# THE BANK OF STAR VALLEY STAR VALLEY ECONOMIC AND DEMOGRAPHIC REVIEW August 2020







# Summary

Star Valley economy was strong in 2019. Lincoln County led the state in growth at 2.0% with Star Valley's growth at an estimated 4.5%. Student enrollment is projected to increase by 100 students over 2019 enrollment and real estate values increased by about 9.7%. Wages increased and construction continued. The U.S. economy was going very strong in 2019 with all three major stock markets reaching record highs. A new record was set each month for continuous months of GDP growth. National unemployment hovered around 3.5% and poverty continued to drop. Economic indicators signaled 2020 would be another great year. Then COVID19 threw a curve ball in the first quarter of 2020 and abruptly halted economic progress.

Because of COVID19, government entities closed schools, churches, and businesses. Many people started telecommuting from home and turned to on-line business to supply their household goods. Unemployment reached levels not seen since the great recession or great depression. For the first time in history, oil futures traded at -\$42.32 per barrel. Demand for coal dropped by 18%. The low demand for energy severely impacted Wyoming's revenue. By the end of first quarter, many people and businesses were very concerned about their physical and economic health. State and Federal governments responded with economic spending packages to keep people employed and keep them in their homes. Wyoming businesses received between \$828 MM and \$1,470 MM in PPP loans to help them get through the COVID19 pandemic. Star Valley businesses received between \$16.8 MM and \$28.9 MM in PPP loans.

Lincoln County and Star Valley do not appear to have been as hurt as rest of Wyoming or the U.S. Star Valley's unemployment rate stayed lower than unemployment rates in Teton County, Wyoming, or the U.S. This is partially because Star Valley is not as energy dependent as much of Wyoming or based in tourism as much as Teton County. Star Valley continues to build storage units and new houses and price of construction materials continues to increase. Although COVID19 dealt a blow to the Star Valley economy, Star Valley will continue growing for the short and long terms.

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 it sincere gratitude to all those who helped provide the information and data and thank them for their time, assistance, and patience.



# A SPECIAL THANKS:

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# 2020 STAR VALLEY ECONOMIC and DEMOGRAPHIC REVIEW

### **INTRODUCTION**

The following document is The Bank of Star Valley's 2020 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, <a href="www.bosv.com">www.bosv.com</a>. 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 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.

After three years of population decline, Wyoming's population grew by a modest 0.2% from 2018 to 2019. Seniors age bracket, ages 65 and over, grew 3.8%, making Wyoming the fastest aging population in the country. This honor is primarily attributed to aging Baby Boomers, but outmigration of young people and lower fertility rates among women also contributed. Despite its speed in growing old, Wyoming's population was still ranked as the 21<sup>st</sup> youngest in the U.S.

The growth rate of all Wyoming counties for the period of 2018 to 2019 is shown in the graph below. Ten of the twenty-three Wyoming counties experienced an increase in population. Although, negative population growth has slowed statewide, it continues to be a problem for eleven Wyoming counties. For the second year in a row, Hot Springs County experienced the highest rate of population loss with at -3.40%. Population growth remained essentially flat for Johnson and Weston Counties.

The graph below shows the population change of Wyoming counties. For the third year in a row, Lincoln County had the highest rate of growth rate for any Wyoming county, contributing to its economic health.



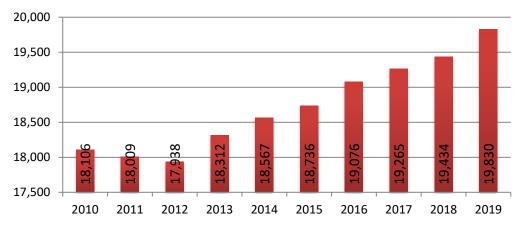
# % Change in Population 2018-2019 Sweetwate **Hot Springs** Washakie Sheridan Converse Natrona Weston 3 2 1 0 -1 -0.8 -1.2 -2 -3 -4

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

EAD estimations indicate that Lincoln County has been steadily growing since 2013, with strong growth in 2019 indicating a healthy economy. The Wyoming Economic Analysis Division (EAD) estimates that between 2018 and 2019 there was an increase in Lincoln County population of 2.0%, or 900 people. According to EAD estimates, the population of Lincoln County has increased by 1,724 people since the 2010 census. This constitutes a 9.52% population increase over the nine-year period of 2010 to 2019, or an annualized population growth rate of 1.06%.

The graph below depicts EAD's population estimations from 2010 to 2019 for Lincoln County.

# **Lincoln County Population**



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



### 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 2018 to 2019, which was 4.75%.
- Star Valley population average annual growth at the same rate realized between the periods of 2010 to 2019, which was 01.08%.
- Star Valley population growth at the 2010 to 2019 annual Lincoln County growth rate adjusted for the higher growth rate realized in Northern Lincoln County resulting in an estimated growth rate of 1.06% (low-end constraint).
- Star Valley population growth at the average annual rate the area experienced from 2000 to 2010, which was 2.42% (high-end constraint).

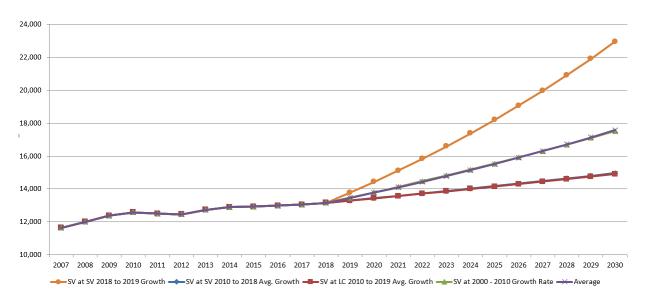
The authors utilized an average of the four growth scenarios to represent a preferred indicator for the highest probability for future population. It is estimated that Star Valley's population, as of year-end 2019, was approximately 13,776, which is a 4.75% increase over 2018.

The high growth rate scenario indicates that in 2021, the Star Valley population may be as high as 15,115 individuals, and the low growth rate scenario forecasts a population of at least 13,573 individuals. Based upon the model results, it is projected that the valley's population will continue to grow to an estimated 17,500 in 2030.

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 recalibrate it for the 2020 - 2030 time periods. Below is the graph of the Star Valley population projections derived by the current model.

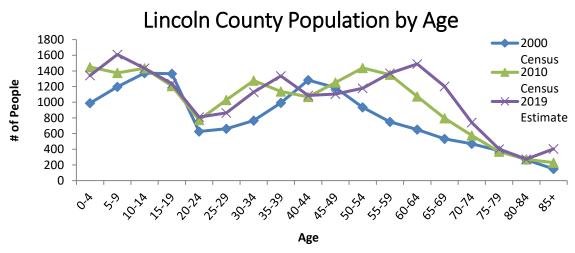


### **Star Valley Population Projection**



### POPULATION COMPOSITION

Total Lincoln County population segmented by age groupings for the years 2000, 2010 (U.S. Census counts), and 2019 (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 2019 estimate, there continues to be 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.

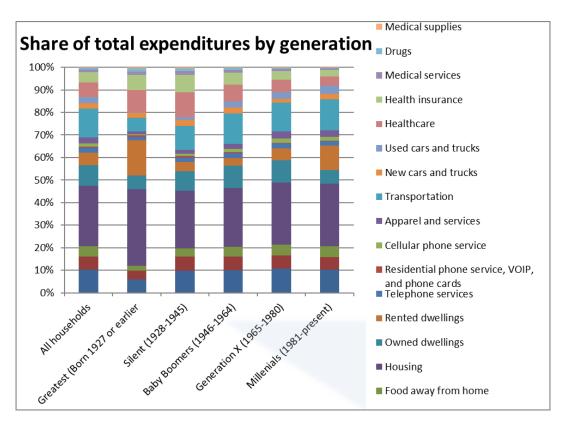


The decrease in the size of both age groups is of concern. Many Star Valley businesses are older-well established businesses and exhibit slower employment growth. Further, there is a general lack of new or start-up businesses. The authors feel that the decrease in these two age groups is directly related to the current lack of higher skilled employment opportunities in Star Valley. Additionally, college educated people in the 25 to 34-year-old age group generally carry student loan debts which must be repaid soon after they graduate. Student loan debt, children, combined with medical insurance obligations create high barriers for these people to start businesses.

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. Increased demand for medical and retirement service-related jobs is a driver for the local economy because it adds jobs to the area.

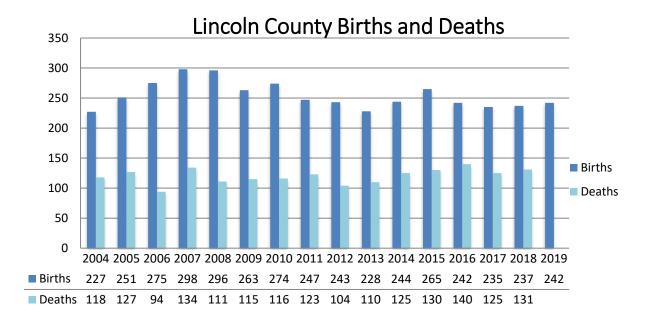
The chart below, created by the Bank using 2018 data from the Bureau of Labor Statistics, shows the spending characteristics of various age groups. Younger individuals unsurprisingly spend a large portion of their income on housing, food, transportation, and healthcare. These expenses account for approximately 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.





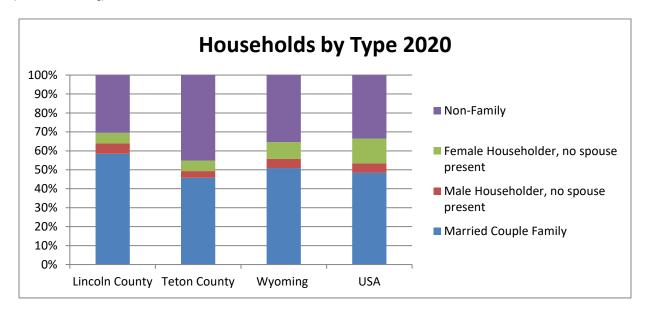
Source: Bureau of Labor Statistics

According to the Wyoming Department of Health, there was an increase in both the number of births and deaths in Lincoln County in 2019. 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 2019 is shown below.





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 (SuburbanStates.org), and Lincoln County (SuburbanStates.org) for 2019.



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

Lincoln County remains high in the number of married couple family households at 58.40%. Further, Lincoln County married couple family households decreased 4.77% from the 2019 percentage of 63.17%. 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 are the State of Wyoming with 50.92%, the United States with 48.42%, and Teton County with 45.71%.

In 2019 about 9.08% of households in Lincoln County were 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 household in a defined 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.

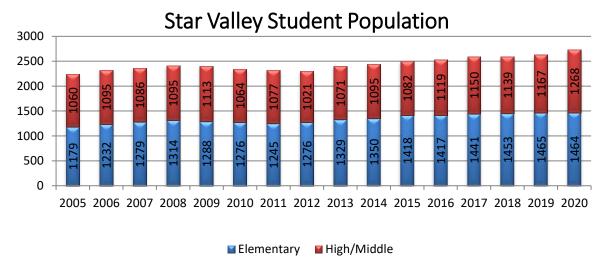
Persons Per Household

U.S.	2.52
Wyoming	2.46
Teton County	2.42
Lincoln County	2.67

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 2020 having the highest student enrollment with 2,732 students. The 2020 enrollment showed a large increase of 100 students over 2019 enrollment. This is the largest year over year increase since 2013. The increase occurred in all Star Valley schools except Afton/Osmond elementary schools where there was a loss of 32 students. For the second year in a row, the student population in the upper valley elementary schools decreased. Enrollment numbers suggest more growth is occurring in the lower valley than in the upper valley.

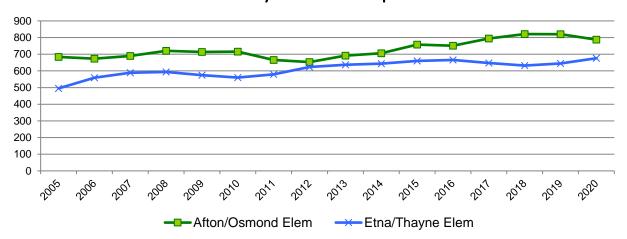


Source: Lincoln County School District #2



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 throughout Star Valley). This metric is illustrated by comparing the number of elementary students attending schools in the upper and lower valley areas – both of which have elementary (K – 6 grade) schools. Historically, the upper valley elementary schools have had higher student populations. However, for the most recent two periods, the upper valley schools have decreased, lowering enrollment in the upper valley to 788 students. At 676 enrolled students, the lower valley schools increased by 31 students, nearly making up for the upper valley's loss. Star Valley Middle School, High School, and Swift Creek combined, increased by 101 students.

# **Star Valley Student Population**

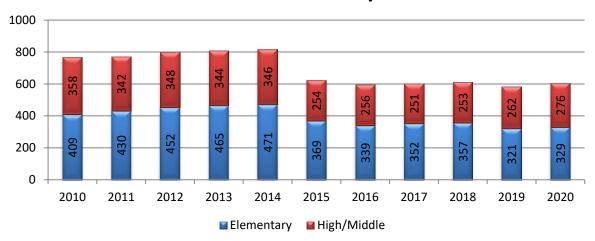


Source: Lincoln County School District #2

Since 2015, the Kemmerer student population has remained relatively flat with small year over year increases or decreases. In 2015 Kemmerer middle school was closed and combined with the high school. In fall 2020 Kemmerer elementary school will close and combine with Canyon elementary in Kemmerer. Below is a chart of the student population from 2010 to 2020.



# **Kemmerer Student Population**



Source: Lincoln County School District #1

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 2019 data, Lincoln County has more high school graduates relative to Wyoming and the United States. However, Lincoln County 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	93.80%	94.40%	92.90%	87.70%
Bachelor's Degree or Higher	22.60%	57.40%	26.90%	31.50%

Source: U.S. Census Bureau

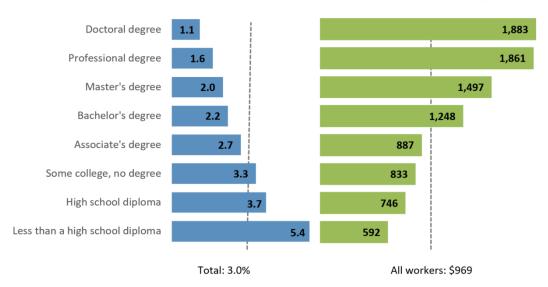
The relatively low percentage of individuals in Star Valley holding a bachelor's degree or higher is concerning because statistics clearly indicate that higher levels of education are strongly correlated with lower unemployment and higher salary levels. Unfortunately, demand for higher degree jobs in Star Valley is lower than in more densely populated areas. As a result, many Star Valley High School graduates leave soon after graduating to purse educational and employment opportunities elsewhere. A lack of employment opportunities prevents many of these people from returning.

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 2019 (most recent information).



# Unemployment rates and earnings by educational attainment, 2019





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.

### **DOMICILE LOCATION**

Another way to identify where growth occurs is by examining the growth of 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. It shows much of the growth is in the lower valley.

**Star Valley Population by Community** 

			Ota.	· · ae.	· Opan	<u> </u>	y community						
	2000	2010	2013	2014	2015	2016	2017	2018	2019	Change in # People	Growth Rate		
Thayne	341	366	362	364	376	367	382	383	394	11	3.23%		
Alpine	550	828	835	845	852	855	866	878	924	46	8.36%		
SV													
Ranch	776	1,503	1,523	1,541	1,546	1,570	1,581	1,597	1,659	62	7.99%		
Afton	1,818	1,916	1,947	1,968	1,965	1,995	2,005	2,006	2,041	35	1.93%		

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

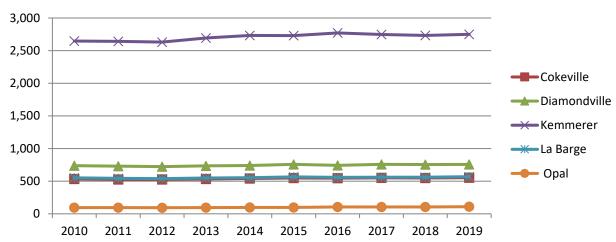
Remember that these estimates are based upon a statistical estimation by EAD, and therefore, they are not an exact census count. However, based on EAD data, it is estimated that Star Valley's population grew by approximately about 120 individuals in 2018 and 625 in 2019. Afton added 35 people to its population. Thayne, Alpine, and Star Valley Ranch realized population surge of 109 persons. The data suggest that all of Star Valley is growing, but more growth is



occurring in the lower valley than in the upper valley. Data also suggest that growth continues to be higher in non-incorporated areas than in incorporated towns. In 2018 and 2019, nearly 75% of population growth occurred in non-incorporated areas of the valley.

As can be seen in the chart below southern Lincoln County has not experienced the same population growth as Star Valley. The population of these towns has remained relatively flat for the past several years. Stagnate growth has been discussed in previous publications and is largely attributed to low energy prices and resulting coal mine closures.

# Southeast Lincoln County

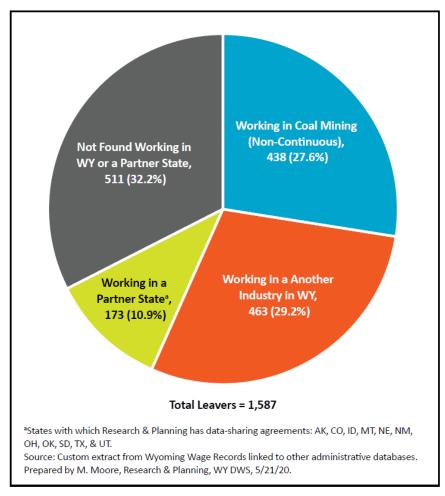


Source: State of Wyoming Department of Administration and Information Economic Analysis Division

Over the past several years, national and global demand for coal has decreased resulting in job losses throughout coal country. Since Wyoming supplies approximately 40% of the nation's coal, it unavoidably has been impacted by the lower demand. Wyoming coal industry lost 20% of its customer base over the previous 10 years and will lose another 23% over the next 10 years as coal-fired power plants are decommissioned. Since 2009 to present, Wyoming coal mining jobs have decreased from approximately 7,000 jobs to about 5,000. This drop equals about 29% Wyoming's coal industry jobs. The average Wyoming coal miner earned \$85,000 before the downturn. The coal mine in Kemmerer employed approximately 300 people, so its bankruptcy has had a significant economic impact on Kemmerer, Diamondville, and the surrounding areas. One might ask, what happened to these miners?

Wyoming Department of Workforce Services conducted a study of where Wyoming coal miners went after losing their jobs. Since the study is specific to coal miners in Wyoming, it can be reasonably assumed that it fairly represents former Kemmerer coal miners. The graphic below shows where some of these workers may have gone.





Source 2020 Wyoming Workforce Annual Report

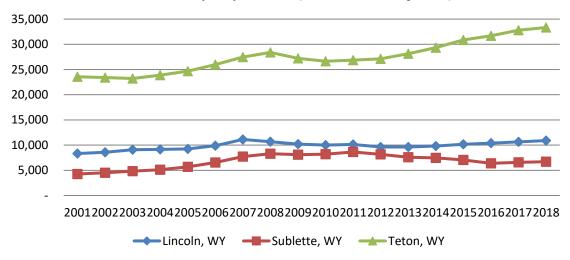
The above pie chart by WY DWS suggests that most workers found another industry to work in, retired, or remain unemployed. Only about 10.9% moved to a different state. The pie chart corroborates with the line chart above showing the population estimate of Southeast Lincoln County showing population remained relatively flat. The 2020 census will more accurately document any population changes resulting from the downturn in the energy industry.

### **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.



# Total Employment (number of jobs)



Source: Bureau of Economic Analysis

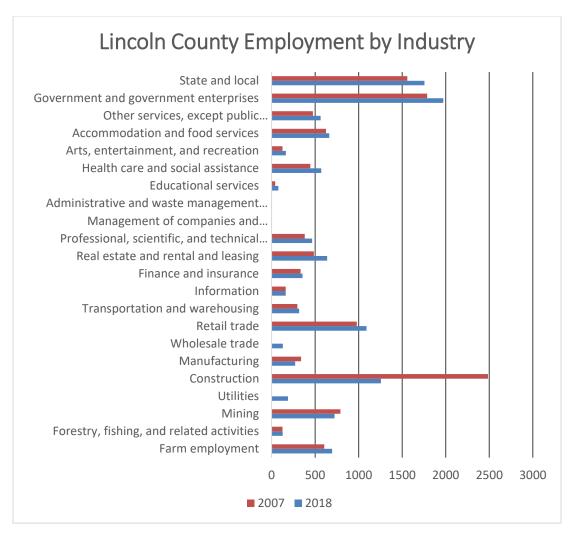
Lincoln County's labor force climbed to 10,891 in 2018, almost reaching 2007 levels of 11,116. This is the eight time it has exceeded 10,000 participants. Since 2012, Lincoln County has experienced a slow employment growth trend of about 2%-3% every year.

Sublette County, a neighboring highly energy dependent county, experienced a slight increase in employment with 6,698 jobs in 2018 up from 6,580 in 2017. Teton County, a tourism and recreational based economy, continues to realize a constant upward trend in the number of jobs, ending 2018 with 33,331 jobs. This is an interesting statistic considering that the number of 2018 reported jobs is larger than the total estimated 2018 Teton County population of 23,464, or a shocking 1.40 jobs per resident. If the number of jobs in Teton County is correct and given that no area has a 100% labor force participation rate, Teton County imports a considerable percent of its daily employees from commuters from Star Valley and Victor/Driggs. This fact is reinforced by the number of job postings in the Jackson Hole Daily newspaper.

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 is compared in the graph below with 2018, which is the most recent year available.

Many of the other industries in Lincoln County are nearly back to, or exceeding, the prerecession numbers. There has been growth in government, accommodation, health care, and education service jobs over the last few years. It is important to note that Star Valley's major employers include essential service providers in the government and healthcare sectors. This could be why Star Valley, overall, has fared well during the energy downturn.





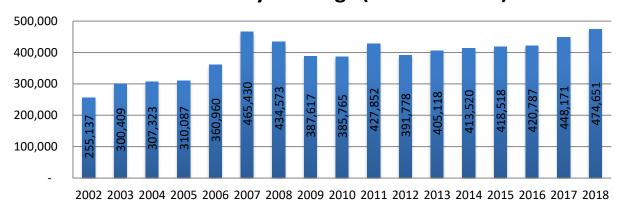
Source: Bureau of Labor Statistics

Workers all agree that recurring paychecks, and the size of those paychecks, are very significant bottom-line factors for their economic well-being. Earnings are an essential foundation to support consumer consumption, which is the primary engine of the U.S. economy. Logically, when consumers have more money, they spend more. 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. Earnings set a new all-time high in 2018 at \$474,651,000. This is the first time that earnings exceeded the previous peak of \$465,430,000 achieved in 2007 before the Great Recession. Considering how well other indicators performed in 2019, it is likely that earnings also exceed pre-recession levels in 2019.



# **Lincoln County Earnings (In Thousands)**



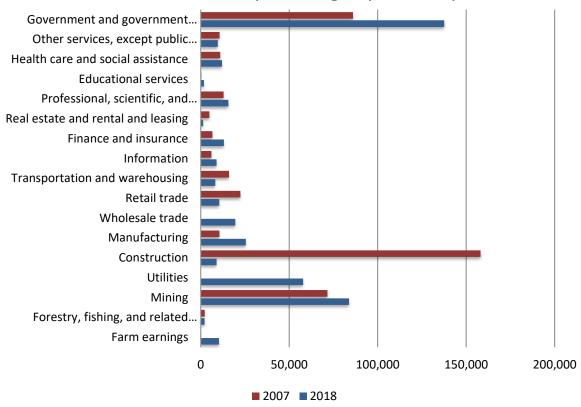
Source: Bureau of Economic Analysis

### **EARNINGS BY INDUSTRY**

The following chart shows earnings by industry for Lincoln County. Again, the most current data from 2018 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. Similarly, almost all other industries, except mining and construction, have reached or surpassed their 2007 level. There is also a very large increase in the government earnings for Lincoln County.



# **Lincoln County Earnings by Industry**



Source: Bureau of Economic Analysis

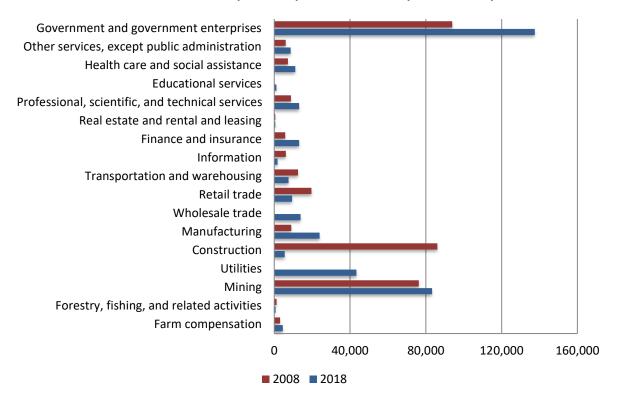
Wyoming DAI compared economic conditions of 1Q2019 to 1Q2020 and found that the only sectors in Wyoming which experienced a drop in personal income and earnings due to COVID-19 were mining (-5.9%), leisure and hospitality (-3.0%). The remaining industries experienced an average increase of 2.8% which is lower than the national increase in personal income of 3.3%. Nationally, personal income actually rose in 1Q2020 because of the CARES act, increased unemployment, and government stimulus money. At the same time, personal spending decreased as people stayed home and prepared for economic uncertainty. The combined result has been higher savings account balances.

# 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 to examine overall trends.



# Lincoln County Compensation by Industry



Source: Bureau of Economic Analysis

While government enterprises increased substantially, construction has a long way to go to achieve pre-great recession levels. However, it is felt by the authors that these two segments are currently reversing course because construction projects are currently strong, and the State of Wyoming and Lincoln County are attempting reduce its expenditures. This is evidenced by the merging of Canyon and Kemmerer Elementary schools.

### 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 defined 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.

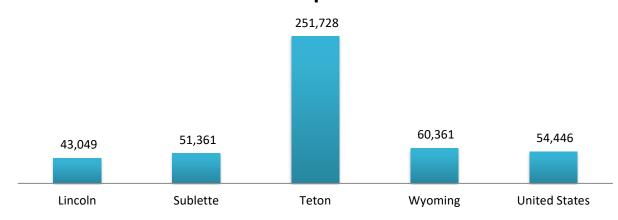
The most recent statistics at the county level are for 2018. Using this data, the chart below compares the 2018 per capita income of Lincoln, Teton, Sublette Counties, the State of Wyoming, and the United States. As has been the fact for over 20 years now, Teton County's per capita income is significantly higher than that of the surrounding areas and the nation. Aside from the Teton County outlier, the other areas report per capita income between



\$43,049 and \$60,361. Unfortunately, Lincoln County still has the lowest reported per capita income at \$41,139.

Lincoln County's per capita income is a full \$8,312 below its closest peer, Sublet County. Although Lincoln county improved over last year's \$8,951 gap, this statistic is concerning since Lincoln County lagged Sublet County by only \$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.

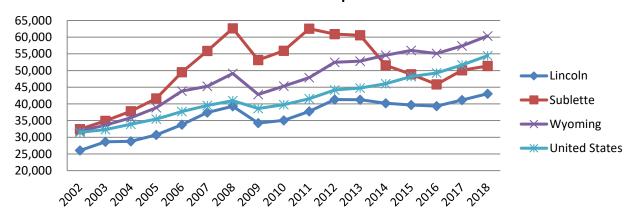
# 2018 Per Capita Income



Source: Bureau of Economic Analysis

Historically, based on per capita income, Lincoln County has trailed the neighboring counties, the State of Wyoming, and the United States as is indicated in the following graph. Indicating 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

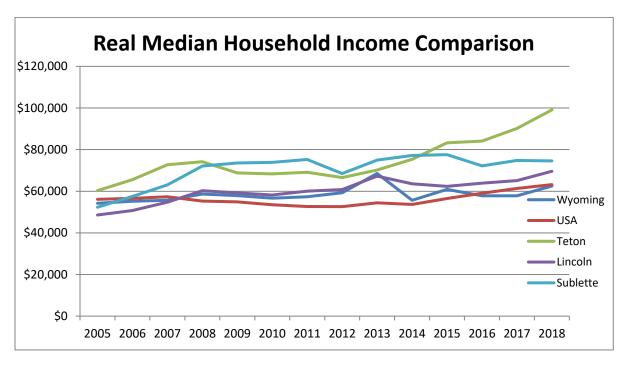


Source: Bureau of Economic Analysis



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 education levels. 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.

Real median household income provides a different perspective than per capita income. The real median household income comparison graph below, compares real median household income between the surrounding counties, the State of Wyoming, and the United States.



Source: Federal Reserve Economic Data

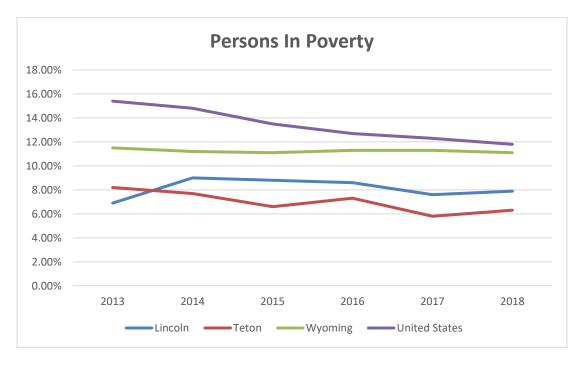
Sublette County leads Lincoln County's real median household income by nearly \$5,000. Lincoln County has consistently been higher than Wyoming and the United States with respect to real median household income. Also, Lincoln County has increased for the third year in a row. This indicates that wages are increasing in the county. Some of this growth could be attributed to both spouses working and to an increased number of workers commuting to Jackson where wages are generally higher.

### **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 2018.

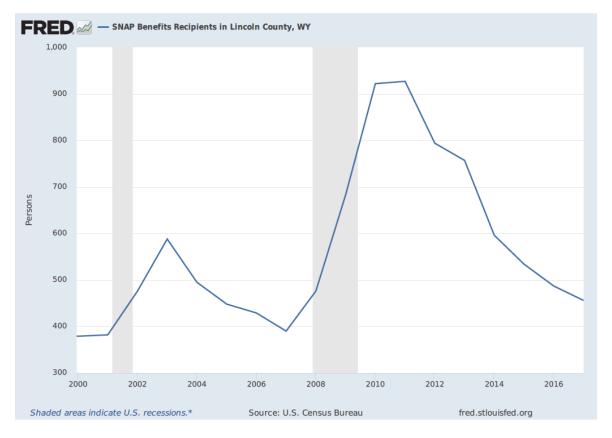


Source: U.S. Census Bureau

The downward trend of U.S. poverty is very positive, because it indicates that the U.S. economy is improving. Wyoming's poverty rate has remained relatively flat just above 11%. Between the 2017 and the 2018 estimates, Teton County's poverty percentage increased by 0.5% and Lincoln County increased by 0.3%. 2018 was the first year since 2014 that Lincoln County's poverty percentage increased. Lincoln and Teton Counties have a lower percentage of people in poverty, and for the past three years they have followed the same general trend. 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 2017, the most recent information available, the total number of recipients was 456 (2.4% of 2017 population). The graph below depicts the trend of SNAP benefits recipients from 2000 to 2017.





Source: Federal Reserve Economic Data

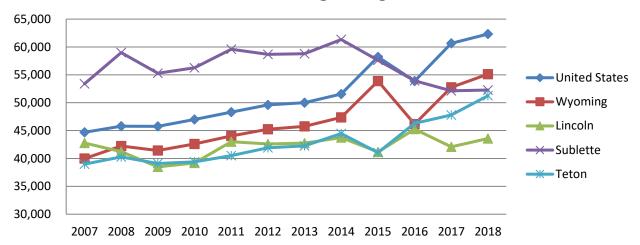
# **AVERAGE WAGE PER JOB**

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 below graph compares the historical average wage per job for Lincoln County, Teton County, Sublette County, Wyoming, and the United States. The authors believe that the average wage per job of the Star Valley area is closer to that of Teton County because they share the same employee base. Historically, Lincoln County has had a relatively low average wage per job. Lincoln County 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 two years of data indicate that there is wage pressure in Teton County pushing up average wages. As a result, Teton County's wage pressure has placed increased upward pressure on Star Valley employers as employees see potential increased earnings from commuting to Teton County.



# Historical Average Wage Per Job

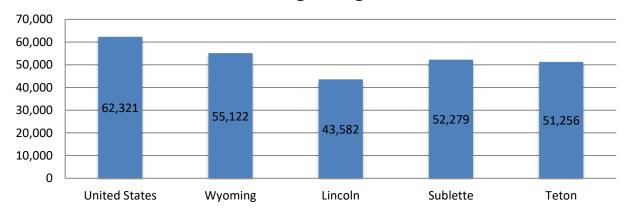


Source: Bureau of Economic Analysis

The relatively flat average wage in Sublette County could be because the ailing energy industry is a large portion of its economy. The other four Counties all saw an increase in average wages. Teton County experienced a large increase in average wages. This could be because of a labor shortage and high cost of living in the Jackson area.

The average wage per job for Lincoln County, Teton County, State of Wyoming, and the United States are compared in the following graph. Lincoln County's average wage per job was reported at \$43,582 for 2018. This is a slight increase of \$1,484, but still less than the average wage in 2016 of \$45,259.

# 2018 Average Wage Per Job



Source: Bureau of Economic Analysis



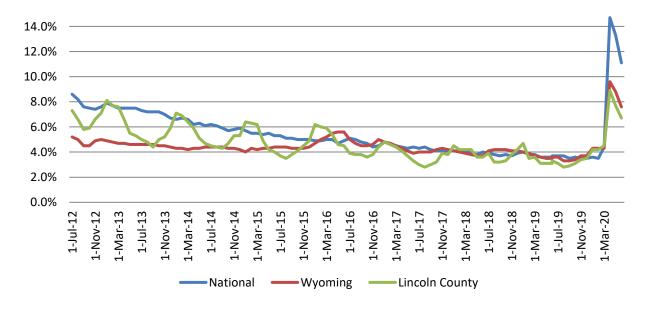
### UNEMPLOYMENT

The COVID-19 pandemic ravaged countries throughout the world, leaving a devastating human toll and severely depressing economies. Lockdowns occurred in almost every country and state in the world. The true impact of COVID-19 may not be known for years to come, but a major result of COVID19 has been record high unemployment levels.

As businesses closed doors and laid off employees or, when possible, asked them to work remotely, it became apparent that some industries were able to adapt better than others. According to BLS, during the first week in April, about 31% of U.S. workers switched to working at home. However, an estimated 63% of U.S. jobs require an onsite presence and cannot be performed from home. Most jobs in industries such as leisure and hospitality, construction, transportation, mining jobs cannot be performed remotely. Government classified non-essential service providers which, by nature of the services provided, necessitated person to person contact, such as restaurants, salons, and bars lost nearly all ability to generate income. Without income, many companies were forced to lay people off until they could re-open again.

The unemployment statistics for Lincoln County, Wyoming, and the United States are compared in the following graph.

# Comparison of Unemployment Rates July 2012 - June 2020

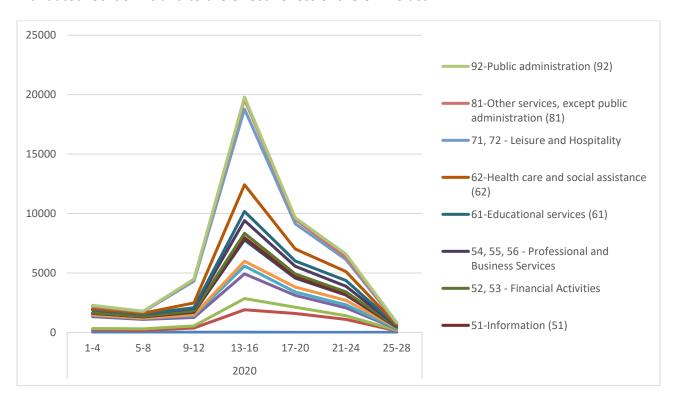


Source: U.S. Bureau of Labor Statistics and Federal Reserve Economic Data



Throughout most of 2019, unemployment was near record lows of 3.5-4%. In February 2020, unemployment was at a very low rate of 3.5%. Then COVID-19 and the subsequent lockdowns spiked April's national unemployment to a historic record high of 14.7%, a level not seen since 1939 during the Great Depression. Unemployment in Wyoming also spiked to record setting 9.6% exceeding the previous records set in 1983 and 1986 of 9.4%. Although not shown here, Teton County was hit especially hard, going from 2.6% unemployment in February to an incredible 18.2% in April. Teton County's unemployment level increase significantly because many jobs in Teton County are in services, leisure and hospitality sectors, which were severely impacted by lockdowns. Lincoln County fared much better at 8.8% in April, well below the peaks of 10.6% set in 2010 and 10% in 2011.

The graph below shows initial unemployment claims for Lincoln County by week (week 1 is in January) and by industry. Public administration, hospitality, and other service sectors were hit harder than other sectors. As can be seen, unemployment claims spiked in April, but then quickly declined. This could be attributed to a combination of the relaxing of government mandated lockdowns and to the effectiveness of the CARES act.

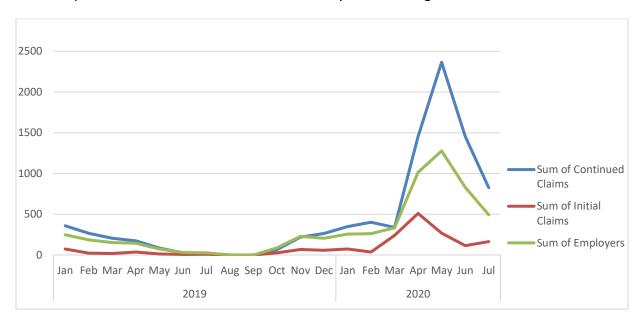


Source: Research & Planning, Wyoming Department of Workforce Services Data

The graph below shows initial unemployment and continued claims for Lincoln County. Continued Claims occur when people who have already filed an initial claim and who have experienced another week of unemployment and then filed a continued claim for that week of unemployment. This graph also shows that by mid-July, the number of people filing continued



claims dropped to 825 or 66% below May's peak of nearly 2,366. The drop is good for Lincoln County because it indicates that people found new employment or were rehired. Of concern is the uptick in new claims from June to July. This could be because a resurgence of COVID19 cases caused some employers to close again. Overall, the general decline in unemployment claims is positive because it indicates the economy is recovering.



Source: Research & Planning, Wyoming Department of Workforce Services Data

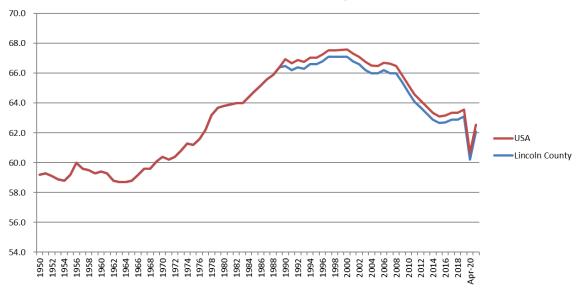
To lower unemployment by helping employers pay employees during the lockdowns, in April the federal government created the Payroll Protection Program (PPP) as part of the CARES act. As part of PPP, business could apply for forgivable business loans. Through PPP Wyoming businesses received between \$828 MM and \$1,470 MM in loans. Of that amount, approximately \$380 MM were smaller than \$150,000. Star Valley businesses received between \$16.8 MM and \$28.9 MM in PPP loans. Of that amount, about \$7.4 MM were smaller than \$150,000.

In addition to unemployment rates, the Bank also follows civilian labor force participation rates. 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. For this year's report the authors included data for April and May of 2020. As can be seen the labor participation rate took a sharp decline during the lockdown, but then quickly rebounded in May. This data suggests the recession could make a V-shape recovery. The quick rebound could be attributed to the healthy economy prior to the lockdown and to the effectiveness of the CARES Act. How quickly the economy recovers will likely depend upon how quickly COVID19 can be controlled either through a vaccine or treatment.

### **AREA EMPLOYERS**

The Bank surveys several employers in Star Valley 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 2020 survey are shown below.

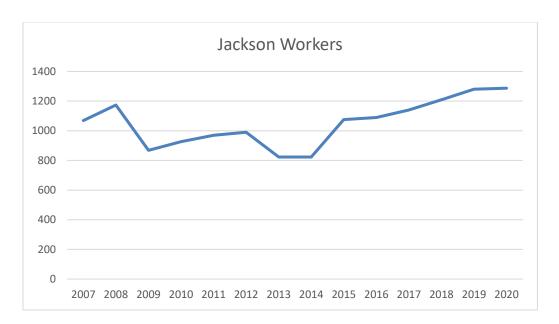


# **Employment by Area Major Employers**

Employer	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Gain/Loss
1ST Bank (Afton & Alpine)		12	13	13	11	11	14	13	11	23	22	22	20	19	-1
Aviat Aircraft	70	49	50	48	36	50	48	47	49	43	44	45	47	46	-1
Bank of Star Valley (All Branches)		28	28	27	26	24	24	24	25	24	25	27	28	30	2
Freedom Arms	13	14	13	14	12	12	14	15	14	15	15	15	15	14	-1
J.R. Simplot	200	220	220	240	250	270	270	270	270	250	250	250	230	228	-2
Lincoln County Government	153	162	163	162	162	151	66	60	60	145	145	143	145	145	0
Lincoln County School #2	464	470	470	470	489	492	488	490	490	600	600	600	565	553	-12
Lower Valley Energy	48	46	43	44	42	47	45	48	48	64	65	68	39	40	1
Silverstar Communications	66	67	88	87	88	67	87	80	80	79	79	70	79	81	2
Star Valley Medical Center	185	230	220	218	239	263	275	284	284	228	254	350	421	422	1
Polyguard & RMP Mobile	15	16	16	16	15	15	9	14	13	15	15	16	16	18	2
Wells Fargo (Thayne)		9	9	13	9	7	11	10	11	6	5	6	5	5	0
PC Industries			25	31	25	30	30	30	33	30	30	30	33	35	2
LSR												51	60	47	-13
No Longer Existing Employers	25	4	4	2	0	0	0	0	0	0	0	0	0	0	0
Total Star Valley Workers	1239	1327	1362	1385	1404	1439	1381	1385	1388	1522	1549	1693	1703	1683	(20)
Jackson Workers	1069	1173	868	926	970	990	823	823	1075	1089	1140	1209	1280	1287	7

The "Jackson Workers" number is derived from a car count performed by the Bank during the week of July 5<sup>th</sup> 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. Prior to COVID19, the average daily ridership on the morning start buses reached 76. After COVID19 lockdowns, the average ridership dropped to 31 per day. Since unemployment in Teton County climbed to an incredible 18.2%, it is likely that the number of passenger car commuters was also higher before COVID19. 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. Below is a chart of the Jackson Workers. Even with high unemployment in 2020, there has been general upward trend since 2014. This upward trend is likely driven by increased wages and lack of affordable housing in Teton county.





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 26.6 minutes. Surprisingly, Wyoming, a very rural state, has an average travel time of only 17.8 minutes indicating that most Wyoming residents live close to the location of their employment. Lincoln County has about the same commute time as the U.S. average. Lincoln County shares the same higher commuting time as the U.S. average because many of those who work in Jackson commute from Star Valley.

Average Work-Related Commuting Time in Minutes								
Lincoln County Teton County Wyoming U.S.								
26.8	14.7	17.8	26.6					

Source: U.S. Census Bureau: https://www.census.gov/

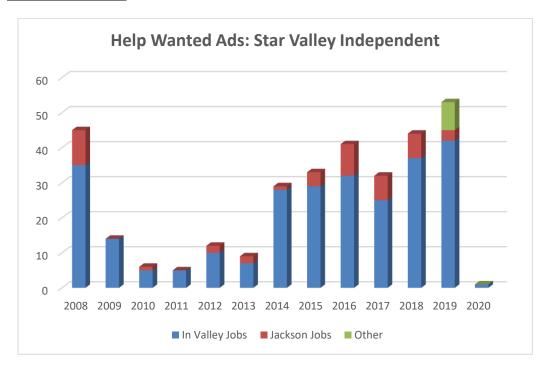
# **EMPLOYMENT ADVERTISING**

Beginning in 2008, the Bank has monitored the number of 'help wanted' advertisements posted in the <u>Star Valley Independent</u>, and in 2019 started monitoring the <u>Jackson Hole Daily</u> help wanted ads. 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.

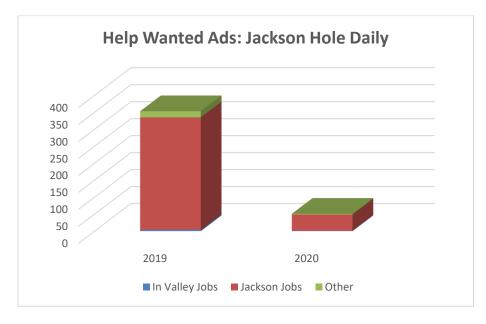
The number of help-wanted ads is a valuable economic indicator as it provides a proxy for the number of unfilled jobs that are available in the community and whether the demand for labor is trending upward or downward. To avoid seasonal anomalies, an average is taken by counting the number of adds once 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 <u>Star Valley Independent</u> count as well as the <u>Jackson Hole Daily</u> count.



Source: Star Valley Independent Classifieds 2008-2020



Source: Jackson Hole Daily Classifieds 2020

Only one job ad was posted in the <u>Star Valley Independent</u>, down from a high of 53 in 2019. <u>Jackson Hole Daily</u> had an average of only 47 ads posted, down from 354 from last year. The dramatic drop in both newspapers is a direct result of the government mandated lockdowns resulting from COVID-19. Despite this huge drop in ads, many of the Jackson ads were re-

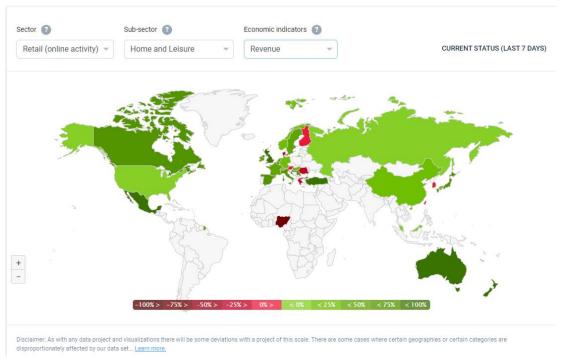


posted in the second and third weeks; indicating that there still is a labor demand for the Jackson area despite the lockdown and social-distancing requirements.

### **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. E-commerce growth was certainly stimulated by government mandated lockdowns resulting from COVID19 and from improved technology enhancing the customer experience.

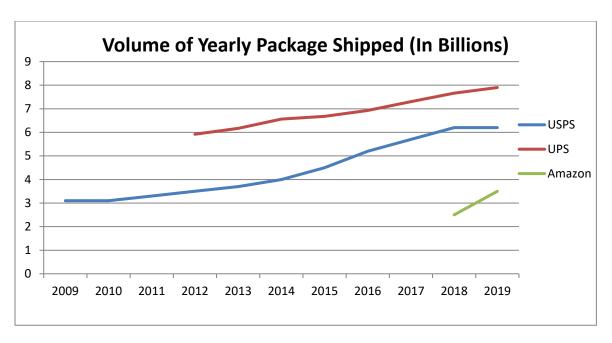
The graphic below shows revenue increases in green and decreases in red of pure play e-commerce compared to the same period last year prior to COVID19. With very few exceptions, on-line shopping has increased in the home and leisure sector across the globe. According to Forbes, in April 2020 the number of e-commerce orders in U.S. and Canada grew by 146% when compared to April 2019.



Source: <a href="https://ccinsight.org/">https://ccinsight.org/</a>

Nearly all internet business rely on third party shipping services to deliver products. Below is a graph illustrating the number of packages shipped by USPS, UPS and Amazon. This year Amazon was added because of its recent entry and success in the shipping sector.





Source: USPS, UPS Annual Report, Amazon Press Releases

In 2019, Amazon had an amazing 40% share of American e-commerce and 6% of all retail sales. As shoppers were quarantined to their homes due to COVID-19, they spent enough money on toilet paper, sanitation supplies, and other household goods to raise Amazon's first quarter year over year sales by 26%.

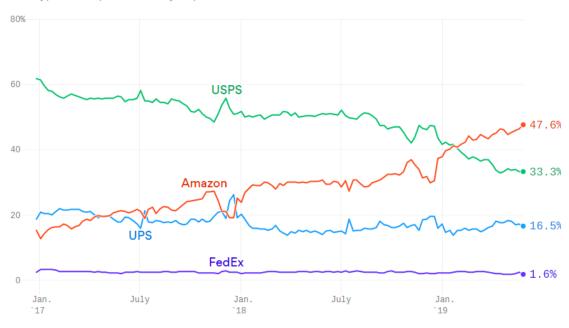
Amazon continues to upset established industries by expanding by offering complementary services including delivering its own packages. Amazon now leases a fleet of 82 cargo aircraft which helped it deliver 3.5 billion packages in 2019. Morgan Stanley projects that Amazon will deliver 6.5 billion packages in 2022. It is reasonable to assume that Amazon effect will continue to be felt throughout Wyoming, including in the remote regions of Star Valley.

Below is a graph of Amazon's shipments by carrier. In mid-2019 Amazon crossed the threshold and delivered a higher percentage of its own packages (47.6%) than traditional carriers.



#### Share of Amazon shipments by carrier

Weekly, Dec. 26, 2016 to May 27, 2019



Data: Rakuten Intelligence; Chart: Axios Visuals

### **MARKET LIQUIDITY**

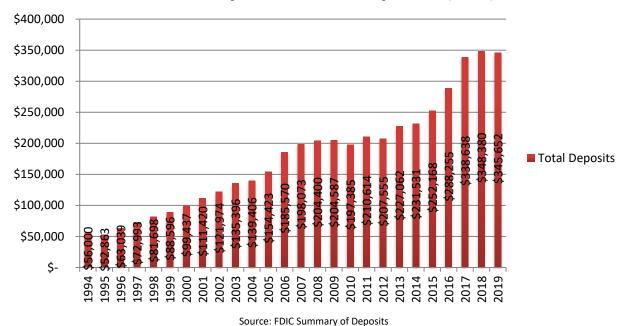
Liquidity, for the purposes of this report, is defined as the deposits held in local non-credit union financial institutions. Liquidity is felt to be representative of general market wealth. This metric is far from a perfect measure of true market liquidity, due to deposits from outside the market being 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 in 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.



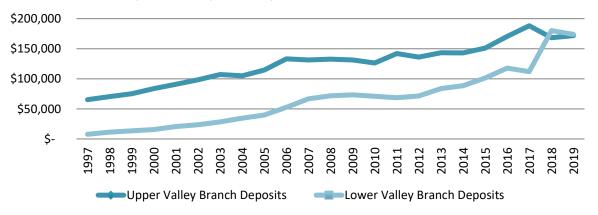
## **Star Valley Total Bank Deposits (000)**



The above chart shows a steady increase in valley deposits up to the Great Recession of 2008, after which deposits fell slightly until 2012. Between 2018 and 2019, deposits fell by 0.78%, which is down from the 2.88% growth realized from 2017 to 2018. A decrease in deposits is a concern because deposits indicate a large portion of a person's income.

Because deposits are reported by branch, the bank deposits can be broken down by regions within the market. The graph below shows local deposits by upper and lower valleys. The following data is as of June 2019.

# Deposits by Valley Branch Location (000)



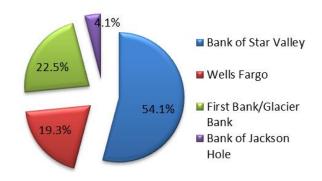
Source: FDIC Summary of Deposits



Deposits in the lower valley were \$2,196,000 higher than in the upper valley. This marks the second year in a row deposits in the lower valley were higher than deposits in the upper valley. This could be the start of a new trend if growth in the lower valley continues to outpace growth in the upper valley. In total, all deposits in Star Valley decreased slightly by \$2,728,000 in 2019, marking the first year since 2012 that deposits decreased.

The following graph shows the market share percentage of each bank based on total Star Valley deposits, as of June 2019. Bank of Jackson Hole decreased 4.2%. The Bank of Star Valley had the largest increase in market share at 3.7%.

# 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 which are: Lincoln County-Afton and Lincoln County-Kemmerer. EAD's bifurcation of Lincoln County confirms the authors belief and comments that the two economies of North Lincoln County and South Lincoln County have marked underlying economic 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 2019											
(Statewide Average=100)											
County	Trans.	Medical	Rec.								
Lincoln-Afton	100	99	96	106	102	103	112				
Lincoln-Kemmerer	91	102	80	91	104	103	103				



Teton	161	111	219	134	104	99	103
Sublette	103	111	98	107	103	99	116
Uinta	91	82	85	92	101	108	95

Source: Department of Administration & Information Economic Analysis Division

Afton's cost-of-living index lowered slightly and in 2019 it was equal to Wyoming's average of 100. Kemmerer continues to have a lower cost-of-living, which is driven primarily by lower cost of housing. Teton County continues to lead the State with the highest cost-of-living index in Wyoming. Due to the high cost of living, many Teton County employees 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.

Chang	ge in Lincol	n-Afton Co	st of Living	Index Betv	veen Jul. 20	006 and De	c 2019
Lincoln- Afton	All Items	Food	Housing	Apparel	Trans.	Medical	Rec.
4Q 5	102	95	107	89	99	94	106
4Q 6	104	98	110	88	101	104	100
4Q 7	100	97	104	86	99	100	96
4Q 8	101	96	104	95	100	91	110
4Q 9	101	96	102	96	100	91	110
4Q 10	102	103	101	104	100	98	112
4Q 11	100	96	100	98	99	96	112
4Q 12	94	98	85	102	100	96	112
4Q 13	95	97	88	107	102	96	107
4Q 14	92	94	86	96	99	93	107
4Q 15	95	99	87	99	104	92	112
4Q 16	96	95	92	105	104	91	109
4Q 17	98	96	95	105	103	99	109
4Q18	101	100	98	113	102	102	116
4Q19	100	99	96	106	102	103	112

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. The authors noticed that many cleaning items were out of stock in the stores sampled because of COVID19.



## **Grocery Comparison**



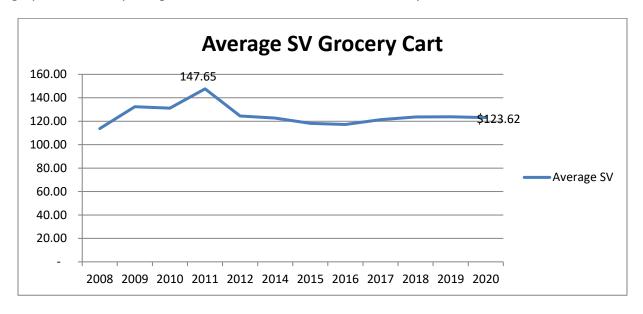
Idaho Falls boasts the cheapest cost for the basket of goods used in the study. The findings for the basket of goods supports the State's findings for the cost of food in these areas. Jackson has the highest cost for the basket. The other three areas are within a \$10.00 range of each other, with Star Valley averaging a cost of \$123.15.

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

2019 Cost of	a Basket	of Groce	ry Items		
Grocery	Kemmerer	Jackson	Pinedale	SV Avg	IF - Winco
White Bread (Sara Lee)	3.29	3.39	2.99	3.56	1.98
Bread (Grandma's Sycamore)	3.29	3.79	3.29	3.49	2.78
Russet Potatoes (1 lb.)	0.45	0.89	0.5	0.59	0.34
Apples (Red Delicious) (1 lb)	1.49	1.49	1.49	1.39	0.98
Lettuce Head (Iceberg)	1.79	1.49	1.89	1.46	0.98
Boneless Skinless Chicken Breasts (1 lb.)	3.69	2.99	3.28	2.59	1.48
Ground Beef (1 lb. 80%)	5.19	5.99	5.99	5.46	5.18
Cereal (Frosted Shredded Wheat 18 oz.)	3.89	3.99	4.59	4.26	3.64
Cereal (Lucky Charms 11.5 oz.)	4.49	4.99	4.59	4.26	2.48
Cereal (Cheerios 12 oz.)	4.29	3.99	4.29	4.59	4.37
Ice Cream (WF 4 qt.)	8.49	5.99	8.69	7.56	4.47
Flour (WF All Purpose Bleached 10 lb.)	4.19	4.29	3.69	3.89	2.42
Sugar (WF 10 lb.)	5.99	7.99	6.99	6.66	4.98
Salt (WF)	0.69	0.99	0.89	0.92	0.58
Rice (Minute, White 28 oz.)	5.89	4.49	5.19	4.86	3.37
Milk (WF 2%)	2.24	3.29	2.19	2.89	2.36
Cheese (Cache Valley 2 lb. Sharp Cheddar)	8.79	5.99	9.79	9.56	4.98
Yogurt (Red Yoplait)	0.6	0.79	0.69	0.73	0.48
Eggs (WF 12 lg.)	1.48	1.29	1.39	1.59	0.98
Butter (WF)	3.59	3.29	3.69	3.46	2.92
Margarine (Imperial)	1.19	0.99	1.19	1.12	0.84
Cottage Cheese (WF 1 lb.)	1.49	2.49	1.59	2.02	1.68
Wheat Thin Crackers (9.1 oz)	1.88	3.34	2.38	3.22	2.98
Cut Green Beans (WF 1 can)	0.99	0.89	0.99	1.11	0.50
Toilet Paper (Charmin 12 Rolls)	7.89	15.99	11.99	8.16	6.20
Napkins (Vanity Fair 200 count)	6.49	5.49	5.79	6.52	3.96
Paper Towels (Bounty single)	1.69	2.5	1.69	3.20	1.77
Kleenex (160)	2.19	2.79	3.19	2.29	2.47
Detergent (Tide 100 fl. oz.)	12.49	14.99	13.49	13.92	11.48
Dish Detergent (Cascade 75 oz.)	12.99	7.99	7.39	7.82	5.89
Total	\$123.10	\$128.86	\$125.79	\$123.15	\$89.52



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. Despite inflation, since 2012 the price for groceries has stayed relatively stable.

#### **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 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 more likely mirrors 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 4<sup>th</sup> quarter of 2019 was estimated to be 2.1%. This is a 0.4% increase from the 4<sup>th</sup> quarter of 2018 which was estimated at 1.7%.

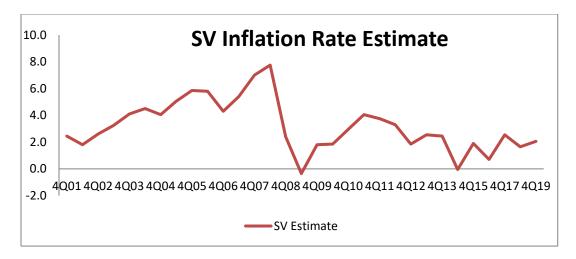


	Annu	al Inflatio	n Rates I	y Regior	)
Quarter	U.S. CPI*	Statewide All Items	Northwest	Southwest	SV Estimate
4Q01	1.6	3.5	2.6	2.3	2.5
2Q02	1.1	2.5	2.2	1.4	1.8
4Q02	2.4	3.7	2.7	2.5	2.6
2Q03	2.1	2.6	3.0	3.5	3.3
4Q03	1.9	3.6	3.9	4.3	4.1
2Q04	3.3	4.9	4.4	4.6	4.5
4Q04	3.3	4.3	3.3	4.8	4.1
2Q05	2.5	4.5	3.5	6.6	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	1.9	2.5	2.3	1.0	1.7
4Q19	2.3	2.2	2.5	1.6	2.1

Source: Department of Administration & Information Economic Analysis Division

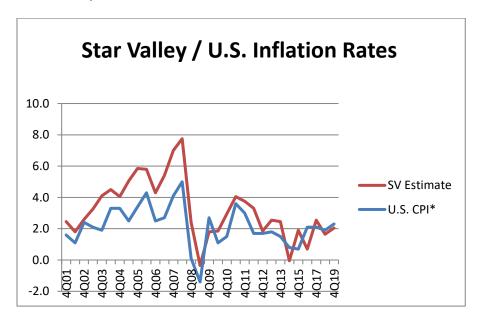
The above data is shown in graph form below. The graph clearly illustrates that overall inflation has trended downward from the 2008 peak. The U.S. CPI in 2019 increased by 2.3% from 2018.





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

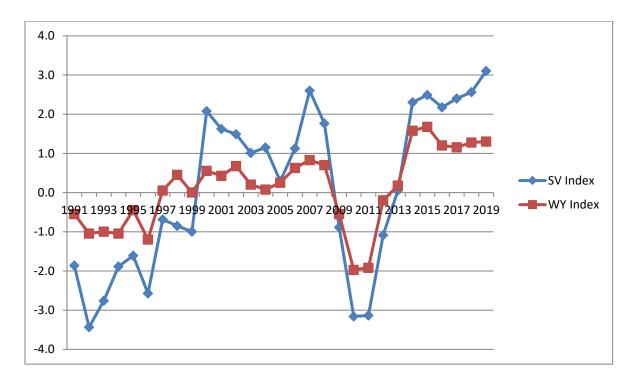
Historically, Star Valley's inflation has been higher than the national average. However, the most recent data indicates that Star Valley's inflation rate is lower than the national average. This reversal has occurred three other times since the Great Recession as the U.S. inflation and Star Valley's inflation lines get closer together.

### **MISERY INDEX**

The Bank created a Star Valley Misery Index 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 vise-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 4 years. In January, the Star Valley Misery Index in 2019 surpassed the level seen just before the Great Recession. This indicates a strong consumer expectation for economic well-being.

For this year's report, the authors decided to graph how the misery index changed as a result of COVID19. When considering unemployment and inflation data for Q1 2020, the misery indices for both Star Valley and Wyoming drops to levels seen during the Great Recession.

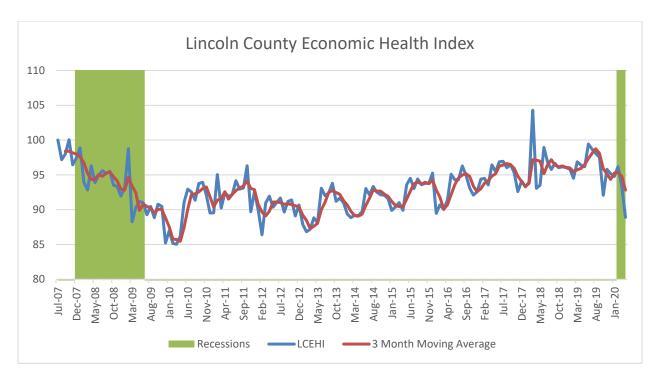




### LINCOLN COUNTY ECONOMIC HEALTH INDEX

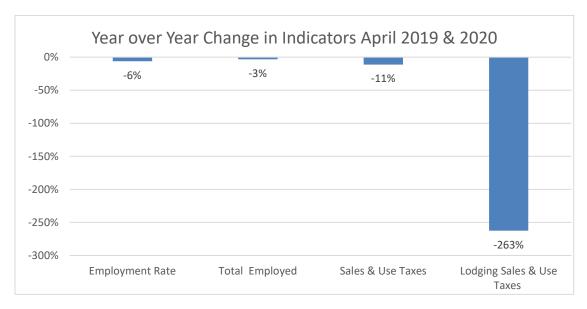
The Bank of Star Valley created a Lincoln County Economic Health Index (LCEHI) which was modeled after the Wyoming Economic Health Index, created by EAD (discussed below). LCEHI combines four county-level economic indicators to track Lincoln County's economic health over time. The four indicators are: 1) monthly unemployment rate, 2) total monthly employment, 3) monthly sales and use tax collections, less lodging sales and use, and 4) monthly sales and use tax collections from lodging. Sales and use taxes are adjusted for inflation, and all data are seasonally adjusted. Each indicator is weighted to show fluctuations which may be relatively large for any single indicator, but small for other indicators, to affect the health index. For example, although lodging sales & use tax only represent 1% of the total sales and use tax collections for Lincoln County, the spike in March of 2018 was the result of a \$40,000 spike of in lodging and use tax. The spike was much higher than the next highest peak of \$26,000 in October of 2019, and significantly higher than the monthly median of \$8,000.





Sources: Wyoming Department of Revenue & Federal Reserve Economic Data

As can be seen by the chart below, all indicators were down in April 2020 from April 2019. Lodging sales & use taxes was the hardest hit at -263%. This is a direct result of travel bans imposed to stop the spread of COVID19. Lodging Sales and Use taxes equal only about 1% of sales taxes collected in Lincoln County, but it represents trends of people visiting the County and surrounding areas. It also correlates with the high levels of unemployment claims in the Leisure and Hospitality sector discussed above.



Sources: Wyoming Department of Revenue & Federal Reserve Economic Data



### STATE AND LOCAL TAX

In 1935 Wyoming implemented a temporary 2% sales tax on goods purchased in brick and mortar stores. In 1937 the 2% tax was made permanent, and in 1993 Wyoming's sales tax was raised to 4%. However, with the rise of internet shopping, Wyoming, and many other states, began to see a decrease in sales tax revenues. To stop the bleeding, in October 2018 the Wyoming legislature passed a tax bill which required remote sellers to collect a 4% tax for online sales. The new law became effective on July 1, 2019. The additional tax revenue resulted in a \$28.1 MM year-over-year increase for 1Q2020 in sales tax contributions from the retail trade industry. Unfortunately, the increase was not near enough to offset the sales tax decreases in the mining and transportation industries caused by the declining energy industry. Overall statewide taxable sales decreased by 5.7% since 2018.

Wyoming was ranked 14<sup>th</sup> in a national comparison of state tax revenue per capita, at \$3,647, in 2019. This represents an increase of \$467 over the \$3,180 collected in 2018 and a jump from 20<sup>th</sup> to 14<sup>th</sup> nationally. This is the sum of the taxes paid to state and local governments, divided by the population – which, appears that Wyoming has a higher than average tax rate. While Wyoming shows an above-average per capita tax obligation, a large share of the actual taxes paid in Wyoming are paid by the mineral extraction industries through severance and sales taxes. In fact, Wyoming residents currently enjoy a low relative tax burden which has a direct positive impact on the financial health of each resident.

2019 State Tax Revenue										
State	Pe	r Capita	Rank	% of Personal						
State	Si	tate Tax	IVALIK	Income						
District of Columbia	\$	12,298	1	15.1%						
North Dakota	\$	6,521	2	11.8%						
Vermont	\$	5,495	4	10.1%						
Alaska	\$	2,434	42	4.1%						
Connecticut	\$	5,047	5	6.6%						
Hawaii	\$	5,797	3	10.4%						
Minnesota	\$	4,996	6	8.7%						
New York	\$	4,710	9	6.8%						
Wyoming	\$	3,647	14	6.1%						
Massachusetts	\$	4,614	10	6.4%						

Source: Federation of Tax Administrators

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 with dual income, earning \$80,000, living in a \$200,000 house, and

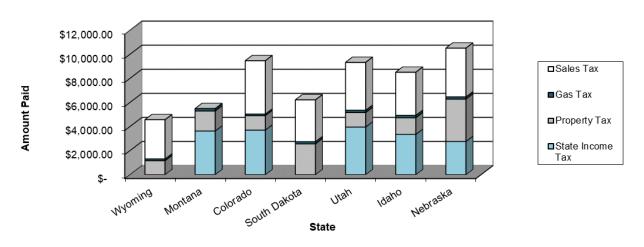


driving 15,000 miles a year. The comparison of state tax obligations for this hypothetical family is shown below:

Con	Computed taxes for 2019 - Family of 4, \$80M Gross Income, \$200M House, 15,000 miles per year																
	\$	80M State		59.5M	62	625 Gallons		625 Gallons Property		Comparative		% of Wyoming					
State	In	come Tax		Comsumption	G	Gasoline		Gasoline		Tax	Tax						
				Sales Tax		Tax/Gal.		Tax/Gal.		Tax/Gal.		Tax/Gal.		200M Res.			
Idaho	\$	3,346.49	\$	3,575.95	\$	206.25	\$	1,380.00	44	8,508.69	186%						
Colorado	\$	3,704.00	\$	4,426.80	\$	137.50	\$	1,200.00	\$	9,468.30	207%						
Montana	\$	3,627.92	\$	-	\$	201.56	\$	1,660.00	44	5,489.48	120%						
Nebraska	\$	2,757.86	\$	4,046.00	\$	188.75	\$	3,520.00	\$	10,512.61	230%						
South Dakota	\$	-	\$	3,468.85	\$	187.50	\$	2,560.00	\$	6,216.35	136%						
Utah	\$	3,960.00	\$	3,974.60	\$	194.44	\$	1,200.00	\$	9,329.04	204%						
Wyoming	\$	-	\$	3,254.65	\$	150.00	\$	1,160.00	\$	4,564.65	100%						

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

#### State Comparative Taxes



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

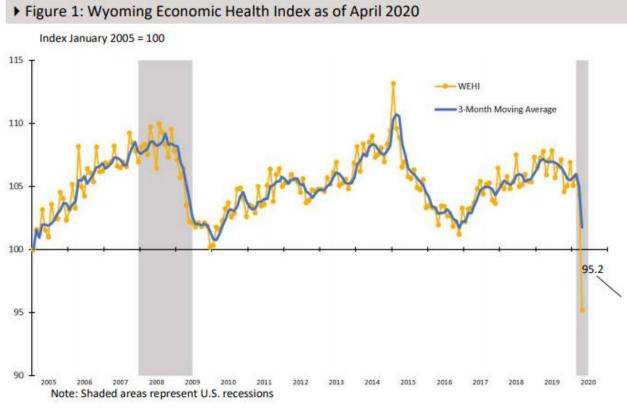
The analysis shows that Wyoming is one of the best states to live for people who like low taxes. The state with the next lowest tax burden in the sample is Montana. The tax burden for a Montana resident in this scenario is still \$924 more than that of a Wyoming resident.

### WYOMING ECONOMY

Each January the Consensus Revenue Estimating Group (CREG) creates a forecast of Wyoming's revenues which is used for informational and budgetary purposes for current and subsequent years. In May 2020 CREG issued an atypical forecast which revised and decreased the State's forecasted revenue scenarios due to projected impacts of COVID19 and the dramatic decline in oil prices. In July 2020, CREG revised the State's revenue forecasts again, showing a more optimistic view of the State's revenue streams and budgets. These changes show that nobody is certain what will happen except that circumstances will change.



In its June 2020 publication, Wyoming Department of Economic Analysis created an economic health index which combines unemployment rate, nonfarm employment, sales and use tax collections from mining, and sales and use tax collections from lodging. The index combines all four indicators into one index. All four indicators were down, and as can be seen by the graph below, the WEHI was down at its lowest point in April.



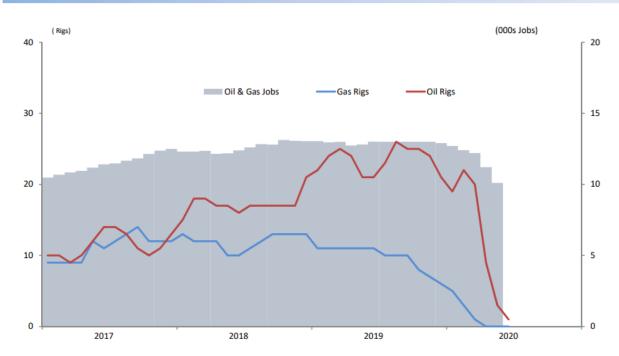
Source: Wyoming Economic Analysis Division

In addition to historic records set in unemployment mentioned earlier, history was also made in the oil industry in 2020. For the first time in history, crude oil prices dropped to below zero. There was such an enormous glut of supply that upstream companies had to pay midstream companies to take oil off their hands. This situation was created by two seemingly unrelated and improbable factors. The first factor was a brief oil production war between members of OPEC. In March, OPEC member-states had a major disagreement over oil production cuts. Consequently, because of their puerile disagreement, a few OPEC members increased oil output to 30-year highs in early April. Secondly, and at the same time, the U.S. and many other countries, imposed travel restrictions and locked down their economies, severely decreasing demand. The result of the historic abundant supply and historic low demand created the perfect storm to drive oil prices down to negative \$40.32 per barrel.



Because of low crude oil prices, late June 2020 marked the first time in recorded history that zero oil rigs operated in Wyoming. Since oil prices were so low, even negative for a while, upstream oil producers had no incentive to continue exploratory drilling. As can be seen below, the dramatic drop in oil and gas prices resulted in job losses throughout the state and severely hurt Wyoming's economy.

## WY Oil & Gas Jobs (through May) and Rig Counts (through June)



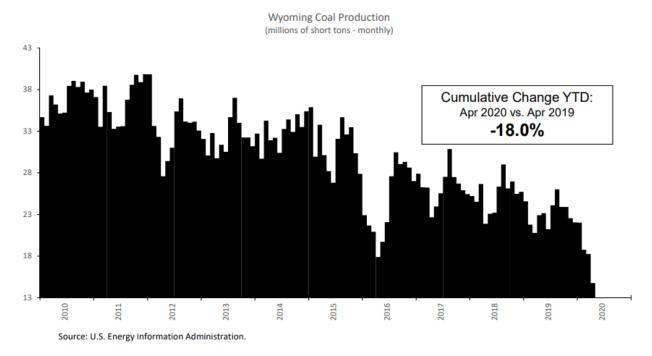
Sources: Wyoming Economic Analysis Division, WY Oil and Gas Conservation Commission, U.S. Bureau of Labor Statistics

#### **COAL AND NATURAL GAS IMPACTS**

In previous years we discussed projected coal fired power plant closures on a U.S. national basis to-date and closures which are projected to take place by 2035. The projected loss in future coal demand for electrical generation is overwhelming and very problematic for Wyoming. Electric power generation accounts for about 92% of the total U.S. coal consumption. The large loss of coal-based power generation will continue to harm the Wyoming economy because Wyoming is the largest coal producing state in America. In 2019 and 2020 Wyoming continued to see a decline in coal production. The graph below was created by EAD and it shows an 18% drop in coal production, which in turn resulted in a drop in sales and use taxes and drop in severance taxes collections. From June 2019 to June 2020, sales and use taxes for mining are down 57.3%. Although coal is a very reliable and cheap source of energy, it is expected that coal use as a source of energy will continue to diminish in the coming years.



# WY Coal Production (through April 2020)



The following table, produced by the U.S. Energy Information Administration (EIA), breaks down U.S. power generation by the different sources available. As of 2019, 62.7% of U.S. electric generation came from fossil-fuels. Electricity generated from natural gas increased to 38.4%, up from 35.1% in 2018. Renewable energy made a small increase to 17.5% of electric power generation in the U.S.

U.S. utility-scale electricity generation by source	U.S. utility-scale electricity generation by source, amount, and share of total in 2019									
Energy source	Billion kWh	Share of total								
Total - all sources	4,118									
Fossil fuels (total)	2,580	62.70%								
Natural Gas	1,582	38.40%								
Coal	966	23.50%								
Petroleum (total)	19	0.50%								
Petroleum liquids	12	0.30%								
Petroleum coke	7	0.20%								
Other gases	14	0.30%								
Nuclear	809	19.70%								
Renewables (total)	720	17.50%								
Hydropower	274	6.60%								
Wind	300	7.30%								



Biomass (total)	58	1.40%
Wood	40	1.00%
Landfill gas	10	0.20%
Municipal solid waste	6	0.10%
(biogenic)		
Other biomass waste	2	0.10%
Solar	72	1.80%
Photovoltaic	69	1.70%
Solar thermal	3	0.10%
Geothermal	16	0.40%
Pumped storage hydropower	-5	-0.10%
Other sources	13	0.30%

Source: Energy Information Administration

Increased usage of natural gas to generate electricity is a trend that will likely continue as long as natural gas prices remain low and political opposition to coal remains high. Further, natural gas is an efficient and popular heating source for buildings. The growing demand for natural gas is being met through a large U.S. supply, which supply will also keep prices for natural gas stable even as demand increases.

In 2019, the U.S. became the world's third-largest LNG exporter, surpassed only by Qatar and Australia. Also, in 2019 Wyoming declined to the 8th largest natural gas-producing state in the nation, down from the 4<sup>th</sup> largest. While natural gas production in Wyoming has decreased slightly; Wyoming's decline in rankings appears to be driven more by an increase in production in other states. Production increases are taking place in the southern and eastern states where they have access to an LNG export facility. The U.S. has only six LNG export facilities. Four facilities are in the Gulf of Mexico, and the other two are on the east coast of the U.S. It is predicted that LNG exports will continue to increase as additional LNG facilities are built.

### **WYOMING ECONOMIC ANALYSIS DIVISION Q1 2020 SUMMARY**

Wyoming's Economic Analysis division creates a summary report about Wyoming's economy during the first quarter of each year. The first quarter report of 2020 showed the devastating impacts of COVID19. Reporting losses in nearly every sector.

Taxable sales in Wyoming shrunk by 5.7% for the first quarter of 2020, this amounts to \$4.2 billion in total. Tax collected from the mining sector decreased by 27.2%. With the mining sector making up about one-fifth of tax collections its continuing decline is stressing Wyoming coffers.



Tourism also declined in the first quarter. Visitors to Yellowstone National Park and Grand Teton National Park dropped 5.2% and 4.9% respectively. Part of the drop in visitors is attributable to the closure of both parks in late March.

Investment into Wyoming's general fund was \$55.3 million for the first quarter of 2020. This is 26.4% lower than in the first quarter of 2018. The state also generated \$112.7 million dollars in mineral severance taxes, a significant decrease from first quarter 2018, and the least amount generated since 2016.

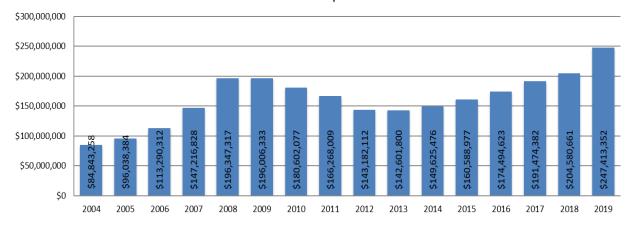
On a positive note, Wyoming home prices increased 9.9% for the first quarter of 2020. The national average price rose 5.7% during the same period. The rise in home prices could be because 30-year mortgage rates hit new all-time lows, making it cheaper to finance the purchase of a home.

### **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 of Star Valley, the assessed valuation can be used as a lagging indicator to represent changes in Star Valley's real estate values over time. The valuation is performed by the Lincoln County Assessor's office based upon prior year sales information.

The 2019 assessed valuation for the North Lincoln Hospital District was \$247,413,352. This valuation is a 20.97% increase over 2018, indicating a strong positive appreciation in real estate values. The assessment has been steadily increasing since 2013. The 2019 valuation is the highest valuation ever recorded for the North Lincoln Hospital District. The trend over the last six years is an indication that property values are increasing in aggregate.

### North Lincoln Hospital Valuation



Source: Lincoln County Assessor

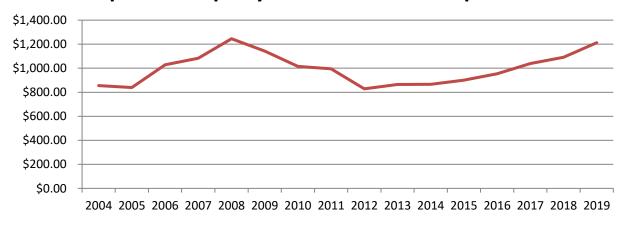


### PROPERTY TAXES (SELECT PROPERTIES)

For over a decade, the Bank has tracked the property tax assessments for ten different properties located throughout Star Valley. The purpose of tracking tax assessments 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 2019. The accumulation of the select properties tax assessments mirrors the trends identified in the total North Lincoln Hospital District valuation except select property taxes not yet reaching their peak realized in 2008.

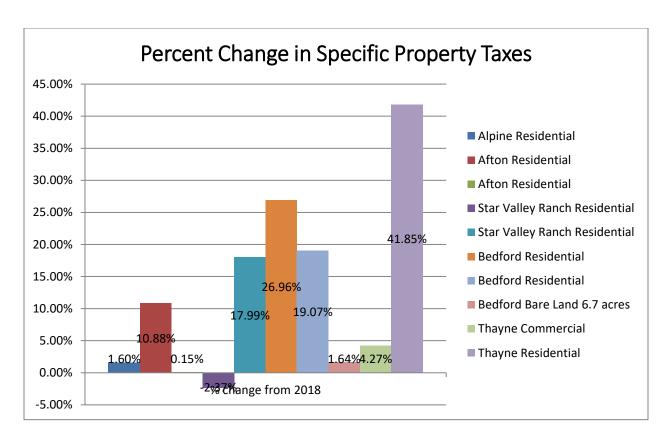
While it is tempting to look at the hospital valuation as a static measure showing true real estate appreciation over time, (i.e. my house value has appreciated X% because the hospital valuation has increased X%), that is not necessarily the case. Each year property improvements occur throughout the 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 2018 to 2019. This hints at where the greatest amount of market appreciation is happening. Thayne Residential shows the greatest appreciation at a 41.85% increase from 2018's valuation. This increased valuation can be exciting if a Thayne area resident is looking to sell a property, but it also means that Thayne 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 - To June 30, 2020**

	2012	2013	2014	2015	2016	2017	2018	2019	2020 to June 30
New Homes Non- Incorporated	33	37	66	94	98	113	114	105	43



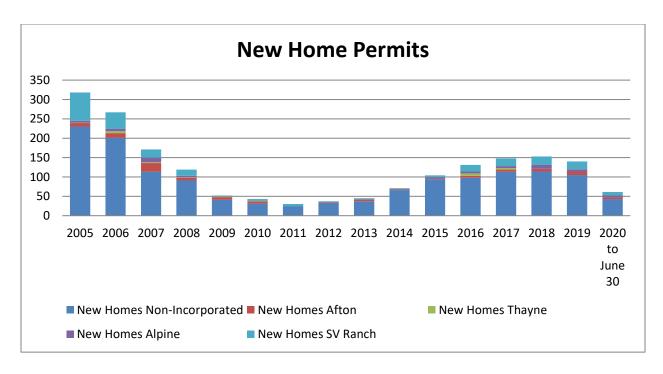
Total Homes Non-									
Incorporated	2439	2476	2542	2636	2734	2847	2961	2948	2991
% Rate of Growth	1.4%	1.5%	2.7%	3.7%	3.7%	4.1%	4.0%	3.5%	1.5%
New Homes Afton	2	5	2	2	5	6	7	9	5
Total Homes Afton	736	741	743	745	750	756	763	772	777
% Rate of Growth	0.3%	0.7%	0.3%	0.3%	0.7%	0.8%	0.9%	1.2%	0.6%
New Homes Thayne	0	0	0	0	6	4	0	0	0
Total Homes Thayne	140	140	140	140	146	150	150	150	150
% Rate of Growth	0.0%	0.0%	0.0%	0.0%	4.3%	2.7%	0.0%	0.0%	0.0%
New Homes Alpine	0	0	1	3	5	5	10	6	4
Total Homes Alpine	330	330	331	334	339	344	354	485	489
% Rate of Growth	0.0%	0.0%	0.3%	0.9%	1.5%	1.5%	2.9%	1.7%	0.8%
New Homes SV Ranch	2	3	2	5	17	20	22	20	9
Total Homes SV Ranch	965	968	970	975	992	1012	1034	1003*	1012
% Rate of Growth	0.2%	0.3%	0.2%	0.5%	1.7%	2.0%	2.2%	1.9%	0.9%
Total New Homes	37	45	71	104	131	148	153	140	61
Total Homes	4610	4655	4726	4830	4961	5109	5262	5358	5419
% Growth Rate in SV	0.8%	1.0%	1.5%	2.2%	2.7%	3.0%	3.0%	2.7%	1.1%

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

The number of building permits in 2019 was 140, a decrease of 13 from 2018. The first six months of 2020 slowed down even more. Of the 140 permits, 105 were in the non-incorporated parts of Star Valley and the remaining 35 were in incorporated towns. This shows that growth continues to be in the outlying areas more than in towns. The table below shows the number of permits from beginning of January 2006 to the end of June 2020.



<sup>\*</sup> Star Valley Ranch clarified there were only 1003 homes at the end of 2019. The difference in data is likely attributed to new home permits being issued but the homes are never built.



In addition to population growth by development, the town of Alpine recently annexed Alpine Meadows and an adjacent development of tiny homes for an additional 128 homes. The town of Thayne also annexed 40 acres for future development. Town growth through annexation will likely continue as more land is developed near town borders.

**Total Star Valley New Home Permits - To June 30, 2020** 

	2016	2017	2018	2019	2020 to June 30
New Homes Non-Incorporated	98	113	114	105	43
Total Homes Non-Incorporated	2734	2847	2961	2948	2991
% Rate of Growth	3.7%	4.1%	4.0%	3.5%	1.5%
New Homes Afton	5	6	7	9	5
Total Homes Afton	750	756	763	772	777
% Rate of Growth	0.7%	0.8%	0.9%	1.2%	0.6%
New Homes Thayne	6	4	0	0	0
Total Homes Thayne	146	150	150	150	150
% Rate of Growth	4.3%	2.7%	0.0%	0.0%	0.0%
New Homes Alpine	5	5	10	6	4
Total Homes Alpine	339	344	354	485	489
% Rate of Growth	1.5%	1.5%	2.9%	1.7%	0.8%
New Homes SV Ranch	17	20	22	20	9
Total Homes SV Ranch	992	1012	1034	1003	1012
% Rate of Growth	1.7%	2.0%	2.2%	1.9%	0.9%



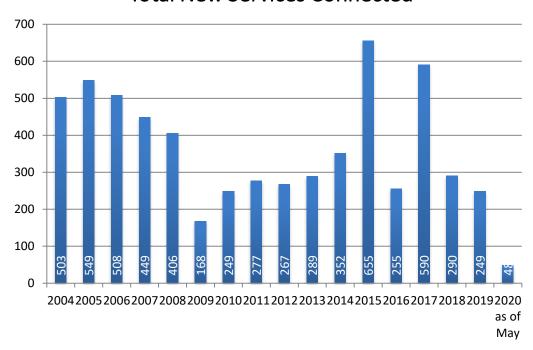
Total New Homes	131	148	153	140	61
Total Homes	4961	5109	5262	5358	5419
% Growth Rate in SV	2.7%	3.0%	3.0%	2.7%	1.1%

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 North Lincoln County and nearby areas. The numbers do not directly correlate with, or directly represent, the number of North Lincoln County new home permits because Lower Valley Energy serves a larger area than this analysis covers. 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 variation in the number of new connections.

### **Total New Services Connected**



Source: Lower Valley Energy



#### RESIDENTIAL HOME TRANSACTIONS

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

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.

### **Residential Home Sales**



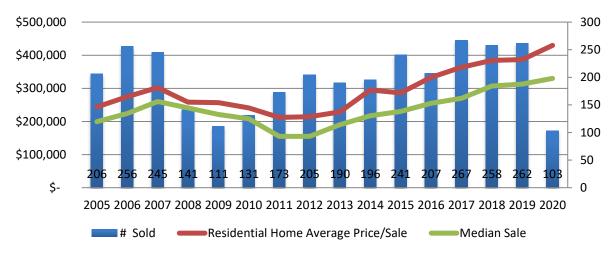
Source: Multiple Listing Services

The housing market in Star Valley appears to be slowing. Home sales in Star Valley showed minimal growth for the past three years. However, the number of homes sold during the past three years has been higher than any other three-year period in Star Valley. During the first six months of 2020, only 103 homes were sold on MLS with a sales volume of \$44,264,032. This number equals 21 homes less than the 130 sold in the first half of 2019. Despite the decrease in number of sales, the average residential home sales price showed in 2020 an increase of 9.7% when compared to 2019. For the first half of 2020, the average home sales price was \$460,174, an increase of \$40,666, as compared to an average price of \$419,508 for the first half of 2019. The price increase is consistent with the EAD 1Q2020 report which showed a 9.9% increase in housing prices statewide during first quarter of 2020.

The following graph shows average and median residential sales in Star Valley over time.



### **Residential Home Sales**



Source: Multiple Listing Services

The median sales price is a better indicator of home prices because it is not skewed by a few high-priced homes. The median home price for the first half of 2020 was \$330,000. This is an increase of 5.4% or \$17,000 from 2019 and continues the trend rising home prices. The rise in home prices may be of concern because it makes it harder for low to mid-level income earners to purchase a home in the area. The rise also indicates that those who can afford a home in Star Valley have not been as affected by COVID19 as low-income earners.

The graph below substantiates the Star Valley MLS data. The bottom line shows there was a large spike of 2.6% in U.S. homeownership rates 2Q2020. The spike represents the largest quarter over quarter increase in recorded U.S. history. Increased homeownership rates were likely triggered by record low federal interest rates combined with federal stimulus checks. These new homebuyers are primarily people under 44 years old. Federal interest rates are discussed in greater detail below.

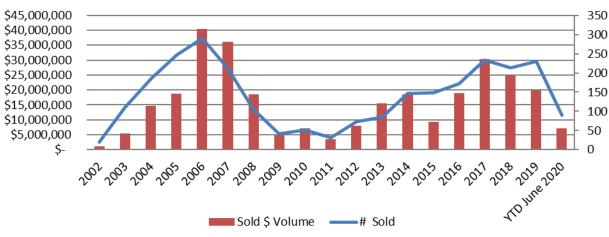




### **BUILDING LOT TRANSACTIONS**

The total number of building lot sales and the total sold value of building lots in the Star Valley area on MLS since 2002 are illustrated on the following graph. Building lots of all sizes are included in the figures and 2020 data represents only the first 6 months of activity.

## **Building Site Sales**



Source: Multiple Listing Services

Building lot sales for the past three years followed the same pattern as that of home sales, with a high in 2017 and lower numbers in 2018 and 2019. The first half of 2020 had 91 lot sales as compared to 86 in 2019, an increase of 5 sales.

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 2020 was \$79,763 compared to \$71,231 for the first 6 months of 2019. The median lot sales price, which deals more fairly with the large variation in sales prices, for the first half of 2020 was \$44,000 compared to \$48,260 for the first half of 2019. Both the average and median lot sales prices in Star Valley are shown in the following graph from 2005 through June 2020.



## **Building Site Sales**



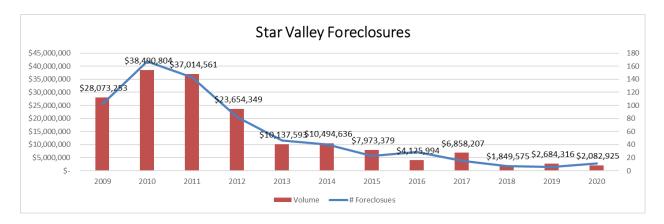
Source: Multiple Listing Services

### **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.

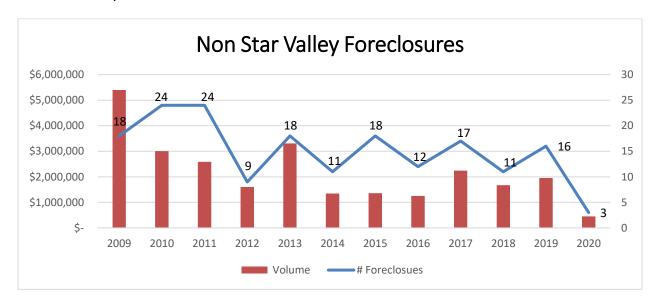
The bank has monitored the published foreclosures since 2009 using newspaper publishing's in the <u>Star Valley Independent</u> and the <u>Kemmerer Gazette</u>. The following graph shows the number of advertised foreclosures in Star Valley since 2009. In Star Valley, through June 2020, there were eleven foreclosures, with a total foreclosure amount of \$2,082,925. Three of the eleven were parcels of land owned by the same person. Even with the three land parcels the foreclosure dollar amount for the first six-months of the year was less than the six total foreclosures in 2019. This indicates that 2019 foreclosures were higher value properties. It is anticipated that with the economic downturn due to COVID19, there may be more foreclosures in Star Valley.





Source: Kemmerer Gazette and Star Valley Independent

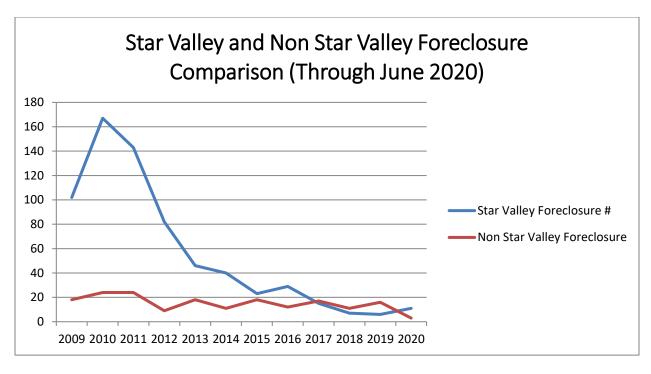
Lincoln County – Non-Star Valley foreclosures include forclosures in Kemmerer, LaBarge, Cokeville and surroundings areas within southern Lincoln County. While Star Valley had 11 advertised forclosures in the first half of 2020, southern Lincoln County had only three foreclosures. The lower number of forclosures in southern Lincoln County is very good because it suggests that the area has stabilized a little from the mine closure. The following graph shows Non-Star Valley foreclosures from 2009 to June 2020.



Source: Kemmerer Gazette and Star Valley Independent

The following graph compares the number of Star Valley foreclosures to the number of Non-Star Valley foreclosures. Star Valley surpassed Non-Star Valley foreclosures again in 2020. It will be interesting to see whether there are additional foreclosures that result from COVID19.

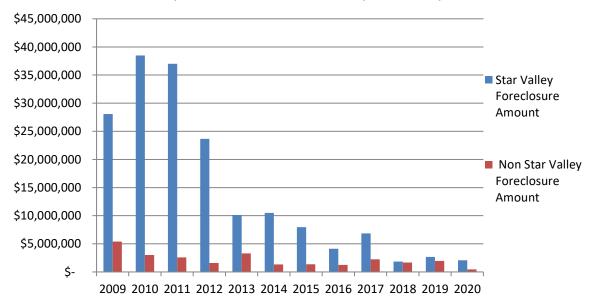




Source: Kemmerer Gazette & Star Valley Independent

The following graph compares the dollar volume of foreclosures between Star Valley and Non-Star Valley areas. Star Valley foreclosures consistently represent a higher dollar volume, which is driven by higher real estate values and generally a higher number of foreclosures.

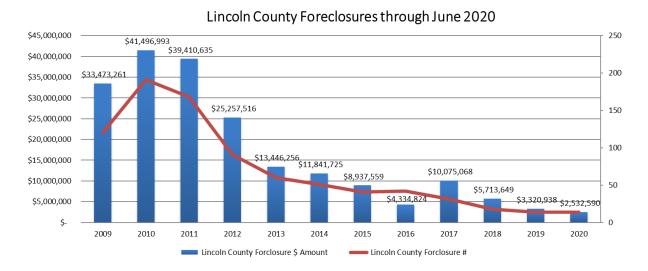
# Star Valley and Non Star Valley \$ Comparison



Source: Kemmerer Gazette & Star Valley Independent



By 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 & Star Valley Independent

### **RENTAL COSTS**

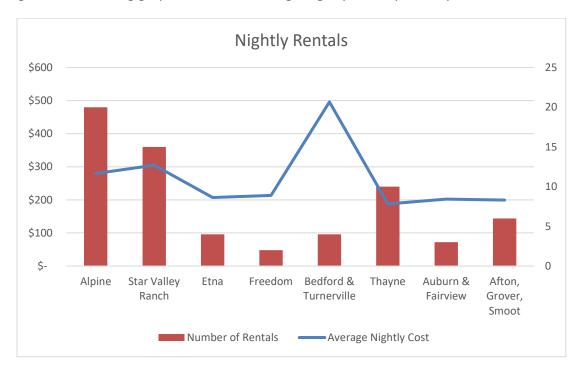
The lack of affordable housing in Star Valley makes it difficult for prospective moderate-income home buyers to purchase a house. Because of the affordable housing shortage, many people chose to rent for a period to save money before purchasing a home. An extensive search of real estate websites, social media sites, and newspapers shows that there are not many houses to rent in Star Valley. In fact, while searching for rentals in Star Valley, the authors found several internet posts by people "in search of" a place to rent. A lack of houses to rent or purchase for moderate-income people makes it very difficult for these people to live on their own in Star Valley.

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 \$1,313 based on our 2020 survey, which is greater than the \$1,087 for the 2019 survey. The average monthly cost for a rental house was \$1,592 compared to \$1,125 for 2019. Although the averages show a \$226 increase over 2019, most of the available units were in the lower valley which historically has been more expensive than the upper valley. The average monthly rental cost for an apartment was \$983 which is a very minor increase over \$980 found 2019. Even though rental prices remain high in Star Valley, renting is still cheaper than buying a house.

Despite the lack of houses to rent on a monthly basis, there are many houses to rent on a nightly basis throughout the valley. In August, the authors found 64 houses available on vrbo.com for rent. The considerable volume of available rentals indicates homeowners are



taking advantage of the tourism activity rather than traditional monthly rentals. This could be because of financial returns can be higher than renting on a monthly basis, another reason could be because homeowners want to live in their home during part of the year and rent it out for the remainder of the year. The overall average nightly rate for a house in Star Valley is \$261. Except for Bedford and Turnerville as the outliner, each towns' average was about \$200 or \$300 per night. The following graph shows the average nightly rental prices by town for 2020.



Source: Vacation Rentals by Owner

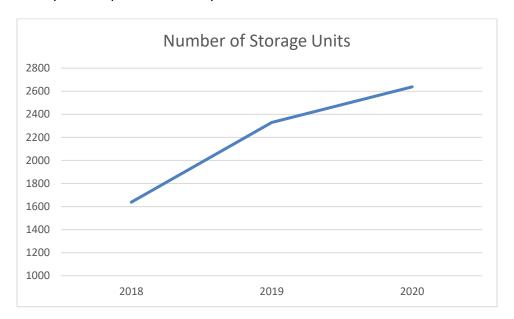
Most of the rentals are in the lower valley. Alpine, Star Valley Ranch, and Thayne showed the highest number of rental units available. This is likely because the lower valley is geographically closer to Palisades Reservoir and Jackson Hole which are regional tourist destinations.

### **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 July 2020, the bank conducted a market survey and counted 2,638 storage units currently in the valley, an increase of 486 over 2,160 counted in 2019. Throughout the whole valley the number of storage units increased by 309 or 13%. The number of units in Afton increased, however, during the 2020 survey, the authors spoke with owners of a large storage unit complex who indicated that they had about 420 units, instead of the previously miscounted 250 units. The actual number of storage units in Afton in 2019 was 734. In 2020, this number increased by 127 to 861 or 15%. Alpine increased by 100 units and



Freedom increased by 82 units. There are at least another 50 units under construction in Afton and another 50 in Freedom and Star Valley Ranch. Below is a graph of the number of storage units in the valley for the previous three years.

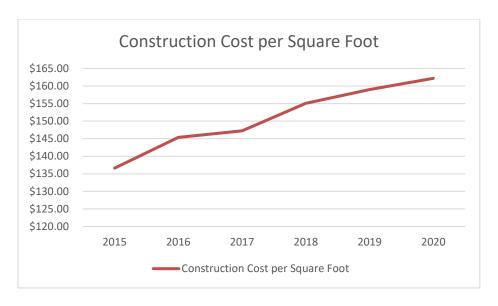


### **CONSTRUCTION COSTS**

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.

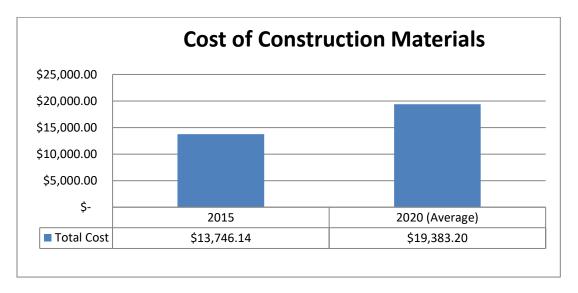
The bank's study revealed that the for the first six months of 2020, the average construction cost was \$162.19 per square foot. Construction cost does not include land costs, utility connection costs, and only includes square footage that was completed and livable. For example, the square footage of 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 six years. The trend exhibits an increase in cost of construction over time.





#### **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 2020 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 Wood Products, and Calls Ready Mix.



Source: Jenkins Lumber, Evergreen Wood Products, Calls Ready Mix

The basket of construction material has increased in cost by \$5,637.06 over the 5-year period in review for a total increase of 41% or an 8.2% 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 continues. The basket of construction materials used in the review is shown below.

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	

### **GENERAL MARKET SUMMARY**

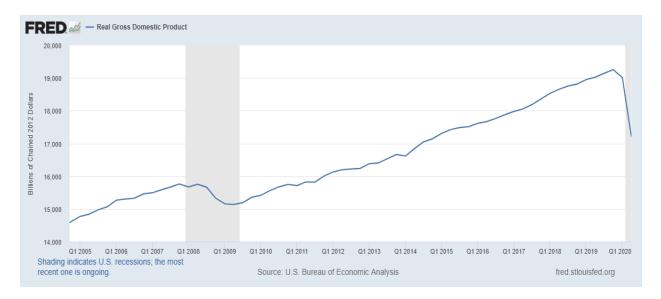
The economy in 2019 continued to grow for Wyoming and Lincoln county. Dow Jones Industrial Average set new record highs and finished 2019 with 25.3% returns. Nasdaq and S&P500 also finished 2019 very strong. In February 2020, the U.S. set a new record for economic expansion of ten and half years or 128 months, exceeding the previous record of 120 months which took place in the 1990's. 2020 was poised to be another great year, however COVID19 derailed the world economy, sent the stock market on a roller-coaster ride, and sent unemployment to levels not seen since the great depression. February unemployment was at a record low 3.5%



and then spiked to a record high of 14.1% in a matter of two months. Other economic indicators plummeted to Great Recession levels.

A recession is defined as a fall in GDP. February, April, and March marked one of the deepest and shortest recessions in recent history. What makes it so remarkable is the recession was driven by a virus and subsequent government mandated lockdowns, not by normal economic factors. This type of recession is considered a black swan event because it is very hard to predict but is so disruptive that it affects large scale supply and demand.

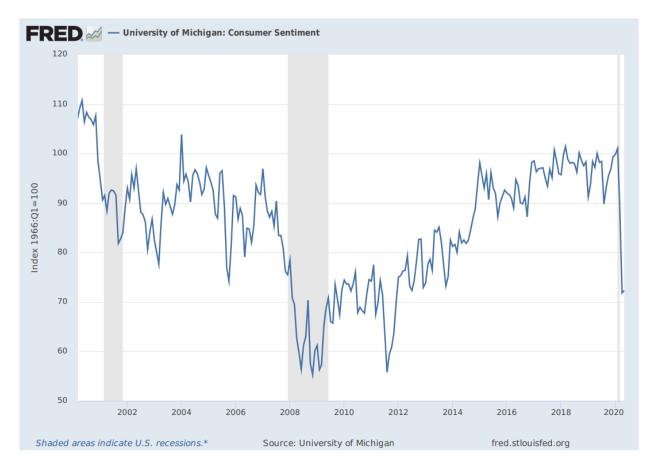
Below is a chart of the U.S. GDP since 2005. As can be seen, GDP dropped dramatically in Q1 and Q2 of 2020.



The Federal Reserve maintained the Effective Federal Funds Rate (federal interest rate) at or near 2.4% from January 2019 through July, when it began to stair step down the federal interest rates to 1.5%. In late March, in response to the drop in GDP and other economic indicators cause by COVID19, the Federal Reserve dropped federal interest rates to below 0.05%. Other countries changed their policies to reflect negative interest rates.

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 was growing pre-recession and then, like other indicators, dropped in March and April.





With all the changes and uncertainty surrounding COVID19, it is difficult to opine on what will happen to the economy over the next year. Declining unemployment rates, a rebounding stock market, and ample cash supply indicate that the recession was short, and the economy will make a quick recovery. However, as has been seen in recent months, as government restrictions loosen, the number of COVID19 cases increases forcing some governments to reimpose restrictions. When restrictions are re-imposed, the economy suffers, creating a cycle of expansion and contraction. It is the authors opinion, that until most of the U.S. population, and possibly world population, is vaccinated for COVID19, the U.S. economy will continue in a state of uncertainty.

Surprisingly, housing prices in Wyoming, apparently buoyed by record-low interest rates, jumped up by 9.9%. This could be because that those with higher income levels and assets were able to keep their jobs and wealth and they purchased homes because of the very low interest rates.

Fortunately, Star Valley has not been as impacted by COVID19 as other regions of the U.S. Certainly, Star Valley's growth has been stifled but not stopped. Unemployment is dropping, housing prices are up, school enrollment is up, there is upward wage pressure, and new homes and storage units are being constructed. Growth continues in Star Valley despite COVID19.



#### REFERENCES

Baker Hughes North American Rig Count, July 2020. Retrieved from <a href="https://rigcount.bakerhughes.com/na-rig-count">https://rigcount.bakerhughes.com/na-rig-count</a>

Bleizeffer, D. and Adams, M. (2020, June 23). Transition in Coal Country: Rural communities on the brink. *WyoFile*. Retrieved from <a href="https://www.wyofile.com/transition-in-coal-country-rural-communities-on-the-brink/">https://www.wyofile.com/transition-in-coal-country-rural-communities-on-the-brink/</a>

Columbus, L. (2020, April 28). *Forbes*. Retrieved from <a href="https://www.forbes.com/sites/louiscolumbus/2020/04/28/how-covid-19-is-transforming-e-commerce/#1483ae0a3544">https://www.forbes.com/sites/louiscolumbus/2020/04/28/how-covid-19-is-transforming-e-commerce/#1483ae0a3544</a>

Federal Reserve Bank of St. Louis. "Homeownership Rate." Fred. U.S. Census Bureau, Retrieved 30 July 2020. <a href="https://fred.stlouisfed.org/">https://fred.stlouisfed.org/</a>

Federal Reserve Bank of St. Louis. "SNAP Benefits Recipients in Lincoln County, WY" Fred. U.S. Census Bureau, 18 July 2020. <a href="https://fred.stlouisfed.org/">https://fred.stlouisfed.org/</a>

Ngai, C., Raimonde, O., & Longley, A. (2020, April 20). *Bloomberg. Oil Plunges Below Zero for First Time in Unprecedented Wipeout*. Retrieved from <a href="https://www.bloomberg.com/news/articles/2020-04-19/oil-drops-to-18-year-low-on-global-demand-crunch-storage-woes">https://www.bloomberg.com/news/articles/2020-04-19/oil-drops-to-18-year-low-on-global-demand-crunch-storage-woes</a>

Smith, G. (2020, May 1). *WorldOil*. OPEC output hit 30-year high during the Saudi-Russia price war. Retrieved from <a href="https://www.worldoil.com/news/">https://www.worldoil.com/news/</a>

State of Wyoming, Consensus Revenue Estimating Group (CREG). Economic Analysis Division. July 2019. Wyoming State Government Revenue Forecast Fiscal Year 2109 – Fiscal Year 2024. Retrieved from <a href="http://eadiv.state.wy.us/">http://eadiv.state.wy.us/</a>

State of Wyoming, Department of Health. July 2020. *Vital Statistics Data and Reports*, Retrieved from https://health.wyo.gov/admin/vitalstatistics/reports/

State of Wyoming, Economic Analysis Division. July 2020. *Economic Summary: 1Q2020*. Retrieved from http://eadiv.state.wy.us/

The Genius of Amazon. *The Economist*, June 20<sup>th</sup>-26<sup>th</sup> 2020, pg 7.

U.S. Bureau of Labor Statistics, Monthly Labor Review. June 2020. *Ability to work from home: evidence from two surveys and implications for the labor market in the COVID-19 pandemic*, Retrieved from <a href="https://www.bls.gov/opub/mlr/2020/article/ability-to-work-from-home.htm">https://www.bls.gov/opub/mlr/2020/article/ability-to-work-from-home.htm</a>

U.S. Census Bureau, July 28, 2020. *Quarterly Residential Vacancies and Homeownership Second Quarter 2020*. (Release Number: CB20-107) Retrieved from https://www.census.gov/housing/hvs/files/currenthvspress.pdf



U.S. Energy Information Administration, 20 Feb. 2020. Wyoming State Profile and Energy Estimates. *Wyoming Profile*. Retrieved from https://www.eia.gov/state/analysis.php?sid=WY

U.S. Energy Information Administration, 27 Feb. 2020. What is U.S. Electricity Generation by Energy Source? FAQ. Retrieved from <a href="https://www.eia.gov/tools/faqs/faq.php?id=427&t=2">https://www.eia.gov/tools/faqs/faq.php?id=427&t=2</a>

Vacation Rentals by Owner, Star Valley Ranch, Thayne, Wyoming, August 2020. Retrieved from: <a href="https://www.vrbo.com/search/keywords:star-valley-ranch-thayne-wyoming-united-states-of-america?petIncluded=false">https://www.vrbo.com/search/keywords:star-valley-ranch-thayne-wyoming-united-states-of-america?petIncluded=false</a>

Wyoming Department of Administration & Information, Economic Analysis Division. July 2020. *Population for Wyoming, Counties, Cities, and Towns: 2010 to 2040.* Retrieved from http://eadiv.state.wy.us/

Wyoming Department of Administration & Information, Economic Analysis Division. July 2020. *Wyoming State Government Revenue Update: July 2020.* Retrieved from <a href="http://eadiv.state.wy.us/">http://eadiv.state.wy.us/</a>

Wyoming Department of Administration & Information, Economic Analysis Division. July 2020. *Wyoming Economic Summary Report for the First Quarter of 2020.* Retrieved from <a href="http://eadiv.state.wy.us/">http://eadiv.state.wy.us/</a>

Wyoming Department of Administration & Information, Economic Analysis Division. July 2020. *Wyoming State Government Revenue Forecast for FY2020-FY2024*. Retrieved from <a href="http://eadiv.state.wy.us/">http://eadiv.state.wy.us/</a>

Wyoming Department of Administration & Information, Economic Analysis Division. June 2020. *Wyoming Insight. June 2020.* Retrieved from <a href="http://eadiv.state.wy.us/">http://eadiv.state.wy.us/</a>

Wyoming Department of Administration & Information, Economic Analysis Division. *Wyoming Insight. June 2020*. Retrieved from http://eadiv.state.wy.us/

Wyoming Department of Workforce Services, Research and Planning. July 2020. *Weekly Unemployment Insurance Claims for Wyoming by County of Residence, Industry, and Selected Demographics, 2019-2020.* Retrieved from <a href="https://doe.state.wy.us/lmi/">https://doe.state.wy.us/lmi/</a>

Wyoming Department of Workforce Services. 2020 Wyoming Workforce Annual Report, June 2020. *Tracking Coal Miners Into the Labor Force After Job Losses*. Retrieved from <a href="https://doe.state.wy.us/lmi/">https://doe.state.wy.us/lmi/</a>

Wyoming Taxpayers Association, July 2020. *Sales and Use/Excise tax rates in Wyoming*. Retrieved from <a href="https://www.wyotax.org/sales\_and\_use\_tax.aspx#:~:text=The%20original%20sales%20tax%20in,a%20permanent%20tax%20at%202%25">https://www.wyotax.org/sales\_and\_use\_tax.aspx#:~:text=The%20original%20sales%20tax%20in,a%20permanent%20tax%20at%202%25</a>.

