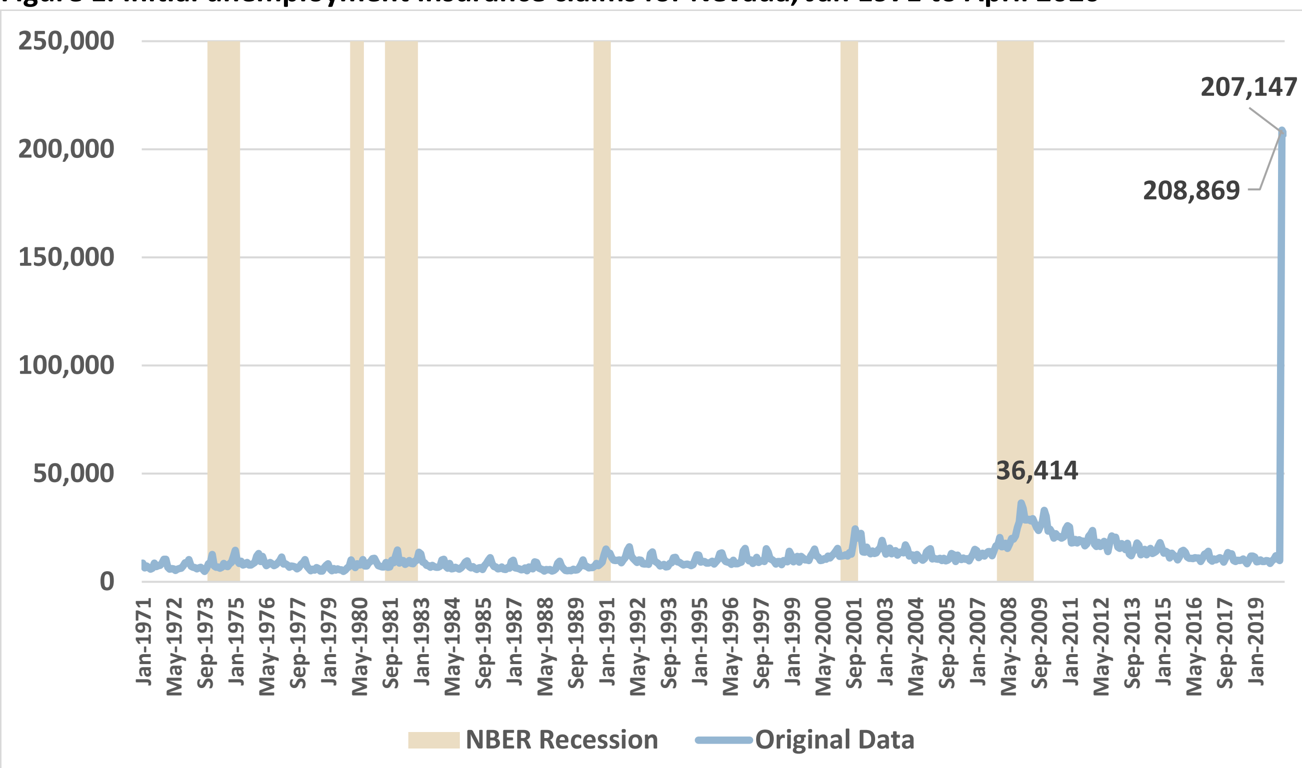
COVID-19 and Nevada Housing Market: Like the Great Recession or Not?

A Look Back at the Great Recession's Effect on the Nevada Economy with Special Focus on Housing

Governor Sisolak announced March 17th, 2020, that the state's casinos would close at midnight to prevent the spread of the novel coronavirus. All other non-essential businesses were also closed at that time. Unprecedented job losses followed immediately. Initial unemployment insurance claims for March were 208,869, far surpassing the previous monthly high of 36,414 set in December 2008 during the Great Recession.[i] In April, initial unemployment insurance claims were nearly as high at 207,147. On May 15th, NV Department of Employment, Training and Rehabilitation reported 462,396 initial claims filed in 2020, and over 324,000 continuing claims. Nevada insured unemployment (the ratio of continued claims to total covered employment) stood at 23.5%, a record. In comparison, national insured unemployment for the previous week was 15.7%, also a record. [ii] At this writing the entire casino industry remains closed with opening date set for June 4th.

Figure 1. Initial unemployment insurance claims for Nevada, Jan 1971 to April 2020



Source: See endnote i.

April unemployment in Nevada was 28.2%, the highest in the nation, and 5.5% higher than Michigan with the second highest April unemployment. The 28.2% unemployment rate was a record high for any state for the unemployment series, which began in 1976.[iii]

Clearly, the COVID-19 pandemic and efforts to stop the spread of the virus are affecting Nevada's economy in unprecedented ways and it is very early in the crisis to predict what could happen next. However, to the extent that the current situation may again lead to a difficult recessionary period for

Nevada there may be some similarities to the Great Recession we have recently emerged from. Accordingly this report looks back to the beginning of the Great Recession in Nevada and at what happened in the following years with a focus on housing and housing for low income households in order to gauge what Nevada could be facing in the coming months and years.

Hopes are high that Nevada and the rest of the country will soon be fully open for business again, but experts are predicting that at least some social distancing protocols will need to continue until a vaccine for the novel coronavirus can be mass produced, possibly for a year or more. State imposed travel restrictions, social distancing protocols and fear of the virus worldwide imply a dampening of activity in the hospitality sector in particular, as well as the rest of the economy. It's a reasonable guess that tourism will remain substantially lower than normal until people feel safe to travel, i.e. until a vaccine or other effective medical intervention comes into wide use, or until the virus mutates or stops spreading or we otherwise learn how better to control the contagion through rapid and inexpensive testing. A recent Smart Asset study predicted that the hospitality sector would suffer more than any other sector, and found Nevada has the largest vulnerability of any state to a coronavirus-induced recession.[iv] Another study done at Brookings found that for cities with populations over 50,000 Las Vegas had the largest share of jobs in industries at high risk from COVID19 impacts. Reno was also found to be high on the list of at-risk cities[v]

Economic context

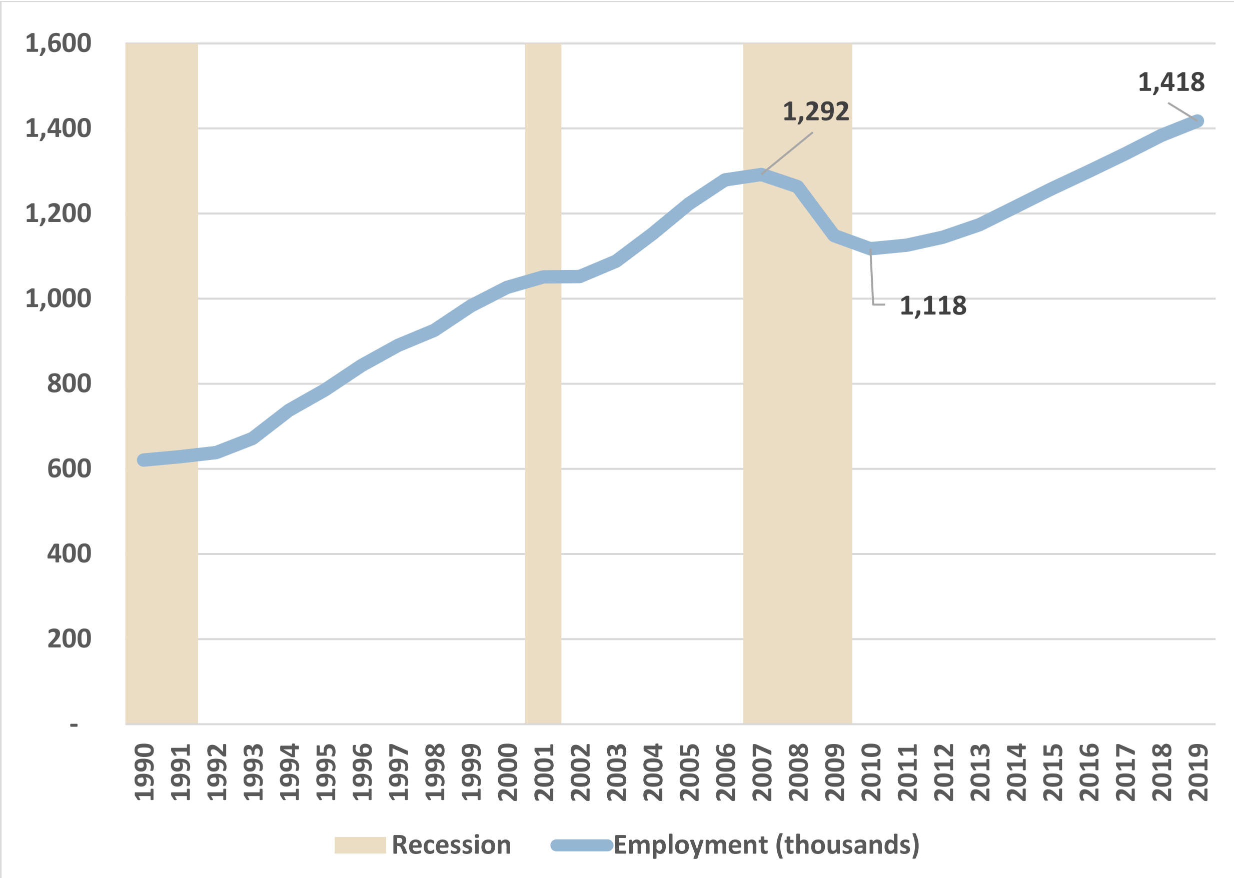
The following charts facilitate a look back at the economic indicators over the time of the Great Recession.

Employment

Figure 2 shows how overall annual average non-farm employment changed from 1990 to 2019, a period that includes the Great Recession years from 2007 to 2009. Nevada's annual average non-farm employment peaked in 2007 with 1,292,000 jobs but dropped by 175,000 jobs (14%) by 2010 at the bottom of the cycle. Annual average non-farm employment did not exceed the 2007 high again until 2016. In more detail, Nevada employment was growing at an average pace of 5.5% a year from 2004 to 2006. At the end of 2007, the recession began, and employment growth slowed to 1%. The following three years Nevada employment shrank, first in 2008 by 2.2%, then in 2009 by 9.1% and finally in 2010 by 2.7%. In 2011 employment at last increased but only by 0.7%. From 2012 on, growth has averaged 2.9% a year. [vi]

In contrast, Nevada lost many more jobs in the last 10 weeks due to the coronavirus shutdown with the recovery trajectory unknown. April 2020 Nevada non-farm employment was down nearly 255,000 or 18% as compared to April 2019.[vii] The shape of the Coronavirus Contraction is much different, with a very sudden and more severe initiation.

Figure 2. Nevada annual average non-farm employment (1,000s), 1990 to 2019.



Source: see endnote v.

Sectoral employment in 2007 and 2019

As in the Great Recession, Nevada is particularly vulnerable but for different reasons. In the most recent recession, the major driver was the housing bubble, with heavy impacts in the construction sector. Nevada suffered a larger impact in part because its fast growth led to a bigger housing bubble than many other states. In the case of the Coronavirus Contraction, Bureau of Labor Statistics (BLS) data shows the hospitality sector to be most affected. In April, the Bureau of Labor Statistics estimated a loss of 254,800 Nevada jobs. Of these, 140,100, about 55% of the total, were estimated to be lost to the leisure and hospitality sector. The leisure and hospitality sector had the largest decline of any sector with 39% of its employment lost in April.[viii]

Table 1 shows the sectoral employment for Nevada in 2007, at the threshold of the Great Recession and in 2019, at the threshold of the Coronavirus Contraction. One of the largest structural changes is in the construction sector which lost 37,500 jobs, down from 133,700 jobs in 2007 to 96,200 in 2019. In percentage terms construction shrank from over 10% of total employment to less than 7%. Other notable changes are a 3% increase in the education and health services sector from 7.2% to 10.2% of total employment, a 1.5% increase in the professional and business services sector from 12.3% to 13.8% of total and a one percent decrease in the leisure and hospitality sector from 26.3% to 25.1% of total non-farm employment. The leisure and hospitality sector remains the largest sector in Nevada with 355,000 employees.[ix] Given that this sector is likely to be most affected by the coronavirus, and the challenges in adapting the sector to provide a safe experience for customers, it is this sectoral dependency that creates Nevada's special vulnerability to the virus induced contraction. It is in southern Nevada in particular that the economy is most dominated by the hospitality sector. According to February 2020 employment figures, 28% of non-farm employment in the Las Vegas metro region was in the leisure and hospitality sector as compared to 15% in the Reno metro region.[x]

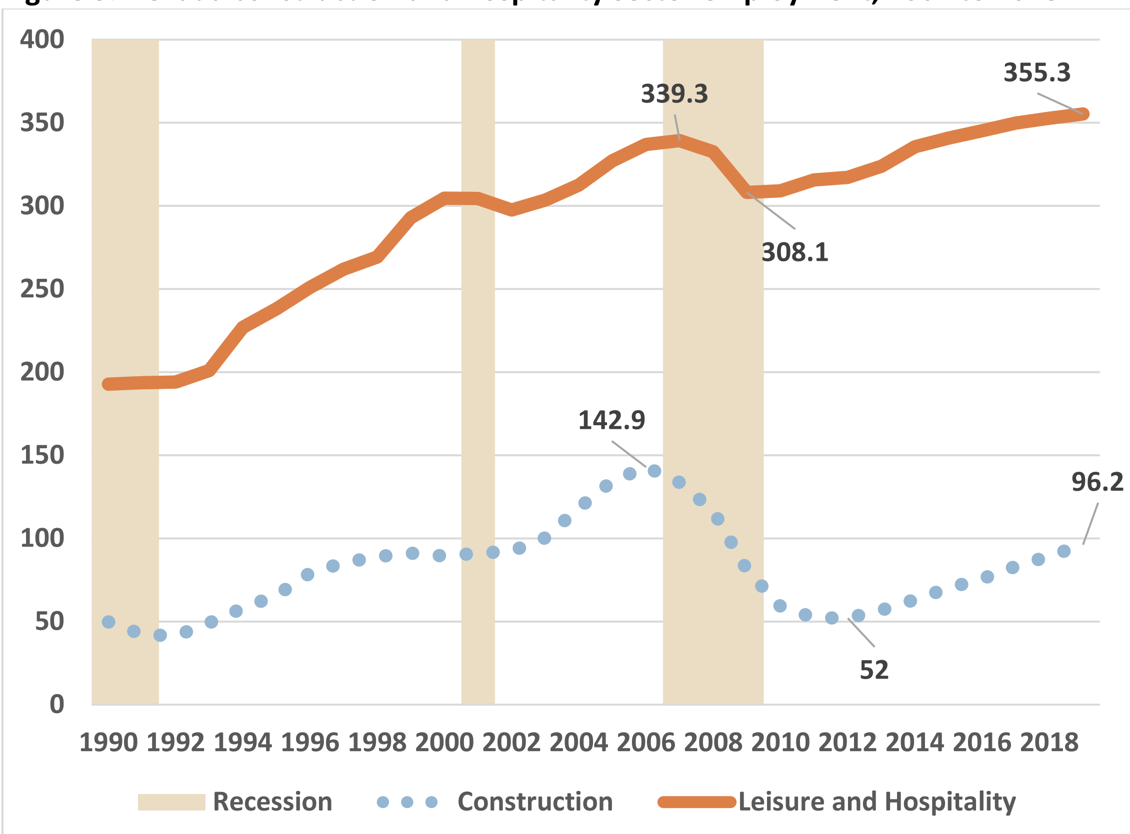
Table 1. Nevada Sectoral Non-farm Employment (1,000s), 2007 and 2019

Sector	2007 Employ-ment	2019 Employ-ment	Change: employ-ment 2007-2019	% employ-ment 2007	% employ-ment 2019	Change % 2007 - 2019
Mining & Logging	12	14.7	2.7	0.9%	1.0%	0.1%
Construction	133.7	96.2	-37.5	10.3%	6.8%	-3.6%
Manufacturing	50.2	59.4	9.2	3.9%	4.2%	0.3%
Trade Transportation & Utilities	232.3	261.2	28.9	18.0%	18.4%	0.4%
Information	15.7	15.8	0.1	1.2%	1.1%	-0.1%
Financial Activities	64.6	69	4.4	5.0%	4.9%	-0.1%
Professional & Business Services	159.1	195.5	36.4	12.3%	13.8%	1.5%
Education & Health Services	92.9	144	51.1	7.2%	10.2%	3.0%
Leisure & Hospitality	339.3	355.3	16	26.3%	25.1%	-1.2%
Other Services	36.5	41.5	5	2.8%	2.9%	0.1%
Government	156	165.2	9.2	12.1%	11.7%	-0.4%
Total non-farm employment	1292.4	1417.8	125.4	100.0%	100.0%	0.0%

As seen in Figure 4, construction employment peaked in 2006 and began to lose jobs before the official start of the recession. Ultimately construction employment would lose 91,000 jobs with the low point in annual construction employment not reached until 2012, three years after the end of the recession. Construction employment still had not returned to the peak in 2006 as of 2019.[xi] For a coronavirus-induced economic recession, there is not expected to be as severe a reaction in the construction sector, given the more balanced state of the sector as of 2019. The driver of the recession would likely be the revenue and employment losses in the hospitality and entertainment sectors.

During the Great Recession, the largest sector in the Nevada economy, leisure and hospitality, was less impacted than construction, both by number of jobs and by percentage downturn. From the high in 2007 of 339,300 jobs to the low in 2009 of 308,100 jobs there were 31,200 hospitality and entertainment sector jobs lost, a downturn of 9%. The sector started gaining employment in 2010 and by 2015 surpassed the 2007 high point. However, this sector, which makes up over a quarter of the jobs in the Nevada economy, is the sector most likely to lose revenue and employment in a coronavirus induced recession. Given the sharp and deep initiation of the contraction in hospitality sector employment due to the coronavirus shutdown, the Great Recession's 9.2% reduction seems relatively mild. In fact, the casino sector, a subsector of the leisure and hospitality sector, has had close to zero employment and revenue for almost eleven weeks. Assuming ten percent of normal revenue through the eleven-week shutdown period, the sector could already have sustained a 19% revenue loss for the year all else equal.

Figure 3. Nevada construction and hospitality sector employment, 2002 to 2018



Source: see endnote viii.

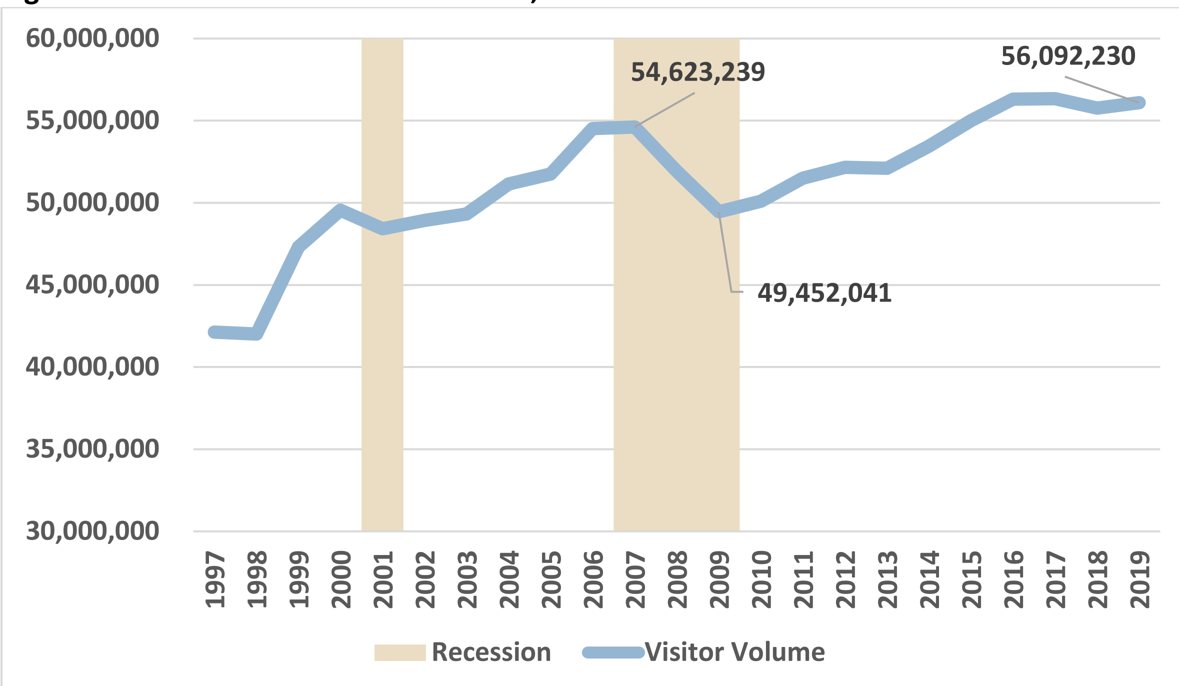
Visitor Volume and Gross Gaming Revenue

Before the Great Recession, annual Nevada visitor volume peaked at 54,623,239 in 2007. It dropped 9% to 49,452,041 in 2009. The volume did not surpass the 2007 peak until 2015 when it reached 55,004,539. [xii] In contrast, March 2020 Las Vegas visitor volume was down 58.6% from March 2019.[xiii] It is certain that April over April visitor volume will show an even greater impact since a mandatory closure of all casinos was enforced for the entire month. May will have also been a period of mandatory closure as well. Making a generous assumption that visitor volume will be 1/10 of 2019 volume for the 11 weeks of the closure March, April, May, and early June, visitor volume would already be down 19% over 2019 without any further impacts.

In the most optimistic scenario, visitor volume might behave as it did in the case of Toronto in a study of how the SARS pandemic affected hotel visitor volume and revenue there. During the period from March to July of 2003, Toronto was identified as an area of recent local transmission of SARS, had travel advisories issued and lifted after a week in April, then was again identified as an area of recent local transmission before finally being cleared in early July. Lodging demand decreased by about 20% through

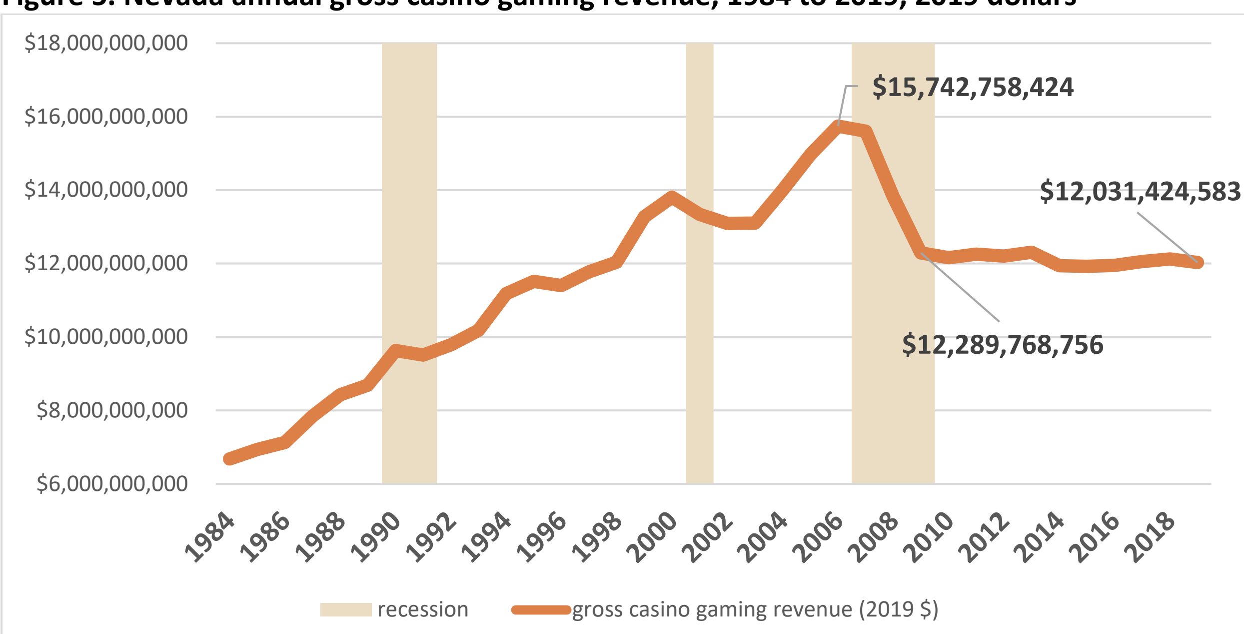
July with demand still somewhat depressed through November, five months after being cleared. Within a year demand had fully recovered but revenue lagged another two years because of discounts given to encourage demand.[xiv]

Figure 4. Nevada Annual Visitor Volume, 1997 to 2019



Source: see endnote xii.

Figure 5. Nevada annual gross casino gaming revenue, 1984 to 2019, 2019 dollars



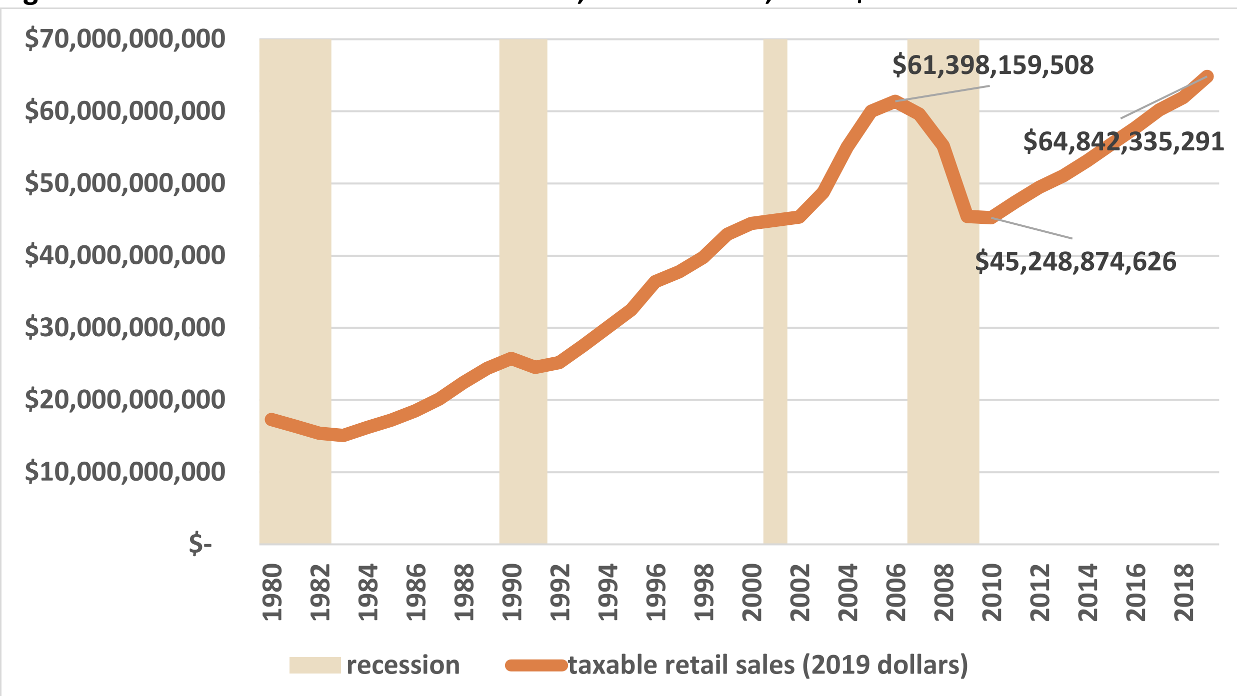
Source: See endnote xv.

During the recession, inflation adjusted annual gross casino gaming revenues fell 24% from $15.7 billion (2019 dollars) to $12.3 billion.[xv] Since the Great Recession, non-gaming revenues have been growing while gaming revenues are flat because of a different business strategy that depends more on revenues from restaurants, shows, events and retail shopping.[xvi]

Taxable retail sales

Taxable retail sales are an important indicator both of consumer spending and of the tax revenue base for state and local governments. Taxable retail sales dropped by 26% from an inflation adjusted $61.4 billion (2019 dollars) in 2006 to $45.3 billion in 2010. Annual taxable retail sales did not surpass the 2006 high mark until 2018.[xvii]

Figure 6. Nevada annual taxable retail sales, 1980 to 2019, 2019 $



Source: See endnote xvii.

Population growth and net migration.

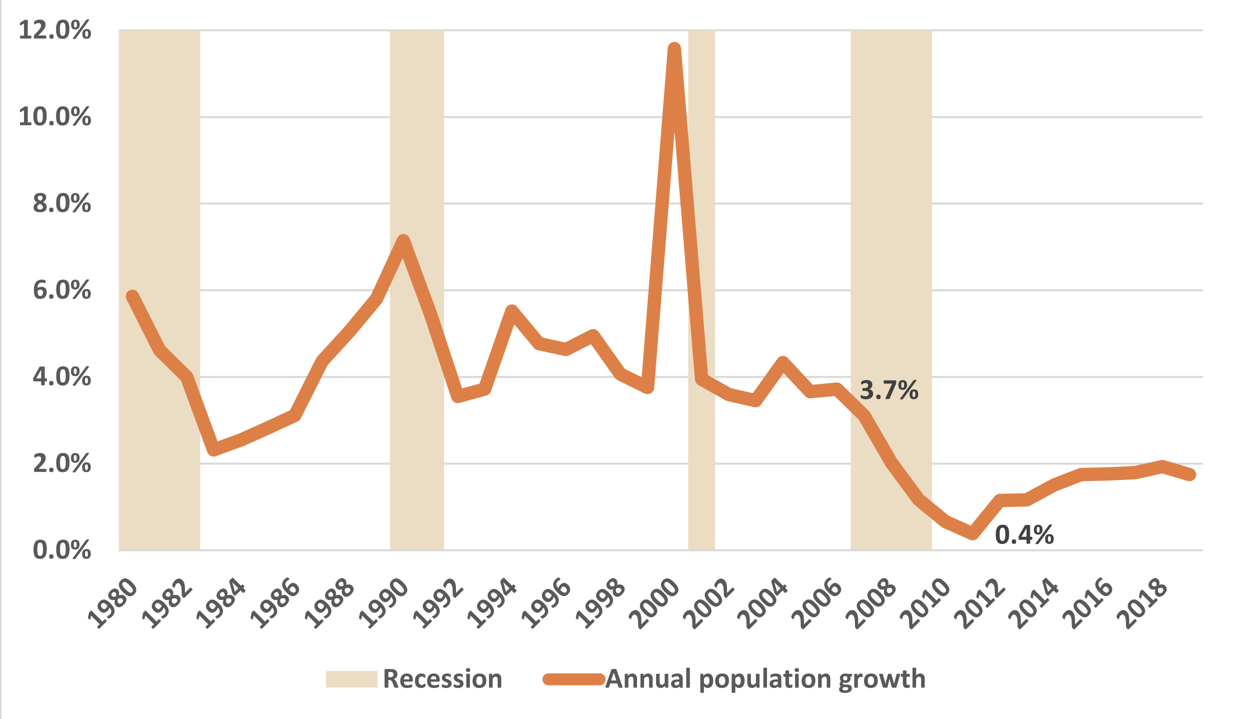
The economy connects to the housing sector through population growth and household formation, or the lack of it.

Population growth

Over most of the last 60 years, Nevada has been the fastest growing state in the nation with the most recent decade proving to be the exception.[xviii] It is the recession impacted years from about 2007 to 2012 that slowed down the state's growth the most as is seen in the growth rate chart in Figure 7. Since the recession, growth rates have not returned to the previous decades high rates. Average annual growth during the 2010's was 1.4% as compared to growth rates of 4.1% in the previous decade.[xix]

Estimates from the Census Bureau put Nevada as the 6th fastest growing state from 2010 to 2019 with net migration driving most of the growth.[xx] Figure 8 demonstrates how net migration fell during the recession years.[xxi]

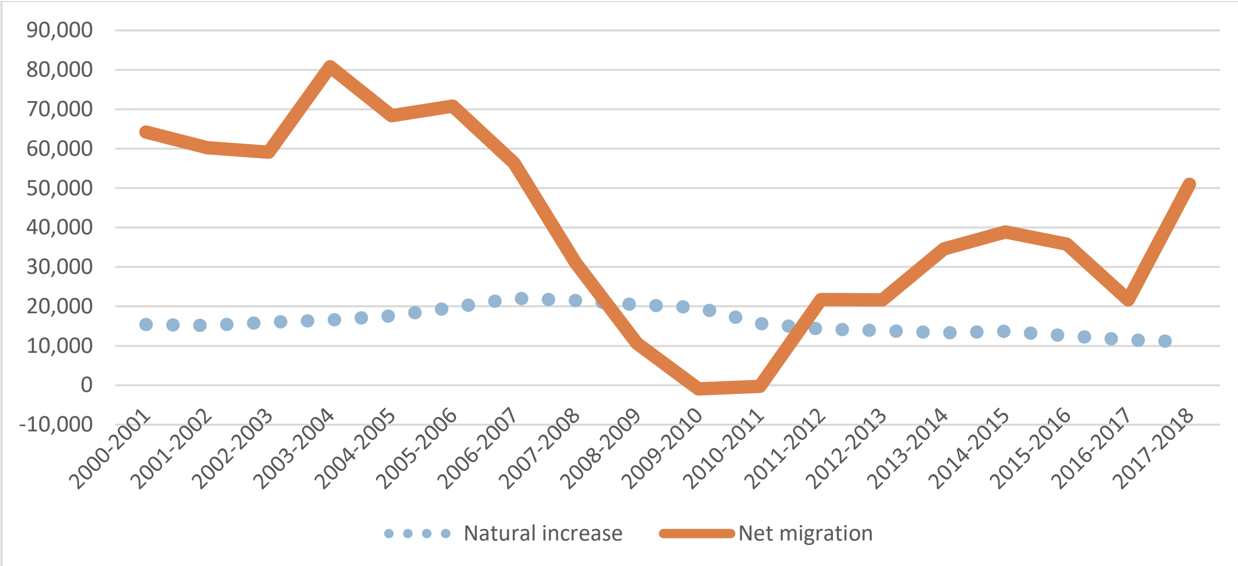
Figure 7. Nevada annual estimates of population growth rate, 1980 to 2019



Source: See endnote xviii. The growth spike at 2000 is likely a result of low estimations being corrected by the Census count.

The key driver of population growth in Nevada has been positive net domestic migration.[xxii] Most migration appears to be driven by households with workers seeking employment in Nevada, although some migration appears to be retirement related. IRS migration data indicates that in 2017-2018, for example, tax returns for 87% of in-migrating filers were under age 65, and 58% were in the prime working years from 26 to 55.[xxiii] No data is yet available to establish any trends in population growth for the era of the Coronavirus Contraction. However, it is likely that Nevada's net migration will fall again if unemployment rates in Nevada are higher than in other locations for a long period of time. It could be expected that Nevada population growth would again slow dramatically if employment falls again as it did in the Great Recession. More slowing of population growth or population decreases will affect housing demand.

Figure 8. Nevada natural increase and net migration 2000-2001 to 2017-2018



Source: See endnote xxii.

Household formation

Another factor affecting housing demand throughout the Great Recession was a slowing of household formation. The U.S. rate fell dramatically from an average before 2008 of about 1.5 million households to 0.5 million households during the years 2008-2010. [xxiv] The fall in household formation was primarily due to younger age cohorts not forming new households and was worst in metropolitan areas with the worst employment to population ratios and largest drops in home values. It is easy to imagine that household formation could decrease and doubling up could increase in the Coronavirus Contraction. There are already some indications of an increase in vacancies in multi-family apartments (see below for early data on vacancies for Reno and Las Vegas).

Recession Impacts on Housing

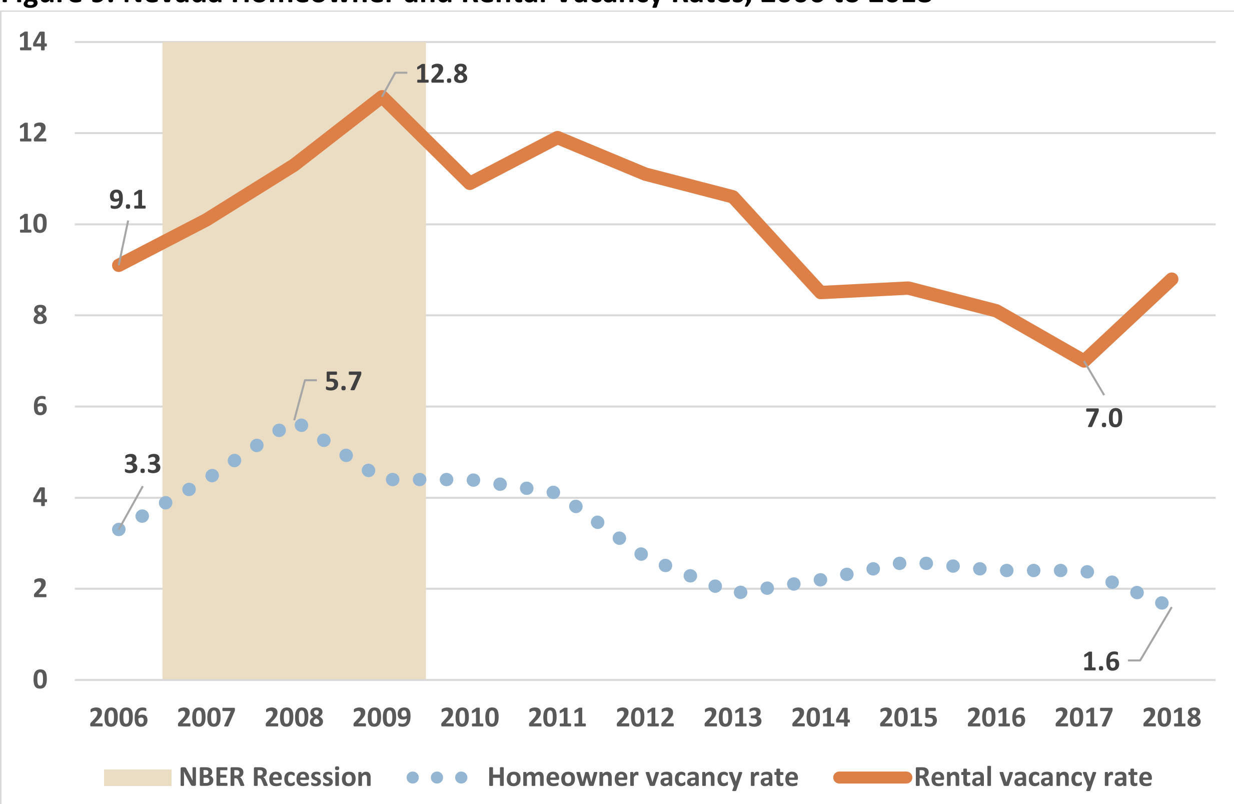
In the Great Recession, economic problems began in the housing sector. In the Coronavirus Contraction, the virus and measures to inhibit it have struck a direct blow to Nevada's primary sector, leisure and hospitality. The depth of the impacts to this sector will drive impacts in the housing market. Below the impacts of the Great Recession on housing are reviewed and the data available so far in the Coronavirus Contraction is compared.

Multi-family Rents and Vacancies

It is early yet to have much data available in the current economic crisis. Thus far federal aid and a state moratorium on evictions have been influential in keeping tenants in place and in ensuring their rent payments can be made. Data on the National Multi-family Housing Council website shows that despite the enormous disruption in employment documented above, 90.8% of renters nationwide have paid some or all of their rent for May, only two percentage points behind 2019, at least for large professionally managed properties.[xxv] In Las Vegas, April ALN Apartment Data showed a slight decrease in occupancy rates (increase in vacancy rates) and increases in concessions.[xxvi] Lied Institute's Apartment Vacancy 1st Quarter 2020 results were similar with a half a point rise in vacancy over the previous quarter.[xxvii] In the 1st quarter Johnson, Perkins and Griffin report for Reno, the vacancy rate remained low at 3.5%. This was the highest vacancy level the report recorded for the 1st quarter since 2014; however, effects of the Coronavirus Contraction probably do not yet appear in the report.[xxviii] The April ALN Apartment Data for Reno showed an increase in occupancy but increases in concessions. Rents in the reports continued to rise. However, at a national webinar, the National Multifamily Housing Council reported rents already down in many markets.[xxix]

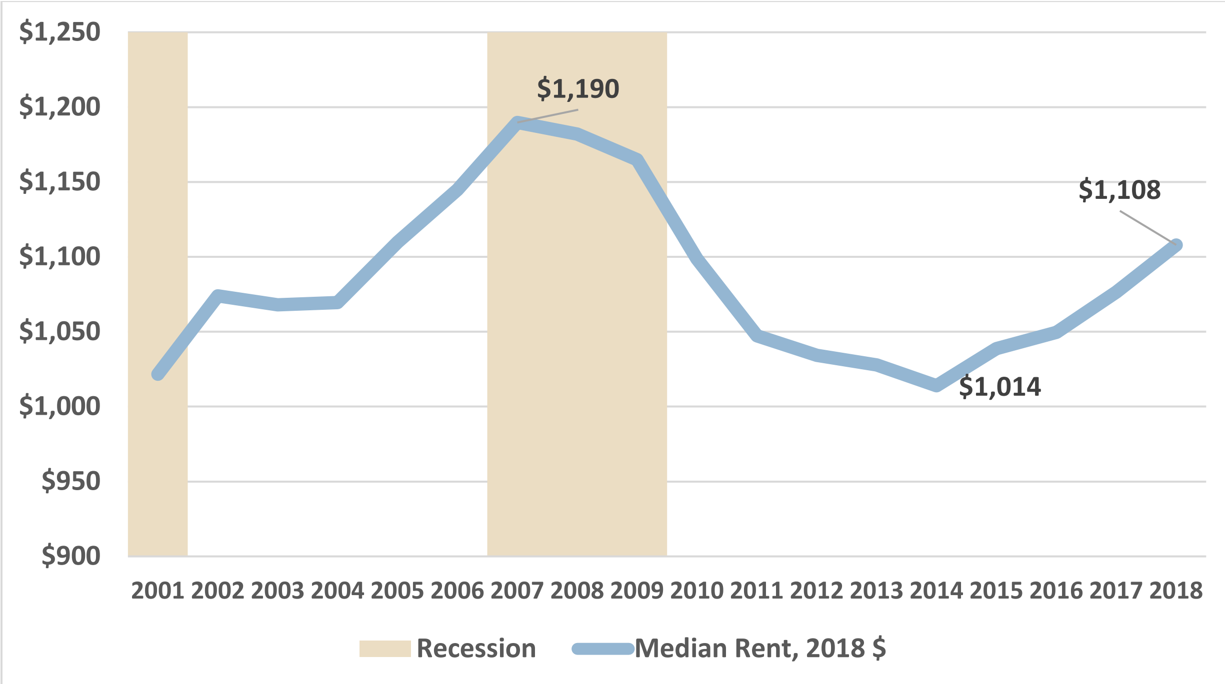
During the Great Recession, rental vacancies for all types of rentals, including multi-family, single family, condos, mobile homes, etc., peaked in 2009 at 12.8%, very gradually decreasing to 7.0% in 2017, according to the American Community Survey data (see Figure 9).[xxx] Real median rents over the period from 2001 to 2018 peaked in 2007.[xxxi] Real rents decreased almost 15% to a low of $1,014 in 2014 and as of 2018 had not yet returned to the high reached in 2007 (Figure 10). For data on multi-family apartments only, the inflation adjusted ALN rent series for the Las Vegas metro region and the Johnson, Perkins and Griffin series for the Reno metro region from 2006 to 2019 are shown in Figure 11.[xxxii] The two regions experienced a different movement in average real multi-family rents. As recorded in these two series, in Las Vegas, average rents fell 36% in four years from 2006 to 2010, whereas in Reno, real rents decreased by 18% more slowly over the period from 2006 to 2012. Average multi-family rents in Reno then rose by over 50%, ending the period with 24% higher multi-family rents. In Las Vegas, average rents in 2019 were only 9% higher than they were in 2006. It may be that as in the last recession, Las Vegas and Reno may experience differential impacts from the Coronavirus Contraction.

Figure 9. Nevada Homeowner and Rental Vacancy Rates, 2006 to 2018



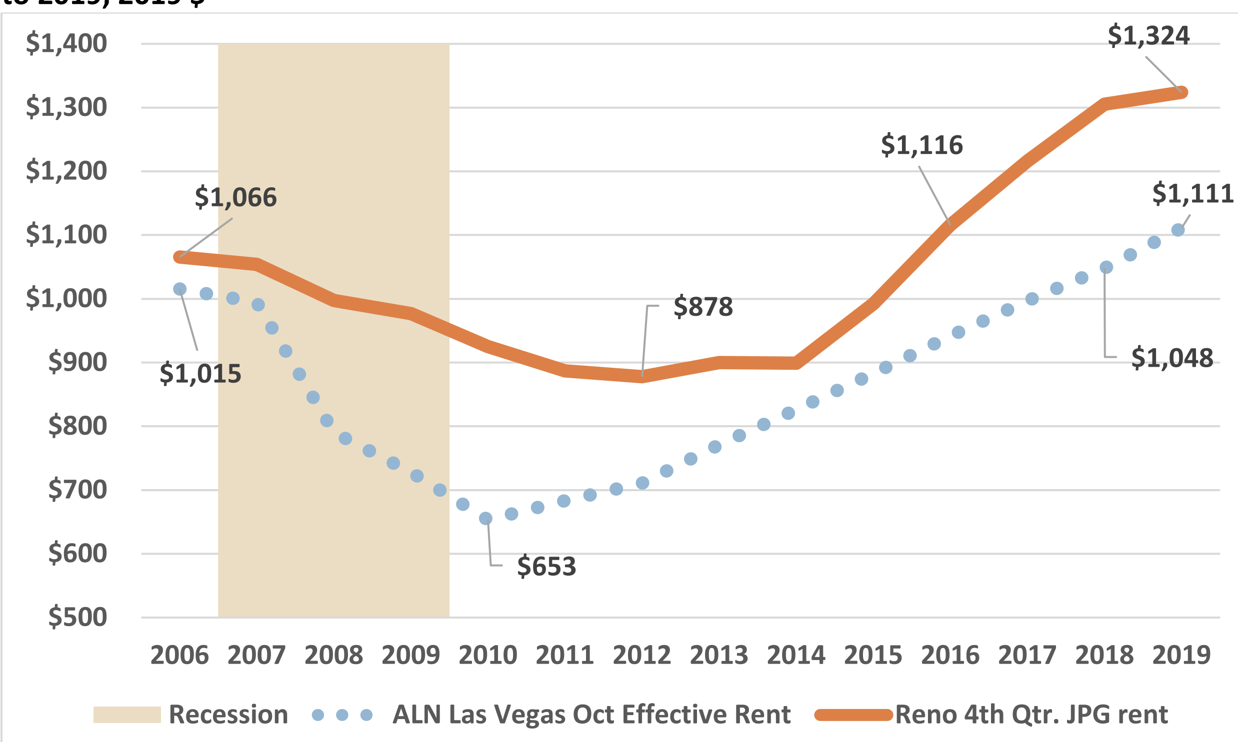
Source: See endnote xxx.

Figure 10. Nevada Median Rent, All Types of Rentals, 2001 to 2018, 2018 $



Source: See endnote xxxi.

Figure 11. ALN and JP&G Average 4th Quarter Multi-family Rents in Las Vegas and Reno, 2006 to 2019, 2019 $

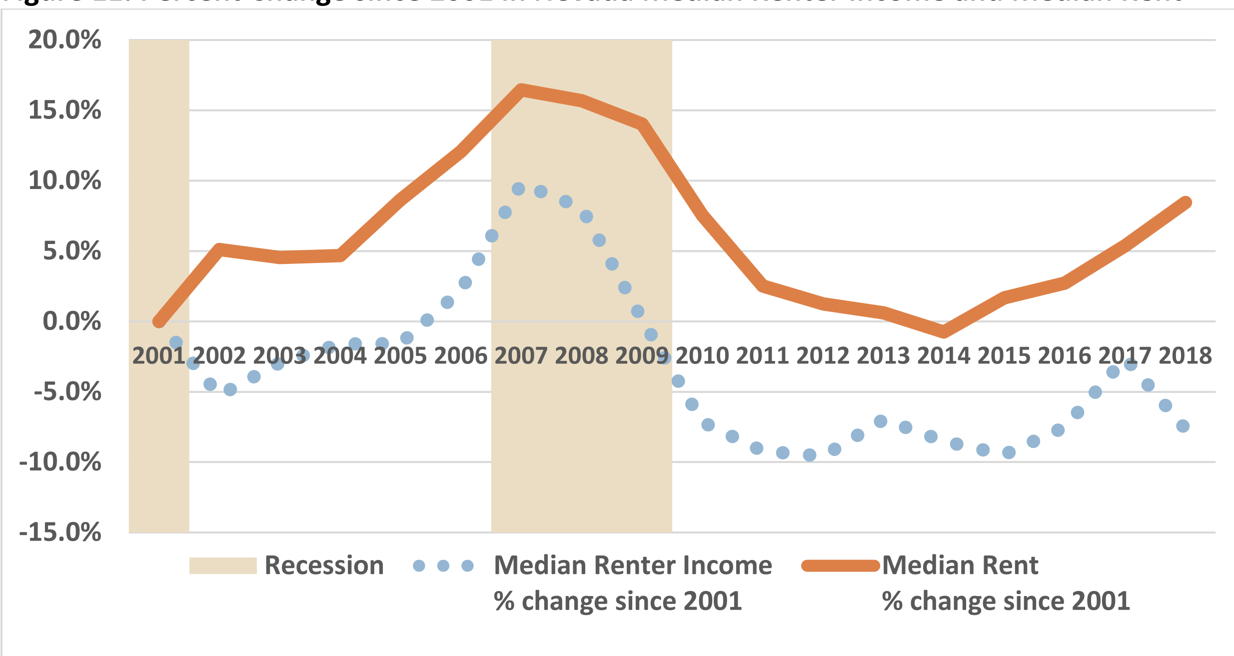


Sources: Author calculations with rent series from ALN Apartment Data, Inc., Johnsons, Perkins and Griffin. For details see endnote xxxii

Decreasing rents might have helped Nevada renter households with affordability. However, Figure 11 demonstrates that real median renter income declined even more than did real rents over the period, leaving the median renter worse off than before almost a decade after the Great Recession. From 2007 to 2018, median real rent decreased by 7% while real median renter income decreased by 16%.[xxxiii]

Increased vacancies followed by a long period of reduced rents was not favorable to some owners of affordable housing in Las Vegas. From 2009 to 2013, thirteen Low Income Tax Credit Properties with over 2,300 rent restricted units exited the tax credit system through foreclosure. All but one of these properties were located in Las Vegas, the hardest hit region during the Great Recession. All except one were family properties, and most were located in the regions of Las Vegas with the lowest average rents. The properties had to compete against plentiful single-family rentals as well as other nearby apartment complexes also suffering from low vacancy rates.[xxxiv]

Figure 11. Percent Change since 2001 in Nevada Median Renter Income and Median Rent

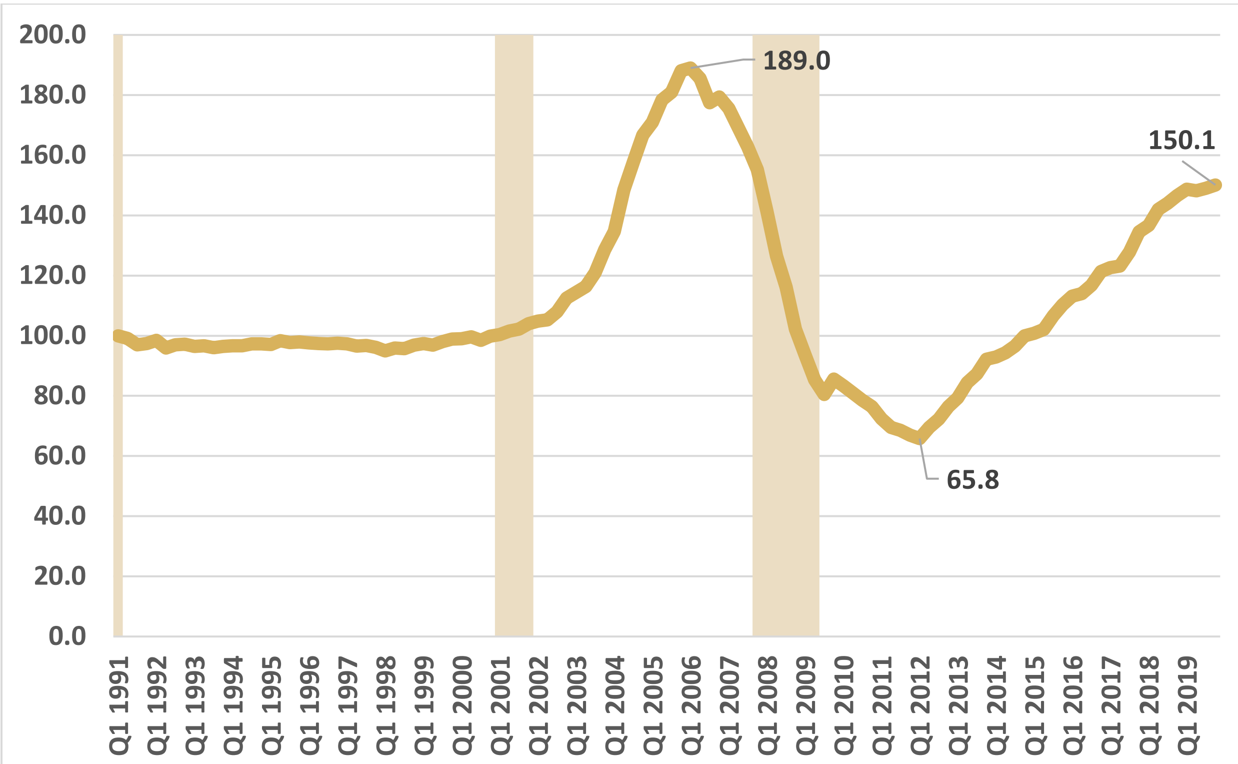


Source: See endnote xxxiii.

Home Sales Volume and Price

The Federal Housing Finance Agency (FHFA) Housing Price Index is a repeat sale index measuring changes in single family home prices. Nevada's single-family home prices soared in the early 2000s as the housing bubble began to form. After adjusting for inflation, the index pre-recession high was 189.0 in the first quarter of 2006 (see figure 12). From this point the index dropped 65% over a period of six years to a low of 65.8. In more detail, the price fell 7% in 2006, 19% in 2007, then had its greatest decline in the first full year of the recession in 2008 with a drop of 31%. Double digit drops continued in the next two years slowing to a 9% drop in 2011 before finally reaching the bottom. Since that time single family home prices have risen considerably. The steep drop in prices was related to the nature of the crisis, which was an unsustainable building boom brought about by loose lending practices in the mortgage industry. In the previous recession in 2001, Nevada home prices continued to rise.[xxxv] Rather than being a cause of the recession, it is likely that the housing market in Nevada will react to the crisis in response to what is happening in the leisure and hospitality sector and to federal policy responses to the crisis. Currently, April home sale volumes are down considerably in both Las Vegas and Reno areas. Median existing home prices were down 2.8% in the Las Vegas region from March but were still 3% higher than April 2019 (not adjusted for inflation). In Reno-Sparks, existing single-family median home prices increased in March and April.[xxxvi]

Figure 12. Nevada Seasonally Adjusted Purchase Only FHFA Housing Price Index, Adjusted for Inflation.



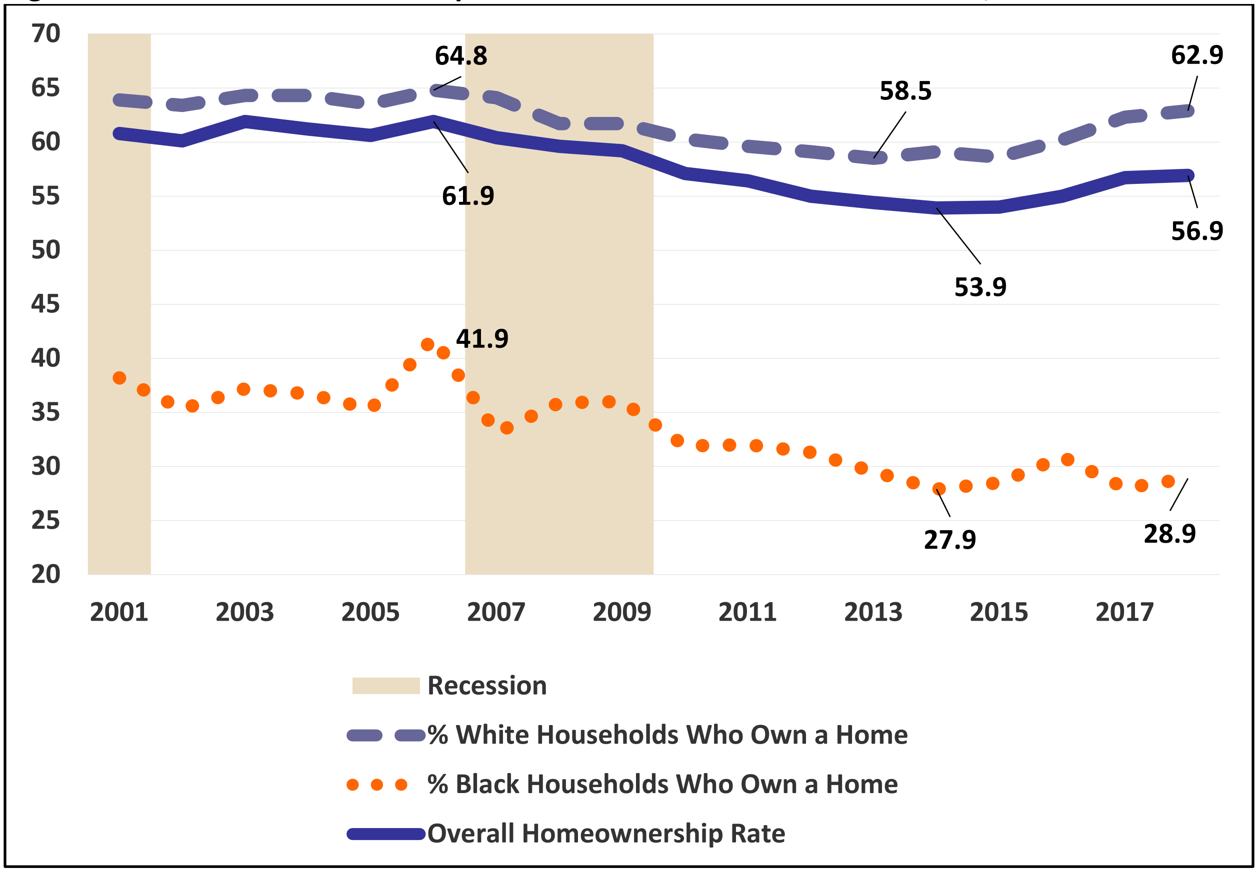
Source: See endnote xxxv.

Shifts in tenure

Nevada experienced a dramatic drop in the homeownership rate over the years of the Great Recession. From IPUMS data derived from the American Community Survey data, a high point in Nevada homeownership rate occurred in 2003 and 2006 at 61.9% of Nevada households and reaching a low point of 53.9% in 2014, a drop of 8%. Homeownership rates increased to 56.9% in 2018, still five percentage points below the high in 2006. When homeownership is broken out by race, two things are clear. Nevada homeownership rates in households with a black householder averaged nearly 30 percentage points lower than homeownership rates for households with a white householder over the period from 2001 to 2018. Secondly, white homeownership rates eventually regained ground, ending in 2018 at 62.9%, one percentage point less than the 63.9% rate at the beginning of the period in 2001, black homeownership rates did not recover, ending in 2018 at 28.9%, 9 percentage points lower than the rate of 38.2% in 2001. It should be noted that one-year estimates, especially for black homeownership rates, have large confidence intervals, ranging up to +/-7% points in some years. However, much more reliable 5-year estimates retain the same patterns that are noted here.[xxxvii]

Any changes in tenure during the Coronavirus Contraction are likely to relate directly to changes in the tourism industry, rather than to factors in the mortgage industry. As is seen in Figure 13, outcomes from the recession may not be evenly experienced across different income, racial or ethnic groups.

Figure 13. Nevada Homeownership Rates for White and Black Households, 2001 to 2018



Source: See endnote xxxvii.

Two scenarios

Nevada has already experienced far higher levels of unemployment than those experienced in the Great Recession. The loss of employment in the leisure and hospitality sector, losses in visitor volume and in gross gaming revenue already far exceed losses experienced during any particular year of the Great Recession. What remains to be seen, is how long the leisure and hospitality sector, primarily, will be impacted and how deeply. Perhaps the best advice in this regard is Dr. Fauci's statement, the U.S. top infectious disease expert, "You don't make the timeline. The virus makes the timeline." Nevada may even have some control over its own infection rate; it does not control the infection rate in other states or worldwide, restrictions on travel, or consumer reaction generally and it does not control federal relief packages.

The Congressional Budget Office projects national impacts as a check-mark shape with deep declines in output in 2nd quarter of 2020 relative to 4th quarter 2019 and significant recovery beginning in the 3rd quarter. Output continues to climb, returning to about 2% below 4th quarter 2019 output by the end of 2021. [xxxviii] However, the sector with the most severe impacts, leisure and hospitality, makes up only around 11% of national non-farm employment as compared to 25% in Nevada. This means that the impact of the Coronavirus Contraction will likely be considerably worse in Nevada.

Mid-level impact scenario. Assume shorter lasting effects than the Great Recession. Quick, cheap, and reliable testing becomes widely available. More effective ways to stop the virus' spread are devised. Effective medications are found in early summer drastically reducing deaths and worries about hospital overload, and a vaccine is mass produced in September with worldwide travel now possible. Federal funds fill the gaps in wages, state, and local government funding.

Effective testing and tracing eliminate the virus from California and Nevada by July allowing for significant tourist travel between the two states by August. Frequent gamblers are the first to return to new conditions at the casinos. The downturn is severe in 2020 with after-effects well into 2022 but is not long enough to inflict long-term damage. We do not see lagged effects of the crisis for five to seven years, a strong feature of many of the Great Recession indicator series examined above. As to housing impacts, vacancies increase for a couple years and real rent decreases, home sales slow and prices drop somewhat. Housing costs less. However, as seen above, impacts are more severe for the lowest income households, for minorities, and for the southern part of the state. The need for affordable housing still increases by a significant percentage as more households enter lower income categories because of ongoing high unemployment in 2020 and 2021. With the help of federal and state programs, multi-family owners can survive the recession without entering the cycle of high vacancy, low revenue, and maintenance difficulties.

Worst case. The Coronavirus Contraction ends up being worse than the Great Recession. A new wave of the virus closes Nevada and California businesses for another six weeks. Additional waves weaken the national and international economies with further shut-downs. No vaccine is available until the end of 2021 and even then, is not widely available. Supply chain bottlenecks in testing keep interfering with attempts to test and trace. Federal response is fumbled and does not fill the gaps in wages, and in state, and local government funding. Nevada's economy permanently shifts emphasis away from casino hotels causing severe disruption in Las Vegas and within state and local government as sales and gaming taxes remain far below normal. Bankruptcy hits many major resorts.

We see lagged effects of the crisis for five to seven years, a strong feature of many of the Great Recession indicator series examined above. Nevada loses population as casino work dries up. Households double up and household formation drops. Vacancies increase dramatically, real rent decreases, home sales slow and prices drop. Housing becomes much more affordable as supply is too plentiful given the net out-migration of working age families. Impacts are even more severe for the lowest income households, for minorities, and for the southern part of the state. Need for the lowest income households without resources to move elsewhere continues with ongoing high unemployment in 2020 and 2021. However, tax credit properties and naturally occurring affordable housing are left with high vacancy rates as they compete with available apartments in newer complexes. Some multi-family owners are not able to survive the recession without entering the cycle of high vacancy, low revenue and maintenance difficulties leading to foreclosures.

Endnotes

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[i] U.S. Department of Labor. Initial Unemployment Insurance Claims as downloaded from Nevada Governor's Office of Economic Development for series to February 2020. https://www.diversifynevada.com/why-nevada/data-portal/ March and April 2020 number is from Nevada Department of Employment, Training and Rehabilitation, Labor Market Information, http://nevadaworkforce.com/.
Recession dates are from National Bureau of Economic Research. https://www.nber.org/cycles.html
[ii]Nevada Department of Employment, Training and Rehabilitation, Research and Analysis Bureau. May 15, 2020. *Unemployment Insurance Claims Press Release.* http://nvlmi.mt.gov/Portals/197/UI%20Monthly%20Claims%20Press%20Release/Dashboards/Weekly%20UI%20Claims%20Press%20Release.pdf
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