



2021 Taking Stock

Nevada Housing Division
2021 Annual Affordable Apartment Survey
www.housing.nv.gov

From the Administrator

The State of Nevada Housing Division is pleased to bring you the 2021 Taking Stock housing survey of the Low-Income Housing Tax Credit properties. The purpose of this report is to gather information about current properties and to help determine housing needs throughout the state. We continue to be proud of the partnerships we have formed which have resulted in and will continue to result in the creation and preservation of more affordable housing, so desperately needed statewide. With the recent influx of federal pandemic recovery funds and the desire from the state and local officials to use those funds to address our lack of supply of affordable housing, these partnerships have never proved more valuable. While this influx of funds has not moved the needle yet in our supply of affordable housing, all partners are committed to using these funds as efficiently and effectively as possible. It is for these reasons, understanding our existing supply and the areas in which current supply fails to address housing needs is paramount. The funds provided through the Federal Fiscal Recovery Funds can be used to dramatically increase our extremely low-income supply and our supportive housing supply.

Governor Sisolak's recently announced Home Means Nevada Initiative will provide \$500 million statewide to address our affordable housing issues. Of the \$500 million, over \$470 million will specifically address new construction of affordable units, preservation of existing affordable units, and provide for land acquisition for future affordable development. Over time, while these will not specifically be tax-credit properties, they will be affordable, be subject to similar affordability restrictions and will be accounted for in this report going forward.

The Nevada Housing Division continues to operate our traditional tax credit programs for the development and preservation of affordable housing. Over the course of the past two years, the Division also has been tasked with allocating the recovery dollars for affordable housing, whether it be emergency rental assistance, additional grant funding for pandemic response, or the Home Means Nevada Initiative. This group of dedicated public servants will continue to accept these additional responsibilities all while ensuring accountability in the use of this additional funding.

We stand on the precipice of a historic moment in the advancement of affordable housing in the state and through our partnerships we can make a substantial difference in solving our affordable housing issues.

We thank you for your interest in this report and your interest in expanding affordable housing opportunities.

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 **14,806** housing units in the State of Nevada with a total of over \$182 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.

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. Since the tax credit program was instituted, bonds have typically been used in combination with 4% Low Income Housing Tax Credits.
- Since 1975, nearly \$2.8 billion of bond financing with close to \$130,000,000 of 4% tax credit allocations have created or preserved over 31,000 multi-family units.ⁱⁱ Equity value of very roughly nine times the tax credit allocation was raised for production of housing units.

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

Program	Units Built/Preserved since inception
4% Tax Credit with Bond	26,329
9% Tax Credit*	14,806
Bond Only	4,982
Total LIHTC/Bond	46,117

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

**Properties with allocations as of February 2022 are included (includes units under construction). 4,901 units were counted twice, once for the first round of bonds and/or tax credits and a second time for preservation of the units 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. 11,532 units were in properties that no longer have rent or income restrictions. An additional 438 units are in properties that have exited tax credit compliance but remain in the subsidized housing inventory through other low income housing programs.

HOME Investment Partnerships 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 **3,799** housing units in Nevada.

The Account for Affordable Housing Trust Fund (AAHTF)

- AAHTF, formerly known as the Low Income Housing Trust Fund, 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, AAHTF funds have served nearly **47,350** households through down payment, provision of emergency housing needs, or rehabilitation assistance. This total includes over **5,674** units that have been constructed or maintained as affordable housing through the AAHTF.

The Emergency Solutions Grants (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, including supplemental funds received through the CARES Act, have provided shelter for more than **52,128** 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 to sell or rent those homes to qualified low-income families.
- NSP has served more than **432** households.

National Housing Trust Fund (HTF)

- National Housing Trust Funds are targeted for the production or preservation of affordable housing for extremely low income households through the acquisition, new construction, reconstruction, and/or rehabilitation of non-luxury housing with suitable amenities.
- Since receiving funding in 2016, this program has assisted in building or preserving 122 housing units for extremely low income 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 Weatherization Assistance Program weatherized **414** homes last year. The program, established in 1977, has increased energy efficiency for over **29,687** 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. The locator is a part of the Low Income Housing Database described in NRS 319.143.
- There is no cost to property managers, builders, and developers to list any type of Nevada rental housing. Over **48,000** units are represented in the listings and the site has logged over **97,000** 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](https://www.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.
- 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.
- In 2020, Manufactured Housing issued **5,168** titles and **3,239** permits, carried out **351** plan reviews, conducted **3,567** inspections, placed **564** commercial unit insignia and **18** residential insignia, and placed **1,199** install labels.
- The lot rent subsidy program was established in 1991 and provides up to \$150 for lot rental to qualifying low income manufactured homeowners. The lot rent subsidy helped 110 households in 2021.

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 - a Program for Heroes, 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 nearly 28,000 homebuyers and has generated more than \$6.1 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. An annual [Affordable Housing Dashboard](#) is produced as a part of the project as well as the [Annual Housing Progress Report](#).

Affordable Housing Advocate

- The Affordable Housing Advocate was established during the 2017 Legislative Session within the Housing Division to help improve the affordable housing landscape across the state. The Affordable Housing Advocate strives to ensure superior customer service to individuals seeking services and support from the Housing Division, and endeavors to work with affordable housing stakeholders to strategically address the housing affordability crisis.
- The Affordable Housing Advocate especially strives to connect underserved populations, including seniors, veterans, disabled persons, and those with low to moderate incomes with housing and shelter providers, homebuyer programs, mortgage and rental assistance programs or other resources. The ultimate goal of the advocate is to ensure that every Nevadan has access to a safe and comfortable place to call home.

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.

Changes to Nevada's LIHTC Housing Stock

2021 New Construction and Preservation

This year, 16 properties finished construction in 2021 or earlier and had not yet been featured in Taking Stock. The properties are listed in Table 2 below.

Six new properties with a total of 844 units were added. Ten additional properties received tax credits to help preserve 1,567 units. Six of the properties were issued 9% tax credits, and ten were financed through 4% tax credits and tax-exempt bonds. Nine were family properties (1,490 units), six were senior properties (895 units) and one was a special needs property with 26 units. Three hundred and forty-two of the units were in rural Nevada, 1,230 in Washoe County and 839 in Clark County.

Table 2. LIHTC properties preserved or created in 2021*

Property	County	# of units	Funding	Type	New or preserved
Crescendo	Clark	195	4%/Bond	Senior	New
Decatur Commons Sr	Clark	60	9%	Senior	New
El Centro	Washoe	26	9%	Special Needs	Preserved
Flamingo Pines 3	Clark	43	9%	Senior	New
Melody	Clark	201	4%/Bond	Senior	New
Old Mill Village	Clark	39	9%	Family	Preserved
Parkway Plaza	Carson City	316	4%/Bond	Family	Preserved
Pinewood Terrace	Washoe	50	4%/Bond	Family	Preserved
Pinion	Elko	26	9%	Family	Preserved
Ridgeview	Washoe	300	4%/Bond	Family	Preserved
Silver Terrace	Washoe	126	4%/Bond	Family	Preserved
Sky Mountain	Washoe	288	4%/Bond	Family	New
South Peak	Washoe	288	4%/Bond	Family	Preserved
Vintage at Citivista	Washoe	152	4%/Bond	Senior	Preserved
Vintage at Seven Hills	Clark	244	4%/Bond	Senior	Preserved
Wardelle St	Clark	57	9%	Family	New
Total		2,411			

*Larger properties may be placed in service over several years. 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 and Renovated Property Descriptions

Crescendo is a new senior apartment complex developed by Ovation. Located on Russel Road one half mile from the Bruce Woodbury Beltway in Las Vegas, there are 195 one and two bedroom units. The complex is close to shopping and several bus stops. Less than one mile away are two hospitals as well other medical facilities. It is an EnergyStar-rated development.

Decatur Commons Senior Apartments offers 60 senior apartment units. It is a part of the larger Decatur Commons development in Las Vegas with a total of 480 new units under construction, half for seniors 55 and up, and half for families. A retail component will be included on the site. The development is the first to use the income averaging rule enacted in 2018 which allows developers to average lower and higher income

set-asides to meet affordability restriction requirements. The project is being jointly developed by Nevada Hand and George Gekakis, Inc.

El Centro, formerly known as Joseph's Inn, is a unique renovation project which restored the original name and some of the period architectural detail of this former hotel in downtown Reno. Accessibility issues were addressed as well as long-term maintenance and improvements. El Centro provides permanent supportive housing. It is a veterans' preference property developed and managed by Northern Nevada Community Housing.

Flamingo Pines 3 is the final phase of a new three-phase senior development, adding an additional 43 units. This Las Vegas development now totals 175-units. Common areas for the community include a movie theater, wellness room and beauty salon. Nevada HAND is the developer and manager of this community.

Melody is a senior complex located east of the Bruce Woodbury Beltway on Oquendo Road. Common space amenities include a hair salon, game area, and wellness center. The development is less than one quarter mile from Mountain's Edge Hospital. Ovation is the developer and manager of this community.

Old Mill Village, previously known as Millstream Apartments, is an affordable rural housing development in Mesquite originally built in 1985. It has 39 one-, two- and three-bedroom units and offers USDA rental assistance for 33 of the units. A drugstore, grocery store and park lie within ¼ mile of the development. Renovation work included accessibility improvements, new windows, new roof, and new high efficiency HVAC equipment, and new or refurbished bathroom fixtures. Community amenities added include a new patio with picnic area and BBQ, new community garden and new horseshoe pit. The developer is Gregory Development Group and management is Weststates.

Parkway Plaza, originally built in 1979, completed a second round of renovations. It is a key affordable housing development in Carson City with 316 family units in 36 garden-style two-story buildings. Renovation work within the units included paint, new windows, new flooring, new water and energy efficient appliances as well as new fixtures, counters, and cabinets. Outside and community areas also received extensive renovation including accessibility improvements. The developer was the DeSola Group.

Pinewood Terrace renovation in Reno helped to preserve this important resource for northern Nevada. The 50-unit family property has HUD Housing Assistance Program contracts and can house some of Reno's most vulnerable families. The renovation improved accessibility and energy efficiency. A new roof and new windows were installed, and kitchens and bathrooms were improved. The developer was Integra Property Group.

Pinion Apartments project preserved a 26-unit USDA-RD Section 515 property in Elko. The property was originally built in two phases, one in 1993 and the other in 1996. New flooring, cabinets, countertops, fixtures, and energy efficient appliances were installed. Roofing, walkways, stairs, siding, and landscaping were also replaced or repaired. Pinion Apartments was developed by the Nevada Rural Housing Authority.

Ridgeview by Vintage Apartments, originally named The Bluffs, and built in 2003 with 4% tax credits and tax exempt bonds, received a second round of 4% tax credits for a preservation project. Ridgeview is an important

housing resource for north Reno, with 300 affordable two, three and four bedroom family units. New energy efficient HVAC systems and appliances were installed, as well as new cabinets, countertops, and flooring for interiors with extensive upgrades and repairs to the exterior and common areas. The Ridgeview Development team was Greenstreet Companies and Vintage Housing.

Silver Terrace, renamed Sagebrush Place II, is a 126-unit affordable family project in Reno that carries HUD section 8 contracts on 97 of the units. The property was originally built in 1968 and received an initial allocation of tax credits for rehabilitation in 2003. The recent renovation, carried out by Integra, will help preserve these units for an additional 30 years.

Sky Mountain by Vintage is a new 288-unit family project located in northwest Reno. Four shopping centers lie within a mile and a half of the property, and five bus stops are within a quarter mile. Each unit has either a balcony or a patio and a washer and dryer. Amenities on the grounds include a tot-lot and fenced swimming pool. The property was developed by Greenstreet Companies and Vintage Housing.

South Peak by Vintage, formerly known as Diamond Creek, received a second round of 4% tax credits to preserve these 288 two, three and four bedroom units in south Reno for another 30 years. New energy efficient heating and cooling systems, appliances, windows, and doors were installed, and numerous repairs and upgrades to the exterior and landscaping were carried out. The complex is connected to a multi-use trail, has two bus-stops directly on the edge of the property, and is one-quarter mile from Double Diamond Elementary School. The property was developed by Greenstreet Companies and Vintage Housing.

Vintage at Citivista renovations preserved 152 studio, one and two bedroom apartments for seniors in downtown Reno and reset affordability restrictions for another 30 years. The apartments are near two areas targeted for revitalization efforts by the City of Reno, and it is less than one mile from the Washoe County Senior Center. Upgrades included new cabinets, countertops, and energy efficient appliances. Exterior work included new cool roof shingles along with other energy efficiency measures. The property was developed by Greenstreet Companies and Vintage Housing.

Vintage at Seven Hills, is a senior property in Henderson, originally built in 2004. The 244 one and two bedroom units received new flooring, cabinets, and countertops as needed. New energy efficient appliances, windows and doors were installed throughout the property. Vintage at Seven Hills borders the Commons at Seven Hills Shopping Center, so a mix of stores, services and restaurants are within easy walking distance. The developer is Vintage Housing Development.

Wardelle Street Townhouses is a new family development across the street from the new East Las Vegas Branch Public Library with 64 one, two and three bedroom units. The units all have front doors, balconies and porches oriented to streets and courtyards in a New Urbanist best practices design. Adjacent to the property is an early childhood development center. Wardelle Street is an EnergyStar rated development and is projected to offset 10% or more of its electricity consumption through solar photovoltaic generation. It was developed by Southern Nevada Regional Housing Authority.

Properties Exiting the LIHTC System in 2021

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 no LIHTC properties exited the system through the QC process.

Some single-family units did exit through an LIHTC homeownership project in Mesquite. After the initial 15 years, tenants are allowed to purchase their home.

The tax credit program began in 1986. Until 1989, the minimum affordability period was 15 years. All these early tax credit properties have already either received additional rounds of tax credit allocations, or funding through other programs or have exited the 15-year affordability period and joined the private market. Starting with allocations in 1990, the affordability period was changed to a minimum of 30 years. This means that a few projects from the early years of the program will start to reach the end of the 30-year period over the next several years; however, for 2021, only one project, Arborwood I in Fallon, with 36 units, reached the end of the affordability period. It is also a property active in the USDA Rural Housing 515 program until 2041 so will retain its status as an affordable project.

Although not tax credit properties, two properties financed through the bond program also exited affordability restrictions: Sunlake Terrace and Sutton Terrace. These two properties were the last remaining financed solely through the bond program with no tax credit involvement. This type of financing allows properties to exit rent and income restrictions when the bond is paid off. The two large properties were assisted living facilities with a total of 53 units set aside for very low income households.

Table 3. LIHTC properties exiting the tax credit system in 2021

Property	County	Tax Credit allocation	PIS Year*	# of units (restricted units)
River's Bend (homeownership program)	Clark	2002	2004	48 (48)
Arborwood I (remains affordable through USDA 515 program)	Churchill	1991	1991	36(36)

*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) 2021 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 2021 for the Nevada LIHTC responding properties was 2.5%, down from 2.6% in 2020 4th quarter.
- Both Washoe and Clark Counties' LIHTC vacancy rates were lower than 2020's. Washoe's decreased from 3.3% to 2.7% while Clark's decreased from 2.2% to 2.0%.
- Clark County LIHTC vacancy rates have been lower than Washoe County's since 2019.
- LIHTC vacancy rates were highest for mining counties, a pattern that has held since 2016.
- Senior properties' vacancy rate dropped to 1.9% while family properties stayed at the 2.9% vacancy rate they recorded in Taking Stock 2020.
- Average 2021 Nevada LIHTC monthly rent was \$955, close to \$60 more than the average of \$897 found in 2020 Taking Stock.
- 2021 LIHTC properties reported rents increased 5% over 2020 rents in Clark County and 8% over 2020 rents in Washoe County.
- One, two- and three-bedroom high rents in LIHTC properties ranged from 34% to 40% lower than market rates on average.
- Rent collections for Nevada LIHTC properties were down an average of 12% as compared to levels before the pandemic. In senior properties collections were down 7% while for family properties the average was 15%.
- Thirty-seven percent of households in family properties were behind three or more months whereas only 13% of households in senior units were.
- Fifty-three percent of Nevada LIHTC properties had received government issued Coronavirus emergency rental assistance or had tenants who received it. More family properties (71%) had received the emergency rental assistance than had senior properties (34%).
- Managers of the properties with the worst rental arrears difficulties were least likely to report most or all cases of unpaid rent as having been resolved through the Coronavirus Emergency Rental Assistance programs.
- For Nevada LIHTC properties the average waiting list was 79 households for each 100 units. For properties with project based sliding scale rental assistance, the waiting list averaged 145 households for each 100 units while for properties with no sliding scale rental assistance tied to the property, the average was 62 households pre 100 units.

Introduction

The Division carried out a survey of Nevada's Low Income Housing Tax Credit (LIHTC) properties October through December 2021. The survey helps identify affordable housing needs throughout the state. Additionally, it helps the Division 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.ⁱⁱⁱ The role the program's public private partnership plays in affordable housing is large. In 2021, tax credit units currently active or under construction made-up about 10% of the estimated 286,000 multi-family units in Nevada.^{iv} The LIHTC program is by far the largest in Nevada, and nation-wide, for producing affordable rental housing. Seventy-eight percent of below-market multi-family housing units in Nevada have been or will be constructed or rehabilitated fully or partially with tax credit funding. Included in these units with tax credit funding are nearly half of Nevada's more deeply subsidized units, that is, units with project-based sliding-scale assistance.^v

Methodology of Survey

The 2021 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 2021. 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 regional or 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 was allowed for and submitted by several property management groups with at least a dozen tax credit properties in their portfolio. Data from a much shorter survey questionnaire and from these rent rolls was merged into the main dataset. New topics this year included rent collections during the pandemic, rental arrears, and the Emergency Rental Assistance program. The questions about the waiting list were added back in this year. 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 2021. Special use properties and new or renovated properties not yet stabilized were excluded where known.^{vi} The surveyed properties represented 25,612 units. Each year has a slightly different group of participating properties included in the final dataset due to new properties added, properties having exited affordability restrictions and variations in response rate. The return rate this year was 98.5% with 266 of the 270 questionnaires returned. These properties represent 99.1% of the 25,612 units surveyed (see Table 4). Las Vegas and surrounding communities had 135 responses, the Reno-Sparks region had 55 responses and 76 responses were from the balance of State. Sixty-one percent of the units represented in the survey are in Clark County.

About 4% of the units represented by returned questionnaires were market rate units or manager units. About 44% of the units were either senior units or senior/non-senior disabled designated units. Seventeen percent of the units had project-based sliding scale assistance available from United States Housing and Urban Development (HUD) programs, United States Department of Agriculture Rural Development programs or other programs. Project based assistance provides a deeper sliding-scale type subsidy to tenant households which is like the Housing Choice Voucher program except that the assistance is tied to the property.

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

Region	Properties Responding	Property Response Rate	Units Represented	% Units Represented
Clark Co.	135	99.3%	15,591	99.2%
Washoe Co.	55	98.2%	5,771	99.2%
Rural Nevada	76	97.4%	2,988	98.5%
Total	266	98.5%	25,393	99.1%

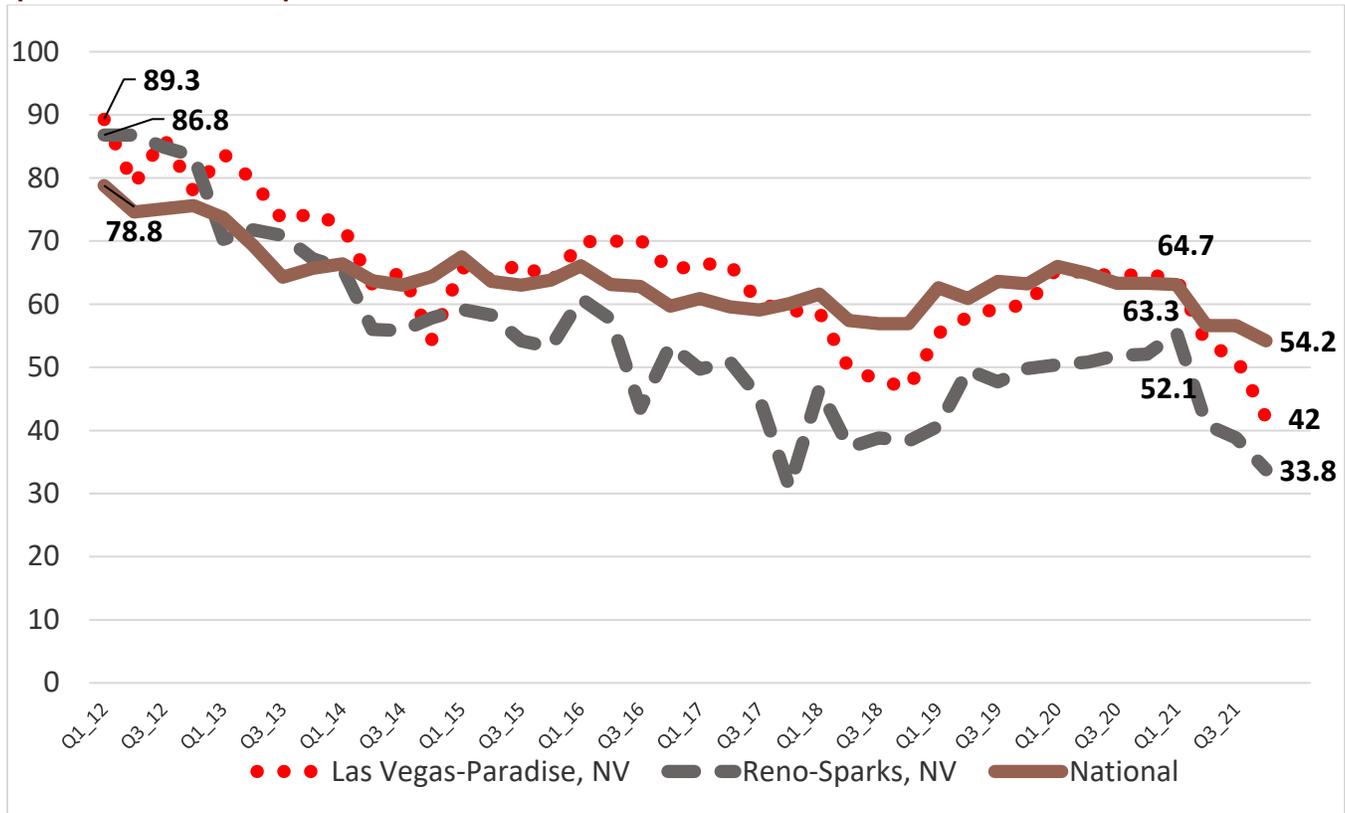
Economic Context: 2021 Partial Recovery from Coronavirus Pandemic

The 2021 economic and social context was still heavily influenced by the Covid-19 pandemic and responses to it, although there was significant recovery from the events of 2020. In 2020, Nevada went from the lowest ever unemployment rate in the series in August 2019 (3.7%) to the highest ever in April (28.5%).^{vii} In Dec. 2021, the seasonally adjusted unemployment rate was still elevated at 5.3%. Regional differences were profound, with Reno Metropolitan Area returning to record lows at 2.8% (preliminary) while Las Vegas-Henderson-Paradise Metropolitan Area was 6.0% (preliminary), still 2.4 percentage points higher than the low of 3.6% hit in February 2020.^{viii}

Nevada home prices continued to increase through 2021 and at a faster pace than the increases recorded in 2020. In October, Las Vegas home prices, as measured by the Case Schiller repeat sales index, were up 25% over the previous year.^{ix} The Case Schiller index is not available for the Reno area, but average sale price per square foot for existing homes was up over 20% year over year as of November 2021, according to the Lied Institute Housing Market report. The equivalent statistic for the Las Vegas area was 23%.^x

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. Coming out of the previous recession, the affordability share rose to 87.5% in Reno and 88.7% in Las Vegas-Henderson-Paradise. Affordability has trended downward since then. For the fourth quarter of 2021, the affordability index stands at 42.0% for Las Vegas-Henderson-Paradise and 33.8% in Reno-Sparks. The Reno-Sparks and Las Vegas-Henderson-Paradise indices plummeted 18.3 and 22.7% respectively from 4th quarter 2020 to 4th quarter 2021. Affordability decreased mainly because of increasing home prices. Median income also increased but did not keep up with home prices. There was also an increase in interest rates. Nationally the index decreased to 54.2%. Both Reno-Sparks and Las Vegas-Henderson-Paradise homes are less affordable than the national average with Reno's Opportunity Index below both the national and Las Vegas index since 4th quarter 2014.

Figure 1. National Association of Home Builders – Wells Fargo Housing Opportunity Index, 1st quarter 2012 to 4th quarter 2021.



National Association of Home Builders. NAHB-Wells Fargo Housing Opportunity Index.

<https://www.nahb.org/news-and-economics/housing-economics/indices/housing-opportunity-index> accessed 3-31-2022.

Vacancies

Nevada 2021 LIHTC Overall Vacancy Rate Is 2.5%

Overall vacancy rate in the 4th quarter of 2021 for the Nevada LIHTC responding properties was 2.5%, down slightly from last year's rate of 2.6%. Half of all responding properties had a 1.2% vacancy rate or lower. Ninety-seven properties, or 39% of the responding properties, reported that all units were full, that is, 0% vacancy rate. Two hundred and ten properties (85%) had a vacancy rate of 5% or less. There were fifteen properties with vacancy rates higher than 10%, the majority of which were small rural properties.

There were 246 properties with usable information on vacancies.^{xi} Sixty-one percent of the units were in Clark County, 26% 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). Two percent of units reported were studio units, 37% were one-bedroom units, 45% were two bedroom, 14% three bedroom and 2% were four- or five-bedroom units.

2021 Nevada LIHTC Vacancy Rates Low in Most Regions and Floorplans

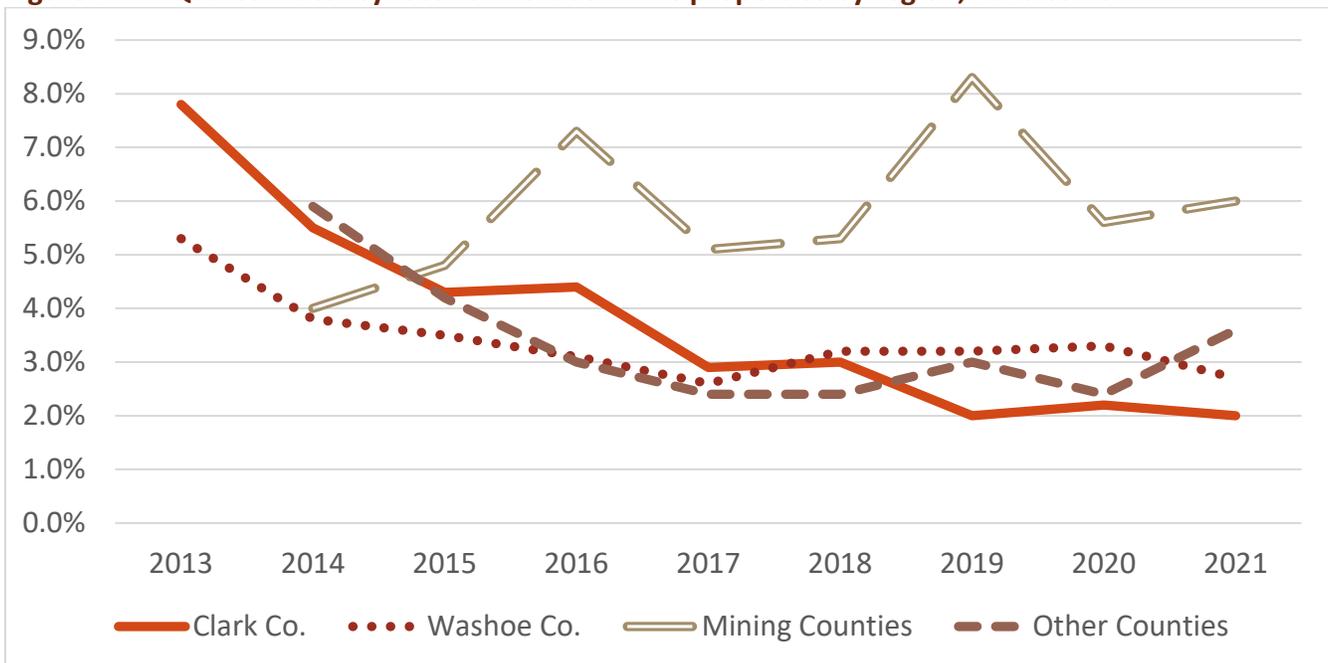
As for the last several years, the highest LIHTC vacancy rates were in mining counties. However, at 6.0% overall they were up somewhat from 2020 at 5.6%. Clark County had a lower vacancy rate than last year and a lower rate than Washoe County again in 2021. Washoe County was down from 3.3% vacancy rate in 4th quarter 2020. Clark County properties reported a 2.0% overall vacancy rate in 2021 as compared to 2.2% in the 4th quarter of 2020. Other rural counties, which include several counties in northwestern Nevada, increased from 2.4% last year to 3.6% in 2021. Vacancy rates were again lowest overall for one-bedroom (2.2%) apartments.

Table 5. 4th Quarter 2020 vacancy rate for Nevada LIHTC properties by region

Number of bedrooms	Clark	Mining Counties ^{xii}	Other Counties	Washoe	Nevada
One-bedroom	1.8%	5.1%	2.2%	2.7%	2.2%
Two-bedroom	2.0%	7.2%	4.2%	2.3%	2.5%
Three-bedroom	2.2%	5.4%	5.7%	2.4%	2.7%
Overall average	2.0%	6.0%	3.6%	2.7%	2.5%

Figure 2 charts the changes in vacancy rate for each of the four regions from 2013 to 2021.^{xiii} Only the mining region started out with a lower vacancy rate in 2014. The vacancy rate for the three other regions has shown an overall downward trend. Most of the mining counties, Elko, Eureka, Humboldt, Lander, Nye, Pershing, and White Pine, are not close to the urban centers of population in the state and are subject to somewhat different economic forces. The largest drop in vacancy rates, from 7.8% in 2013 to 2.0% in 2021, occurred in Clark County, which experienced the largest impact from the Great Recession, but has again been growing rapidly, with a 14% population growth since 2013, even more rapid than Washoe County’s (12% since 2013).

Figure 2. 4th Quarter vacancy rate for Nevada LIHTC properties by region, 2013 to 2021



Lied Institute’s Las Vegas Market Vacancy Rate Lower than LIHTC Vacancy Rate in Las Vegas

Average October 2021 market vacancy rates for multi-family properties in Las Vegas were down for the ALN Apartment Data Inc. (ALN) series. Over the past year ALN showed vacancies decreasing from 4.7% to 4.2%. The Lied Institute series 2 reports an extremely low vacancy rate of 1.4%. Lied Institute Apartment Market Trends started a new methodology and report in 2019 so the previous series (Lied Institute 1) is no longer comparable.^{xiv} As compared to the ALN series, LIHTC vacancy rates in Las Vegas are considerably lower than market vacancy rates and have decreased more since 2013.

Table 6. Comparison of 4th quarter market and LIHTC vacancy rates, 2013 to 2021

Region/Type	2013	2014	2015	2016	2017	2018	2019	2020	2021	Change 2013 to 2021
Las Vegas - ALN	9.1%	7.7%	6.8%	6.4%	7.2%	6.5%	6.2%	4.7%	4.2%	-4.9%
Las Vegas -Lied Inst. 1	8.7%	8.3%	8.2%	7.6%	7.6%	*	*	*	*	NA
Las Vegas –Lied Inst. 2							5.4%	3.2%	1.4%	NA
Las Vegas – LIHTC rate	7.8%	5.5%	4.3%	4.4%	2.9%	3.0%	2.0%	2.2%	2.0%	-5.8%
Reno- JP & G	4.1%	3.3%	2.9%	2.9%	3.8%	3.6%	4.0%	2.8%	3.2%	-0.9%
Reno- ALN	4.0%	3.9%	4.3%	3.4%	5.0%	5.7%	6.4%	5.5%	8.0%	4.0%
Reno- LIHTC	5.3%	3.8%	3.5%	3.1%	2.6%	3.2%	3.2%	3.3%	2.7%	-2.6%

*Starting with 2019 the Lied Institute series has new methodology and report. Sources: [Lied Institute Apartment Market Trends Report](#), [ALN Market Reviews](#), [Johnson, Perkins and Griffin Q4 2021 Apartment Survey](#), [Taking Stock 2020](#). See also endnotes 15 and 16.

In Reno-Sparks the market vacancy rate increased over the last year from 2.8% to 3.2% as measured by Johnson, Perkins and Griffin (JP & G, Reno) and increased from 5.5% to 8.0% as measured by the ALN Apartment data series. The ALN vacancy rate may be high because of the inclusion of properties that are not fully leased up.^{xv} Reno’s overall LIHTC vacancy rate was 2.7%, lower than last year’s 3.3% and the JP & G vacancy rate (3.2%).

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. ALN includes new properties that have not yet stabilized producing a more volatile vacancy rate.

As shown in Table 6, for both the Reno and Las Vegas market over the nine-year period from 4th quarter 2013 to 4th quarter 2021, the decrease in vacancy rates has been greater for the LIHTC properties, with Las Vegas LIHTC properties experiencing the largest decrease (5.8%). However, if the Lied Institute series had comparability back to 2013, given the extraordinarily low vacancy rate reported in 2021, it is possible there could have been a greater decrease in this market rate series.

Senior and Family LIHTC Vacancy Rates Diverge Again in 2021

Overall average vacancy rates in senior LIHTC properties decreased from 2.2% in 2020 to 1.9% in 2021 while family vacancy rates stayed even at 2.9%. The spread between family and senior properties’ rates widened somewhat as compared to 2020 Taking Stock (see Figure 3).^{xvi}

Washoe County senior properties reported a vacancy rate of 2.3% for one-bedroom units and 3.0% for two-bedroom units, down from last year's 2.8% and 3.3% respectively. Clark County vacancy rates in senior LIHTC properties were again lower than Washoe's at 1.7% for one-bedroom units and 1.6% for two-bedroom units. Clark County vacancy rates for senior properties were lower than Washoe's despite remarkable differences in the proportion of senior units in the inventory. In Clark County, for the LIHTC properties included in the 2021 survey results, 56% of LIHTC units in Las Vegas were designated for seniors or senior/non-senior disabled, whereas in Washoe County only 23% of the LIHTC inventory was set aside for seniors or senior/non-senior disabled.

Family LIHTC vacancy rates were higher than 2020 for one bedrooms in both regions. Rates remained the same for two-bedroom family units in Clark County and were lower in Washoe County.

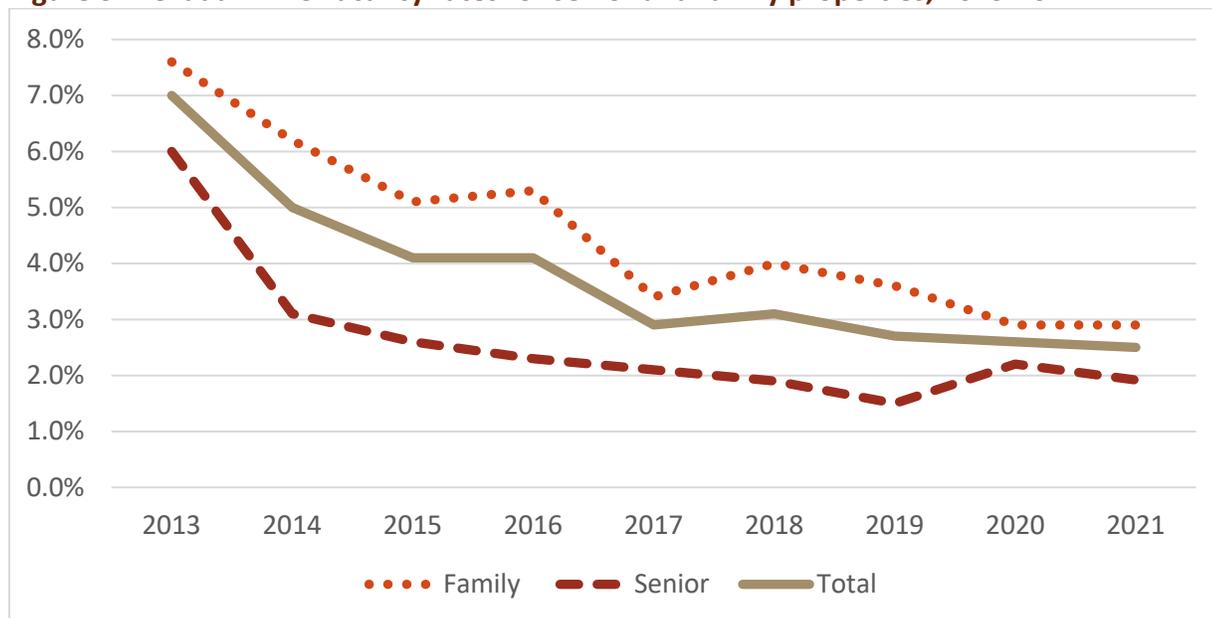
Table 7. 4th quarter 2021 vacancy rates for LIHTC senior and family properties

Number of Bedrooms	Family	Senior
Studio	6.5%	2.3%
One-bedroom	2.7%	2.0%
Two-bedroom	3.0%	1.7%
Three-bedroom	2.6%	NA
Four-bedroom	3.9%	NA
Overall average	2.9%	1.9%

Table 8. 4th quarter 2021 senior and family vacancy rates for LIHTC properties in Washoe & Clark Co.

	Clark Senior	Washoe Senior	Clark Family	Washoe Family
One-bedroom	1.7%	2.3%	2.0%	3.0%
Two-bedroom	1.6%	3.0%	2.5%	2.2%

Figure 3. Nevada LIHTC vacancy rates for senior and family properties, 2013-2021



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 sub-regional LIHTC vacancy rates are reported below.

Mining counties and smaller counties have highest vacancy rates

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 urban centers in Washoe and Clark County may have housing markets that are highly related to those urban centers. Table 9 gives the LIHTC vacancy rate for selected Nevada counties. Clark and Washoe County rates are included for comparison. Douglas, Clark, and Washoe Counties had the lowest vacancy rates. Carson City, Douglas and Lyon Counties have strong commuting links to Washoe County and to each other. It is somewhat surprising that Nye County has a vacancy rate of 6.7% given that many of its LIHTC properties lie in Pahrump, which is just a little more than a one-hour drive from Las Vegas. The subset of LIHTC properties in rural Clark County had a vacancy rate of 0.5% (not reported below). However, Nye County is an extremely large county and several LIHTC properties are in Tonopah and Beatty, which are not close enough to have a commuter relationship with Las Vegas. Rates were highest in the remaining counties which are mining counties and/or some of the counties with the smallest populations.

Table 9. 4th quarter 2021 LIHTC vacancy rate for selected Nevada counties

County	LIHTC vacancy rate
Douglas County	1.0%
Clark County	2.0%
Washoe County	2.7%
Lyon County	3.2%
Carson City	4.3%
Elko County	4.5%
Humboldt County	4.6%
Nye County	6.7%
Remaining Counties	7.6%

Las Vegas Metro LIHTC vacancy rates low in all neighborhoods

In addition, neighborhoods within urban regions may constitute somewhat differentiated housing markets for many reasons: average age of housing units, 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.

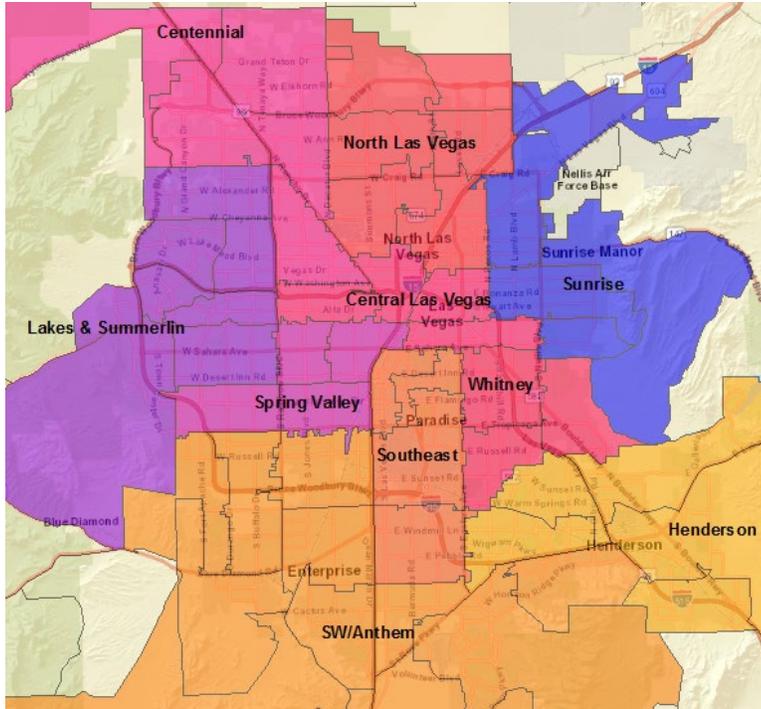
Clark County neighborhoods were defined using zip codes. Table 10 gives zip code definitions used, and Figure 4 illustrates the neighborhoods. All vacancy rates are in the low to extremely low range for both market rate and LIHTC properties. Highest rates for LIHTC properties were in Central Las Vegas at 2.6%, Sunrise at 3.1% and Centennial at 3.8%. For market rate properties, the highest vacancy rate was in Central Las Vegas at 2.0%. Compared to Lied Institute private market vacancy rates, LIHTC vacancies were lower only in Whitney, Lakes and Summerlin. The pattern of vacancy rates from lowest to highest was not similar for market properties and LIHTC properties.

Table 10. 4th quarter 2021 LIHTC vacancy rate for selected Las Vegas Metro neighborhoods

Las Vegas Metro neighborhood	LIHTC vacancy rate	Lied 4th Qtr 2021 private market ^{xvii} *	Zip codes included
Whitney	0.6%	1.6%	89120, 89121, 89122
Spring Valley	1.2%	1.1%	89102, 89103, 89146, 89147
Lakes & Summerlin	1.2%	1.5%	89117, 89128, 89129, 89134, 89135, 89138, 89144, 89145
Southeast	1.6%	1.2%	89109, 89119, 89123, 89169
Southwest & Anthem	1.7%	1.7%	89012, 89044, 89052, 89054, 89113, 89118, 89139, 89141, 89148, 89178, 89183
North Las Vegas	1.8%	1.0%	89030, 89031, 89032, 89081, 89084, 89085, 89086, 89087
Green Valley & Henderson	1.9%	1.0%	89002, 89011, 89014, 89015, 89074
Central Las Vegas	2.6%	2.0%	89101, 89104, 89106, 89107
Sunrise	3.0%	1.0%	89110, 89115, 89142, 89156
Centennial	3.8%	1.3%	89108, 89130, 89131, 89143, 89149, 89166

*Lied Institute for Real Estate Studies. University of Nevada Las Vegas, Apartment Marketing Trends, 4th Quarter 2021, and calculations by author.

See [Lied Institute Apartment Market Trends Report](#).

Figure 4. 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 Fourth Quarter Apartment Market Trends from Lied Institute at UNLV were used to

Table 11. 2021 LIHTC and market rate vacancies by monthly rent range of zip code.

Monthly rent range for Zip Codes	LIHTC vacancy rate	Lied market vacancy rate*	Zip Codes in category
\$1100 or less	2.4%	1.5%	89030,89101,89104,89109,89119,89156,89169
\$1101 - \$1200	2.1%	1.1%	89086,89102,89103,89106,89107,89110,89115,89122,89146
\$1201-\$1450	2.3%	1.4%	89015,89108,89118,89120,89121,89130,89142
\$1451-\$1600	1.5%	1.4%	89031,89032,89084,89113,89117,89123,89129,89139,89147,89149,89178
\$1601 and up	1.2%	1.4%	89011,89012,89014,89044,89052,90074,90081,89128,89131,89134,89135,89141,89144,89145,89148,89166,89183

*Lied Institute 4th Quarter 2021 Apartment Market Trends by zip code and calculations by author. See [Lied Institute Apartment Market Trends Report](#).

define the zip code categories. Results are in Table 11. The LIHTC properties in the most expensive zip codes had a very low vacancy rate of 1.2%. The lowest vacancy rate for market rate properties, in contrast, occurred in the \$1101 to \$1200 rent range category. All LIHTC vacancy rates were higher than Lied market vacancy rates except for the highest rent category of \$1601 and up. Both LIHTC and market rate vacancy rates were extremely low in all regions.

Reno/Sparks vacancy rates

Reno/Sparks neighborhoods were defined to facilitate comparisons with Johnson, Perkins and Griffin's Quarterly Apartment Survey for 4th Quarter 2021 by using the definitions and map posted on page nine and ten, a screenshot of which is displayed with permission in Figure 5 and 6.

LIHTC vacancy rates were low in all Reno/Sparks sub-regions. The lowest vacancy reported was in West Sparks/North Valley neighborhood at 2.0%, while the highest reported was in Northwest Reno at 3.1%. Johnson, Perkins and Griffin (JP&G) fourth quarter vacancy rates were also low. In Airport, Northwest, and Northeast Reno, LIHTC rates were higher than private market vacancy rates.

Figure 5. Johnson, Perkins and Griffin market area map for Reno-Sparks

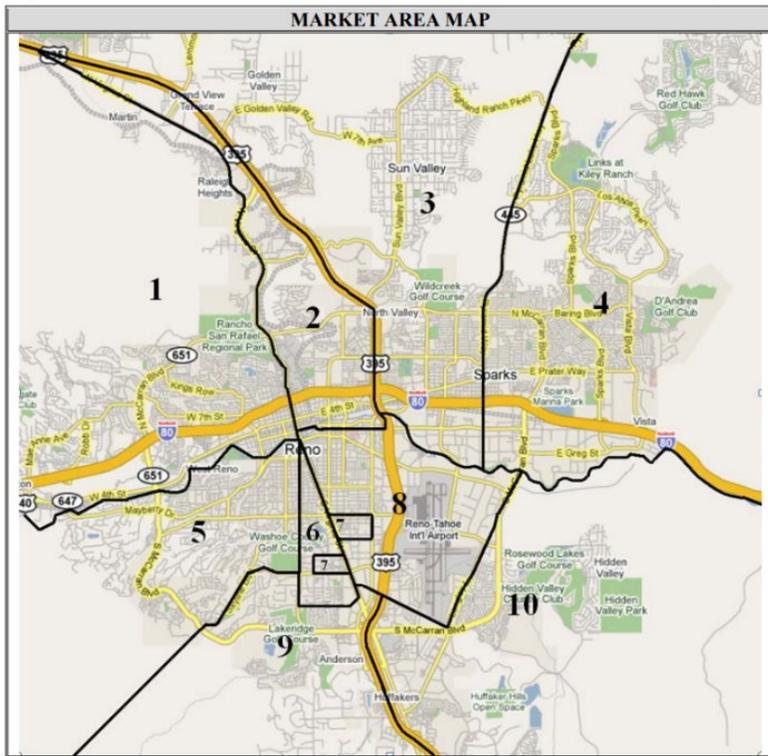


Figure 6. Johnson, Perkins and Griffin market area definitions for Reno/Sparks

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.

Table 12. 4th quarter 2021 LIHTC vacancy rate for selected Reno/Sparks neighborhoods

Reno/Sparks neighborhoods	LIHTC vacancy rate	JP&G private market vacancy rate*
West Sparks/North Valleys	2.0%	3.3%
Airport (Reno)	2.5%	1.8%
Northwest Reno	3.1%	2.7%
Northeast Reno	2.7%	2.0%
Remaining neighborhoods combined**	2.8%	3.4%

*Johnson, Perkins & Griffin 4th Quarter 2021 report.

**West Reno has no tax credit properties and is not included.

A comparison of vacancy rates by average rent of the neighborhood 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 like 2020 in that lower rent neighborhoods were associated with lower LIHTC vacancy rates. The regions with average rent from \$1100 to \$1550 per month in 4th quarter JP&G had an average LIHTC vacancy rate of 2.3% whereas the higher rent neighborhoods reporting rents over \$1600 a month had an LIHTC vacancy rate of 3.1%.

Rents

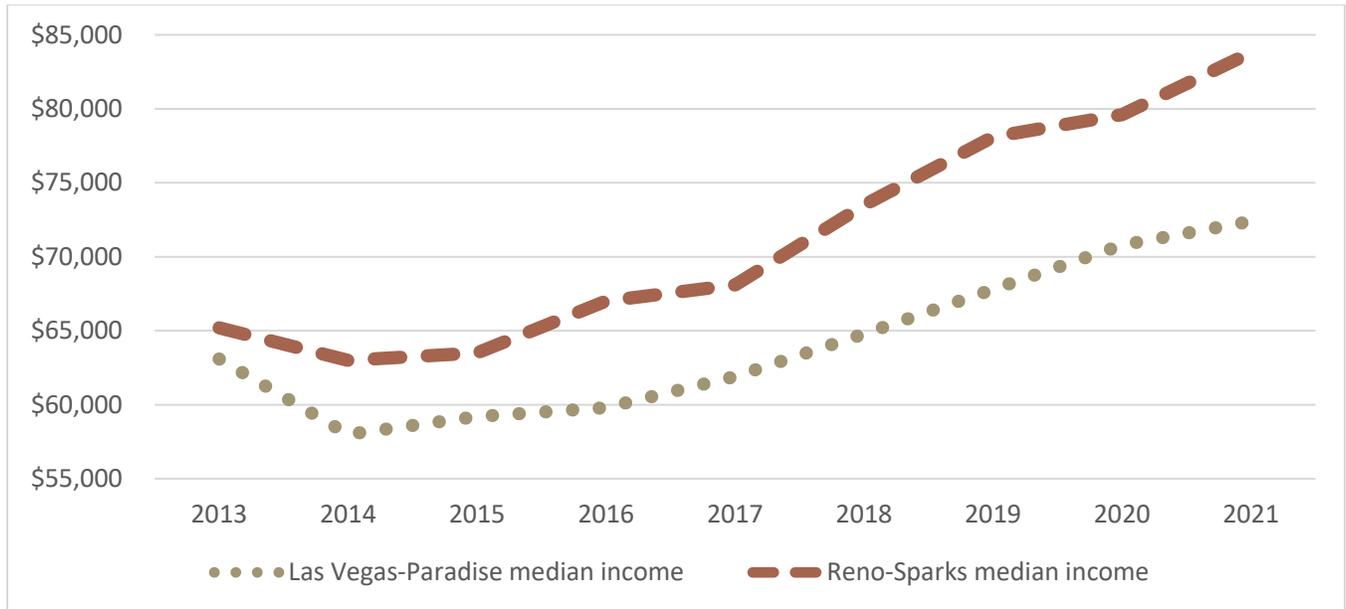
HUD Median Family Income Higher

Maximum allowable rents for LIHTC properties are complex. They depend on regional HUD median family incomes, determined annually, number of bedrooms, set aside agreements, the date each property is put into service, whether median incomes have increased or decreased, and other factors.^{xviii}

HUD median family incomes have been increasing since 2014 for Washoe and Clark Counties. Washoe County's was nominally 33% higher than 2014 levels and 5% higher than 2020 (see Figure 7). Clark County HUD median family income was 25% higher than 2014 levels and 2% higher than 2020.^{xix} HUD median family incomes are used to calculate the four-person very low-income limits (4P VLIL) which ultimately are used to specify the Multi-family Tax Subsidy Project rent and income limits. 4P VLIL for Clark and Washoe Counties was 5% higher than it was in 2020.

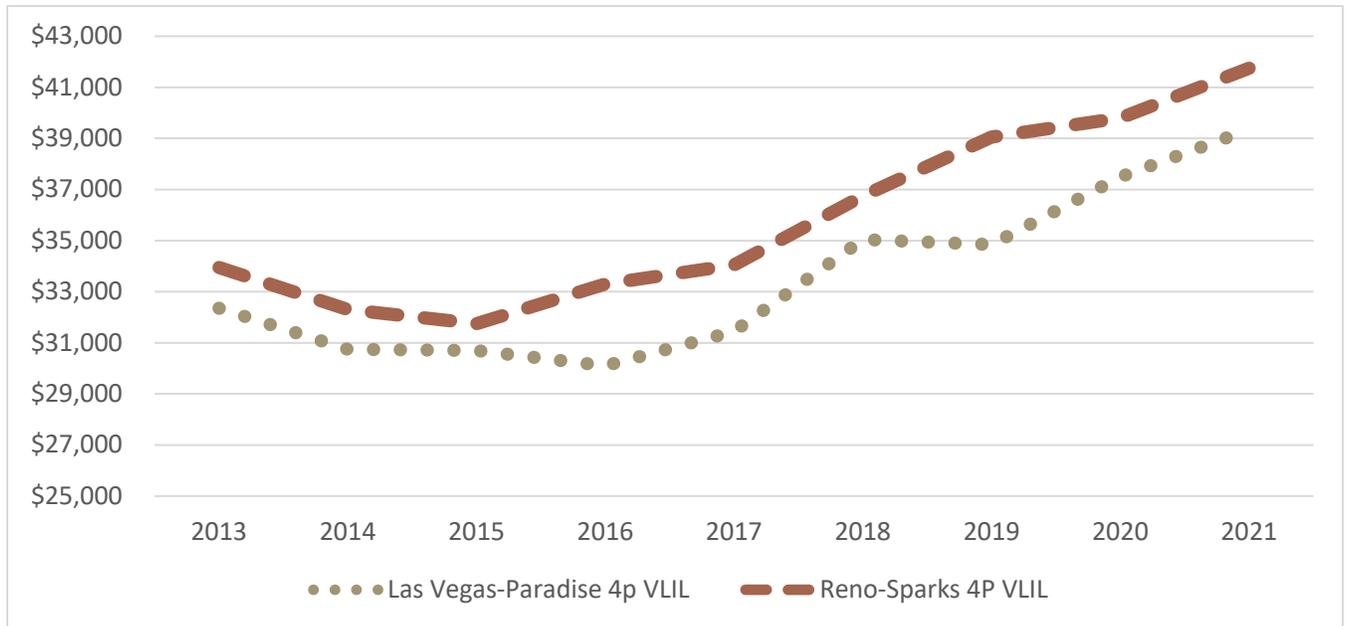
The 4P VLIL are subject to a series of legislatively mandated adjustments. The result of all these adjustments is that while Clark County median family income increased by 15% from 2013 to 2021, maximum allowable two-bedroom rents increased more, by 23%. Meanwhile, in Washoe County, adjustments had an opposite effect with median family income increasing by 29% from 2013 to 2021 while maximum allowable MTSP rents increased by 22%. In other words, while in Clark County maximum allowable rents increased more than median income, in Washoe County maximum allowable rents increased less than median income. For more about these adjustments and how they influence maximum allowable rents in Clark and Washoe Counties see Appendix B.

Figure 7. HUD median family annual income from 2013 to 2021 for Reno-Sparks and Las Vegas-Paradise



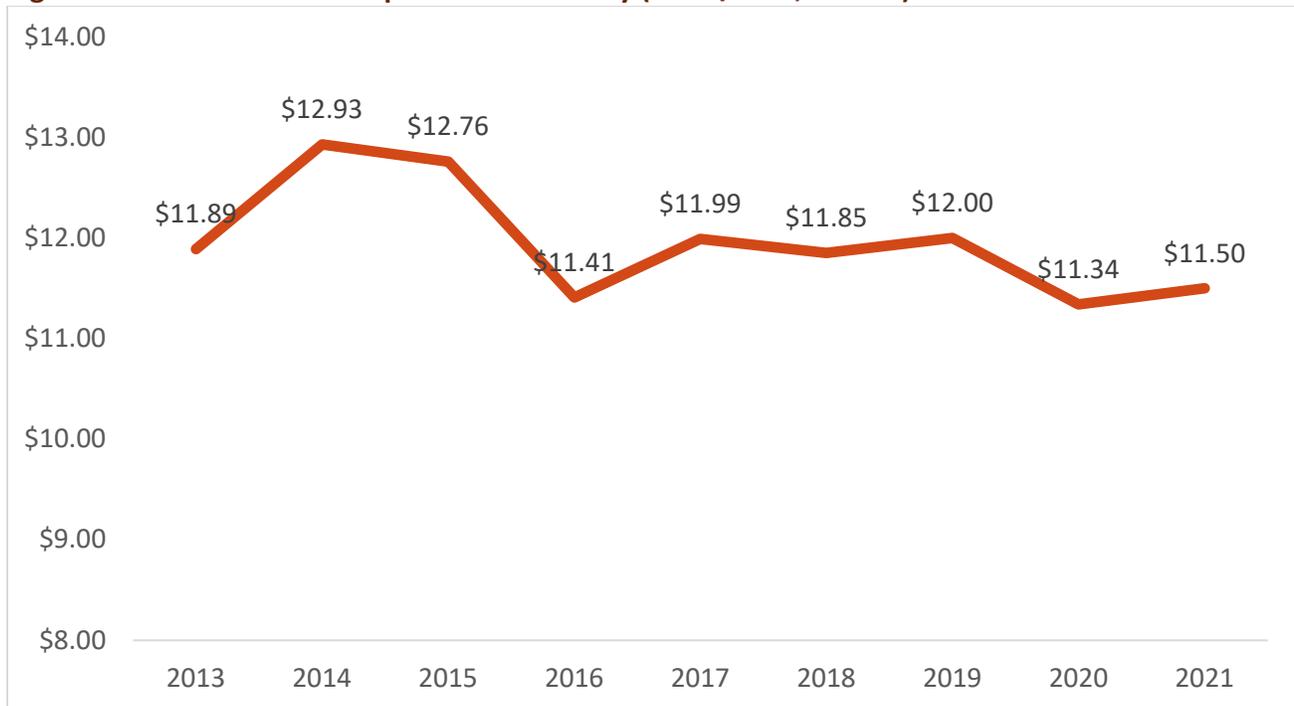
Source: NHD chart using U. S. Housing and Urban Development. Multifamily Tax Subsidy Projects Rent and Income Limits. <https://www.huduser.gov/portal/datasets/mtsp.html>

Figure 8. HUD Four Person Very Low Income Limit for Reno-Sparks and Las Vegas-Paradise, 2013 to 2021



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 4-12-2022.

Figure 9. Nevada residential price for electricity (cents/kWh, annual)



Source: See endnote 20.

Figure 10. Nevada price of natural gas delivered to residential consumers (\$/1000 cubic ft., annual)



Source: See endnote 20.

Any change in utility costs could also influence rent. It is *gross* rents that are restricted in tax credit properties. Gross rent includes utility costs. Utility costs are paid for by the tenant in most of Nevada’s tax credit properties (Taking Stock 2015 found that 77% of tenants paid for all utilities). If utilities are paid by the tenant, rents must be reduced by an estimated utility allowance.

Nevada average residential prices for natural gas in 2021 were 6% lower than the 2020 annual average. Electricity prices were up 1% on average.^{xx} See Figure 9 and 10 above. Heating degree days were down 13% in 2021 over 2020 in Las Vegas while there was a decrease of 3% in cooling degree days. In Reno, heating degree days were up 1% while cooling degree days were up 16%.^{xxi} Given this, the effect of utility cost changes is mixed.

The changes in median income and maximum allowable rents, and changes in utility costs would give a mixed effect on LIHTC rents. Also, owners that were not charging maximum rents in 2020 could potentially record percentage increases higher than changes in maximum rents since they are starting at a lower base.

Average 2021 LIHTC Rents by Region and Floorplan

Average LIHTC high rents for all types of units were lowest in mining counties at \$844 a month. The highest average rent reported for all floorplan types was in Washoe County at \$1,027 a month. Nevada average LIHTC rent was \$955, close to \$60 higher than average LIHTC rent in 2020. This was about six percent higher than last year.^{xxii}

Table 13. Average high 2021 4th Quarter LIHTC monthly rents by region and by number of bedrooms

# of Bedrooms	Clark	Mining	Other	Washoe	Nevada
One-bedroom	\$ 813	\$ 813	\$ 812	\$ 862	\$ 824
Two-bedroom	\$ 989	\$ 857	\$ 925	\$ 1,035	\$ 988
Three-bedroom	\$ 1,167	\$ 900	\$ 1,029	\$ 1,302	\$ 1,181
Overall average	\$ 944	\$ 844	\$ 896	\$ 1,027	\$ 955

Divergence Between 4th Quarter LIHTC and Market Rate Rents Grows

The LIHTC average high monthly rents were again compared to average market rate monthly rents. While market rate rents increased 13% in Reno in the Johnson, Perkins and Griffin series and 21% in Las Vegas in the ALN series, LIHTC rents increased by a modest 5% in Clark County and 8% in Washoe County. The difference between LIHTC rents and market rate rents widened markedly, especially in Clark County. For example, last year Reno and Las Vegas comparisons with market rents showed LIHTC rents 33% and 22% lower respectively, whereas the same comparison this year showed Washoe County LIHTC rents averaged 36% lower than market rents and Clark County rents averaged 32% below market rents. In dollar amounts, monthly rent in Clark County LIHTC units averaged almost \$450 less than market rate units and Washoe County LIHTC units averaged almost \$600 less.

It should be noted that if market rate properties do not include utilities in the rent to the same extent that LIHTC properties do, it may skew comparisons of market rents with LIHTC rents. Evidence collected in Taking Stock 2015 suggested that 77% of LIHTC tenants paid utilities separately whereas the American

Housing Survey data indicates that, in Las Vegas, up to 92% of multi-family tenants paid utilities separately. If more utilities are included in the LIHTC properties rent than in the market rate properties, then LIHTC rents may compare even more favorably to the market rate rents.^{xxiii} Another caveat is that when detailed set aside information was included in calculations for average rent comparisons in the 2019 Taking Stock, average LIHTC rents were found to be lower than they would be using less detailed information as is used here.^{xxiv}

Table 14. Comparison of 4th quarter 2021 market and LIHTC high monthly rents in Washoe County

Number of Bedrooms	High LIHTC	JP&G market*	\$ Amount lower	% lower
One-bedroom	\$ 862	\$ 1,436	\$574	40%
Two-bedroom	\$1,035	\$ 1,709	\$674	39%
Three-bedroom	\$1,302	\$ 2,151	\$849	39%
Overall average	\$1,027	\$1,616	\$589	36%

*Johnson, Perkins and Griffin Apartment Survey, 4th Quarter 2021, Reno Sparks Metro, [Johnson, Perkins and Griffin Q4 2021 Apartment Survey](#), email correspondence and calculations by author. Two bedroom rent is weighted average of 2 bedroom 1 bath and 2 bedroom 2 bath rent reported in JPG. Studio, townhomes, four bedroom or more are not reported but are included in the overall average.

Table 15. Comparison of 4th quarter 2021 market and LIHTC high monthly rents in Clark County*

Number of Bedrooms	High LIHTC	ALN Apt. market**	\$ Amount lower	% lower
One-bedroom	\$813	\$1,335	\$522	39%
Two-bedroom	\$989	\$1,567	\$578	37%
Three-bedroom	\$1,167	\$1,771	\$604	34%
Overall average	\$944	\$1,392	\$448	32%

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

**ALN Apartment Data Las Vegas Review Oct. 2021. Email with ALN Analytics Specialist 4-28-2021. Units with dens not reported above but included in totals. [ALN Market Reviews](#)

2021 4th Quarter Market Rate Rent Growth Shows Strong Divergence from LIHTC Rent Growth

LIHTC rents increased 5% in Las Vegas and 8% in Reno/Sparks as compared to last year. In comparison, market rate rents increased by 21% in Las Vegas and 13% in Reno/Sparks. In Washoe County, average market rate rents have increased over twice as much as LIHTC rents over the 2013 to 2021 period. In Clark County market rate rents have increased 38% more than LIHTC rents over the period.

Table 16. Comparison of 4th quarter rents in Washoe County from 2013 to 2021

Type of unit	2013	2014	2015	2016	2017	2018	2019	2020	2021	Increase 2013 to 2021
Studio – J&PG mkt. rate	\$ 545	\$ 555	\$ 580	\$ 673	\$ 723	\$ 837	\$804	\$927	\$ 1,058	94%
Studio - LIHTC	\$ 544	\$ 550	\$ 577	\$ 572	\$ 593	\$ 725	\$646	\$849	\$ 882	62%
1 bdrm - J&PG mkt. rate	\$ 717	\$ 775	\$ 840	\$ 939	\$1,062	\$1,155	\$1,179	\$1,279	\$ 1,436	100%
1 bdrm - LIHTC	\$ 626	\$ 665	\$ 686	\$ 709	\$ 716	\$ 747	\$766	\$811	\$ 862	38%
2 bdrm -J&PG mkt. rate*	\$ 878	\$ 918	\$1,003	\$1,141	\$1,245	\$1,356	\$1,394	\$1,490	\$ 1,709	95%
2 bdrm - LIHTC	\$ 699	\$ 741	\$ 805	\$ 819	\$ 849	\$ 867	\$940	\$955	\$ 1,035	48%
3 bdrm- J&PG mkt. rate	\$1,117	\$1,176	\$1,263	\$1,382	\$1,551	\$1,762	\$1,771	\$1,887	\$ 2,151	93%
3 bdrm - LIHTC	\$ 929	\$ 983	\$ 962	\$1,012	\$1,049	\$1,056	\$1,175	\$1,181	\$ 1,302	40%
Overall- J&PG mkt. rate	\$ 860	\$ 868	\$ 946	\$1,066	\$1,180	\$1,292	\$1,324	\$1,424	\$ 1,616	88%
Overall - LIHTC	\$ 716	\$ 755	\$ 784	\$ 807	\$ 823	\$ 861	\$911	\$949	\$ 1,027	43%

Source of market rate rents: [Johnson, Perkins and Griffin Q4 2020 Apartment Survey](#), email correspondence and calculations by author. *Two-bedroom rent was extrapolated.

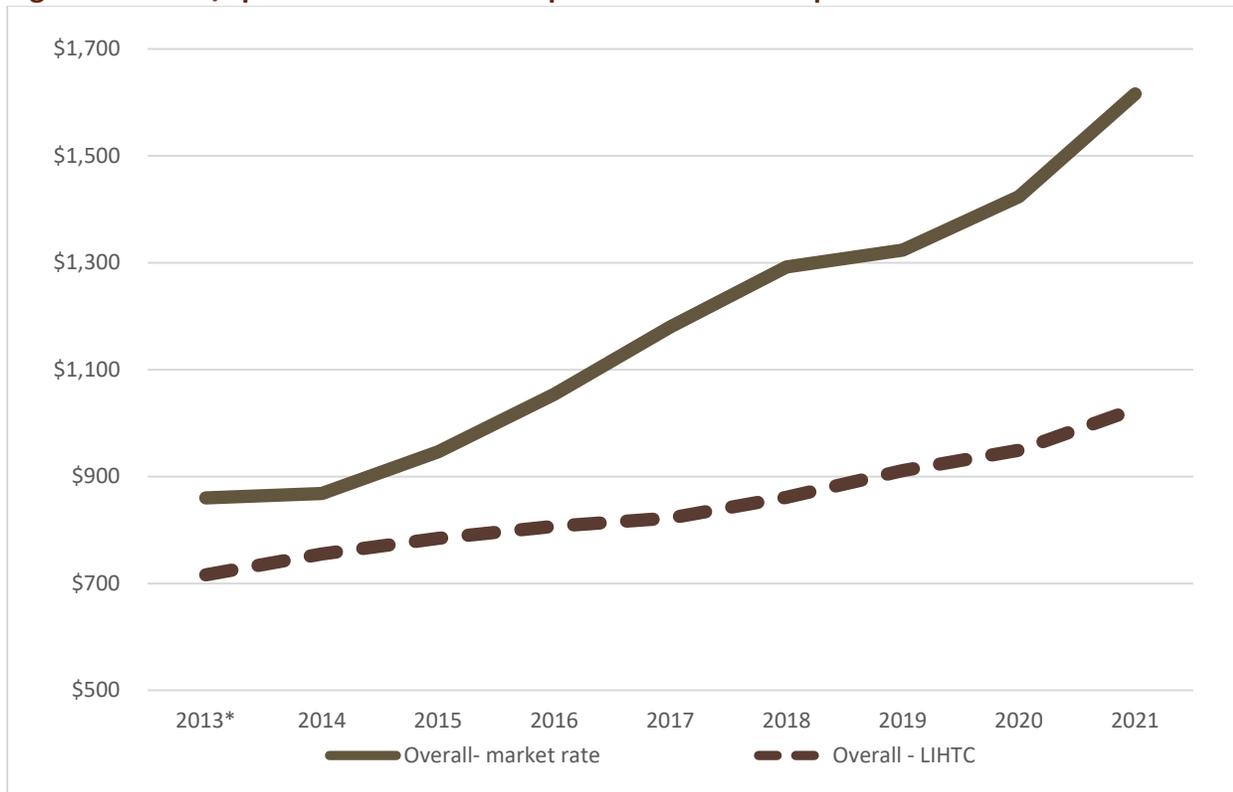
Table 17. Comparison of 4th quarter rents in Clark County from 2013 to 2020*

Type of unit	2013	2014	2015	2016	2017	2018	2019	2020	2021	Increase 2013 to 2021
Studio – ALN mkt. rate	\$ 495	\$ 517	\$ 571	\$ 603	\$ 637	\$685	\$769	\$802	\$ 1,027	107%
Studio - LIHTC	\$ 473	\$ 486	\$ 624	\$ 642	\$ 634	\$698	\$584	\$636	\$ 660	40%
1 bdrm - ALN mkt. rate	\$ 665	\$ 701	\$ 754	\$ 806	\$ 860	\$ 923	\$999	\$1,040	\$ 1,335	101%
1 bdrm - LIHTC	\$ 572	\$ 569	\$ 637	\$ 635	\$ 646	\$ 691	\$712	\$768	\$ 813	42%
2 bdrm - ALN mkt. rate	\$ 798	\$ 838	\$ 896	\$ 955	\$1,024	\$1,101	\$1,183	\$1,229	\$ 1,562	96%
2 bdrm - LIHTC	\$ 670	\$ 688	\$ 735	\$ 749	\$ 769	\$ 823	\$835	\$921	\$ 989	48%
3 bdrm- ALN mkt. rate	\$ 928	\$ 971	\$1,040	\$1,107	\$1,175	\$1,261	\$1,335	\$1,402	\$ 1,776	91%
3 bdrm - LIHTC	\$ 756	\$ 805	\$ 867	\$ 866	\$ 910	\$ 968	\$1,003	\$1,115	\$ 1,167	54%
Overall- ALN mkt. rate	\$ 759	\$ 798	\$ 856	\$ 913	\$ 979	\$1,037	\$1,118	\$1,154	\$ 1,392	83%
Overall - LIHTC	\$ 649	\$ 657	\$ 724	\$ 732	\$ 750	\$ 801	\$825	\$896	\$ 944	45%

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

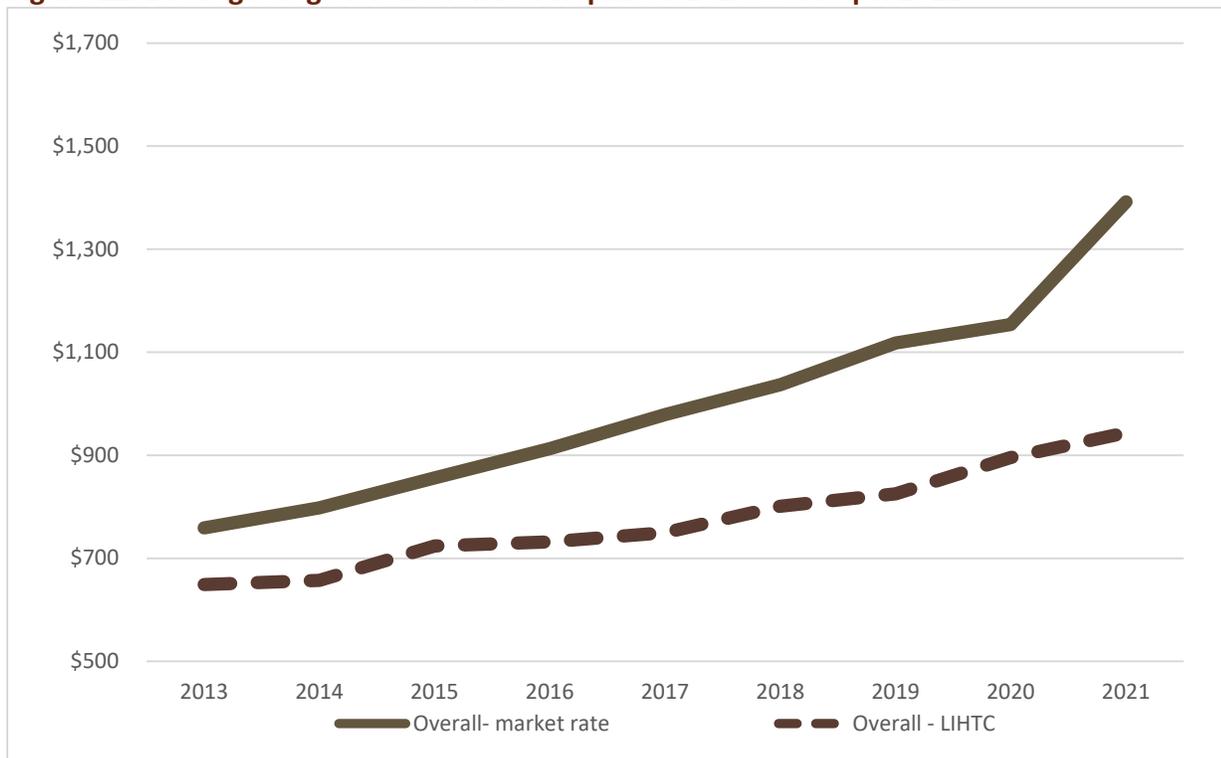
Source of market rate rents: [ALN Market Reviews](#).

Figure 11. Reno/Sparks Rent Trends 4th quarter 2013 to 4th qtr. 2021



Source: Table 16.

Figure 12. Las Vegas region rent trends 4th quarter 2013 to 4th qtr. 2021



Source: Table 17.

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 sub-regional rent averages are reported below.

Mining and Other Rural LIHTC average rents vary widely

Different counties have widely varying median incomes and maximum allowable rents as well as having unique economic circumstances. In smaller counties, the particular set asides at properties could also influence average rents. Table 18 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 Washoe 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. Other mining counties such as Elko and Humboldt counties have high median incomes but are experiencing higher levels of vacancy than other counties, which possibly caused landlords to reduce rents below the maximum allowable.

Table 18. Average 4th quarter 2021 LIHTC rents for selected Nevada counties

County	LIHTC High Rent
Nye	\$729
Humboldt	\$869
Lyon	\$894
Carson City	\$904
Elko	\$914
Douglas	\$916
Clark	\$944
Washoe	\$1,027

Las Vegas Metro LIHTC-market rate rent spread by neighborhood varies from \$60 to \$810

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. For selected neighborhoods, LIHTC average rents are reported in Table 19 and 21 below for the Las Vegas Metro and Reno Metro regions, respectively.

Table 19. 4th quarter 2021 LIHTC rents for selected Las Vegas Metro neighborhoods

Las Vegas neighborhood	Avg. LIHTC high rent	4th Quarter Lied market rent*	\$ Amount lower	% lower
Central Las Vegas	\$837	\$1,033	\$196	19%
Southeast	\$1,044	\$1,104	\$60	5%
Sunrise	\$1,010	\$1,151	\$141	12%
Whitney	\$953	\$1,255	\$302	24%
Spring Valley	\$1,041	\$1,248	\$207	17%
North Las Vegas	\$994	\$1,443	\$449	31%
Centennial	\$883	\$1,341	\$458	34%
Henderson	\$831	\$1,626	\$795	49%
Southwest & Anthem	\$995	\$1,805	\$810	45%

*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. See [Lied Institute Apartment Market Trends Report](#),

Clark County neighborhoods were defined using zip codes as explained in the vacancy section above. A substantial difference in average LIHTC rents was reported between neighborhoods varying from \$831 a month in Henderson to \$1,044 in the Southeast neighborhood. Average rents charged in LIHTC properties are influenced by the set asides for various income groups, mix of floor plans, whether landlords charge the maximum allowable rent and many other factors. Market rate average rents varied from \$1,033 a month in Central Las Vegas to \$1,805 a month in Southwest and Anthem. The spread between market rents and LIHTC rents was greatest in Henderson and Southwest/Anthem and neighborhoods, with average rents over 45% lower than market rents. Sunrise and Central Las Vegas had the lowest spread with LIHTC rents 12% less than market rents in Sunrise and 5% less than market rate rents in Southeast.

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 Fourth Quarter Apartment Market Trends from Lied Institute were used to define the zip code categories. The results are in Table 20 below. In the zip code areas with market rents below an average of \$1,100 per month, LIHTC average high rents were from 16% lower than the market average. Thirteen percent of the Las Vegas metro region LIHTC units included in the survey rent calculations were in these lowest rent zip codes. Nineteen percent of the market rate units in the Lied survey were also in those zip codes. For the areas with market rate rents from \$1,101 to \$1,200, 26% of the Lied Institute market rate units were in these zip codes and 13% of the Las Vegas LITHC units. LIHTC rents were 14% lower than market rate. For other rent range zip codes, LIHTC rents ranged from 31% to 47% lower than market rents. Nine percent of the LIHTC units were in the most expensive zip codes with average market rents over \$1,786 a month, while 21% of the Lied market rate units were in those zip codes.

In addition, regional desirability traits that make market rents differ by region, some portion of the differences may be due to set asides on each property, the extent each region's apartments include or do not include utilities in the rent for LIHTC and private market properties, and the extent to which bedroom floor plan mixes differ.

Table 20. Las Vegas Metro average LIHTC and market rate rents by rent range of zip code.

Rent range for Zip Code	LIHTC rent	Lied market rent*	% LIHTC lower	Zip Codes in category
\$1,100 or less	\$853	\$1,015	16%	89030, 89101, 89104, 89109, 89119, 89156, 89169
\$1101 - \$1200	\$996	\$1,153	14%	89086, 89102, 89103, 89106, 89107, 89110, 89115, 89122, 89146
\$1201-\$1450	\$870	\$1,301	33%	89015, 89108, 89118, 89120, 89121, 89130, 89142
\$1451-\$1600	\$1,070	\$1,544	31%	89031, 89032, 89084, 89113, 89117, 89123, 89129, 89139, 89147, 89149, 89178
\$1601 and up	\$949	\$1,786	47%	89011, 89012, 89014, 89044, 89052, 89074, 89081, 89128, 89131, 89134, 89135, 89141, 89144, 89145, 89148, 89166, 89183

*Lied Institute 4th Quarter 2021 Apartment Market Trends and calculations by author. See [Lied Institute Apartment Market Trends Report](#),

Reno/Sparks LIHTC-market rate rent spread by neighborhood varies from \$420 to \$618

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 29% to 38% reported. The dollar amount of the wedge ranged from \$420 to \$618 dollars a month.

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 22 LIHTC properties in the JP&G lower rent regions were about 31% lower than average market rate rent reported in JP&G for the same neighborhoods and 36% lower in the higher rent neighborhoods.

Table 21. 4th quarter 2021 LIHTC monthly rents for selected Reno/Sparks neighborhoods

Reno/Sparks Neighborhood	Avg. LIHTC High Rent	JP&G Market Rent*	Amount lower	% Lower
West Sparks	\$1,015	\$1,435	\$420	29%
NE Reno	\$1,001	\$1,432	\$431	30%
Airport	\$ 946	\$1,517	\$571	38%
NW Reno	\$1,043	\$1,661	\$618	37%

*Johnson, Perkins and Griffin Q4 2021 Apartment Survey and calculations by author.

Table 22. Reno-Sparks LIHTC and market rate monthly rents by rent range of neighborhood

Reno JP&G Rent range	LIHTC High Rent	JP&G Avg. Rent*	% Lower	JP&G Neighborhoods in Rent Range
\$1,100 -\$1,550	\$964	\$1,392	31%	Northeast Reno, West-Sparks/N. Valley, West Reno, Brinkby/Grove, Airport, Southwest Reno
over \$1,600	\$1,107	\$1,727	36%	Northwest Reno, East Sparks, Lakeridge, Southeast Reno, Downtown Urban

*Johnson, Perkins and Griffin Q4 2021 Apartment Survey and calculations by author.

Nevada LIHTC Rent Collections During the Pandemic

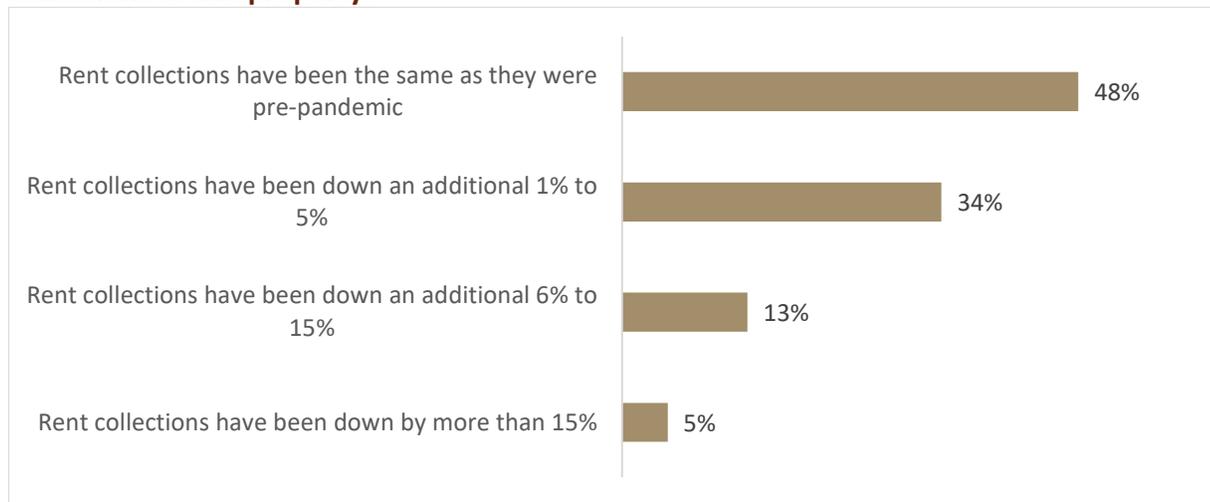
Just as in 2020, there was concern that high unemployment brought about by the Coronavirus pandemic combined with eviction moratoria, issued as a part of the pandemic response, might mean that unpaid rent could be a significant but less visible problem building up for both tenants and landlords. To gather data on the extent of this problem in Nevada LIHTC properties, the following question was added to the survey questionnaire:

From April 2020 until now, how have the Coronavirus pandemic and associated government policies affected rent collections at this property? Give your best estimate.

- Rent collections improved as compared to before the pandemic*
- Rent collections have been the same as they were pre-pandemic*
- Rent collections have been down an additional 1% to 5%*
- Rent collections have been down an additional 6% to 15%*
- Rent collections have been down by more than 15%*

This question was answered for all properties in the sample. Most property managers (82%) said that rent collections were the same as they were pre-pandemic or down five percent or less. However, five percent said that rent collections were down by more than 15%.

Figure 13. How have the Coronavirus pandemic and associated government policies affected rent collections at this property?



There was a strong regional difference in the responses. More Washoe County property managers said that rent collections were down either one to five percent or six to 15%. This is perhaps surprising, given that economic conditions were clearly worst in Clark County. However, the difference may lie in the higher percentage of family properties in Washoe County as compared to Clark County.^{xv} As might be expected there was a very large difference in the rent collection experience of senior and family properties with rent collection at family properties much more effected by the pandemic. Seventy-five percent of managers at senior properties said rent collections were the same as before the pandemic whereas only 23% of family property managers said that rent collections were the same at the property as before the pandemic. Senior income sources such as social security and pension payments would not be impacted by the pandemic thereby

insulating many senior households and senior properties from loss of income and the resulting impact to rent collections.

Figure 14. LIHTC pandemic era rent collections by region.

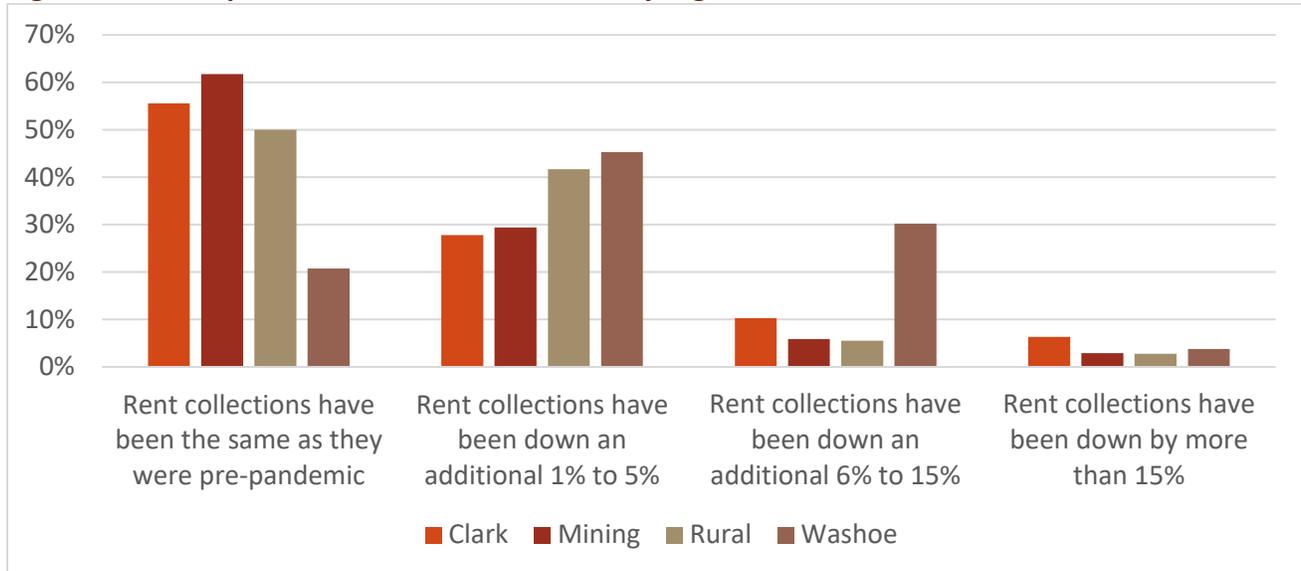


Figure 15. LIHTC pandemic era rent collections by family and senior project



Percentage of LIHTC Tenants Behind on Rent

Following the question on rent collections was a question about the percentage of tenants currently behind on rent.

Q2.13 Currently, what percentage of your tenants are not caught up with rent payments? Give your best estimate. _____

Data was available for 229 of the tax credit properties. For those properties the average percentage of tenants not caught up with rent payments was 12%. For senior properties the average was 7% while for family properties it was 15%.

Using the previous question, some information about the normal level of tenants in arrears and elevated levels due to the pandemic is available. For the 48% of property managers with a property with normal levels of rent collection, the average percentage of tenants behind on rent was 8%. For the small number of properties (5%) with rent collection down 15% or more, an average 35% of tenants were not caught up with payments. This seems to correlate with results last year which suggested that while most properties had normal levels of rent payments throughout the pandemic so far, a significant fraction did experience lower levels of rent payment. Family properties, where income was more impacted by elevated levels of unemployment, were more vulnerable to these stresses.

Table 23. Average percentage of Nevada LIHTC tenants not caught up with payments by rent collection experience.

Answer to previous question on rent collection	Average percentage of tenants not caught up with payments
Tenants behind in properties where rent collection was the same as before the pandemic	8%
Tenants behind in properties with rent collection down 1-5%	10%
Tenants behind in properties with rent collection down 6-15%	11%
Tenants behind in properties with rent collection down 15% or more	35%

Number of months Nevada LIHTC tenants were behind on rent

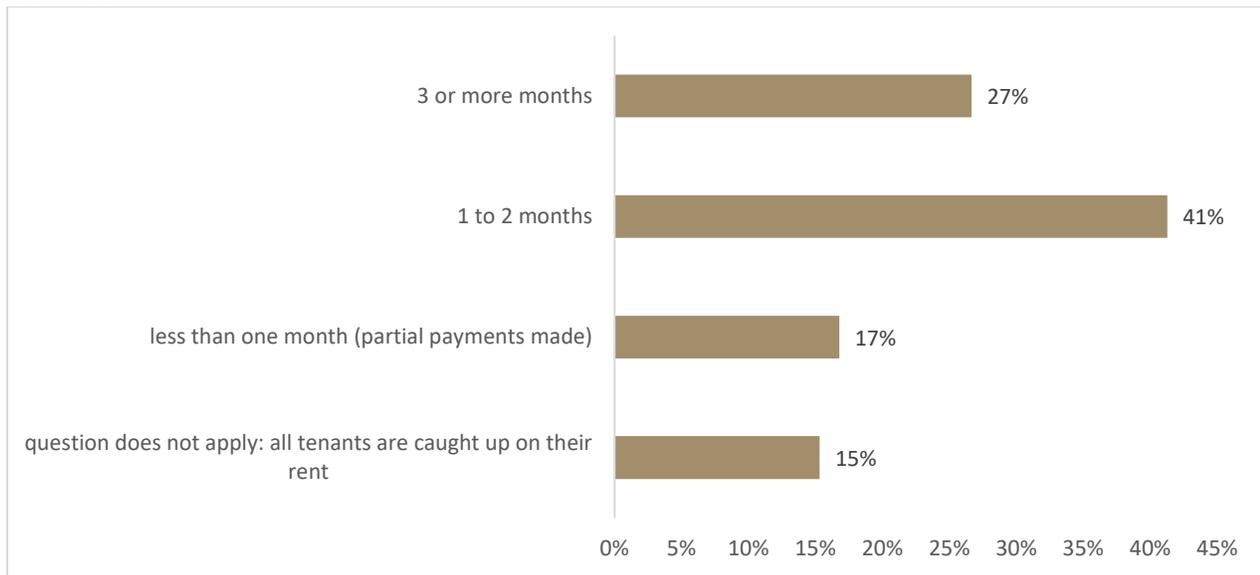
To further understand the severity of the problem with rent collections, if there was one, the question below followed the question about tenants not caught up with rent payments.

Q2.14 Currently, on average, for tenants who are not caught up, how many months are tenants behind? Give your best estimate.

- less than one month (partial payments made)*
- 1 to 2 months*
- 3 or more months*
- question does not apply: all tenants are caught up on their rent*

This question was answered for all properties. For 32% of units in the properties, either all tenants were caught up on their rent, or tenants were less than one month behind. However, for 68% of the units in the properties, there were some tenants behind one month or more.

Figure 16. Currently, on average, for tenants who are not caught up, how many months are tenants behind?



There was again a strong regional difference in the responses. A larger percentage of units in Washoe County (37%) were in properties where rent collections averaged three or more months behind than in Clark County (23%). The far larger proportion of senior properties in Clark County may once again be behind these regional differences. Again, as might be expected, there was a very large difference in the rent collection experience of senior and family properties with family properties more effected by the pandemic. Thirty-seven percent of households in family properties were behind three or more months whereas only 13% of households in senior units were.

Figure 17. How many months Nevada LIHTC tenants were behind on rent by region.

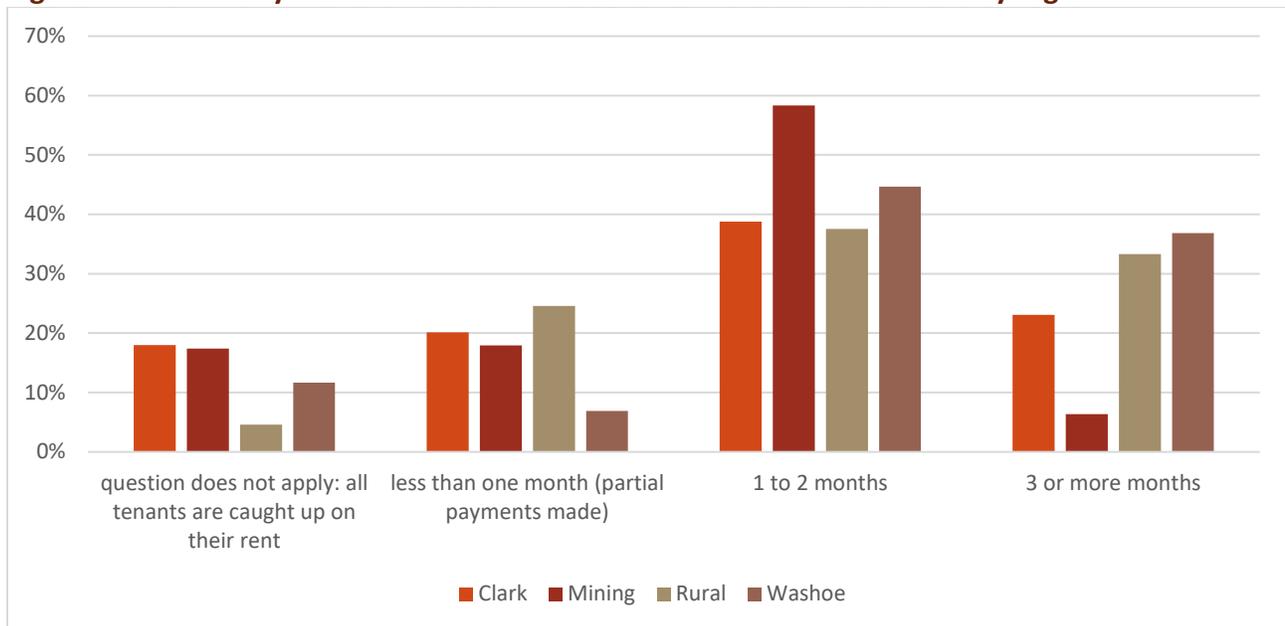
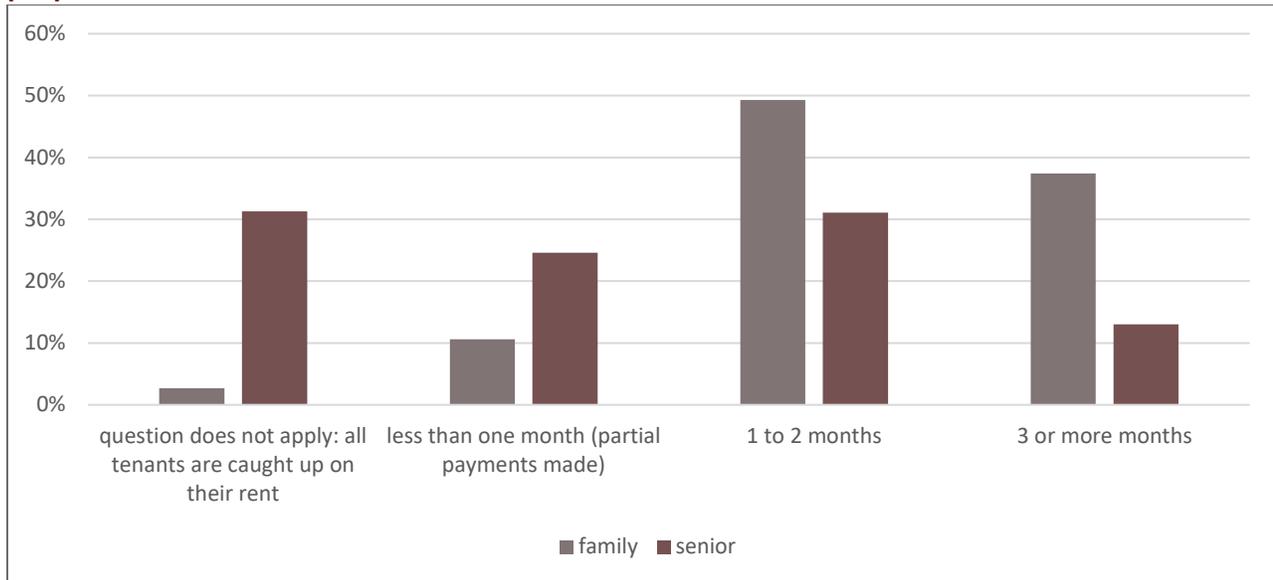


Figure 18. How many months Nevada LIHTC tenants were behind on rent for senior versus family properties.



Combining the answers to the question on months behind with the fraction of tenants behind, 46% of households behind on rent were behind 3 or more months, 38% were behind one or two months and 16% were behind less than a month.

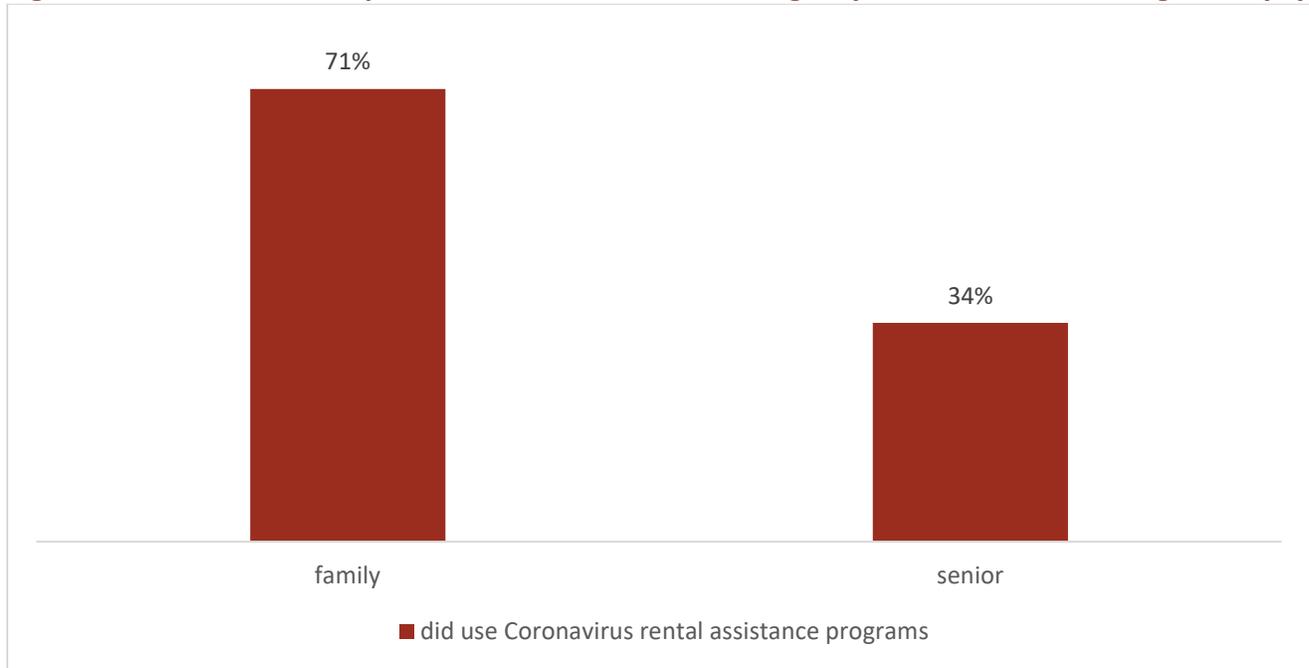
Experience with the Coronavirus Housing Assistance Programs

Property managers were asked about their experience with the Coronavirus emergency rental assistance programs:

Q2.15 To your knowledge, have you and/or your tenants received any of the government issued Coronavirus emergency rental assistance?

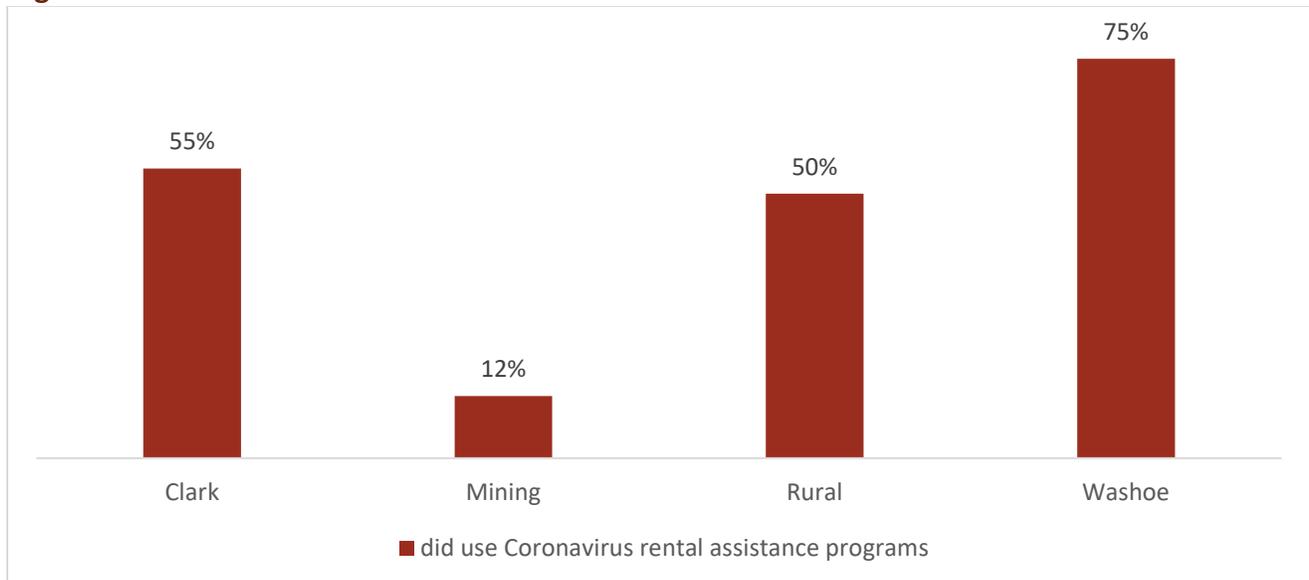
- Yes
- No

Figure 19. Nevada LIHTC Experience with Coronavirus Emergency Rental Assistance Programs by type



Overall, managers reported that at 53% of Nevada LIHTC properties government issued Coronavirus emergency rental assistance had been used. More family properties (71%) had managers who had used or had tenants who used the Coronavirus emergency rental assistance than had senior properties (34%). Strong regional differences were again observed, again likely due in large part to differences in the proportion of senior properties in the different regions.

Figure 20. Nevada LIHTC experience with Coronavirus Emergency Rental Assistance programs by region

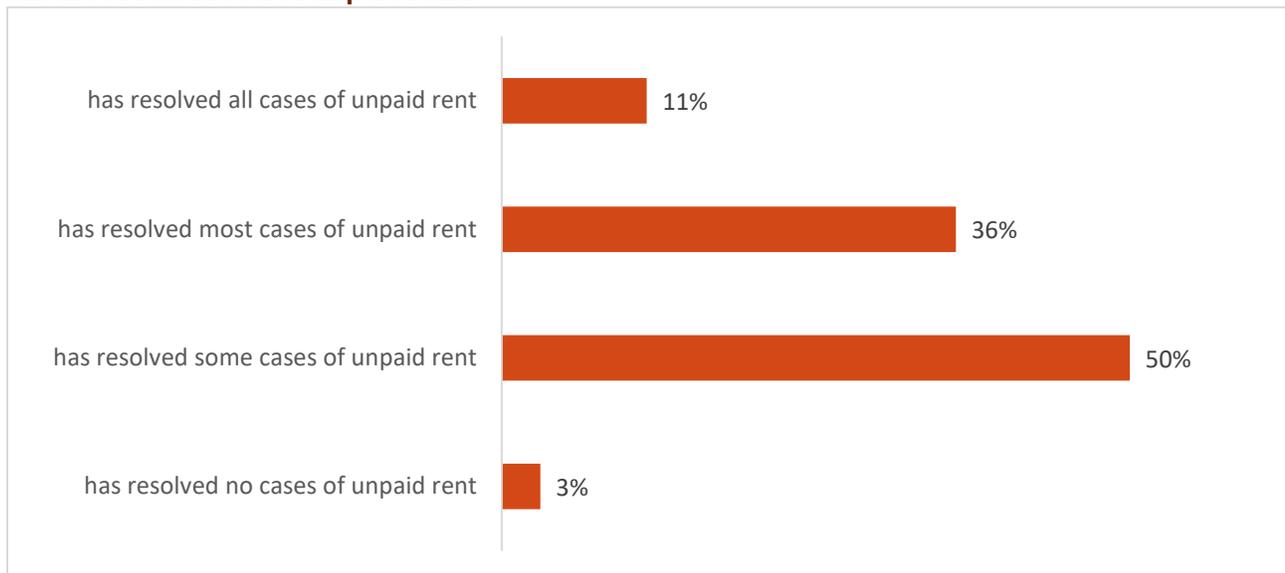


Property managers who had used Coronavirus emergency rental assistance were asked a follow-up question about the extent to which the assistance had resolved cases of unpaid rent:

Q2.16 At this property, government-issued Coronavirus emergency rental assistance . . .

- has resolved all cases of unpaid rent*
- has resolved most cases of unpaid rent*
- has resolved some cases of unpaid rent*
- has resolved no cases of unpaid rent*

Figure 21. For Nevada LIHTC managers with experience of Coronavirus emergency rental assistance, extent of resolution of unpaid rent.

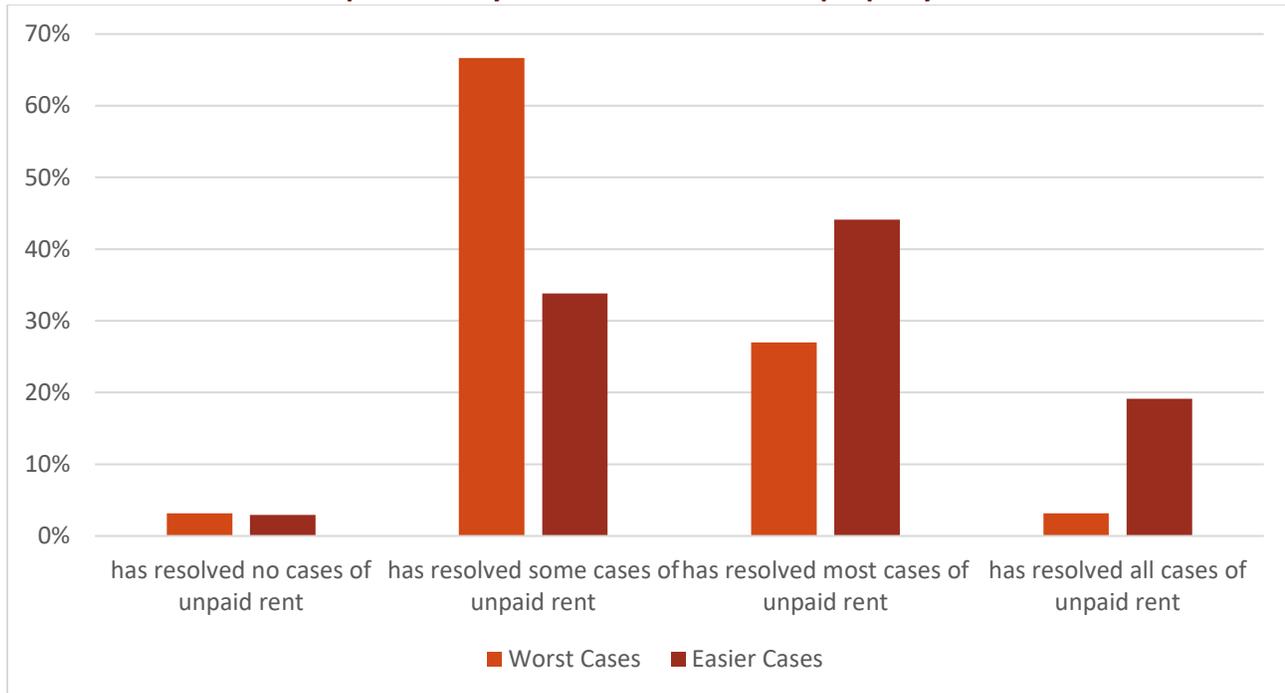


Half of the property managers who had used or had tenants who used the emergency rental assistance said it had resolved some cases of unpaid rent, 47% said it had resolved all or most cases of unpaid rent and three percent said it did not resolve any cases of unpaid rent. The answers did not differ appreciably for senior or family properties.

For property managers who had used or had tenants who used emergency rental assistance, “worst case” properties were defined as those whose rent collections were down 6% or more or who had 10% or more of their tenants behind on rent. These “worst case” properties were less likely to report resolution of most or all cases of unpaid rent as compared to properties with “easier cases” with rent collections down 5% or less or less than 10% of tenants behind on rent.

The additional stressors experienced due to the pandemic appear to have hit family properties harder than senior properties. For all metrics, most properties, whether senior or family, were either not effected or slightly effected by pandemic issues but a large minority, often about 20% of total properties, suffered from more serious problems. For example, 18% of properties reported rent collections were down 6% or more, while about 17% of the properties reported an above average percentage of tenants behind on rent.

Figure 22. For Nevada LIHTC managers with experience of Coronavirus emergency rental assistance, extent of resolution of unpaid rent by extent of difficulties at property



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 2014-2018 CHAS data, about 88,000 Nevada renter households with incomes under 50% of HUD area median family income had gross rents that used 50% or more of their household income.^{xxvi} Nationally only one out of four families that qualify for any type of federal rental assistance receive it.^{xxvii} 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 cannot be considered comprehensive.

Respondents were asked:

Q2.9 Do you currently have a waiting list?

- Yes
- No, because there are units available.
- No, we do not keep a waiting list.

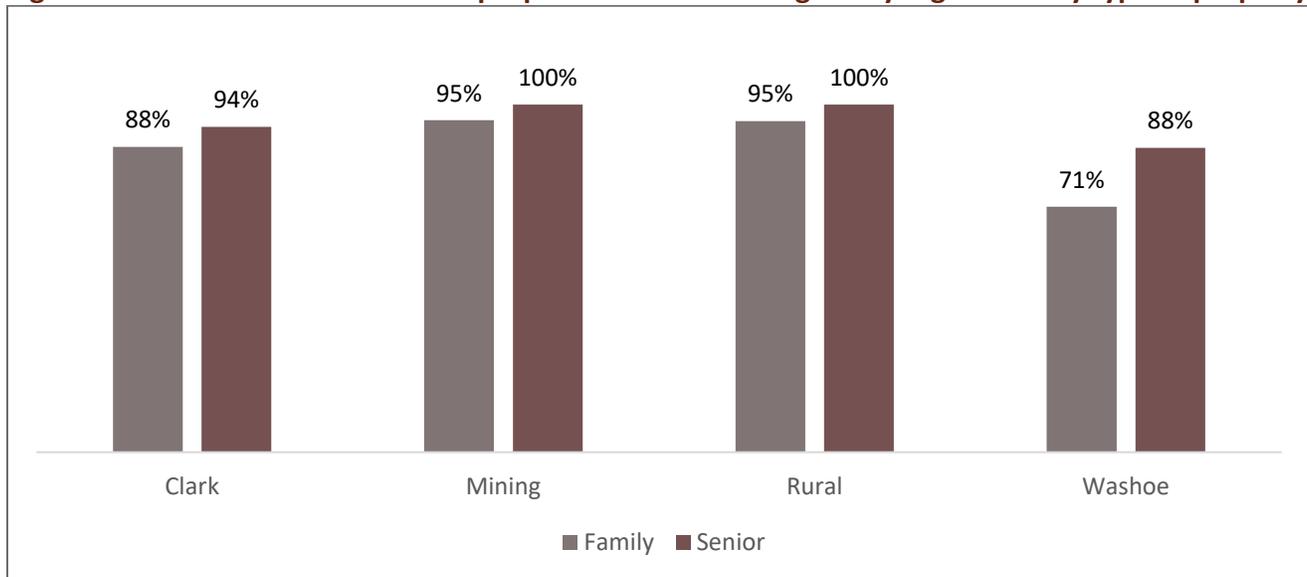
If there was a positive response, survey respondents were asked if the waiting list was for the entire property or for a specific type of unit. If for a specific type of unit, respondents were asked to indicate the number on the waiting list for each floor plan or to describe any additional attributes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

Most LIHTC Properties have a Waiting List

Eighty-six percent of the responding LIHTC properties had waiting lists or inquiry lists. Ten percent of the respondents said they do not have a waiting list because they have units available and 4% said they do not keep waiting lists. The following analysis includes only properties that keep a waiting list when units are full (i.e., excludes the 4% of properties that do not keep waiting lists).

Senior properties were more likely to have a waiting list than were family properties in every region (Figure 13). Washoe County properties were least likely to have a waiting list.

Figure 23. Percent of Nevada LIHTC properties with a waiting list by region and by type of property

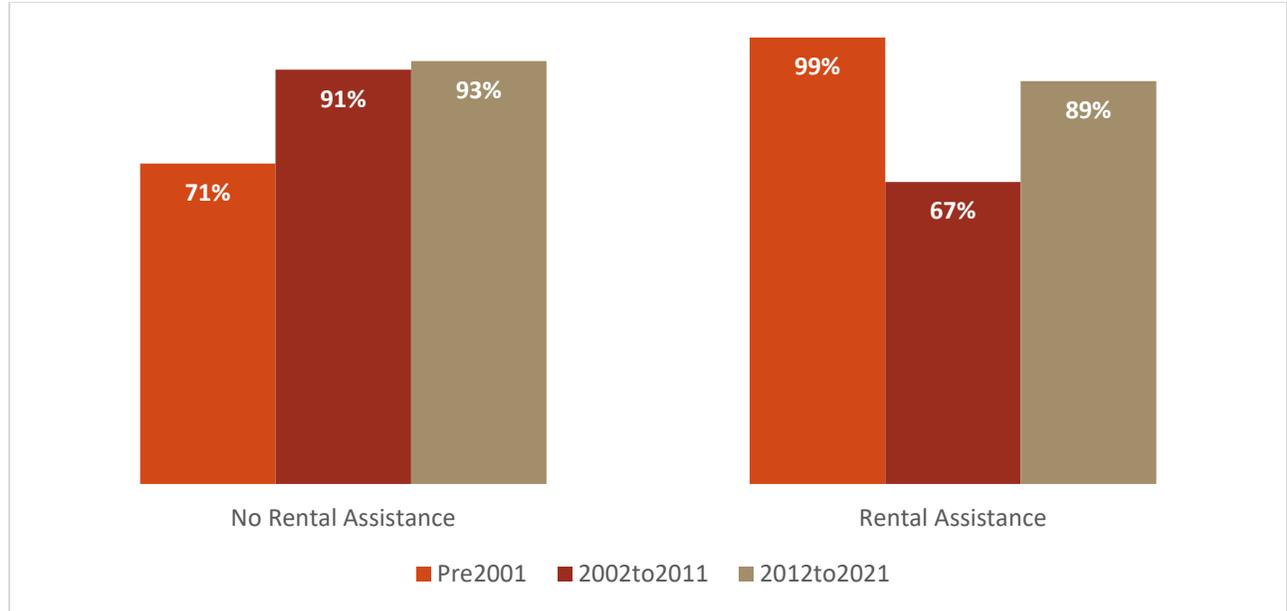


Properties with Rental Assistance are More Likely to Have a Waiting List.

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 typically ensure a household pays no more than 30% of its income in gross rent.^{xxviii} For the properties that keep a waiting list, about 34% of properties (82 properties) had project based rental assistance on all or some units offering these deeper subsidies. Properties with rental assistance are more likely to have a waiting list than those without rental

assistance. Overall, 87% of properties without rental assistance reported having a waiting list versus 96% of the properties with rental assistance. For properties without rental assistance, the newest properties built since 2012 were most likely to have a waiting list with 93% reporting a waiting list.

Figure 24. LIHTC Properties with a waiting list by presence of rental assistance and by year first built



Over 18,000 Households on Nevada LIHTC Waiting Lists

A total of 18,288 households were reported to be on waiting lists for tax credit properties in the 2021 survey. The number was down from 27,218 in 2018, when waiting lists were last measured. However, waiting list information was missing for six properties, five of which have full rental assistance with 1,000s of households reported on the waiting lists in 2018. Full information on Southern Nevada Regional Housing Authority (SNRHA) waiting lists was not available.

The median length of a waiting list was 42 households. One hundred thirty-seven of the properties reported waiting lists of 50 households or less. Of these, twenty-four properties reported having no waiting list because units were available. Six properties did not supply the number of households on the waiting list. Eleven properties do not keep a waiting list.

Average Waiting List 79 households for each 100 units

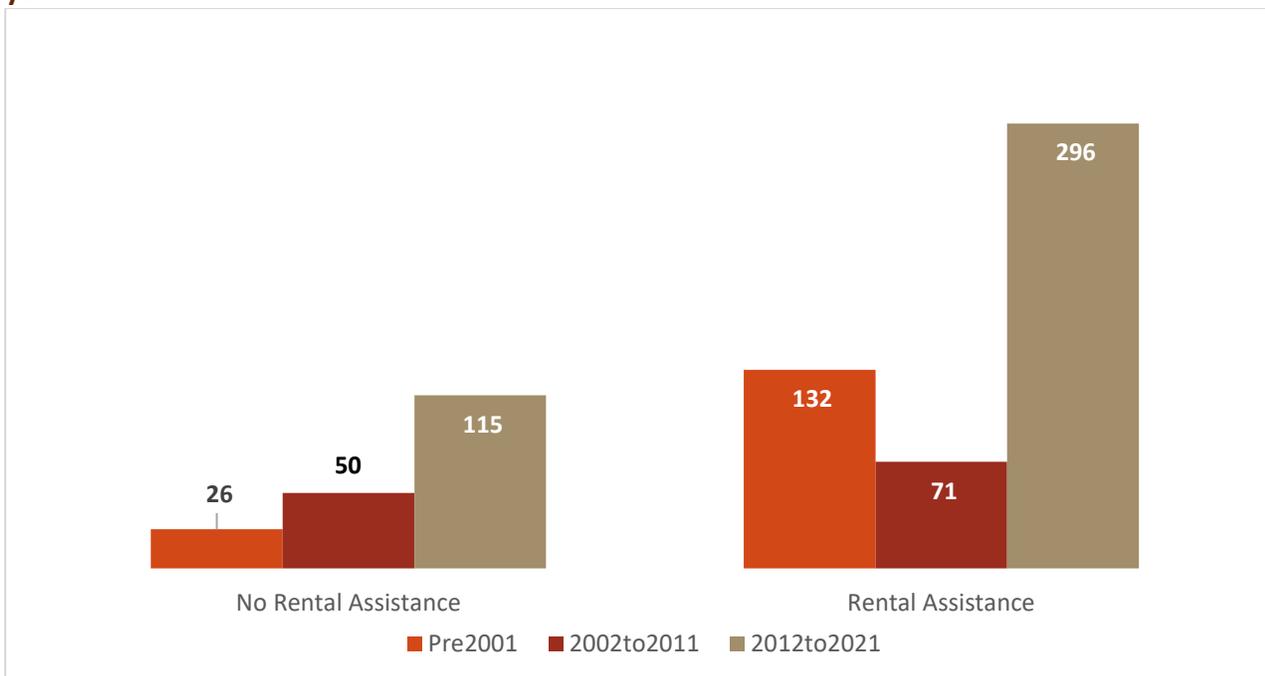
In the chart below, the lengths of the waiting lists are examined. Length of the waiting list is given as number of households on the waiting list for each one hundred units. The average waiting lists for older properties without rental assistance averaged 26 households per 100 units. The newest properties built since 2012 had a much higher average waiting list of 115 households per 100 units. Overall average waiting list for LIHTC properties without rental assistance was 62 households per hundred units.

For properties with rental assistance, the age pattern wasn't as clear. However, 87% of the LIHTC units with project based rental assistance are in the oldest age category. Of these older units with rental assistance, 89% 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. The average waiting lists for older properties with rental assistance averaged 132 households per 100 units. The newest properties built since 2012 had a much higher average waiting list of 296 households per 100 units. Overall average waiting list for LIHTC properties with rental assistance was 145 households per hundred units.

For family properties the average waiting list was 60 households for each hundred units; the equivalent statistic for senior properties was 101 households per 100 units. Overall, for all properties, the average waiting list was 79 households for each 100 units.

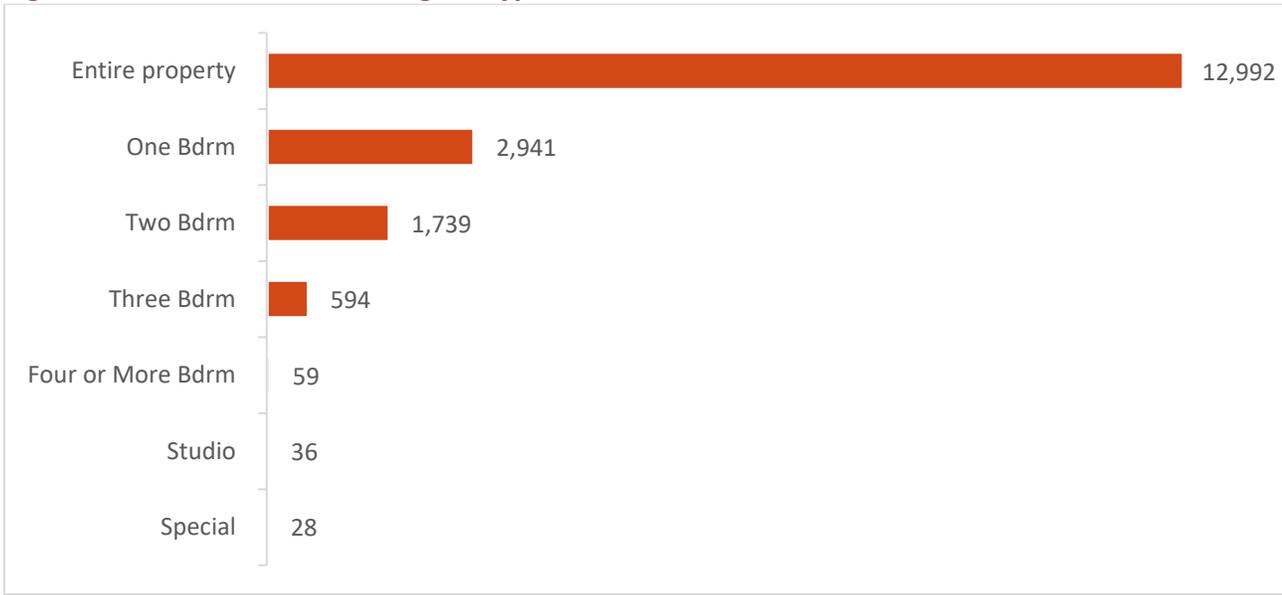
Figure 25. Households on waiting list (per hundred units) by presence of rental assistance and by year first built



Waiting Lists by Type of Unit

Seventy-one percent of households on waiting lists were on a general waiting list for the entire property, and 29% 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 one bedroom followed by the two-bedroom unit. In a few cases, households were on a waiting list for units with special attributes such as ground floor units or units without carpeting.

Figure 26. Nevada LIHTC Waiting list type



Discussion and Conclusion

Although the unemployment rate is back down to more normal levels than it was in 2020, the effects of the pandemic and resulting economic dislocation are still with us. The combination of policies, including eviction moratoria, exposed tax credit properties to problems with unpaid rent. Unpaid rent remained an issue in 2021 as evidenced by the 18% of tax credit properties with rent collections down 6% or more from the norm before the pandemic hit. A smaller subgroup reported rent collections down more than 15%. As might be expected, family properties were much more exposed to problems with rent collection than were senior properties. About half of the LIHTC properties with rental arrears issues reported receiving some relief from Covid Emergency Rental Assistance programs with half on those properties reporting all or most unpaid rent issues resolved because of the assistance. But for property managers reporting the worst problems with rent collections, the Emergency Rental Assistance programs were less likely to have resolved unpaid rent issues.

Rents in the private market surged up dramatically in 2021; according to the ALN series for Las Vegas and the Johnson, Perkins and Griffin series for Reno, 4th quarter rents increased 21% and 13% respectively over 2020 4th quarter rents. Meanwhile, LIHTC rents increased an average 5% in Las Vegas and 8% in Reno. Consequently, market rate rents and LIHTC rents diverged even further, increasing the “wedge” between the two rents. LIHTC rents were found to be from 32% to 36% lower than market rents. It is not surprising then that the already low vacancy rates in 2020 (2.6%) were found to have decreased another notch to 2.5%.

NHD is grateful to the management companies and their employees for maintaining their outstanding level of participation in the Taking Stock survey even while coping with a second year of Covid-19 related disruptions. Their efforts to house Nevada’s most vulnerable populations are much appreciated.

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 Elizabeth Fadali, efadali@housing.nv.gov, Carson City, NV 89706.

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Appendix A Survey Questionnaire

Below is the 2020 Affordable vacancy and rent long survey (Qualtrics on-line survey). Because the survey was taken online on computer or phone screens there is no way to present the survey completely on paper.

2021 LIHTC Vacancy & Rent Survey Form

Start of Block: Start-up Questions

Q1.1 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

Q2.1 Name of Property:



Q2.2 If the name of the property was not in the drop down list above or needs corrections fill in below.

Q2.3 Address of Property



Q2.4 If address is not in the drop down list above or needs any corrections please note below:

Q2.5 Number of units

Affordable units : _____

Market units : _____

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

Total : _____

Q2.6 Which types of units are in your complex? Please check all that apply.

- Studio
- One bedroom
- Two bedrooms
- Three bedrooms
- Four or more bedrooms

Q2.7 Please fill out the **total number of units** of each type for your property:

(For reference your total from Question 8 was $\{Q2.5/TotalSum\}$.)

	Number of units
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio Studio	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom One bedroom	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms Two bedrooms	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms Three bedrooms	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Four or more bedrooms Four or more bedrooms	

Q2.8 Please fill out the **number of vacant units** for each type.

	Number of vacant units
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio Studio	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom One bedroom	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms Two bedrooms	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms Three bedrooms	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Four or more bedrooms Four or more bedrooms	

Q2.9 Please fill out the **lowest rent you will charge on turnover** for each type of unit

	Lowest rent you will charge on turnover
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio Studio	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom One bedroom	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms Two bedrooms	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms Three bedrooms	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Four or more bedrooms Four or more bedrooms	

Q2.10 Please fill out **highest rent you will charge on turnover** for each type of unit

	Highest rent you will charge on turnover
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio Studio	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom One bedroom	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms Two bedrooms	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms Three bedrooms	
Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Four or more bedrooms Four or more bedrooms	

Q2.11 What was the property's average occupancy rate for the past 12 months? _____

Q2.12 From April 2020 until now, how have the Coronavirus pandemic and associated government policies affected rent collections at this property? Give your best estimate.

- Rent collections improved as compared to before the pandemic
- Rent collections have been the same as they were pre-pandemic
- Rent collections have been down an additional 1% to 5%
- Rent collections have been down an additional 6% to 15%
- Rent collections have been down by more than 15%

Q2.13 Currently, what percentage of your tenants are not caught up with rent payments? Give your best estimate.

Q2.14 Currently, on average, for tenants who are not caught up, how many months are tenants behind? Give your best estimate.

- less than one month (partial payments made)
- 1 to 2 months
- 3 or more months
- question does not apply: all tenants are caught up on their rent

Q2.15 To your knowledge, have you and/or your tenants received any of the government issued Coronavirus emergency rental assistance?

- Yes
- No

Display This Question:

If Loop current: To your knowledge, have you and/or your tenants received any of the government issued Coronavirus... = Yes

Q2.16 At this property, government-issued Coronavirus emergency rental assistance . . .

- has resolved all cases of unpaid rent
- has resolved most cases of unpaid rent
- has resolved some cases of unpaid rent
- has resolved no cases of unpaid rent

Q2.17 Do you currently have a waiting list?

- Yes
- No, because there are units available.
- No, we do not keep a waiting list.

Display This Question:

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

Q2.18 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

Q2.19 How many households are on the waiting list? _____

Display This Question:

If Loop current: Is the waiting list for a specific type of unit? = Yes

Q2.20 Please indicate how many households are on the waiting list for each type of unit.

	number of households on waiting list
<p>Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Studio Studio</p>	
<p>Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = One bedroom One bedroom</p>	
<p>Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Two bedrooms Two bedrooms</p>	
<p>Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Three bedrooms Three bedrooms</p>	
<p>Display This Choice: If Loop current: Which types of units are in your complex? Please check all that apply. (For reference total un = Four or more bedrooms Four or more bedrooms</p>	
<p>Or (regardless of floorplan) waiting list was for special attributes (Specify below, for example, washer dryer, ground floor, accessible unit, low income set aside, etc.)</p>	

Q2.21 You have reached the end of the survey for this property. Thank you! Do you have any comments?

End of Block: Rest of Survey

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Start of Block: Start-up Questions

Q1.1 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

Q2.1 Name of Property:



Q2.2 If the name of the property was not in the drop down list above or needs corrections fill in below.

Q2.3 What was the property's average occupancy rate for the past 12 months?

Q2.4 From April 2020 until now, how have the Coronavirus pandemic and associated government policies affected rent collections at this property? Give your best estimate.

- Rent collections improved as compared to before the pandemic
- Rent collections have been the same as they were pre-pandemic
- Rent collections have been down an additional 1% to 5%
- Rent collections have been down an additional 6% to 15%
- Rent collections have been down by more than 15%

Q2.5 Currently, what percentage of your tenants are not caught up with rent payments? Give your best estimate.

Q2.6 Currently, on average, for tenants who are not caught up, how many months are tenants behind? Give your best estimate.

- less than one month (partial payments made)
- 1 to 2 months
- 3 or more months
- question does not apply: all tenants are caught up on their rent

Q2.7 To your knowledge, have you and/or your tenants received any of the government issued Coronavirus emergency rental assistance?

- Yes
- No

Display This Question:

If Loop current: To your knowledge, have you and/or your tenants received any of the government issued Coronavirus... = Yes

Q2.8 At this property, government-issued Coronavirus emergency rental assistance . . .

- has resolved all cases of unpaid rent
- has resolved most cases of unpaid rent
- has resolved some cases of unpaid rent
- has resolved no cases of unpaid rent

Q2.9 Do you currently have a waiting list?

- Yes
- No, because there are units available.
- No, we do not keep a waiting list.

Display This Question:

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

Q2.10 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

Q2.11 How many households are on the waiting list _____

Display This Question:

If Loop current: Is the waiting list for a specific type of unit? = Yes

Q2.12 Please indicate how many households are on the waiting list for each type of unit.

	number of households on waiting list
Studio	
One bedroom	
Two bedrooms	
Three bedrooms	
Four or more bedrooms	
Or (regardless of floorplan) waiting list was for special attributes (Specify below, for example, washer dryer, ground floor, accessible unit, low income set aside, etc.)	

Q2.13 You have reached the end of the survey for this property. Thank you! Do you have any comments?

End of Block: Rest of Survey

Appendix B Detailed HUD Adjustments to 4 Person Very Low Income Limits and Maximum Allowable Rents for Clark and Washoe Counties

Maximum allowable rents for LIHTC properties are complex. They depend on regional HUD median family incomes, determined annually, number of bedrooms, set aside agreements, the date each property is put into service, whether median incomes have increased or decreased, and other factors.^{xxix}

HUD area median family incomes (HAMFI) are used to calculate the four-person very low-income limits (4P VLIL) which then ultimately are used to specify the Multi-family Tax Subsidy Project rent and income limits used for tax credit properties. A series of legislatively mandated adjustments to the 4P VLIL help to determine the annually published maximum income and rent limits for all regions. As seen in Table 24 below there are four main adjustments: the High Housing Cost Adjustment, the Low Housing Cost Adjustment, the State Non-metropolitan Median Family Income Adjustment and the Ceilings and Floors Adjustment.

High Housing Cost Adjustment increases income limits for regions with especially high rental housing costs as compared to median income. Similarly, the Low Housing Cost Adjustment decreases income limits for regions with high median incomes and affordable rental housing. Neither adjustment has been used for Clark or for Washoe County since 2013.

The adjustment used most consistently and having the most impact is the State Non-Metro Adjustment which has been used each year since 2013 (except 2014) to adjust Clark County 4P VLIL upwards. The state non-metropolitan adjustment assures that no 4P VLIL is lower than 50% of state non-metropolitan median family income. Upward adjustments for Clark County 4P VLIL have ranged from \$200 in 2016 to \$3,850 (or 11%) in this past year. The adjustment was not used to adjust Washoe County 4P VLIL in any of the years from 2013 to 2021.

The fourth adjustment, which applies ceilings and floors to the rate of increase or decrease in 4P VLIL, has occasionally come into play in both Washoe and Clark Counties, creating both increases and decreases in 4P VLIL for either county. The ceiling prevents an increase in 4P VLIL of greater than 5% over the previous year or twice the increase in national median family income, whichever is greater. The floor prevents a decrease in 4P VLIL greater than 5% over the previous year. The largest of these adjustments occurred in 2014. The floor preventing a decrease greater than 5% in 4P VLIL avoided a 10% drop in 4P VLIL (and thus maximum allowable rents) in Clark County and a 7% drop in Washoe County. This allowed Clark County rents to increase at a greater rate than Washoe County's when compared to increases in HAMFI. Adjustments in 2018 and 2021 helped to slightly dampen the effect of the State Non-Metro Adjustment in Clark County.

See Figures 4 and 5 to see the pattern of these adjustments over the past nine years. The result of all these adjustments is that while Clark County median family income increased by 15% from 2013 to 2021, maximum two-bedroom rents increased more, by 23%. Meanwhile, in Washoe County adjustments had an opposite effect with median family income increasing by 29% from 2013 to 2021 while maximum

allowable MTSP rents increased by 22%. In other words, while in Clark County maximum allowable rents increased more than median income, in Washoe County maximum allowable rents increased less than median income. This means that the ratio of maximum allowable rent to median income has tended to go up a couple percentage points in some years in Clark County and go down a couple percentage points in Washoe County.

Table 24. Adjustments to Four Person Very Low Income Limit for Clark and Washoe Counties, 2013 to 2021^{xxx}

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Las Vegas-Paradise 4P VLIL	\$32,350	\$30,750	\$30,700	\$30,100	\$31,450	\$35,050	\$34,850	\$37,500	\$39,350
Reno-Sparks 4P VLIL	\$33,950	\$32,300	\$31,750	\$33,300	\$34,050	\$36,750	\$39,050	\$39,800	\$41,750
Adjustment Type – Clark Co.									
High Income Used?	no	no	no	no	no	no	no	no	no
Amount									
Low Income Used?	no	no	no	no	no	no	no	no	no
Amount									
State Non-metro Used?	yes (+3%)	no (0%)	yes (+4%)	yes (+1%)	yes (+2%)	yes (+10%)	yes (+3%)	yes (+6%)	yes (+11%)
Amount	\$800	\$0	\$1,100	\$200	\$500	\$3,200	\$950	\$2,100	\$3,850
Ceiling or Floor Used?	no	yes (+6%)	no	no	no	yes (-2%)	no	no	yes (-2%)
Amount		\$1,750				\$(550)			\$(700)
Adjustment Type - Washoe									
High Income Used?	no	no	no	no	no	no	no	no	no
Amount									
Low Income Used?	no	no	no	no	no	no	no	no	no
Amount									
State Non-metro Used?	no	no	no	no	no	no	no	no	no
Amount									
Ceiling or Floor Used?	yes (+4%)	yes (+2%)	no	yes (-1%)	no	no	no	no	yes (-0%)
Amount	\$1,350	\$800		\$(200)					\$(150)

Figure 27. Change in Clark County HAMFI versus maximum allowable MTSP two bedroom rent indices (2013=1)

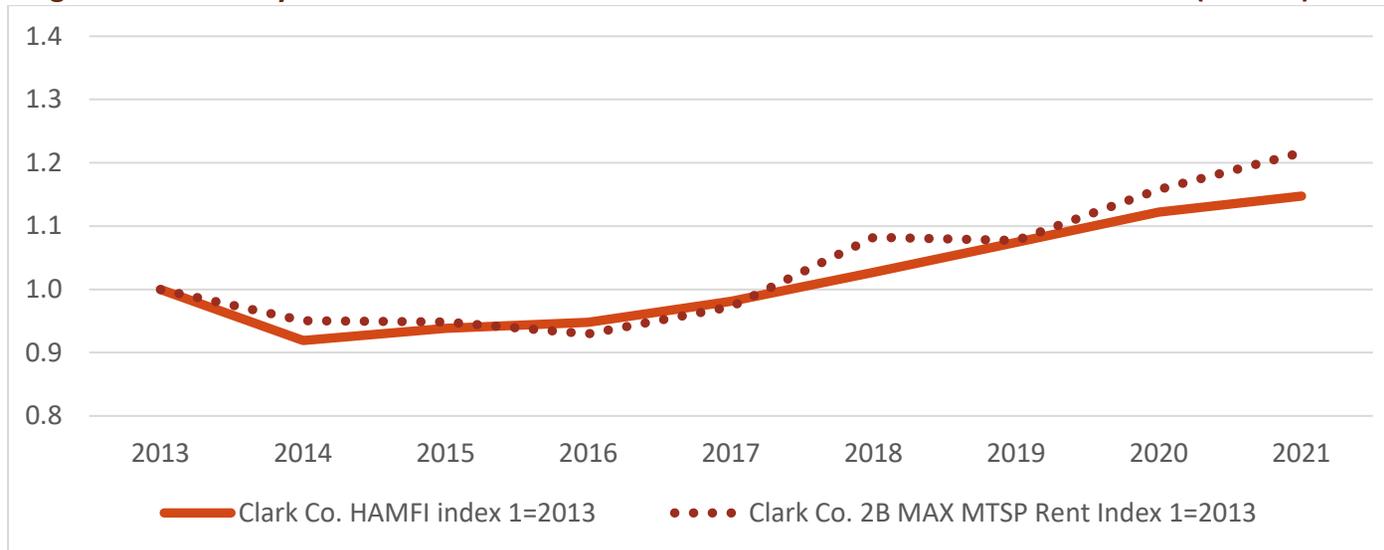
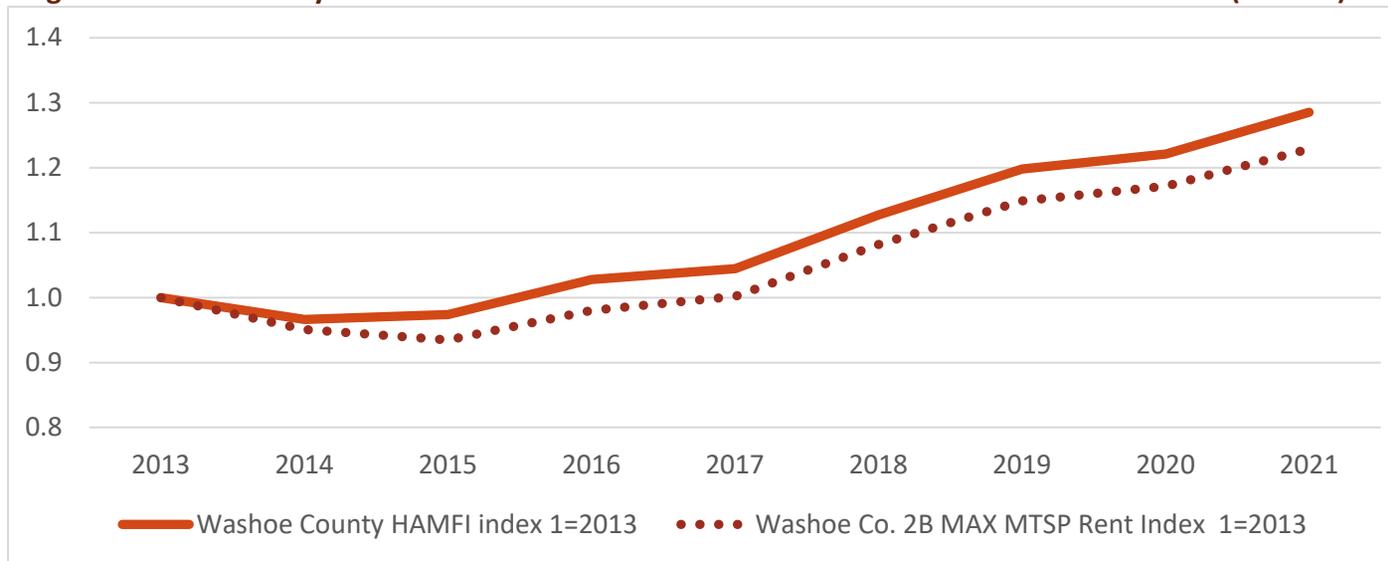


Figure28. Change in Washoe County HAMFI versus maximum allowable MTSP two bedroom rent indices (2013=1)



Endnotes

ⁱ The totals include units and dollars available through the American Reinvestment and Recovery Act Tax Credit Assistance Program and Section 1602 properties.. GDP Implicit Price Deflator in United States, Index 2015=100, Annual, Not Seasonally Adjusted, was used to adjust bond amounts and tax credit allocations to 2021 dollars. Deflator data from Organization for Economic Co-operation and Development, GDP Implicit Price Deflator in United States [USAGDPDEFAISMEI], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/USAGDPDEFAISMEI>, February 20, 2022.

ⁱⁱ GDP Implicit Price Deflator in United States, Index 2015=100, Annual, Not Seasonally Adjusted, was used to adjust bond amounts and tax credit allocations to 2021 dollars. Estimates were used for 2019-2021 Bond/4% properties because final numbers were not yet available. Deflator data from Organization for Economic Co-operation and Development, GDP Implicit Price Deflator in United States [USAGDPDEFAISMEI], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/USAGDPDEFAISMEI>, February 20, 2022.

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

^{iv} Census Bureau, 2020 American Community Survey Experimental one-year estimates, Table DP04, Selected Housing Characteristics, accessed 3/21/2022. <https://data.census.gov/cedsci/> For Nevada Tax Credit Housing by County, an in-house Nevada Housing Division database gives total housing units in tax credit properties as of March 21, 2022 as 29,208 including units under construction.

^v From NHD in-house database, Mothership Microsoft Access Database, 3-21-2022. There were a total of 36,207 active below-market units listed in the database, with 28,129 units that had tax credit involvement currently or in the past. The list includes public housing, HUD and USDA Rural Development Multi-family, Housing Authority non-aided properties and LIHTC properties. Of the state's 10,013 units with full sliding scale style rental assistance, 4,825 units were in projects that included active tax credits as a funding source.

^{vi} Some special use properties were excluded such as properties serving homeless populations or assisted living facilities. In addition, some properties not included on the survey send-out list were returned and added into the original list.

^{vii} U.S. Bureau of Labor Statistics. Local Area Unemployment Statistics. <https://www.bls.gov/lau/data.htm> Accessed Mar. 31, 2022. Numbers were subject to revision on March, 2,2022.

^{viii} Ibid.

^{ix} S&P Dow Jones Indices LLC, S&P/Case-Shiller NV-Las Vegas Home Price Index© [LVXRNSA], retrieved from FRED, Federal Reserve Bank of St. Louis <https://research.stlouisfed.org/fred2/series/LVXRNSA>, January 21, 2022.

^x Lied Center for Real Estate. Nevada Housing Market Update, November 2021. https://liedcenter.unlv.edu/wp-content/uploads/2022/01/6025_Lied-Housing-Market-Report_Nov-2021.pdf

^{xi} Three 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, issuance of tenant-based vouchers to all tenants of RAD property) 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.

^{xii} 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 – 2021 for continuity.

^{xiii} The 2013 version of Taking Stock gives the vacancy rate for all rural counties together so separate rates for mining and other counties were not readily available.

^{xiv} Vivek Sah, Director, Lied Institute for Real Estate Studies, Lee Business School, University of Nevada Las Vegas. Personal communication. 3/6/2020.

^{xv} ALN Las Vegas Apartment Data for month of October 2013, November 2014, October 2015-2017, Nov. 2018, Sept. 2019, and Oct. 2020 and 2021. ALN Apartment Data for month of October 2013 – 2016, 2018 for Reno from email communication with ALN staff and Oct. 2017 reports, Oct. 2018 – 2021 reports via email request. Johnson, Perkins & Griffin 4th Quarter 2013-2021 reports.

^{xvi} Fadali, E. 2020. Fadali, E. et al. Taking Stock 2013-2020. Nevada Housing Division. Taking Stock 2018 to 2020 are available on the Nevada Housing Division Housing Database webpage. Taking Stock 2013 to 2017 are available by request. https://housing.nv.gov/Programs/Housing_Database/

^{xvii} Lied Institute vacancy rates methods changed somewhat in that in previous reports vacant units over total units was equal to the vacancy rate but this was no longer the case for the 4th quarter 2021 report. Weighted average vacancy rates were used to find neighborhood averages.

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

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

^{xx} 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) <https://www.eia.gov/naturalgas/> and <https://www.eia.gov/electricity/> accessed 4-14-2022.

^{xxi} Heating degree days and cooling degree days are from the calculator on the Energy Star website. Energy Star is a program run by the U.S. Environmental Protection Agency and Department of Energy to help save energy. <https://portfoliomanager.energystar.gov/pm/degreeDaysCalculator>

^{xxii} Four properties did not have usable rent data and could not be included.

^{xxiii} 2017 American Housing Survey. Housing Costs, Renter Occupied Units with calculations by author. <https://www.census.gov/programs-surveys/ahs.html>

^{xxiv} Fadali, E. et al. Taking Stock 2019. Nevada Housing Division. [Taking Stock 2019](#).

^{xxv} For the entire sample, as used for this question, 70% of the properties and 78% of the units in Washoe County are in family properties as compared to 37% of the properties and 43% of the units in Clark County.

^{xxvi} CHAS special tabulations of 5 year estimates from 2014 to 2018 American Community Survey data <https://www.huduser.gov/portal/datasets/cp.html> accessed 10-28-2021.

^{xxvii} Fischer et al. 2021. More Housing Vouchers: Most Important Step to help More People Afford Stable Homes. <https://www.cbpp.org/research/housing/more-housing-vouchers-most-important-step-to-help-more-people-afford-stable-homes> Center on Budget and Policy Priorities.

^{xxviii} 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.

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

^{xxx} This table and appendix was compiled using data and explanations available from U. S. Housing and Urban Development, Multifamily Tax Subsidy Projects Rent and Income Limits. <https://www.huduser.gov/portal/datasets/mtsp.html>.