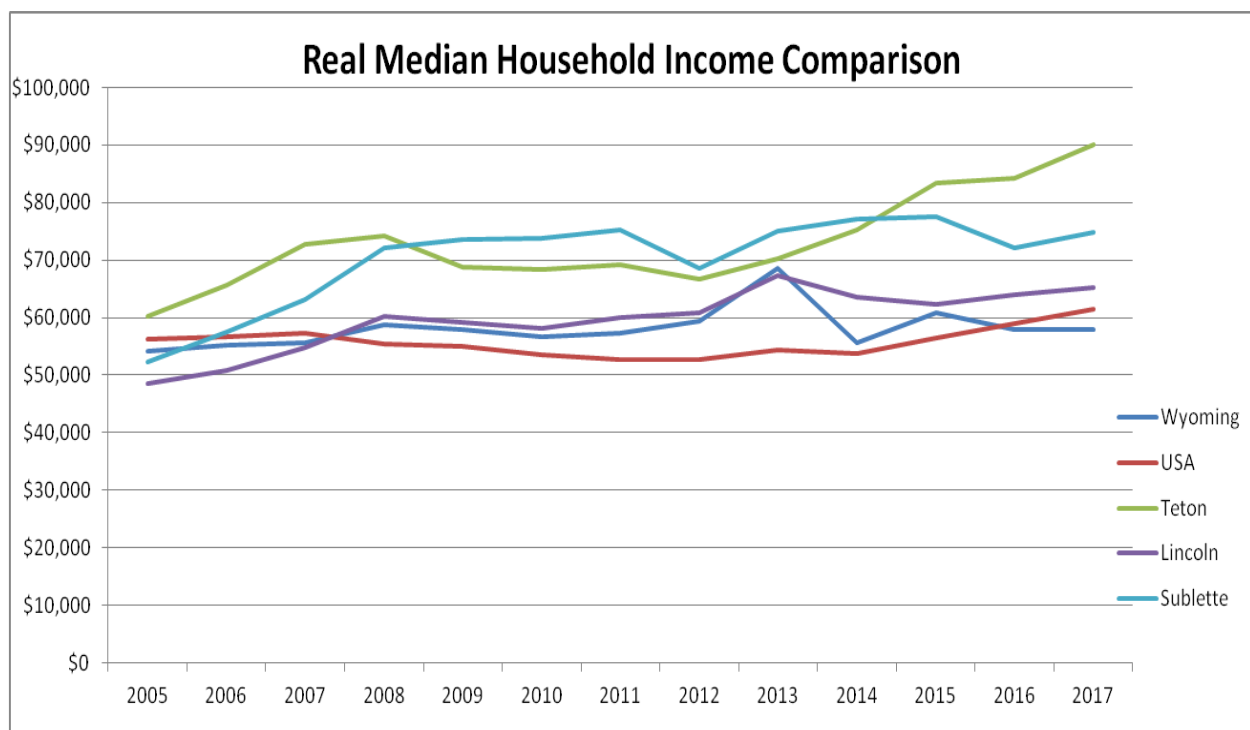
As discussed earlier, for the peer group reviewed, Lincoln County has the most married couple households, the highest number of persons per household, a growing senior population, and lower levels of education. These factors all converge to directly contribute to the lower Lincoln County per capita income statistic. Until these demographic factors change, Lincoln County is destined to be a relatively lower per capita income area.

However, a structural issue with the per capita income statistic is that it can be skewed by a few very wealthy individuals – and may not correctly represent the average or typical area populations' well-being. The Casper Star Tribune published an article in 2018 titled, "The highs



and lows of Teton County, home to the greatest income inequality in America” which reported that the top 1% in Teton County earned an average of 142 times the income of the bottom 99% of families in the county. The article also stated that Wyoming is ranked sixth in the nation for income inequality, but the majority of this is caused by wealthy families residing in Teton County. The top 1% earns 68.3% of the income and the bottom 90% earns 17.3% of the income. Therefore, on an individual basis the very high Teton County per capita income statistic is misleading and does not represent the general well being of the many Teton County, Wyoming, citizens (Richards).

Real median household income, however, smoothes out the issue discussed with per capita income. The real median household income comparison graph, found below, compares real median household income between Lincoln, Sublette, and Teton Counties, to the State of Wyoming, and the United States.



Source: Federal Reserve Economic Data

Lincoln County has consistently been higher than Wyoming and the United States with respect to real median household income. Surprisingly, Lincoln County’s real median household income did not decrease dramatically during the Great Recession indicating that the many construction workers who lost their construction employment were able to re-employ in other industries, which the authors believe to have been largely energy related.



Of concern is the decrease in Lincoln County's real median household income which began in 2013 and continued into 2015. The authors feel that this decrease may be largely driven by the energy industry impacts in South Lincoln County, and not necessarily driven by the Star Valley market. However, it may also represent a lack of wage growth. This being said, Lincoln County's real median household income has shown an increase for the second year in a row, beginning in 2016. Lincoln County is above Wyoming and the U.S. real median household income. The authors feel that this higher level of real median household income could be due to the high number of married people in Lincoln County and both spouses being employed. This will increase the total household income as more people in the home are working.

POVERTY LEVEL

Income and quality-of-life factors can be represented by the number of people living beneath the poverty level. The fewer number of individuals below the poverty level, the better off the general population is. The following chart compares Lincoln County, Teton Count, Wyoming, and the United States poverty levels based upon the US Census Bureau's estimates for 2013 through 2017.

Persons in Poverty, (Percentage)				
	Lincoln	Teton	Wyoming	United States
2017	7.60%	5.80%	11.30%	12.30%
2016	8.60%	7.30%	11.30%	12.70%
2015	8.80%	6.60%	11.10%	13.50%
2014	9.00%	7.70%	11.20%	14.80%
2013	6.90%	8.20%	11.50%	15.40%

Source: U.S. Census Bureau

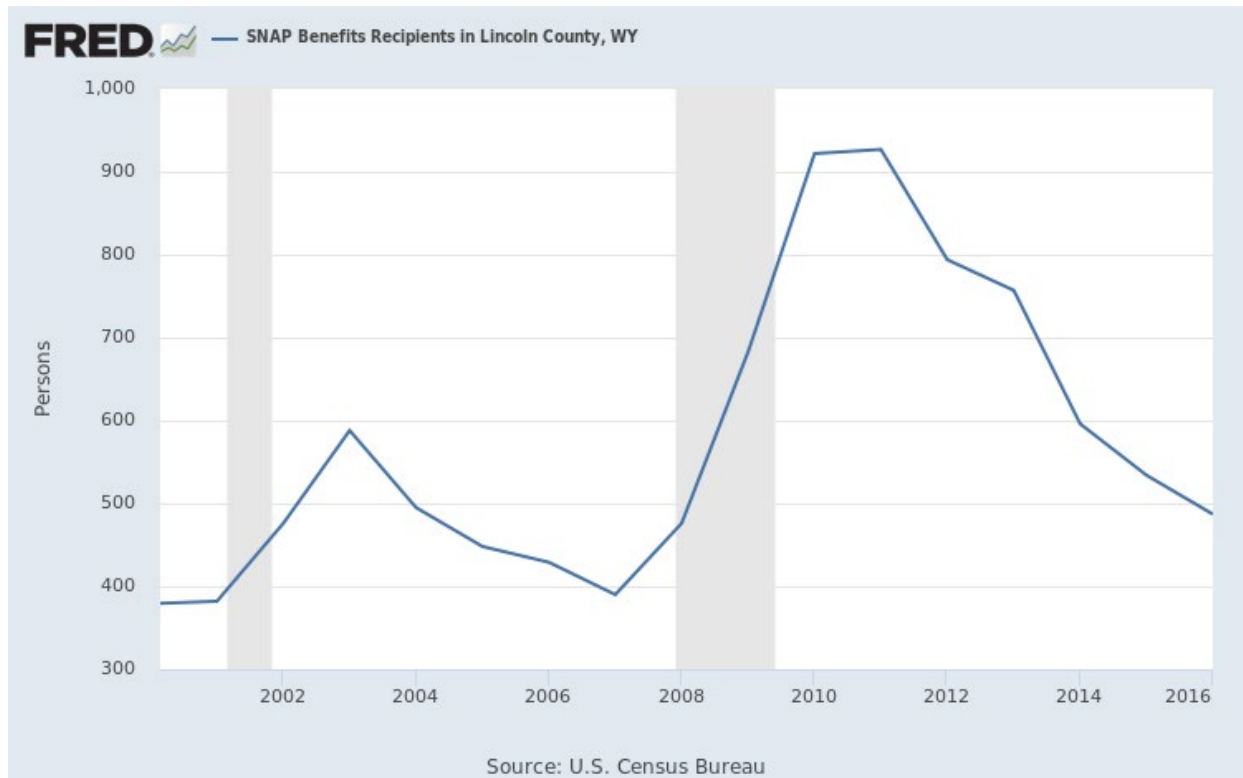
While Lincoln County has a lower relative per capita income, but strong real median household income, it also has a lower percentage of persons below poverty level than Wyoming and the United States. This likely indicates a somewhat even distribution of income over the entire population of Lincoln County.

Between the 2016 and the 2017 estimates, Teton County's poverty percentage decreased by 1.5% and Lincoln County's decreased by 1.0%. It is important to note that the Lincoln County poverty percentage has been steadily dropping since 2014. The authors argue that the Star Valley economy is strongly tied to Jackson, and therefore, would expect that the percentage of the Star Valley population living in poverty would more closely mirror that of Teton County than our southern Lincoln County counterparts.

Poverty levels can also be estimated by the number of people participating in the Supplemental Nutrition Assistance Program (SNAP). The number of SNAP recipients in Lincoln County peaked



in 2011 after the Great Recession with 927 recipients (7.41% of total population). Since then, the number of SNAP recipients has been steadily decreasing. In 2016, the most recent information available, the total number of recipients was 487 (2.4% of total population). The graph below depicts the trend of SNAP benefits recipients from 2001 to 2016



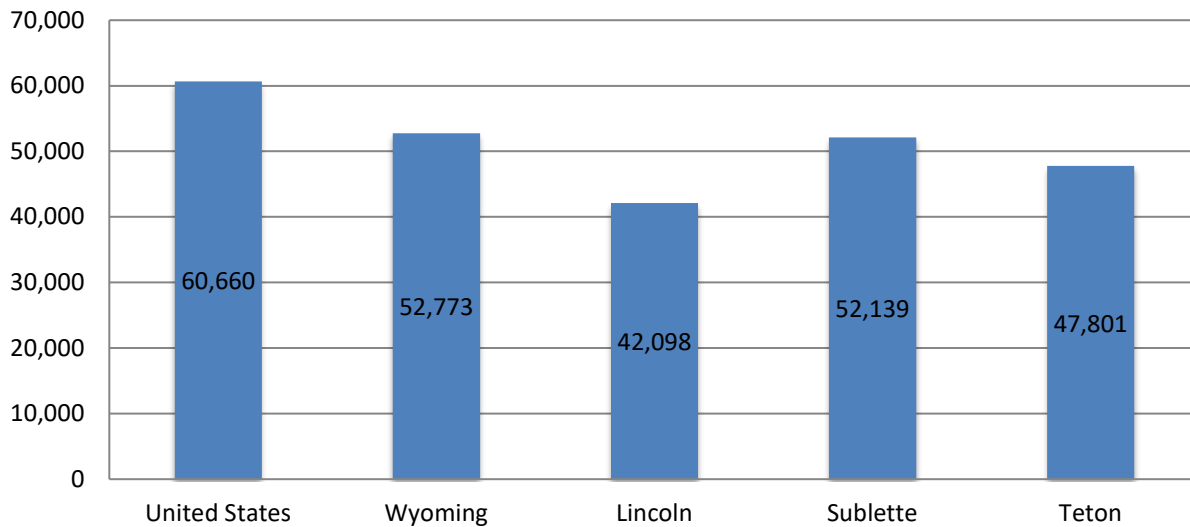
Source: Federal Reserve Economic Data

AVERAGE WAGE PER JOB

The average wage per job represents the actual wage income that would be reported on a W2, or the taxable consideration received from an employer to an employee. It does not include other non-wage income sources such as dividend income, business income, interest income, or governmental transfer payments.

The average wage per job for Lincoln County, Teton County, State of Wyoming, and the United States are compared in the following graph.

2017 Average Wage Per Job



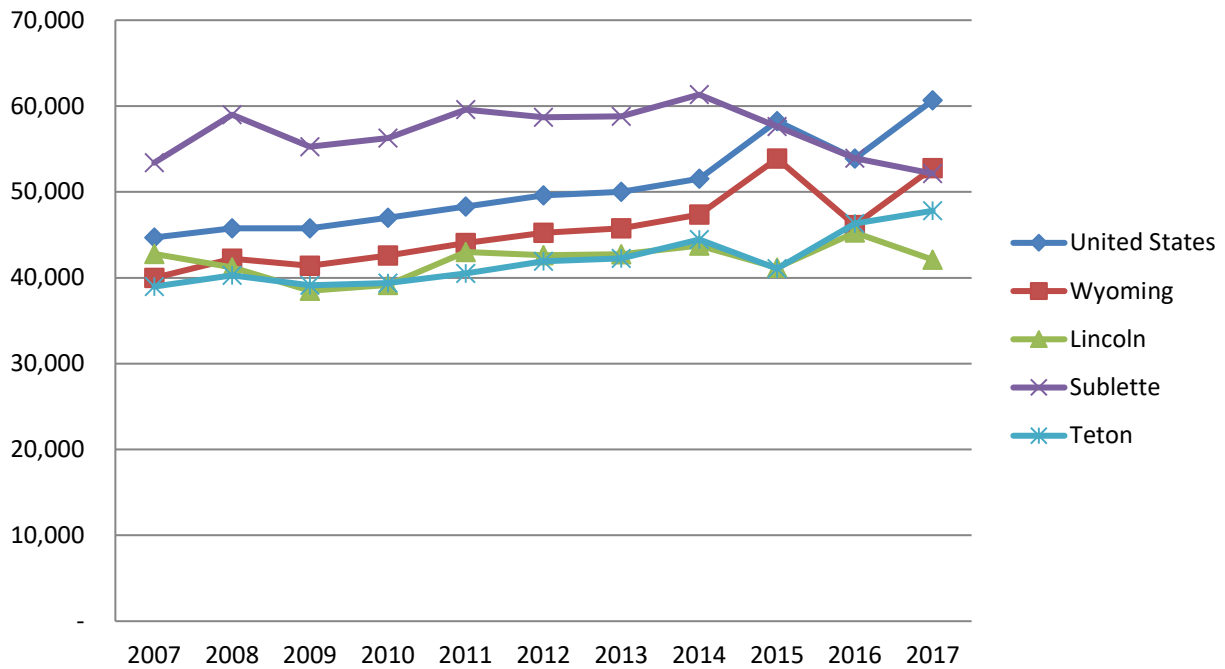
Source: Bureau of Economic Analysis

Lincoln County's average wage per job was reported at \$42,098 for 2017. Unfortunately, this is a significant decrease of \$3,161 from the \$45,259 average wage per job reported for 2016. Due to the energy industry being a large portion of both Sublette and the southern half of Lincoln County's economy, the dip in the energy industry could explain the decrease in wages for the two counties. The other three reviewed areas all saw an increase in average wages.

Historically, Lincoln County has had a relatively low average wage per job. Lincoln County had maintained a consistent level of average wage per job over the last few years and until 2016 tracked close to that of Teton County. However, the last year of data clearly indicates that there is greater wage pressure in Teton County pushing up average wages. This upward wage pressure will place increased upward pressure on Star Valley employers as employees see potential increased earnings from commuting to Teton County.

The following graph compares the historical average wage per job for Lincoln County, Teton County, Sublette County, Wyoming, and the United States. The divergence of Lincoln County and Teton County may be due partly to the energy markets as mentioned above. The authors believe that the average wage per job of the Star Valley area is closer to that of Teton County.

Historical Average Wage Per Job



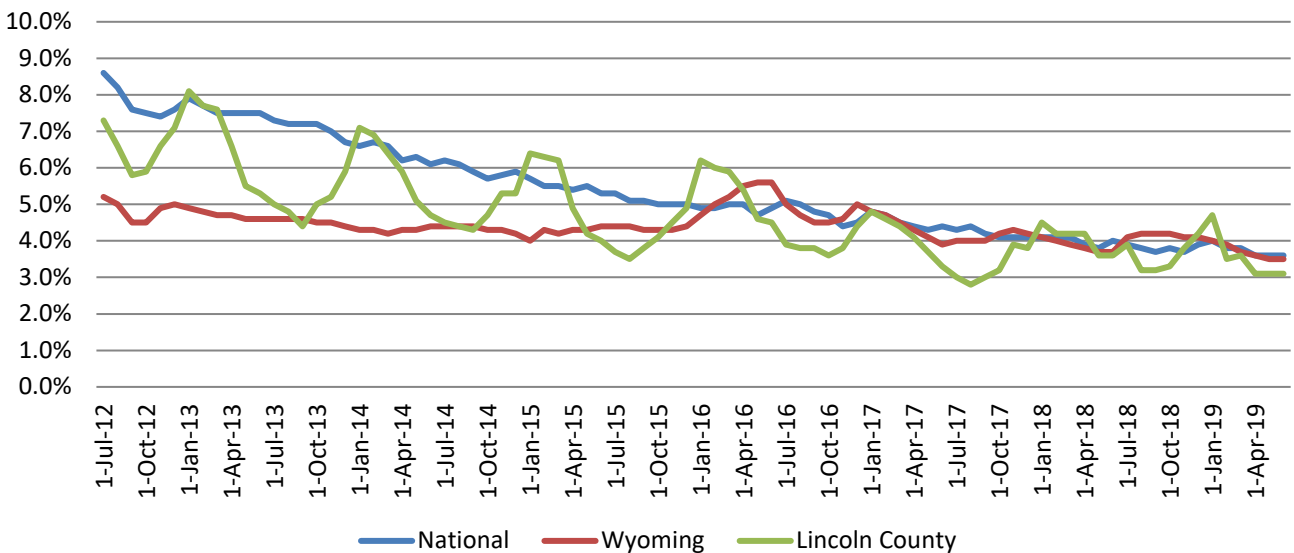
Source: Bureau of Economic Analysis

UNEMPLOYMENT

A significant economic indicator is the number of unemployed individuals in an area. People who are unemployed, but are seeking a job, are included in unemployment numbers. The unemployment statistics for Lincoln County, Wyoming, and the United States are compared in the following graph.



Comparison of Unemployment Rates July 2012 - June 2019



Source: U.S. Bureau of Labor Statistics and Federal Reserve Economic Data

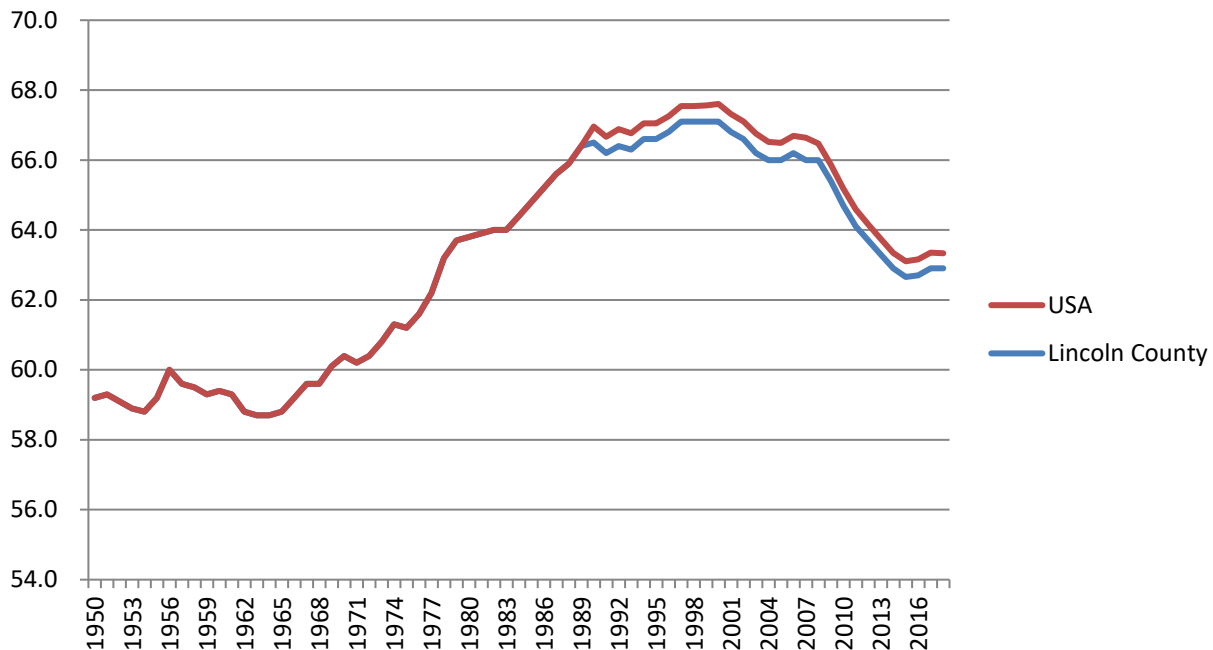
The unemployment rate for Lincoln County is not seasonally adjusted. (This is evidenced by seasonal increases and decreases in the Lincoln County unemployment line in the graph.) Clearly, in Lincoln County many people become employed in the summer construction and tourist related months and then become unemployed during the winter months. This cyclical unemployment trend directly impacts per capita income and total wages, as unemployment benefits are not counted as part of total wages. Further, unemployment compensation is at the lower end of the income scale. The Lincoln County, Wyoming and United States unemployment rates have been trending downward for the last few years and are now at a level below 4.00%. Four Percent unemployment is considered the natural rate of unemployment. Unemployment below this level is historically considered to be inflationary over time. This low unemployment rate should result in further increase in wage pressure as employee compete to fill available positions.

To get a more complete perspective of employment demographics, however, one must also consider the civilian labor force participation rate. The unemployment rate only considers those individuals that are working or are actively seeking a job. The civilian labor force participation rate is defined as "All persons classified as employed or unemployed ... as a percent of the civilian non-institutional population." (Glossary)

The graph below shows Lincoln County's labor force participation rate in comparison to the United States.



Civilian Labor Force Participation Rate



Source: Federal Reserve Economic Data

Lincoln County's labor force participation trends closely mirror that of the United States, but is below that of the U.S. The downward trend from 2000 in labor force participation is thought to be caused primarily by two factors which are first, the generation of baby boomers which are a growing population segment in Star Valley and are transitioning from employment into retirement, and second, the job market still may not have fully recovered from the Great Recession - meaning that some unemployed individuals have become comfortable in their current environment and may have given up seeking employment altogether and left the labor force. The steady downward trend in labor force participation is troublesome as it could indicate that the total population is becoming less productive over time. Productivity growth is essential to long-term economic growth and human flourishing. However, based on 2016 and 2017 data the decline in the labor force participation rate appears to have bottomed out for the time being as the participation rate appears to have a slight upward trend occurring.



AREA EMPLOYERS

The Bank surveys several employers in Star Valley in an attempt to determine changes in local labor demand under the assumption that these employees serve as a proxy for all area businesses. The Bank asks each respective employer for the number of employees that work at their business in the Star Valley area. By tracking the number of employees, the Bank can partially gauge general area employment trends. The findings of the 2019 survey are shown below.

Employment by Area Major Employers

Employer	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	Gain/Loss
IST Bank (Afton & Alpine)		12	13	13	11	11	14	13	11	23	22	22	20	-2
Aviat Aircraft	70	49	50	48	36	50	48	47	49	43	44	45	47	2
Bank of Star Valley (All Branches)		28	28	27	26	24	24	24	25	24	25	27	28	1
Freedom Arms	13	14	13	14	12	12	14	15	14	15	15	15	15	0
J.R. Simplot	200	220	220	240	250	270	270	270	270	250	250	250	230	-20
Lincoln County Government	153	162	163	162	162	151	66	60	60	145	145	143	145	2
Lincoln County School #2	464	470	470	470	489	492	488	490	490	600	600	600	565	-35
Lower Valley Energy	48	46	43	44	42	47	45	48	48	64	65	68	39	-29
Silverstar Communications	66	67	88	87	88	67	87	80	80	79	79	70	79	9
Star Valley Medical Center	185	230	220	218	239	263	275	284	284	228	254	350	421	71
Polyguard & RMP Mobile	15	16	16	16	15	15	9	14	13	15	15	16	16	0
Wells Fargo (Thayne)		9	9	13	9	7	11	10	11	6	5	6	5	-1
PC Industries			25	31	25	30	30	30	33	30	30	30	33	3
LSR												51	60	9
No Longer Existing Employers	25	4	4	2	0	0	0	0	0	0	0	0	0	0
Jackson Workers	1069	1173	868	926	970	990	823	823	1075	1089	1140	1209	1280	71
Total	1239	1327	1362	1385	1404	1439	1381	1385	1388	1522	1549	1693	1703	10

It must be noted that Lower Valley Energy employment numbers show a false drop in employment because 2018 included those employed outside of the Star Valley area; these employees are not included in the 2019 number.

Employment numbers have shown moderate overall growth which supports the trend of a decreasing unemployment rate. The school district cut 35 jobs; this may be due to the governmental agencies in Wyoming trying to cut costs in the face of shrinking energy revenue. It is also important to note that the Medical Center (which was rebranded to Star Valley Health) added 71 employees over a one-year span. This supports the concept of an aging population in Star Valley creating a higher demand for health care and its related services.

The number of Jackson commuters realized an increase of 71 additional people this year. The “Jackson Workers” number is derived from a car count preformed by the Bank during the week of July 5th each year and presents the average daily count of Wyoming and Idaho licensed autos, Start Bus passengers, and selective local area commercial traffic for the time between 5:00 a.m. and 8:00 a.m. on Monday, Wednesday and Friday of the subject week. This count



does not represent a census of Star Valley commuters driving to the Jackson market, but rather provides an annual trend line to review commuter activity overtime. This statistic can provide a reasonable estimate of how many Star Valley residents are employed in Jackson. The 2019 study indicated a new peak for Jackson based commuter traffic, which does tie logically with the current strong economy, higher average wage levels, and a low unemployment rate in Teton County.

Many people also have long commutes to their job when working in the valley due to its rural nature. The U.S. Census Bureau calculates mean work related travel time. Looking at the most recent data from the U.S. Census Bureau the average travel time to work in the U.S. is 26.4 minutes. Surprisingly, Wyoming, a very rural state, has an average travel time of only 18 minutes indicating that most Wyoming residents live close to the location of their employment.

Looking specifically at Star Valley commuting times, the data indicates that individuals living in the lower valley have a substantially longer commute than the U.S., Wyoming, or upper valley averages. This is due to many of those who commute to Jackson live in the lower valley, as well as many jobs in the upper valley that are filled by those living in the lower valley. This leads to longer commute times and increased travel expense for those in the lower valley.

Average Work Related Commuting Time in Minutes				
Upper Valley	Lower Valley	Teton County	Wyoming	US
20	35.7	14.3	18	26.4

Source: U.S. Census Bureau <https://project.wnyc.org/>

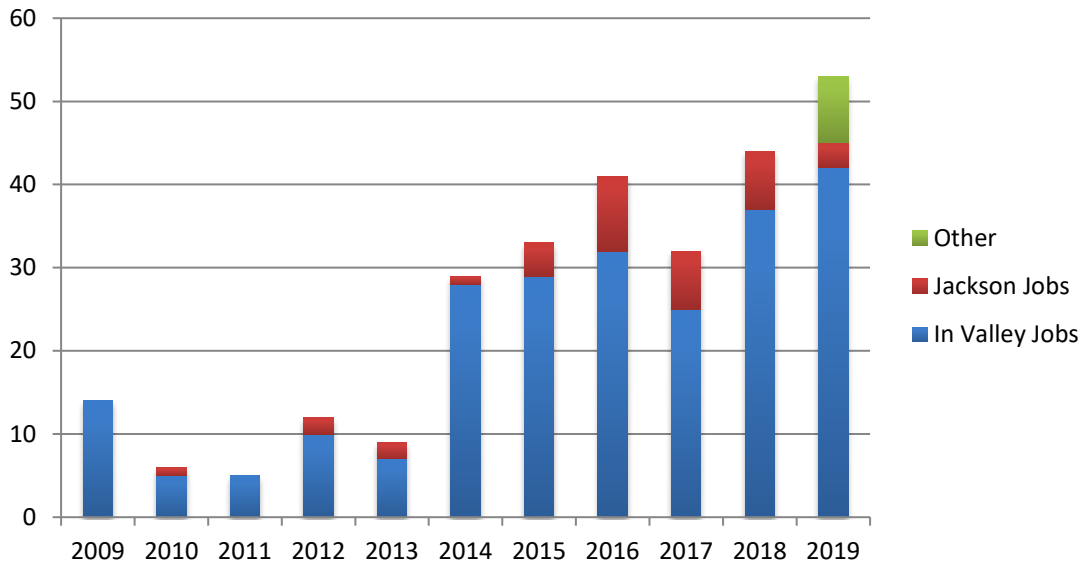
EMPLOYMENT ADVERTISING

Beginning in 2008, the Bank has monitored the number of ‘help wanted’ advertisements posted in the Star Valley Independent, and starting this year the Jackson Hole Daily help wanted ads were counted as well. Another segment was added called “other” in 2019 to capture jobs which were advertised in the newspapers but were for positions outside of both the Star Valley and Jackson areas.

The number of help-wanted ads is a valuable economic indicator as it provides a proxy for the number of unfilled jobs that are available in the community and whether the demand for labor is trending upward or downward. In order to avoid seasonal anomalies, an average is taken by counting the number of adds once a week, starting in the last week of May then the next 3 weeks after that. The graphs below represent this data for both the Star Valley Independent count as well as the Jackson Hole Daily count.

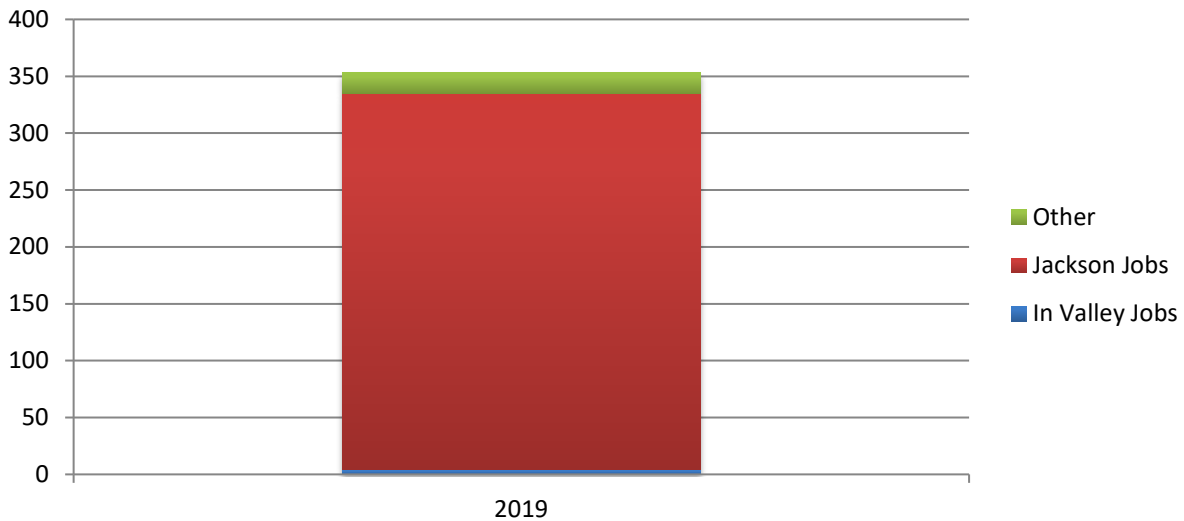


Help Wanted Ads: Star Valley Independent



Source: Star Valley Independent Classifieds 2008-2019

Help Wanted Ads: Jackson Hole Daily



Source: Jackson Hole Daily Classifieds 2019

The number of advertisements in the Star Valley Independent for 2008, which is not shown on the graph, hit a peak of 45 jobs. 2019 is the first year the number of advertised jobs exceeded the previous 2008 peak with 52 jobs listed. This clearly indicates a growing local economy with a strong job market and further correlates with the low local unemployment rate for Lincoln County. The count indicated that 42 of the 52 advertised jobs in the Independent were located



in the Star Valley area, 3 were in Jackson, and the remaining 8 located outside of the Jackson and Star Valley areas.

The Jackson Hole Daily had a whooping average of 354 listings with 331 of them being in the Jackson area. This clearly indicates a very strong economy in the Jackson area with a huge demand for labor. It also supports the high number of people commuting to Jackson as jobs are abundant in the area.

The types of jobs found in the two jobs markets do differ though. The Star Valley help wanted advertisements consisted of jobs at the school district, hospital, and a few construction jobs. Teton County help wanted ads contain many construction jobs, matching the strong real estate market in the county, and many resort jobs, such as cleaning and cooking, which matches the large tourism sector in the county.

The market appears to be surpassing employment equilibrium. Employment positions are being unfilled as labor demand is surpassing the labor supply. With the low unemployment and the continued tightening of the labor market, it is expected that more positions will continue to go unfilled. If this dynamic continues to play-out, the strong labor market should begin to put additional upward pressure on wages.

ONLINE BUSINESSES

Over the last 15 years people conducting business through the internet has been growing exponentially. This is due to the benefits that come from running a business through the internet such as: lower capital and operating costs, mobility, flexible hours, as well as the benefits for consumers such as a wider choice of products, convenience, and highly competitive pricing provided by a world-wide web system. Further the internet marketplace is constantly growing due to faster, more reliable, and more accessible internet to consumers. The growth in the internet based marketplace is evidenced by Amazon's capitalization, as is shown below:

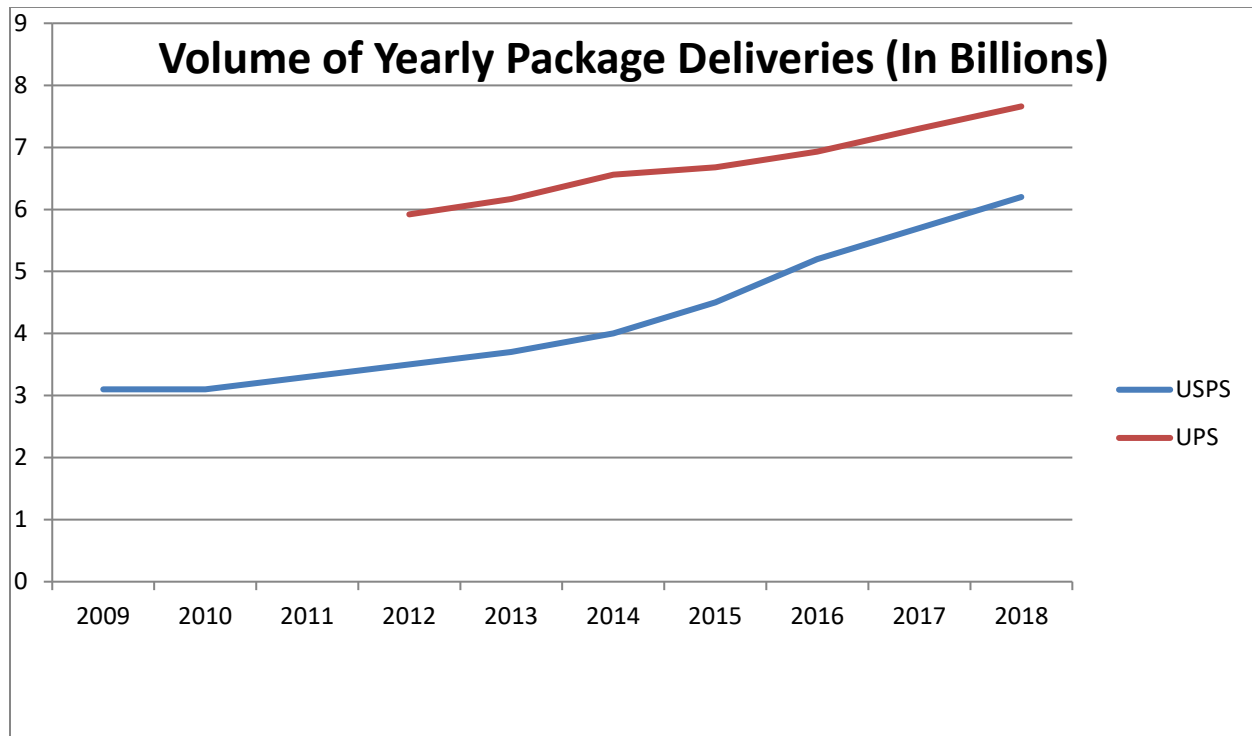




The authors believe that some of the people migrating to the valley are taking advantage of the internet to conduct business. Moving to Star Valley provides not only robust and exceptional gigabit internet service options but also provides great access to outdoor amenities, and relatively cheaper property than the neighboring Teton County. These amenities make moving to Star Valley desirable to many self-employed people who can operate their business over the internet.

A huge factor impacting the economy with the rise of internet business is the leakage of consumer and business purchases from hometown businesses to web-based businesses. The authors attempted to obtain UPS delivery numbers to Star Valley to document this shift in consumer purchasing, but UPS would not provide the local data. However, it is felt the local market trends likely do mirror the published UPS data. Nearly all internet business currently relies on shipping services to deliver products. Below is a graph illustrating the number of packages shipped by USPS, both in the U.S. and Globally.





Source: USPS, UPS Annual Report

The internet is not just creating new opportunities for individuals to live where they want and work; it is also being accused of hurting and causing the closure of brick and mortar stores. Industries such as cable TV, travel agencies, and video rentals struggle to compete with the convenience and low cost offered by internet-based giants such as Amazon and Alibaba.

A recent example of this economic shift which affects the Star Valley community is ShopKo. ShopKo constructed a new store in Afton 5 years ago, bringing a large retail and pharmacy outlet to the Star Valley community. After just a few years of operation the corporation of ShopKo (not just the Afton store) filed for bankruptcy and ceased all operations. This is a result of the ease of ordering the items available at ShopKo, often cheaper and without leaving one's home, on Amazon or other internet-based outlets.

ShopKo is a visible victim of the marketplace migration from brick and mortar to online business. The same challenges are facing nearly all brick and mortar retail businesses. The internet marketplace will continue to grow and at the same time will become a larger traditional business disruptor. The bottom line is that retail, including that in Star Valley, outside of specialized boutique shops, services, and stores with specialty or perishable items will be challenged in the coming years and a number of local businesses may not be able to find the competitive niche necessary to survive and prosper.



MARKET LIQUIDITY

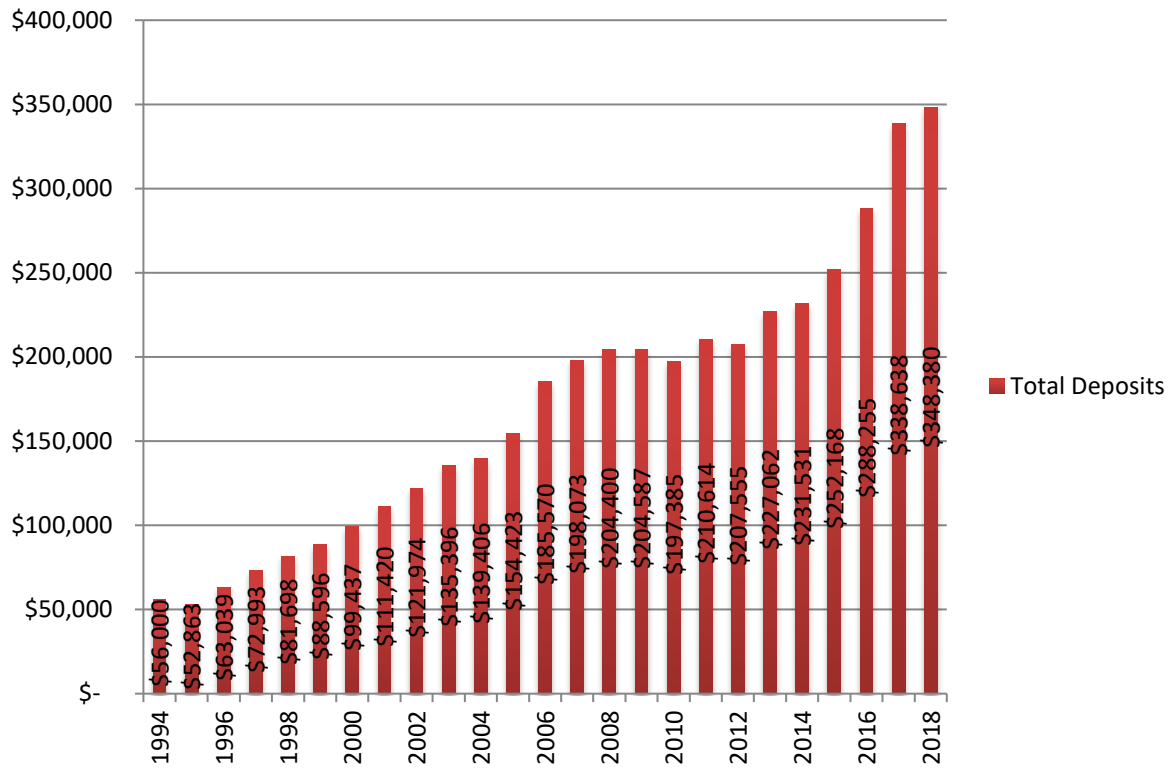
Liquidity, for the purposes of this report, is defined as the deposits held in local non-credit union financial institutions. Liquidity is felt to be representative of general market wealth. This metric is far from a perfect measure of true market liquidity, due to deposits from outside the market being held in local banks, local money being deposited into outside financial institutions, credit unions, and other market leakages including investments made through brokerage houses. Liquidity measures in this report, therefore, should not be interpreted as an indication of the total financial wealth of an area, but rather as a metric used to represent general trends in liquidity growth -- assuming consistent consumer and business investment preferences over time.

The graph below shows the total commercial bank deposits for Star Valley beginning in 1994. Since 1994, Star Valley has seen 6 additional financial institution branches opened, and one branch closed (Wells Fargo - Afton, November 2017). An out-of-area credit union was also opened in June 2019.

The 4 local commercial banks report the deposits by each respective branch to the Federal Deposit Insurance Corporation (FDIC), as of June 30 of each year, and the FDIC makes the information public in November of each year.



Star Valley Total Bank Deposits (000)



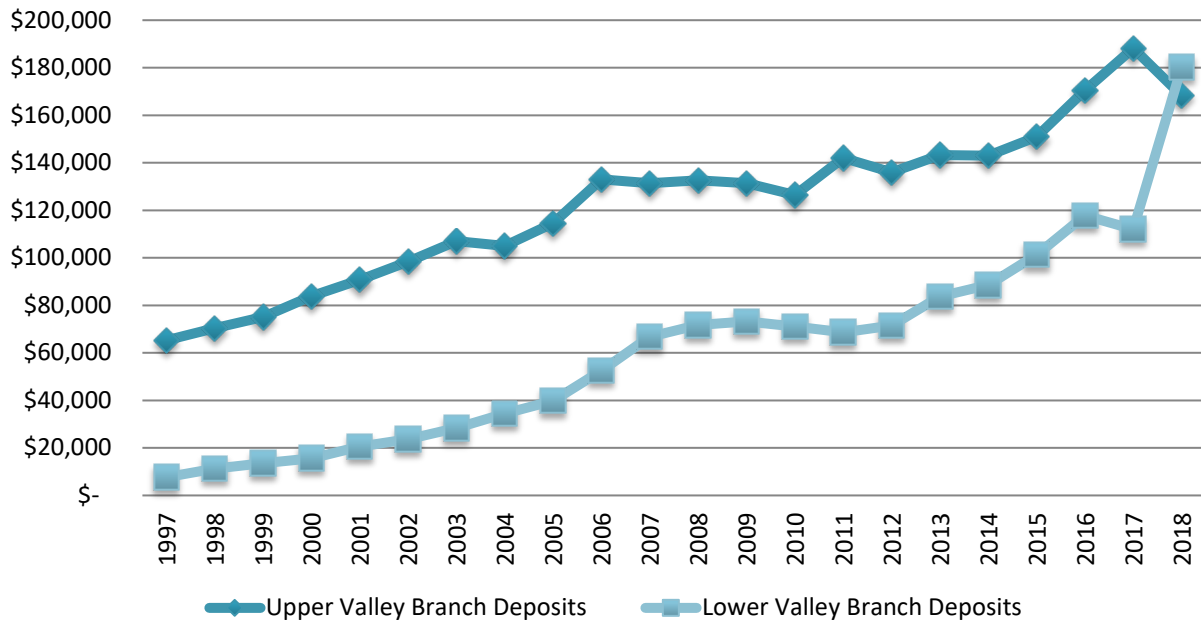
Source: FDIC Summary of Deposits

The above chart shows a steady increase in valley deposits up to the Great Recession of 2008, after which deposits fell slightly until 2012. Post 2012, total bank deposits rebounded quickly surpassing pre-recession numbers. Between 2017 and 2018, there was 2.88% growth in bank deposits, which is down from the 17.48% growth realized from 2016 to 2017. Though 2017 to 2018 had a much smaller growth rate than 2016 to 2017, a growth rate still indicates a growing population with increased wealth.

Due to the deposits being reported by branch, the bank deposits can be broken down by regions within the market. The graph below shows the local deposits by location of upper or lower valleys. The following data is as of June 2018.



Deposits by Valley Branch Location (000)



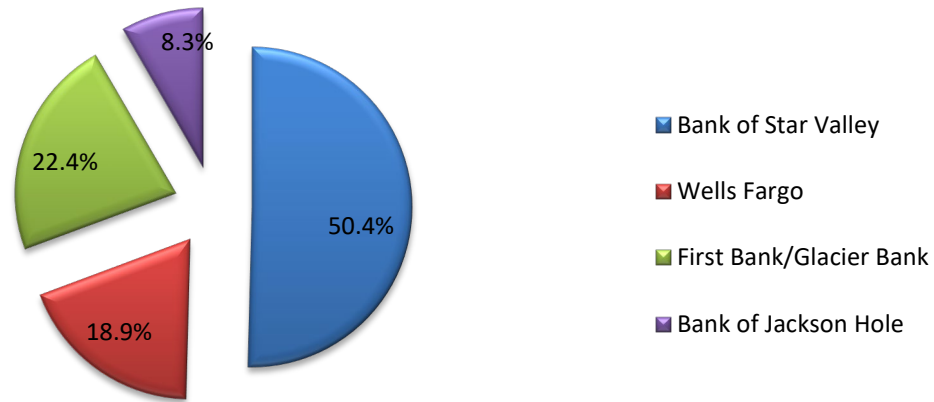
Source: FDIC Summary of Deposits

Historically, the upper valley bank offices have held more deposits than the lower valley offices. This changed in 2018, for the first time, as the lower valley deposits surpassed the upper valley deposits by \$11,852,000. This is largely due to the Afton Wells Fargo branch closing and the migration of its Afton business to the Thayne office. However, it may also be an indication of the strong job market in Jackson leading to higher income levels for the lower valley people who work there.

The following graph shows the market share percentage of each bank based on total Star Valley deposits, as of June 2018. Wells Fargo is down 3.4% from 2017, which is most likely due to the closing of their Afton branch. The Bank of Star Valley had the largest increase in market share with an increase of 3.9%.



Market Share by Financial Institution



Source: FDIC Summary of Deposits

COST-OF-LIVING

A state-wide cost-of-living index is prepared by EAD twice each year. The report is based on the cost of food, housing, apparel, transportation, medical, and recreational activities. The index value of 100 is considered the state average.

EAD breaks Lincoln County into two markets being Lincoln County-Afton, and Lincoln County-Kemmerer. This is felt to confirm the authors belief and comments that the two economies of North Lincoln County and South Lincoln County have marked underlying structural differences.

The chart below compares Lincoln County-Afton, Lincoln County-Kemmerer, Teton, Sublette, and Uinta County.

Wyoming Comparative Cost of Living Index- 4th QTR 2018 (Statewide Average=100)							
County	All Items	Food	Housing	Apparel	Trans.	Medical	Rec.
Lincoln-Afton	101	100	98	113	102	102	116
Lincoln-Kemmerer	89	95	82	81	103	86	96
Teton	159	115	213	125	103	97	113
Sublette	106	112	105	114	101	102	113
Uinta	92	91	85	89	100	110	107

Source: Department of Administration & Information Economic Analysis Division



The chart illustrates that Afton is just slightly above the state average index of 100 for the cost-of-living. Not surprisingly, there is a substantial difference between Afton and Kemmerer. For those employed in Teton County, Star Valley clearly remains a cost-effective alternative to living in Teton County - which has the highest cost-of-living index in Wyoming. The cost-of-living in Teton County remains a significant cause of the current population growth in Star Valley. Many Teton County employees, looking out of necessity to avoid the high cost-of-living in housing and other services, choose to live in the surrounding areas of Star Valley and Victor/Driggs. This trend appears to be long-term in nature with no change anticipated in the foreseeable future.

The chart below gives a historical perspective on the cost-of-living in Lincoln County-Afton. Before 2012, Lincoln County-Afton was at or above the state average for the cost-of-living. From 2012 to 2017 Afton moved to below the state average of 100. The fourth quarter of 2018 is the first time Afton has exceeded 100 for six years. This movement of Afton to above the state average cost-of-living is not positive and places increased financial pressure on the residents of the area as they attempt to meet their consumption needs without corresponding significant wage growth.

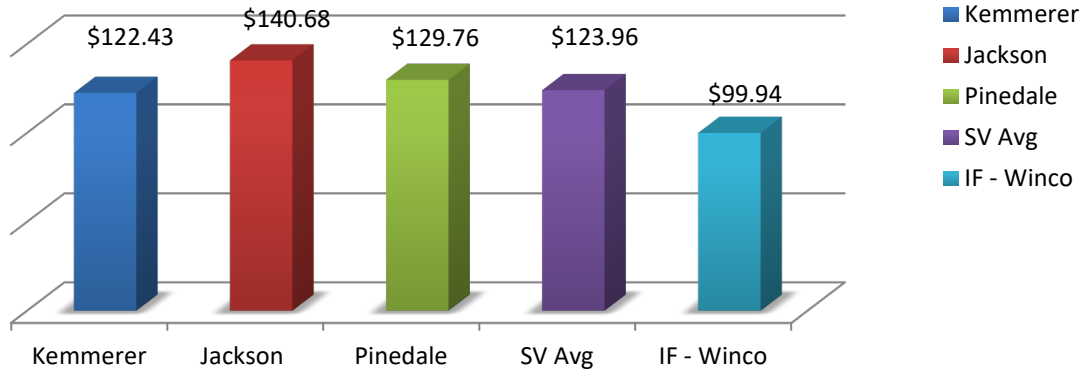
Change in Lincoln-Afton Cost of Living Index Between Jul. 2006 and Dec. 2018							
Lincoln-Afton	All Items	Food	Housing	Apparel	Trans.	Medical	Rec.
Jul-06	102	95	107	89	99	94	106
2Q7	104	98	110	88	101	104	100
2Q8	100	97	104	86	99	100	96
2Q9	101	96	104	95	100	91	110
4Q9	101	96	102	96	100	91	110
4Q10	102	103	101	104	100	98	112
4Q11	100	96	100	98	99	96	112
4Q12	94	98	85	102	100	96	112
4Q13	95	97	88	107	102	96	107
4Q14	92	94	86	96	99	93	107
4Q15	95	99	87	99	104	92	112
4Q16	96	95	92	105	104	91	109
4Q17	98	96	95	105	103	99	109
4Q18	101	100	98	113	102	102	116

Source: Department of Administration & Information Economic Analysis Division

To supplement the state's estimates for the cost-of-living, the Bank performs an item specific analysis on the cost of a basket of groceries. An identical basket of goods (subject to branding among the stores) is compared among the three Star Valley grocery stores as well as grocery stores in Jackson, Pinedale, Kemmerer, and Idaho Falls. The results of the study, which was performed in July 2019, are shown below.



Grocery Comparison

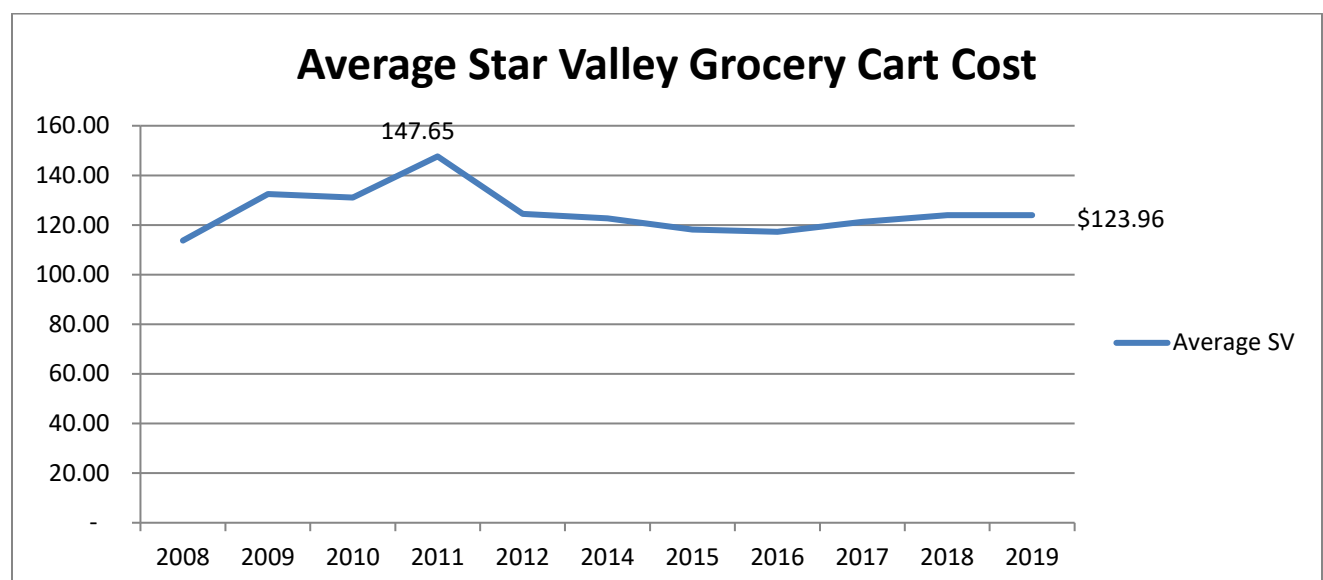


Idaho Falls boasts the cheapest cost for the basket of goods used in the study. The findings for the Banks basket of goods support the state's findings for the cost of food in these areas. Jackson has the highest cost for the basket. The other three areas are within a \$10.00 range of each other, with Star Valley having a cost of \$123.96.

A detailed list of the grocery cart and prices is listed below.

2019 Cost of a Basket of Grocery Items					
Grocery	Kemmerer	Jackson	Pinedale	SV Avg	IF - Winco
White Bread (Sara Lee)	3.29	3.69	3.29	3.36	2.18
Bread (Grandma's Sycamore)	3.19	3.79	3.28	2.96	2.98
Russet Potatoes (1 lb.)	0.69	0.89	0.69	0.62	0.68
Apples (Red Delicious) (1 lb)	1.49	1.49	1.99	1.62	1.27
Lettuce Head (Iceberg)	1.59	1.49	1.59	1.46	1.28
Boneless Skinless Chicken Breasts (1 lb.)	2.99	2.99	3.98	3.72	3.23
Ground Beef (1 lb. 80%)	2.99	4.99	2.99	4.22	4.34
Cereal (Frosted Shredded Wheat 18 oz.)	4.29	4.29	4.59	4.49	2.55
Cereal (Lucky Charms 11.5 oz.)	3.99	4.29	4.49	4.06	2.98
Cereal (Cheerios 12 oz.)	3.89	3.69	4.39	4.26	2.98
Ice Cream (WF 4 qt.)	8.99	5.99	8.69	8.02	4.97
Flour (WF All Purpose Bleached 10 lb.)	3.69	4.29	3.99	3.69	2.24
Sugar (WF 10 lb.)	5.89	6.99	6.49	5.86	4.80
Salt (WF)	0.79	0.99	0.89	0.81	0.50
Rice (Minute, White 28 oz.)	5.89	5.79	4.99	4.62	3.37
Milk (WF 2%)	2.74	2.99	2.69	2.79	2.28
Cheese (Cache Valley 2 lb. Sharp Cheddar)	8.89	12.99	10.99	10.82	8.68
Yogurt (Red Yoplait)	0.59	0.6	0.69	0.70	0.50
Eggs (WF 12 lg.)	1.49	1.99	1.49	1.49	1.30
Butter (WF)	3.59	3.29	3.69	3.46	2.98
Margarine (Imperial)	1.19	1	1.19	1.12	0.84
Cottage Cheese (WF 1 lb.)	3.69	4.29	2.39	2.19	1.64
Wheat Thin Crackers (9.1 oz)	3.87	3.59	3.87	3.69	2.16
Cut Green Beans (WF 1 can)	0.79	1	0.99	0.89	0.74
Toilet Paper (Charmin 12 Rolls)	9.99	18.99	13.49	11.16	12.97
Napkins (Vanity Fair 200 count)	6.49	5.99	5.79	5.59	3.98
Paper Towels (Bounty single)	2.39	2.55	2.39	2.46	2.00
Kleenex (160)	3.29	2.78	2.69	2.59	1.58
Detergent (Tide 100 fl. oz.)	12.49	14.99	13.69	13.49	11.97
Dish Detergent (Cascade 75 oz.)	7.29	7.99	7.39	7.76	5.97
Total	\$122.43	\$140.68	\$129.76	\$123.96	\$99.94

The Bank has used this same basket of goods for its economic studies since 2008. The following graph shows the pricing trend for this list of items in Star Valley.



Star Valley's average grocery prices peaked in 2011 and then dropped in 2012. Since 2012 the price for groceries has stayed relatively stable. This stable trend may be changing though as both 2018 and 2019 saw slight increases in the price of the basket of goods.

INFLATION

The EAD cost-of-living index is likely the best source of inflation data within Wyoming. The inflation rate is estimated by using the percent change year-over-year in the price level for a standard basket of goods. EAD then estimates inflation for the entire state and five sub-regions within Wyoming. The Northwest region includes Big Horn, Hot Springs, Park, Teton, and Washakie counties. The Southwest region includes Lincoln-Kemmerer, Lincoln-Afton, Sublette, Sweetwater, and Uinta counties.

Star Valley lies within the EAD's Southwest region. However, due to the recreation and tourist activity and employment ties to Teton County, as well as the lack of mineral based activity which is the base economy of the Southwest region, the authors feel that Star Valley inflation is more probable to mirror the Northwest region. To compensate for this assumption, an average of the Northwest and Southwest regions is used to approximate a more reflective and correct measure for inflation in Star Valley.

Using the average of the Northwest and Southwest regions, Star Valley area inflation in the 4th quarter of 2018 was estimated to be 1.7%. This is a 0.9% decrease from the 4th quarter of 2017 which was estimated at 2.6%.

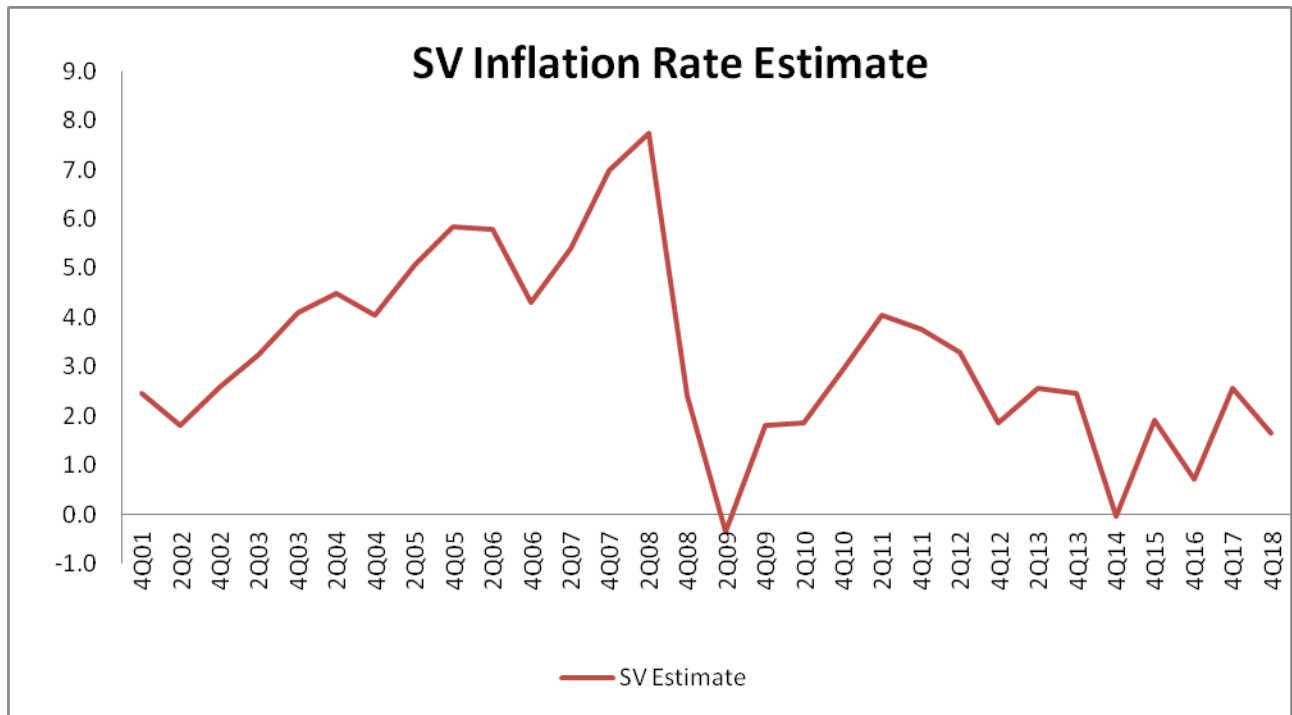


Annual Inflation Rates by Region					
Quarter	U.S. CPI*	Statewide All Items	Northwest	Southwest	SV Estimate
4Q01	1.6	3.5	2.6	2.3	2.5
2Q02	1.1	2.5	2.2	1.4	1.8
4Q02	2.4	3.7	2.7	2.5	2.6
2Q03	2.1	2.6	3.0	3.5	3.3
4Q03	1.9	3.6	3.9	4.3	4.1
2Q04	3.3	4.9	4.4	4.6	4.5
4Q04	3.3	4.3	3.3	4.8	4.1
2Q05	2.5	4.5	3.5	6.6	5.1
4Q05	3.4	5.0	3.4	8.3	5.9
2Q06	4.3	5.6	4.0	7.6	5.8
4Q06	2.5	4.4	3.8	4.8	4.3
2Q07	2.7	4.7	4.6	6.2	5.4
4Q07	4.1	6.1	5.9	8.1	7.0
2Q08	5.0	7.9	7.4	8.1	7.8
4Q08	0.1	2.7	2.7	2.1	2.4
2Q09	-1.4	0.0	-0.5	-0.2	-0.4
4Q09	2.7	2.7	2.1	1.5	1.8
2Q10	1.1	1.9	2.1	1.6	1.9
4Q10	1.5	2.9	3.8	2.1	3.0
2Q11	3.6	4.5	4.5	3.6	4.1
4Q11	3.0	3.9	4.2	3.3	3.8
2Q12	1.7	2.4	3.8	2.8	3.3
4Q12	1.7	2.1	2.1	1.6	1.9
2Q13	1.8	3.1	2.3	2.8	2.6
4Q13	1.5	2.9	3.0	1.9	2.5
4Q14	0.8	1.1	0.8	-0.9	-0.1
4Q15	0.7	0.5	2.7	1.1	1.9
4Q16	2.1	0.6	1.9	-0.5	0.7
4Q17	2.1	2.3	2.2	2.9	2.6
4Q18	2.0	2.5	2.3	1.0	1.7

Source: Department of Administration & Information Economic Analysis Division

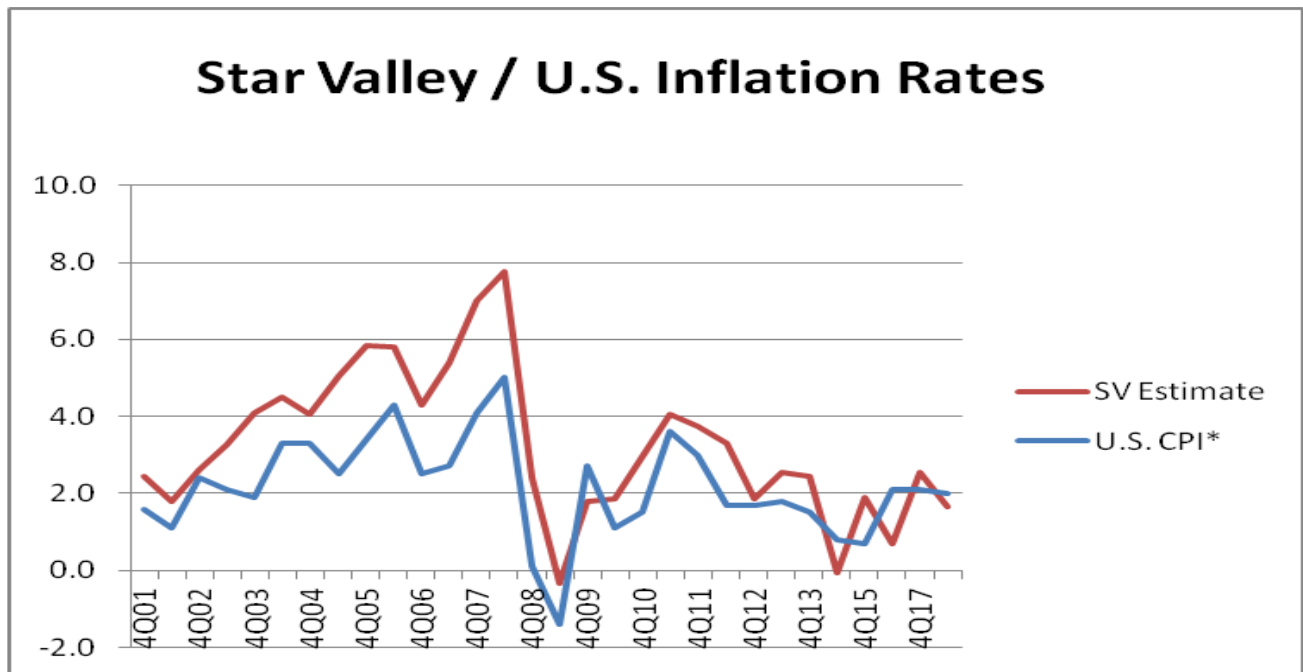
The above data is shown in graph form below. The graph clearly illustrates that overall inflation has trended downward from the 2008 peak. The U.S. CPI has decreased by 0.1% from 2017; this is in line with the Federal Reserve's target inflation rate of 2.0%, though this number may change as the FED has begun a more accommodative monetary policy with a recent decrease in the FED Funds rate, and is indicating the potential for more interest rate decreases in the coming months.





Source: Department of Administration & Information Economic Analysis Division

The estimated Star Valley inflation rate, relative to the U.S. CPI is shown below.



Source: Department of Administration & Information Economic Analysis Division

Overall, Star Valley inflation has historically been higher than the national average. The most recent data indicates that Star Valley's inflation rate decreased from 2017 to 2018, which

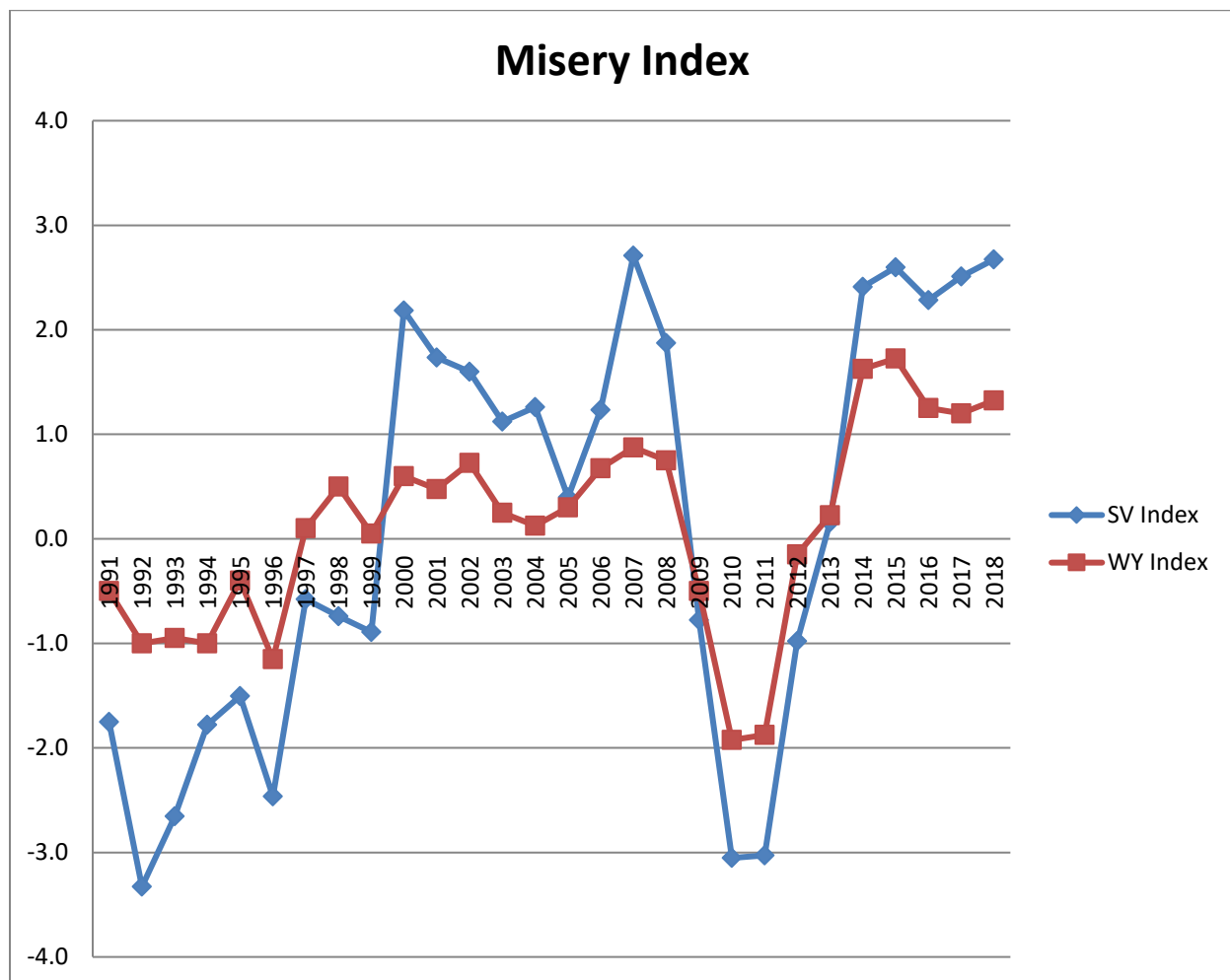


results in a real cost-of-living decrease for residents. This can lead to individuals having higher levels of disposable income creating more economic growth through higher spending levels.

MISERY INDEX

The Bank created a Star Valley Misery Index in an attempt to gauge the overall “economic attitude” of the Star Valley citizens. The original Misery Index concept was created in late 1970’s under the expectation that with lower unemployment levels and lower inflation rates, the population would hold a more positive economic perspective and vice-versa; with higher unemployment and inflation rates, the population would tend to have a more negative outlook. Thus, the misery index is simply the sum of two components: being the unemployment rate and the inflation rate. The underlying assumption is that individuals will spend more and be more risk tolerant in a positive economic environment and be more conservative and less risk intolerant in a negative economic environment.

The Misery Index, as calculated for Wyoming and Star Valley is graphed below.



The graph indicates that the average person in Star Valley should tend to have a very positive economic outlook. In fact, the positive Misery Index for Star Valley has been trending upward for the last 3 years and may now be in near-euphoric territory. The Star Valley Misery Index in 2018 has reached a similar level to that seen just before the Great Recession in 2008. This indicates a strong consumer expectation for economic well being. This excessive economic euphoria could lead to excessive risk taking for many residents. This may become a problem if the index continues its current upward trend.

STATE AND LOCAL TAX

Wyoming was ranked 20th in a national comparison of state tax revenue per capita, at \$3,180, in 2018. This is the sum of the taxes paid to state and local governments, divided by the population – which, on first glance, indicates that Wyoming is a higher than average tax state. Select rankings from this study are shown below.

2018 State Tax Revenue			
State	Per Capita State Tax	Rank	% of Personal Income
District of Columbia	\$ 11,331	1	14.3%
North Dakota	\$ 5,533	2	10.7%
Vermont	\$ 5,244	5	10.1%
Alaska	\$ 2,226	44	3.9%
Connecticut	\$ 5,341	4	7.4%
Hawaii	\$ 5,431	3	10.2%
Minnesota	\$ 4,758	6	8.8%
New York	\$ 4,531	7	6.9%
Wyoming	\$ 3,180	20	5.5%
Massachusetts	\$ 4,296	10	6.4%

Source: Federation of Tax Administrators

State and local tax obligations have a direct impact on disposable income. A person earning a relatively lower wage in a low-tax area may be as well off as a person earning a higher wage in a high-tax area. While Wyoming shows an average per capita tax obligation, a large share of the actual taxes in Wyoming are paid by the mineral extraction industries through severance and sales tax. In fact, Wyoming residents currently enjoy a low relative tax burden which has a direct positive impact on the financial health of each resident. An attempt was made to quantify the impact of Wyoming's low resident tax rates, relative to neighboring states.

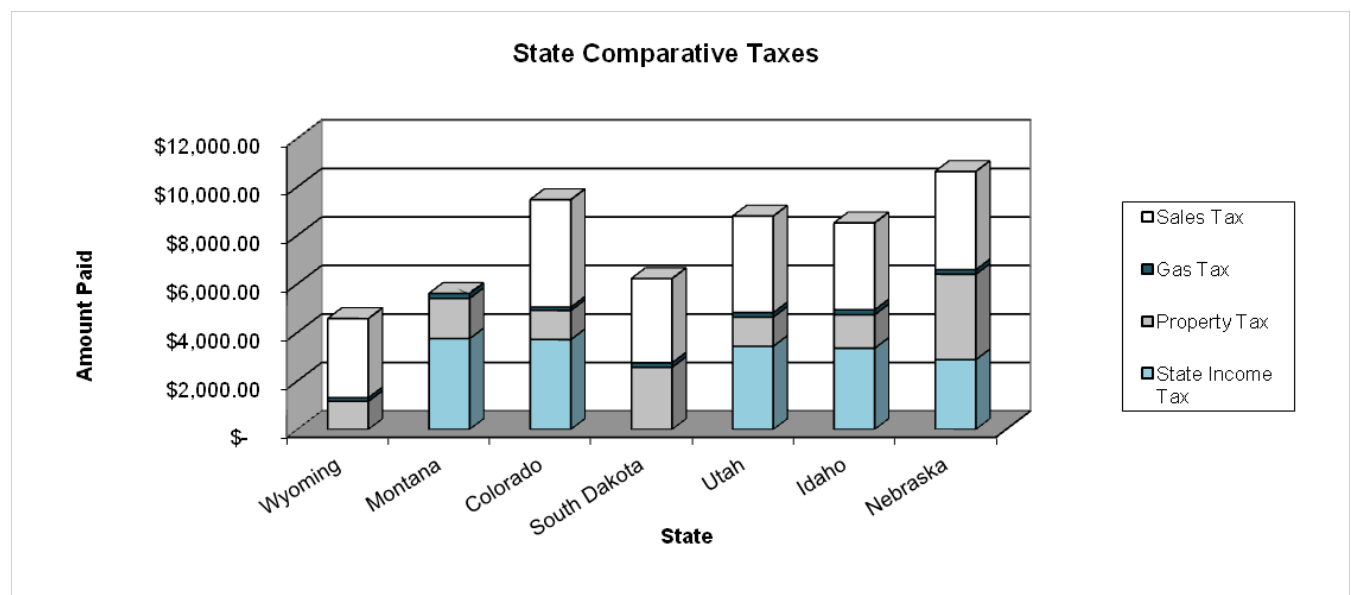
The Bank created a relative tax comparison for a hypothetical family to illustrate the impact of Wyoming's lower residential tax rates. The comparative tax analysis is based upon a hypothetical family of four, earning \$80,000 (double wage earners living in Lincoln County),



living in a \$200,000 house, and driving 15,000 miles a year. The comparison of state tax obligations for this hypothetical family is shown below:

Computed taxes for 2019 - Family of 4, \$80M Gross Income, \$200M House, 15,000 miles per year						
State	\$80M State Income Tax	59.5M Consumption Sales Tax	625 Gallons Gasoline Tax/Gal.	Property Tax \$200M Res.	Comparative Tax	% of Wyoming
Idaho	\$ 3,346.37	\$ 3,575.95	\$ 206.25	\$ 1,380.00	\$ 8,508.57	186%
Colorado	\$ 3,704.00	\$ 4,426.80	\$ 137.50	\$ 1,200.00	\$ 9,468.30	207%
Montana	\$ 3,741.06	\$ -	\$ 201.56	\$ 1,660.00	\$ 5,602.62	123%
Nebraska	\$ 2,877.35	\$ 4,046.00	\$ 187.50	\$ 3,520.00	\$ 10,630.85	233%
South Dakota	\$ -	\$ 3,468.85	\$ 187.50	\$ 2,560.00	\$ 6,216.35	136%
Utah	\$ 3,430.00	\$ 3,974.60	\$ 187.50	\$ 1,200.00	\$ 8,792.10	193%
Wyoming	\$ -	\$ 3,254.65	\$ 150.00	\$ 1,160.00	\$ 4,564.65	100%

Source: api.org, tax-rates.org, taxfoundation.org



Source: api.org, tax-rates.org, taxfoundation.org

The analysis shows that Wyoming is one of the best states to live in, as far as lower levels of individual taxes are concerned. The state with the next lowest tax burden in the sample is Montana. The tax burden for a Montana resident in this scenario is still \$1,037 more than that of a Wyomingite.

Wyoming residents have more disposable income because less of their money goes to taxes. The higher a person's income, the more this dynamic becomes apparent...and appealing. Because of the lower tax burden, retired and high net-worth individuals are drawn to Wyoming to reduce their overall tax expenditures (Block).



WYOMING ECONOMY

Gregory Nickerson, a reporter for WyoFile, noted that, “Despite Wyoming’s small population, it has a relatively robust state government that spends \$9.3 billion in state and federal dollars every two years.” (<http://www.wyofile.com/how-does-wyoming-spend-9-3-billion-every-two-years>). Further, the Wyoming Taxpayers Association and the Bank’s previous analysis indicate that the household tax burden for Wyoming households ranks the lowest in the nation. So, to support Wyoming’s robust state government, the state has developed a huge reliance, if not an addiction, on the mineral extraction industry. The mineral extraction industry supports 20.3% of state GDP and 6.9% of its employment. However, at the same time, mineral based taxes makes up about two-thirds of State and Local Government total revenue.

The Wyoming Department of Economic Analysis reported in its June 2019 Economic Summary that, “Wyoming’s economy continued to rebound from the severe downturn in 2015 and 2016, and has somewhat accelerated since the third quarter of 2018”. The job market added 4,400 jobs in the first quarter of 2019. This is the largest quarterly growth Wyoming has experienced since the fourth quarter of 2014. Close to half of the jobs created were in the construction sector where energy industries construction projects have increased. Large employment sectors such as the government, health care, and mining saw little job change from the previous year.

Relative to other states, Wyoming is ranked second in total energy production according to the U.S. Energy Information Administration. Wyoming ranks 8th in crude oil production, 4th in natural gas production, and 1st in coal production. As to energy price sensitivity, the Wyoming Taxpayers Association indicates that for Wyoming state revenues:

Every \$1.00 per ton price change in coal results in a \$51 million change in state revenue;

Every \$1.00 per mcf change in natural gas results in a \$189 million change in state revenue; and,

Every \$1.00 per bbl. change results in a \$9 million change in state revenue.

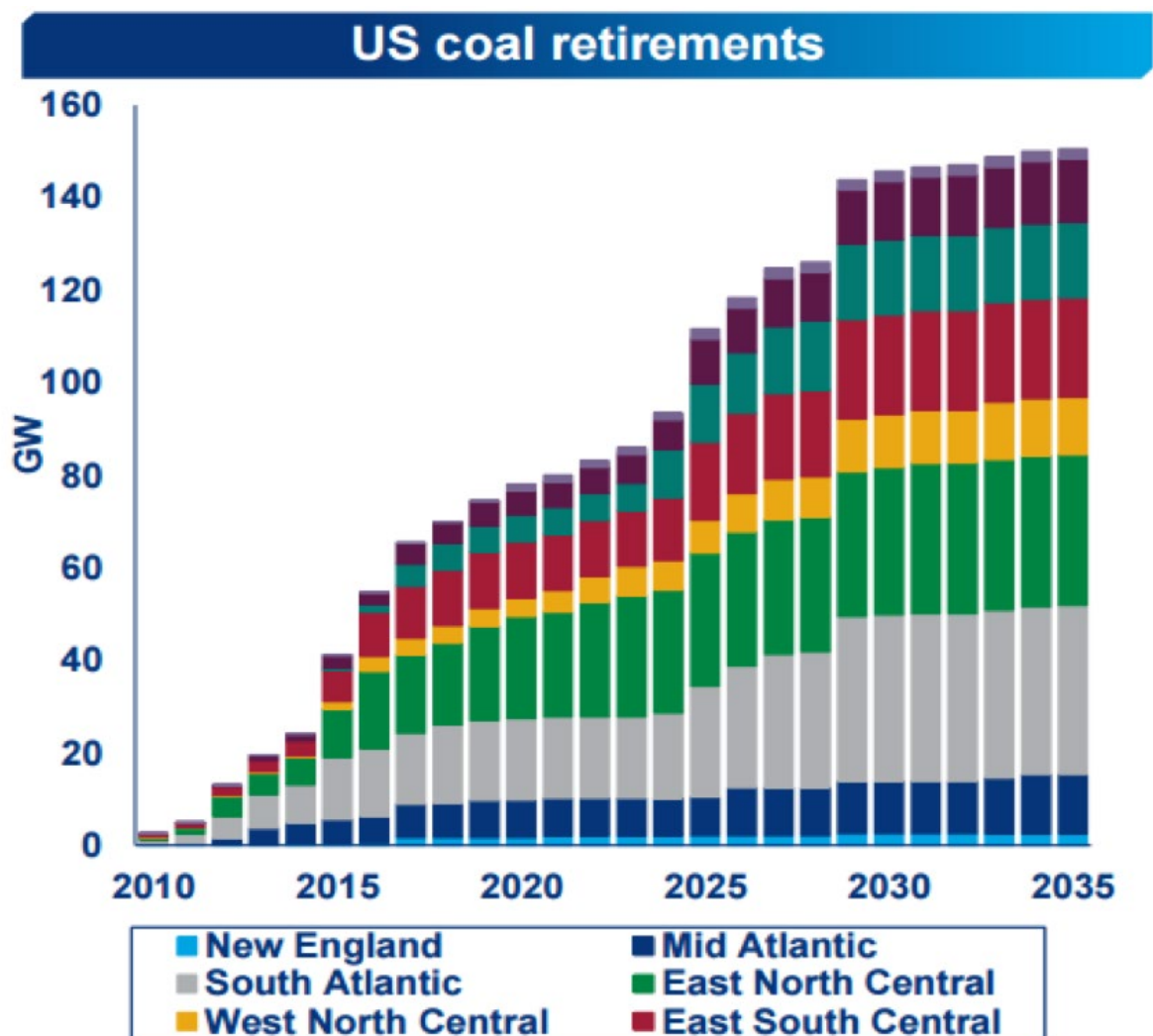
Both the oil and natural gas sectors saw increases in production for the year 2018 as compared to 2017, with a total of 12.2 million more barrels produced.



COAL AND NATURAL GAS IMPACTS

The following graph shows the projected coal fired power plant closures on a U.S. national basis to-date and then closures which are projected to take place by 2035. The projected loss in future coal demand for electrical generation is overwhelming. The large loss of coal based power generation will directly harm the current Wyoming economy as Wyoming is the largest coal producing state in America.

This graph may be subject to change in the near future as companies, such as Rocky Mountain Power and PacifiCorp, are conducting integrated resource plans and studies on closing coal fired power plants earlier than previously planned. These studies are indicating that energy costs to consumers may be lower with premature plant closures. If the companies decide to implement the findings from these studies closures of up to 4 plants in Wyoming could take place as early as 2025.



Source: Wood Mackenzie Americas Power and Renewables Research



As U.S. coal power plant retirements become a reality, there will be reduced demand for Wyoming coal, downward pressure on coal prices, and reduced mineral severance and related sales tax payments to the State of Wyoming.

One may wonder, with all of the troubles facing coal and talk of mine closures where is the power coming from to replace the loss of coal production? The following table, produced by the U.S. Energy Information Administration or EIA, breaks down U.S. power generation by the different sources available. As of 2018, 63.5% of U.S. energy production came from fossil-fuels; of that 63.5% - 35.1% was produced using natural gas, up from 31.8% in 2017. A second telling feature of this table is renewables. Renewable energy made up 17.1% of the power generation in the U.S.; a considerable amount considering that in 2010 renewables only made up 11% of the U.S. power grid. Between these two power sources, natural gas and renewables, coal is struggling to find its place in the future of cheap 'green' energy. It is expected that coal use as a source of energy will continue to diminish in the coming years.



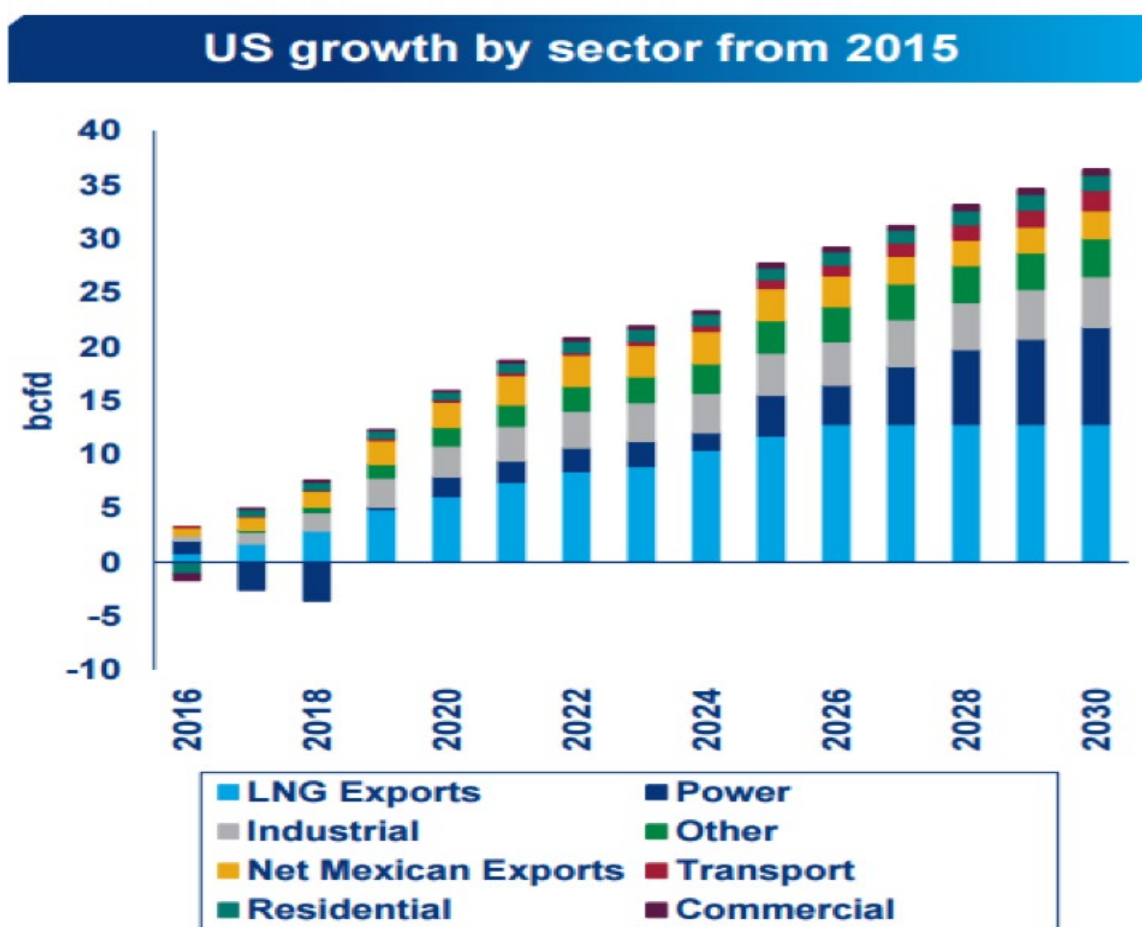
U.S. electricity generation by source, amount, and share of total in 2018 ¹		
Energy source	Billion kWh	Share of total
Total - all sources	4,178	
Fossil fuels (total)	2,651	63.5%
Natural gas	1,468	35.1%
Coal	1,146	27.4%
Petroleum (total)	25	0.6%
Petroleum liquids	16	0.4%
Petroleum coke	9	0.2%
Other gases	12	0.3%
Nuclear	807	19.3%
Renewables (total)	713	17.1%
Hydropower	292	7.0%
Wind	275	6.6%
Biomass (total)	63	1.5%
Wood	41	1.0%
Landfill gas	11	0.3%
Municipal solid waste (biogenic)	7	0.2%
Other biomass waste	3	0.1%
Solar (total)	67	1.6%
Photovoltaic	63	1.5%
Solar thermal	4	0.1%
Geothermal	17	0.4%
Pumped storage hydropower³	-6	-0.1%
Other sources	13	0.3%

Source: Energy Information Administration



Natural Gas on the other hand is expected to increase in demand over time. This is due to it being a cheap and efficient electrical power production source and is used to augment renewables when the renewable sources are not producing power. Further, natural gas is an efficient and popular heating source for buildings. The growing demand for natural gas is being met through large U.S. supply. The large U.S. supply of natural gas will keep prices for natural gas stable even as demand increases.

The following graph shows the predicated growth for the natural gas uses by sector from 2015 to 2030. This graph shows that liquid natural gas (LNG) exports and power production are predicated to increase dramatically in the coming years.



Source: Wood Mackenzie

Wyoming is the 4th largest natural gas-producing state in the nation. While production takes place throughout the state, but most of Wyoming's natural gas has come from fields in the Great Green River Basin; basically Sublette County as well as limited areas of Sweetwater, Uinta and Lincoln Counties. Wyoming has 16 of the nation's largest natural gas fields, including the



Pinedale and Jonah fields that rank among the top 10 (U.S. Energy Information Administration, Wyoming State Profile and Energy Estimates, Dec 2016).

It is expected that in the mid-to-long term, Wyoming's economy will be forced to become less coal dependent. However, the state should continue to see strong severance tax revenue from natural gas, oil, and other mineral extraction.

There is hope that renewable energy, particularly wind, may help fill some of the revenue gaps created with lost coal taxes over time. California and Colorado, states with many consumers and aggressive renewable standards, are talking with Wyoming about potential joint state wind generation. However, as reported in the winter 2017 issue of the Western Confluence, in an article entitled "Turbines on the Horizon", there are political and environmental hurdles with such a joint state venture. For instance, 'California worries about Wyoming's less-green electrons and the loss of new renewable energy jobs, while Wyoming chafes under California's oversight of a shared electricity grid and the prospect of more turbines on the horizon. University of Wyoming research shows something else: wind could be a moneymaker in Wyoming too; enough to help diversify Wyoming's struggling economy when there are few revenue sources." Depending upon how this renewable energy source grows, it is calculated that wind could generate an estimated \$1.9 to \$2.1 billion in tax revenue in Wyoming over 20 years from property taxes, sales and use taxes from construction and operating activities, and the current wind production tax. ([Western confluence](#), Winter 2017, Issue 7, TURBINES ON THE HORIZON).

The idea that wind energy may become a big market in Wyoming is supported by the actions of Wyoming energy companies. Wyoming energy companies are moving to invest money into renewable sources of power with the biggest push in the wind market. The latest evidence of this is Rocky Mountain Power Building 4 new wind farms across Wyoming with completion dates in 2021.

WYOMING ECONOMIC ANALYSIS DIVISION Q1 2019 SUMMARY

Taxable sales in Wyoming grew by 14.1% for the first quarter of 2019 this amounts to \$4.4 billion in total. Most economic sectors saw an increase in sales for the first quarter of 2019. Though the mining sector did see a 22.5% increase from increased sales, it is still 33% lower than that realized in 2014. With the mining sector making up about one-fifth of tax collections its continuing fluctuations are putting stresses on the Wyoming economy.

Tourism, a major industry for Wyoming, also showed growth in the first quarter of 2019. Both Yellowstone National Park and Grand Teton National Park had an increase in visitors. Yellowstone entertained 94,241 visitors in the first quarter of 2019, while Grand Teton was able to bring in 166,412 visitors. This is a total of 260,653 people in the first quarter of 2019 that



have come and spent money at Wyoming businesses while visiting one of the greatest assets of the state.

Investment into Wyoming's general fund hit \$75.1 million for the first quarter of 2019. This is 7.6% higher than was realized in the first quarter of 2018. The state also generated \$163.4 million dollars in mineral severance taxes, a 3.9% increase from first quarter 2018, but still 39% less than the peak that was reached in first quarter of 2014.

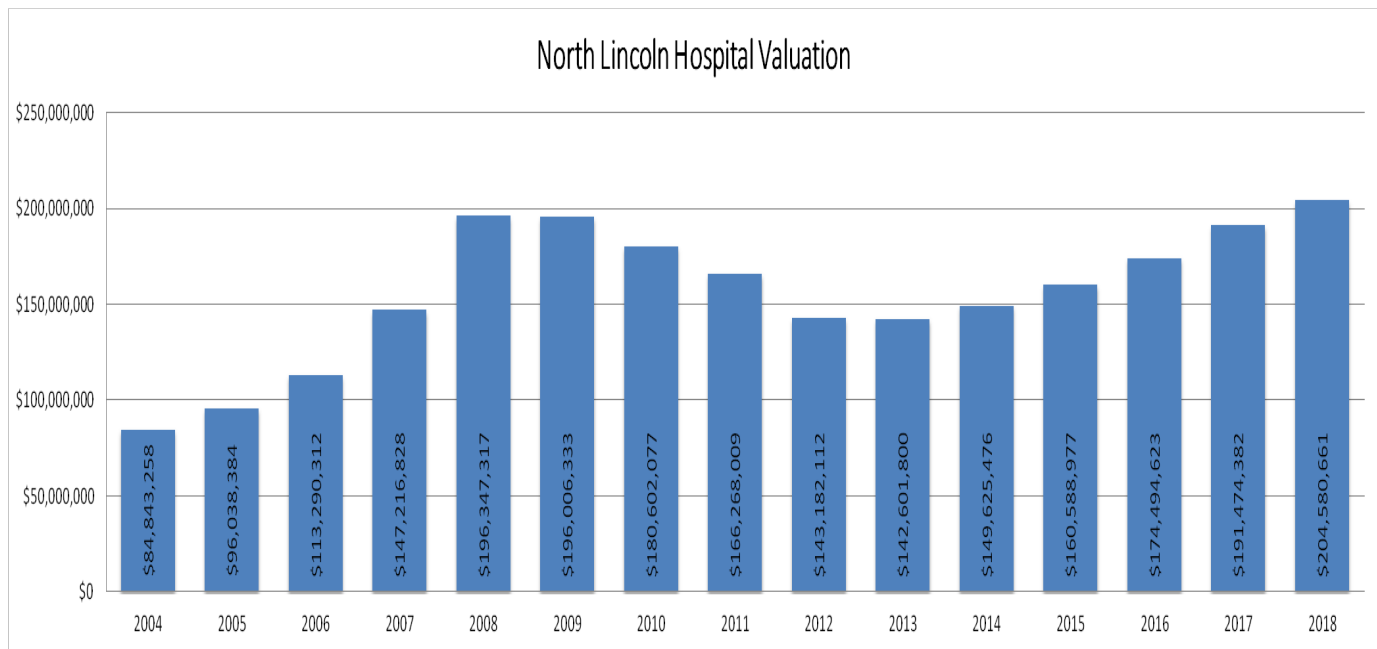
In 2016 the authors were very worried about the apparent decline in state revenues, and the trickle-down effects to the highly dependent local governmental entities. However, Wyoming has seen stabilization since the 2016 revenue declines. The growth in revenues that began in 2017 has continued into 2019. This is very positive as it provides the state legislature time to carefully investigate and develop alternative long-term income strategies, and it removes some of the immediate pressure to drastically cut governmental expenditures in the short run.

REAL ESTATE

The assessed valuation of the North Lincoln County Hospital District covers all of Star Valley, Wyoming, but does not include Star Valley, Idaho. Because the District covers the vast majority of the Star Valley area, the assessed valuation can be used to represent changes in Star Valley's real estate values over time. Assessed valuation is a lagging indicator as the valuation is performed by the Lincoln County Assessor's office based upon prior year sales information.

The 2018 assessed valuation for the North Lincoln Hospital District was \$204,580,661. This valuation is a 6.84% increase over 2017, indicating a strong positive appreciation in real estate values. The assessment has been steadily increasing since 2013. The 2018 valuation is the highest valuation ever recorded for the North Lincoln Hospital District, surpassing the pre-recession, real estate-bubble numbers of 2008. The bottom of the post-recession trough was 2013's valuation of \$142,601,800. The trend over the last five years is a clear indication that property values are increasing in aggregate and represents an annual growth rate of 8.69% and a total appreciation of 43.46% since 2013.





Source: Lincoln County Assessor

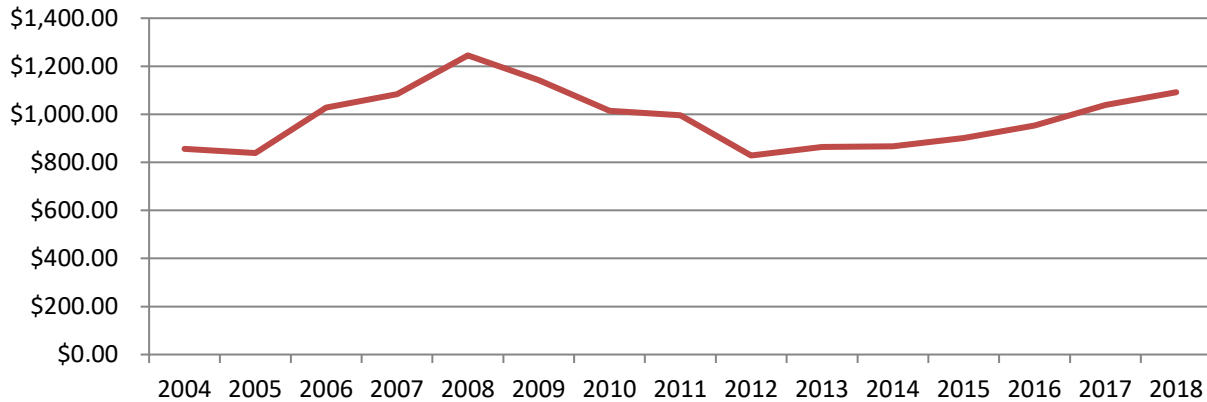
PROPERTY TAXES (SELECT PROPERTIES)

For over a decade, the Bank has tracked the property tax assessments for ten different properties located throughout Star Valley. The purpose of this exercise is to document trends in specific real estate assessments in different areas of the Valley. The graph below shows the trend in property tax assessments for the subject properties from 2004 to 2018. The accumulation of the select properties tax assessments mirrors the trends identified in the total North Lincoln Hospital District valuation with the exception of select property taxes not yet reaching their peak realized in 2008.

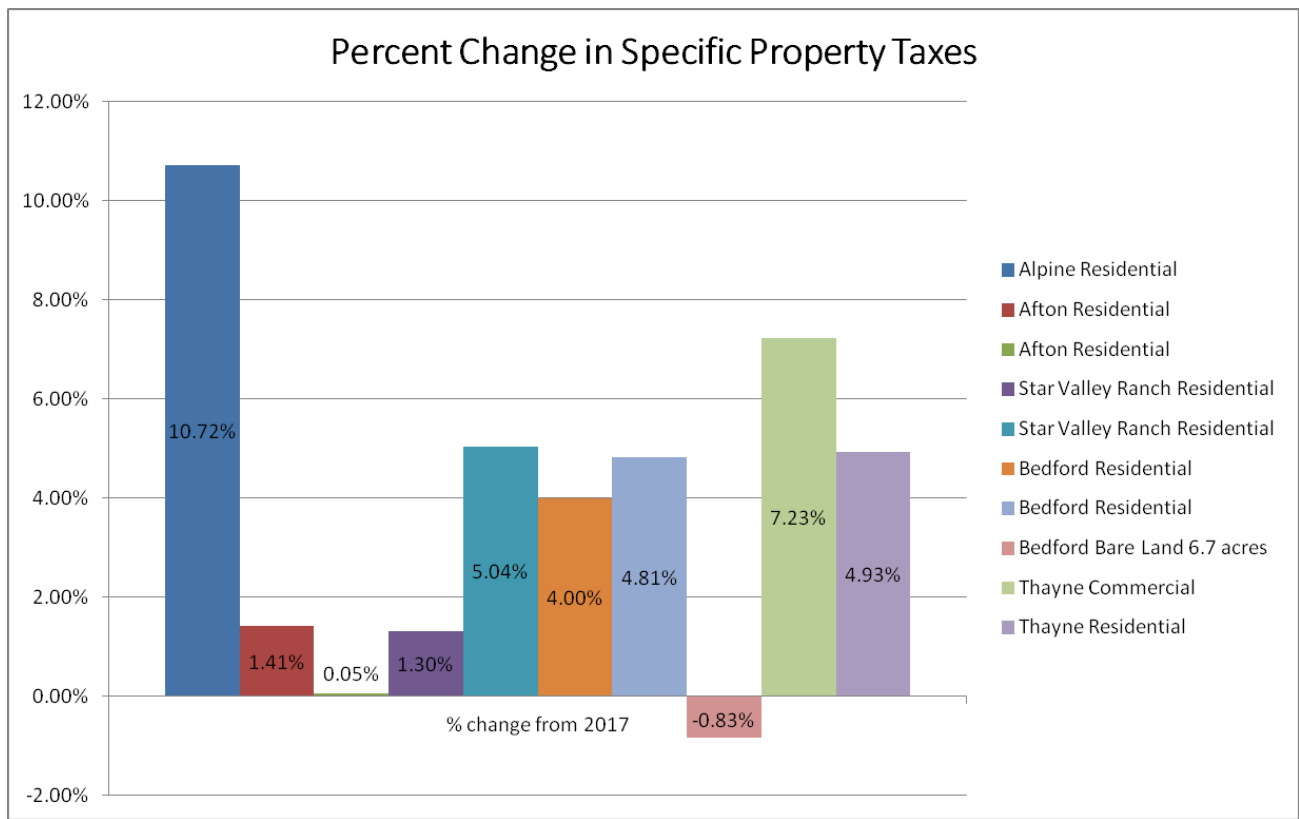
This factor brings out one important note in the hospital valuation. While it is tempting to look at the hospital valuation as a static measure showing true real estate appreciation over time, (i.e. my house value has appreciated X% because the hospital valuation has increased X%), that is not necessarily the case. Each year property improvements occur throughout the district, including subdivisions being added, home expansion and improvements, agricultural ground being converted to residential or commercial lots and new residential and commercial structures being built: all of which dramatically increase the valuation of each respective parcel. Thus the overall hospital valuation does not only capture overall property appreciation, but also incorporates property improvements. This dynamic partially explains why the select property tax assessments show a similar trend as the hospital district valuation, but has not increased at the same rate as the hospital valuation.



Specific Property Taxes for Select Properties



The following graph shows the percent change in valuation for select properties from 2017 to 2018. This hints at where the greatest amount of market appreciation is happening. In the sample, Alpine shows the greatest appreciation at a 10.72% increase from 2017's valuation. This increased valuation can be exciting if an Alpine area resident is looking to sell a property, but it also means that Alpine area property owners are seeing real increases in their tax liabilities and new residents are facing higher pricing pressure in home purchases.



NEW HOME CONSTRUCTION

The construction of new homes is an important indicator of local economic conditions and the real estate market as it represents population growth, direct investment, and construction industry labor conditions. The Lincoln County Planning and Zoning Department and the four incorporated towns in Star Valley are kind enough to provide the Bank with the new construction permit data each year to analyze home permits. Note that new homes in the Idaho areas of Star Valley are not included in this new home count.

Total Star Valley New Home Permits

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
New Homes Non-Incorporated	219	230	201	113	91	41	31	25	33	37	66	94	98	113	114
Total Homes Non-Incorporated	1674	1904	2105	2218	2309	2350	2381	2406	2439	2476	2542	2636	2734	2847	2961
% Rate of Growth	15.1%	13.7%	10.6%	5.4%	4.1%	1.8%	1.3%	1.0%	1.4%	1.5%	2.7%	3.7%	3.7%	4.1%	4.0%
New Homes Afton	6	9	12	23	7	7	6	0	2	5	2	2	5	6	7
Total Homes Afton	670	679	691	714	721	728	734	734	736	741	743	745	750	756	763
% Rate of Growth	0.9%	1.3%	1.8%	3.3%	1.0%	1.0%	0.8%	0.0%	0.3%	0.7%	0.3%	0.3%	0.7%	0.8%	0.9%
New Homes Thayne	5	1	5	2	1	1	1	0	0	0	0	0	6	4	0
Total Homes Thayne	129	130	135	137	138	139	140	140	140	140	140	140	146	150	150
% Rate of Growth	4.0%	0.8%	3.8%	1.5%	0.7%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	2.7%	0.0%
New Homes Alpine	14	5	6	12	4	1	0	0	0	0	1	3	5	5	10
Total Homes Alpine	302	307	313	325	329	330	330	330	330	330	331	334	339	344	354
% Rate of Growth	4.9%	1.7%	2.0%	3.8%	1.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.9%	1.5%	1.5%	2.9%
New Homes SV Ranch		73	43	21	16	2	5	5	2	3	2	5	17	20	22
Total Homes SV Ranch	727	800	873	916	937	953	958	963	965	968	970	975	992	1012	1034
% Rate of Growth		10.0%	5.4%	2.4%	1.7%	0.2%	0.5%	0.5%	0.2%	0.3%	0.2%	0.5%	1.7%	2.0%	2.2%
Total New Homes	244	318	267	171	119	52	43	30	37	45	71	104	131	148	153
Total Homes	3502	3820	4117	4310	4434	4500	4543	4573	4610	4655	4726	4830	4961	5109	5262
% Growth Rate in SV	9.6%	9.1%	7.0%	4.2%	2.8%	1.2%	1.0%	0.7%	0.8%	1.0%	1.5%	2.2%	2.7%	3.0%	3.0%

Source: Lincoln County Planning & Zoning, Town of Afton, Town of Alpine, Town of Star Valley Ranch

The number of building permits has been increasing since 2011. Last year realized the highest number of building permits since the Great Recession with 153 permits. This shows very positive growth in the housing market and a strong construction economy. However, high as these numbers appear, they are only half the pre-recession numbers realized in Star Valley.

The first six months of 2019 are on track to have similar number of permits as compared to the building permit numbers for 2018. There were 83 building permits issued up to June 2019. Of these permits, 62 are in the non-incorporated parts of Star Valley and the remaining 21 in the incorporated towns. The residential construction sector for Star Valley is continuing to be strong. The table below shows the amount of permits from beginning of January 2019 to the end of June 2019.



	2019 YTD (June)
New Homes Non-Incorporated	62
Total Homes Non-Incorporated	3023
% Rate of Growth	2.1%
New Homes Afton	3
Total Homes Afton	766
% Rate of Growth	0.4%
New Homes Thayne	0
Total Homes Thayne	150
% Rate of Growth	0.0%
New Homes Alpine	6
Total Homes Alpine	360
% Rate of Growth	1.7%
New Homes SV Ranch	12
Total Homes SV Ranch	1046
% Rate of Growth	1.2%
Total New Homes	83
Total Homes	5345
% Growth Rate in SV	1.6%

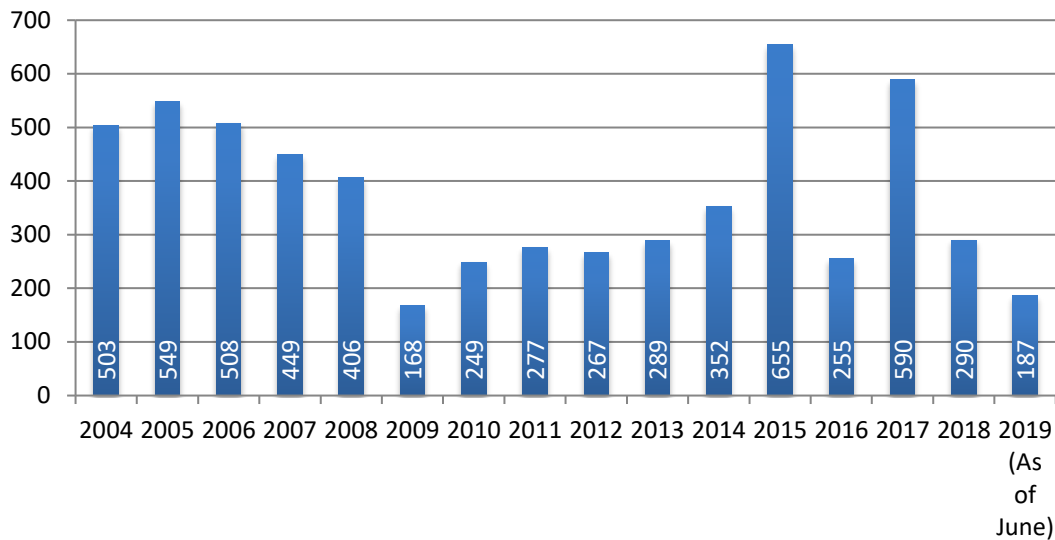
Source: Lincoln County Planning & Zoning, Town of Afton, Town of Alpine, Town of Star Valley Ranch

UTILITY CONNECTIONS

In addition to building permits, new utility service connections are another indicator of real estate activity. The local energy cooperative, Lower Valley Energy, serves Star Valley, Teton County, Wyoming, Swan Valley, and Bondurant. Because they serve a larger area than this economic analysis covers, the numbers do not directly correlate with, or directly represent, the number of North Lincoln County new home permits. However, the data is valuable in identifying regional market activity. New utility connections followed the same trend as new home permits realizing a peak in 2005 and then a tailing off through 2009. Between 2009 and 2014 there was minimal growth in the number of new service connections and post-2015 there has been huge variation in the number of new connections.



Total New Services Connected



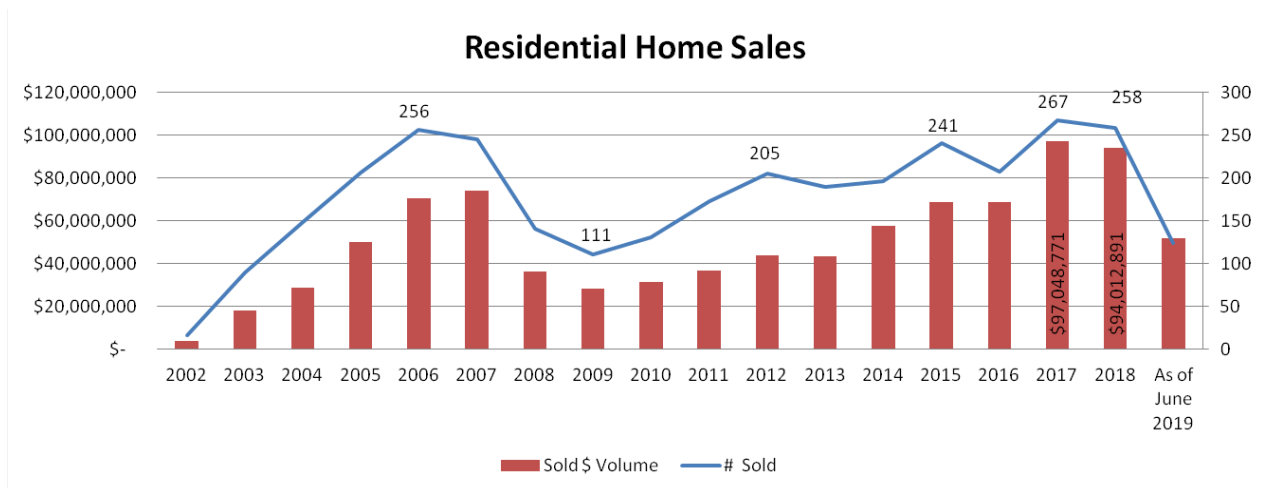
Source: Lower Valley Energy

RESIDENTIAL HOME TRANSACTIONS

In Star Valley, the majority of the real estate sales transactions are documented through the Multiple Listing Service (MLS). However, private party sales are occurring that are not reported in MLS, and therefore total market activity is in fact greater than that derived from the MLS. That being said, it is felt by the authors that the MLS numbers adequately represent trends which are occurring in the real estate market.

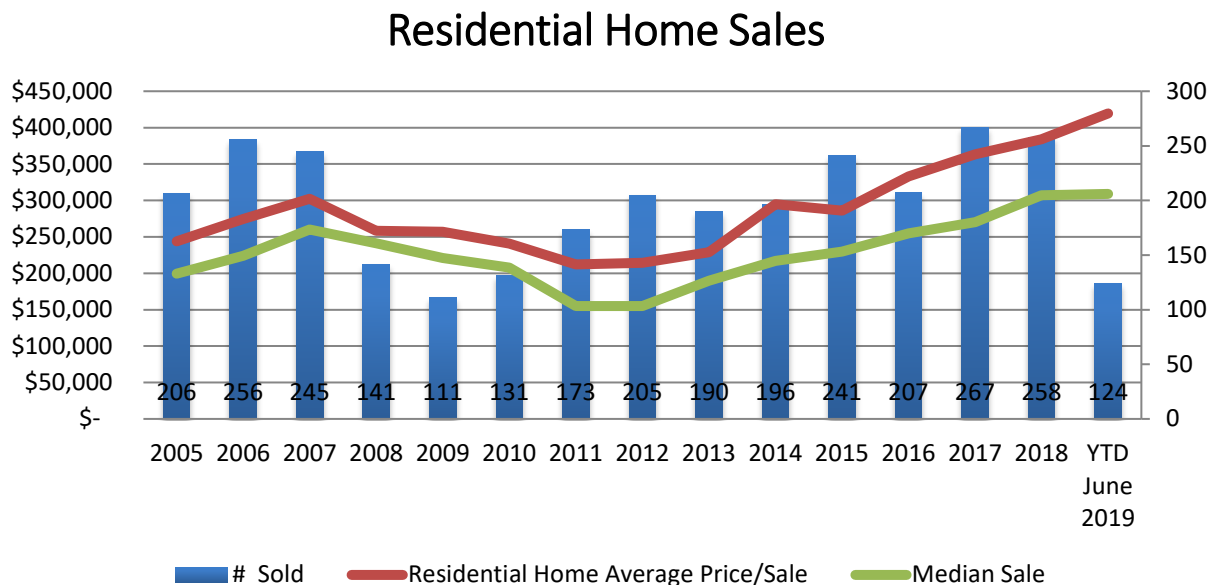
Single-family home sales are the main driver in the Star Valley real estate market. Buying a home is likely the largest purchase many families will undertake during their lifetime and often represents a significant portion of a person's wealth.

The following graph shows the total annual number of sales and the total annual volume of the residential home sales in Star Valley since 2002, derived from MLS data. There was a steady increase in both the number of sales and the dollar volume the first five years shown in the graph and, as one would expect, a sharp decline during the Great Recession which has since rebounded.

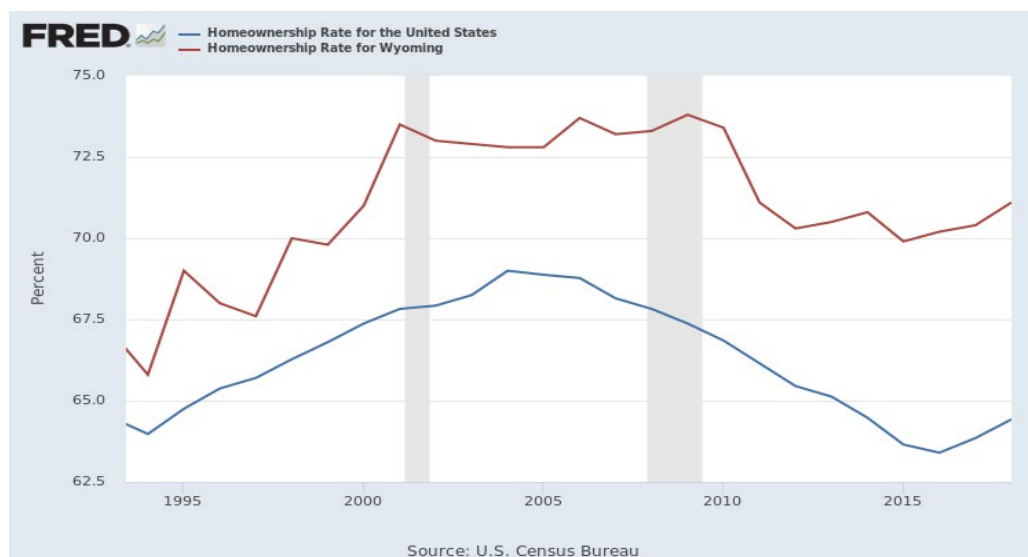


The housing market for Star Valley has continued to be strong for the first 6 months of 2019. Over this span of time 124 houses have been sold with a total sales volume of \$52,018,986. The 124 transactions realized in the first half of 2019 is 6 homes less than the 130 transactions during the same six-month period realized in 2018. However, 124 transactions is still a large number of homes sold for such a small community.

The following graph shows average and median residential sales in Star Valley over time. For the first 6 months of 2019 the average residential home sales price was \$419,508 as compared to the average price of \$414,571 for the first half of 2018.



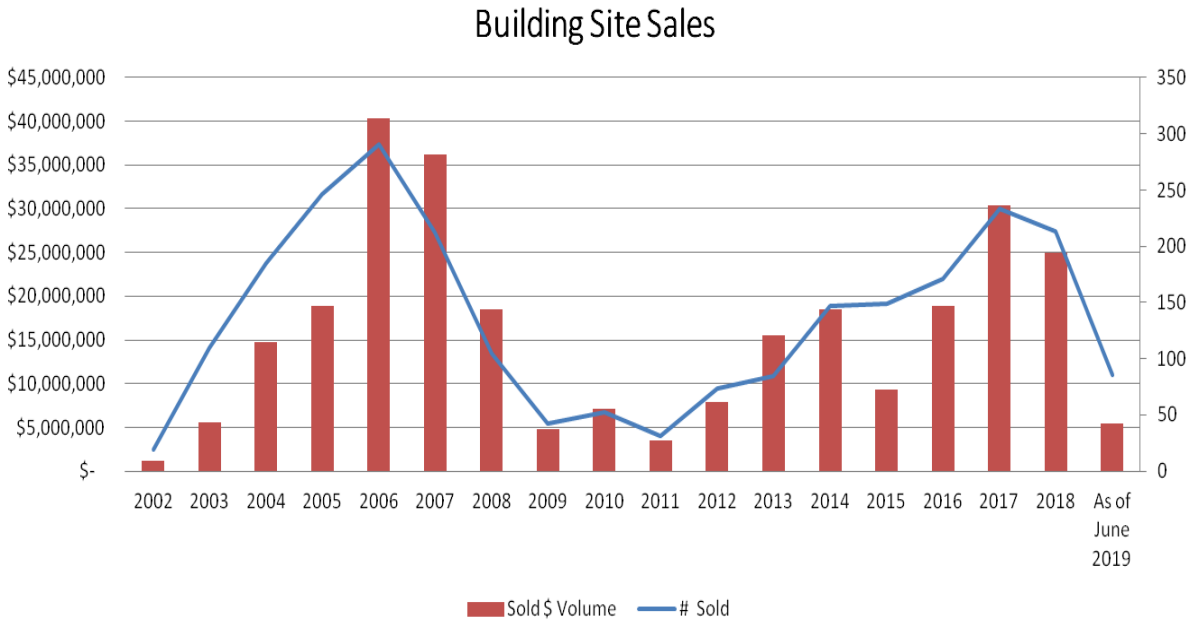
The median sales price is a better indicator of home prices as it is not skewed by a few high-priced homes. The median home price for the first half of 2019 was \$309,000. This is an increase of \$2,000 from 2018 and a continuation of the trend of consistently increasing home prices. This constant increase in home prices may be of concern as it makes it harder for low to mid-level income earners to purchase a home in the area. This may be one of the largest driving forces for the high demand for rentals in the area. Homeownership is important to an area as home ownership results in a higher commitment to an area, higher stability, and creates a stable source of demand for the areas goods and services. Wyoming still enjoys a higher percentage of home ownership than the U.S. average (illustrated in following graph).



Source: Federal Reserve Economic Data

BUILDING LOT TRANSACTIONS

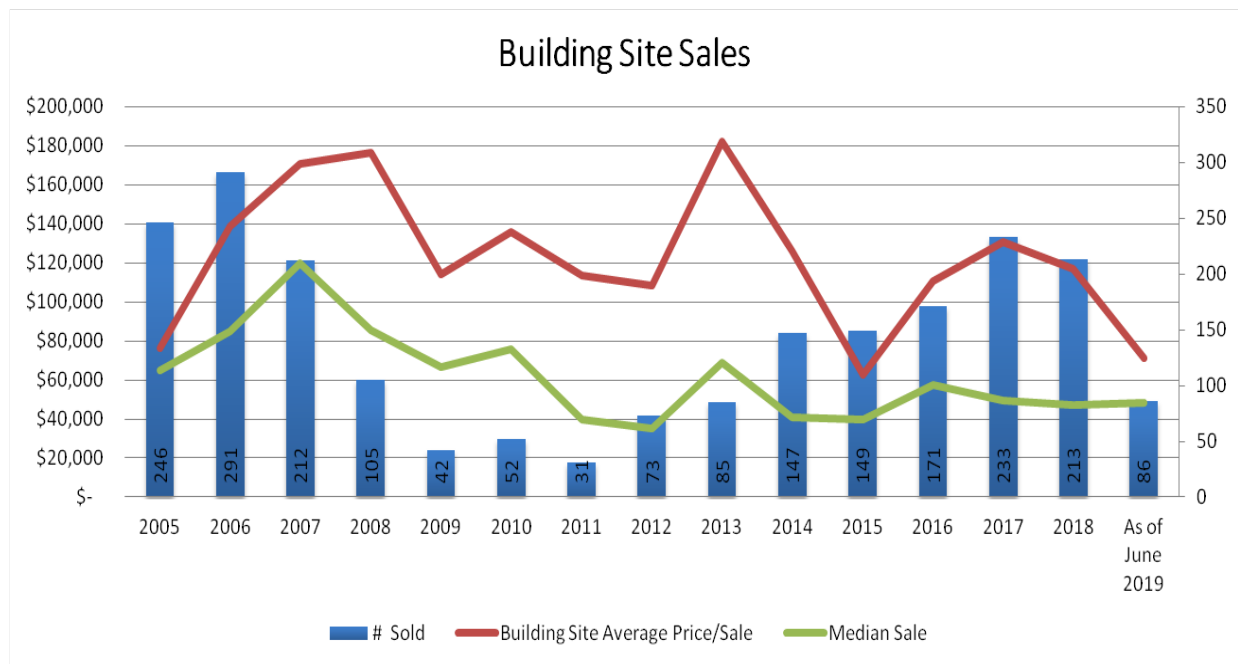
The total number of building lot sales and the total sold value of building lots in the Star Valley area since 2002 are illustrated on the following graph. Building lots of all sizes are included in the figures and 2019 data represents only the first 6 months of activity.



Building lot sales peaked in the number of lots sold in 2006 at 291 and decreased sharply until 2009. Though Star Valley is seeing a large number of building lot sales from year-to-year, there was a slight decrease from 2017 to 2018. There was also a 5 lot decrease for the first half of 2019 when compared to the same time frame in 2018. The first half of 2019 had 86 lot sales as compared to the 91 in 2018.

The average sales price of buildings lots is a difficult metric because a building lot could be a \$400,000 - 20-acre lot or it could be a \$9,000 - 0.4 acre lot both of which affect the average dramatically. The average lot sale price through the first half of 2019 was \$71,231 compared to \$75,999 for the first 6 months of 2018. The median lot sales price, which deals more fairly with the large variation in sales prices, for the first half of 2019 was \$48,260 compared to \$47,000 for the first half of 2018. Both the average and median lot sales prices in Star Valley are shown in the following graph from 2005 through June 2019.



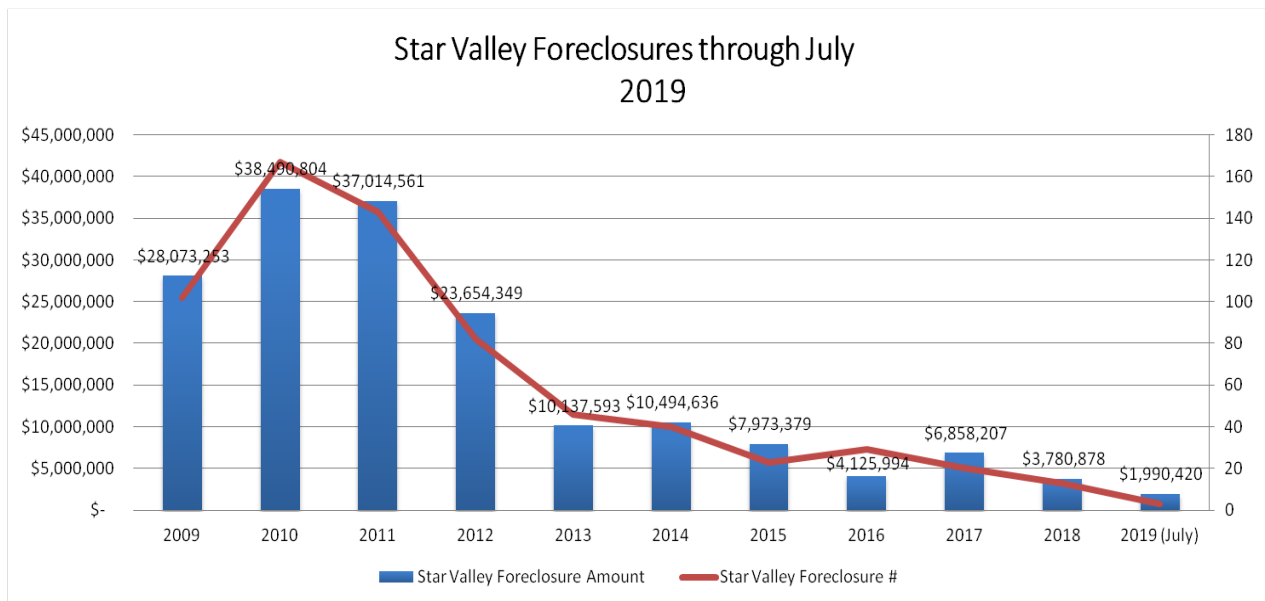


FORECLOSURE ACTIVITY

Foreclosure activity has an inverse relationship with real estate market activity and overall economic health. Foreclosures generally occur due to job losses or difficult economic times, especially during times of depressed real estate values. Foreclosed homes usually sell for less than comparable homes not in foreclosure.

The bank has monitored the published foreclosures since 2009 using newspaper publishing's in the Star Valley Independent and the Kemmerer Gazette. The following graph shows the number of advertised foreclosures in Star Valley since 2009. The number of foreclosures has decreased significantly since the Great Recession. In Star Valley, through July 2019, there were a total of three foreclosures, with a total foreclosure amount of \$1,990,420. This is four fewer foreclosures than the seven advertised in the first half of 2018. However, the foreclosure dollar amount for the first six-months of the year was nearly equivalent with 2018's seven foreclosures of \$1,849,575. This reflects the increase in home costs, and corresponding higher mortgages amounts, which have occurred over the past few years.

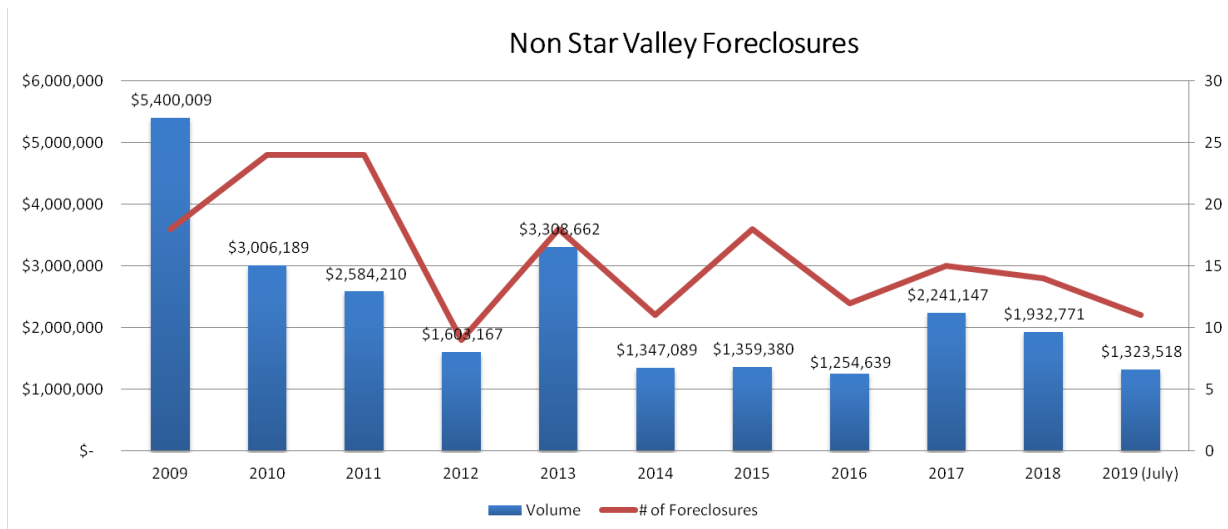




Source: Kemmerer Gazette

Due to the struggling coal industry, which has a direct affect on southern Lincoln County, the authors felt it was worth reviewing the number of Lincoln County – Non-Star Valley foreclosures. While Star Valley has had three advertised forclousers in the first half of 2019 southern Lincoln County has had eleven foreclousers. Clearly the struggling coal mine and associated power plant issues are having a negative affect on the southern half of Lincoln County.

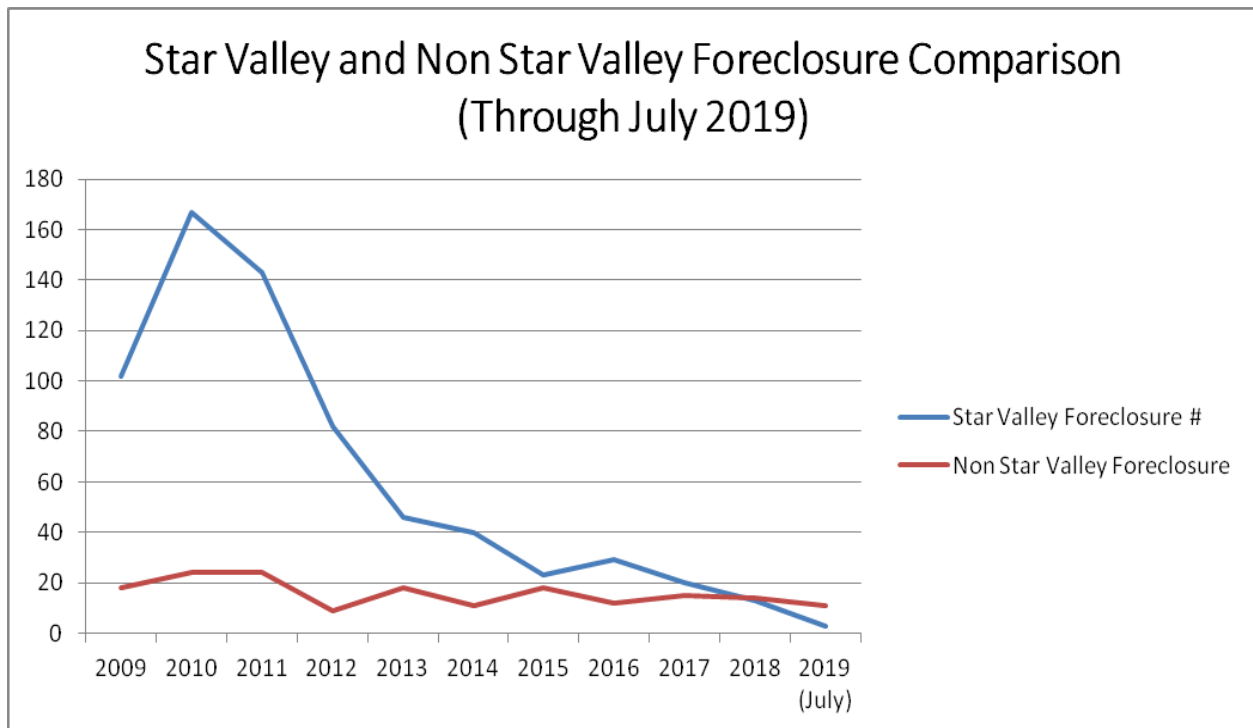
The following graph shows Non-Star Valley foreclosures from 2009 to July 2019.



Source: Kemmerer Gazette



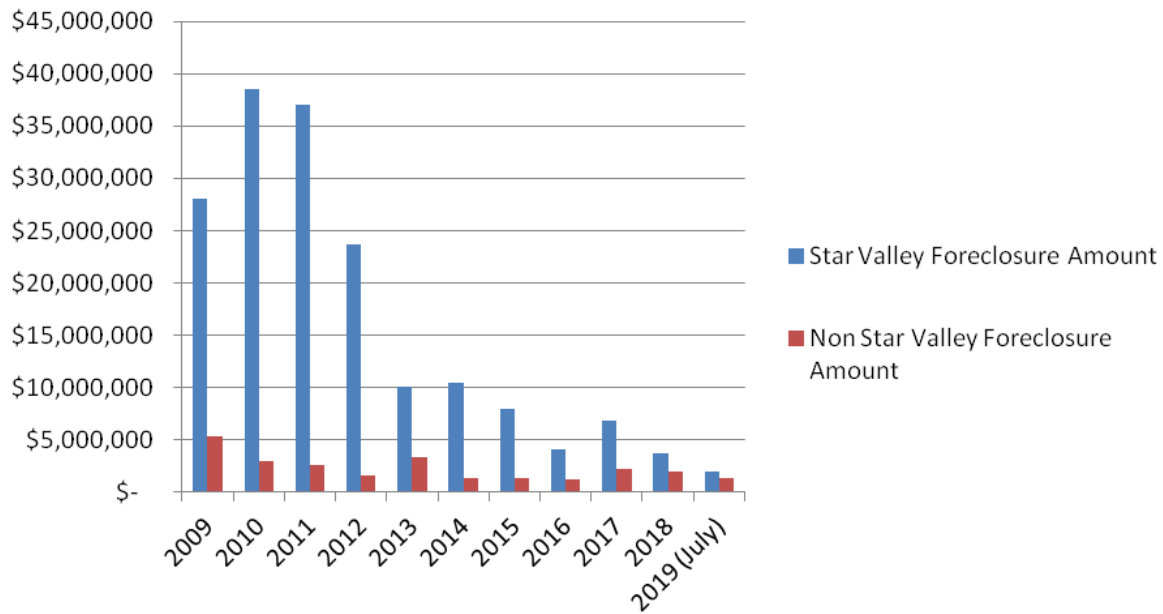
The following graph compares the number of Star Valley foreclosures to the number of Non-Star Valley foreclosures. The value of Non-Star Valley foreclosures surpassed Star Valley foreclosures for the first time in 2018. The trend is continuing into the first half of 2019 with the nine foreclosure difference between the two areas.



Source: Kemmerer Gazette

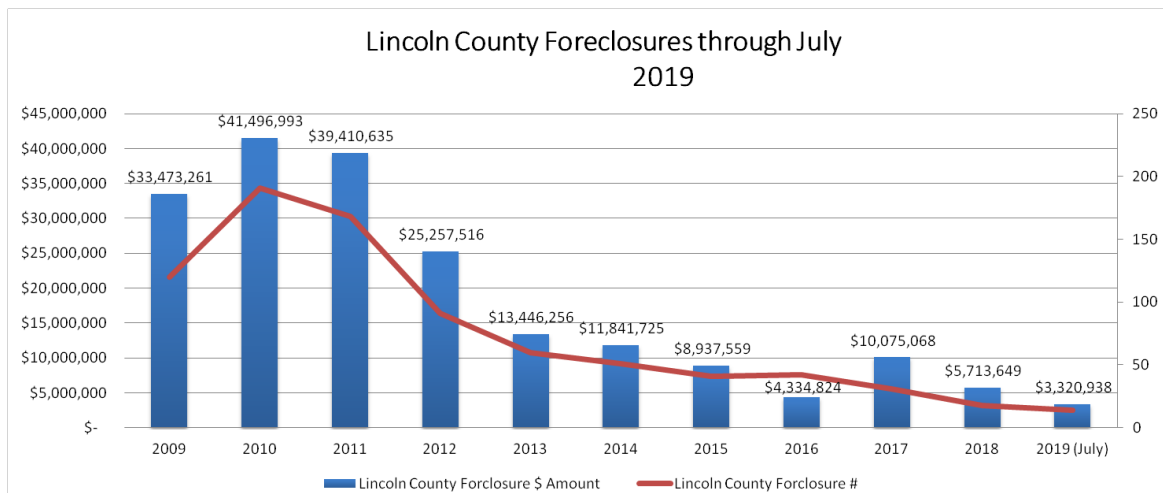
While Star Valley has fewer foreclosures when compared to Non-Star Valley foreclosures, Star Valley still reports a higher dollar volume in foreclosures due to its high real estate prices. This is illustrated in the following graph.

Star Valley and Non Star Valley \$ Comparison



Source: Kemmerer Gazette

Combining Star Valley and southern Lincoln County we can look at total Lincoln County foreclosure count and dollar volume. This is shown below.



Source: Kemmerer Gazette

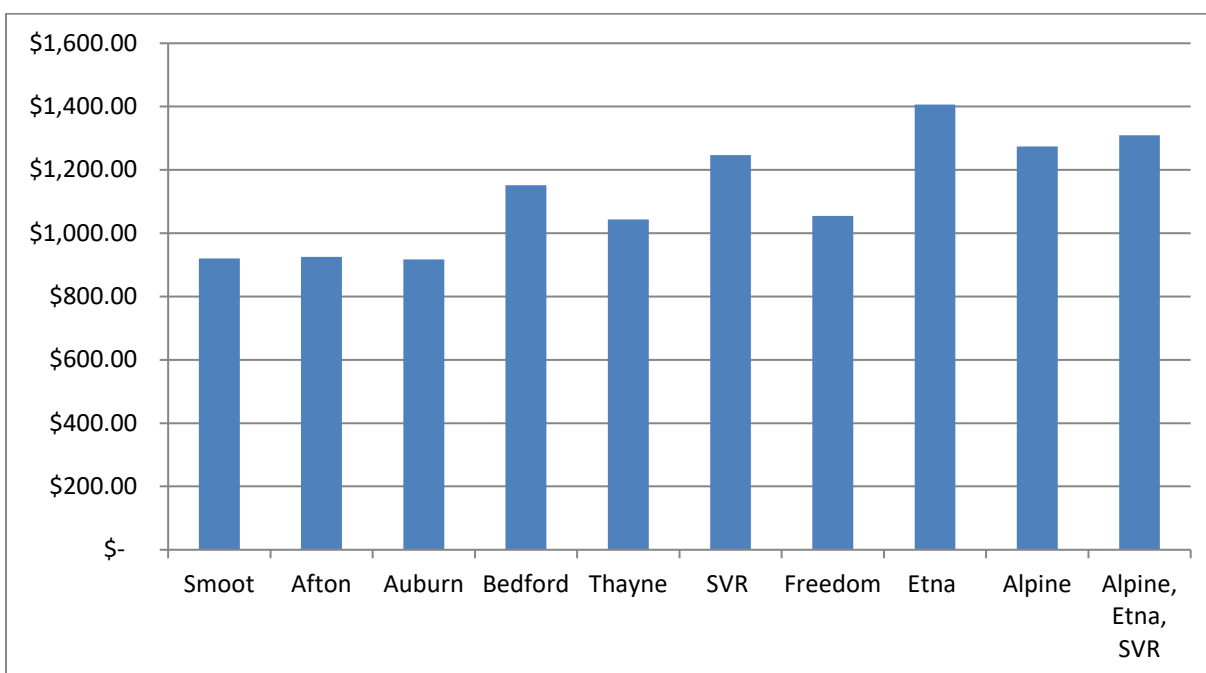


RENTAL COSTS

The residential rental market is an important market sector as it represents both home-ownership housing alternatives and real estate investment opportunities. Last year, the Bank began researching, in greater detail, the cost of renting a home in the Star Valley area. Increased regulation and the related consumer protection requirements have made it harder for individuals to obtain a mortgage and to purchase a home. Added to regulatory changes is the decreased supply of affordable housing and the increasing price of homes resulting in a perfect storm roiling against prospective moderate-income home buyers.

The Bank surveys local landlords to estimate an average rental cost for different towns throughout Star Valley. The overall average for a rental unit in Star Valley is \$1,087 based on our 2019 survey, which is greater than the \$1055 for the 2018 survey. The average monthly cost for a rental house was \$1,125 compared to \$1055 for 2018 and the average monthly rental cost for an apartment was \$980 compared the \$958 of 2018. Even though rental prices have increased over the last year it is still currently a cheaper option to rent a home in Star Valley then it is to buy a home in Star Valley, that is - if one can find a unit to rent.

Though there is not sufficient data to quantify the supply and demand for rentals in Star Valley, the difficulty of finding suitable rentals in the area indicates that there is greater demand for rentals than there is a supply of rentals. This will cause the cost of rentals to continue to rise over-time. The average rental prices by town for 2019 are shown in the following graph.



Source: Local Landlords



The Alpine, Etna, and Star Valley Ranch averages show the highest rental prices. The authors feel that this is due to the larger Jackson based commuter population that resides in the lower valley and the apparent lack of housing inventory.

STORAGE UNITS

Star Valley has realized extraordinary growth in the number of storage units being built in the last few years. For the size of the valley's population, one would not expect to see as many storage units that currently exists. In June 2019 the bank conducted a market survey and counted 2,160 storage units currently in the valley, with more being built. Seventeen percent of the current storage unit complexes had more units in the process of construction during the time of the survey.

The 2,160 storage units in 2019 amount to 522 more units, or a 31% increase, from the previous year's survey. This is a large increase for such a small population with more units still in production. There are a few factors that could explain the large number of, and demand for, storage units in Star Valley.

First, Star Valley's close location to Jackson and the high cost of real estate in Teton County. The bank study indicates that 73.9% of the storage units currently built are located in the lower valley area. Alpine had the second most amount of units with 533, only exceeded by Afton which has 564. This supports the "proximity theory" where demand for storage units is from non-valley residents. The high cost of land in Jackson is not suitable for storage unit development as they are not the most economical use of the high-cost land. Star Valley is a less expensive alternative for storage unit construction to meet the demand of people living in the Jackson area.

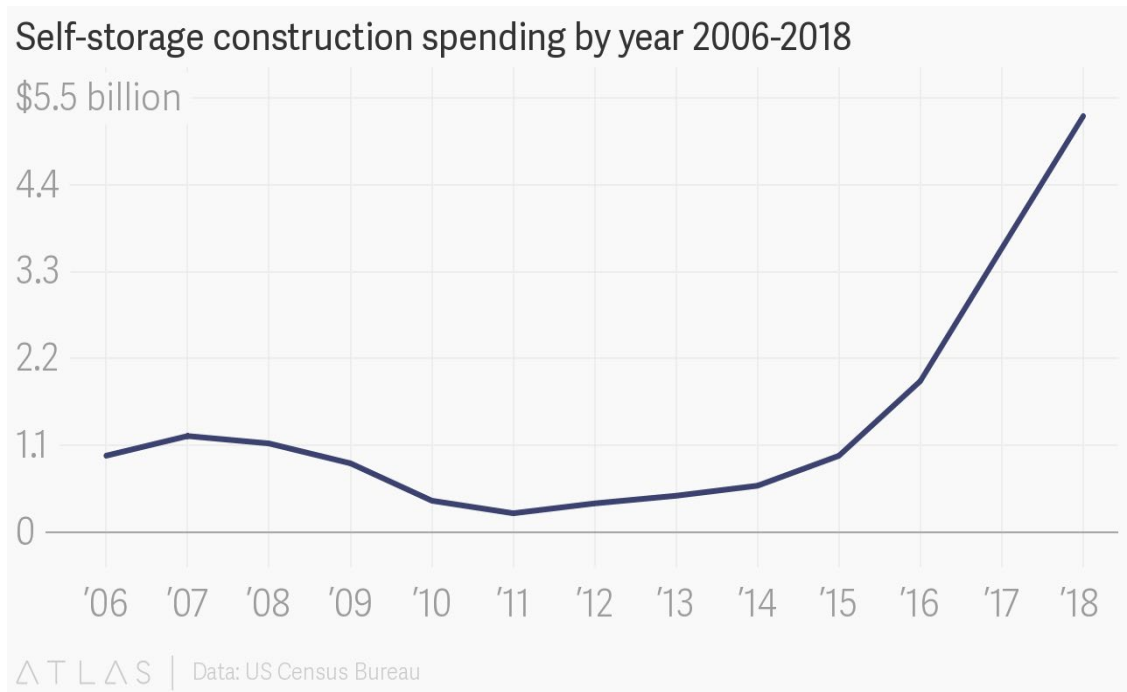
Another explanation for the high demand for storage units could be the lack of affordable housing in Star Valley and the strong local real estate market. Individuals who can't afford to buy a house, or who are in a transition period, and are faced with the reality of renting and often need additional space for their personal belongings. Further, rental size or rules may not provide individuals adequate space to store their belongings.

Another possible reason for the increasing demand for rentals is the general affluence of the population under the current positive economic conditions. With the U.S. in its longest economic expansion in history, currently at 121 consecutive months, people have more disposable income, and they are buying things that they then have to find a place to store.

Regardless of the exact reason behind the increased local storage unit demand, the new popularity of storage units appears to be a national trend. Following is a graph showing self storage construction spending per year. Spending has already far surpassed that of pre-recession spending, with the graph beginning to increase at an almost exponential rate. This



may give some credence to the idea of generally increasing affluence leads to large amounts of purchases for individuals; this in turn leads to more storage units to store the increased number of purchased goods.



CONSTRUCTION COSTS

Due to the increasing new construction in Star Valley, the Bank chose to look at the construction costs of new homes in the valley over the past few years. The bank segmented total construction costs into construction budget cost categories. The segmented cost categories are foundation, framing, exterior finishes, major systems installation, interior finishing, final details, wells, and septic.

The bank’s study revealed that the 2018 average construction cost was \$155 per square foot -- which does not include land costs, utility connection costs, and only includes square footage that was completed and livable. For example, the square footage of an unfinished basement is not included in the total square footage of the home, but finished basement, main, and upper level square footage would all be included. The construction costs per square foot illustrated in the table below represent the average cost per square foot for finished and livable square feet over the last four years. The trend exhibits a strong increase in cost of construction over time.

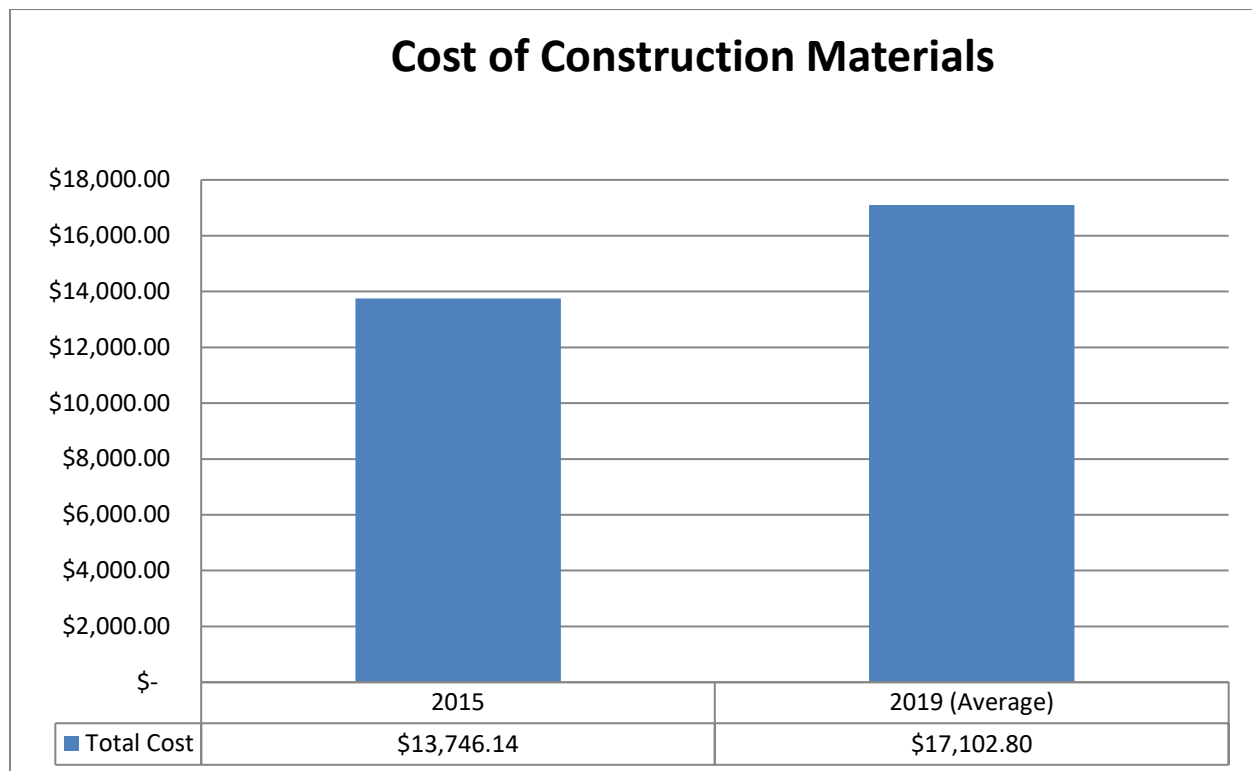


Year	Construction Costs Per Square Foot
2018	\$155.06
2017	\$147.22
2016	\$145.36
2015	\$136.62

Based on the median home size in 2018 of 2,400 square feet, the 2018 construction costs-per-square foot was \$155, the median building site cost for 2018 of \$47,000, and the median septic and well cost for 2018 of \$16,000, the bank determined that the median cost to build a median home in today's market is \$435,000. When comparing this cost to the different income metrics for Lincoln County the average resident of Star Valley is currently not able to afford \$435,000. This leads to less individuals being able to afford new homes in the Star Valley market.

BUILDING MATERIALS

With construction costs constantly rising the bank started to track the cost of a basket of building materials used in a home construction. The 2019 materials are compared against the same market basket in 2015. The following graph shows the difference in total price for the materials. An average price was taken based on the materials prices from Jenkins Lumber, Evergreen, and Calls Ready Mix



The basket of construction material has increased in cost by \$3,356.66 over the 4-year period in review for a total increase of 24% or a 6% annual increase. This is consistent with the per square foot cost of construction found above. As the costs of inputs increase the cost of home construction will increase. Therefore, it can be expected that home prices will continue to increase as the trend of increasing material costs continue.

The basket of construction materials used in the review is shown bellow.

Item	Qty
I-Joist: 11 7/8" x 1 3/4" x 32'	50
Rim Board	250 LF
I Joist Hangers: Top Mount	26
Gold Edge Floor Sheeting	70 Sheets
Glulam Beam: 5 1/8" x 18" x 22'	1
PT: 2 x 6 x 16	25
PT: 2 x 4 x 16	15
Timber Strand, Stair Stringers: 2 x 12 x 16	12
Stair Treads: 4'	40
Pre Cut 9' wall studs: 2 x 6	270
Pre Cut 9' wall studs: 2 x 4	120
2 x 6 x 16	105
2 x 4 x 16	50
2 x 6 x 10	180
2 x 10 x 16	25
7/16" OSB	100 Sheets
Sill Seal: 5 1/2"	350 LF
Sub Floor Adhesive	3 Cases
Ring Shank Flooring Nails	2 Boxes
3 1/4" Framin Nails	4 Boxes
3 1/4" Galvanized Gun Nails	1 Box
4" x 1/2" Concrete Anchors	1 Box of 50
5/8 Compression Washers	75
Bostitch ?Hanger Nails	1 Box
3/4" x 10" Lags	3
Galvanized Hammer Tacker Staples	3 Boxes
House Wrap	3 Rolls
Vycor: Window Sill 6" Rolls	1 Case



GERNERAL MARKET SUMMARY

The U.S. economy has entered into its longest economic expansion in history. The current expansion has lasted over 121 months as of June 2019, exceeding the previous record of 120 months which took place in the 1990's. Unemployment is also reaching its lowest levels of the last 60 years for the U.S. hitting 3.7% in June 2019. In July the Dow Jones Industrial Average (a stock index) broke 27,000 for the first time in history. This shows that the current U.S. economy is strong.

The University of Michigan performs a survey of consumer sentiment for the U.S. economy. The following graph illustrates how consumers are feeling about the current economic climate. The consumer sentiment survey shows that consumer sentiment has been growing since the Great Recession and has surpassed pre-recession confidence in the economy.



It is important to note that signals are beginning to warn that the current economic growth could be weakening both domestically and globally. Global GDP growth rates are slowing, trade disputes are continuing if not escalating, the FED has elected to lower short-term interest rates, and bond market yields have fallen across the board. Further the three-month and ten-year Treasuries spread became negative two months ago and has remained inverted since – as the

spread has been a reliable predictor of recessions in the past, there is a growing fear of a recession on the horizon.

Real GDP growth which tracked close to 3.0% for 2018 is now closer to 2.1% for the second quarter of 2019. A low unemployment rate, though positive, also means that the supply of labor is tight, while at the same time the demand is high. According to the Bureau of Labor Statistics there are currently 0.8 unemployed persons per job opening in the United States. This means that companies are struggling to find employees to fill positions. This is extremely apparent in the construction industry as there is a predicted 300,000 worker shortage across the United States. This leads to delays in projects, increasing construction costs, and an impact on investment into new infrastructure. Though immediate economic statistics look positive, signs are emerging indicating potential near-term problems.

The FED has also currently halted its plan to normalize interest rates faced with the current economical environment and lower than 2% inflation. Jerome Powell (the current FED chairman) has recently announced a 0.25% cut to the feds fund rate taking it from 2.5% to 2.25% in order to spur investment and increase inflation. This could help to extend this current period of economic growth.

For the present, Star Valley's economy is running smoothly. It is enjoying low employment, real estate appreciation, upward wage pressure, and a generally optimistic outlook towards the future. Life in Star Valley is as good as it has ever been, and economically speaking, should continue to be bright in the near-term.



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