



CITY OF CORNELIUS, OR

**HOUSING AND RESIDENTIAL LAND NEEDS ASSESSMENT
(OREGON STATEWIDE PLANNING GOAL 10)**

**20-YEAR HOUSING NEED
2020 - 2040**

June 2020



Acknowledgments

Johnson Economics prepared this report for the City of Cornelius. Johnson Economics and the City of Cornelius thank the many people who helped to develop this document.

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TABLE OF CONTENTS

I.	INTRODUCTION	3
II.	CITY OF CORNELIUS DEMOGRAPHIC PROFILE	3
	A. POPULATION GROWTH	4
	B. HOUSEHOLD GROWTH & SIZE	4
	C. FAMILY HOUSEHOLDS	5
	D. GROUP QUARTERS POPULATION	5
	E. HOUSING UNITS	5
	F. AGE TRENDS	6
	G. INCOME TRENDS	7
	H. POVERTY STATISTICS	8
	I. EMPLOYMENT LOCATION TRENDS	9
III.	CURRENT HOUSING CONDITIONS	11
	A. HOUSING TENURE	11
	B. HOUSING STOCK	11
	C. NUMBER OF BEDROOMS	11
	D. UNIT TYPES BY TENURE	12
	E. AGE OF HOUSING STOCK	13
	F. HOUSING COSTS VS. LOCAL INCOMES	14
	G. PUBLICLY ASSISTED HOUSING	15
IV.	CURRENT HOUSING NEEDS (CITY OF CORNELIUS)	17
V.	FUTURE HOUSING NEEDS - 2040 (CITY OF CORNELIUS)	24

I. INTRODUCTION

This analysis outlines a forecast of housing need within the City of Cornelius. Housing need and resulting land need are forecast to 2040 consistent with 20-year need assessment requirements of Oregon Revised Statutes.¹ This report presents a housing need analysis (presented in number and types of housing units) and a residential land need analysis, based on those projections.

The primary data sources used in generating this forecast were:

- Portland State University Population Research Center
- Metro
- U.S. Census
- Environics Analytics Inc.²
- Oregon Employment Department
- City of Cornelius
- Washington County
- Other sources are identified as appropriate.

This analysis relies heavily on Census data from both the Decennial Census, and the American Community Survey (ACS). Generally, data from the ACS has a larger statistical margin of error than the 10-year Census. This analysis relies whenever possible on the most recent ACS 5-year estimates. The 5-year estimates have the lowest margin of error in comparison to the ACS 3-year and 1-year estimates. All Census data feature some margin of error but remain the best source of data available on many demographic and housing subjects.

II. CITY OF CORNELIUS DEMOGRAPHIC PROFILE

SUMMARY

The following table (Figure 2.1) presents a profile of City of Cornelius demographics from the 2000 and 2010 Census. It also reflects the estimated population of this area as of 2019 from PSU estimates, forecasted forward to 2020 using the growth rate since 2010.

- Cornelius is a City of roughly 12,300 people (City) located mostly in Washington County near the western edge of the Portland metropolitan area.
- Based on the UGB population, Cornelius is the 42nd largest city in the state by population, similar in size to other the regional cities of St. Helens and Gladstone. Cornelius is roughly half the population of neighboring Forest Grove, and a tenth the population of Hillsboro to the east.
- Cornelius has experienced strong growth, growing an estimated 27% since 2000. In contrast, Washington County as a whole saw higher growth of 38%, while the state population grew by 23%. (US Census and PSU Population Research Center)
- Cornelius was home to an estimated 3,540 households in 2020, an increase of 660 households since 2000. The percentage of families has fallen slightly from 78% of all households in 2000 to 76% in 2020. The city

¹ ORS 197.628; OAR 660-025

² Environics Analytics Inc. is a third-party company providing data on demographics and market segmentation. It licenses data from the Nielson Company which conducts direct market research including surveying of households across the nation. Nielson combines proprietary data with data from the U.S. Census, Postal Service, and other federal sources, as well as local-level sources such as Equifax, Vallassis and the National Association of Realtors. Projections of future growth by demographic segments are based on the continuation of long-term and emergent demographic trends identified through the above sources.

has a larger share of family households than Washington County (66%) and the state (63%). Average household size is estimated to have fallen during this period but remains high compared to the county.

- Cornelius’s estimated average household size is 3.42 persons. This is significantly higher than the Washington County average of 2.62 and greater than the statewide average of 2.47.

FIGURE 2.1: CORNELIUS DEMOGRAPHIC PROFILE

POPULATION, HOUSEHOLDS, FAMILIES, AND YEAR-ROUND HOUSING UNITS					
	2000	2010	Growth	2020	Growth
	(Census)	(Census)	00-10	(PSU)	10-20
Population ¹	9,652	11,869	23%	12,265	3%
Households ²	2,880	3,277	14%	3,537	8%
Families ³	2,245	2,501	11%	2,685	7%
Housing Units ⁴	3,003	3,467	15%	3,718	7%
Group Quarters Population ⁵	116	162	40%	167	3%
<i>Household Size (non-group)</i>	<i>3.31</i>	<i>3.51</i>	<i>6%</i>	<i>3.42</i>	<i>-3%</i>
<i>Avg. Family Size</i>	<i>3.64</i>	<i>3.88</i>	<i>7%</i>	<i>3.84</i>	<i>-1%</i>
PER CAPITA AND MEDIAN HOUSEHOLD INCOME					
	2000	2010	Growth	2020	Growth
	(Census)	(Census)	00-10	(Proj.)	10-20
Per Capita (\$)	na	\$16,739	na	\$22,110	32%
Median HH (\$)	na	\$47,768	na	\$62,786	31%

SOURCE: Census, PSU Population Research Center, and Johnson Economics

Census Tables: DP-1 (2000, 2010); DP-3 (2000); S1901; S19301

1 From PSU Population Research Center, growth rate 2000-2019 extended to 2020

2 2020 Households = (2020 population - Group Quarters Population)/2020 HH Size

3 Ratio of 2020 Families to total HH is based on 2018 ACS 5-year Estimates

4 2020 housing units are the '10 Census total plus new units permitted from '10 through '20 (source: Census, City)

5 Ratio of 2020 Group Quarters Population to Total Population is kept constant from 2010.

A. POPULATION GROWTH

Since 2000, Cornelius has grown by roughly 2,600 people within the UGB, or 27% in 20 years. This was less than the countywide rate of growth. In comparison, the population of Forest Grove grew by an estimated 42% during this period.

B. HOUSEHOLD GROWTH & SIZE

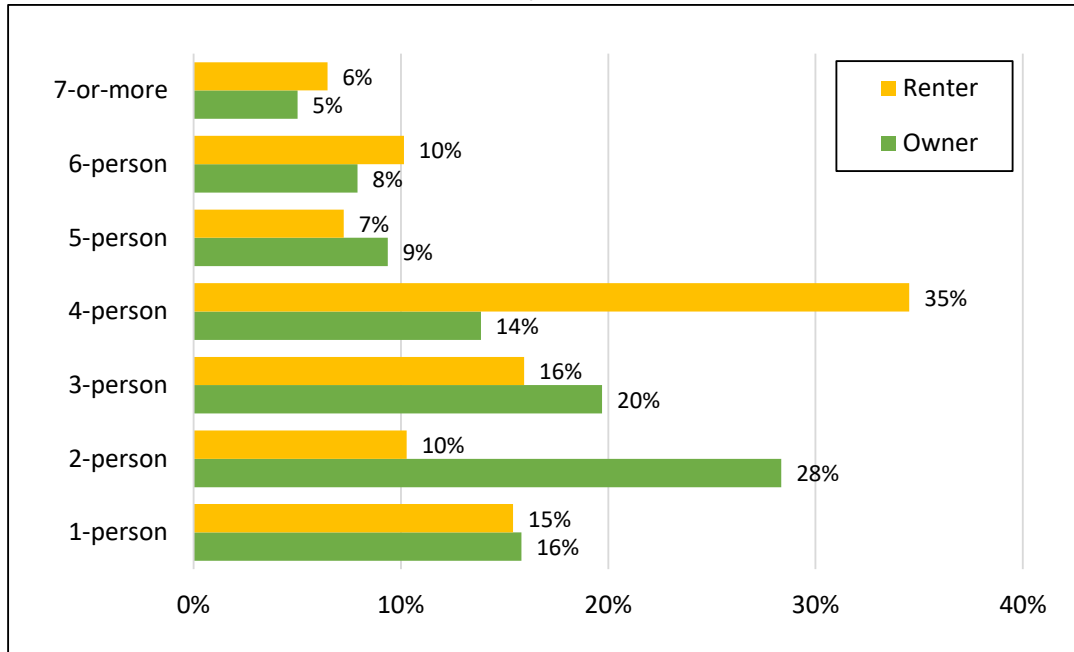
As of 2020, the city has an estimated 3,540 households. Since 2000, Cornelius has added an estimated 660 households. This is an average of roughly 32 households annually during this period. The growth since 2000 has roughly kept pace with the growth in new housing units, which have been permitted at the rate of roughly 35 units per year.

There has been a general trend in Oregon and nationwide towards declining household size as birth rates have fallen, more people have chosen to live alone, and the Baby Boomers have become empty nesters. While this trend of diminishing household size is expected to continue nationwide, there are limits to how far the average can fall.

Cornelius’s average household size of 3.4 people, with 76% family households, is still much higher than Washington County (2.62; 66%).

Figure 2.2 shows the share of households by the number of people for renter and owner households in 2018 (latest data available), according to the Census. Renter households are more likely to have four persons, or larger family sizes. Owner households are more likely to have two persons or three persons. Household size correlates to housing needs.

FIGURE 2.2: NUMBER OF PEOPLE PER HOUSEHOLD, CITY OF CORNELIUS



SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: B25009 (2018 ACS 5-yr Estimates)

C. FAMILY HOUSEHOLDS

As of the 2010 Census, 76% of Cornelius households were family households, slightly lower than 2000 (78%). But the total number of family households in Cornelius is estimated to have grown by roughly 440 since 2000. The Census defines family households as two or more persons, related by marriage, birth or adoption and living together. In 2020, family households in Cornelius had an average size of 3.8 people.

D. GROUP QUARTERS POPULATION

The City of Cornelius has an estimated group quarters population of 1.4% of the total population, or 167 persons. Group quarters include such shared housing situations as nursing homes, prisons, dorms, group residences, military housing, or shelters. For the purposes of this analysis, these residents are removed from the estimated population total, before determining the amount of other types of housing that are needed for non-group households. (The share of group quarters population is assumed to remain steady over the 20-year forecast period.)

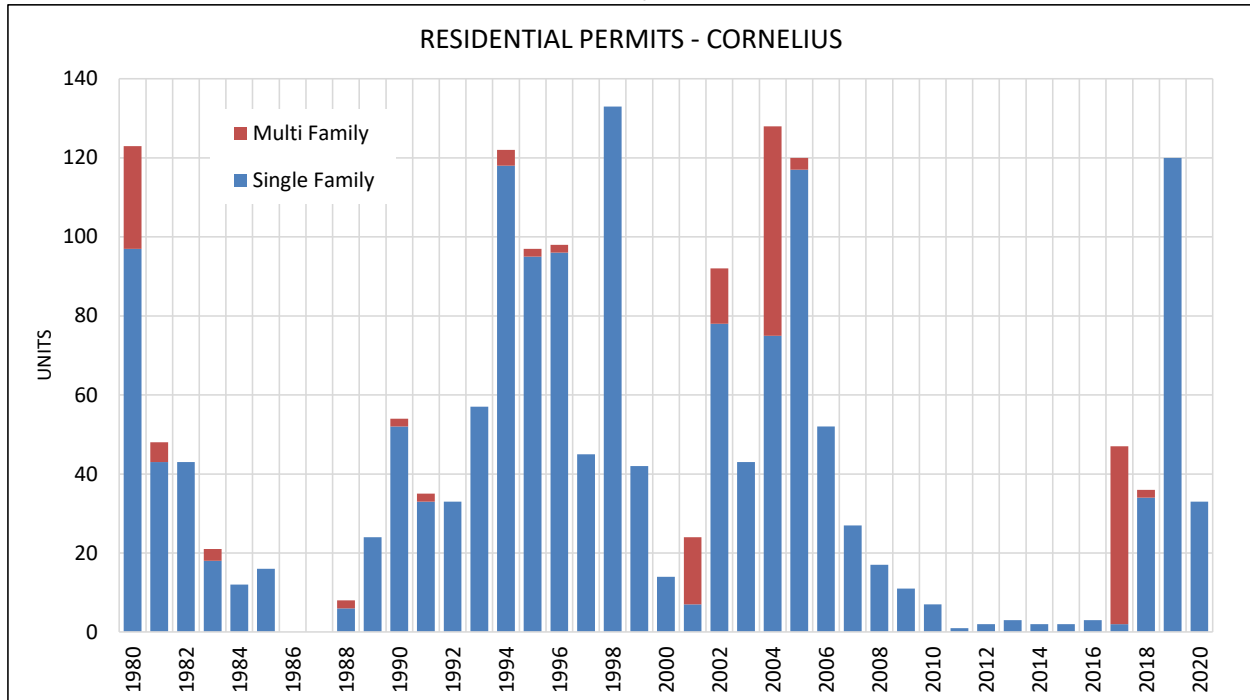
E. HOUSING UNITS

Data from the City of Cornelius and the US Census indicate that the city added roughly 715 new housing units since 2000, representing 24% growth in the housing stock. This number of new units is slightly higher than the growth in new households estimated during the same period (660), indicating that housing growth has kept pace with growing need.

As of 2020, the city had an estimated housing stock of roughly 3,718 units for its 3,537 estimated households. This translates to an estimated average vacancy rate of 4.9%.

Residential Permits: The city of Cornelius has accounted for just over 1% of the total county residential permits since 2000. An average of 35 units have been permitted annually since 2000, with 17% being multi-family units.

FIGURE 2.3: HISTORIC AND PROJECTED RESIDENTIAL PERMITS, CITY OF CORNELIUS

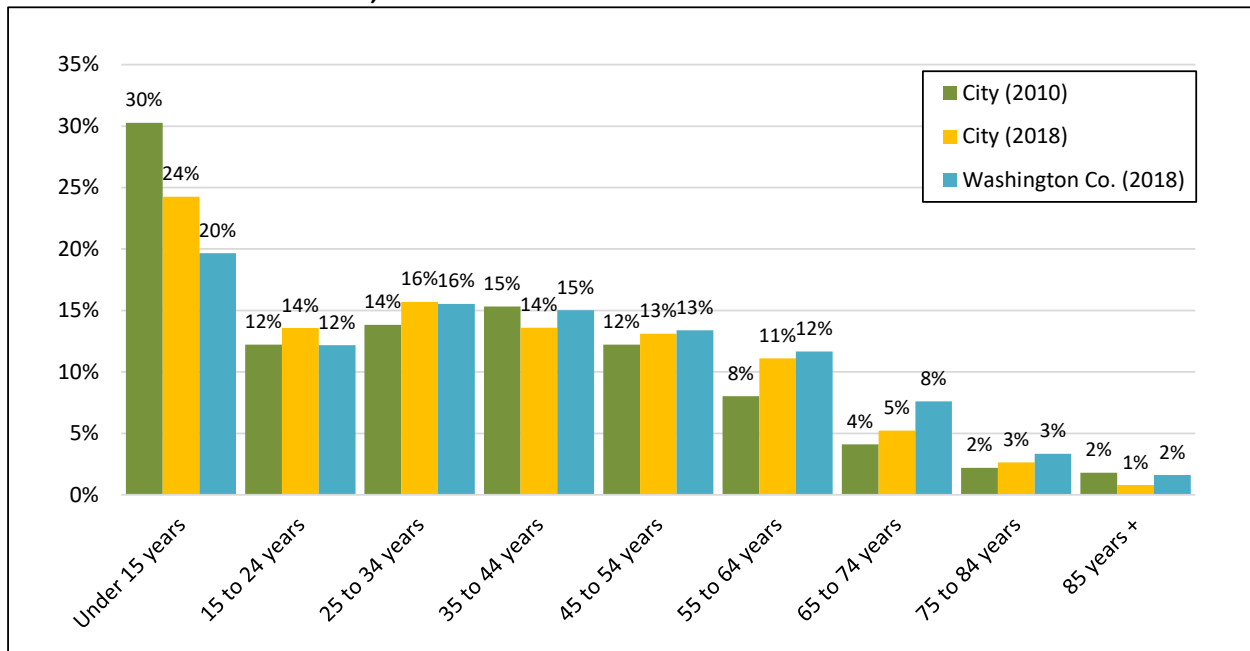


SOURCE: HUD

F. AGE TRENDS

The following figure shows the share of the population falling in different age cohorts between the 2000 Census and the most recent 5-year American Community Survey estimates. As the chart shows, there is a general trend for middle age and young cohorts to fall as share of total population, while older cohorts have grown in share. This is in keeping with the national trend caused by the aging of the Baby Boom generation. Overall, Cornelius has a younger population than the county, with a greater share of children.

FIGURE 2.4: AGE COHORT TRENDS, 2000 - 2018

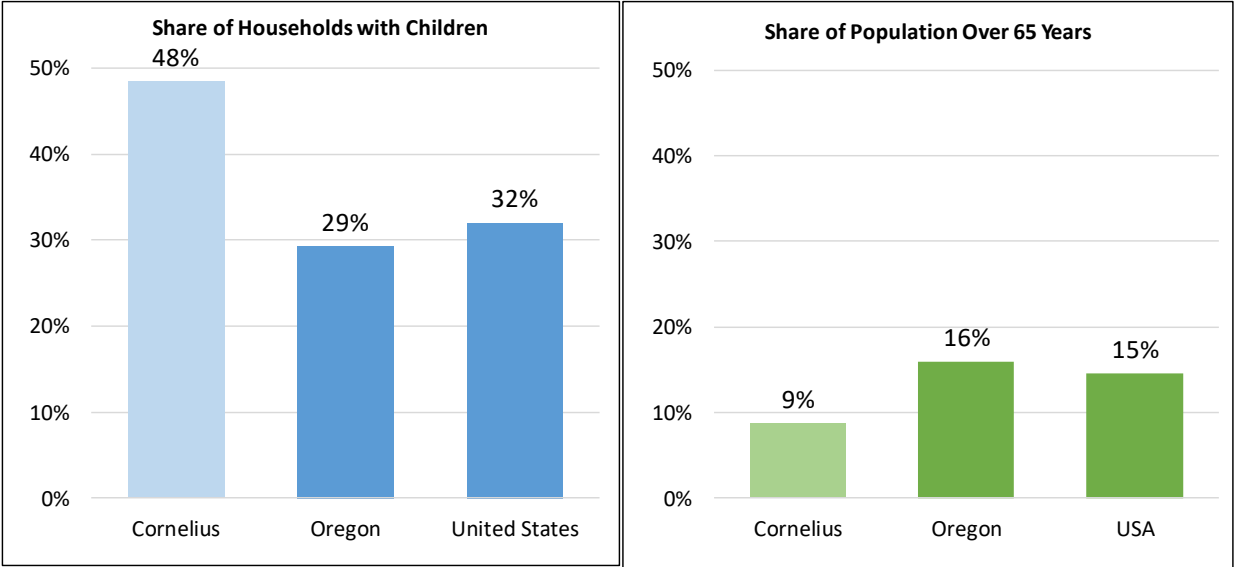


SOURCE: US Census, JOHNSON ECONOMICS LLC
 Census Tables: QT-P1 (2000); S0101 (2018 ACS 5-yr Estimates)

- The cohorts which grew the most in share during this period were those aged 55 to 74 years. Still, an estimated 91% of the population is under 65 years of age.
- In the 2018 ACS, the local median age was an estimated 32 years, compared to 38 years in Oregon.

Figure 2.5 presents the share of households with children, and the share of population over 65 years for comparison. Compared to state and national averages, Cornelius has a higher share of households with children. At 9%, the share of population over 65 is much lower than the state and national figures.

FIGURE 2.5: SHARE OF HOUSEHOLDS WITH CHILDREN/ POPULATION OVER 65 YEARS (CORNELIUS)



SOURCE: US Census, JOHNSON ECONOMICS LLC
 Census Tables: B11005; S0101 (2018 ACS 5-yr Estimates)

G. INCOME TRENDS

The following figure presents data on Cornelius’s income trends. (2000 Census data on income is not available for Cornelius.)

FIGURE 2.6: INCOME TRENDS, 2000 – 2020

PER CAPITA AND MEDIAN HOUSEHOLD INCOME					
	2000	2010	Growth	2020	Growth
	(Census)	(Census)	00-10	(Proj.)	10-20
Per Capita (\$)	na	\$16,739	na	\$22,110	32%
Median HH (\$)	na	\$47,768	na	\$62,786	31%

SOURCE: Census, PSU Population Research Center, and Johnson Economics
 Census Tables: DP-1 (2000, 2010); DP-3 (2000); S1901; S19301

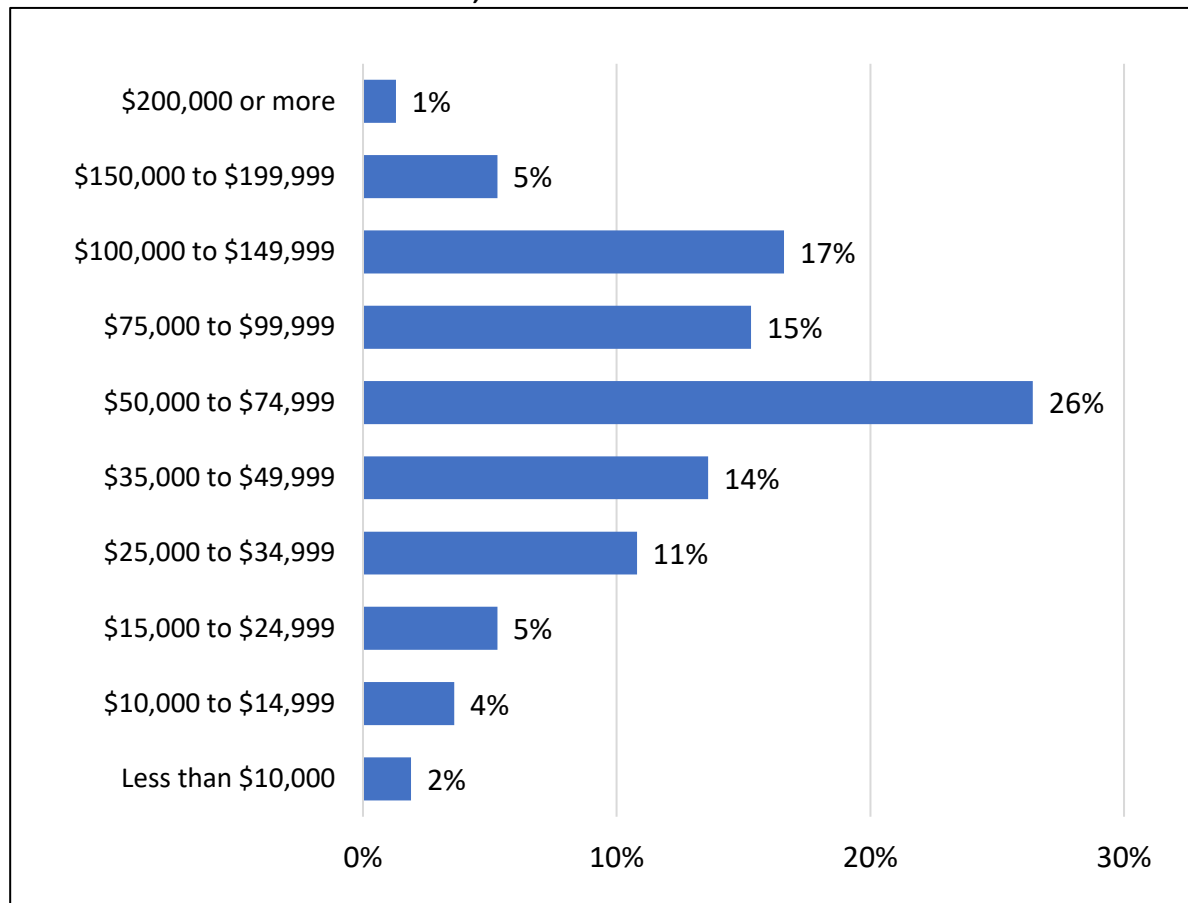
- Cornelius’s estimated median household income was \$63,000 in 2020. This is 24% lower than the Washington County median of \$83,000, but still well above the statewide median of \$56,000.
- Cornelius’s per capita income is roughly \$22,000.

- Median income has grown an estimated 32% between 2010 and 2019, in real dollars. Inflation was an estimated 18% over this period, so the local median income has well exceeded inflation. This is not the case in many regions and nationally, where income growth has not kept pace with inflation.

Figure 2.7 presents the estimated distribution of households by income as of 2018. The largest income cohorts are those households earning between \$50k and \$75k, followed by households earning between \$75,000 and \$149,000. Fifty-five percent of households earn between \$35,000 and \$100,000.

- 35% of households earn less than \$50k per year, while 65% of households earn \$50k or more.
- 11% of households earn less than \$25k per year.

FIGURE 2.7: HOUSEHOLD INCOME COHORTS, 2018



SOURCE: US Census, Census Tables: S1901 (2018 ACS 5-yr Est.)

H. POVERTY STATISTICS

According to the US Census, the official poverty rate in Cornelius is an estimated 10% over the most recent period reported (2018 5-year estimates).³ This is roughly 1,250 individuals in Cornelius. In comparison, the official poverty rate in Washington County is 9%, and at the state level is 17%. In the 2014-18 period:

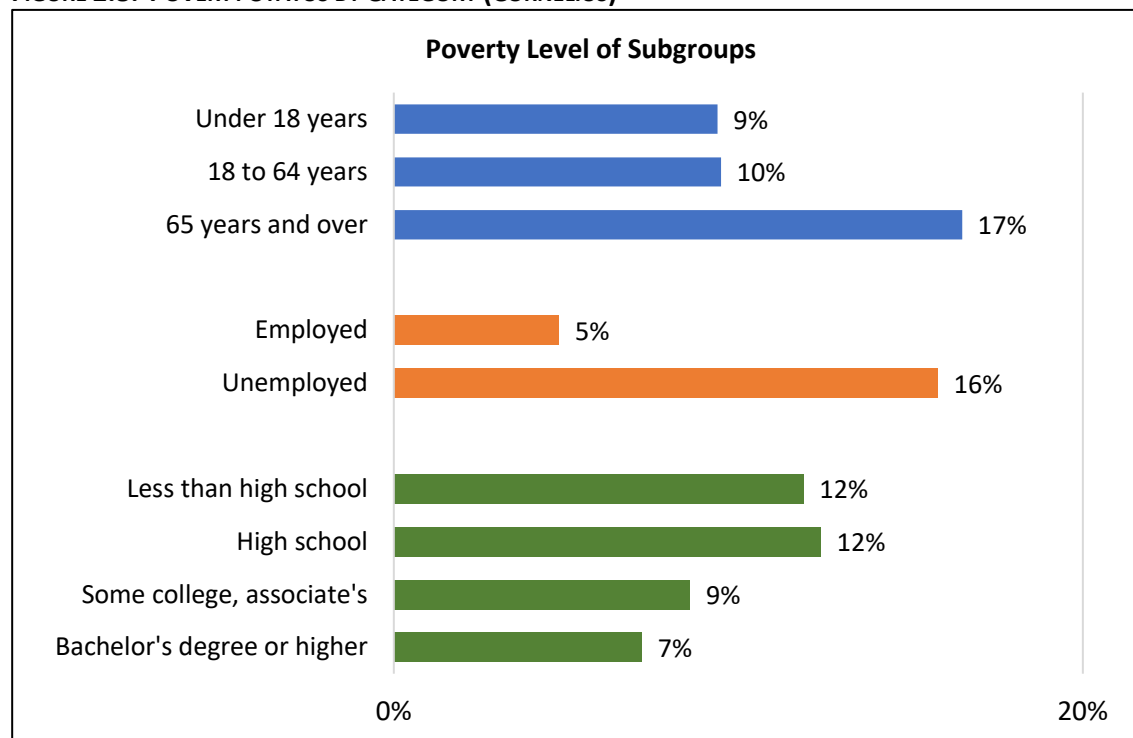
- The Cornelius poverty rate is highest among those over 65 years of age at 17%. The rate is 10% among those between 18 and 64 years of age. The estimated rate is lowest for children at 9%.
- For those without a high school diploma, and with only a high school diploma, the poverty rate is 12%.

³ Census Tables: S1701 (2018 ACS 5-yr Estimates)

- Among those who are employed the poverty rate is 5%, while it is 16% for those who are unemployed.

Information on affordable housing is presented in Section II F of this report.

FIGURE 2.8: POVERTY STATUS BY CATEGORY (CORNELIUS)



SOURCE: US Census
Census Tables: S1701 (2018 ACS 5-yr Est.)

I. EMPLOYMENT LOCATION TRENDS

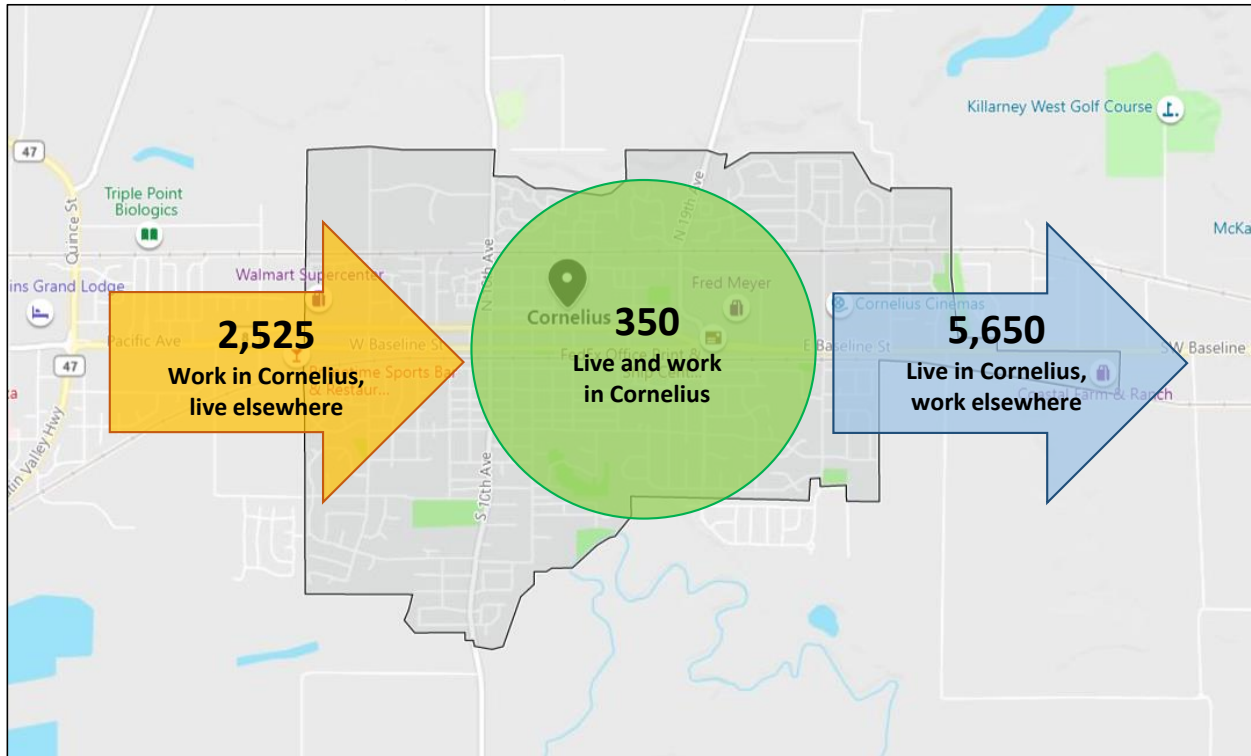
This section provides an overview of employment and industry trends in Cornelius that are related to housing.

Commuting Patterns: The following figure shows the inflow and outflow of commuters to Cornelius according to the Census Employment Dynamics Database. These figures reflect “covered employment” as of 2017, the most recent year available. (Covered employment refers to those jobs where the employee is covered by federal unemployment insurance.) This category does not include many contract employees and self-employed and therefore is not a complete picture of local employment. The figure discussed here is best understood as indicators of the general pattern of commuting and not exact figures.

As of 2017, the most recent year available, the Census estimated there were roughly 2,870 covered employment jobs located in Cornelius. Of these, an estimated 350 or 12%, are held by local residents, while over 2,500 employees commute into the city from elsewhere. This pattern is fairly common among most communities. The most common homes of local workers commuting into the city are Hillsboro and Forest Grove.

Of the estimated 5,985 employed Cornelius residents, 94% of them commute elsewhere to employment. The most common destinations for Cornelius commuters are Hillsboro, Portland and Beaverton. Smaller shares work elsewhere in the Portland metro or in the mid-Willamette Valley.

FIGURE 2.9: COMMUTING PATTERNS (PRIMARY JOBS), CORNELIUS



Source: US Census Longitudinal Employer-Household Dynamics

Jobs/Household Ratio: Cornelius features a fairly-low jobs-to-households ratio. There are an estimated 2,875 jobs in the city of Cornelius (including covered and non-covered), and an estimated 3,537 households in Cornelius. This represents 0.8 jobs per household. There is no standard jobs-to-households ratio that is right for all communities, but it can provide a guide to the balance between employment uses and residential uses in the city.

There is an average of 1.7 jobs held for each Cornelius households, a majority of which are located outside the city.

III. CURRENT HOUSING CONDITIONS

This section presents a profile of the current housing stock and market indicators in Cornelius. This profile forms the foundation to which current and future housing needs will be compared.

A. HOUSING TENURE

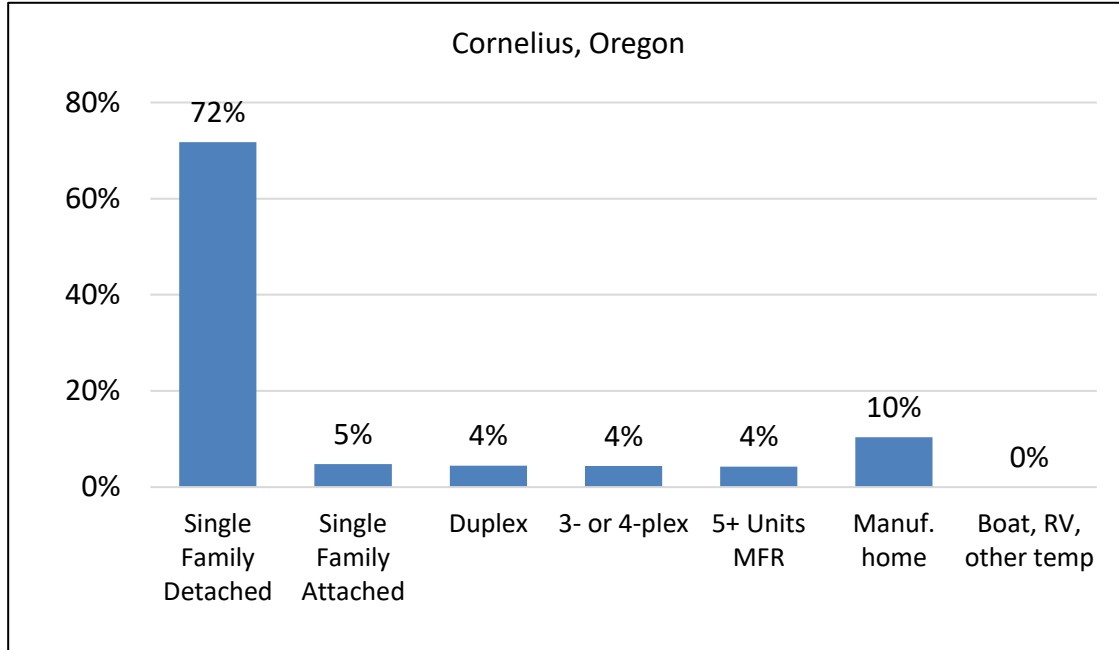
Cornelius has a much greater share of homeowner households than renter households. The 2018 American Community Survey estimates that 79% of occupied units were owner occupied, and only 21% renter occupied. The ownership rate has risen since 2000 (72%). During this period the statewide rate fell from 64% to 61%. Nationally, the homeownership rate has fallen towards the historical average of 65%, after having climbed to 69% from the late 1990's to 2004.

The estimated ownership rate is much lower across Washington County (62%) and statewide (61%).

B. HOUSING STOCK

As shown in Figure 2.1, Cornelius had an estimated 3,718 housing units in 2020, with a vacancy rate of 4.9% (includes ownership and rental units). The housing stock has increased by roughly 715 units since 2000, or growth of 24%.

FIGURE 3.1: ESTIMATED SHARE OF UNITS, BY PROPERTY TYPE, 2018



SOURCE: US Census, City of Cornelius

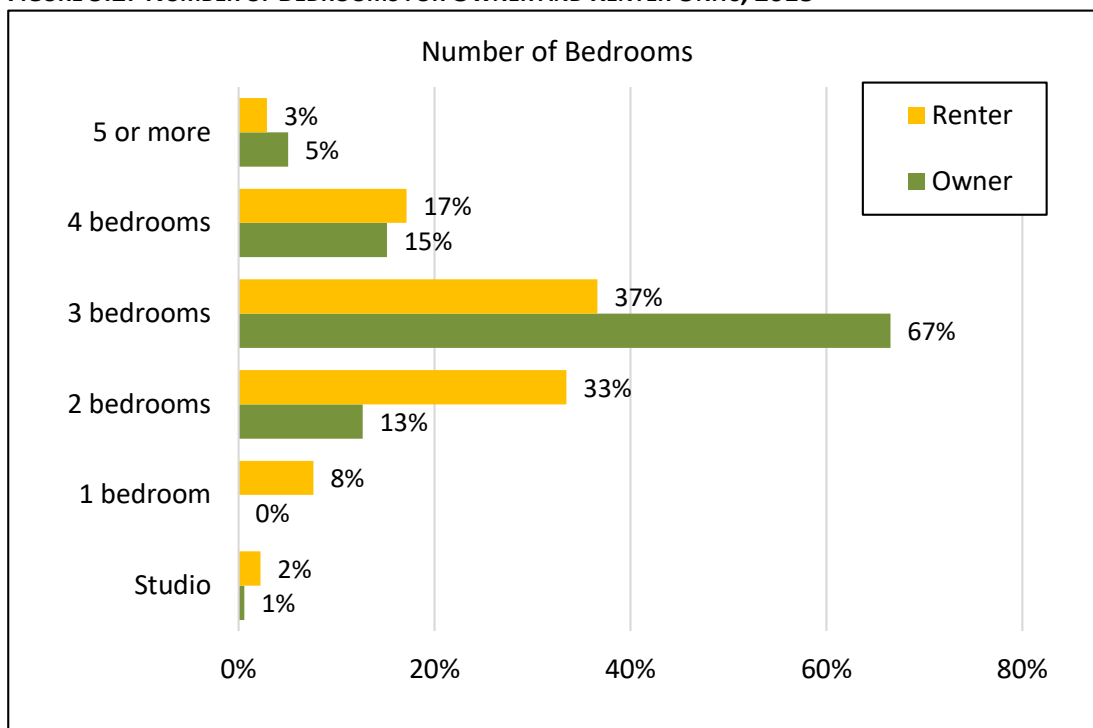
Figure 3.1 shows the estimated number of units by type in 2020 based on US Census. Detached single-family homes represent an estimated 72% of housing units.

Units in larger apartment complexes of 5 or more units represent only 4% of units, and other types of attached homes represent 13% of units. (Attached single family generally includes townhomes, some condos, and 2 to 4-plexes which are separately metered.) Manufactured homes represent 10% of the inventory.

C. NUMBER OF BEDROOMS

Figure 3.2 shows the share of units for owners and renters by the number of bedrooms they have. In general, owner-occupied units are much more likely to have three or more bedrooms, while renter-occupied units are much more likely to have three or fewer bedrooms.

FIGURE 3.2: NUMBER OF BEDROOMS FOR OWNER AND RENTER UNITS, 2018



SOURCE: US Census
 Census Tables: B25042 (2018 ACS 5-year Estimates)

D. UNIT TYPES BY TENURE

As Figure 3.3 and 3.4 show, a large share of owner-occupied units (82%) are detached homes, which is related to why owner-occupied units tend to have more bedrooms, as do manufactured homes (13%). Renter-occupied units are much more distributed among a range of structure types. About 39% of rented units are estimated to be detached homes or manufactured homes, while the remainder are some form of attached unit. Nearly 20% of rental units are in larger apartment complexes.

FIGURE 3.3: CURRENT INVENTORY BY UNIT TYPE, FOR OWNERSHIP AND RENTAL HOUSING

OWNERSHIP HOUSING

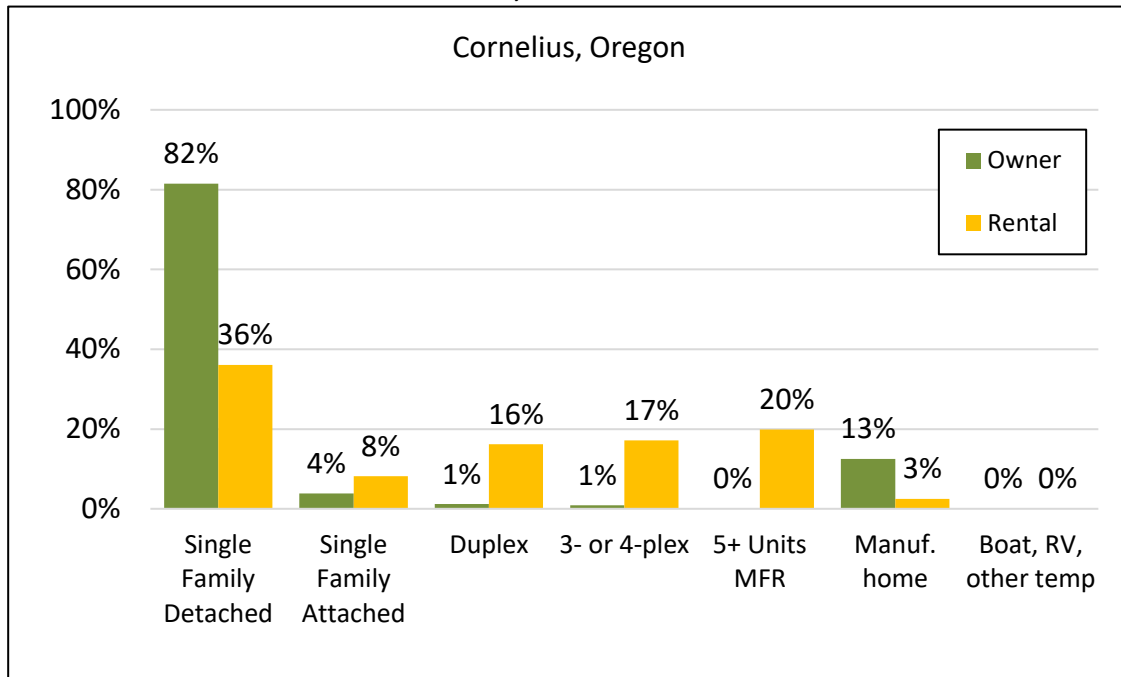
OWNERSHIP HOUSING								
Price Range	Single Family Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Manuf. home	Boat, RV, other temp	Total Units
Totals:	2,377	113	36	25	0	366	0	2,917
Percentage:	81.5%	3.9%	1.2%	0.9%	0.0%	12.5%	0.0%	100%

RENTAL HOUSING

RENTAL HOUSING								
Price Range	Single Family Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Manuf. home	Boat, RV, other temp	Total Units
Totals:	289	65	130	137	159	20	0	801
Percentage:	36.1%	8.2%	16.2%	17.1%	19.9%	2.5%	0.0%	100%

Sources: US Census, JOHNSON ECONOMICS, CITY OF CORNELIUS

FIGURE 3.4: CURRENT INVENTORY BY UNIT TYPE, BY SHARE

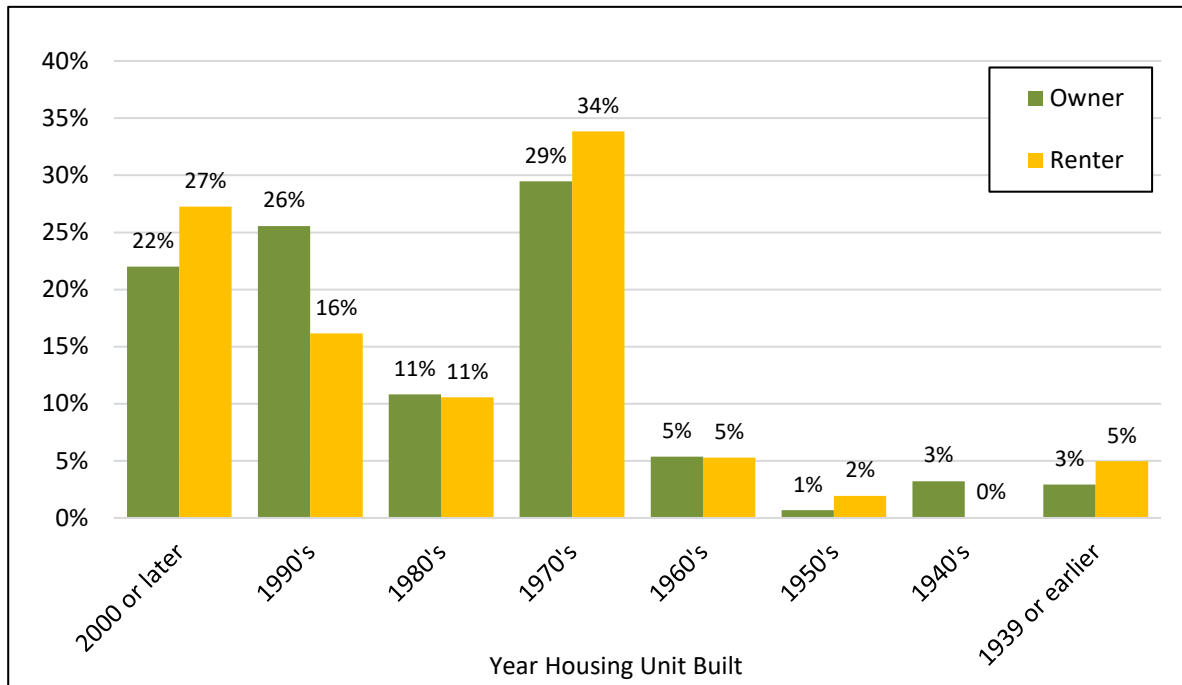


Sources: US Census, JOHNSON ECONOMICS, CITY OF CORNELIUS

E. AGE AND CONDITION OF HOUSING STOCK

Cornelius’s housing stock reflects the pattern of development over time. Almost three-fourths, or 74%, of the housing stock is pre-2000 with the remainder being post-2000. The single largest share of housing stock was built in the 1970’s. Only 12% of the housing stock dates from the 1960’s or earlier, which is low compared to many Oregon communities.

FIGURE 3.5: AGE OF UNITS FOR OWNERS AND RENTERS



SOURCE: US Census
Census Tables: B25036 (2018 ACS 5-year Estimates)

- Unfortunately, good quantitative data on housing condition is generally unavailable without an intensive on-site survey of all local housing that is beyond the scope of this analysis. Census categories related to housing condition are ill-suited for this analysis, dealing with such issues as units without indoor plumbing, which was more common in the mid-20th Century, but is an increasingly rare situation. Age of units serves as the closest reliable proxy for condition with available data.
- For ownership units, older homes may be in poor condition, but are also more likely to have undergone some repair and renovation over the years. Rental units are more likely to degrade steadily with age and wear-and-tear, and less likely to receive sufficient reinvestment to keep them in top condition, though this is not universally true.

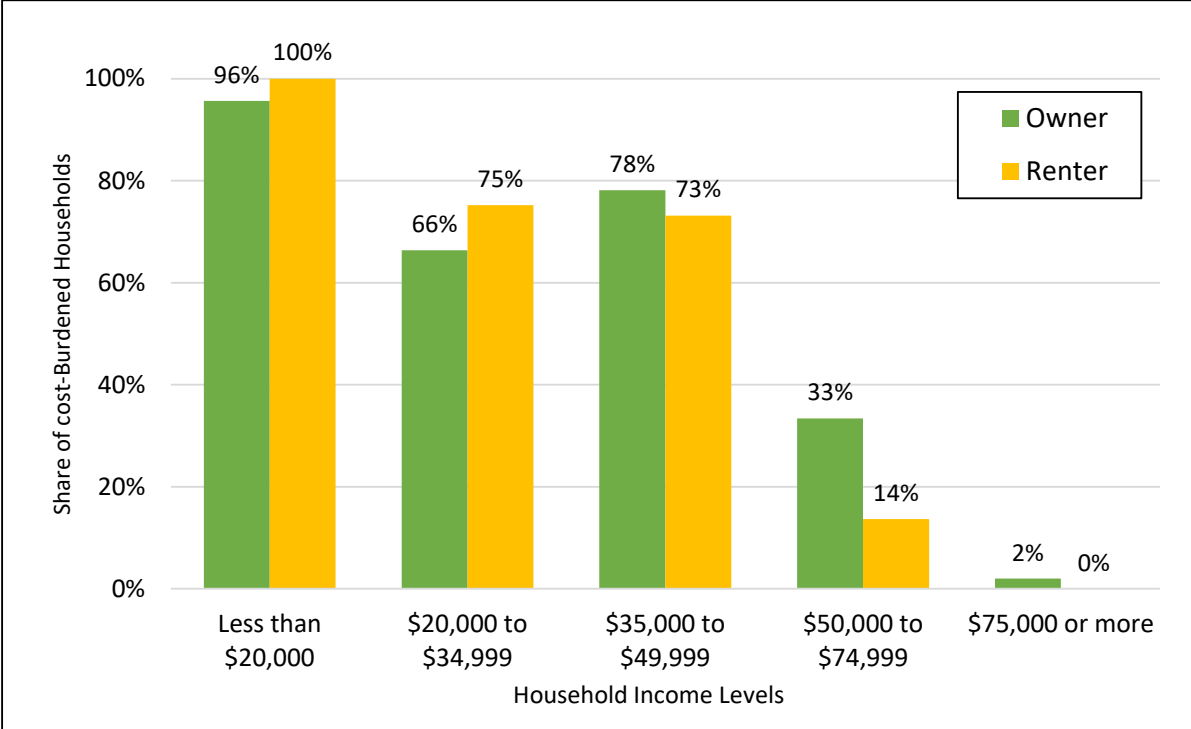
F. HOUSING COSTS VS. LOCAL INCOMES

Figure 3.6 shows the share of owner and renter households who are paying more than 30% of their household income towards housing costs, by income segment. (Spending 30% or less on housing costs is a common measure of “affordability” used by HUD and others, and in the analysis presented in this report.)

As one would expect, households with lower incomes tend to spend more than 30% of their income on housing, while incrementally fewer of those in higher income groups spend more than 30% of their incomes on housing costs. Of those earning less than \$20,000, an estimated 96% of owner households spend more than 30% of income on housing costs and 100% of renters.

In total, the US Census estimates that over 36% of Cornelius households pay more than 30% of income towards housing costs (2018 American Community Survey, B25106)

FIGURE 3.6: SHARE OF HOUSEHOLDS SPENDING MORE THAN 30% ON HOUSING COSTS, BY INCOME GROUP



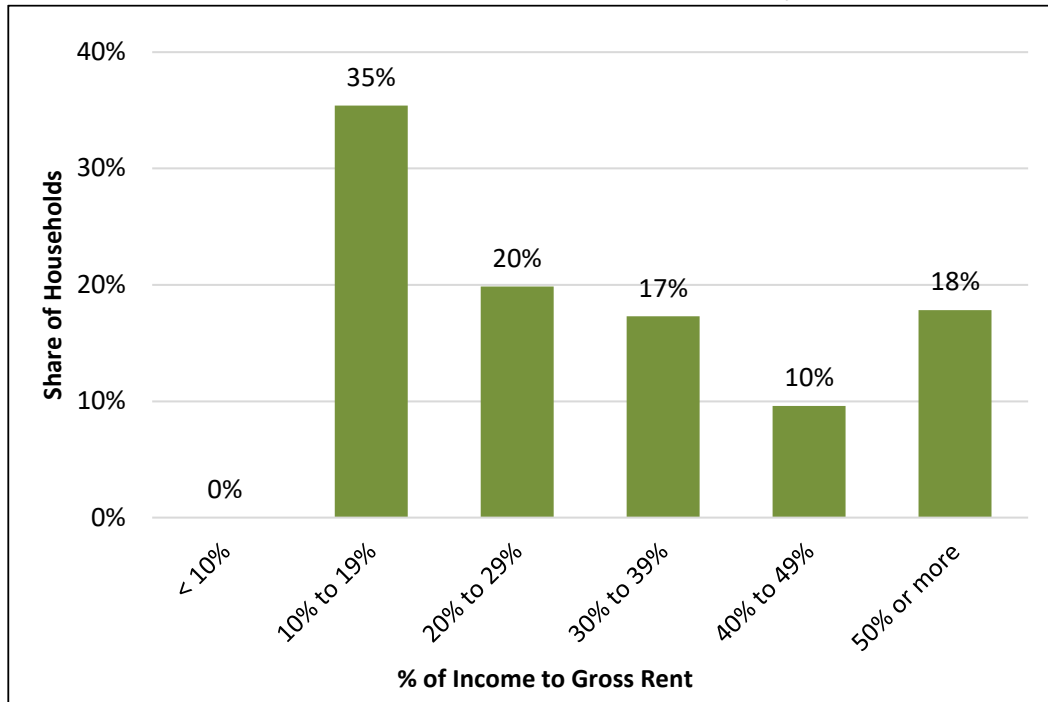
Sources: US Census, JOHNSON ECONOMICS
 Census Table: B25106 (2018 ACS 5-yr Estimates)

Housing is generally one of a household’s largest living costs, if not the largest. The ability to find affordable housing options, and even build wealth through ownership, is one of the biggest contributors to helping lower income households save and build wealth. Even if renting, affordable housing costs, allow for more household income to be put to other needs, including saving.

The following figures shows the percentage of household income spent towards gross rent⁴ for local renter households only. This more fine-grained data shows that not only are 45% of renters spending more than 30% of their income on gross rent, but an estimated 18% of renters are spending 50% or more of their income on housing and are considered severely rent-burdened.

Renters are disproportionately lower income relative to homeowners. Housing cost burdens are felt more broadly for these households, and as the analysis presented in a later section shows there is a need for more affordable rental units in Cornelius, as in most communities.

FIGURE 3.7: PERCENTAGE OF HOUSEHOLD INCOME SPENT ON GROSS RENT, CORNELIUS RENTER HOUSEHOLDS



Sources: US Census, JOHNSON ECONOMICS
 Census Table: B25070 (2018 ACS 5-yr Estimates)

G. PUBLICLY ASSISTED HOUSING

Cornelius has an estimated 79 rent-subsidized housing units, found in 12 properties, according to Oregon Housing and Community Development (OHCS). These properties are funded through HUD programs, tax credits and other programs which guarantee subsidized rents for qualified households. This includes the recently completed Cornelius Place, which features 45 affordable senior housing units.

The estimated 79 subsidized housing units in Cornelius represents 2% of total local households, and 8% of local renter households. The high number of renters paying over 30% of their income towards housing costs indicates that there is an ongoing need for rental units at the lowest price points.

Agricultural Worker Housing: Cornelius is home to one property that provides 20 units dedicated to agricultural workers (included in the above total). This population may also be served by other available affordable units.

Homelessness: The most recent (2019) Point-in-Time count of homeless individuals in Washington County⁵ found 503 homeless individuals on the streets, in shelters, or other temporary and/or precarious housing; this includes 81 children. Of these, 298 were sheltered, and 232 were unsheltered.

⁴ The Census defines Gross Rent as “the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else).” Housing costs for homeowners include mortgage, property taxes, insurance, utilities and condo or HOA dues.

⁵ Figures are for the entire County

H. STUDENT HOUSEHOLDS

The neighboring city of Forest Grove is home to Pacific University, a private liberal arts college with nearly 2,000 undergraduate and graduate students. As with many universities, most upperclassmen tend to live off campus in a variety of housing options in the Forest Grove and Cornelius areas. The university does not track the exact numbers of Pacific students living in Cornelius. The 2018 ACS estimates that there are 655 enrolled college students in the community. 76% of these are estimated to be enrolled in public colleges, including community college, and public distance learning. 23% are enrolled in private college, including Pacific University. College students who live on their own are more likely to have low incomes and be renters. These are captured in the estimates of current housing needs in the next section.

IV. CURRENT HOUSING NEEDS (CITY OF CORNELIUS)

The profile of current housing conditions in the study area is based on Census 2010, which the Portland State University Population Research Center (PRC) uses to develop yearly estimates through 2019. The 2019 estimate is forecasted to 2020 using the estimated growth rate realized since 2010.

FIGURE 4.1: CURRENT HOUSING PROFILE (2020)

CURRENT HOUSING CONDITIONS (2020)		SOURCE
Total 2020 Population:	12,265	PSU Pop. Research Center
- Estimated group housing population:	167 (1.4% of Total)	US Census
Estimated Non-Group 2020 Population:	12,098 (Total - Group)	
Avg. HH Size:	3.42	US Census
Estimated Non-Group 2020 Households:	3,537 (Pop/HH Size)	
Total Housing Units:	3,718 (Occupied + Vacant)	Census 2010 + permits
Occupied Housing Units:	3,537 (= # of HH)	
Vacant Housing Units:	181 (Total HH - Occupied)	
Current Vacancy Rate:	4.9% (Vacant units/ Total units)	

Sources: Johnson Economics, City of Cornelius, PSU Population Research Center, U.S. Census

*This table reflects population, household and housing unit projections shown in Figure 2.1

We estimate a current population of roughly 12,265 residents, living in 3,537 households (excluding group living situations). Average household size is 3.4 persons.

There are an estimated 3,715 housing units in the city, indicating an estimated vacancy rate of 4.9%. This includes units vacant for any reason, not just those which are currently for sale or rent.

ESTIMATE OF CURRENT HOUSING DEMAND

Following the establishment of the current housing profile, the current housing demand was determined based upon the age and income characteristics of current households.

The analysis considered the propensity of households in specific age and income levels to either rent or own their home (tenure), in order to derive the current demand for ownership and rental housing units and the appropriate housing cost level of each. This is done by combining data on tenure by age and tenure by income from the Census American Community Survey (tables: B25007 and B25118, 2018 ACS 5-yr Estimates).

The analysis takes into account the average amount that owners and renters tend to spend on housing costs. For instance, lower income households tend to spend more of their total income on housing, while upper income households spend less on a percentage basis. In this case, it was assumed that households in lower income bands would *prefer* housing costs at no more than 30% of gross income (a common measure of affordability). Higher income households pay a decreasing share down to 20% for the highest income households.

While the Census estimates that most low-income households pay more than 30% of their income for housing, this is an estimate of current *preferred* demand. It assumes that low-income households prefer (or demand) units affordable to them at no more than 30% of income, rather than more expensive units.

Figure 4.2 presents a snapshot of current housing demand (i.e. preferences) equal to the number of households in the study area (3,537). The breakdown of tenure (owners vs. renters) reflects data from the 2018 ACS.

FIGURE 4.2: ESTIMATE OF CURRENT HOUSING DEMAND (2020)

Ownership				
Price Range	# of Households	Income Range	% of Total	Cumulative
\$0k - \$80k	97	Less than \$15,000	3.7%	3.7%
\$80k - \$130k	114	\$15,000 - \$24,999	4.4%	8.1%
\$130k - \$180k	115	\$25,000 - \$34,999	4.4%	12.5%
\$180k - \$230k	391	\$35,000 - \$49,999	15.0%	27.6%
\$230k - \$340k	591	\$50,000 - \$74,999	22.7%	50.3%
\$340k - \$430k	420	\$75,000 - \$99,999	16.2%	66.4%
\$430k - \$510k	310	\$100,000 - \$124,999	11.9%	78.3%
\$510k - \$590k	215	\$125,000 - \$149,999	8.3%	86.6%
\$590k - \$750k	230	\$150,000 - \$199,999	8.8%	95.5%
\$750k +	118	\$200,000+	4.5%	100.0%
Totals:	2,602		% of All:	73.6%

Rental				
Rent Level	# of Households	Income Range	% of Total	Cumulative
\$0 - \$400	90	Less than \$15,000	9.6%	9.6%
\$400 - \$700	95	\$15,000 - \$24,999	10.2%	19.7%
\$700 - \$900	182	\$25,000 - \$34,999	19.5%	39.2%
\$900 - \$1100	91	\$35,000 - \$49,999	9.8%	49.0%
\$1100 - \$1600	170	\$50,000 - \$74,999	18.2%	67.1%
\$1600 - \$2000	168	\$75,000 - \$99,999	18.0%	85.1%
\$2000 - \$2400	72	\$100,000 - \$124,999	7.7%	92.8%
\$2400 - \$2800	30	\$125,000 - \$149,999	3.2%	96.0%
\$2800 - \$3500	25	\$150,000 - \$199,999	2.7%	98.7%
\$3500 +	13	\$200,000+	1.3%	100.0%
Totals:	935		% of All:	26.4%

All Households	3,537
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Sources: PSU Population Research Center, Environics Analytics., Census, JOHNSON ECONOMICS
 Census Tables: B25007, B25106, B25118 (2018 ACS 5-yr Estimates)
 Environics Analytics: Estimates of income by age of householder

The estimated home price and rent ranges are irregular because they are mapped to the affordability levels of the Census income level categories. For instance, an affordable home for those in the lowest income category (less than \$15,000) would have to cost \$80,000 or less. Affordable rent for someone in this category would be \$400 or less.

The affordable price level for ownership housing assumes 30-year amortization, at an interest rate of 5% (significantly more than the current rate, but in line with historic norms), with 15% down payment. These assumptions are designed to represent prudent lending and borrowing levels for ownership households. The 30-year mortgage commonly serves as the standard. In the 2000's, down payment requirements fell significantly, but standards have tightened somewhat since the 2008/9 credit crisis. While 20% is often cited as the standard for most buyers, it is common for homebuyers, particularly first-time buyers, to pay significantly less than this using available programs.

Interest rates are subject to disruption from national and global economic forces, and therefore impossible to forecast beyond the short term. The 5% used here is roughly the average 30-year rate over the last 20 years. The general trend has been falling interest rates since the early 1980's, but coming out of the recent recession, many economists believe that rates cannot fall farther and must begin to climb as the Federal Reserve raises its rate over the coming years.

During the 2020 Covid-19 emergency, the Federal Reserve has again cut their benchmark funds rate to near zero, which has reduced mortgage rates moderately, but not dramatically. The economic uncertainty has the effect of making lenders more cautious, and this can balance the effect of a lower federal rate.

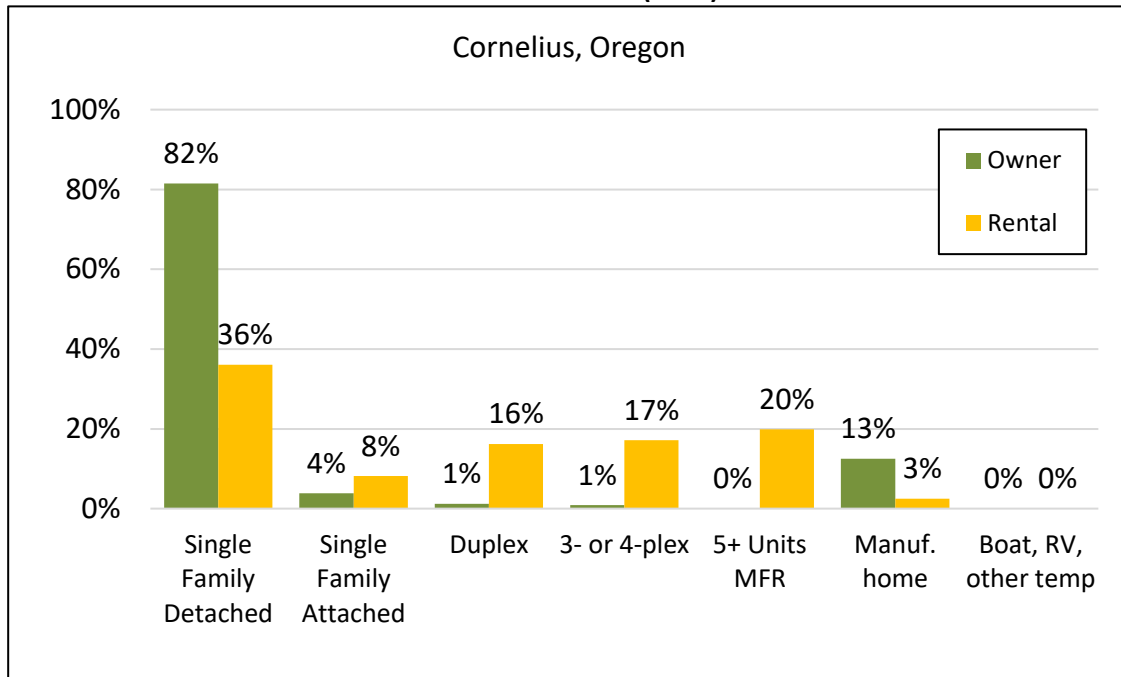
CURRENT HOUSING INVENTORY

The profile of current housing demand (Figure 4.2) represents the preference and affordability levels of households. In reality, the current housing supply (Figures 4.3 and 4.4 below) differs from this profile, meaning that some households may find themselves in housing units which are not optimal, either not meeting the household's own/rent preference, or being unaffordable (requiring more than 30% of gross income).

A profile of current housing supply in Cornelius was estimated based on permit data from the City of Cornelius and Census data from the most recently available 2018 ACS, which provides a profile of housing types (single family, attached, manufactured home, etc.), tenure, housing values, and rent levels. The 5-year estimates from the ACS were used because 3-year and 1-year estimates are not yet available for Cornelius geography.

- An estimated 78% of housing units are ownership units, while an estimated 22% of housing units are rental units. This is different than the estimated demand profile shown in Figure 4.2, which estimated a somewhat higher demand for rental units. This is likely due to the high number of mobile homes in the community. These households would normally tend to rent in many communities, but are able to own homes in Cornelius, due to the higher stock of affordable options. The inventory includes vacant units.
- 82% of ownership units are detached homes, and 13% are manufactured homes. Thirty-nine percent of rental units are either single family homes or manufactured homes, while 20% are in structures of 5 units or more.
- Of total housing units, an estimated 72% are detached homes, and 10% are manufactured homes. Eighteen percent are some sort of attached unit type. There are also a small share of households living in RV units.
- The affordability of different unit types is an approximation based on Census data on the distribution of housing units by value (ownership) or gross rent (rentals).
- Most subsidized affordable housing units found in the city are represented by the inventory at the lowest end of the rental spectrum.
- Ownership housing found at the lower end of the value spectrum generally reflect mobile homes, older, smaller homes, or homes in poor condition on small or irregular lots. **It is important to note that these represent estimates of current property value or current housing cost to the owner, not the current market pricing of homes for sale in the city.** These properties may be candidates for redevelopment when next they sell but are currently estimated to have low value.

FIGURE 4.3: PROFILE OF CURRENT HOUSING SUPPLY BY TYPE (2020)



Sources: US Census, PSU Population Research Center, JOHNSON ECONOMICS
 Census Tables: B25004, B25032, B25063, B25075 (2018 ACS 5-yr Estimates)

FIGURE 4.4: PROFILE OF CURRENT HOUSING SUPPLY, ESTIMATED AFFORDABILITY (2020)

Income Range	Ownership Housing		Rental Housing		Share of Total Units
	Affordable Price Level	Estimated Units	Affordable Rent Level	Estimated Units	
Less than \$15,000	\$0k - \$80k	354	\$0 - \$400	37	11%
\$15,000 - \$24,999	\$80k - \$130k	22	\$400 - \$700	12	1%
\$25,000 - \$34,999	\$130k - \$180k	322	\$700 - \$900	214	14%
\$35,000 - \$49,999	\$180k - \$230k	587	\$900 - \$1100	183	21%
\$50,000 - \$74,999	\$230k - \$340k	1,107	\$1100 - \$1600	209	35%
\$75,000 - \$99,999	\$340k - \$430k	363	\$1600 - \$2000	81	12%
\$100,000 - \$124,999	\$430k - \$510k	95	\$2000 - \$2400	30	3%
\$125,000 - \$149,999	\$510k - \$590k	22	\$2400 - \$2800	21	1%
\$150,000 - \$199,999	\$590k - \$750k	44	\$2800 - \$3500	15	2%
\$200,000+	\$750k +	2	\$3500 +	0	0%
	78%	2,917	22%	801	

Sources: US Census, PSU Population Research Center, JOHNSON ECONOMICS
 Census Tables: B25004, B25032, B25063, B25075 (2018 ACS 5-yr Estimates)

COMPARISON OF CURRENT HOUSING DEMAND WITH CURRENT SUPPLY

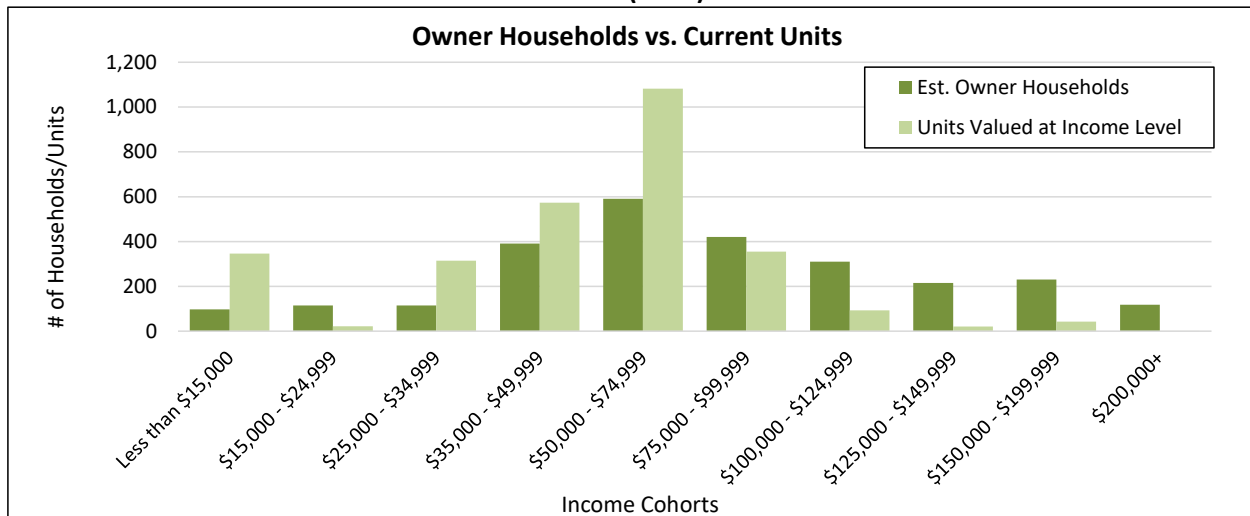
A comparison of estimated current housing *demand* with the existing *supply* identifies the existing discrepancies between needs and the housing which is currently available. The estimated number of units outnumbers the number of households by roughly 180 units, indicating an average vacancy rate of 5%.

In general, this identifies that there is currently support for more ownership housing at both lower and higher price ranges. This is because most housing in Cornelius is clustered at the low-middle to middle property values, while analysis of household incomes and ability to pay indicates that some households could afford housing at higher price points.

The analysis finds that the current market rates for most rental units are in the \$700 to \$1,600/month range. Therefore, this is where most of the rental unit supply is currently clustered. However, the greatest unmet need is found at the lowest end of the income scale, where many current renters pay more than 30% of their income in housing costs. There is an indication that some renter households could support more units at higher rental levels. Rentals at more expensive levels generally represent single family homes for rent.

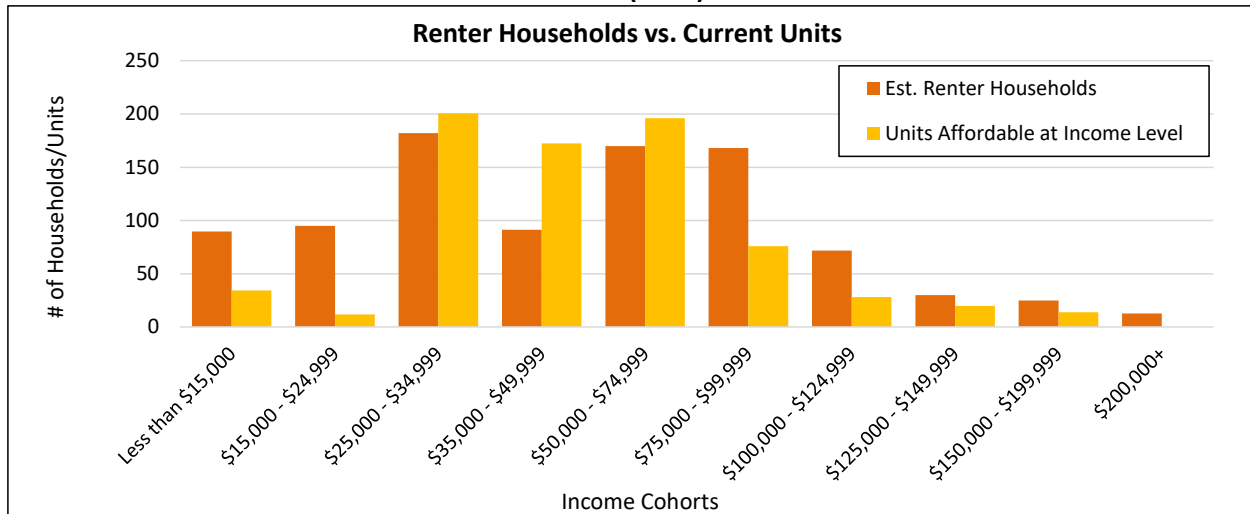
Figures 4.5 and 4.6 present this information in chart form, comparing the estimated number of households in given income ranges, and the supply of units currently valued (ownership) or priced (rentals) within those income ranges. The data is presented for owner and renter households.

FIGURE 4.5: COMPARISON OF OWNER HOUSEHOLD INCOME GROUPS TO ESTIMATED SUPPLY AFFORDABLE AT THOSE INCOME LEVELS (2020)



Sources: PSU Population Research Center, City of Cornelius, Census, JOHNSON ECONOMICS

FIGURE 4.6: COMPARISON OF RENTER HOUSEHOLD INCOME GROUPS TO ESTIMATED SUPPLY AFFORDABLE AT THOSE INCOME LEVELS (2020)



Sources: PSU Population Research Center, City of Cornelius, Census, JOHNSON ECONOMICS

The home value and rent segments which show a “surplus” in Figures 4.5 and 4.6 illustrate where current property values and market rent levels are in Cornelius. Housing prices and rent levels will tend to congregate around those levels. These levels will be too costly for some (i.e. require more than 30% in gross income) or “too affordable” for others (i.e. they have income levels that indicate they could afford more expensive housing if it were available).

In general, these findings demonstrate that there are some lower-value housing opportunities for many owner households, and potential support for some more expensive ownership housing. There is a need for more rental units at lower rent levels (<\$700/mo.), and modest support for some rental units at higher rent levels as well.

HOME SALE PRICES

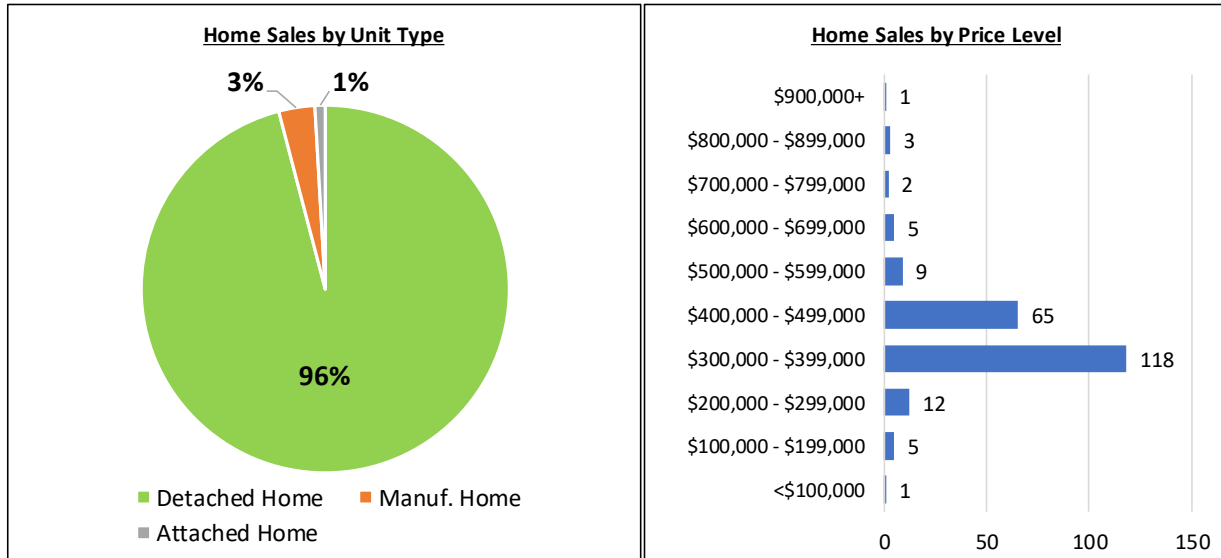
It is important to note that the figures presented in the prior section represent estimates of current *property value or current housing cost to the owner*, not the current market pricing of homes for sale in the city. For instance, a household living in a manufactured home that has been paid off over many years may have relatively low housing costs. This indicates that one owner household is living in a “lower value” unit. It does **not** indicate that units at this price point are available on the current market.

If this hypothetical household were to sell their home, it would sell at a higher price reflecting inflation and current achievable market prices. For this reason, many of the lower value or lower rent units found in the previous section will actually become higher-priced units when they are sold or become vacant.

For reference, this section presents home sales data from 2019 to indicate housing costs for new entrants into the market (Figure 4.7).

- The median sale price was \$380,000.
- The average (mean) sale price was \$400,000.
- The average price per square foot was \$220/s.f.
- The median square footage was 1,675 s.f.

FIGURE 4.7: CORNELIUS HOME SALES (12 MONTHS)



Sources: RMLS, JOHNSON ECONOMICS

- 5.5% of sales were priced between \$200,000 and \$299,000.
- 53% of sales were priced between \$300,000 and \$399,000.
- 38.5% of sales were priced at \$400,000 or more.
- 3% of sales were priced below \$200,000.

Affordability: As indicated, 88% of recent sales in Cornelius took place within the \$200,000 to \$500,000 price range. Homes in this range should be affordable to many households earning from roughly \$45,000 to \$125,000 per year. An estimated 55% of local households fall within these income segments.

Roughly 28% of households earn less than \$45,000 per year, meaning that the bulk of housing supply on the current for-sale market is likely too expensive for most of these households.

* * *

The findings of current need form the foundation for projected future housing need, presented in the following section.

V. FUTURE HOUSING NEEDS - 2040 (CITY OF CORNELIUS)

The projected future (20-year) housing profile (Figure 5.1) in the study area is based on the current housing profile (2020), multiplied by an assumed projected future household growth rate. The projected future growth is the forecasted 2040 population for the City of Cornelius included in the most recent Metro Urban Growth analysis and Regional Transportation Plan analysis (1.8%).

FIGURE 5.1: FUTURE HOUSING PROFILE (2040)

PROJECTED FUTURE HOUSING CONDITIONS (2020 - 2040)		SOURCE
2020 Population (Minus Group Pop.)	12,098	PSU
Projected Annual Growth Rate	1.8%	Metro UGR Forecast Program
2040 Population (Minus Group Pop.)	17,188	(Total 2040 Population - Group Housing Pop.)
Estimated group housing population:	244	Share of total pop. (1.4%)
Total Estimated 2040 Population:	17,432	
Estimated Non-Group 2040 Households:	5,294	(2040 Non-Group Pop./Avg. Household Size)
New Households 2020 to 2040	1,756	
Avg. Household Size:	3.25	Projected household size
Total Housing Units:	5,572	Occupied Units plus Vacant
Occupied Housing Units:	5,294	(= Number of Non-Group Households)
Vacant Housing Units:	279	(= Total Units - Occupied Units)
Projected Market Vacancy Rate:	5.0%	(Vacant Units/ Total Units)

Sources: PSU Population Research Center, Metro, Census, JOHNSON ECONOMICS LLC

*Projections are applied to estimates of 2020 population, household and housing units shown in Figure 2.1

The model projects growth in the number of non-group households over 20 years of nearly 1,800 households, with accompanying population growth of 5,200 new residents. (The number of households differs from the number of housing units, because the total number of housing units includes a percentage of vacancy. Projected housing unit needs are discussed below.)

PROJECTION OF FUTURE HOUSING UNIT DEMAND (2040)

The profile of future housing demand was derived using the same methodology used to produce the estimate of current housing need. This estimate includes current and future households, *but does not include a vacancy assumption*. The vacancy assumption is added in the subsequent step. Therefore, the need identified below is the total need for actual households in occupied units (5,294).

The analysis considered the propensity of households at specific age and income levels to either rent or own their home, in order to derive the future need for ownership and rental housing units, and the affordable cost level of each. The projected need is for *all* 2040 households and therefore includes the needs of current households.

The price levels presented here use the same assumptions regarding the amount of gross income applied to housing costs, from 30% for low income households down to 20% for the highest income households.

The affordable price level for ownership housing assumes 30-year amortization, at an interest rate of 5%, with 15% down payment. Because of the impossibility of predicting variables such as interest rates 20 years into the future,

these assumptions were kept constant from the estimation of current housing demand. Income levels and price levels are presented in 2020 dollars.

Figure 5.2 presents the projected occupied future housing demand (current and new households, without vacancy) in 2040.

FIGURE 5.2: PROJECTED OCCUPIED FUTURE HOUSING DEMAND (2040)

Ownership				
Price Range	# of Households	Income Range	% of Total	Cumulative
\$0k - \$80k	132	Less than \$15,000	3.6%	3.6%
\$80k - \$130k	156	\$15,000 - \$24,999	4.2%	7.8%
\$130k - \$180k	149	\$25,000 - \$34,999	4.1%	11.8%
\$180k - \$230k	548	\$35,000 - \$49,999	14.9%	26.7%
\$230k - \$340k	827	\$50,000 - \$74,999	22.4%	49.2%
\$340k - \$430k	603	\$75,000 - \$99,999	16.3%	65.5%
\$430k - \$510k	447	\$100,000 - \$124,999	12.1%	77.6%
\$510k - \$590k	315	\$125,000 - \$149,999	8.5%	86.2%
\$590k - \$750k	337	\$150,000 - \$199,999	9.1%	95.3%
\$750k +	173	\$200,000+	4.7%	100.0%
Totals:	3,687		% of All:	69.6%

Rental				
Rent Level	# of Households	Income Range	% of Total	Cumulative
\$0 - \$400	148	Less than \$15,000	9.2%	9.2%
\$400 - \$700	158	\$15,000 - \$24,999	9.8%	19.0%
\$700 - \$900	295	\$25,000 - \$34,999	18.3%	37.4%
\$900 - \$1100	173	\$35,000 - \$49,999	10.7%	48.1%
\$1100 - \$1600	311	\$50,000 - \$74,999	19.4%	67.5%
\$1600 - \$2000	278	\$75,000 - \$99,999	17.3%	84.8%
\$2000 - \$2400	124	\$100,000 - \$124,999	7.7%	92.5%
\$2400 - \$2800	52	\$125,000 - \$149,999	3.3%	95.8%
\$2800 - \$3500	45	\$150,000 - \$199,999	2.8%	98.6%
\$3500 +	23	\$200,000+	1.4%	100.0%
Totals:	1,607		% of All:	30.4%

All Units
5,294

Sources: Census, Environics Analytics, JOHNSON ECONOMICS

The number of households across the income spectrum seeking a range of both ownership and rental housing is anticipated to grow. It is projected that the homeownership rate in Cornelius will fall somewhat over the next 20 years to 70%, which would be closer to, but still significantly higher than, the Washington County and statewide ownership rates.

The main reason for this is that the number of new mobile home units available as an inexpensive ownership choice is likely to be much lower among new development than it is in the current housing mix. The households that might own a mobile home are more likely to rent if these are not available. At the same time, development trends in the Metro area, and increasingly limited land for development, point to increased development of attached types of housing such as small plexes and multi-family housing. On balance, these housing types tend to accommodate more renters than owners.

COMPARISON OF FUTURE HOUSING DEMAND TO CURRENT HOUSING INVENTORY

The profile of occupied future housing demand presented above (Figure 5.2) was compared to the current housing inventory presented in the previous section to determine the total future need for *new* housing units by type and price range (Figure 5.3).

This estimate includes a vacancy assumption. As reflected by the most recent Census data, and as is common in most communities, the vacancy rate for rental units is typically higher than that for ownership units. An average vacancy rate of 5% is assumed for the purpose of this analysis.

FIGURE 5.3: PROJECTED FUTURE NEED FOR NEW HOUSING UNITS (2040), CORNELIUS

OWNERSHIP HOUSING									
Unit Type:	Single Family Detached	Single Family Attached	Multi-Family			Manuf. home	Boat, RV, other temp	Total Units	% of Units
			2-unit	3- or 4-plex	5+ Units MFR				
Totals:	719	64	30	8	0	118	0	939	50.7%
Percentage:	76.5%	6.9%	3.2%	0.9%	0.0%	12.5%	0.0%	100%	

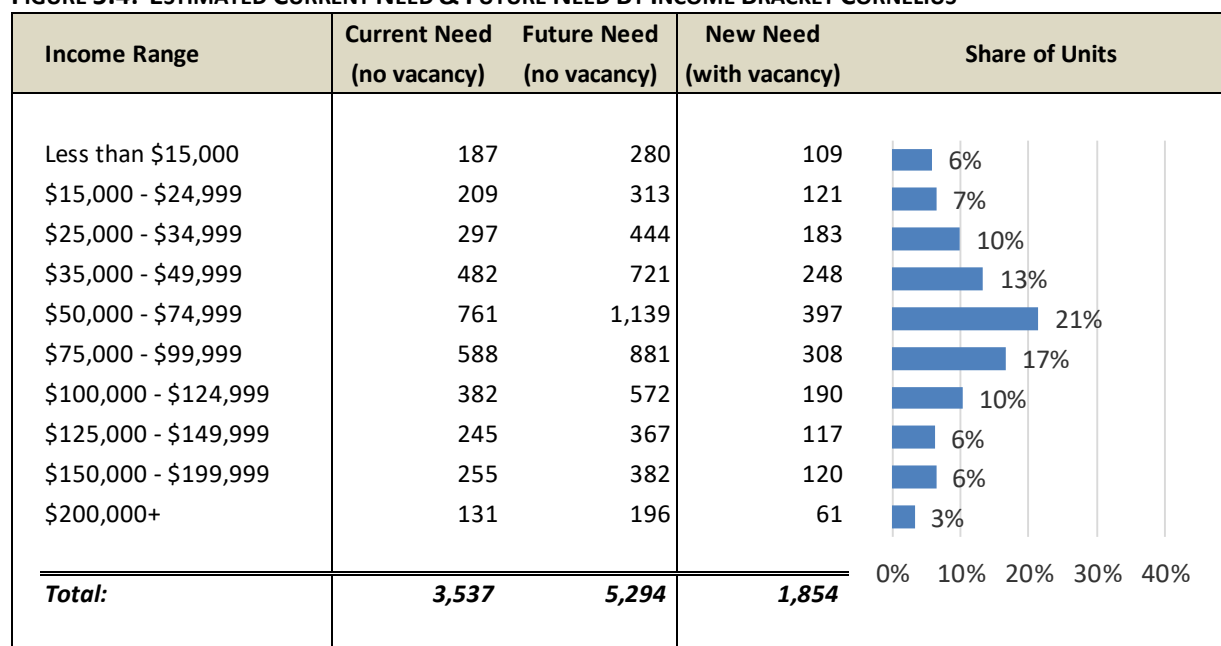
RENTAL HOUSING									
Unit Type:	Single Family Detached	Single Family Attached	Multi-Family			Manuf. home	Boat, RV, other temp	Total Units	% of Units
			2-unit	3- or 4-plex	5+ Units MFR				
Totals:	211	93	167	175	246	23	0	915	49.3%
Percentage:	23.1%	10.2%	18.2%	19.1%	26.9%	2.5%	0.0%	100%	

TOTAL HOUSING UNITS									
Unit Type:	Single Family Detached	Single Family Attached	Multi-Family			Manuf. home	Boat, RV, other temp	Total Units	% of Units
			2-unit	3- or 4-plex	5+ Units MFR				
Totals:	930	158	197	183	246	141	0	1,854	100%
Percentage:	50.2%	8.5%	10.6%	9.9%	13.3%	7.6%	0.0%	100%	

Sources: PSU, City of Cornelius, Census, Environics Analytics, JOHNSON ECONOMICS

- The results show a need for 1,854 new housing units by 2040.
- Of the new units needed, roughly 51% are projected to be ownership units, while 49% are projected to be rental units. This represents more renters than the estimated tenure split, but it is projected that more rental units will be needed to balance the disproportionate share of ownership units in the current inventory.
- There is some new need for ownership housing at the low-end of the pricing spectrum. But income trends suggest that the greatest demand will remain in the middle and upper-middle price ranges (\$200k to \$400k). This is because some of the city’s current housing is found at lower value levels due to age and condition. Therefore, there may be support for some units at higher price points. The \$250,000 to \$350,000 price point (in current dollars) is projected to remain the greatest share of demand.
- The greatest need for rental units is found at the lowest and some higher price points. Market rents are currently clustered in the \$700 to \$1,600 range in current dollars. Therefore, most units are to be found in this range. There is insufficient rental housing for the lowest income households making \$25,000 or less, and there may also be some support for higher rent units, which may be in new apartment complexes, townhomes or detached single-family homes for rent.

FIGURE 5.4: ESTIMATED CURRENT NEED & FUTURE NEED BY INCOME BRACKET CORNELIUS



Sources: PSU, City of Cornelius, Census, Environics Analytics, JOHNSON ECONOMICS

Needed Unit Types

The mix of needed unit types shown in Figure 5.3 reflects both past trends and anticipated future trends. Since 2000, detached single family units (including manufactured and mobile homes) have constituted nearly all the permitted units in Cornelius. In keeping with development trends, and the buildable land available to Cornelius, single family units are expected to continue to make up a large share of new housing development over the next 20 years. However, an increasing share of new needed units is anticipated to attached housing types to accommodate renters and first-time home buyers.

- 50% of the new units are projected to be single family detached homes, while 40% is projected to be some form of attached housing, and 8% are projected to be manufactured homes.
- Single family attached units (townhomes on individual lots) are projected to meet over 8% of future need. These are defined as units on separate tax lots, attached by a wall but separately metered, the most common example being townhome units.
- Duplex through four-plex units are projected to represent over 20% of the total need. Duplex units would include a detached single-family home with an accessory dwelling unit on the same lot, or with a separate unit in the home (for instance, a rental basement unit.)
- 13% of all needed units are projected to be multi-family in structures of 5+ attached units.
- 8% of new needed units are projected to be manufactured home units, which meet the needs of some low-income households for both ownership and rental.
- Of ownership units, 77% are projected to be detached single-family homes, and 12.5% manufactured homes. Only a few units are projected to be attached forms.
- About 74% of new rental units are projected to be found in new attached buildings, with 27% projected in rental properties of 5 or more units, and 37% in buildings of two to four units, and 10% in

Needed Affordability Levels

Figure 5.5 presents the estimated need for net new housing units by major income segment, based on the projected demographics of new households to the market area. The needed affordability levels presented here are based on current 2020 dollars. Over time, incomes and housing costs will both inflate, so the general relationship projected here is expected to remain unchanged.

Figure 5.5 also discusses the housing types typically attainable by residents at these income levels.

FIGURE 5.5: PROJECTED NEED FOR NEW HOUSING AT DIFFERENT INCOME LEVELS

Household Income Segment	Income Level (Rounded)*	Afford. Rent Range	Afford. Price Range	Owner Units	Renter Units	Total	Share	Common Housing Product
Extremely Low Inc. < 30% AMI	< \$26,500	<\$700	<\$100k	70	186	256	14%	Govt-subsidized; Voucher
Very Low Income 30% - 50% AMI	\$26.5k - \$44k	\$700-\$1,000	\$100k-\$210k	108	198	306	17%	Aging/substandard rentals; Govt-subsidized; Voucher
Low Income 50% - 80% AMI	\$44k - \$70k	\$1,000-\$1,600	\$210k-\$300k	222	201	423	23%	Market apts; Manuf. homes; Plexes; Aging SFR
Middle Income 80% - 120% AMI	\$70k - \$105k	\$1,600-\$2,400	\$300k-\$430k	222	201	424	23%	Single-family detached; Townhomes; Small homes; New apts
Upper Income > 120% AMI	> \$105,000	\$2,400+	\$430k+	319	128	446	24%	Single-family detached
TOTAL:				939	915	1,854	100%	

* Adjusted to 2020 dollars. The median household income level in 2020 will be will be inflated from current levels.

Sources: HUD, Census, Environics Analytics, JOHNSON ECONOMICS

- Generally, based on income levels there is a shortage of units in the lowest pricing levels for renter households.
- Figure 5.3 presents the *net NEW* housing unit need over the next 20 years. However, there is also a *current* need for more affordable units. In order for all households, current and new to pay 30% or less of their income towards housing in 2040, more affordable rental units would be required. This indicates that some of the current supply, while it shows up as existing available housing, would need to become less expensive to meet the needs of current households.
- There is a finding of some new need at the lowest end of the rental spectrum (\$700 and less).
- The projection of future ownership units finds that the supply at the lowest end of the spectrum is currently sufficient due to the prevalence of older and manufactured homes in the community. (This reflects the estimated *value* of the total housing stock, and not necessarily the average pricing for housing currently for sale.) The community can support some housing at higher price points, but most demand remains in the middle-income range.
- Figure 5.6 presents estimates of need at key low-income affordability levels in 2020 and in 2040. There is existing and on-going need at these levels, based on income levels specified by Oregon Housing and Community Services for Washington County. An estimated 53% of households qualify as at least “low income” or lower on the income scale, while 14% of household qualify as “extremely low income”. Typically, only rent-subsidized properties can accommodate these households at “affordable” housing cost levels. (The threshold income levels presented here are generated for the entire county based on the significantly higher countywide average household income. Therefore, these income thresholds are likely somewhat high for Cornelius.)

FIGURE 5.6: PROJECTED NEED FOR HOUSING AFFORDABLE AT LOW INCOME LEVELS, CORNELIUS

Affordability Level	Income Level*		Current Need (2020)		Future Need (2040)		NEW Need (20-Year)	
			# of HH	% of All	# of HH	% of All	# of HH	% of All
Extremely Low Inc.	30% AMI	\$26,370	437	12%	693	13%	256	14%
Very Low Income	50% AMI	\$43,950	981	28%	1,542	29%	562	30%
Low Income	80% AMI	\$70,320	1,793	51%	2,778	52%	985	53%

Sources: OHCS, Environics Analytics, JOHNSON ECONOMICS

* Income levels are based on OHCS guidelines for a family of four.

Agricultural Worker Housing

There are currently 20 units of housing dedicated to this population in Cornelius, which is well less than 1% of local housing. Based on the assumption that this type of housing will maintain its current representation in the local housing stock, this indicates a need for 10 – 15 additional units for agricultural workers over the planning period. This population may also be served by other available affordable units.