

Taking Stock



Nevada Housing Division
2018 Annual Affordable Apartment Survey
www.housing.nv.gov



From the Administrator

2018 was witness to continued increases in Nevada's economy. In both the south and the north, we have seen economic growth close to or exceeding record levels. This growth accordingly places pressures on the social structures designed to support Nevada's communities. Health care, education, infrastructure have all experienced challenges as does housing. We have seen record median prices for home sales and rental rates for multi-family developments throughout the state, resulting in affordability issues for many Nevada families.

These pressures have resulted in Nevada families having to choose, in many cases, between foregoing their own health, food, and transportation needs at the expense of housing. As a response to these issues, the Interim Committee to Study Affordable Housing was formed at the State Legislative level and conducted meetings over the course of the year. Five bill draft requests were created by the committee which will be considered by the State legislature in 2019. These efforts represent a concentrated focus on bringing in the State government to compliment current Federal programs and create solutions to the affordability crisis.

In addition to providing technical assistance to the Committee, The Nevada Housing Division has participated in a number of local initiatives to address affordability concerns. In attempting to work through the solutions proposed, we use the data provided through this Taking Stock report as one of the guiding factors in the advancement of affordable developments. As such, we would like to acknowledge and thank the over 99% of properties currently receiving some type of Tax Credit assistance for responding to this year's Taking Stock survey. The results of this survey continue to help guide the decisions we make in our strategies to make certain every Nevada family has a chance to succeed.

With Regards,
Steve Aichroth
Administrator



About Nevada Housing Division

Our mission is to provide affordable housing opportunities and improve the quality of life for Nevada residents. Nevada Housing Division (NHD), a division of the State of Nevada Department of Business and Industry, was created by the Nevada State Legislature in 1975. NHD is committed to making Nevada a better place to live and work. We connect Nevadans with homes by providing financing to developers to build affordable apartment communities, by providing innovative mortgage solutions, and by making more homes energy efficient, thereby lowering utility expenses.

Programs at a Glance

Low Income Housing Tax Credit (LIHTC)

- Since 1986 the 9% LIHTC program has assisted in financing the creation or preservation of 13,231 housing units in the State of Nevada with a total of nearly \$117 million in nine percent housing tax credits allocated.ⁱ Very roughly, equity value of about nine times the tax credit allocation was raised for production of housing units.
- The following objectives are identified in the 2018 Qualified Allocation Plan (QAP):
 - Increase the amount of safe and livable affordable rental housing in Nevada.
 - Preserve existing affordable rental housing.
 - Contribute to a vibrant and sustainable economy by supporting and facilitating the construction of affordable workforce housing near employment centers.
 - Increase the availability of housing with supportive services, including veterans housing.
 - Support the housing goals and objectives stated in the State of Nevada Consolidated Plan.

Multifamily Bond Financing

- The Division is the designated issuer of tax exempt housing revenue bonds. This type of financing uses tax exempt and taxable mortgage revenue bonds to fund affordable housing projects. Typically it is used in combination with 4% Low Income Housing Tax Credits.
- Since 1975, over \$1.5 billion of bond financing with \$68,000,000 of 4% tax credits has created nearly 27,000 multi-family units. Equity value of very roughly nine times the tax credit allocation was raised for production of housing units.

Home Investment Partnership Program (HOME)

- The HOME program is the largest Federal block grant to state and local governments designed exclusively to create affordable housing. Often used in partnership with local nonprofit groups, the program funds a wide range of activities including building, buying, and/or rehabilitating housing for rent or homeownership or providing direct rental assistance to low-income people.
- Since 1992, HOME funds have built or rehabilitated over 3,700 housing units in Nevada.



The Low Income Housing Trust Fund (LIHTF)

- LIHTF is a state funded program whose goal is to expand and improve the supply of both single and multi-family affordable housing.
- Since its inception in 1989, LIHTF funds have served nearly 44,900 households through down payment, provision of emergency housing needs, or rehabilitation assistance. This total includes over 5,500 units that have been constructed or maintained as affordable housing through the LIHTF.

The Emergency Solutions Grant (ESG)

- The ESG grant program focuses on rapid re-housing initiatives and the prevention of homelessness. The emphasis of this program is to provide various relocation and stabilization services to avoid homelessness, while also providing rapid assistance for those who are homeless to quickly obtain permanent housing and stability.
- ESG funds have provided shelter for more than 43,500 at risk Nevadans since 2001.

Neighborhood Stabilization Program (NSP)

- The goal of the program is to stabilize communities through the rehabilitation of vacant homes, and selling or renting those homes to qualified low-income families.
- NSP has served more than 350 households.

Weatherization Assistance Program (WAP)

- The Weatherization Assistance Program serves to reduce energy costs for low-income families, particularly for the elderly, people with disabilities and children by improving the energy efficiency of their homes while ensuring their health and safety. The assistance is provided to eligible clients free of charge.
- The program, established in 1977, has increased energy efficiency for over 28,700 units of low income housing.

NVHousingSearch.org

- This locator service is a free to use resource helping Nevadans find rental homes which fit their needs and budgets.
- There is no cost to property managers, builders and developers to list any type of Nevada rental housing. Over 44,000 units are represented in the listings and the site has logged over 70,000 searches in the past year.
- Detailed resource information and Veterans' services links are available. Additionally, a toll free call center can assist not only those looking to find a home, but also help property managers with analytics and other services.
- The housing resources on NVHousingSearch.org are designed to be accessible to a broad variety of users. Listings are available through multiple modes and the website follows the most recent Web Accessibility Initiative Guidelines. Many accessible features may be detailed in the listings.



Manufactured Housing

- The 2017 Legislative session passed SB500 combining Manufactured Housing with the Nevada Housing Division. Manufactured Housing issues over 8,000 titles and over 5,000 permits on an annual basis.
- This area of the Housing Division works to protect homeowners and occupants of manufactured housing by providing services that assist in keeping these homes safe, sound and sanitary.

Home is Possible Homebuyer Program

- Home is Possible increases homebuyer purchasing power by offering qualified buyers down payment and closing cost assistance equal up to 5% of the loan amount.
- The Home is Possible for Heroes program offers below market interest rates to honorably discharged veterans, active duty, surviving spouses and National Guard.
- The Home is Possible for Teachers program helps recruit and retain licensed, full-time, K-12 public school teachers by offering below market interest rates and down payment assistance of \$7,500.
- Since the inception of the program at the end of 2014, the Home is Possible program has helped over 20,000 homebuyers and has generated more than \$4 billion in mortgages.

Low Income Housing Database

- The Housing Division is required to create and maintain a statewide low income housing database. As a part of the effort to meet this mandate the Division maintains a [Low Income Housing Database](#) webpage with maps, data, links and the most recent reports that have been generated as a part of the database project. New to the program this past year is the [Nevada Affordable Housing Dashboard](#).

Table 1. Tax credit and bond units built or preserved since program inception**

Program	Units Built/Preserved since inception
Tax Credit (9%)*	
Bond Only	4,982
Bond with 4% tax credit	
Total LIHTC/Bond	39,967

*Includes American Reinvestment and Recovery Act Tax Credit Assistance Program and Section 1602 properties.

**Properties with allocations as of September 2018 are included. 1,953 units were counted twice, once for the first round of bonds and/or tax credits and a second time for preservation of the unit with a second round of credits. There were 28 units that were initially financed with bonds and have also received two rounds of tax credits for preservation. 10,114 units have converted to private market units.

Each day ongoing housing challenges are met by a dedicated staff of professionals at the Division who allocate federal and state funds along with private sector investment dollars to help low to moderate income Nevadans make their housing dreams a reality.



Nevada's LIHTC Housing Stock

2018 New Construction and Preservation

This year, 10 properties finished construction and lease-up and have a placed in service date that falls in 2018 or late in 2017. Five new properties with a total of 603 units were added. Four additional properties with HUD or public housing rental assistance received tax credits to help preserve 391 additional units. One additional property, Owens Senior with 72 units, received a second round of tax credits for rehabilitation. Six of the properties were issued 9% tax credits with the remaining four financed through 4% tax credits and tax-exempt bonds. Six were family properties (635 units) and four were senior properties (431 units). Twenty-four of the units were in rural Nevada, 270 in Washoe County and 772 in Clark County. The properties are listed in Table 2 below.

Table 2. LIHTC properties preserved or created in 2018*

Property	County	# of units	Funding	Type	New or preserved
Alpine Haven	Washoe	40	9%	Family/Veteran Preference	New
Boulder Pines II	Clark	168	Bond/4%	Family	New
Cordero Pines II	Clark	60	9%	Family	New
Owens Senior	Clark	72	9%	Senior	Preserved
Rose Garden Townhouses	Clark	115	Bond/4%	Family	Preserved
Sierra Pointe & Granada	Clark	176	Bond/4%	Family	Preserved
Tempo III	Clark	105	9%	Senior	New
Vera Johnson Manor A	Clark	76	9%	Family	Preserved
Vintage at the Crossing	Washoe	230	Bond/4%	Senior	New
Woodlands	Elko	24	9%	Senior	Preserved

*The list includes properties that had a placed in service date in 2018 or late 2017. Not all properties had stabilized at the time of the survey so they are not all included in the survey sample described in the following sections.

New Property Descriptions

Alpine Haven is the newest affordable workforce housing project with a veteran preference in Northern Nevada. This complex features 24 two-bedroom and 16 one-bedroom apartments. It is a unique project that was built with 100% net zero energy consumption and designed to get all its energy from the sun. Alpine Haven will provide low-income and affordable housing to families that do not exceed 60% of area median income requirements. Amenities include; free Wi-Fi internet, Energy Star® appliances, in-unit washer and dryers, and 24-hour security video surveillance.

Boulder Pines II Family Apartments on Boulder Highway recently completed a second phase in a community for income-qualified individuals and families. The first phase has 96 units. Upon completion the project will have a total of 264 apartments ranging from 1,135 to 1574 square feet, with 2, 3 and 4 bedrooms. A collaborative on-site partnership with the 10,000 square foot Boy & Girls Clubs and Lutheran Social Services will provide much needed services such as food pantry and social services. Amenities include pool,

playground, fitness center, BBQ area and covered parking. The property is managed by HAND Property Management Company.

Cordero Pines II has also completed a second phase which provides a smoke-free multi-family community. The first phase is 168 units with 225 brand new units to be completed in total. Rents range from \$714 to \$995/month, offering 2, 3 and 4-bedroom apartments and all the amenities you would expect. There are washers, dryers and walk-in closets in all units. There is a large clubhouse with programs, services, playground, fitness center BBQ area, computer lab and pool. Setting this community apart from other properties are the dog park and pet accommodations. This community was developed and is now managed by Nevada HAND.

Owens Senior apartments completed rehabilitation in 2018 and has 72 1 and 2-bedroom units. Originally built in 2001 this 55+ community provides units targeted to seniors making no more than 40% of area median income. The rehabilitation included adding solar panels to help offset power demand, new windows and sliding doors, appliances, low flow toilets, HVAC units, tankless water heaters, water filtration system and new flooring. All buildings are now designated as smoke free and common areas have also seen upgrades including LED lighting, exercise center and computer/study room.

Rose Gardens recently completed rehabilitation and renovation on all building exteriors and upgraded interiors on 100 of the 115 project units. New exterior paint, stucco and doors were replaced or repaired where needed, and the interiors received new appliances, cabinetry, fixture, carpet and flooring. Additionally, a new community building and management office have been built, with new exterior drought resistant landscaping and a children's play area and splash pad have been installed. Lastly, parking carports have been built with a Solar system atop each section to help offset energy costs.

Sierra Point/Granada was a dual property rehabilitation project acquired by Integra Property Group, LLC. The properties consisted of a 159 unit two- and three-bedroom unit complex and a smaller 16 one- and two-bedroom unit complex. Sierra Point was built in 1963 and Granada was built in 1955. The project sponsor currently has 56 projects representing over 6,400 units throughout the United States.

Tempo III is the third phase of a planned 281-unit senior housing campus. This three-story residence has 63 one-bedroom units and 42 two-bedroom units. They include many amenities such as pool, jacuzzi, exercise room and wellness center plus, social gathering areas, game area and hair salon. The units will feature Energy Star® appliances, low-E vinyl thermal pane windows, and at least 10% of the electrical consumption will be offset by solar generated power. This project will available to those that are 55+.

Vera Johnson Manor A is a 76 unit newly renovated townhome style apartment complex that features 2 and 3-bedroom apartments. Modernization included all new cabinets, floorings, appliances, lighting, and plumbing fixtures, a community garden, BBQ area, computer/study area and exercise room. Landscaping preserved mature landscaping while emphasizing water conservation.

Vintage at the Crossing is one of the newest 55+ communities located in Reno, NV and opened in 2018. Vintage currently offers 1- and 2-bedroom apartment homes with modern appliances, full-size washer/dryers, microwave and dishwasher. Other amenities include; arts and crafts room, BBQ station, Billiards, Library,



Theater, Fitness and Business Center. These new apartments are located within walking distance of shopping, restaurants, banking and pharmacies.

Woodlands is a senior development with 24 units available to those aged 62 or older. These units are located in Elko, NV and feature 1-bedroom apartments with laundry and recreation facilities. The units have income restrictions and allow for handicapped or disabled regardless of age. This complex has recently undergone rehabilitation which will extend the life of the apartments for another 50 years.

Properties Exiting the LIHTC System in 2018

The tax credit program requires properties to maintain restrictions on rents and on incomes of tenants for a period of at least 30 years. However, the tax credit benefits end after 10 years and active Internal Revenue Service (IRS) compliance ends after 15 years. After this initial 15 year period, in some cases, owners of tax credit properties may request that the Housing Division find a buyer for the property, with the price determined by IRS formula. If no buyer can be found after one year, owners may opt out of the extended affordability period and sell the property. This is called the qualified contract (QC) process. This year three LIHTC properties with a total of 1,012 units exited the system as seen in Table 3. Two properties were issued 4% tax credits and bonds in 2001 and 2003, had a placed in service date of approximately 2002 and 2003 and left through the qualified contract process. The large Mi Casita property was originally built in 1972 and was renovated with tax credits in 2003. Buena Vista Springs remaining 24 units exited through a foreclosure process and was originally placed in service in 1998. The three properties were all family properties. All had two and three bedroom apartments, while Buena Vista Springs and Mi Casita had four bedroom apartments and Mi Casita and Silver Creek had one bedroom floor plans as well.

Silver Creek's ultimate status is unclear but is currently maintaining affordability. The Paseo del Prado property that had exited last year ultimately forfeited the option to exit and will remain formally affordable.

Table 3. LIHTC properties exiting the system in 2018

Property	County	TC issue year	PIS Year	# of units
Mi Casita/Pinewood	Clark	2003	2003	764
Silver Creek	Clark	2001	2002	224
Buena Vista Springs II	Clark	1996	1998	24

*The PIS date is an approximation since the Placed in Service date occurs building by building and may involve more than one year for a large property

Executive Summary

This report provides an analysis of data collected through the Nevada Housing Division's (NHD) 2018 Affordable Apartment Survey. The survey focused on Low Income Tax Credit Housing (LIHTC) properties. Some notable findings are as follows:

- Overall vacancy rate in the 4th quarter of 2018 for the Nevada LIHTC responding properties was 3.1%, up slightly from 2.9% in 2017 4th quarter.
- LIHTC vacancy rates remained low but were slightly higher than last year for most regions.
- Senior or senior/disabled LIHTC properties had a vacancy rate of 1.9% while family properties had a 4.0% vacancy rate.
- Both Washoe and Clark County LIHTC properties had lower vacancy rates than market properties.
- LIHTC vacancy rates were lowest in neighborhoods with higher market rents.
- On average in 2018 LIHTC properties reported rents increased 7% in Clark County and 5% in Washoe County over 2017 rents.
- 4th quarter market rents increased 6% in Clark County and 9% in Reno/Sparks from 2017 to 2018.
- Over the past six years 4th quarter market rate rents in Reno/Sparks rose 50% from \$860 a month to \$1,292 a month. In the same time average 4th quarter Washoe County LIHTC rents rose 20% from \$716 to \$861 per month.
- In the Las Vegas region, market rate rents rose 37% from 2013 to 2018 fourth quarter from \$759 to \$1037, while LIHTC rents rose 23% from \$649 to \$801.
- One, two and three bedroom high rents in LIHTC properties ranged from 23% to 40% lower than market rates.
- Broken out by neighborhood, average high LIHTC rents ranged from 1% higher to 37% lower than market rents in 2018.
- Property managers received requests related to the Violence Against Women Act at the rate of one per each 1,239 units of LIHTC housing.
- Vacant Nevada LIHTC units were filled by new tenants within about a week on average.
- A total of 27,218 households were on waiting lists for tax credit properties. The number was up 154% from last year primarily due to new collection of waiting list data from SNRHA for public housing properties with full rental assistance which were recently renovated with tax credit funding.
- A total of 603 new LIHTC units were added in 2018 or late in 2017. An additional 464 units were preserved with tax credits. One thousand and twelve LIHTC units converted to private market apartments in 2018.

Introduction

The Division carried out a survey of the Low Income Housing Tax Credit (LIHTC) properties in October and early November of 2018. The survey helps identify affordable housing needs throughout the state. Additionally, the Division is able to work with its partners to make the best use of resources such as tax credit and bond funding in support of fulfilling its mission to provide affordable housing opportunities to individuals and families throughout Nevada.

The LIHTC program is a federal tax incentive program administered by the Internal Revenue Service (IRS) through regulations published under Section 42 of the Internal Revenue Code.ⁱⁱ The role the program's public private partnership plays in affordable housing is large. In 2017, tax credit units currently active or under construction made-up about 10% of the estimated 277,000 multi-family units in Nevada.ⁱⁱⁱ The LIHTC program is by far the largest in Nevada, and nation-wide, for producing affordable rental housing. Seventy-five percent of affordable multi-family housing units in Nevada have or will be constructed or rehabilitated fully or partially with tax credit funding.^{iv}

Methodology of Survey

The 2018 Affordable Apartment Survey focused on Nevada's LIHTC properties. Properties built with either 4% or 9% tax credits were included. A Qualtrics™ internet survey of LIHTC properties was carried out in the fall of 2018. Survey questionnaire links were sent via e-mail to property management offices with a list of the relevant properties. Home offices filled out the questionnaires or distributed them to onsite managers as necessary. Email was used to send out notices of the upcoming survey and several reminders. Follow-up phone calls were used as well to remind property managers who had not returned a survey. In addition, rent and vacancy data directly from rent roll summaries and pricing sheets submitted by property management groups with large portfolios of tax credit properties was used again this year. Data from a much shorter survey and from these rent rolls was merged into the main dataset. Using data from rent rolls, a practice begun in 2017, represented a substantial change in methodology that in some cases affected results. This year additional questions about turnover times and actions taken under the Violence Against Women Act were added. Hard-copy forms of the electronic questionnaires used are included in the Appendices.

Survey Sample Description

The properties surveyed constitute the active LIHTC properties listed on the auditing rolls of NHD as of September 2018. Special use properties and new or renovated properties not yet stabilized were excluded.^v Some properties in the year waiting period for the Qualified Contract Process appeared to have unusual levels of vacancy but these properties were included. The surveyed properties represented 22,649 units. Each year has a slightly different group of participating properties included in the final dataset due to new properties added, properties having exited the system and variations in response rate. This year had near 100% response. The return rate was 99.6% with 243 of the properties responding. These properties represent 99.8% of the 22,649 units surveyed (see Table 4). Las Vegas and surrounding communities had 122 responses, the Reno-Sparks region had 50 responses and 71 responses were from the remaining 15 Nevada counties. Sixty-three percent of the units represented in the survey are located in Clark County.



About 2% of the units were market rate units or manager units. About 43% of the units were either senior units or senior/disabled units. Fifteen percent of the units had project based rental assistance available from United States Housing and Urban Development (HUD) programs, United States Department of Agriculture Rural Development programs or other programs.

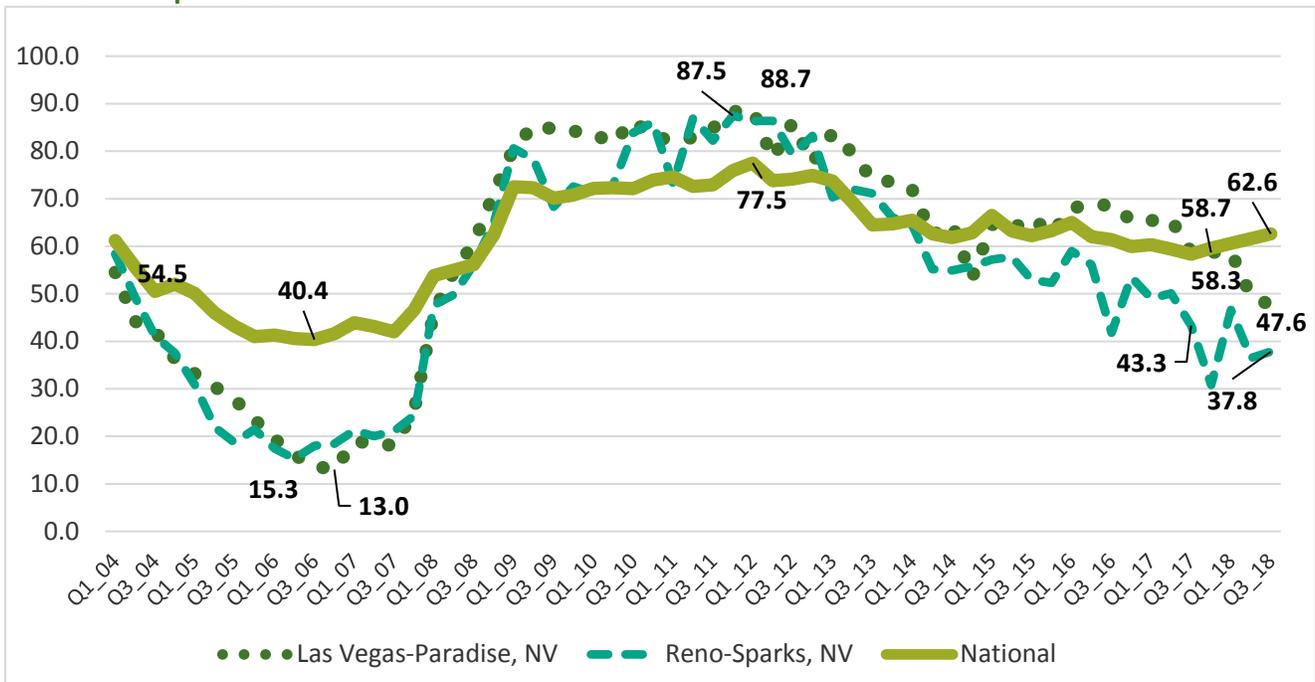
Table 4. Taking Stock survey respondents and response rate by region

Region	Properties Responding	Property Response Rate	Units Represented	% Units Represented
Clark Co.	122	100.0%	14,246	100.0%
Washoe Co.	50	100.0%	5,594	100.0%
Rural Nevada	71	98.6%	2,769	98.6%
Total	243	99.6%	22,609	99.8%

Economic Context: Las Vegas Home Affordability Drops More than Ten Points

The Nevada economy has continued to gain jobs and population in 2018. For additional economic and housing context, Figure 1 gives the housing opportunity index from the National Association of Home Builders. The index gives the share of homes sold that would be affordable to the median income family. At the peak of the housing boom in 2006, this share was only 15% in Reno-Sparks and 13% in Las Vegas-Paradise. As prices plummeted, the share rose to 87% in Reno-Sparks and 89% in Las Vegas-Paradise in 2011 and 2012. Currently, affordability of single family homes has been decreasing both in the north and the south.

Figure 1. National Association of Home Builders – Wells Fargo Housing Opportunity Index, 1st qtr. 2004 to 3rd qtr. 2018



National Association of Home Builders. NAHB-Wells Fargo Housing Opportunity Index. <http://www.nahb.org/en/research/housing-economics/housing-indexes/housing-opportunity-index.aspx> accessed 1-9-2019



Although Las Vegas at 48% still was more affordable than Reno-Sparks in 3rd quarter 2018, Las Vegas affordability decreased at a faster rate and experienced an 11 point drop over the year and a 23 point drop in the last two years. In comparison Reno-Sparks affordability at 38% decreased by four points in the last two years. As compared to the national affordability index of 63% both regions are now less affordable.

Vacancies

Nevada 2018 LIHTC Overall Vacancy Rate Is 3.1%

The final sample included 232 properties' information on vacancies.^{vi} Sixty-three percent of the units were in Clark County, 25% in Washoe County, 5% in rural mining counties (Elko, Eureka, Humboldt, Lander, Nye, Pershing and White Pine) and 7% in the remaining rural counties (these are Douglas, Lyon, Lincoln, Churchill, and Carson City; the counties of Esmeralda, Mineral and Storey do not have tax credit properties). Four percent of units reported were studio units, 34% were one bedroom units, 44% were two bedroom, 15% three bedroom and 2% were four or five bedroom units.

Overall vacancy rate in the 4th quarter of 2018 for the Nevada LIHTC responding properties was 3.1%, up from last year's rate of 2.9% as reported in Taking Stock 2017. The median vacancy rate reported was 2.0%, meaning that half of all responding properties had a 2.0% vacancy rate or lower. Seventy-eight properties, or 33% of the responding properties, reported that all units were full, that is, 0% vacancy rate. One hundred and ninety-four properties (84%) had a vacancy rate of 5% or less. There were twelve outlier properties with vacancy rates higher than 10%, the majority of which were rural properties. A pattern of higher vacancy rates in properties that are in the Qualified Contract process has been noted. If QC properties are taken out of the sample, overall average vacancy rate for Nevada's LIHTC properties decreases to 2.8%.

2018 Nevada LIHTC Vacancy Rates are Low in Most Regions

Compared to 2017, overall vacancy rates increased slightly or remained the same in every region. The largest increase in overall 4th quarter vacancy rates was Washoe County's increase from 2.6% in 2017 to 3.2% for 2018. As in 2017, Washoe and Clark County had very similar overall vacancy rates. Much higher rates were observed in Clark County as compared to Washoe County in years previous to 2017. Clark County average LIHTC vacancy rates were actually slightly lower than Washoe County's in 2018. Clark County properties reported a 3.0% overall vacancy rate as compared to 2.9% in the 4th quarter of 2017. If properties in the Qualified Contract process are removed from the dataset, Clark Co. overall vacancy rate falls to 2.6%. Mining counties vacancy rate stayed about the same on average changing from 5.1% to 5.3%, while other rural counties, which include several counties considered to be within the "Tesla effect" zone of influence in northwestern Nevada, stayed the same in 2017 but at 2.4%. Vacancy rates were lowest overall for one bedroom (2.3%) and four bedroom apartments (2.0%) and were highest on average for studios (8.5%).

Table 5. 4th Quarter 2018 vacancy rate for LIHTC properties by region

Number of bedrooms	Clark	Mining Counties ^{vii}	Other Counties	Washoe	Nevada
One bedroom	2.3%	3.3%	1.9%	2.3%	2.3%
Two bedroom	3.2%	6.0%	3.3%	3.3%	3.3%
Three bedroom	2.5%	8.4%	1.5%	3.4%	3.1%
Overall average	3.0%	5.3%	2.4%	3.2%	3.1%

LIHTC Vacancy Rates Lower than Market Apartment Vacancy Rates

Average fourth quarter 2018 market vacancy rates for multi-family properties reported in Las Vegas are mixed for the two different market rate series included in Table 6 below, ALN and Lied Institute Apartment Market Trends. Over the past year ALN shows vacancies decreasing to 6.5%. Lied records a slight increase over 2017 but 3rd quarter 2018 vacancy rate was used in Table 6 because no 4th quarter LIED estimate is available.^{viii} As compared to either series LIHTC vacancy rates in Las Vegas are lower than market vacancy rates and have decreased more since 2013. In Reno-Sparks the market vacancy rate decreased from 3.8% to 3.6% as measured by Johnson, Perkins and Griffin (JP & G) and increased somewhat from 5.0% to 5.7% as measured by the more inclusive ALN Apartment data series.^{ix} Reno's overall LIHTC vacancy rate (3.2%) increased from 2017 and was lower than the rate reported for the two market rate series. JP & G survey only properties with 80 or more units that have "competitive management on-site" while ALN uses properties with 50 or more units. The ALN data appears to be more inclusive. ALN data is produced monthly whereas the JP & G series is quarterly. As shown in Table 6, for both the Reno and Las Vegas market over the six-year period from 4th quarter 2013 to 4th quarter 2018, the decrease in vacancy rates has been greater for the LIHTC properties, with Las Vegas LIHTC properties experiencing the largest decrease (4.8%).

Table 6. Comparison of 4th quarter market and LIHTC vacancy rates, 2013 to 2018

Region/Type	2013	2014	2015	2016	2017	2018	Change 2013 to 2018
Las Vegas - market rate 1	9.1%	7.7%	6.8%	6.4%	7.2%	6.5%	-2.6%
Las Vegas - market rate 2	8.7%	8.3%	8.2%	7.6%	7.6%	8.0%*	-0.7%
Las Vegas – LIHTC rate	7.8%	5.5%	4.3%	4.4%	2.9%	3.0%	-4.8%
Reno- market rate 1	4.1%	3.3%	2.9%	2.9%	3.8%	3.6%	-0.5%
Reno- market rate 2	4.0%	3.9%	4.3%	3.4%	5.0%	5.7%	1.7%
Reno- LIHTC	5.3%	3.8%	3.5%	3.1%	2.6%	3.2%	-2.1%

*3rd quarter 2018. 4th quarter not available. Sources: See endnotes 9 and 10.

Senior and Family LIHTC Vacancy Rates

Overall average vacancy rates in senior LIHTC properties decreased slightly over 2017 from 2.1% to 1.9% in 2018. The spread between family and senior property vacancy rates was 2.1 percentage points in 2018 as compared to 1.3 in 2017. Washoe County senior properties reported a vacancy rate of 1.8% for one bedroom units and 2.8% for two bedroom units. Clark County vacancy rates in senior LIHTC properties were lower than Washoe's rates. As compared to last year all types of senior units in both Clark and Washoe County had lower vacancy rates or remained the same except for Clark County two bedroom senior units. Family vacancy rates were somewhat higher than 2017 rates for all types of family units.

Table 7. 4th quarter 2018 vacancy rates for LIHTC senior and family properties

Number of Bedrooms	Family	Senior
Studio (0 bdrm)	9.3%	3.5%
One bedroom	4.1%	1.5%
Two bedroom	4.0%	2.3%
Three bedroom	3.0%	NA
Four bedroom	2.0%	NA
Overall average	4.0%	1.9%

Table 8. 4th quarter 2018 senior and family vacancy rates for LIHTC properties in Washoe & Clark Co.

	Clark Senior	Washoe Senior	Clark Family	Washoe Family
One bedroom	1.5%	1.8%	4.8%	2.9%
Two bedroom	2.2%	2.8%	4.2%	3.4%

County and Neighborhood LIHTC Vacancy Rates

To investigate how vacancy rates may vary within the four regions of Clark County, Washoe County, mining counties and other counties some selected subregional LIHTC vacancy rates are reported below.

Mining and Other Rural LIHTC Vacancy Rates Vary Widely

The housing markets in the cities and towns of rural Nevada may be almost completely unrelated to each other given the distances and low population density of the region. On the other hand some counties near the urban centers in Washoe and Clark County may be highly related to the market in their urban neighborhood. Table 9 gives the LIHTC vacancy rate for selected Nevada counties. Clark and Washoe County rates are included again for comparison. Douglas County and Carson City had the lowest vacancy rates. Both these counties have strong commuting links to Washoe County. The two counties with the highest vacancy rates were Elko and Humboldt counties, both considered to be within the grouping of mining counties. The smaller number of properties included in the average for rural counties naturally create greater variability.

Table 9. 4th quarter 2018 LIHTC vacancy rate for selected Nevada counties

County	LIHTC vacancy rate
Douglas County	1.0%
Carson City	1.9%
Nye County	2.5%
Clark County	3.0%
Washoe County	3.2%
Lyon County	3.3%
Elko County	4.9%
Humboldt County	6.7%

Las Vegas Metro LIHTC vacancy rates highest in central Las Vegas

In addition, neighborhoods within urban regions may constitute somewhat differentiated housing markets for many reasons: distance to work centers, hospitals, parks and shopping, school quality, perceived and real crime rates and more. Selected neighborhood's LIHTC vacancy rates are reported in Table 10 and 12 below for Clark and Washoe County respectively.

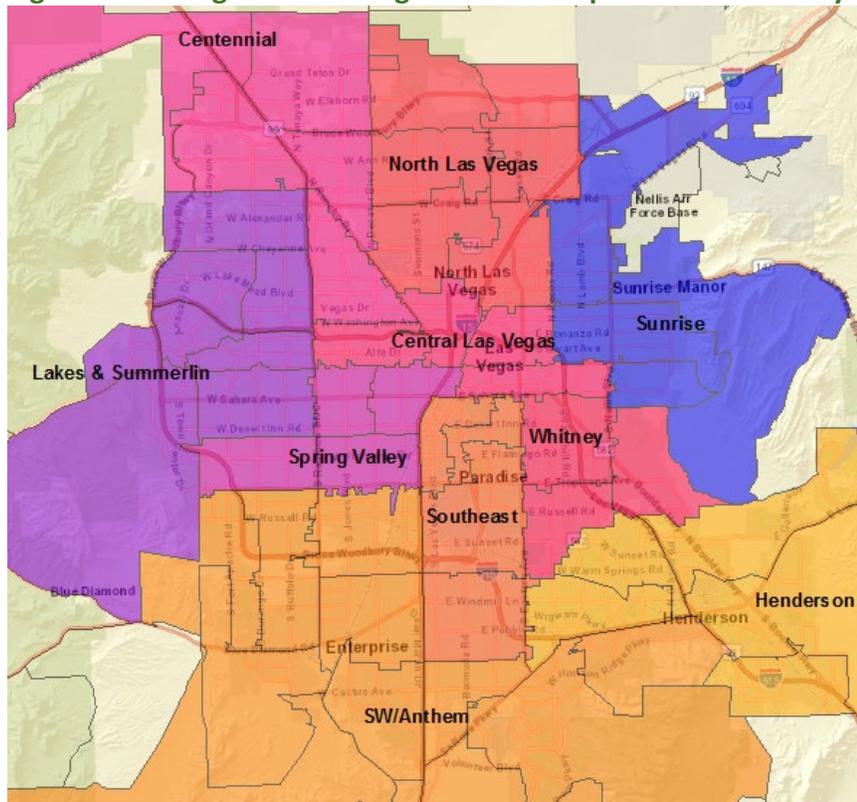
Clark County neighborhoods were defined using zip codes. Table 10 gives zip code definitions used and Figure 2 illustrates the neighborhoods. The highest vacancy rates were for properties in Central Las Vegas. Lowest rates were for properties in Centennial and the Southeast. Compared to Lied Institute private market vacancy rates, LIHTC vacancies were lower in all regions. The pattern of vacancy rates from lowest to highest was not similar for market properties and LIHTC properties although by a small margin vacancy rates were highest in Central Las Vegas for both. All regions had LIHTC vacancy rates considered to be in a balanced or low range.

Table 10. 4th quarter 2018 LIHTC vacancy rate for selected Las Vegas Metro neighborhoods

Las Vegas Metro neighborhood	LIHTC vacancy rate	Lied 3rd Qtr 2018 private market	Zip codes included
Centennial	1.3%	7.8%	89108, 89130, 89131, 89143, 89149, 89166
Southeast	1.3%	8.0%	89109, 89119, 89123, 89169
Southwest & Anthem	1.6%	8.0%	89012, 89044, 89052, 89054, 89113, 89118, 89139, 89141, 89148, 89178, 89178, 89183
Whitney	1.7%	8.1%	89120, 89121, 89122
Sunrise	2.2%	7.6%	89110, 89115, 89142, 89156
Henderson	2.3%	7.7%	89002, 89011, 89014, 89015, 89074
Lakes & Summerlin	2.6%	7.8%	89117, 89128, 89129, 89134, 89135, 89144, 89145
North Las Vegas	2.7%	7.5%	89030, 89031, 89032, 89081, 89084, 89085, 89086, 89087
Spring Valley	2.9%	7.9%	89102, 89103, 89146, 89147
Central Las Vegas	5.3%	8.2%	89101, 89104, 89106, 89107

Lied Institute for Real Estate Studies. University of Nevada Las Vegas, Apartment Marketing Trends, 3rd Quarter 2018, and calculations by author.

Figure 2. Las Vegas Metro neighborhood map for LIHTC vacancy rates



Area definitions adapted from Las Vegas View News Distribution Map Creative Commons.

Comparison by zip code rent range.

Because the definitions by neighborhood above tended to include zip codes with a wide range of rents, an alternate comparison of vacancy rates by Lied average rents for zip code areas was carried out. Average rents reported in the Third Quarter Apartment Market Trends from Lied Institute at UNLV were used to define the zip code categories. Results are in Table 11. With the exception of the \$801 to \$900 average rent range, LIHTC vacancy rates trended lower for lower average rent zip codes. Market rate vacancies for market rate apartments as reported by Lied were more mixed but appeared to have a similar trend.

Table 11. LIHTC and market rate vacancies by rent range of zip code.

Rent range for Zip Code	LIHTC vacancy rate	Lied market vacancy rate*	Zip Codes in category
less than \$800	4.1%	8.4%	89030,89101,89102,89104,89106
\$801 - \$900	2.2%	7.9%	89005,89015,89103,89107,89109,89110,89115,89119,89121,89142,89156,89169
\$901-\$1000	2.8%	8.0%	89002,89032,89086,89108,89122,89130,89146
\$1001-\$1150	1.8%	7.6%	89011,89014,89031,89074,89081,89084,89117,89118,89120,89123,89128,89129,89148,89166,89178
\$1151 and up	1.0%	7.8%	89052,89113,89139,89145,89147,89149,89183,89012,89131,89135,89138,89141,89144

*Lied Institute 3rd Quarter 2018 Apartment Market Trends by zip code and calculations by author.

Reno/Sparks vacancy rates

Reno/Sparks neighborhoods were defined to facilitate comparisons with Johnson, Perkins and Griffin’s Quarterly Apartment Survey for 4th Quarter 2018 by using the definitions and map posted on page eight and nine, a screenshot of which is displayed with permission in Figure 3 and 4.

Figure 3. Johnson, Perkins and Griffin market area map for Reno-Sparks

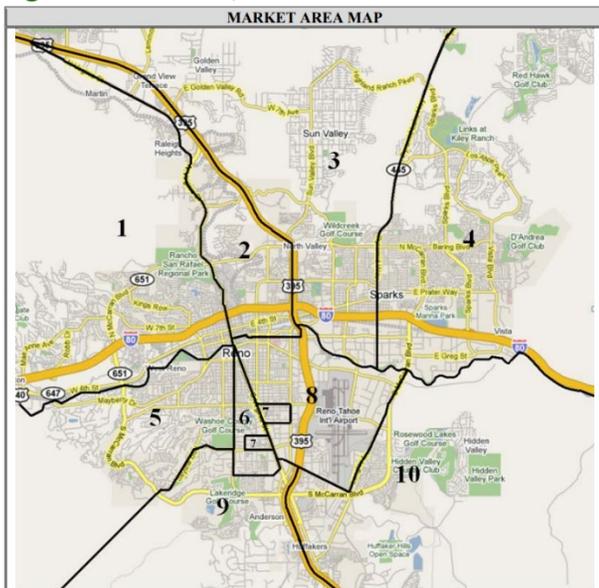


Figure 4. Johnson, Perkins and Griffin market area definitions for Reno/Sparks

MARKET AREAS		
Area	Sub-Market	Location
1	Northwest Reno	North of Truckee River & West of N. Virginia St.
2	Northeast Reno	North of 2 nd St.; West of US-395 & Northtowne Lane; East of N. Virginia St.
3	West Sparks/North Valleys	North of the Truckee River; West of Pyramid Way; East of US-395
4	East Sparks	North of the Truckee River & East of Pyramid Way
5	West Reno	North of Moana Lane; West of Plumas St.; South of Truckee River
6	Southwest Reno	South of Truckee River; West of S. Virginia St.; East of Plumas St.; North of Redfield Parkway
7	Brinkby/Grove	North of Moana Lane; West of S. Virginia St.; South of Brinkby Ave.; East of Lakeside Dr. & North of Linden St.; West of Kietzke Lane; South of Plumb Lane; East of S. Virginia St.
8	Airport	North of Peckham Lane; West of Longley Lane; East of S. Virginia St.; South of 2 nd St. & Truckee River
9	Lakeridge	South of Moana Lane and Redfield Parkway; West of S. Virginia St.
10	Southeast Reno	South of Truckee River; East of S. Virginia St. & Longley Lane
11	Downtown Urban	Downtown Reno; Downtown Sparks
*Sub-Market Area 11 is not depicted on the following Market Area Map, as it contains portions of Downtown Reno and Downtown Sparks, which are contained within previously existing Sub-Market Areas.		

LIHTC vacancy rates were low in all Reno/Sparks sub-regions with the lowest vacancy reported for Airport and Northeast Reno at 2.8% and the highest vacancy rate reported in the West Sparks/North Valleys region at 4.3%. Johnson, Perkins and Griffin (JP&G) fourth quarter vacancy rates were mixed as compared to LIHTC vacancy rates. Because the private market properties JP&G survey are large properties with over 80 units which are professionally managed, it may be that the vacancy rates reported are especially low. Typically ALN vacancy rates, which include smaller market properties, are higher than JP&G.

A comparison of vacancy rates by average rent as reported by JP&G 4th quarter was carried out for Reno-Sparks as it was for the Las Vegas Metro region but with only two rent regions. Results were similar in that lower rent neighborhoods were associated with higher LIHTC vacancy rates. The regions with average rent from \$899 to \$1200 per month in 4th quarter JP&G had an average LIHTC vacancy rate of 3.4% whereas the higher rent neighborhoods reporting rents over \$1200 a month had an LIHTC vacancy rate of 2.8%.

Table 12. 4th quarter 2018 LIHTC vacancy rate for selected Reno/Sparks neighborhoods

Reno/Sparks neighborhoods	LIHTC vacancy rate	JP&G private market vacancy rate*
Airport (Reno)	2.8%	2.5%
Northeast Reno	2.8%	4.0%
Northwest Reno	3.9%	3.8%
West Sparks/North Valleys	4.3%	3.6%

*Johnson, Perkins & Griffin 4th Quarter 2018 report.

Rents

HUD Median Family Income Higher

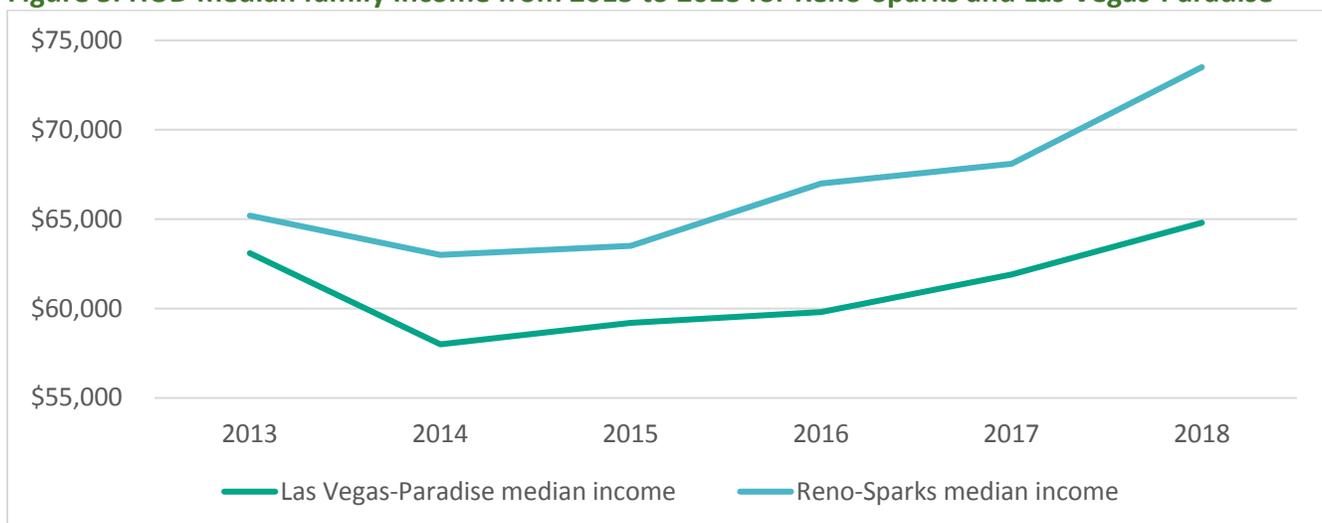
Maximum allowable rents are complex and, since the Housing and Economic Recovery Act reforms, must be calculated on a property by property basis. They depend on regional HUD median incomes, determined annually, set aside agreements, the date each property is put into service, whether median incomes have increased or decreased and many other factors.^x HUD median family income finally surpassed the 2013 level in Clark County this year coming out 3% higher than in 2013 and 5% higher than last year's. Washoe County's was 13% higher than 2013 levels and 8% higher than 2017 (see Figure 5).^{xi}

HUD median family incomes are used to calculate the HUD adjustments to the four-person very low income limits (4P VLIL) that ultimately are used to specify the Multi-family Tax Subsidy Project rent and income limits. Adjustments that have been applied recently to Clark and Washoe Counties include the state non-metropolitan adjustment which assures that no 4P VLIL is lower than the 50% of state non-metropolitan median family income. In 2018 Clark County 4P VLIL received an especially large state non-metropolitan adjustment so that rent maximums were allowed to increase 11% in total.^{xiii} See Figure 6.

Any change in utility costs could also influence rent. Gross rents are restricted in tax credit properties. Gross rent includes utility costs. Utility costs are paid for by the tenant for a majority of Nevada's tax credit units (Taking Stock 2015 found that 77% of tenants paid for all utilities). If so, rents must be reduced by an estimated utility allowance. Nevada average residential prices for natural gas trended higher from 2017 to 2018 while electricity prices were stable.^{xiiii} See Figure 7 and 8 below.

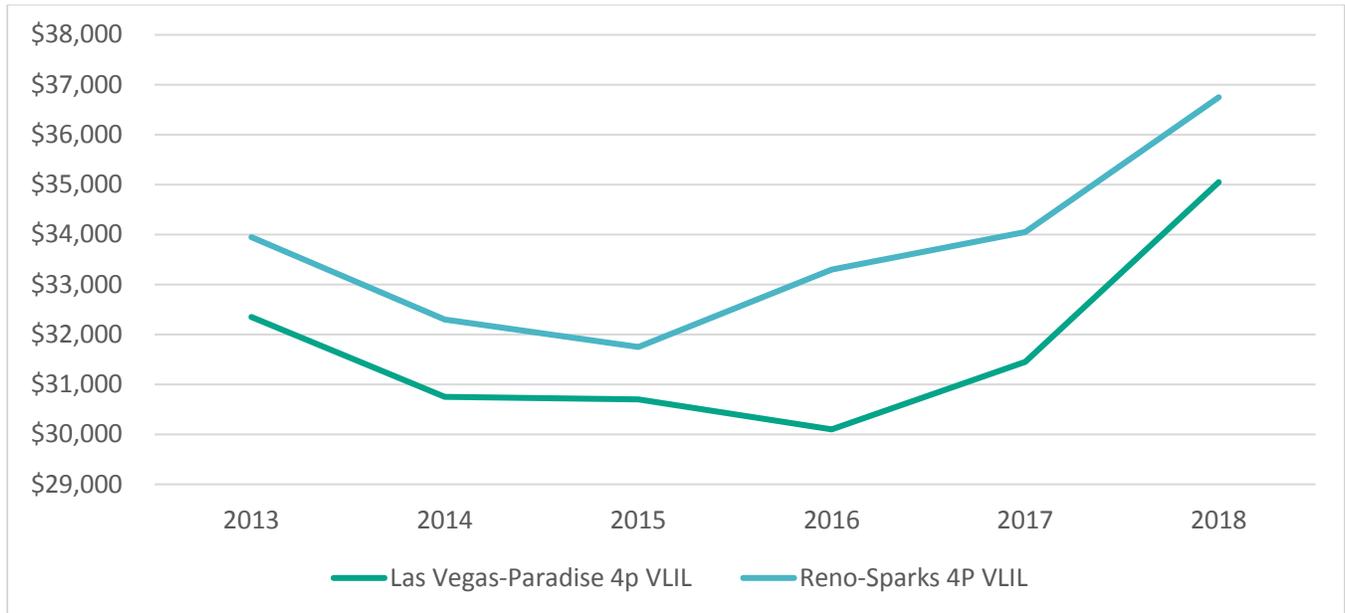
Increases in median income and maximum allowable rents, and changes in utility costs would have a mixed effect on LIHTC rents reported in the 2018 survey. Owners that were not charging maximum rents may also have raised rents.

Figure 5. HUD median family income from 2013 to 2018 for Reno-Sparks and Las Vegas-Paradise



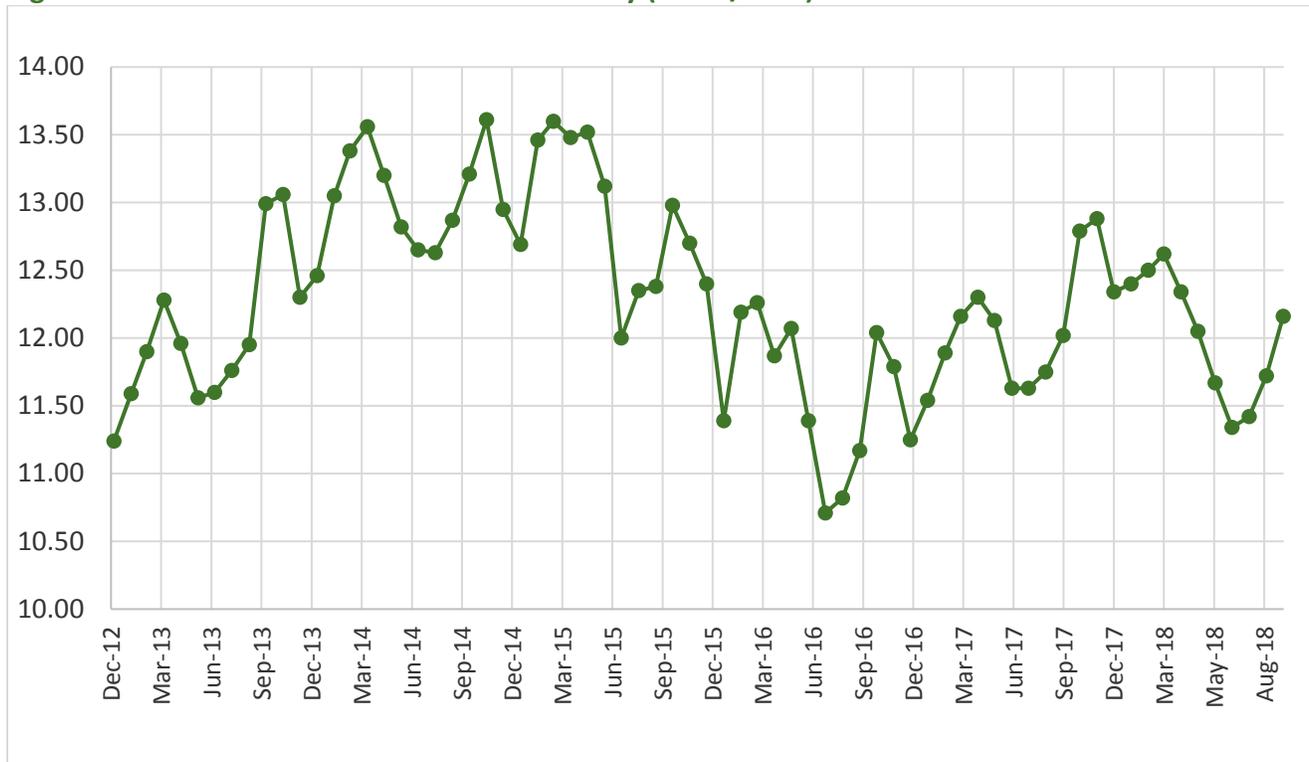
Source: NHD chart using U. S. Housing and Urban Development. Multifamily Tax Subsidy Projects Rent and Income Limits. <https://www.huduser.gov/portal/datasets/mtsp.html> accessed 2-3-2019

Figure 6. HUD Four Person Very Low Income Limit for Reno-Sparks and Las Vegas-Paradise, 2013 to 2018



Source: NHD chart using U. S. Housing and Urban Development. Multifamily Tax Subsidy Projects Rent and Income Limits. <https://www.huduser.gov/portal/datasets/mtsp.html> accessed 2-3-2019

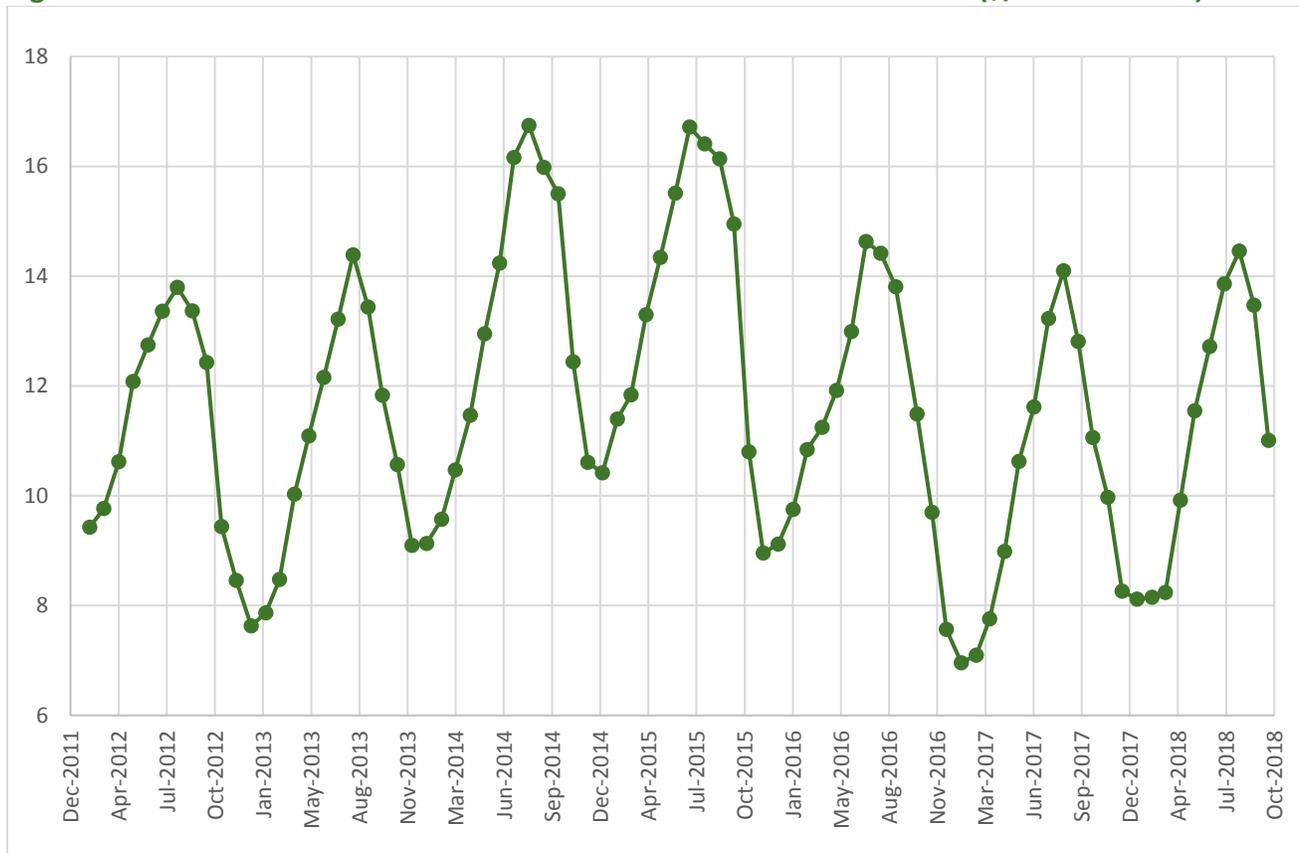
Figure 7. Nevada Residential Price for Electricity (Cents/kWh)



Source: See endnote 12.



Figure 8. Nevada Price of Natural Gas Delivered to residential Consumers (\$/1000 Cubic Ft)



Source: See endnote 12.

Rents for Nevada Tax Credit Properties are Lowest in Clark County

Rent restrictions are governed by IRS rules with regard to tax credit properties and by agreements developers entered into in the Qualified Allocation Plan when competing for tax credits as well as agreements related to other funding sources such as HOME. The agreements may include promises to restrict rents even more than required by federal LIHTC tax regulations. In addition, landlords may reduce their rents below the maximum if so desired in order to compete in the market, or for properties owned by non-profits, as a part of their non-profit mission. Property managers were asked to give “lowest” and “highest” rent on turnover for each unit according to number of bedrooms.

Average LIHTC high rents for studio and one bedroom units were lowest in Clark County. For two bedroom units, Clark County and other non-mining counties had the highest LIHTC rents. Mining counties had the lowest average rent for three-bedroom units. Overall, Clark County had the lowest average rents. The highest average rent reported for all floorplan types except one bedrooms was in Washoe County. Mining Counties had the highest one bedroom rents.

Average lowest rents charged were the lowest in Clark County and highest in Mining counties.

Table 13. Average highest 2018 LIHTC rents by region and by number of bedrooms

# of Bedrooms	Clark	Mining	Other	Washoe	Nevada
Studio (0 bdrm)	\$698	NA	NA	\$725	\$718
One bedroom	\$691	\$796	\$710	\$747	\$712
Two bedroom	\$823	\$839	\$823	\$867	\$832
Three bedroom	\$968	\$805	\$997	\$1,056	\$986
Overall average	\$801	\$813	\$806	\$861	\$817

Table 14. Average lowest 2018 LIHTC rents by region and number of bedrooms

# of Bedrooms	Clark	Mining	Other	Washoe	Nevada
Studio (0 bdrm)	\$688	NA	NA	\$687	\$688
One bedroom	\$583	\$779	\$660	\$647	\$616
Two bedroom	\$676	\$792	\$771	\$788	\$709
Three bedroom	\$864	\$769	\$949	\$925	\$882
Overall average	\$676	\$782	\$755	\$768	\$709

4th Quarter LIHTC Rents Were Lower than Market Rents in 2018 except for Studio Units

The LIHTC average high rents were compared to market rate rents. As was the case in the past several years, average LIHTC rents were found to be well below average market rents. The one exception was studio rents in Clark County. Average LIHTC studio rents were slightly higher than market rate rents in Clark County. (Average highest LIHTC rents for studios were just \$10 higher than the lowest.) However, one, two and three bedroom average rents in LIHTC properties ranged from 23% to 25% lower than market rates. The spread between average market rate rents and average LIHTC rents was even wider in Washoe County which reported average market rents up to 40% higher than LIHTC rents.

Table 15. Comparison of 4th quarter 2018 market and LIHTC high rents in Washoe County

Number of Bedrooms	LIHTC	JP&G market*	% lower
One bedroom	\$747	\$ 1,155	35%
Three bedroom	\$1,056	\$ 1,762	40%

*Johnson, Perkins and Griffin Apartment Survey, 4th Quarter 2018, Reno Sparks Metro, email correspondence and calculations by author.

Table 16. Comparison of 4th quarter 2018 market and LIHTC high rents in Clark County*

Number of Bedrooms	LIHTC	ALN Apt. market**	% lower
Studio (0 bdrm)	\$698	\$685	-2%
One bedroom	\$691	\$923	25%
Two bedroom	\$823	\$1,101	25%
Three bedroom	\$968	\$1,261	23%

*Five percent of LIHTC units are outside of greater Las Vegas.

**ALN Apartment Data Las Vegas Review Oct. 2018. Email with ALN Analytics Specialist 1-24-2019.

4th Quarter 2018 Rents Higher than 4th Quarter 2017 Rents

Using the high rents, on average LIHTC properties reported rents increased 7% in Las Vegas and 5% in Reno/Sparks over 2017 rents. In comparison, market rate rents increased by about 7% in Las Vegas and 10% in Reno/Sparks.

The trend in rents from 2013 to 2018 was different for market properties and tax credit properties. While in the period from 2013 to 2015 overall rents increased for tax credit and market properties by about the same percentage, from that point on rents in market properties increased more than rents in LIHTC properties. In Las Vegas average market rate rents increased almost twice as much as LIHTC rents over the 2013 to 2018 period. In Washoe County market rate rents increased two and a half times more than LIHTC rents from 2013 to 2018.

Table 17. Comparison of 4th quarter rents in Washoe County from 2013 to 2018

Type of unit	2013	2014	2015	2016	2017	2018	Increase 2013 to 2018
Studio – J & P mkt. rate	\$ 545	\$ 555	\$ 580	\$ 673	\$ 723	\$ 837	54%
Studio - LIHTC	\$ 544	\$ 550	\$ 577	\$ 572	\$ 593	\$ 725	33%
1 bdrm - J & P mkt. rate	\$ 717	\$ 775	\$ 840	\$ 939	\$1,062	\$1,155	61%
1 bdrm - LIHTC	\$ 626	\$ 665	\$ 686	\$ 709	\$ 716	\$ 747	19%
2 bdrm - J & P mkt. rate	\$ 878	\$ 918	\$1,003	\$1,141	\$1,245	\$1,356	54%
2 bdrm - LIHTC	\$ 699	\$ 741	\$ 805	\$ 819	\$ 849	\$ 867	24%
3 bdrm- J & P mkt. rate	\$1,117	\$1,176	\$1,263	\$1,382	\$1,551	\$1,762	58%
3 bdrm - LIHTC	\$ 929	\$ 983	\$ 962	\$1,012	\$1,049	\$1,056	14%
Overall- J & P mkt. rate	\$ 860	\$ 868	\$ 946	\$1,066	\$1,180	\$1,292	50%
Overall - LIHTC	\$ 716	\$ 755	\$ 784	\$ 807	\$ 823	\$ 861	20%

See endnote 9 for sources of market rate rents.

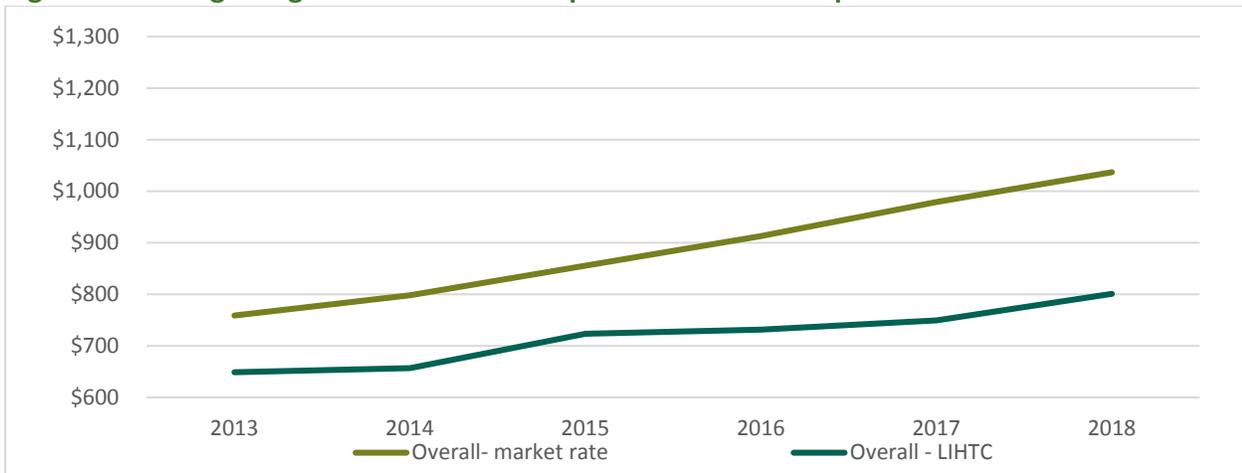
Table 18. Comparison of 4th quarter rents in Clark County from 2013 to 2018*

Type of unit	2013	2014	2015	2016	2017	2018	Increase 2013 to 2018
Studio – ALN mkt. rate	\$ 495	\$ 517	\$ 571	\$ 603	\$ 637	\$685	38%
Studio - LIHTC	\$ 473	\$ 486	\$ 624	\$ 642	\$ 634	\$698	48%
1 bdrm - ALN mkt. rate	\$ 665	\$ 701	\$ 754	\$ 806	\$ 860	\$ 923	39%
1 bdrm - LIHTC	\$ 572	\$ 569	\$ 637	\$ 635	\$ 646	\$ 691	21%
2 bdrm - ALN mkt. rate	\$ 798	\$ 838	\$ 896	\$ 955	\$1,024	\$1,101	38%
2 bdrm - LIHTC	\$ 670	\$ 688	\$ 735	\$ 749	\$ 769	\$ 823	23%
3 bdrm- ALN mkt. rate	\$ 928	\$ 971	\$1,040	\$1,107	\$1,175	\$1,261	36%
3 bdrm - LIHTC	\$ 756	\$ 805	\$ 867	\$ 866	\$ 910	\$ 968	28%
Overall- ALN mkt. rate	\$ 759	\$ 798	\$ 856	\$ 913	\$ 979	\$1,037	37%
Overall - LIHTC	\$ 649	\$ 657	\$ 724	\$ 732	\$ 750	\$801	23%

*Five percent of Clark County LIHTC units are outside of greater Las Vegas.

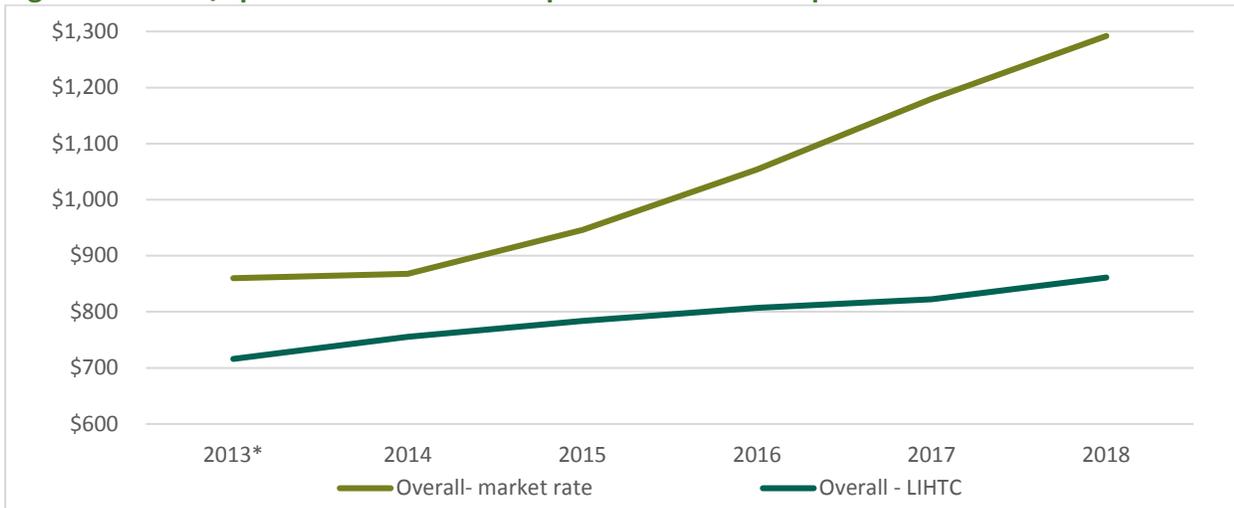
See endnote 9 for sources of market rate rents.

Figure 9. Las Vegas region rent trends 4th quarter 2013 to 4th qtr. 2018



Source: Table 18.

Figure 10. Reno/Sparks Rent Trends 4th quarter 2013 to 4th qtr. 2018



Source: Table 18.

County and Neighborhood LIHTC Rents

To investigate how LIHTC rents may vary within the four regions of Clark County, Washoe County, mining counties and other counties some selected subregional rent averages are reported below. Vacancy rates

Mining and Other Rural LIHTC average rents vary widely

Different counties have widely varying median incomes and maximum allowable rents. Table 19 gives the LIHTC average rents for selected Nevada counties. Clark and Washoe County are included again for comparison. Nye County had the lowest average rents while Elko County had the highest. Although as discussed above, rents are influenced by many variables, Nye has the lowest HUD family median income of the counties displayed with Elko has the highest. The smaller number of properties included in the averages naturally create greater variability.

Table 19. 4th quarter 2018 LIHTC rents for selected Nevada counties

County	LIHTC Lowest Rent	LIHTC Highest Rent
Nye	\$659	\$665
Humboldt	\$744	\$782
Clark	\$676	\$801
Carson City	\$756	\$820
Lyon	\$762	\$836
Douglas	\$829	\$837
Washoe	\$768	\$861
Elko	\$849	\$883

Las Vegas Metro LIHTC market rent spread greatest in Henderson, Lakes & Summerlin neighborhoods

Neighborhoods within urban regions may constitute somewhat differentiated housing markets for many reasons: distance to work centers, hospitals, parks and shopping, school quality, perceived and real crime rates and more. Selected neighborhoods LIHTC average rents are reported in Table 20 and 22 below for Clark and Washoe County respectively.

Clark County neighborhoods were defined using zip codes as explained in the vacancy section above. Survey respondents were asked to report the lowest rent charged on turnover and highest rent charged on turnover. A substantial difference in average rents was reported between neighborhoods, especially for the lowest rents which varied from \$506 in Henderson to \$808 in the Southeast. Lowest rents charged are influenced by the presence of set asides for lower income groups amongst other factors. The spread between market rents and LIHTC rents was greatest for low LIHTC rents in Henderson, Lakes & Summerlin with rents over 50% lower than market reported there. Sunrise, Central Las Vegas and Southeast neighborhoods averaged lower spreads between market and LIHTC rents for highest rents. Southeast and Central Las Vegas had the lowest spread for lower rents with LIHTC rents 13% less and 16% less than market rents respectively.

Table 20. 4th quarter 2018 LIHTC rents for selected Las Vegas Metro neighborhoods

Las Vegas neighborhood	Avg. LIHTC lowest rent	Avg. LIHTC highest rent	3rd Quarter Lied market rent*	% lower (lowest rent)	% lower (highest rent)
Central Las Vegas	\$645	\$714	\$765	16%	7%
Sunrise	\$664	\$889	\$876	24%	-1%
Whitney	\$624	\$768	\$931	33%	18%
Southeast	\$808	\$867	\$932	13%	7%
Spring Valley	\$755	\$829	\$980	23%	15%
NLV	\$720	\$825	\$1,021	29%	19%
Centennial	\$661	\$797	\$1,056	37%	25%
Henderson	\$506	\$721	\$1,137	55%	37%
Lakes & Summerlin	\$563	\$794	\$1,191	53%	33%
Southwest & Anthem	\$799	\$881	\$1,226	35%	28%

*Weighted averages for Lied Market rents calculated by the author with data from Apartment Market Trends rental and vacancy rates by zip code area and definitions of neighborhoods given in Table 10.

Comparison by zip code rent range

The definitions by neighborhood above tended to include zip codes with a wide range of rents so an alternate comparison of LIHTC rents by Lied average rents for zip code areas was carried out. Average rents reported in the Third Quarter Apartment Market Trends from Lied Institute were used to define the zip code categories. The results are in Table 21 below. In the zip code areas with the lowest rents, LIHTC lowest reported rents were only 4% lower than the market average. About a third of the LIHTC units included in the survey were in these zip codes with average Lied Institute rents \$800 or less. For other rent range zip codes the margin between LIHTC lowest rents and market rents ranged from 26% to 46%.

Table 21. Las Vegas Metro average LIHTC and market rate rents by rent range of zip code.

Rent range for Zip Code	LIHTC lowest rent	Lied market rent	% LIHTC lower	Zip Codes in category
\$800 or less	\$ 680	\$ 708	4.0%	89030,89101,89102,89104,89106
\$801 - \$900	\$ 601	\$ 869	30.8%	89005,89015,89103,89107,89109,89110,89115,89119,89121,89142,89156,89169
\$901-\$1000	\$ 719	\$ 967	25.6%	89002,89032,89086,89108,89122,89130,89146
\$1001-\$1150	\$ 751	\$1,069	29.7%	89011,89014,89031,89074,89081,89084,89117,89118,89120,89123,89128,89129,89148,89166,89178
\$1151 and up	\$ 664	\$ 1,228	45.9%	89052,89113,89139,89145,89147,89149,89183,89012,89131,89135,89138,89141,89144

*Lied Institute 3rd Quarter 2018 Apartment Market Trends by zip code and calculations by author.

Reno/Sparks neighborhood LIHTC rents

Reno/Sparks neighborhoods were defined as described in the section above on vacancies to facilitate comparisons with Johnson, Perkins and Griffin (JP & G). LIHTC rents were substantially lower in all neighborhoods with enough data for comparisons with wedges from 21% to 44% reported. However, not all neighborhoods had enough data for a comparison to be reported.

A comparison of LIHTC rents by rent range as reported by JP&G 4th quarter was carried out for Reno-Sparks as it was for the Las Vegas Metro region but with only two rent regions composed of JP&G neighborhoods. As seen in Table 23 LIHTC lowest rents were about 32% lower than averages reported in JP&G for the lower rent neighborhoods and 41% lower than average rent in the higher rent neighborhoods. Sixty-four percent of Reno-Sparks LIHTC units included in the survey were in the lower rent neighborhoods.

Table 22. 4th quarter 2018 LIHTC rents for selected Reno/Sparks neighborhoods

Reno/Sparks Neighborhood	Avg. LIHTC Lowest Rent	Avg. LIHTC Highest Rent	JP&G Market Rent	% lower (lowest rent)	% lower (highest rent)
NE Reno	\$ 820	\$ 903	\$ 1,149	29%	21%
West Sparks	\$ 721	\$ 863	\$ 1,152	37%	25%
NW Reno	\$ 800	\$ 892	\$ 1,342	40%	34%
Airport	\$ 640	\$ 745	\$ 1,153	44%	35%
NE Reno	\$ 820	\$ 903	\$ 1,149	29%	21%

Table 23 Reno-Sparks LIHTC and market rate rents by rent range of zip code.

Reno JP&G Rent range	LIHTC Lowest Rent	JP&G Rent	% Lower	JP&G Neighborhoods in Rent Range
\$899 to \$1200	\$753	\$1,103	32%	Northeast Reno, West-Sparks/N. Valley, West Reno, Brinkby/Grove, Airport
Over \$1200	\$800	\$1,367	41%	Northwest Reno, East Sparks, Southwest Reno, Lakeridge, Southeast Reno

Violence Against Women Act

In the past, victims of domestic violence have been evicted from tax credit or other low income housing because of the crime committed against them by their domestic partner. In response to this, the Violence Against Women Act of 1994 was amended in 2013 to prevent eviction or loss of rental assistance by victims of domestic violence, dating violence, sexual assault and stalking based on the criminal behavior of the perpetrator. The amendment specifically included tax credit properties in addition to all housing that receives funding from Home, Housing Choice Vouchers, public housing, etc.^{xiv} In Nevada, tax credit property owners and management receive information on the VAWA act requirements at annual LIHTC compliance trainings. As an additional safeguard, if a prospective LIHTC tenant’s application for housing is denied due to problems with landlords and she can demonstrate that the problems were connected to domestic violence, she may appeal the denial.

This year’s survey asked the following question:

Have you received any requests related to the Violence Against Women Act over the past year? Examples include a request to change door lock, bifurcate lease, transfer to a different unit, or a waiver of termination fee due for a victim of domestic violence or sexual assault.

- Yes
- No

If yes, how many requests have you received over the past year? _____

Property managers reported a total of 17 requests in 2018. This was a rate of one request per 1,239 LIHTC units.

Rent Skipping Decreased in 2018 Continuing a Four Year Trend

LIHTC properties are designed to serve Nevada’s moderate to low income families. The rent in LIHTC qualifying units must be under a maximum allowable rent. Only when LIHTC units are combined with other programs can there be a deep subsidy that ensures that a family will pay no more than 30% of their income for rent. Thus some families living in LIHTC properties can suffer rent burden. One sign rent burden may be high enough to be unsustainable is so called rent skipping, that is, when a family leaves before the end of their lease term or is evicted for non-payment. Rent skipping creates costs for property providers, creating “economic vacancy” which reduces the income stream from a property.

In 2018 Nevada LIHTC properties reported the lowest average skip rate of the period from 2013 to 2018 continuing a four year downward trend. Overall, there were an average of 0.5 skips per month per hundred units reported in 2018 as compared to 0.9 in 2017. In both family and senior properties, the monthly skip rate per hundred was lower than last year (0.8 as compared to 1.1) and for senior properties 0.2 versus 0.5 in 2017.

Skip rates have consistently been reported to be far lower in senior properties as compared to family properties. A total of 16 respondents did not answer this question and were excluded from the calculation.

Skip rates were low for senior properties in all regions. Family properties had somewhat higher skip rates which were similar in every region.

Figure 11. Skip rate trends for LIHTC properties in 2013 to 2018 (skips per hundred units per month)

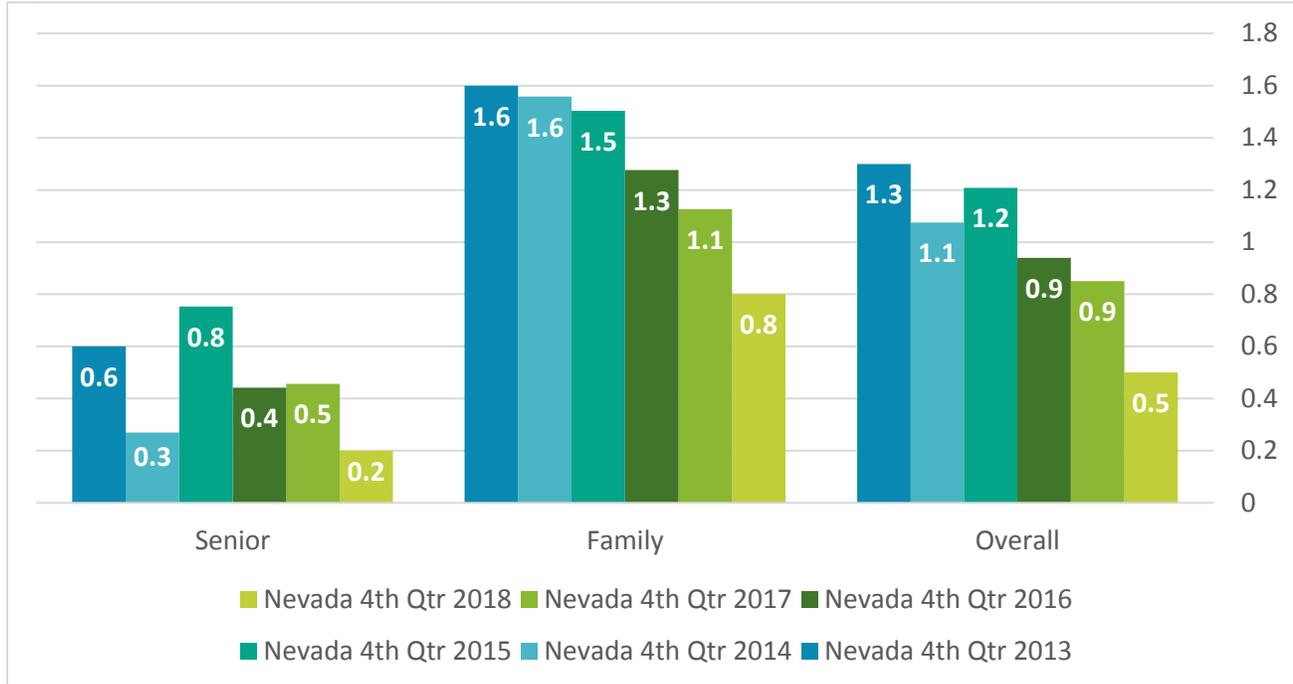


Figure 12. Skip rate per hundred units per month for LIHTC properties by region



Turnover Time

Average turnover times are important because rent is lost while a unit is not filled. Long turnover times reduce the number of available tax credit units from the consumer point of view as well. A new question on the survey this year requested information on turnover times:

Q14 On average how many days does it take you to turnover a unit (days between move-out of old tenant and move-in of new)? _____

Turnover times averaged 7.1 days for the state as a whole. Averages were weighted by number of units in a property. Looking at the state averages, turnover time in senior properties was 6.5 days whereas in family properties average turnover time was longer at 7.6 days. Two outliers with very large impact were removed from the sample. An additional two properties were missing data and were not included.

Table 24. Weighted average turnover time in days for LIHTC properties by region and type

Average turnover	Family	Senior	Nevada total
Clark	5.8	6.7	6.3
Mining	4.5	1.6	3.6
Rural	10.3	4.7	8.4
Washoe	10.6	7.1	9.8
Nevada Total	7.6	6.5	7.1

Waiting Lists are an Indicator of Demand Pressure

Waiting lists are an important indicator of the unmet demand for affordable housing. However, waiting lists require careful interpretation. Households are not necessarily pre-qualified for income levels, background checks, region, age and so forth and many will not, in the final analysis, qualify for the unit. These lists are not unduplicated; households may be on many waiting lists and may already be housed in an affordable unit elsewhere or their information may be outdated. For these and other reasons, waiting lists cannot be interpreted simply as the number of households with unmet housing needs. Rather they are an indicator of the demand pressure on certain types of affordable and/or assisted housing.

The converse is also true. That is, the lack of a waiting list does not mean that there is no unmet need for low income housing. First, waiting lists may be so long that they close, so many who would like to be on a waiting list are not able to get on it. In addition, there may be households in need who cannot afford LIHTC rents without greater subsidies and do not attempt to rent such a unit. The long waiting lists for most housing with full rental assistance is one indicator of this need. Statistics on housing problems bear this out as well; for example, according to 2011-2015 CHAS data, about 130,000 Nevada households with incomes under 50% HUD area median income had gross rents that used 50% or more of their household income.^{xv} Nationally only one out of four families that qualify for a housing choice voucher receive one.^{xvi} In addition, some LIHTC properties without other federal funding avoid keeping waiting lists because waiting list regulations make it difficult to turn a unit in a timely manner and create significant labor costs. Waiting list data is not comprehensive.

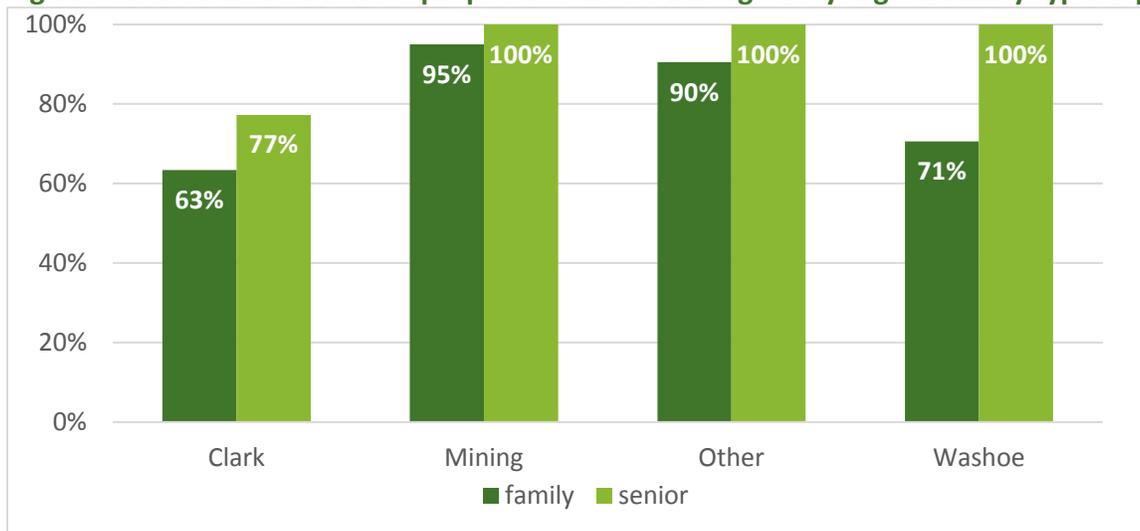
Survey respondents were asked, “Do you currently have a waiting list for any units?” If there was a positive response, survey respondents were asked if the waiting list was for the entire property or for a specific type of unit. If for a specific type of unit, respondents were asked to indicate the number on the waiting list for each floor plan or to describe any additional attributes of units with a waiting list.

Most LIHTC Properties have a Waiting List

Eighty-one percent of the responding LIHTC properties had waiting lists or inquiry lists, the same percentage as was reported in 2017. One hundred percent of responding senior properties in all regions except Clark had waiting lists in 2018.



Figure 13. Percent of tax credit properties with a waiting list by region and by type of property

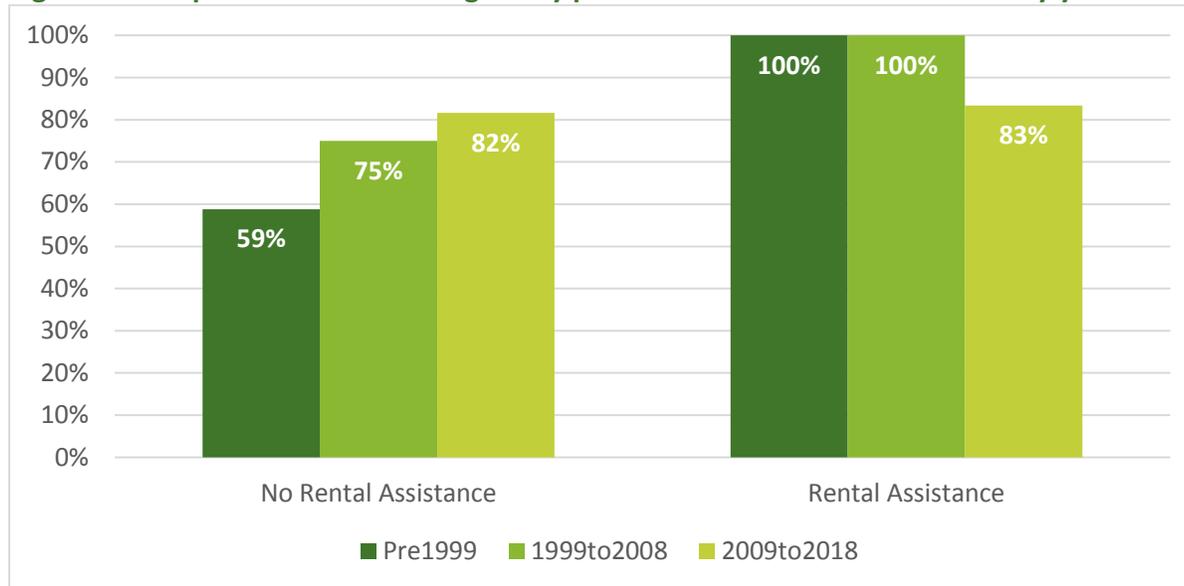


Properties with Rental Assistance are More Likely to Have a Waiting List.

The shortage of affordable housing is most acute for the lowest income households. Waiting lists reflect a pressure on rental assistance, the deeper sliding scale type subsidies that ensure a household pays no more than 30% of its income in gross rent.^{xvii} For the properties with data on waiting lists, about 17%, or 3,712

units had project based rental assistance offering these deeper subsidies.^{xviii} Properties with rental assistance are more likely to have a waiting list than those without rental assistance. Overall, 74% of properties without rental assistance reported having a waiting list versus 98% of the properties with rental assistance. For properties without rental assistance, the newest properties built since 2009 were most likely to have a waiting list with 82% of LIHTC properties reporting a waiting list.

Figure 14. Properties with a waiting list by presence of rental assistance and by year first built



More Complete Information Increased Waiting List Numbers in Clark County

A total of 27,218 households were reported to be on waiting lists for tax credit properties in the 2018 survey. The number was up 154% from last year when 10,729 households were reported on waiting lists. The increase was due almost entirely to fuller information on Southern Nevada Regional Housing Authority (SNRHA) waiting lists for properties that have been renovated with tax credit funding. These properties all have full sliding scale rental assistance and most have been recently renovated. Most of these properties are relatively new to the tax credit inventory. It has been difficult to obtain full information on waiting lists for these properties because waiting lists are not kept by site managers but are managed by SNRHA. This year a separate collection of waiting list information from SNRHA was carried out.

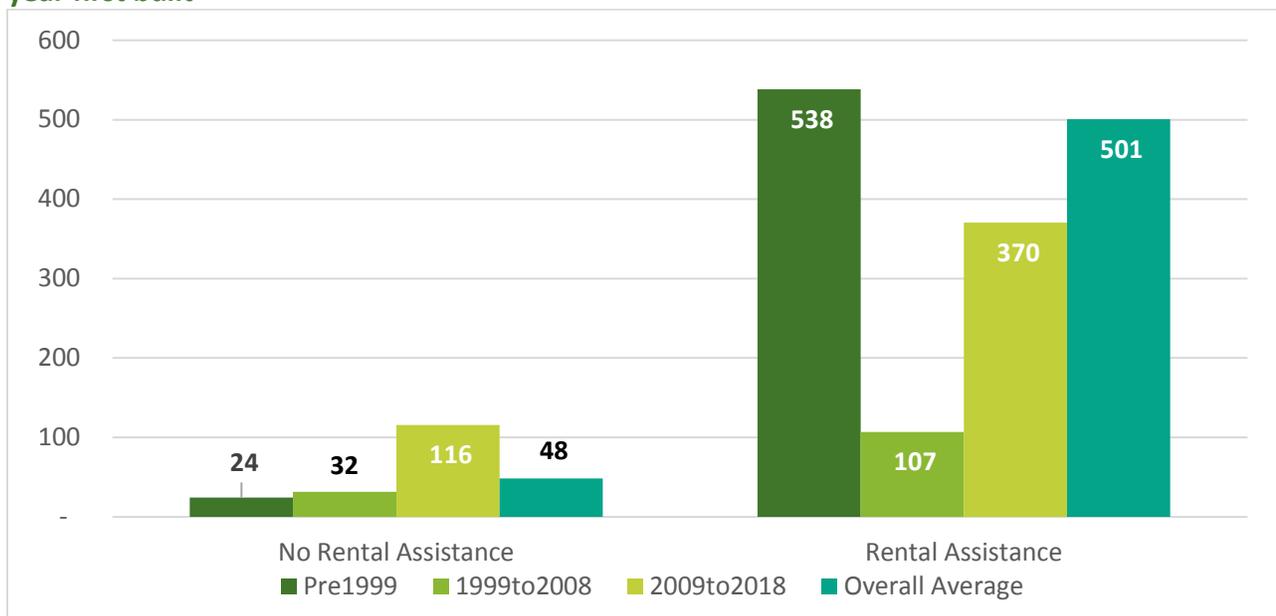
Washoe County waiting lists decreased by 30%, a decrease of 1,305 households, while Clark County's grew by 405%, an increase of 16,713 households, again primarily due to the SNRHA data collection. Other Counties' lists grew by 39% and the Mining region waiting lists increased by 66%. As stated above, the combined lists likely contain many duplicates and households that would not qualify, so the number by itself cannot be read as total number of households in need of affordable units; however, the increase in waiting lists continues to demonstrate unmet need for affordable housing, especially for units with full rental assistance.

The median length of a waiting list was 21 households, about the same as last year. One hundred fifty one of the properties reported waiting lists of 50 households or less. Of these forty-three properties reported no waiting list. Nine properties did not supply any waiting list information.

More Complete Data in 2018 Reveal Longer Waiting Lists for Rental Assistance.

In the chart below, the lengths of the waiting lists are examined. Length of the waiting list is given as number of households on the waiting list for each one hundred units. The average waiting lists for older properties without rental assistance are longer than last year, averaging 24 households per 100 units as compared to 13 households in 2017 for properties built before 1999 and 1998 respectively. The newest properties built since 2008 had a much higher average waiting list of 116 households per 100 units. In contrast, for properties with rental assistance, no age pattern was clear. However, 80% of the LIHTC units with project based rental assistance are in the oldest age category. Of these older units with rental assistance, 91% of the units have been renovated. Most LIHTC properties with rental assistance are older because of the frequent use of tax credits to renovate older public housing, USDA RD or HUD properties. Because few properties with rental assistance are in the newer age categories these are subject to more variability in waiting list length. Waiting list lengths were slightly higher than last year’s for properties without rental assistance (48 per hundred units versus 45), and much higher on average for properties with rental assistance, again primarily due to additional information on waiting lists provided by SNRHA (501 per hundred units versus 84).

Figure 15. Households on waiting list (per hundred units) by presence of rental assistance and by year first built



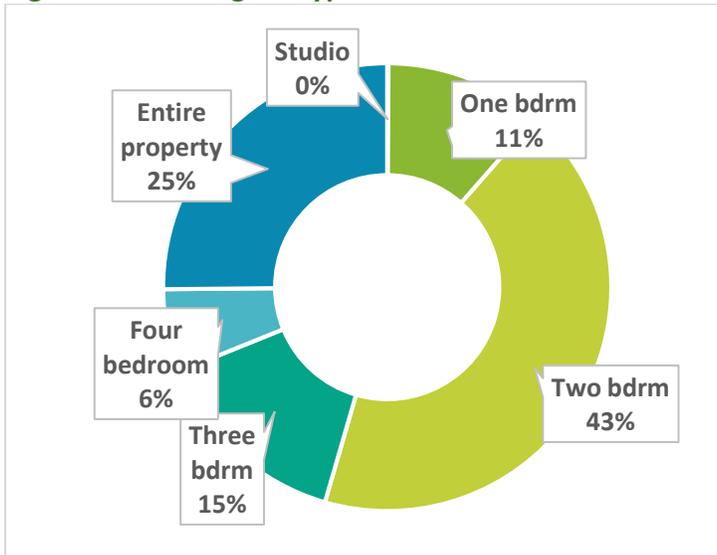
Waiting Lists by Type of Unit

Twenty-five percent of households on waiting lists were on a general waiting list for the entire property, and 75% were on a waiting list for specific types of units. The type of unit with the highest number of households on the waiting list was the two bedroom followed by the three-bedroom unit. This data was dominated by the



waiting list information collected from SNRHA. In some cases, households were on a waiting list for units with special attributes such as ADA accessibility, ground level units, or lowest rent units (those with lower set-asides). However, a problem with the questionnaire prevented collecting full information on waiting length lists for these types of units.

Figure 16. Waiting list type



Discussion and Conclusion

The 2018 edition of Taking Stock examined LIHTC rent and vacancy by neighborhood and compared the neighborhood results to market rate vacancies and rents for Washoe and Clark Counties. All neighborhood level LIHTC vacancy rates were found to be balanced or low. However, there was evidence that LIHTC vacancy rates were slightly higher in neighborhoods where market rents are lowest. LIHTC rents were found to be lower than market rents in almost all neighborhoods. However, in Central Las Vegas, where about one third of Clark County's LIHTC units are, average low LIHTC rents were only 4% lower than Market rents as compared with higher rent neighborhoods where LIHTC low rents were up to 46% lower than market rents. The data on average rents leaves out important information about utility payments. Both market and LIHTC tenants usually pay for all utilities but no data is available on how these numbers might differ by region. Also hard to quantify are differences in quality between private market and LIHTC properties.

A new question on Violence Against Women Act requests found that the Act's provisions are being used in Nevada tax credit properties. Another new question found that the average time from move out of an old tenant to move-in of a new tenant was about a week.

Good economic conditions have raised all types of rents in both the north and south. Price caps related to median income on LIHTC properties have increased the price differential between LIHTC and market properties and kept LIHTC vacancy rates low.

NHD would once again like to thank the management companies and their employees for their outstanding participation in this year's survey. Their efforts to house Nevada's most vulnerable populations amidst difficult economic conditions and demanding regulatory requirements warrant acknowledgement.

This report can be found on Nevada Housing Division website at www.housing.nv.gov. The Division encourages ideas or suggestions for future reports to be emailed to NHDinfo@housing.nv.gov or sent to Nevada Housing Division, attention Perry Faigin, pfaigin@housing.nv.gov, Carson City, NV 89706.

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Appendix A Survey Questionnaire

Below is the 2018 Affordable vacancy and rent long survey. (Qualtrics on-line survey). Because the survey was taken online on computer screens there is no way to present the survey completely on paper. The following version includes logic and code values.

2018 LIHTC Affordable Vacancy & Rent Survey Final

Start of Block: Start-up Questions

Q1 Thank you for your help with the Nevada Housing Division's 2018 rent and vacancy survey. Your participation allows us to publish timely data and helps us understand more about our state's affordable housing stock. Your responses will be presented in combination with others and will remain confidential. Please contact Betsy Fadali at 775-687-2238 with any questions. We very much appreciate your help.

Q2 Some technical information that may be helpful:

* You may use the back button *in the survey form* to return to the previous page. However, it is not recommended to use your browser back arrow. This may cause the survey to close and you will need to start over. You may enter up to three properties. If you have more properties to enter please use the link sent in your e-mail again to open a new survey form.

Q3 How many properties would you like to enter information for now (you may enter up to three)? _____

End of Block: Start-up Questions

Start of Block: Rest of Survey

Q4 Name of Property:

▼ Acapella Sr, . . ., other

Q5 If the name of the property was not in the drop down list above or needs corrections fill in below.

Q6 Address of Property

▼ 5025 & 5050 Mohave, . . ., other

Q7 If address is not in the drop down list above or needs any corrections please note below:

Q8 Number of units

Affordable units : _____

Market units : _____

Other units - please describe (e.g. manager units, caretaker units, etc.) : _____

Total : _____

Q9 Which types of units are in your complex? Please check all that apply.

- Studio
- One bedroom
- Two bedrooms
- Three bedrooms
- Other _____

Q10 Please fill out the **total number of units** of each type for your property:
 (For reference your total from Question 8 was $\{Q8/TotalSum\}$.)

(Type of floor plan)	Number of units
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio</i> Studio	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom</i> One bedroom	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms</i> Two bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms</i> Three bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Other</i> Other	

Q11 Please fill out the **number of vacant units** for each type.

(Type of floor plan)	Number of vacant units
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio</i> Studio	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom</i> One bedroom	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms</i> Two bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms</i> Three bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Other</i> Other	

Q12 Please fill out the **lowest rent you will charge on turnover** for each type of unit

(Type of floor plan)	Lowest rent you will charge on turnover
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio</i> Studio	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom</i> One bedroom	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms</i> Two bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms</i> Three bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Other</i> Other	

Q13 Please fill out **highest rent you will charge on turnover** for each type of unit

(Type of floor plan)	Highest rent you will charge on turnover
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio</i> Studio	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom</i> One bedroom	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms</i> Two bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms</i> Three bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Other</i> Other	

Q14 On average how many days does it take you to turnover a unit (days between move-out of old tenant and move-in of new)? _____

Q15 Have you received any requests related to the Violence Against Women Act over the past year? Examples include a request to change door lock, bifurcate lease, transfer to a different unit, or a waiver of termination fee due for a victim of domestic violence or sexual assault.

- Yes
- No

Q16 If yes, how many requests have you received over the past year? _____



Q17 What was the property's average occupancy rate for the past 12 months? _____

Q18 On average, how many households **per month** skip or are required to move out due to inability to pay their rent? _____

Q19 Do you currently have a waiting list?

- Yes
- No

Skip To: Q23 If Do you currently have a waiting list? = No

Display This Question:

If Loop current: Do you currently have a waiting list? = Yes

Q20 Is the waiting list for a specific type of unit?

- Yes
- No, the waiting list is for the entire property

Display This Question:

If Loop current: Is the waiting list for a specific type of unit? = No, the waiting list is for the entire property

Q21 How many households are on the waiting list? _____

Display This Question:

If Loop current: Is the waiting list for a specific type of unit? != No, the waiting list is for the entire property

Q22 Please indicate how many households are on the waiting list for each type of unit.

(Type of floor plan)	number of households on waiting list
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio</i> Studio	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom</i> One bedroom	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms</i> Two bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms</i> Three bedrooms	
<i>Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Other</i> Other	
Or special attribute (for example, washer dryer, ground floor, accessible unit, low income set aside, etc.)	

Q23 You have reached the end of the survey. Thank you! Do you have any comments?

End of Block: Rest of Survey _____



2018 Short Affordable Vacancy & Rent Survey Final

Start of Block: Start-up Questions

Q1 Thank you for your help with the Nevada Housing Division's 2018 rent and vacancy survey. Your participation allows us to publish timely data and helps us understand more about our state's affordable housing stock. Your responses will be presented in combination with others and will remain confidential. Please contact Betsy Fadali at 775-687-2238 with any questions. We very much appreciate your help.

Q2 Some technical information that may be helpful:

You may use the back button *in the survey form* to return to the previous page. However, it is not recommended to use your browser back arrow. This may cause the survey to close and you will need to start over. You may enter up to three properties. If you have more properties to enter please use the link sent in your e-mail again to open a new survey form.

Q3 How many properties would you like to enter information for now (you may enter up to three)? _____

End of Block: Start-up Questions

Start of Block: Rest of Survey

Q4 Name of Property:

▼ Acapella Sr, . . ., other

Q5 If the name of the property was not in the drop down list above or needs corrections fill in below.

Q6 Address of Property

▼ 5025 & 5050 Mohave, ..., other

Q7 If address is not in the drop down list above or needs any corrections please note below:

Q8 Number of units

Affordable units : _____

Market units : _____

Other units - please describe (e.g. manager units, caretaker units, etc.) : _____

Total : _____

Q9 On average how many days does it take you to turnover a unit (days between move-out of old tenant and move-in of new)? _____

Q10 Have you received any requests related to the Violence Against Women Act over the past year? Examples include a request to change door lock, bifurcate lease, transfer to a different unit, or a waiver of termination fee due for a victim of domestic violence or sexual assault.

Yes

No

Q11 If yes, how many requests have you received over the past year? _____

Q12 What was the property's average occupancy rate for the past 12 months? _____

Q13 On average, how many households **per month** skip or are required to move out due to inability to pay their rent? _____

Q14 Do you currently have a waiting list?

- Yes
 No

Skip To: Q18 If Do you currently have a waiting list? = No

Display This Question: If Loop current: Do you currently have a waiting list? = Yes

Q15 Is the waiting list for a specific type of unit?

- Yes (1)
 No, the waiting list is for the entire property

Display This Question: If Loop current: Is the waiting list for a specific type of unit? = No, the waiting list is for the entire property

Q16 How many households are on the waiting list? _____

Display This Question: If Loop current: Is the waiting list for a specific type of unit? != No, the waiting list is for the entire property

Q17 Please indicate how many households are on the waiting list for each type of unit.

(Type of floor plan)	number of households on waiting list
Studio	
One bedroom	
Two bedrooms	
Three bedrooms	
Other	
Or special attribute (for example, washer dryer, ground floor, accessible unit, low income set aside, etc.)	

Q18 You have reached the end of the survey. Thank you! Do you have any comments?

End of Block: Rest of Survey

ⁱ The totals include units and dollars available through the American Reinvestment and Recovery Act Tax Credit Assistance Program and Section 1602 properties. Numbers do not include late 2nd round allocations in 2018.

ⁱⁱ Section 42 regulations can be found at: <https://www.irs.gov/pub/irs-drop/rr-04-82.pdf>

ⁱⁱⁱ Census Bureau, American Community Survey 5-year estimates for 2017, Table B25024, Units in Structure <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> accessed 2/4/2019. For Nevada Tax Credit Housing by County, an in-house Nevada Housing Division database gives total housing units in tax credit properties as of February 4,, 2019 as 27,117.

^{iv} From NHD in-house database, Mothership.xlsx, 2-4-2019

^v Some special use properties were excluded such as properties serving homeless populations or assisted living facilities.

^{vi} Seven of the questionnaires were not used for these calculations because of special circumstances (e.g. rent-up not completed for new property, in process of renovation) or because of missing or incomplete data. In addition the way phases were grouped together differed in the response set and in the original list sent out to properties.

^{vii} Mining counties were determined in 2014 using a cut-off of 10% or more QCEW place of work employment in the mining sector and included Elko, Nye, Humboldt, White Pine, Pershing, Lander and Eureka County. Mineral and Esmeralda counties have high mining employment but have no tax credit properties. This 2014 definition was kept for 2015 - 2018 for continuity.

^{viii} Lied Institute market rate vacancies since 2013 showed no clear pattern of increase or decrease in vacancy rates from 3rd to 4th quarter. Johnson and Perkins data since 2006 shows a strong tendency for higher vacancy rates in the 4th quarter as compared to the third quarter.

^{ix} ALN Las Vegas Apartment Data for month of October 2013, November 2014, October 2015-2017 and Nov. 2018. ALN Apartment Data for month of October 2013 – 2016, 2018 for Reno from email communication with ALN staff and Oct. 2017 reports. Johnson, Perkins & Griffin 4th Quarter 2013-2018 reports.

^x Stagg, Thomas. 2009. "Understanding the New Income Limits." Novogradac Property Compliance Report. Vol. XII, Issue 5.

^{xi} U. S. Housing and Urban Development. Multifamily Tax Subsidy Projects Rent and Income Limits. <https://www.huduser.gov/portal/datasets/mtsp.html> accessed 2-3-2019.

^{xii} Ibid.

^{xiii} For a more definitive conclusion Utility Allowance data could be examined. Data was from Energy Information Administration. Average retail price of electricity: Nevada. Nevada Price of Natural Gas Delivered to Residential Consumers (Dollars per Thousand Cubic Feet) and Average Monthly Bill - Residential. <https://www.eia.gov/naturalgas/> and <https://www.eia.gov/electricity/> accessed 1-22-2019.

^{xiv} American Civil Liberties Union et al. 2017. Protections Delayed: State Housing Finance Agency Compliance with the Violence Against Women Act. <http://nhlp.org/files/Protections%20Delayed%20-%20HFA%20Compliance%20with%20VAWA.pdf>

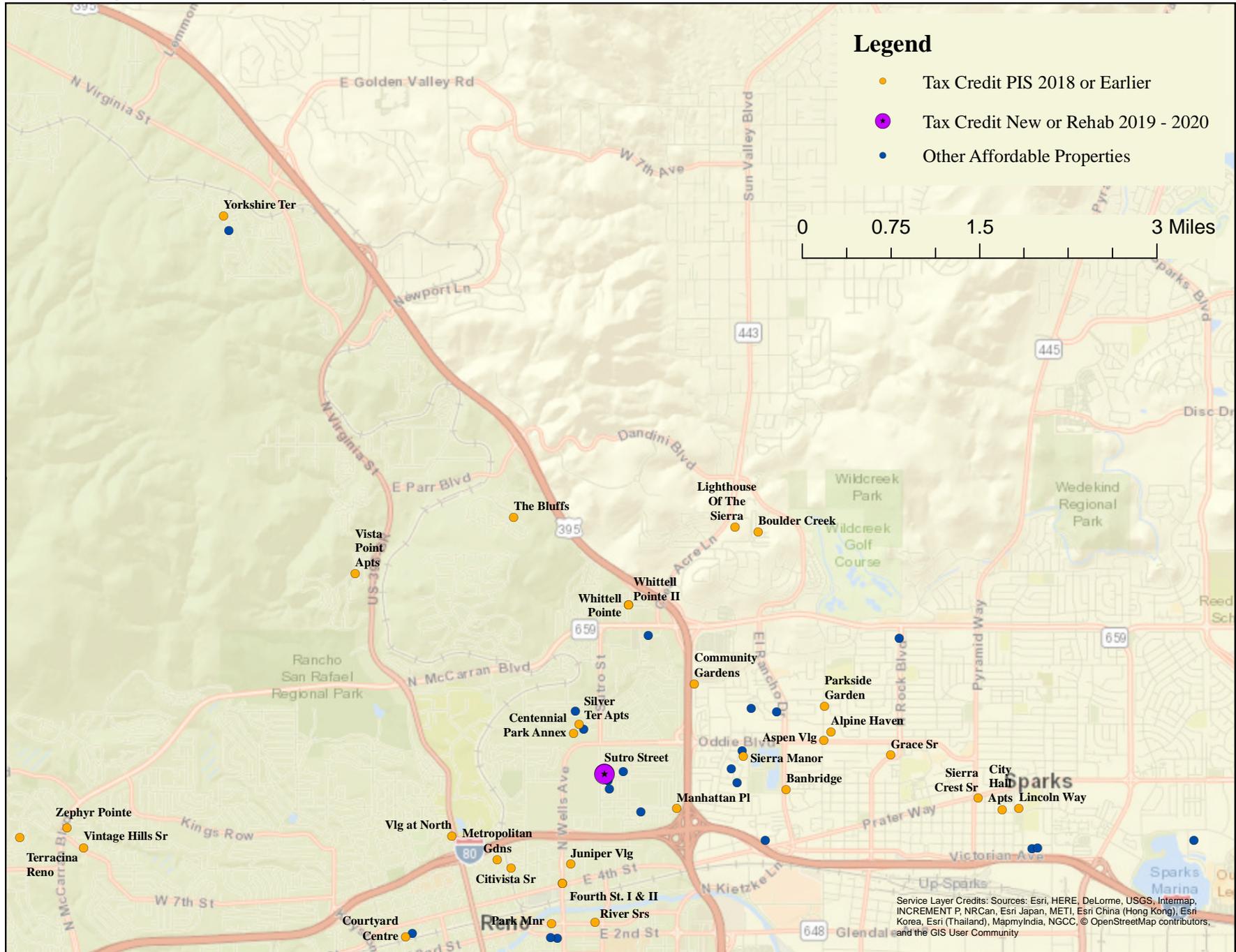
^{xv} CHAS special tabulations of 5 year estimates from 2010 to 2014 American Community Survey data <https://www.huduser.gov/portal/datasets/cp.html> accessed 11-30-2017.

^{xvi} <http://www.cbpp.org/research/housing/policy-basics-federal-rental-assistance> accessed 12-9-2016.

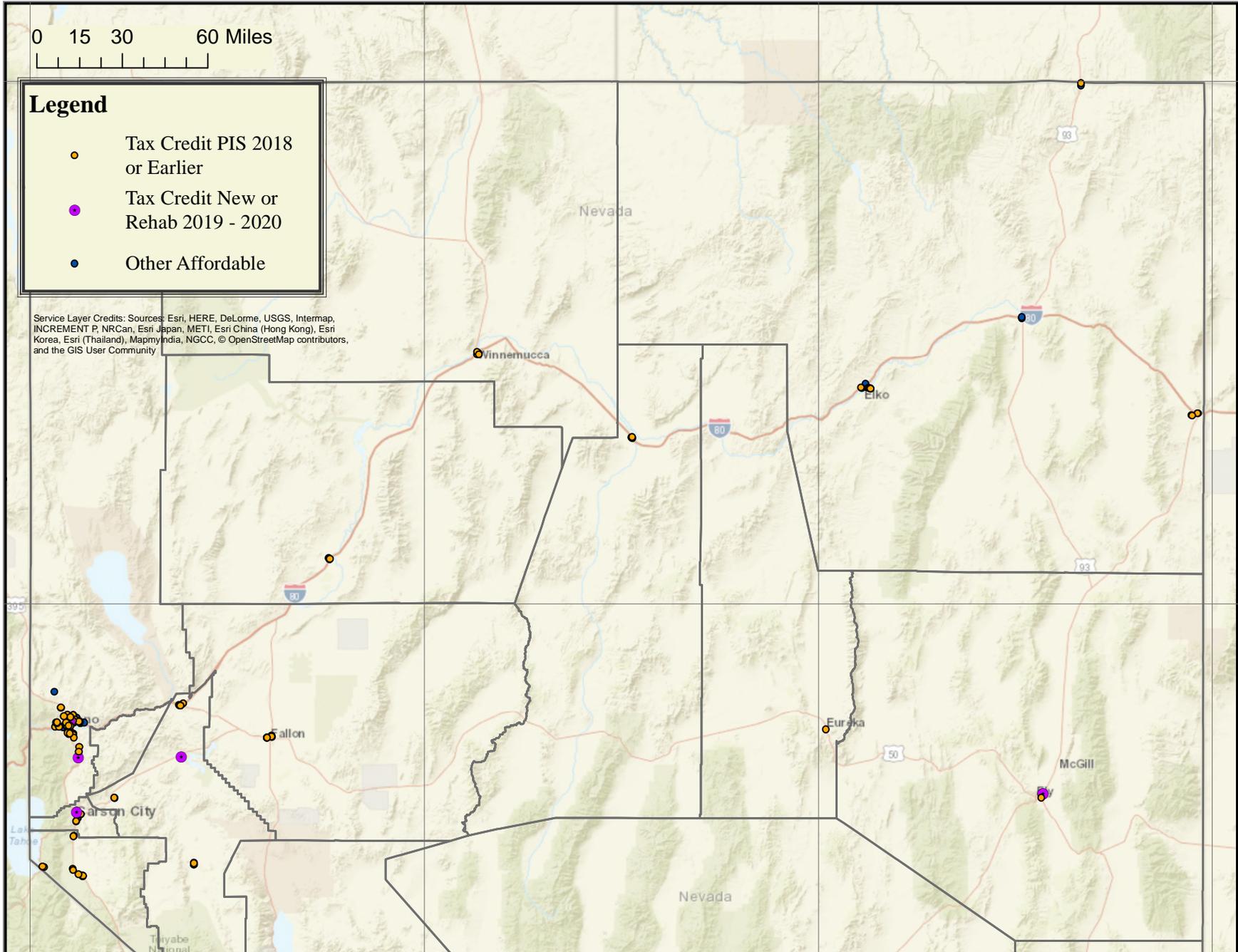
^{xvii} It is possible that households with rental assistance may pay up to 40% of gross rents in some cases. See for example Reno Housing Authority notes: <http://www.renoha.org/section-8/> accessed 2-9-2018.

^{xviii} The number of units with rental assistance which were in properties with respondents reporting waiting list data increased by about 1,000 units as compared to 2017. This is because many more respondents for properties with rental assistance provided waiting list data in 2018. A secondary reason was the addition of four new or renovated properties with rental assistance new to the survey this year.

Map of LIHTC Properties in Northern Reno-Sparks Region



Map of LIHTC Properties in Northern Nevada



Map of LIHTC Properties in Southern Nevada

