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# HOUSING NEEDS ASSESSMENT- HUMBOLDT COUNTY, NEVADA

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## EXECUTIVE SUMMARY

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Ekay Economic Consultants, Inc. (EEC), in partnership with the Center for Regional Studies at the University of Nevada, Reno, were retained to provide an overview of Humboldt County's housing market, including supply and demand factors for future growth of the region. Key findings of the study are summarized below.

### *Demographic and Employment Overview*

- After four years of decline between 2013 and 2017, population in the County increased for three consecutive years between 2018 and 2020, with population growth tied closely to gold prices.
- Almost three quarters of residents own their homes in Humboldt County, compared to less than two-thirds of US residents.
- Median income at the household and family levels, exceeded national measures, though average income levels were slightly lower. Per capita income in Humboldt County was lower, likely due to a higher ratio of families with children used in the income calculation.
- Between 2015 and 2019, 10% of Humboldt County residents migrated from outside the county. The majority of those moving from outside the county had median age ranging from 25 to 30. Approximately one-third of these residents had a per capita income of \$75,000 and over.
- Like most areas, Humboldt County lost some employment during the COVID-19 pandemic in 2020. However, by March 2021, the county's employment levels exceeded pre-2020 levels, and the unemployment rate of 3.5% is significantly below natural unemployment levels. Labor for new industries will either cannibalize from existing industries or require importing new employees.

- County wages increased by 12.5% between 2010 and 2015 and another 13.6% between 2015 and 2020. The industry with the highest wages in Humboldt County in 2020 was the Utilities industry with a weekly wage at almost twice than the countywide average wage, followed by the Mining, Quarrying, and Oil and Gas Extraction industry at 1.75 times greater than the average wage. Other high wage industries include Manufacturing at 1.32 times the average wage and Wholesale Trade at 1.27 times.
- The Humboldt Development Authority projects over 1,000 new jobs over the next five years. The significant new job expectations are largely driven by two proposed developments, Lithium Nevada and West Coast Salmon Nevada.
- Lithium Nevada is preparing to invest \$1.7 billion into the development of a “world-class lithium project” near Orovada (Humboldt County), construction of the project will begin January 2022.
- West Coast Salmon Nevada is an industrial-scale, land-based Atlantic salmon production facility planned for north Pershing County, located approximately 15 miles south of Winnemucca.
- Construction jobs associated with the two projects, along with indirect and induced jobs supported by this construction are projected to peak in 2023 with 1,368 temporary employees, and permanent operations jobs are expected to peak in 2027 with 991 employees.

### ***Housing Supply***

- Humboldt County residential unit inventory primarily consists of single family detached and manufactured homes, with each product representing 38% of total housing units. Multi-family (apartment units) represents 24% of total inventory. The county does not have a significant inventory of single-family attached (condominium and townhomes) product.

- Between 2000 and 2020 only 65 new dwelling units were added per year, which is almost exactly half the rate of 1970-1999. Average year built for all residential properties is 1985.
- Adjusted housing vacancy rate declined from the 2010-2014 average of 3.5% to the 2015-2019 average of 2.9%. This indicates the housing market has few existing units available for rent and/or sale in order to accommodate future growth in the county and will require new construction to accommodate this future growth.
- This shortage of residential units has led to a remarkable decrease in new home sales since the peak of 47 new home sales in 2013. During the same period, median prices rose from \$273,900 to \$350,000 in 2020. Through May 2021, the median value of three transactions increased to \$459,000.
- Existing home sales show a strong and consistent demand for homes over the last 10 years, in light of the waning activity in the new home market. As of 2020, median sales price of existing single-family homes was \$234,700, while new home prices have exceeded that value by over \$100,000 since 2018. Nevertheless, the existing home sales trends shows an increasing demand for housing and home ownership in Humboldt County.
- A review of the available for-sale home inventory shows few available units, significantly below what is considered healthy levels. This, combined with low recent home sales, is further indication of need for additional homeownership product in Humboldt County.
- Rental rates in the county also increased, data reports a 7.7% increase for gross rent costs between five-year surveys, ending at \$841 per month within the 2015-2019 survey.
- Current housing cost increases impacting local and national markets creating affordability barriers. However, wages paid in Humboldt County can afford manufactured homes and rental units for almost all types of jobs. When household

costs are shared with an additional household member, housing affordability is in reach for all housing product types in Humboldt County.

- The number May 2021 home listings (all ownership product) for under \$300,000 is 40 out of 74 total homes listed. Based on 2019 average wages across all industries in Humboldt County, a household with 1.73 workers can afford to purchase a home for \$294,500. Wages for Lithium Nevada and West Coast Salmon Nevada will be significantly higher than overall average wage, with home affordability estimated at \$468,000 for those jobs. Overall, the results from comparing workforce wages, household worker composition, and home prices show that home affordability in Humboldt County is not an impediment to housing absorption.
- A small number of residential developments are planned for the County. In assessing these developments, while referring to the over 1,000 construction jobs projected over the next couple of years, a glaring shortfall has been identified in the multifamily product. Humboldt County's current inventory of existing multifamily units, 9.0% of all residential units, is lacking when compared to other Nevada counties (2015-2019 ACS). Elko County's ratio of multifamily units is 16.2% and increases to 29.7% in Washoe County. For all of Nevada, the ratio of multifamily units to total housing units is 30.2%, and for the U.S., 26.3%.

### ***Housing Demand***

- Based on the direct and indirect employment projections reported by Lithium Nevada and West Coast Salmon Nevada, in addition to lack of vacant inventory, our analysis concludes significant new housing will be needed in Humboldt County in the near future.
- To accommodate projected construction employees by 2023, approximately 504 to 1,008 temporary residential units will be needed depending on the assumption of single or double occupancy. This demand will change by year as construction demand changes.

- Current wages (2020) for construction employees in northern Nevada average \$31.43 per hour. At this wage, an individual can afford a monthly housing cost of \$1,655 (including utilities), based on housing costs at 33% of income. This makes most existing Humboldt County rental products affordable to construction employees.
- For the projected permanent operations employees, an average of 58 new housing units per year will be needed between 2022 and 2027 to satisfy the two major developments.



## INTRODUCTION

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Ekay Economic Consultants, Inc. (EEC), in partnership with the Center for Regional Studies at the University of Nevada, Reno, was retained to provide an overview of Humboldt County's housing market, including supply and demand factors for future growth of the region. The housing needs assessment report is divided into three sections:

- Section I-Humboldt County and Regional Economy and Demographics- includes an overview of historical and projected demographic, employment, and other economic data for Humboldt County. A discussion of employment projections for the Lithium Nevada and West Coast Salmon Nevada development and operations are also included.
- Section II- Humboldt County Residential Market Supply- provides an overview of the current and projected future inventory of residential units in Humboldt County. As the residential market is divided into two primary components (renter-occupied and owner-occupied), the analysis reviews the supply of both components in the County. An overview of home affordability issues in Humboldt County is also analyzed. Property zoned for single-family and future residential developments planned for the County are also mapped and discussed.
- Section III- Humboldt County Residential Market Demand- estimates demand for housing in Humboldt County based on projected population and employment growth discussed in Section I. Demand drivers will include normal growth, plus growth created by Lithium Nevada and West Coast Salmon Nevada operations. This includes estimates of demand for owner and renter-occupied housing based on wages by industry, rent rates and current home prices, and other demographic demand factors.

This section also compares demand estimates to existing supply of housing to determine the need for additional housing in the County. Information is provided for the entire housing market, as well as separately for owner and renter-occupied properties to show future needs for the two types of properties in Humboldt County.

# I. HUMBOLDT COUNTY DEMOGRAPHICS AND EMPLOYMENT

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This section provides an overview of historical and projected demographic, employment, and other economic data for Humboldt County. A discussion of employment projections for the Lithium Nevada and West Coast Salmon Nevada development and operations are also included.

## POPULATION TRENDS

Table 1 shows historical population growth for Humboldt County, as estimated by the U.S. Census Bureau. The table shows decreasing growth in the county between 2001 and 2003, which correlates with the “dot-com” recession and flat gold prices (below \$400 per ounce). Beginning in 2004, Humboldt County experienced robust population growth through 2010, resulting in an average annual population increase of 1.8% between 2003 and 2010. This period of population growth trends with gold prices that eventually reached \$1,400 per ounce in 2010. Post 2010, while the nation continued to struggle with the effects of the Great Recession, Humboldt County population continued to increase at robust rates through 2013, as gold prices remained above \$1,500 per ounce. As gold prices crashed to almost \$1,000 per ounce in 2016, Humboldt County population also declined by 635 persons between its peak in 2013 and 2017. Humboldt County population returned to positive growth in 2018 and added 131 persons in 2020 during the pandemic’s grip on industries and households. During the recent COVID-19 recession, gold prices surpassed \$2,000 per ounce.

It is important to note the strong correlation between Humboldt County population and gold prices. This is due to the mining industry’s large presence in the region and the significant number of residents who work in the industry. However, future industries that propose to begin construction and operations in the coming years (discussed in following sections) will have a different impact on Humboldt County. These proposed industries will not be “chained” to gold prices and will operate on a more static and permanent basis.

When these industries reach fruition, population growth is expected to continue and become less sensitive to changes in gold prices.

**Table 1. Historical and Projected Population-Humboldt County<sup>1</sup>**

Year	Humboldt County			
	Population	Annual Change	% Change	10-Year Annual Average Rate
2000	15,868			
2001	15,211	-657	-4.1%	0.5%
2002	14,776	-435	-2.9%	
2003	14,630	-146	-1.0%	
2004	14,912	282	1.9%	
2005	15,046	134	0.9%	
2006	15,420	374	2.5%	
2007	15,658	238	1.5%	
2008	15,958	300	1.9%	0.2%
2009	16,290	332	2.1%	
2010	16,584	294	1.8%	
2011	16,639	55	0.3%	
2012	17,071	432	2.6%	
2013	17,354	283	1.7%	
2014	17,215	-139	-0.8%	
2015	17,017	-198	-1.2%	
2016	16,795	-222	-1.3%	
2017	16,719	-76	-0.5%	
2018	16,778	59	0.4%	
2019	16,831	53	0.3%	
2020	16,962	131	0.8%	

## POPULATION CHARACTERISTICS

Tables 2-5 summarize demographic and important economic characteristics for Humboldt County. Table 2 shows age and gender distributions for Humboldt County. The table shows the county is slowly aging, with a median age of 35.3 in 2014 increasing to 36.0 by 2019. The county's median age in 2019 remains below the US median age during the same period of 38.1 years.

<sup>1</sup> U.S. Census Bureau, Population Estimates Program (PEP).

**Table 2. Selected Demographic Characteristics-Humboldt County and the US<sup>2</sup>**

Demographics	Humboldt County	United States
<b>Median Age</b>		
2019	36.0	38.1
2014	35.3	37.4
<b>2019 Age Distribution</b>		
Under 5 years	7.4%	6.1%
5 to 9 years	5.9%	6.2%
10 to 14 years	9.5%	6.4%
15 to 19 years	6.1%	6.5%
20 to 24 years	5.1%	6.8%
25 to 29 years	6.4%	7.1%
30 to 34 years	8.3%	6.8%
35 to 39 years	5.6%	6.5%
40 to 44 years	7.0%	6.1%
45 to 49 years	6.2%	6.4%
50 to 54 years	6.1%	6.6%
55 to 59 years	6.8%	6.7%
60 to 64 years	6.2%	6.2%
65 to 69 years	5.8%	5.2%
70 to 74 years	3.1%	3.9%
75 to 79 years	2.3%	2.7%
80 to 84 years	1.5%	1.9%
85 years and over	0.8%	1.9%
<18 Years	27.1%	22.6%
>18 Years	72.9%	77.4%
>65 Years	13.4%	15.6%
<b>2019 Gender Distribution</b>		
Male	51.6%	49.2%
Female	48.4%	50.8%

The table shows the county has a higher percent of residents under 18 years of age, compared to the national average (27.1% versus 22.6%) and a lower number of older persons, aged 65 and older (13.4% versus 15.6%). The county also has a higher ratio of males than the national average (51.6% versus 49.2%).

<sup>2</sup> U.S. Census Bureau, 2015-2019 and 2010-2014 American Community Survey 5-Year Estimates.

Table 3 shows household characteristics for Humboldt County and the US. Humboldt County's average household size of 2.56 in 2019 is smaller than the national average of 2.62, indicating fewer people living in each housing unit. The household size in the county was significantly higher in 2014, declining by 0.2 persons over the five-year period. Humboldt County's average family size at 3.11 persons per unit in 2019 is also smaller than the national average of 3.23. This ratio also declined between 2014 and 2019 for Humboldt County, while it did not change nationally. This also indicates fewer persons, whether related (family), or not per housing unit.

**Table 3. Household Characteristics-Humboldt County and the US<sup>3</sup>**

Households	Humboldt County	United States
<b># of Households</b>		
2019	6,500	120,756,048
2014	6,092	116,211,092
<b>Average Household Size</b>		
2019	2.56	2.62
2014	2.76	2.63
<b># of Families</b>		
2019	4,305	79,114,031
2014	4,056	76,958,064
<b>Average Family Size</b>		
2019	3.11	3.23
2014	3.43	3.23
<b>% of Households w/ Children (&gt;18 Years)</b>		
2019	35.2%	31.0%
2014	34.3%	32.6%
<b>% of Households w/ At Least One Resident 60 Years and Over</b>		
2019	35.9%	39.5%
2014	32.6%	35.6%

As supported by Table 2 data, Humboldt County's ratio of households with children (under 18 years) increased between 2014 and 2019 and remains higher than national data. The ratio of households with older residents also increased in Humboldt County between 2014 and 2019, but remains below national levels.

<sup>3</sup> U.S. Census Bureau, 2015-2019 and 2010-2014 American Community Survey 5-Year Estimates.

Table 4 shows housing occupancy characteristics for Humboldt County and the US. The table shows almost three-fourth of all housing units in Humboldt County are owned (owner occupied) units. This is significantly higher than the national average of approximately two-thirds of all units. The owner-occupied ratio in both the US and Humboldt County declined slightly between 2014 and 2019.

**Table 4. Housing Occupancy Characteristics-Humboldt County and the US<sup>4</sup>**

Occupancy	Humboldt County	United States
<b>Owner Occupied Housing</b>		
2019	71.4%	64.0%
2014	72.9%	64.4%
<b>Renter Occupied Housing</b>		
2019	28.6%	36.0%
2014	27.1%	35.6%
<b>2019 Married Couple Family Household Occupancy</b>		
Owner Occupied	86.8%	79.8%
Renter Occupied	13.2%	20.2%
<b>2019 Male Householder (No Wife) Occupancy</b>		
Owner Occupied	41.0%	54.1%
Renter Occupied	59.0%	45.9%
<b>2019 Female Householder (No Husband) Occupancy</b>		
Owner Occupied	40.5%	46.2%
Renter Occupied	59.5%	53.8%
<b>2019 Non-Family Household Occupancy</b>		
Owner Occupied	58.2%	49.7%
Renter Occupied	41.8%	50.3%

Table 4 provides additional details regarding occupancy statistics for various household categories. Married couple households in Humboldt County had a higher ratio of owner occupancy, with 86.8% of these households living in owner-occupied housing. Non-family households had a higher ratio of owner occupancy than renters. Single householders (male and female), on the other hand had a higher ratio of renter-occupied homes than owner-occupied homes.

Table 5 shows income characteristics for Humboldt County and the US. Income levels are provided for different measurement levels (mean and median) and measurement types

<sup>4</sup> U.S. Census Bureau, 2015-2019 and 2010-2014 American Community Survey 5-Year Estimates.

(household, family, and per capita) to provide a broader base of comparison. The table shows Humboldt County in 2019, and 2014, had higher levels of median income, both household and family, than the national average. Mean incomes (both household and family) are higher at the national level than in Humboldt County. The per capita income in 2019 was slightly lower in Humboldt County compared to national levels. This is likely because the county has a higher number of children who do not generate income, diluting this income measure compared to national levels.

**Table 5. Income Characteristics-Humboldt County and the US<sup>5</sup>**

Income	Humboldt County	United States
<b>Median Household Income</b>		
2019	\$ 67,756	\$ 62,843
2014	\$ 62,632	\$ 53,482
<b>Mean Household Income</b>		
2019	\$ 84,751	\$ 88,607
2014	\$ 71,421	\$ 74,596
<b>Median Family Income</b>		
2019	\$ 83,256	\$ 77,263
2014	\$ 74,248	\$ 65,443
<b>Mean Family Income</b>		
2019	\$ 88,501	\$ 103,863
2014	\$ 81,003	\$ 86,963
<b>Per Capita Income</b>		
2019	\$ 33,362	\$ 34,103
2014	\$ 26,547	\$ 28,555

The table also shows all income measures in Humboldt County and the US increased between 2014 and 2019.

Table 6 reports total mobility and age and income characteristics for persons moving to or within Humboldt County. US data is not included as it shows international data only and not county-to-county data, which makes it difficult to compare to Humboldt County data.

These data show movements for all county residents within the past 12 months. The table shows 1,518 persons moved to Humboldt County from outside the county. Of these, 733

<sup>5</sup> U.S. Census Bureau, 2015-2019 and 2010-2014 American Community Survey 5-Year Estimates.

residents moved from outside the state of Nevada, and 51 from abroad. Median age of those moving to Humboldt County from another county in Nevada in 2019 was 25.1, from outside of Nevada, 30.3 years, with those moving from abroad, 39.3 years.

**Table 6. Mobility Characteristics-Humboldt County and the US<sup>6</sup>**

Mobility	Humboldt County	Mobility	Humboldt County
<b>2019 Mobility of Population</b>		<b>2019 Moving from Outside County-Income (Aged 15+)</b>	
Same House	13,437	No income	13.5%
Moved w/in Same County	1,516	\$1 to \$9,999 or loss	18.9%
Moved from Different NV County	734	\$10,000 to \$14,999	9.4%
Moved from Different State	733	\$15,000 to \$24,999	8.7%
Moved from Abroad	51	\$25,000 to \$34,999	6.0%
<b>2019 Median Age of Mobile Residents</b>		\$35,000 to \$49,999	2.4%
Same House	41.4	\$50,000 to \$64,999	2.2%
Moved w/in Same County	27.0	\$65,000 to \$74,999	1.9%
Moved from Different NV County	25.1	\$75,000 or more	36.9%
Moved from Different State	30.3	<b>2019 Median Individual Income of Mobile Residents</b>	
Moved from Abroad	39.3	Same House	\$ 36,243
<b>2019 Education-Moving from Outside County (Aged 25+)</b>		Moved w/in Same County	\$ 20,586
Less than high school graduate	22.6%	Moved from Different NV County	\$ 29,911
High school graduate (includes equivalency)	26.0%	Moved from Different State	\$ -
Some college or associate's degree	30.9%	Moved from Abroad	\$ -
Bachelor's degree	19.4%		
Graduate or professional degree	1.0%		

Table 6 also shows mobility information by income. Individuals aged 15 and over moving to Humboldt County from outside the county had a median individual income of \$29,911. No income information for residents moving from another state or from abroad was provided by the US Census Bureau. This is lower than the per capita income for existing residents in 2019 shown in Table 5 of \$33,362.

Finally, the largest percentage of persons moving to Humboldt County from outside the county had some college or an associate degree (30.9%) followed by those with a high school education (26.0%), and less than high school education (22.6%).

<sup>6</sup> U.S. Census Bureau, 2015-2019 and 2010-2014 American Community Survey 5-Year Estimates.



## EMPLOYMENT TRENDS

Figure 1 shows historical employment data for Humboldt County. The figure shows employment and labor force for the county fluctuated over the period shown (2000 to partial year 2021), with an upward growth trend. Like most areas, Humboldt County lost some employment during the COVID-19 pandemic in 2020, however, by March 2021, the county's employment levels significantly exceeded pre-2020 levels.

Humboldt County's 2019 unemployment of 2.9% was below natural unemployment levels (typically ranging from 4 to 5%), with 2020 pandemic unemployment levels reaching 4.9%. The 2020 unemployment in Humboldt County was significantly below unemployment levels across the State, which reached into double-digits for much of 2020. By March 2021, Humboldt County unemployment rates reached 3.5%, again below natural employment levels. As of the second quarter 2021, the national long-term natural rate of unemployment is expected to be 4.5%, declining to 4.3% by the second quarter 2031.<sup>7</sup>

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<sup>7</sup> FRED (Federal Reserve Economic Data), Federal Reserve Bank of St. Louis.

**Figure 1. Annual Employment, Labor Force, and Unemployment Trends-Humboldt County<sup>8</sup>**



\*2021 data as of March 2021

Table 7 shows changes in the number of employment establishments, employees, and wages for Humboldt County in five-year periods between 2010, 2015, and 2020. These data are shown for all major industry sectors in the county.

<sup>8</sup> Nevada Department of Employment, Training, and Rehabilitation, LAUS.

**Table 7. Humboldt County Firms, Employment, and Wages by Industry<sup>9</sup>**

<b>Summary</b>	<b>2010</b>		<b>2015</b>		<b>2020</b>	
Total Establishments	506		535		489	
Total Employment	7,746		7,854		7,528	
Ave. Weekly Wage	\$938		\$1,055		\$1,198	
Total Annual Payroll	\$377,818,896		\$430,870,440		\$432,496,046	
<b>Establishments</b>	Count	% of Total	Count	% of Total	Count	% of Total
11 - Agriculture, Forestry, Fishing & Hunting	32	6.3%	39	7.3%	33	6.6%
21 - Mining, Quarrying, and Oil and Gas Extraction	30	5.9%	33	6.2%	21	4.2%
22 - Utilities	-	0.0%	5	0.9%	6	1.2%
23 - Construction	50	9.9%	52	9.7%	35	7.2%
31-33 Manufacturing	7	1.4%	9	1.7%	5	1.1%
42 - Wholesale Trade	23	4.5%	27	5.0%	25	5.1%
44-45 Retail Trade	62	12.3%	76	14.2%	71	14.5%
48-49 Transportation and Warehousing	21	4.2%	27	5.0%	29	5.8%
51 - Information	9	1.8%	7	1.3%	11	2.1%
52 - Finance and Insurance	14	2.8%	13	2.4%	12	2.5%
53 - Real Estate and Rental and Leasing	9	1.8%	11	2.1%	14	2.9%
54 - Professional and Technical Services	27	5.3%	26	4.9%	25	5.1%
56 - Administrative and Waste Services	21	4.2%	23	4.3%	24	5.0%
62 - Health Care and Social Assistance	36	7.1%	41	7.7%	37	7.5%
71 - Arts, Entertainment, and Recreation	12	2.4%	14	2.6%	16	3.2%
72 - Accommodation and Food Services	62	12.3%	60	11.2%	56	11.5%
81 - Other Services (except Public Administration)	34	6.7%	36	6.7%	28	5.8%
92 - Public Administration	29	5.7%	28	5.2%	27	5.5%
99 - Unclassified	28	5.5%	8	1.5%	15	3.1%
<b>Employment</b>	Count	% of Total	Count	% of Total	Count	% of Total
11 - Agriculture, Forestry, Fishing & Hunting	307	4.0%	340	4.3%	315	4.2%
21 - Mining, Quarrying, and Oil and Gas Extraction	1,765	22.8%	1,926	24.5%	1,846	24.5%
22 - Utilities	-	0.0%	152	1.9%	126	1.7%
23 - Construction	518	6.7%	327	4.2%	299	4.0%
31-33 Manufacturing	118	1.5%	119	1.5%	141	1.9%
42 - Wholesale Trade	119	1.5%	154	2.0%	155	2.1%
44-45 Retail Trade	571	7.4%	926	11.8%	936	12.4%
48-49 Transportation and Warehousing	132	1.7%	212	2.7%	259	3.4%
51 - Information	78	1.0%	64	0.8%	58	0.8%
52 - Finance and Insurance	66	0.9%	63	0.8%	51	0.7%
53 - Real Estate and Rental and Leasing	34	0.4%	33	0.4%	60	0.8%
54 - Professional and Technical Services	99	1.3%	87	1.1%	71	0.9%
56 - Administrative and Waste Services	314	4.1%	283	3.6%	188	2.5%
62 - Health Care and Social Assistance	557	7.2%	551	7.0%	620	8.2%
71 - Arts, Entertainment, and Recreation	100	1.3%	108	1.4%	93	1.2%
72 - Accommodation and Food Services	967	12.5%	980	12.5%	835	11.1%
81 - Other Services (except Public Administration)	159	2.1%	185	2.4%	165	2.2%
92 - Public Administration	602	7.8%	590	7.5%	573	7.6%
99 - Unclassified	1,240	16.0%	754	9.6%	739	9.8%

<sup>9</sup> Nevada Department of Employment, Training, and Rehabilitation, QCEW.

**Table 7. Humboldt County Firms, Employment, and Wages by Industry (continued)**

Summary	2010		2015		2020	
	Amount	% of Average	Amount	% of Average	Amount	% of Average
<i>Average Weekly Wages</i>						
11 - Agriculture, Forestry, Fishing & Hunting	\$ 556	59.3%	\$ 715	67.8%	\$ 797	66.5%
21 - Mining, Quarrying, and Oil and Gas Extraction	\$ 1,611	171.7%	\$ 1,910	181.0%	\$ 2,102	175.4%
22 - Utilities	\$ -	0.0%	\$ 2,113	200.3%	\$ 2,361	197.1%
23 - Construction	\$ 1,568	167.2%	\$ 1,116	105.8%	\$ 1,209	100.9%
31-33 Manufacturing	\$ 1,126	120.0%	\$ 1,186	112.5%	\$ 1,575	131.5%
42 - Wholesale Trade	\$ 1,113	118.7%	\$ 1,356	128.5%	\$ 1,526	127.4%
44-45 Retail Trade	\$ 497	53.0%	\$ 520	49.3%	\$ 605	50.5%
48-49 Transportation and Warehousing	\$ 941	100.3%	\$ 1,001	94.9%	\$ 1,075	89.7%
51 - Information	\$ 549	58.5%	\$ 717	68.0%	\$ 766	63.9%
52 - Finance and Insurance	\$ 642	68.4%	\$ 686	65.0%	\$ 885	73.8%
53 - Real Estate and Rental and Leasing	\$ 371	39.6%	\$ 503	47.7%	\$ 525	43.9%
54 - Professional and Technical Services	\$ 910	97.0%	\$ 990	93.8%	\$ 736	61.4%
56 - Administrative and Waste Services	\$ 758	80.8%	\$ 850	80.6%	\$ 688	57.4%
62 - Health Care and Social Assistance	\$ 679	72.4%	\$ 852	80.8%	\$ 1,083	90.4%
71 - Arts, Entertainment, and Recreation	\$ 373	39.8%	\$ 385	36.5%	\$ 353	29.5%
72 - Accommodation and Food Services	\$ 317	33.8%	\$ 348	33.0%	\$ 393	32.8%
81 - Other Services (except Public Administration)	\$ 780	83.2%	\$ 1,012	95.9%	\$ 1,177	98.2%
92 - Public Administration	\$ 915	97.5%	\$ 1,008	95.5%	\$ 1,197	99.9%
99 - Unclassified	\$ 761	81.2%	\$ 753	71.4%	\$ 1,347	112.4%

The number of establishments in the county increased between 2010 and 2015 by 5.7%, employment increased by 1.4%, wages by 12.5%, and total payroll by 14.0%. Employment and number of establishments fell between 2015 and 2020 due to the impact of the COVID pandemic, which was less severe in Humboldt County than the rest of the state. County's number of establishments declined by 8.6% between 2015 and pandemic levels and employment declined by 4.2%. However, wages increased during this period by 13.6%, with total payroll increasing by 0.4%.

Table 7 also shows despite losing approximately 80 employees between 2015 and 2020, the Mining, Quarrying, and Oil and Gas Extraction industry in Humboldt County remains the biggest employer, with 24.5% of all county employees. Retail trade is the second biggest employers at 12.4% in 2020, followed by Accommodation and Food Services at 11.1%.

The industry with the highest wages in Humboldt County in 2020 was the Utilities industry with a weekly wage at almost twice than the countywide average wage. This is followed by the Mining, Quarrying, and Oil and Gas Extraction industry at 1.75 times greater than the average wage. Other high wage industries include Manufacturing at 1.32 times the average

wage and Wholesale Trade at 1.27 times. Unlike Mining, these industries, including Utilities, make up a small portion of the County's employment.

## Employment Projections

In its "Housing Market Report," issued in the spring of 2021, the Humboldt Development Authority projects over 1,000 new jobs across the next five years that will impact housing in Humboldt County. This information is based on surveys of the area's existing and potential employers and their expectations for the next five years.<sup>10</sup>

The significant new job expectations are largely driven by two proposed developments, Lithium Nevada and West Coast Salmon Nevada.

Lithium Nevada is preparing to invest \$1.7 billion into the development of a "world-class lithium project" near Orovada (Humboldt County) that will feature a first-of-its-kind processing plant in the state.<sup>1112</sup> According to Lithium Nevada representatives, construction of the project will begin January 2022. Construction labor is projected to start with 65 employees and eventually ramp up to 260 construction employees by end of 2022. The second year of construction in 2023 will also include commissioning of the mine and is expected to employ between 310 and 620 construction workers. Year three (2024) of construction and commissioning will involve between 110 and 585 construction workers before operations begin in 2025. Lithium Nevada projects to ramp up operations in 2025, beginning with 126 employees and reaching a maximum of 225 employees sometime during the year. Year two of operations (2026) is when the mine expects to reach full operational employment of 300 permanent jobs.

West Coast Salmon Nevada is an industrial-scale, land-based Atlantic salmon production facility planned for north Pershing County, located approximately 15 miles from Winnemucca (Humboldt County). Although there are housing options in Pershing County's

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<sup>10</sup> "Housing Market Report Spring 2021" Humboldt Development Authority.

<sup>11</sup> Featherston, Suzanne. "Lithium Nevada to invest \$1B-plus in Humboldt County mine." Elko Daily Free Press. October 23, 2018.

<sup>12</sup> Zawadzki, Alexi. "Lithium Nevada Corp's CEO explains the benefits of the Thacker Pass Lithium Project." Sierra Nevada Ally. April 28, 2021

largest community, Lovelock is approximately 40 miles south of the salmon farm facility and lacks significant amenities to fully support households.

The Humboldt Sun reported that construction will begin in 2022, followed by the first salmon harvest in the second half of 2024. The article also reported that the project expects to employ approximately 500 to 600 construction workers and 150 to 200 permanent employees. In addition, based on its success, the project may expand in the future, generating up to 400 permanent employees.<sup>13</sup>

Recent information shared by West Coast Salmon Nevada representatives confirmed the projected construction employment of 500, although the project is still in the conceptual design stage. Representatives also confirmed that operations will begin in 2022 with a staff of 75 employees and increase to 100 employees by end of 2023. Future phases will add another 100 employees by end of 2025, and 100 more employees by 2027. Total operating employment will be 300 upon completion of all project phases.

The proposed developments, upon construction and transition to operations, will also generate indirect and induced employment impacts. Additional employees will be needed by companies that provide goods and services to the new developments to meet the increase in demand (indirect impacts), and the spending of new household income from new employees will generate the need for even more employees at grocery stores, auto supply establishments, restaurants, etc. (induced impacts). In addition to new employment directly and indirectly generated by the two developments, organic employment growth will continue to occur within the county as new businesses open, industries expand, and number of households increase.

Table 8 provides a summary of temporary construction and permanent operating employment projections for the two major new projects and the new employment generated by the new developments for goods and services over the next six years. The analysis does not include this additional organic growth to avoid double-counting with the estimated impacts of the two major developments and their indirect and induced impacts.

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<sup>13</sup> "Norwegian company secures financing for industrial-scale salmon farm in rural Nevada." Humboldt Sun, October 14, 2020

The table shows that construction jobs are projected to peak in 2023 with 1,368 temporary employees, and permanent jobs are expected to peak in 2027 with 991 employees. It is important to note the employment swings through the six years, with employment quickly ramping up over the next two years, then decreasing to less than half of the 2023 total by 2025.

**Table 8. Projected Employees 2022 to 2027-Humboldt County**

	2022	2023	2024	2025	2026	2027
<b>Temporary Employment</b>						
Lithium Nevada Construction	260	620	585			
West Coast Salmon Nevada Construction	250	500	500	500	500	500
Indirect Employment Impact	113	248	241	111	111	111
<b>Total Temporary Employment</b>	<b>623</b>	<b>1,368</b>	<b>1,326</b>	<b>611</b>	<b>611</b>	<b>611</b>
<b>Permanent Employment</b>						
Lithium Nevada Operations				225	300	300
West Coast Salmon Nevada Operations	75	100	150	200	250	300
Indirect Employment Impact	44	59	89	278	361	391
<b>Total Permanent Employment</b>	<b>119</b>	<b>159</b>	<b>239</b>	<b>703</b>	<b>911</b>	<b>991</b>
<b>Total Employment</b>	<b>742</b>	<b>1,528</b>	<b>1,564</b>	<b>1,314</b>	<b>1,522</b>	<b>1,601</b>

Employment totals are accumulative

Indirect Employment Impacts are calculated using Humboldt County industry multipliers provided by IMPLAN Group LLC

## II. HUMBOLDT COUNTY RESIDENTIAL MARKET SUPPLY

### EXISTING HOUSING SUPPLY

#### Overview

Existing housing supply in Humboldt County (including City of Winnemucca) is based on parcel records provided by the Humboldt County Assessor's Office. Table 9 shows the number of existing housing units in Humboldt County, by year of their construction (if available). The table shows a total of 7,143 dwelling units in Humboldt County as of the date of this report, on over 24,940 acres of land.

**Table 9. Humboldt County Existing Housing Inventory by Type and Year Built<sup>14,15</sup>**

Year	SF Detached	SF Attached	Multi-Family	Manufactured	Total Units
NA	15	-	216	38	269
<1960	637	7	609	44	1,297
1960-69	167	-	57	62	286
1970-79	429	-	143	368	940
1980-89	441	-	198	489	1,128
1990-99	439	-	262	1,158	1,859
2000-09	309	-	101	283	693
2010-19	238	40	131	219	628
2020	6	-	-	37	43
<b>Total</b>	<b>2,681</b>	<b>47</b>	<b>1,717</b>	<b>2,698</b>	<b>7,143</b>
Average Year Built	1979	2008	1968	1993	1985

The table shows approximately 2,681 single-family detached units (SFD) in Humboldt County as of the date of this report, with an average year of construction of 1979. The majority of these units (79%) were added before 2000. Only 244 SFD units were added

<sup>14</sup> SF-Single-Family. Data from Humboldt County Assessor's Office, analysis by CRS. Analysis includes all dwelling units corresponding to land uses 200-201/280-290 = Detached Single-Family Units, 210-211 = Attached Single-Family, 220-236 = Manufactured Homes, 300-390 = Multifamily.

<sup>15</sup> Unit counts are shown for residential land uses only. The table does not include residential units included in primarily commercial, office, agricultural, or other non-residential land uses. These properties are typically restricted and occupied, and will not provide significant supply of housing for new area residents.



since 2010. SFD units are typically stick- (site-) built units, constructed directly on the parcel. By definition, these units are stand-alone units, typically occupied by a single household, with occupation either by owner or rented by the owner to a third party.

In addition to single-family detached units, Humboldt County includes 47 single-family attached (SFA) units. These units are similar to their detached counterparts, in that they are built on site and occupied by owner or rented by owner to a third party. The main difference is that SFA units are attached to another unit or multiple units. This includes condominium and townhome properties. After seven SFA units were constructed in 1935 no additional SFA units were added until 2013, when Frontier Village completed 40 units. No SFA units have been built since 2013.

Multifamily (MF) units are also typically site-built attached units, but unlike SFA units, these units are typically owned by investors as a rental property, rather than as owner-occupied units. MF units are typically apartment buildings of various sizes. There were 1,717 MF units in Humboldt County at the time of this report, with an average construction year of 1968. The largest number of MF units (86%) were constructed before 2000 and only 232 MF units have been added since 2000.

Finally, Humboldt County contains 2,698 manufactured home (MH) units. Unlike SFD, SFA, and MF units, MH units are typically constructed offsite and moved to the parcel. Manufactured homes can be considered real or personal property for property tax purposes, with the difference based on ownership of the land where the unit is located, unit foundation, and conversion certification.

MH units can be occupied by owners, rented by owners to third parties, or owned and rented by investors. The average year of MH units is 1993 due to 43% of the units being added in the 1990s. The manufactured housing product leads all other residential types in the number of units constructed and age of construction (after excluding the low number of attached single-family units).

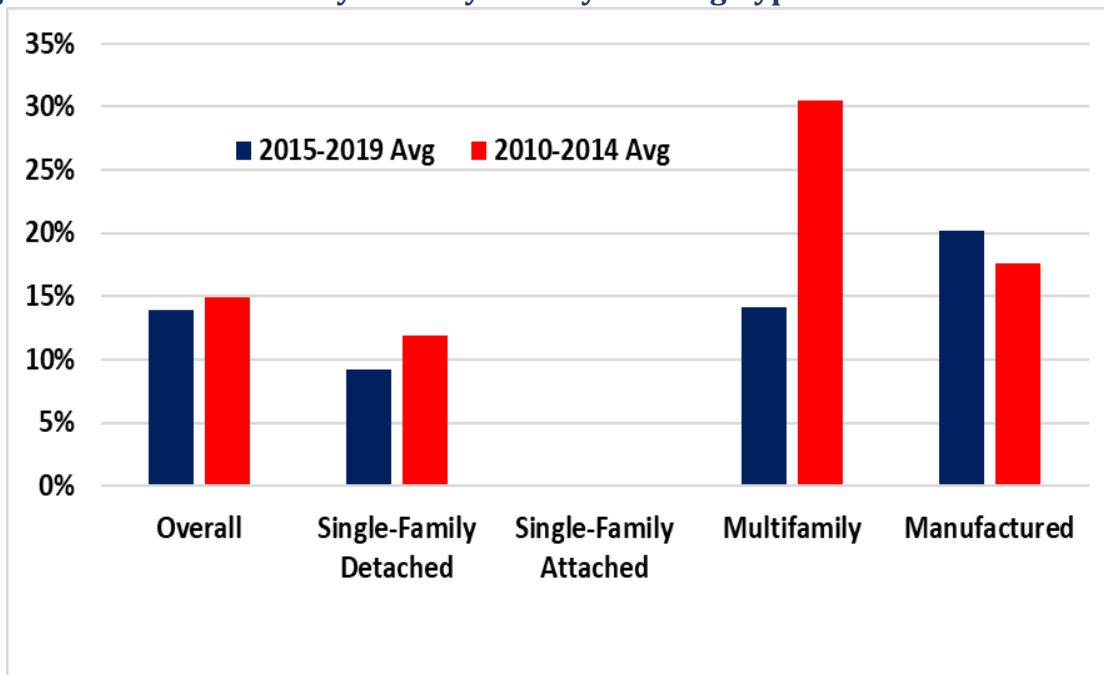
Overall, Table 9 shows significant growth in the County (55%) in terms of construction of residential units between 1970 and 1999, adding an average of 131 new dwelling units per

year. ***Between 2000 and 2020 only 65 new dwelling units were added per year, which is almost exactly half the rate of 1970-1999.***

High residential construction levels between 1990 and early 2000s corresponds to high levels of population growth in the State of Nevada and in Northern Nevada. Slow growth in the number of new units in the past ten years is consistent with the Great Recession and the general slow level of post-recession construction ramp-up reflected across the region.

Occupancy/vacancy information for any area is difficult to determine due to the dynamic nature of residential real estate, household mobility, and data collection/survey costs. American Community Survey (ACS) provides data regarding vacancy rates in Humboldt County, including vacancy rates by occupancy type and reasons for vacancy. Figure 2 shows historical vacancy rates for Humboldt County by housing type.

**Figure 2. Humboldt County Vacancy Rate by Housing Type<sup>16</sup>**



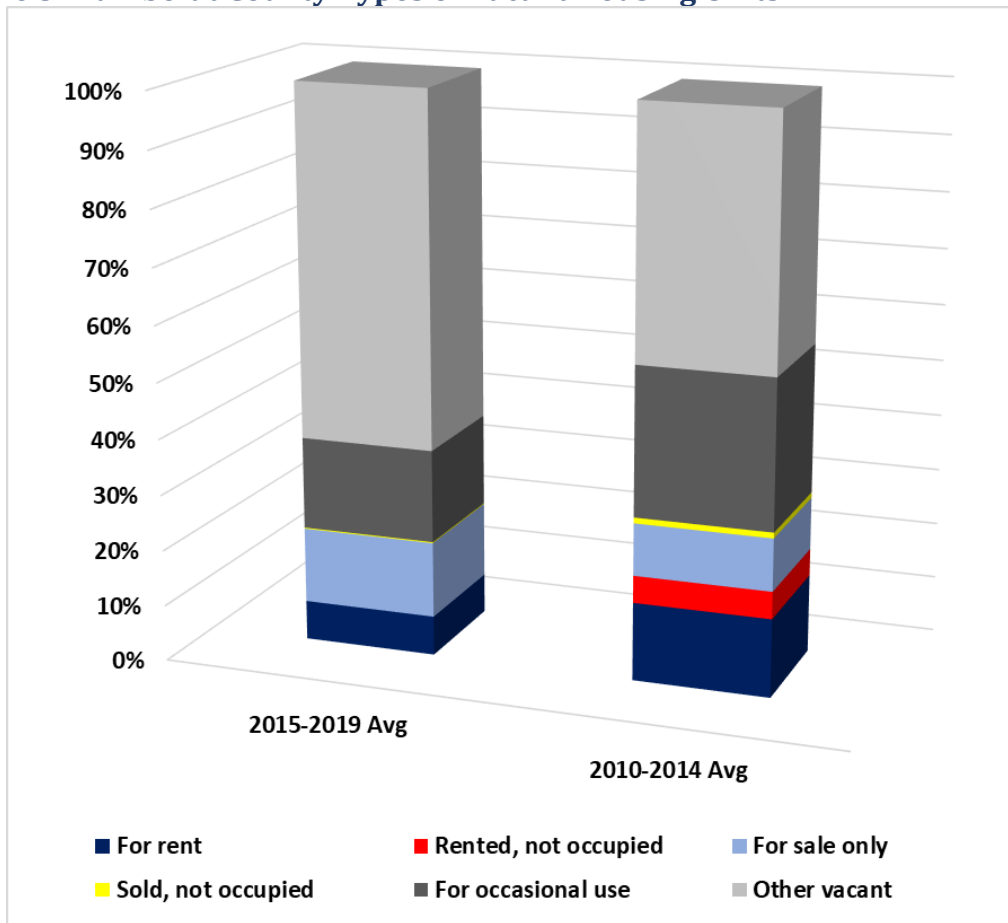
Vacancy rate for the overall residential market in Humboldt County based on the latest data available (2015-2019 average) was 13.9%. Single-family attached (SFA) units had the lowest vacancy rate at 0%, followed by single-family detached (SFD) units at 9.2%, multifamily (MF) units at 14.2%, and manufactured housing (MH) at 20.2%. The figure

<sup>16</sup> U.S. Census Bureau, American Community Survey, 5-Year Estimates. Data for Humboldt County.

also shows a decrease in the vacancy rates for all categories excluding manufactured housing since the ACS 2010-2014 averages.

Figure 3 shows the historical change in the reasons for vacancy for vacant housing units in Humboldt County.

**Figure 3. Humboldt County Types of Vacant Housing Units<sup>17</sup>**



Vacancy reasons include For Rent; Rented, Not Occupied; For Sale Only; Sold, Not Occupied; For Seasonal/Occasional use; and Other Vacant units.<sup>18</sup> The figure shows that the largest

<sup>17</sup> U.S. Census Bureau, American Community Survey, 5-Year Estimates. Data for Humboldt County.

<sup>18</sup> For Rent - These are vacant units offered "for rent," and vacant units offered either "for rent" or "for sale." Rented, Not Occupied - These are vacant units rented but not yet occupied, including units where money has been paid or agreed upon, but the renter has not yet moved in.

For Sale Only - These are vacant units being offered "for sale only," including units in cooperatives and condominium projects if the individual units are offered "for sale only." If units are offered either "for rent" or "for sale" they are included in the "for rent" classification.

Sold, Not Occupied - These are vacant units sold but not yet occupied, including units that have been sold recently, but the new owner has not yet moved in.

reason for vacancy in Humboldt County is Other Vacant. According to ACS, Other Vacant properties are units that do not fall under any other provided category. For example, this category includes units held for occupancy by a caretaker or janitor, and units held for personal reasons of the owner. Other Vacant units made up 62.8% of vacant units by 2019 (ACS 2015-2019 data), increasing from 44.3% in 2014 (ACS 2010-2014 data). These units are typically not considered to be available units, but may be released into the market should prices increase sufficiently to entice owners to rent or sell.

The second largest vacant category is For Occasional Use properties, making up 16.4% of vacant units in 2019, up from 26.6% of vacant units in 2014. For Sale Only properties are the third largest category of vacant properties, making up 13.5% of these properties in 2019, up slightly from 9.3% in 2014. The two other vacancy categories, Rented, Not Occupied and Sold, Not Occupied are not considered available units as these units are typically vacant due to timing of new owners/renters moving into the units. Finally, the For Occasional Use units are also not considered units available to accommodate growth unless, similar to Other Vacant units, the economic benefit of selling/leasing these units outweighs the utility of keeping these units out of the market.

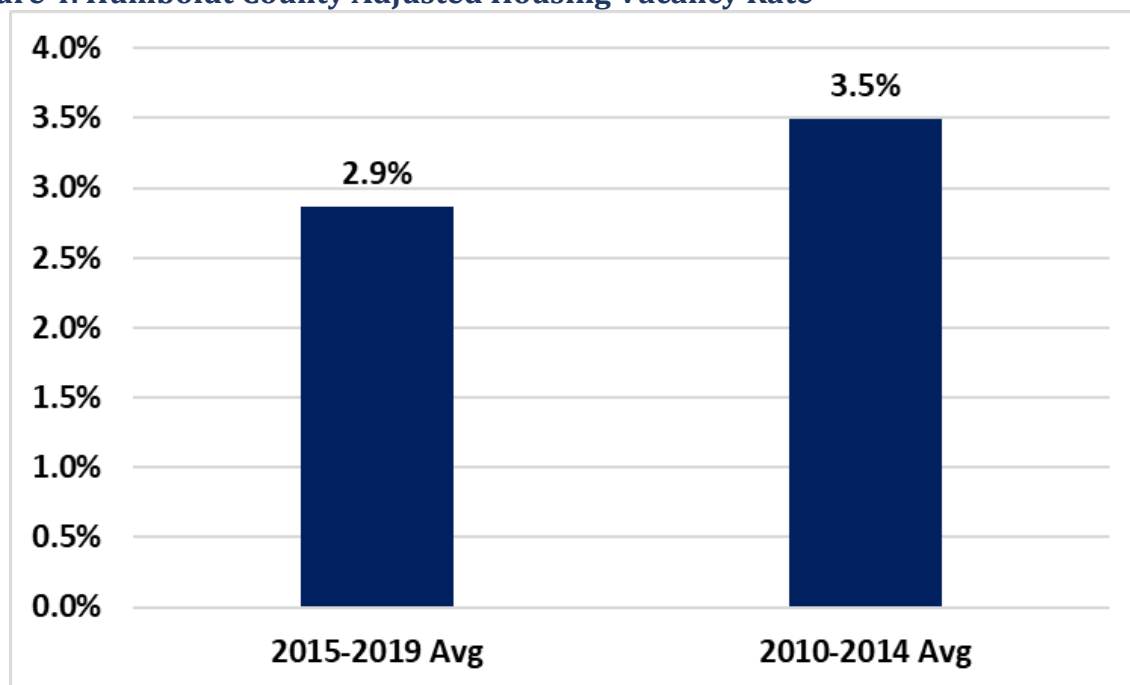
Figure 4 adjusts Humboldt County's historical vacancy rate to include only units available for rent and sale, as discussed above. The figure shows county adjusted housing vacancy rate declined from the 2010-2014 average of 3.5% to the 2015-2019 average of 2.9%. This is significantly lower than the overall vacancy rate (including non-market properties) of 13.9% in 2015-2019. ***This indicates the housing market has few existing units available for rent and/or sale in order to accommodate future growth in the county and will require new construction to accommodate this future growth.***

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For Seasonal, Recreational, or Occasional Use - These are vacant units used or intended for use only in certain seasons or for weekends or other occasional use throughout the year. Seasonal units include those used for summer or winter sports or recreation, such as beach cottages and hunting cabins. Seasonal units also may include quarters for such migrant workers, herders and loggers. Interval ownership units, sometimes called shared-ownership or timesharing condominiums, also are included here.

Other Vacant - If a vacant unit does not fall into any of the categories specified above, it is classified as "Other vacant." For example, this category includes units held for occupancy by a caretaker or janitor, and units held for personal reasons of the owner.

**Figure 4. Humboldt County Adjusted Housing Vacancy Rate<sup>19</sup>**



**Owner-Occupied Market**

Table 10 shows data for the annual number of sales and median price of new and existing single-family (detached), attached single-family, and manufactured homes in Humboldt Counties since 2011.

**Table 10. Humboldt County Single-Family and Manufactured Housing Quarterly Sales and Median Price<sup>20</sup>**

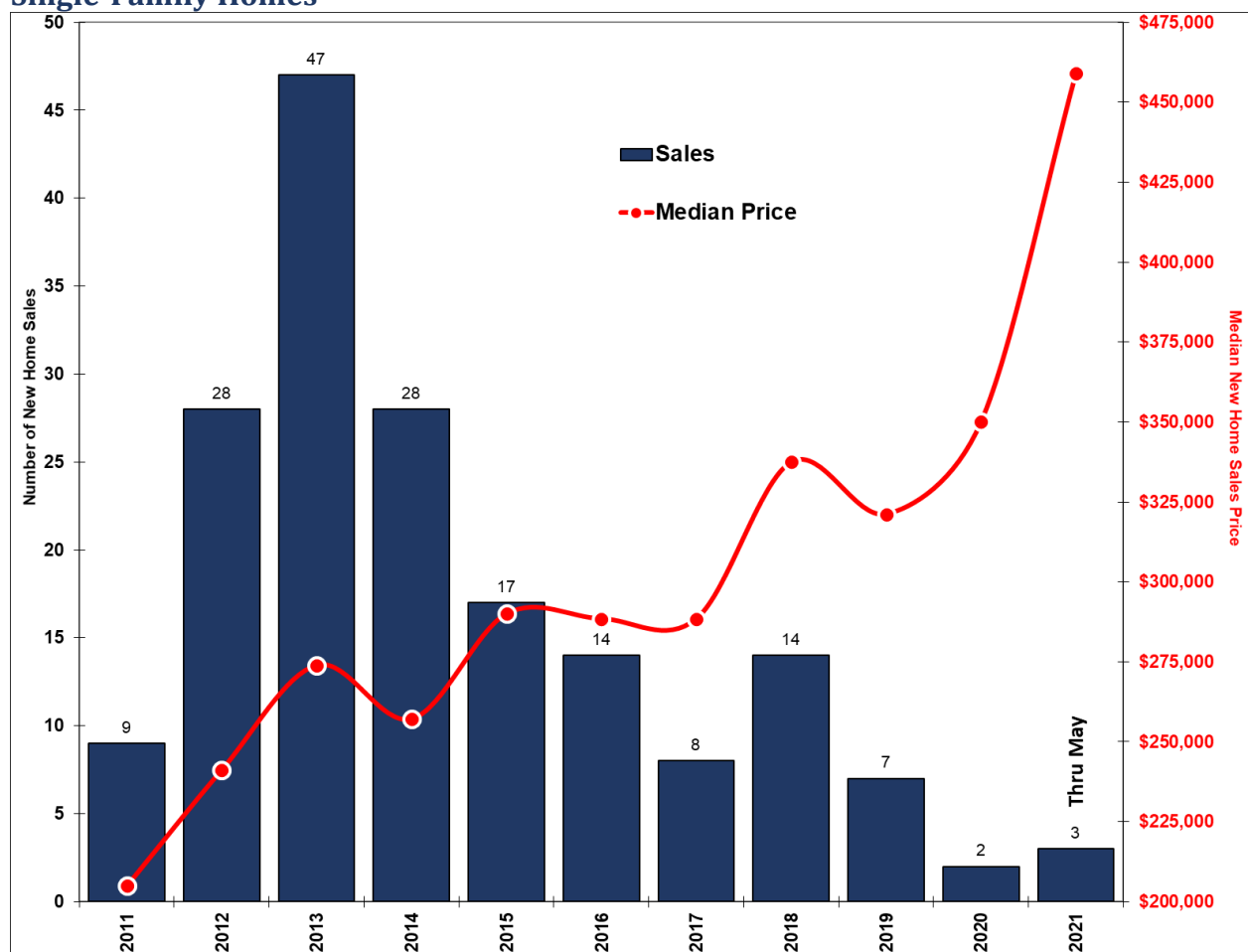
Year	New SF		Existing SF		Attached SF		Manufactured	
	Median Price	Sales	Median Price	Sales	Median Price	Sales	Median Price	Sales
2011	\$204,900	9	\$168,000	135			\$106,750	72
2012	\$241,241	28	\$195,000	142			\$137,500	91
2013	\$273,900	47	\$202,500	170	\$218,911	22	\$130,000	75
2014	\$257,096	28	\$185,000	131	\$189,000	37	\$89,000	97
2015	\$290,000	17	\$189,900	155	\$168,450	5	\$123,900	125
2016	\$288,450	14	\$188,800	163	\$173,000	12	\$100,000	150
2017	\$288,450	8	\$219,000	166	\$180,750	6	\$101,000	155
2018	\$337,450	14	\$220,000	170	\$183,950	10	\$126,333	158
2019	\$321,181	7	\$225,000	225	\$180,900	18	\$134,300	169
2020	\$350,000	2	\$234,700	186	\$202,500	6	\$169,900	151
2021	\$459,000	3	\$275,000	59	\$227,000	3	\$199,000	59

<sup>19</sup> U.S. Census Bureau, American Community Survey, 5-Year Averages. Data for Humboldt County.

<sup>20</sup> Data from Humboldt County Assessor’s files as analyzed by CRS; data through May 2021

Figures 5-8 show these data in graph form to illustrate the change in the number of sales and median prices over time. Figure 5 shows home sale and median sales price information for *new* detached single-family homes in Humboldt County. The figure displays a remarkable decrease in new home sales since the peak of 47 new home sales in 2013. During the same period, median prices rose from just above \$200,000 to \$350,000 in 2020, for an annual average appreciation rate of 6.1%. Through May 2021, the median value of three transactions has increased to \$459,000.

**Figure 5. Humboldt County Single-Family Home Sales and Median Sales Price-New Single-Family Homes<sup>21</sup>**

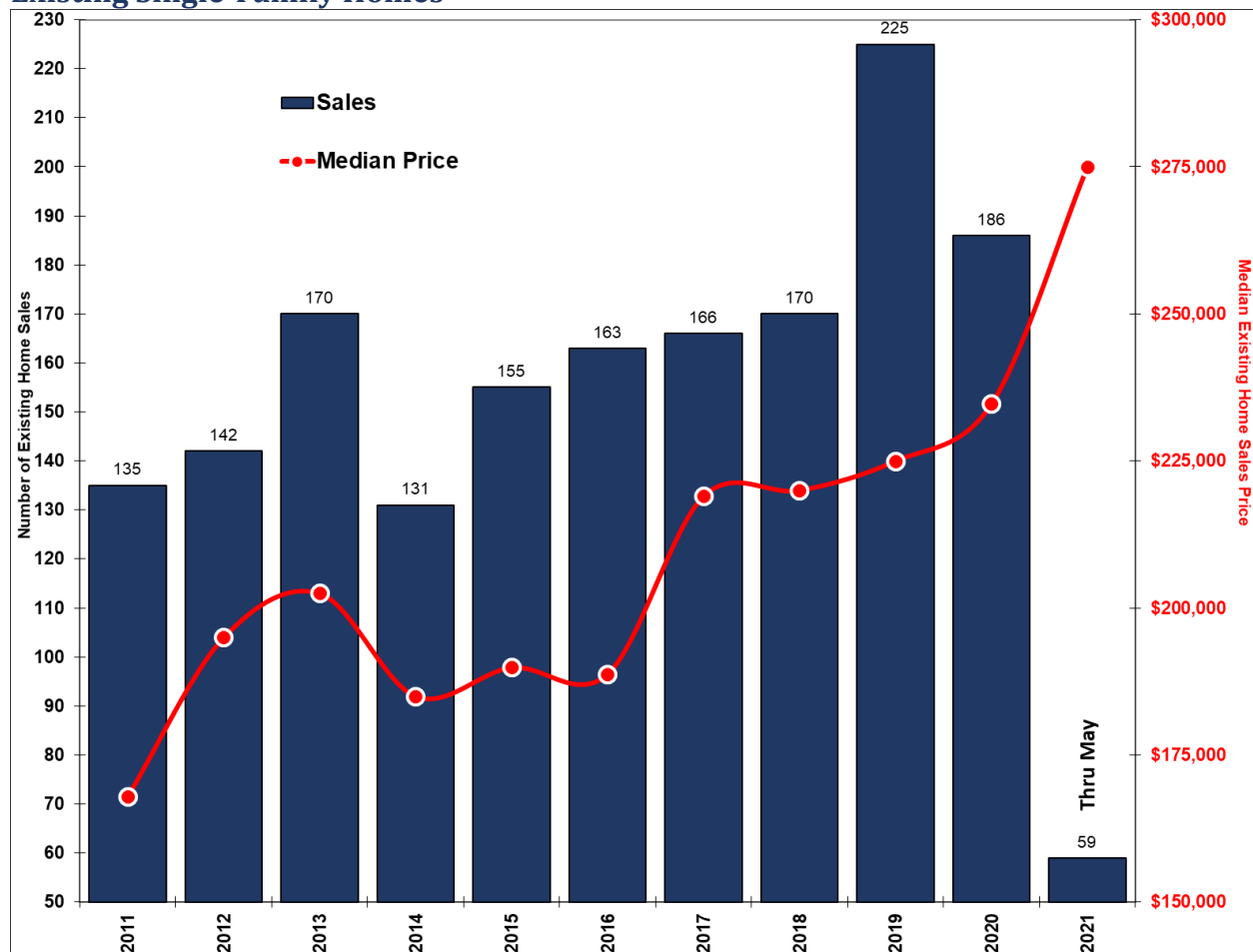


The sales volume and price trends decrease at the same time between 2015 and 2017, indicating that pricing was not the driver for the lack of sales activity. However, since 2017, price appreciation has recovered whereas sales activity has continued to struggle.

<sup>21</sup> Data from Humboldt County Assessor’s files as analysis by CRS.

Figure 6 shows home sale and median sales price information for *existing* detached single-family homes in Humboldt County. The graph of existing home sales shows a strong and consistent demand for homes over the last 10 years, in light of the waning activity in the new home market. The conflicting trends between the new and existing home sales market is caused by affordability of new homes or lack of interest by new homebuilders. As of 2020, median sales price of existing single-family homes was \$234,700, while new home prices have exceeded that value by over \$100,000 since 2018. Nevertheless, the existing home sales trends shows an increasing demand for housing and home ownership in Humboldt County.

**Figure 6. Humboldt County Single-Family Home Sales and Median Sales Price-Existing Single-Family Homes<sup>22</sup>**



<sup>22</sup> Data from Humboldt County Assessor’s files as analysis by CRS.

Figure 7 shows home sale and median sales price information for attached single-family homes (townhomes) in Humboldt County. After 33 townhomes were constructed in 2013 in the Frontier Village development, and all new sales were completed by 2015, the same townhomes have actively resold over the last five years. The popularity of this product/development is also documented by the price appreciation of 3.8% per year between 2015 and 2020.

**Figure 7. Humboldt County Single-Family Home Sales and Median Sales Price-Attached Single-Family Homes<sup>23</sup>**

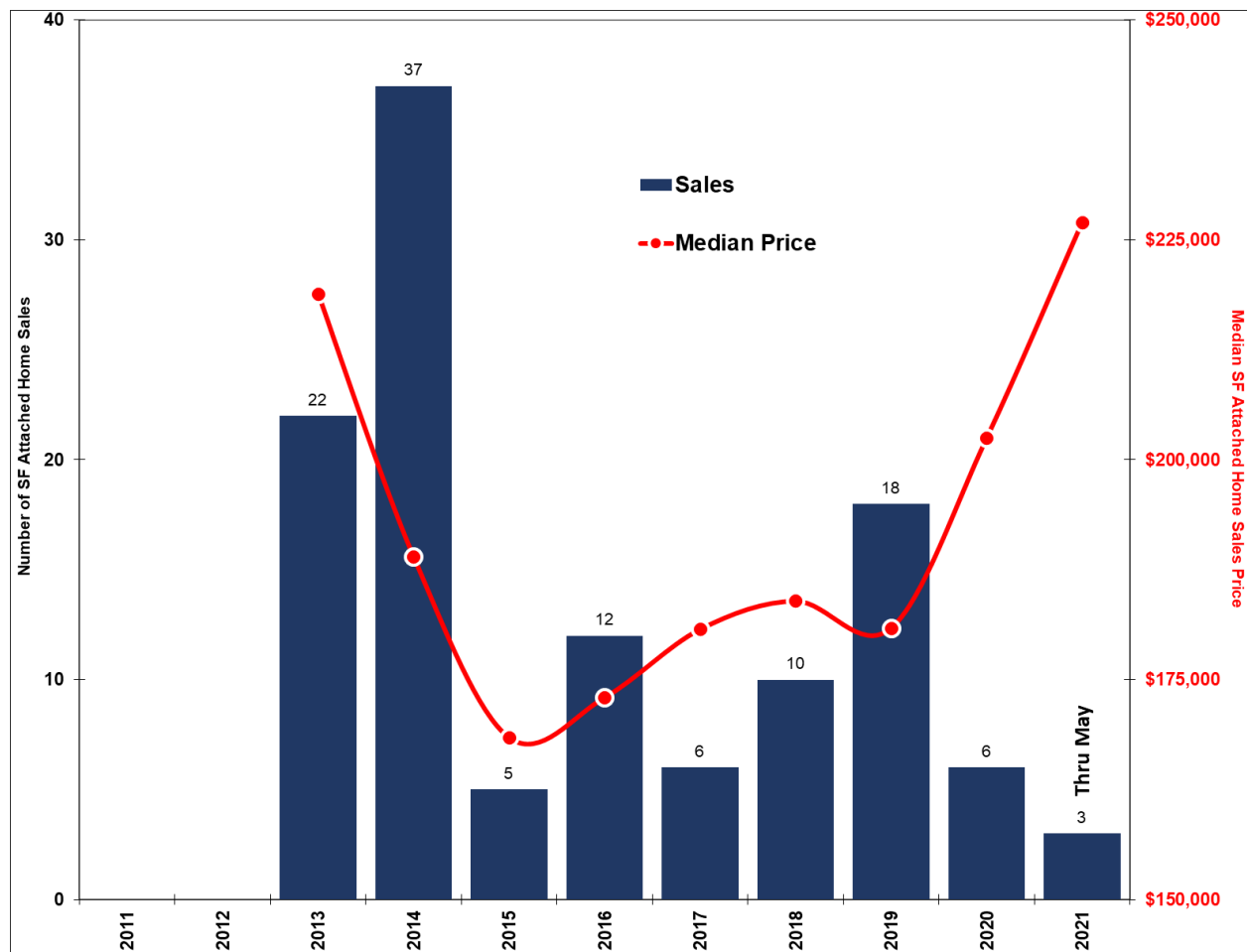


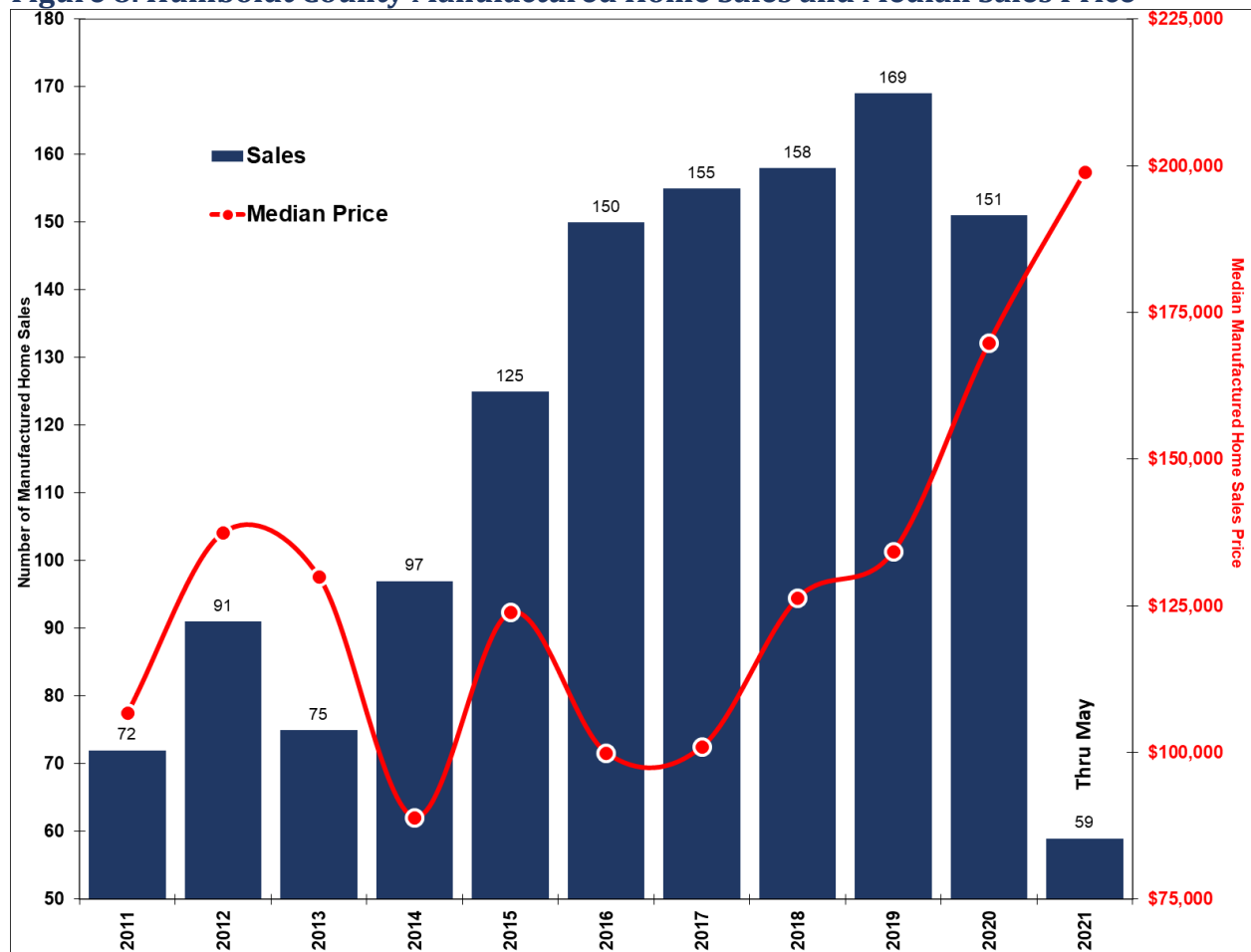
Figure 8 shows home sale and median sales price information for manufactured homes in Humboldt County. As with all other home ownership options for existing product, manufactured home sales also increased over the last ten years, *and especially following*

<sup>23</sup> Data from Humboldt County Assessor’s files as analysis by CRS.



*the decrease of new home options starting in 2015.* Although median sales prices of manufactured homes are the most affordable of all ownership products, home appreciation in manufactured homes is the highest among all products, new or existing, increasing 14.2% per year between 2016 and 2020. During the winter and spring months of 2021, typically the slowest period for home sales, 59 manufactured home transactions occurred, with a median value of \$199,000. The sales activity within the manufactured home market is another sign of robust demand for housing and home ownership in Humboldt County.

**Figure 8. Humboldt County Manufactured Home Sales and Median Sales Price<sup>24</sup>**



Understanding of community housing needs are also ascertained through home listing inventories, measured against rate of sales. According to May 2021 information from the Northern Nevada Regional Multiple Listing Service (NNRMLS), there were seven single-family (detached) homes actively listed for sale in Humboldt County. These units had a

<sup>24</sup> Data from Humboldt County Assessor’s files as analysis by CRS.

median year built of 1978 and ranged in size from 1,023 to 3,770 square feet, with a median size of 1,847 square feet. These units have been on the market for a median of 21 days and have an asking price ranging from \$169,900 to \$660,000, with a median price of \$425,000 or \$185.73 per square foot.

The sales rate of existing detached single-family homes in 2020 was 15.5 homes per month, indicating a current three-month supply of the detached home product for sale (45 listings/15.5 avg monthly sales). The real estate industry reports that a six-month supply of for-sale inventory is required to balance supply with demand and to eliminate run-away price appreciation. In 2019, the rate of home sales was 18.8 home per month. At this rate, the current inventory of listings decreases to less than 2.4 months of supply.

In May 2021, there were 27 listings for manufactured homes, the second most popular home product in terms of historical sales in Humboldt County. The 2020 sales rate for manufactured housing in Humboldt County was 12.6 homes per month. At this rate of sales, only 2.1 months of for-sale inventory exists for this product.

Manufactured homes listed in May 2021 had a median construction year of 1997 and ranged in size from 924 to 2,604 square feet, with a median size of 1,512 square feet. These units have been on the market for a median of 42 days and have an asking price ranging from \$59,900 to \$590,000, with a median price of \$249,900 or \$160.87 per square foot.<sup>25</sup>

The occupancy status of home listings is also important for understanding and calculating housing needs. For all home ownership product, only 18 (24.3%) for-sale listings in May 2021 were unoccupied when listed for sale. The remaining 56 homeowners will require new housing upon selling these units.

***The conclusion of very low for-sale home inventory, calculated by combining current for-sale listing information with recent home sales, is further indication of need for additional homeownership product in Humboldt County.***

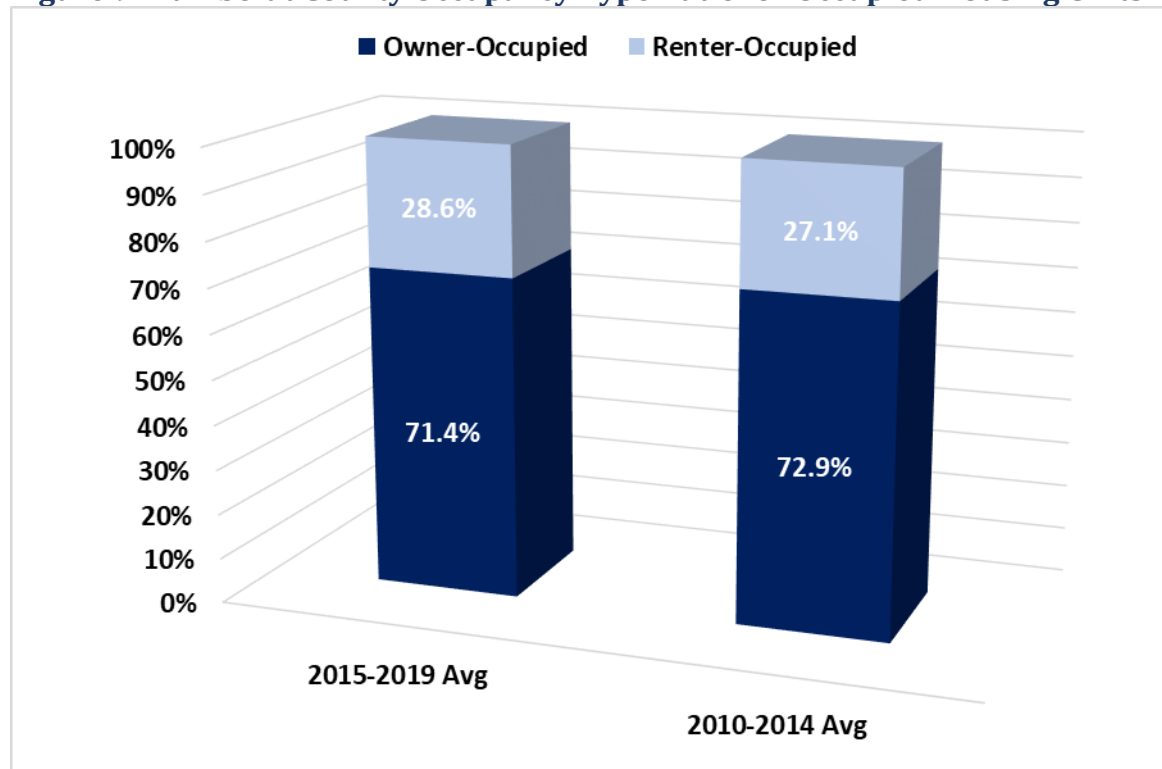
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<sup>25</sup> NNRMLS, analysis by EEC and CRS.

### Renter-Occupied Market

Table 9 shows 1,717 multifamily units, which are typically rental units, make up 24.0% of total housing supply in Humboldt County. However, many single-family and manufactured homes may also be occupied by renters rather than property owners. According to the 2015-2019 American Community Survey (latest data available), 71.4% of all occupied housing units in Humboldt County were occupied by owners, with the remaining 28.6% occupied by renters.<sup>26</sup> The same dataset reports that 20.3% of single-family homes and 17.4% of manufactured homes were occupied by renters. Figure 9 shows these ratios have not changed significantly since the 2010-2014 survey, with owner-occupied ratio decreasing 1.5 percentage points since the 2010-2014 survey.

**Figure 9. Humboldt County Occupancy Type Ratio for Occupied Housing Units<sup>27</sup>**



More current residential rent information is difficult to obtain due to daily changes to rental agreements and lack of rental data captured by official sources. Snapshots of rental markets are provided by online companies including Apartments.com, Rent.com,

<sup>26</sup> U.S. Census Bureau, American Community Survey, 5-Year Estimates. Data for Humboldt County.

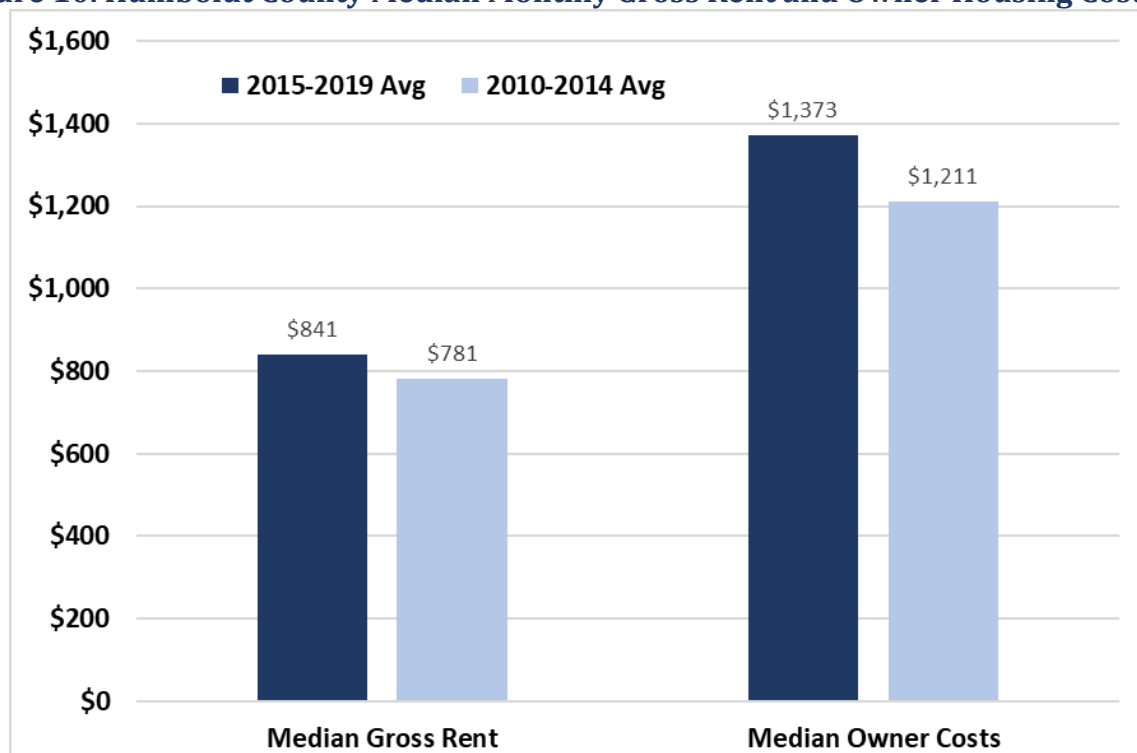
<sup>27</sup> U.S. Census Bureau, American Community Survey, 5-Year Estimates. Data for Humboldt County.

Craigslist.com, Homefinder.com, and Zillow.com. An online search conducted June 10, 2021 of the above rental offering companies found no available rental listings for homes or apartments in Humboldt County. A phone survey of Sonoma Property Management, a real estate rental agency located in Winnemucca, also reported no rental listings on the same date. ***The unsuccessful canvas of available rental properties in Winnemucca and its surroundings, in addition to the very low amounts of new housing construction, is a direct indicator of very low housing supply to support future growth.***

### Housing Affordability

Figure 10 shows a comparison of median gross rent and owner housing costs for those with a mortgage in Humboldt County, according to American Community Survey data. Gross rent includes all rent-related costs, such as utilities and parking, in addition to the contracted rental rate. Owner housing costs include mortgage-related costs, as well as utility and maintenance costs.

**Figure 10. Humboldt County Median Monthly Gross Rent and Owner Housing Costs<sup>28</sup>**

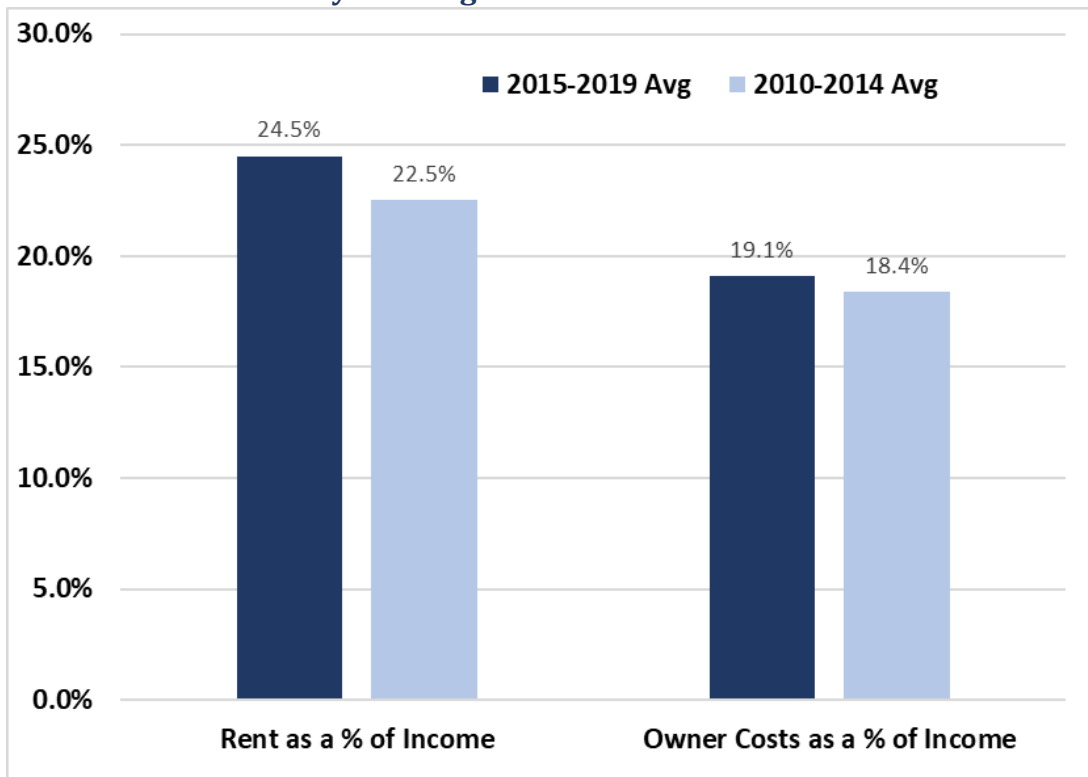


<sup>28</sup> U.S. Census Bureau, American Community Survey, 5-Year Estimates. Data for Humboldt County.

The data reports a 7.7% increase for gross rent costs between the five-year datasets, ending at \$841 per month.<sup>29</sup> Owner housing costs increased 13.4% between the same period, almost double the rate of increase for rent costs, with owner costs ending at \$1,373 per month based on the most recent data.

Figure 11 shows the ratio of housing cost as percent of household income for renters and households with a mortgage. The figure shows that the cost ratio for households living in rental properties is much higher than for those living in own homes and paying on a mortgage. This is because while rent costs are less than owned housing costs, household incomes for the two groups differ greatly.

**Figure 11. Humboldt County Housing Cost as Percent of Household Income<sup>30</sup>**



Based on the latest data for Humboldt County (2015-19 ACS 5-Year Survey), median household income for those living in owner-occupied units was \$79,270, compared to \$40,505 for households in rental units. This results in a significantly higher cost ratio for

<sup>29</sup> It should be noted these rental rates reflect some subsidized and low-income properties and may be lower than market rates in the area.

<sup>30</sup> U.S. Census Bureau, American Community Survey, 5-Year Estimates. Data for Humboldt County.

rental households when compared to income. Of further interest is the 9.9% growth in income for renter-occupied households in Humboldt County compared to the 7.7% change in median gross rent between the 2015-2019 and 2010-2014 surveys. However, income growth for owner-occupied households (11.5%) did not exceed the increase in housing costs (13.4%) for the same period.

Table 11 shows workforce affordability levels for home purchases and rent rates across 25 Humboldt County industries with the highest number of employees (industries with low numbers of competing establishments are not provided due to disclosure confidentiality). The top 25 industries in Table 11 are segmented at the four-digit NAICS code (North American Industrial Classification System) and represent 61.9% of all employment in Humboldt County in 2019. The table shows the estimated median family wage for each occupation (based on workers per family) and the affordable home price (assuming 10% down at a 3.25% mortgage rate) and monthly affordable rental rate for each industry, as well as 2019 sales price and rental rate levels in Humboldt County.

**Table 11. Humboldt County Housing Price and Rent Affordability Levels for Top Industries**

Industry NAICS Code & Title	2019 Average Employment	Average Weekly Wages	Average Annual Wages	Estimate Median Family Wage	Estimated Qualifying Home Price	Estimated Affordable Monthly	
2211 -Power Generation and Supply	113	\$2,453	\$127,907	\$170,892	\$522,000	\$3,325	
2122 -Metal Ore Mining	1,545	\$2,137	\$111,429	\$154,415	\$468,000	\$3,000	
2131 -Support Activities for Mining	248	\$1,814	\$94,587	\$137,573	\$412,500	\$2,650	
4238 -Machinery & Supply Merchant Wholesalers	76	\$1,569	\$81,812	\$124,798	\$370,000	\$2,400	
2362 -Nonresidential Building Construction	80	\$1,410	\$73,521	\$116,507	\$342,500	\$2,225	
2371 -Utility System Construction	72	\$1,400	\$73,000	\$115,986	\$341,000	\$2,215	
8113 -Commercial and Industrial Machinery and Equip	110	\$1,342	\$69,976	\$112,962	\$331,000	\$2,150	<b>2019 Median Sales</b>
9241 -Administration of Environmental Programs	132	\$1,303	\$67,942	\$110,928	\$324,500	\$2,115	<b>Price of New SF =</b>
9211 -Executive, Legislative, & Gen Government	308	\$1,057	\$55,115	\$98,101	\$282,000	\$1,850	<b>\$321,181</b>
4411 -Automobile Dealers	57	\$1,047	\$54,594	\$97,579	\$280,500	\$1,840	
4841 -General Freight Trucking	52	\$1,024	\$53,394	\$96,380	\$276,500	\$1,820	
9261 -Administration of Economic Programs	79	\$1,013	\$52,821	\$95,807	\$274,500	\$1,805	<b>2019 Median Sales</b>
1119 -Other Crop Farming	148	\$801	\$41,766	\$84,752	\$238,000	\$1,580	<b>Price of Existing SF</b>
5613 -Employment Services	107	\$696	\$36,291	\$79,277	\$220,000	\$1,470	<b>= \$225,000</b>
4441 -Building Material and Supplies Dealers	59	\$675	\$35,196	\$78,182	\$216,500	\$1,445	
4413 -Auto Parts, Accessories, and Tire Stores	81	\$667	\$34,779	\$77,765	\$215,000	\$1,440	
1121 -Cattle Ranching and Farming	91	\$638	\$33,267	\$76,253	\$210,500	\$1,405	
6241 -Individual and Family Services	87	\$535	\$27,896	\$70,882	\$192,500	\$1,295	
7211 -Traveler Accommodation	432	\$442	\$23,047	\$66,033	\$176,500	\$1,200	
7132 -Gambling Industries	60	\$436	\$22,734	\$65,720	\$175,500	\$1,190	
4471 -Gasoline Stations	160	\$414	\$21,587	\$64,573	\$171,500	\$1,170	
4451 -Grocery Stores	146	\$412	\$21,483	\$64,469	\$171,000	\$1,165	<b>2019 Median Sales</b>
5617 -Services to Buildings and Dwellings	50	\$379	\$19,762	\$62,748	\$165,500	\$1,130	<b>Price of Manuf</b>
7225 -Restaurants and Other Eating Places	467	\$336	\$17,520	\$60,506	\$157,500	\$1,085	<b>Home = \$134,300</b>
7139 -Other Amusement and Recreation Industries	49	\$254	\$13,244	\$56,230	\$144,000	\$1,000	<b>2015-2019 Median</b>
All Industries	7,767	\$1,131	\$58,974	\$101,959	\$294,500	\$1,930	<b>Rent Rate = \$841</b>

**Notes:**

1. Industries, number of employees, and mean wages for Humboldt County for 2019 from Nevada Department of Employment, Training, and Rehabilitation (DETR). Table includes top 25 industries by highest number of employees.
2. Family wage is estimated assuming 1.73 workers per family based on data for Humboldt County, Nevada from 2015-2019 American Community Survey 5-Year Estimates, US Census Bureau. Analysis assumes 1 worker per family will earn wages at the median wage shown for that industry. The remaining 0.73 worker in the family will earn an average wage for Humboldt County of \$58,974.
3. Maximum affordable home price and rental rate estimated using a proprietary affordability calculator created by the Center for Regional Studies, UNR and Ekay Economic Consultants, Inc. The calculator estimates a family income necessary to afford home-related costs, including rent/mortgage, utilities, and property taxes at percent of family income reported by 2015-2019 ACS.

The table shows families with a primary members employed as utility workers, miners, wholesalers, construction employees, machinery mechanics, and environmental administrators can afford to purchase a new single-family home at the median price of \$321,181 (Table 10). Families with primary employees in these industries, as well as those in government, auto dealers, truckers, economic administrators, and farmers can afford to purchase an existing single-family home at the median price of \$225,000 (Table 10). Families with employees in all top 25 industries (and others) can purchase manufactured

homes with a median price of \$134,300 (Table 10). The 2019 manufactured median home price requires an estimated \$53,290 in annual income. Averaging across all industries in Humboldt County, households and families with at least 1.73 workers (2015-2019 ACS estimate) can afford existing single-family or manufactured homes, according to Table 11.

The calculations provided in Table 11 also report that families with primary employees within the top 25 industries (and others) are able to afford median Humboldt County rental rates of \$841 per month (Figure 10) with a household worker size of 1.73. Altogether, manufactured homes and rental units are affordable at current prices for families with employees within the 60 industries where wages are reported at the four-digit NAICS code (72% of all employees in Humboldt County) if household costs are shared with an additional part-time worker.

The number May 2021 home listings (all ownership product, including pending listings) under \$300,000 is 40, out of 74 total homes listed. Based on 2019 average wages across all industries in Humboldt County, \$300,000 is the estimated qualifying home price in current terms. Overall, the results from comparing workforce wages, household worker composition, and home prices show that home affordability in Humboldt County is not an impediment to housing absorption.

## **FUTURE HOUSING SUPPLY**

The greater Winnemucca region currently has ample residential developments in the construction and planning process (Figure 12). According to residential pipeline information provided by Humboldt County Regional Planning Department, there are three single-family projects under construction that will add 63 homes, and two manufactured housing projects under construction that will add 22 homes upon buildout. One of these manufactured home developments (16 units) is already sold out, leaving 14 units to be absorbed. Another mixed manufactured/single-family development will bring 16 units to the market.

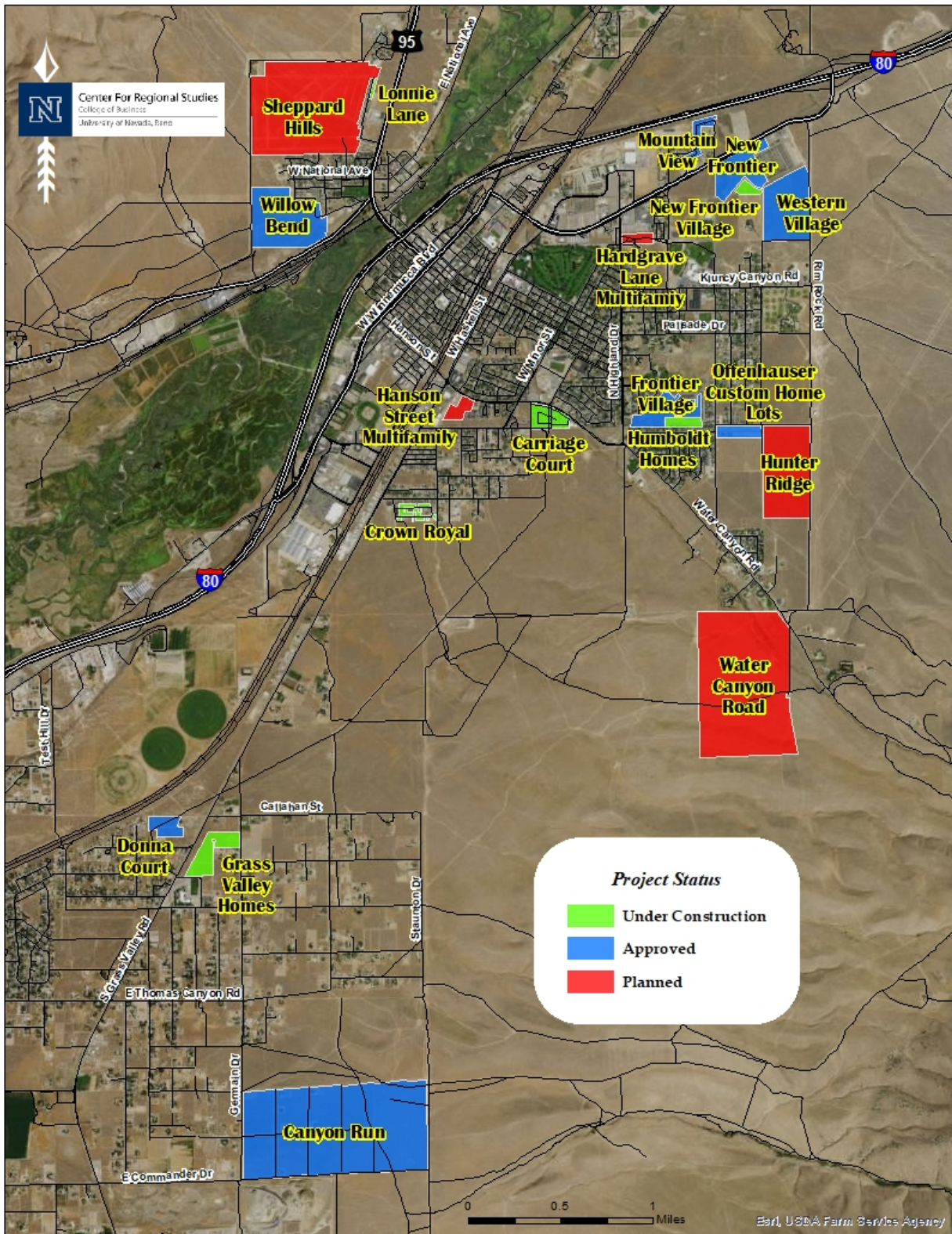
In addition to the six developments under construction, eight more developments totaling 995 units are entitled and awaiting lot sales or subdivision construction. Of these eight



projects, two (one manufactured home and one single-family home project) have announced beginning of construction in the second half of 2021. These two developments will add 258 residential units upon buildout.

Beyond the 14 active and inactive-but-approved developments, another five projects have let their approvals expire or have not begun the application and review process. The five developments are proposed to add another 1,140 units, including two apartment projects that would add 220 units. This information is summarized graphically and in table form in Figure 12.

Figure 12. Humboldt County Residential Construction Activity



Development	Developer/Owner	Location	Total Units	Status	Type
Carriage Court	BoaVida Group	W Minor St & Hanson St	14	Under Construction	MANUF
Crown Royal	Western States Investment LLC	Moon Ln & Center St	6	Under Construction	MANUF
Grass Valley Homes	Western States Investment LLC	Vern Dr & Larry Dr	16	Under Construction	MANUF/SF
Humboldt Homes	Braemar Construction	Marla Dr	26	Under Construction	SF
Lonnie Lane	Western States Investment LLC	Lonnie Lane	12	Under Construction	SF
New Frontier Village	Western States Investment LLC	Great Basin Ave	25	Under Construction	SF
<b>Under Construction Total</b>			<b>99</b>		
Canyon Run	Cowboy Country Realty	Germain Dr & E Commander Dr	99	Approved	Lots
Donna Court	Western States Investment LLC	N of Mercury Ave	8	Approved	MANUF
Frontier Village	New Frontier Village LLC	Marla Dr	143	Approved	SF
Mountain View	BoaVida Group	5575 E. Winnemucca Blvd	25	Approved	MANUF
New Frontier	East Horizon Holdings LLC	E Winnemucca Blvd	264	Approved	MF/SF
Offenhauser Custom Home Lots	Next Home Realty	E Offenhauser Dr	23	Approved	Lots
Western Village	East Horizon Holdings LLC	Great Basin Ave	183	Approved	SF
Willow Bend	Western States Investment LLC	Terminus of Mesa Way	250	Approved	SF
<b>Approved Total</b>			<b>995</b>		
Hanson Street Multifamily	Pat Morrissey	Hanson St	120	Planned	MF
Hardgrave Lane Multifamily	Mike Sheppard	Hardgrave Ln	100	Planned	MF
Hunter Ridge	Pat Morrissey	E Offenhauser Rd	212	Planned	SF
Sheppard Hills	Mike Sheppard	Terminus of Ida Ave	480	Planned	TBD
Water Canyon Rd	Pat Morrissey	Water Canyon Rd	228	Planned	SF
<b>Planned Total</b>			<b>1,140</b>		

Source: Humboldt County Regional Planning Department

Although the overall residential pipeline activity in greater Winnemucca area appears to be addressing the need for new housing, a glaring shortfall has been identified in the multifamily product. The multifamily product is very important to households unsure about future employment, family planning, and home ownership requirements (lending qualifications, cost, upkeep, etc.). Availability of multifamily product is additionally important in rural areas where transient-type of employment (workplace is temporary) is common, including employment in gold mining, transportation, construction, state and federal government, utilities, and professional and technical services industries. In 2020, roughly 40% of Humboldt County’s employment by place of work was concentrated in these industries.

Humboldt County’s current inventory of existing multifamily units, 9.0% of all residential units, is lacking when compared to other Nevada counties (2015-2019 ACS). Elko County’s ratio of multifamily units is 16.2%, increasing to 29.7% in Washoe County. For all of Nevada, the ratio of multifamily units to total housing units is 30.2%, and for the U.S., 26.3%.

### III. HUMBOLDT COUNTY RESIDENTIAL MARKET DEMAND

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#### Housing Demand for Temporary Construction Labor

Additional need for housing is predicated on population and employment growth. Due to larger swings in new employment compared to new population, housing demand in Humboldt County is more related to employment growth in the area. Of course, although new population to the area is primarily driven by new jobs, new population also includes births and in-migration of retirees.

Regional employment projections expected to impact Humboldt County (discussed in Section I) are primarily based on large-scale industrial projects, including Lithium Nevada's proposed Thacker Pass Mine currently navigating the permit process and the proposed West Coast Salmon Nevada facility in northern Pershing County. The Lithium Nevada project will incur years of construction activity before permanent operations begin, while West Coast Salmon Nevada is expected to begin hiring and training operations staff in 2022 when construction on the facility begins. Both projects will immediately require additional housing product that addresses both temporary worker (renter-occupied housing) and permanent workers (owner-occupied housing) when construction commences.

It is important to note that Lithium Nevada representatives report that 90% of their construction employees will require housing. Based on reported employment found in Table 8, and assuming all construction workers will relocate from outside the region, 459 housing units will be needed for construction workers in 2022, and 549 additional units in 2023 (based on single-occupancy and 90% demand factor). By 2025, construction employment is projected to decrease to 500 jobs (housing units needed for construction workers decrease to 450 units at single-occupancy) when construction on West Coast Salmon Nevada Nevada facilities move into phases II and III, and Lithium Nevada begins commissioning the mine. This is shown in Table 12.

**Table 12. Projected Housing Needs for Construction Activity**

	2022	2023	2024	2025	2026	2027
<b>Housing Needs for Temporary Employment</b>						
Lithium Nevada Construction Employment	260	620	585			
West Coast Salmon Nevada Construction Employment	250	500	500	500	500	500
Total	510	1,120	1085	500	500	500
Assume 90% with Housing Needs	459	1,008	977	450	450	450
<b>Housing Unit Demand @ Single Occpancy</b>	<b>459</b>	<b>1,008</b>	<b>977</b>	<b>450</b>	<b>450</b>	<b>450</b>
<b>Housing Unit Demand @ Double Occpancy</b>	<b>230</b>	<b>504</b>	<b>488</b>	<b>225</b>	<b>225</b>	<b>225</b>

Employment & housing unit totals are accumulative  
Lithium Nevada reports 90% of construction workers will need housing.

In areas with limited housing inventory, single occupancy is a luxury most residents can ill afford. Construction workers who relocate from outside Humboldt County will most likely be forced to share housing units during their temporary stay. If all housing units for construction workers are assumed to be double occupancy, a total 504 units will be needed at peak construction levels. The actual demand will fall somewhere between the two estimates.

No additional housing is expected to be needed for indirect employment growth created by the spending on goods and services by the construction process due to the temporary nature of the activity. Although the construction activity will generate an increase in Humboldt County business activity, sources of goods and services for the temporary construction are assumed to be spread across existing companies in the region and Humboldt County residents.

Due to the temporary nature of the construction labor, demand for rent-occupied housing product is expected. However, as discussed in the housing supply section, current availability of for-rent product is severely low. Although the housing supply section above reports robust planned development activity, all active and approved projects will provide single-family and manufactured homes, but no apartments. According to Humboldt County Regional Planning Department, only two apartment projects are planned for future construction, but both developments still require reviews, approvals, and, most importantly, builders.

### **Housing Demand for Permanent Operations Labor**

Ongoing facility operations are projected to begin in 2022 for West Coast Salmon Nevada and in 2025 for Lithium Nevada. Beginning with 75 employees in 2022, West Coast Salmon Nevada projects to double operating employees by 2024, and then add 50 employees per year thereafter until 300 ongoing employees are reached in 2027. Lithium Nevada is also projecting 300 permanent employees by 2026.

The planned developments will also ramp up business activity in Humboldt County, as the two developments seek nearby supply chains to support operations. Based on economic multipliers for mining and animal production (IMPLAN Group LLC), indirect and induced employment through the spending on goods and services by the two permanent operations and their employees are estimated to support 44 jobs in 2022 and reach almost 1,000 jobs in 2027. Because indirect employment impacts are spread across multiple industries, full-time equivalencies of these “support” jobs are too low to cause an establishment to hire additional employees for most companies. As a result, indirect employment impacts are defined as jobs supported and not jobs created. However, full-time operations from the planned developments are sure to boost future organic employment growth in Humboldt County.

Estimating housing demand for permanent operations differs from temporary construction labor. Unlike construction workers, entire households are expected to migrate to Humboldt County for employment opportunities, and multiple persons from an individual household could work at the two developments or jobs vacated by existing residents seeking work at the new projects. Unlike assuming single or double-occupancy housing demand for temporary construction workers, housing demand for families and households seeking permanent employment opportunities is estimated by applying most recent workers-per-family ratio in Humboldt County (2015-2019 American Community Survey).

An average family with at least one member in the workforce and that resides in Humboldt County contains 1.73 workers. Applying this factor to employment projections resulting from Lithium Nevada and West Coast Salmon Nevada operations estimates a housing need of 43 units in 2022, increasing to 347 units by 2027. ***On average, 58 new housing units***

*per year will be needed between 2022 and 2027* to satisfy projected employment volumes of the two major developments. This is shown in Table 13.

**Table 13. Projected Housing Needs for Operations Activity**

	2022	2023	2024	2025	2026	2027
<b>Housing Needs for Permanent Employment</b>						
Lithium Nevada Operations Employment				225	300	300
West Coast Salmon Nevada Operations Employment	75	100	150	200	250	300
Total	75	100	150	425	550	600
<b>Housing Unit Demand @ 1.73 Workers/Family</b>	<b>43</b>	<b>58</b>	<b>87</b>	<b>246</b>	<b>318</b>	<b>347</b>

Employment & housing unit totals are accumulative

Workers/family from 2015-2019 American Community Survey for Humboldt County. Ratio calculated from families with at least one worker.

The housing demand projections for both construction and operations employees assumes that new employees will all be non-locals. This assumption is based on May 2021 unemployment rate of 3.4% for Humboldt County, and 3.6% for Pershing County. U.S. Federal Reserve economists define natural rate of unemployment at between 4.0% and 5.0%. The economists further believe that inflation is triggered when unemployment rates fall below this range due to upward pressure on wages. As a result, the Lithium Nevada and West Coast Salmon Nevada developments will most certainly force Humboldt County to increase its labor force with non-locals to properly staff construction and operations. Furthermore, extremely low housing vacancy rates in the area will ensure these new residents will require additional housing, rather than relying on existing vacant inventory.

### **Housing Cost by Type of Housing Product**

The desired housing product for temporary construction workers will differ from that of permanent operation employees. The type of housing needed to meet the demand (single- or multi-family) is determined by industry wages, employment characteristics, and demographics. As reported in Tables 7 and 11, some existing industries and occupations in Humboldt County pay wages sufficient for their employees to purchase existing and new single-family homes, while others are required to rent housing to lower their housing costs.

In addition to affordability, employment characteristics plays a key role for future housing demand in Humboldt County. Much of the projected construction employment is expected to rotate through Humboldt County on a temporary basis. Their transient situation discourages purchasing of homes, creating demand for rental housing. Finally,

demographics play a key role in demand. Humboldt County has a high concentration of population under 15 years of age. Households with children desire more bedrooms, bigger homes, and yards, which are typically provided through single family detached and manufactured home, rather than attached products.

For temporary construction workers, affordability will drive the type of rental product, be it multifamily or single-family, new or existing. Current wages (2020) for construction employees in northern Nevada, based on counties with sizeable construction employment (Churchill, Elko, Humboldt, Lyon, Storey, and Washoe counties), range between \$27.60 per hour (Lyon County) to \$39.33 per hour (Storey County), with an overall average of \$31.43 per hour across the six counties (Department of Employment, Training, and Rehabilitation). At this wage, an individual can afford a monthly housing cost of \$1,655 (including utilities), based on housing costs at 33% of income. For perspective, the first quarter 2021 average rent in Reno-Sparks is \$1,469 per month.

As mentioned previously, in areas with limited housing inventory and home builders, single occupancy is a luxury, even if affordable. The amount of product builders can bring to market for temporary construction workers depends on long-term risks of maintaining rent streams, in addition to access to sufficient materials and labor. Builders may be hesitant to build at a 1:1 ratio for construction worker/unit due to their temporary status. However, permanent operations employment will eventually replace some demand for renter-occupied housing product.

Unlike temporary laborers, a larger share of permanent employees will desire to own a home. Current wages (2020) for the Mining, Quarrying, and Oil and Gas Extraction industry in northern Nevada, based on counties with sizeable mining employment (Elko, Humboldt, Lyon, Pershing, Washoe, and White Pine counties), range between \$43.98 per hour (Pershing County) to \$52.55 per hour (Humboldt County), with an overall average of \$49.84 per hour across the seven counties (Department of Employment, Training, and Rehabilitation).

The average wage of mining employees in Northern Nevada, \$103,955 per year, qualifies for purchasing a home of \$550,000 or less, based on a 10% down payment, a 3.25%



mortgage rate, and owner cost at 33% of annual income. This qualifying income calculation includes costs for utilities, property taxes, and mortgage insurance. Table 10 in Section II reports new home sales values by year in Humboldt County, with 2020 median value at \$350,000 (only two sales) and 2021(through May) median value at \$459,000 (only three sales).

The same source of 2020 wages reports that average wages for the Agriculture, Forestry, Fishing & Hunting industry ranges from \$15.50 per hour (Elko County) to \$27.95 per hour (Pershing County), with an overall average of \$19.91 per hour across 14 Nevada counties that are home to the industry (excludes Esmeralda, Mineral, and Storey counties). However, although the West Coast Salmon Nevada operation is classified as a fishery, representatives report that their specialization of raising sensitive habitat requires employees with college degrees (biologists), and that their wages will be on par with mining wages.

Home affordability increases with number of workers per household. The home price that mining and scientific employees can afford (\$550,000) is based on one-person income. The 2015-2019 American Community Survey reports that families in Humboldt County contain 1.73 workers on average. The 2020 average wage in Humboldt County across all industries is \$29.96 per hour, or \$62,479 per year. As a result, family households with one worker in the mining industry and one worker earning an average wage in Humboldt County can afford to purchase a home for \$900,000.

For the planned permanent labor force, a portion will choose to rent instead of buying a home. For the average mining wage of \$103,955, the employee could afford \$2,700 in rent. For a two-earner household with a mining employee, the rent affordability increases to \$4,425.

As a result, all home product types are currently affordable for the operations labor proposed by Lithium Nevada and West Coast Salmon Nevada.