

CITY OF THE DALLES, OR

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

**20-YEAR HOUSING NEED
2016 - 2036**

Prepared For:
CITY OF THE DALLES, OREGON

March 2017

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INTRODUCTION

This analysis outlines a forecast of housing need within the City of The Dalles. Housing need and resulting land need are forecast to 2036 consistent with 20-year need assessment requirements of periodic review. 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
- U.S. Census
- Claritas Inc.¹
- Wasco County GIS
- Other sources are identified as appropriate.

This analysis reflects the coordinated population forecast from the Oregon Population Forecast Program, at the Population Research Center (PRC) at PSU. State legislation passed in 2013 made the PRC responsible for generating the official population forecasts to be used in Goal 10 housing analyses in Oregon communities outside of the Portland Metro area (ORS 195.033). The population forecasts used in this analysis were generated in 2016.

This project is funded by Oregon general fund dollars through the Department of Land Conservation and Development. The contents of this document do not necessarily reflect the views or policies of the State of Oregon.

I. CITY OF THE DALLES DEMOGRAPHIC PROFILE

SUMMARY

The following table (Figure 1.1) presents a profile of City of The Dalles demographics from the 2000 and 2010 Census. This includes the city limits of The Dalles, as well as areas currently included within the Urban Growth Boundary (UGB). It also presents the estimated population of this area in 2016 from PSU estimates.

- The Dalles is a City of over 15,500 people (City), and over 16,800 people (UGB), located in Wasco County in the Columbia River Gorge on the northern border of Oregon.
- Based on the UGB population, The Dalles is the 40th largest city in the state by population, and the largest city in Wasco County.
- The Dalles has experienced moderate growth, growing 13.4% since 2000. In contrast, Wasco County and the state experienced population growth of 10.8% and 17.3% respectively. (US Census and PSU Population Research Center)

¹ Claritas Inc. is a third-party company providing data on demographics and market segmentation. It is owned by 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. Claritas promotes a “bottom-up” and “top-down” analysis using these sources to produce annual demographic and economic profiles for individual geographies. Projections of future growth are based on the continuation of long-term and emergent demographic trends identified through the above sources.

- The Dalles is home to an estimated 6,800 households in 2016, an increase of 787 households since 2000. The percentage of families fell somewhat between 2000 and 2016 from 65.9% to 62.9% of all households. Average household size has remained flat during this period. The city has a similar share of family households as Wasco County (65%) and the state (63%).
- The Dalles' average household size is 2.40 persons, remaining unchanged since 2000. This is somewhat smaller than the Wasco County average of 2.44 and the statewide average of 2.47.

FIGURE 1.1: THE DALLES DEMOGRAPHIC PROFILE

POPULATION, HOUSEHOLDS, FAMILIES, AND YEAR-ROUND HOUSING UNITS					
	2000	2010	Growth	2016	Growth
	(Estimate)	(Estimate)	00-10	(PSU)	10-16
Population ¹	14,840	15,792	6.4%	16,823	6.5%
Households ²	6,014	6,385	6.2%	6,801	6.5%
Families ³	3,962	4,015	1%	4,277	7%
Housing Units ⁴	6,329	6,787	7%	6,927	2%
Group Quarters Population ⁵	406	469	16%	500	7%
Household Size (non-group)	2.40	2.40	0%	2.40	0%
Avg. Family Size	2.94	2.99	2%	3.02	1%
PER CAPITA AND MEDIAN HOUSEHOLD INCOME					
	2000	2010	Growth	2016	Growth
	(Census)	(Census)	00-10	(Proj.)	10-16
Per Capita (\$)	\$17,511	\$23,186	32%	\$27,439	18%
Median HH (\$)	\$35,430	\$42,317	19%	\$47,076	11%

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

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

¹ From PSU Population Research Center, Population Forecast Program, final forecast for Wasco Co. (6/2016)

² 2016 Households = (2016 population - Group Quarters Population)/2016 HH Size

³ Ratio of 2016 Families to total HH is based on 2014 ACS 5-year Estimates

⁴ 2015 housing units are the 2010 Census total plus new units permitted from '10 through January '16 (source: Census, City of THE DALLES)

⁵ Ratio of 2016 Group Quarters Population to Total Population is kept constant from 2010.

A. POPULATION GROWTH

Since 2000, The Dalles has grown by roughly 2,000 people within the UGB, or 13.4% in 16 years. This is a greater growth rate than was seen in the rest of the county, but moderate compared to statewide growth. In comparison, the population of Hood River grew by over 30% during this period.

B. HOUSEHOLD GROWTH & SIZE

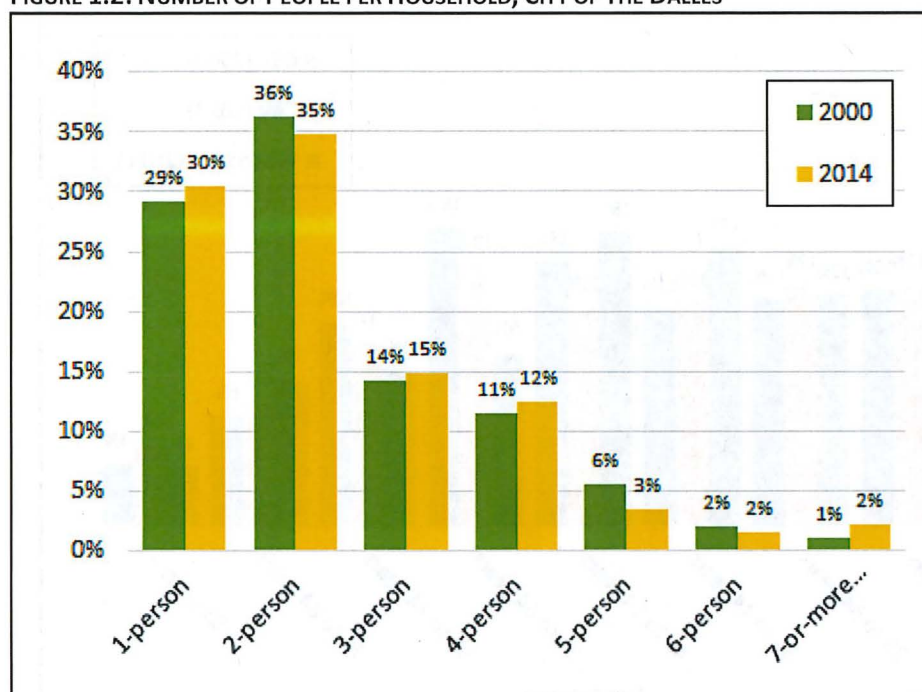
As of 2016, the city has an estimated 6,801 households. Since 2000, The Dalles has added an estimated 787 households, or growth of 13.1%. This is an average of roughly 50 households annually during this period. The growth since 2000 has outpaced the growth in new housing units, which have been permitted at the rate of 32 units per year. This has contributing to a tight housing supply.

Household growth has kept pace with population growth reflecting that the average household size has remained steady. 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. The Dalles has resisted this trend.

The Dalles' average household size of 2.40 people, with 63% family households, is slightly smaller than Wasco County (2.44; 65%). Hood River has an average household size of 2.38 people with 58% family households.

Figure 1.2 shows the share of households by the number of people in 2000 and 2014 (latest available), according to the Census. 30% are single-person households, up from 29% in 2000. This is higher than the percentage in the state (27%). The share of two person households fell somewhat, while households of 3 or 4 persons grew in share.

FIGURE 1.2: NUMBER OF PEOPLE PER HOUSEHOLD, CITY OF THE DALLES



SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: H013 (2000); B11016 (2014 ACS 5-yr Estimates)

C. FAMILY HOUSEHOLDS

As of the 2010 Census, 63% of The Dalles households were family households, down from 66% of households in 2000. The number of family households in The Dalles is estimated to have grown by 315 since 2000.

The Census defines family households as two or more persons, related by marriage, birth or adoption and living together. In 2010, family households in The Dalles had an average size of 2.99 people.

D. HOUSING UNITS

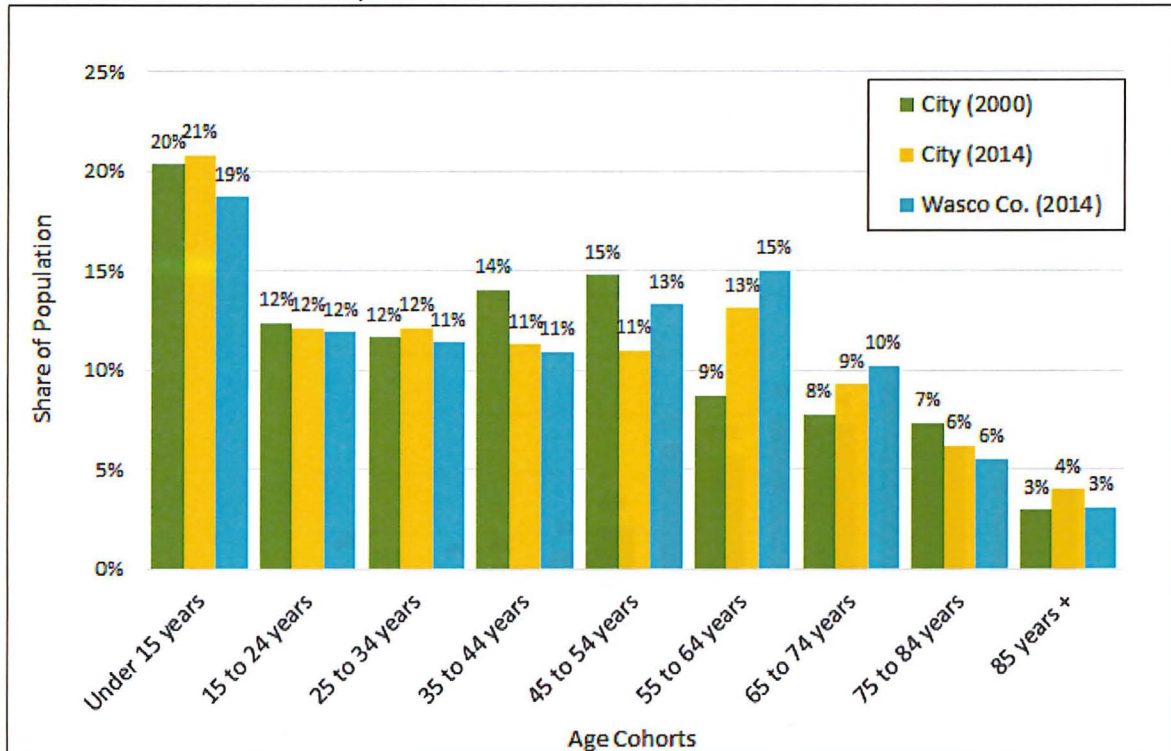
Data from the City of The Dalles and the US Census indicate that the city added an estimated 598 housing units since 2000 within the UGB, representing 9.4% growth in the housing stock. 93% of these new units were detached single family homes, while 7% were attached housing types. This number of new units is only 76% of the 787 new households estimated during the same period, indicating that housing growth did not keep pace with growing need.

As of 2016, the city has an estimated housing stock of roughly 6,925 units for its 6,800 estimated households. This translates to an estimated vacancy rate of 2%, which indicates a very tight housing supply in the community.

E. 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 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. At the same time, the number of younger people has remained fairly steady as a share of population.

FIGURE 1.3: AGE COHORT TRENDS, 2000 - 2014



SOURCE: US Census, JOHNSON ECONOMICS LLC

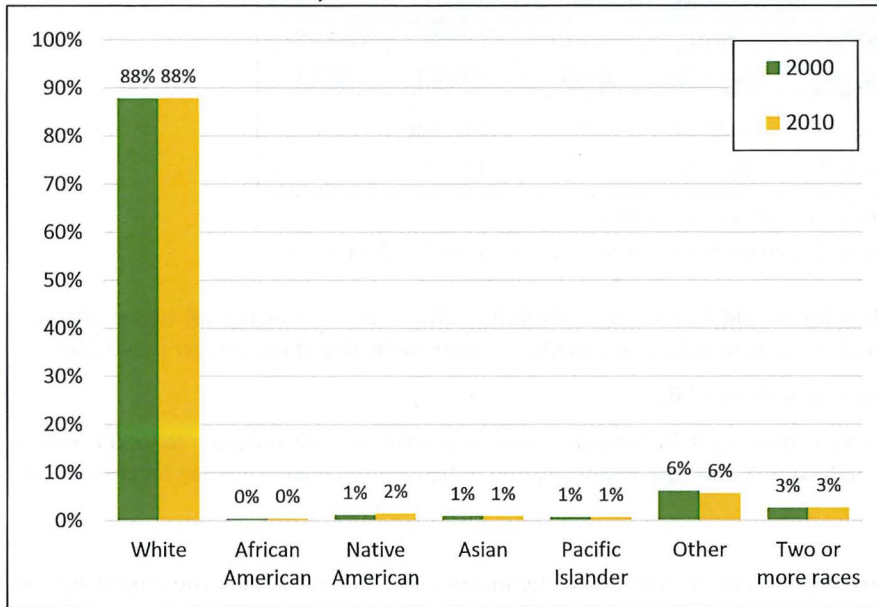
Census Tables: DP-1 (2000); S0101 (2014 ACS 5-yr Estimates)

- Figure 1.3 shows the share of the population by age according to the Census. In general, the distribution of the population is shifting upwards in age as the Baby Boom generation moves into the retirement years. The cohorts which grew in share during this period were those aged 55 to 74 years and 85 years and older. Still an estimated 81% of the population is under 65 years of age, and 21% of the population consists of children under the age of 15.
- Wasco County in comparison features a smaller share of children under 15 years of age and older cohorts, and a smaller share of people aged 44 years or less.
- In the 2010 Census, the local median age was 39 years, compared to 38 years in Oregon.
- The greatest growth was in the 55 to 64 age range, coinciding with the center of the Baby Boom cohort. This cohort grew from 9% to 13% of the population.
- 19% of the population is now 65 years or older.

F. DIVERSITY TRENDS

The Dalles has also remained fairly stable in terms of diversity. The Dalles is roughly 88% white with small share of other racial groups. Wasco County has a similar share of white residents (86%), while Oregon is 84% white.

FIGURE 1.4: RACIAL DIVERSITY, 2000 AND 2010



SOURCE: US Census
Census Tables: DP-1 (2000, 2010)

The Hispanic or Latino community has increased more significantly in The Dalles. From roughly 1,275 individuals in the 2000 Census, or 10.5% of the population, the Latino population grew by over 1,000 people by the 2010 Census, to roughly 2,315 people, or 17% of the population. This is higher than the 15% Latino population in Wasco County, and higher than the 12% share across the state.

Immigration: As of the 2014 American Community Survey², an estimated 8% of The Dalles' population is foreign-born, up from 7% in 2000. Of these, 80% were born in Latin America, 8% were born in Europe, and roughly 6.5% were born in Asia.

In 2010, the percentage of the population speaking a language other than English at home was 16%, up from 12% in 2000.

The North Wasco County School District categorizes 24% of students as "English learners", speaking six different primary languages. The younger grades (K-3) have the highest percentage of English learners at 27%, while only 20% are defined as such at the high school level.

The immigrant population is not homogeneous and includes households ranging from political refugees to skilled recruits to local companies. However on average, these households do have some commonalities which are discussed further in Section III of this report.

² Census Table: B05006 (2014 ACS, 5-Year Estimates)

G. INCOME TRENDS

The following figure presents data on income trends in The Dalles.

FIGURE 1.5: INCOME TRENDS, 2000 – 2016

<i>PER CAPITA AND MEDIAN HOUSEHOLD INCOME</i>					
	2000 (Census)	2010 (Census)	Growth 00-10	2016 (Proj.)	Growth 10-16
Per Capita (\$)	\$17,511	\$23,186	32%	\$27,439	18%
Median HH (\$)	\$35,430	\$42,317	19%	\$47,076	11%

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

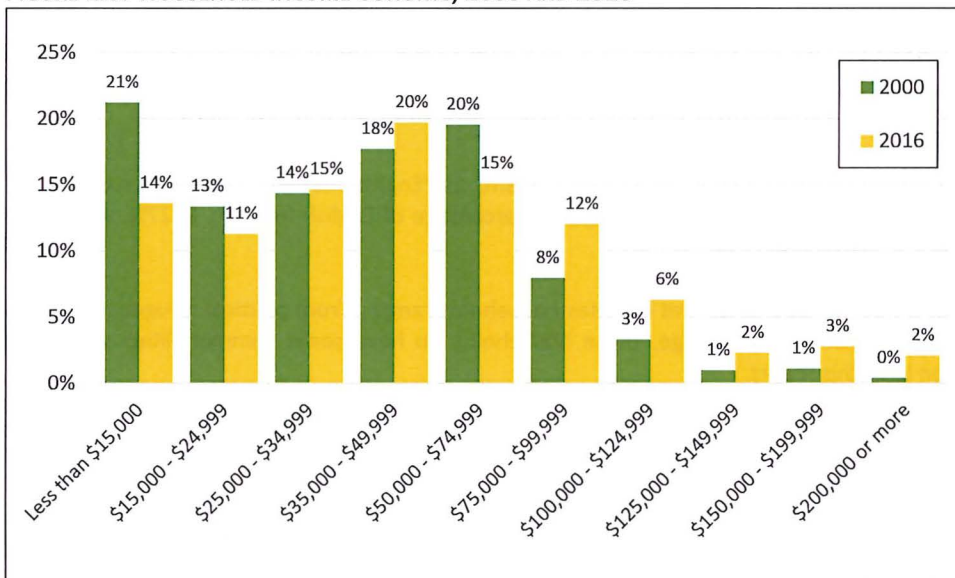
Census Tables: DP-1 (2000, 2010); DP-3 (2000); S1901 (2010 ACS 3-yr Estimates); S19301 (2010 ACS 3-yr Estimates);

- The Dalles' estimated median household income was \$47,000 in 2016. This is roughly 7% higher than the Wasco County median of \$43,500. In comparison, the median income in the city of Hood River is \$49,500.
- The Dalles' per capita income is roughly \$27,500.
- Median income has grown an estimated 33% between 2000 and 2016, in real dollars. Inflation was an estimated 36% over this period, so as is the case regionally and nationwide, the local median income has not kept pace with inflation.

Figure 1.6 presents the estimated distribution of households by income in 2000 and 2016. The largest income cohort is those households earning between \$35k and \$50k, at 20% of households. 40% of households earn less than this, while 40% of households earn \$50k or more per year.

- As one would expect due to wage increases over time, the income distribution has shifted towards higher-income cohorts (in non-adjusted dollars), with the largest gains in those households earning above \$75,000 per year.
- 25% of households earn \$25k or less, which is a much smaller share than in 2000, when 34% of households met that definition. The falling share of households in the lowest income cohort was especially pronounced.

FIGURE 1.6: HOUSEHOLD INCOME COHORTS, 2000 AND 2016



SOURCE: US Census, Nielsen Claritas

Census Tables: DP-3 (2000); S1901 (2014 ACS 5-yr Est.)

H. POVERTY STATISTICS

According to the US Census, the official poverty rate in The Dalles has been increasing over time from 9% of individuals in 2000, to an estimated 13.8% over the most recent period reported (2014 5-year estimates).³ This is roughly 2,000 individuals in The Dalles. In comparison, the official poverty rate in Wasco County and at the state level is 17%.

In the 2010-14 period:

- The Dalles poverty rate is highest among those under 18 years of age at 15.6%. The rate is 14.7% among those aged 18 to 64. The rate is lowest for those 65 and older at 8.5%.
- For those without a high school diploma the poverty rate is 27%. For those with a high school diploma only, the rate is 10.5%.
- Among those who are employed the poverty rate is 7.5%, while it is 30% for those who are unemployed.
- The poverty rate is similar among racial groups, ranging from 12% to 15%. However, the poverty rate for those identifying as Hispanic is 20%.
- Information on affordable housing is presented in the following section of this report.

The official measure of poverty used by the Census dates to the 1960's and the adequacy of this measurement has long been debated. The measure is based on an estimate of three times the cost of minimum food diet in 1963 and adjusted for inflation since that time. The measure is adjusted for household size, composition and age of householder. However, the federal poverty level is not adjusted for geographical differences across the 48 contiguous states. The Census itself has been working on an alternative "supplemental poverty measure" (SPM) for some time, but this measure is not finalized. Preliminary results are available but only for the broadest geographical categories. In the "West" region, which includes the 13 states from the Rocky Mountains to Hawaii and Alaska, the preliminary SPM estimated poverty to be 120% of the official estimated rate, or roughly 20% higher.

Perhaps the most advanced alternative to the official poverty measure developed is the Self-Sufficiency Standard (SSS). The SSS aims to update the measure of poverty with up to date costs estimates of a much wider range of cost categories (housing, child care, transportation, food, etc.), as well as much finer-grained categorization of household types. The SSS income levels for different household types are currently available at the county level in Oregon, including Wasco County.

FIGURE 1.7: FEDERAL POVERTY GUIDELINE VS. SELF-SUFFICIENCY STANDARD (WASCO CO.)

Household Size	Federal Poverty Guideline	Self-Sufficiency Standard	Poverty Guideline/ SSS	Median Income (The Dalles)	SSS/ Median Income
One person	\$11,670	\$19,809	59%	\$26,307	75%
Two people	\$15,730	\$34,404	46%	\$44,740	77%
Three people	\$19,790	\$44,515	44%	\$46,705	95%
Four people	\$23,850	\$46,836	51%	\$54,750	86%
Five people	\$27,910	\$61,575	45%	\$63,500	97%

SOURCE: US Dept. of Health and Human Services, University of Washington, US Census

Figure 1.7 shows a comparison of the federal poverty level and the estimated SSS for 2014 (the latest year the SSS was calculated.) As the table shows, the estimated income thresholds for self-sufficiency are much higher than the

³ Census Tables: QT-P34 (2000); S1701 (2014 ACS 5-yr Estimates)

officially recognized poverty level. As the final columns show, the self-sufficiency thresholds are generally not much lower than the median household income by household size.

These poverty thresholds can be applied to individual cases, but unfortunately, neither the Census nor other sources provide a detailed breakdown of local households by both size and income, that would allow a more detailed application to The Dalles than that found in Figure 1.7. Nevertheless, the stark contrast between the lower official poverty guidelines and the SSS indicate that by this second measure, the number of households in The Dalles facing financial stress is probably much higher than what is implied by the official poverty statistics.

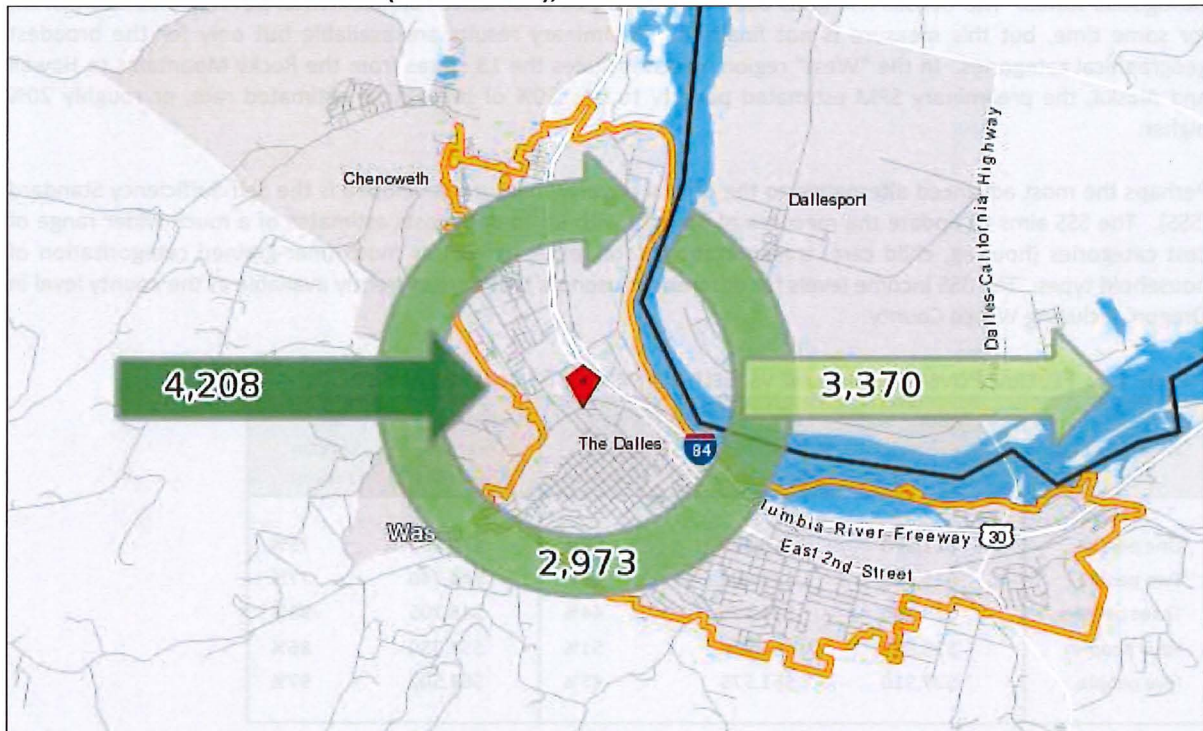
One measure of poverty as it relates to housing is the share of income local households are spending on their housing costs. As discussed in more detail in Section II(F) of this report, the Census estimates that over 42% of all households spend more than 30% of their income on housing costs. Among renters, nearly 62% of households spend more than 30% of their income on housing costs, while 39% of renter households spend more than 50% of their income.

I. EMPLOYMENT TRENDS

This section provides an overview of employment and industry trends in The Dalles that may impact housing.

Commuting Patterns: The following figure shows the inflow and outflow of commuters to The Dalles according to the Census Employment Dynamics Database. As of 2014, the most recent year available, the Census estimates 7,181 jobs located in The Dalles. 2,973 of these, or 41%, are held by local residents, while over 4,200 employees commute into the city from elsewhere.

FIGURE 1.8: COMMUTING PATTERNS (PRIMARY JOBS), THE DALLES



Source: US Census Longitudinal Employer-Household Dynamics

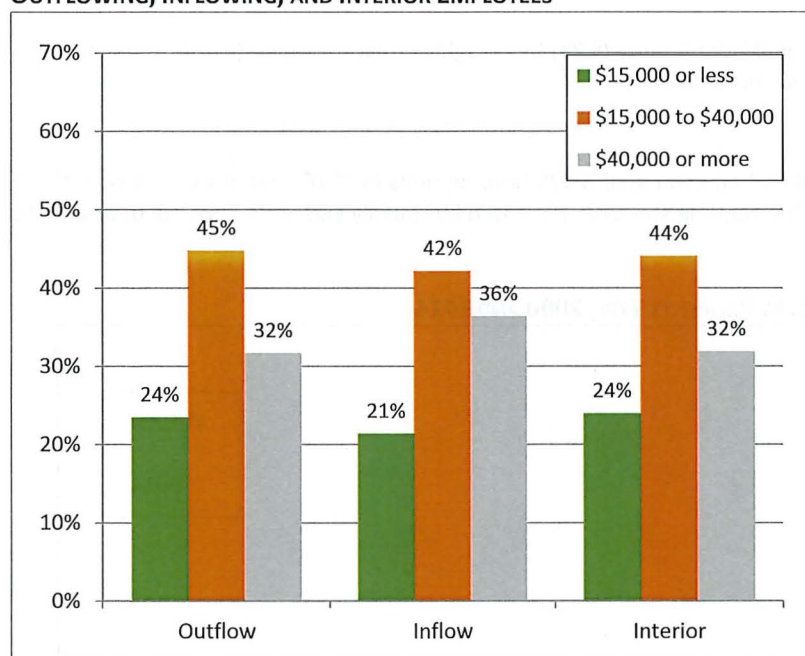
Of the estimated 6,343 employed The Dalles residents, 53% of them commute elsewhere to employment. While Census data is incomplete, it seems that most of these residents work in nearby communities including Hood River, Dallesport, and Hermiston, and a small segment works at least part time in the Portland Metro area.

Because The Dalles is relatively distant from other major population centers, the community actually retains more local residents in the local employment pool than seen in many communities. For instance, in the Portland Metro region it is common for a much smaller share of residents to both live and work in the same community.

The following figure shows broad income levels for each of the commuting groups (outflowing, inflowing, and interior). The income segments shown here are due to how the Census reports this data.

The data show that regardless of the home and job location of the employee, the different commuting groups have very similar income characteristics. This indicates that residents leaving the community for work are not necessarily finding higher or lower-wage jobs than the employment offered in the city.

FIGURE 1.9: INCOME LEVELS BY COMMUTING COHORT (PRIMARY JOBS)
OUTFLOWING, INFLOWING, AND INTERIOR EMPLOYEES



SOURCE: US Census Longitudinal Employer-Household Dynamics

Jobs/Household Ratio: The Dalles features a healthy jobs-to-households ratio. There are an estimated 7,200 jobs in the city of The Dalles, and an estimated 6,340 Dalles residents in the labor force. This represents 1.2 jobs per working adult, and more than one job per household.

II. CURRENT HOUSING CONDITIONS

The following figure presents a profile of the current housing stock and market indicators in The Dalles. This profile forms the foundation to which current and future housing needs will be compared.

A. HOUSING TENURE

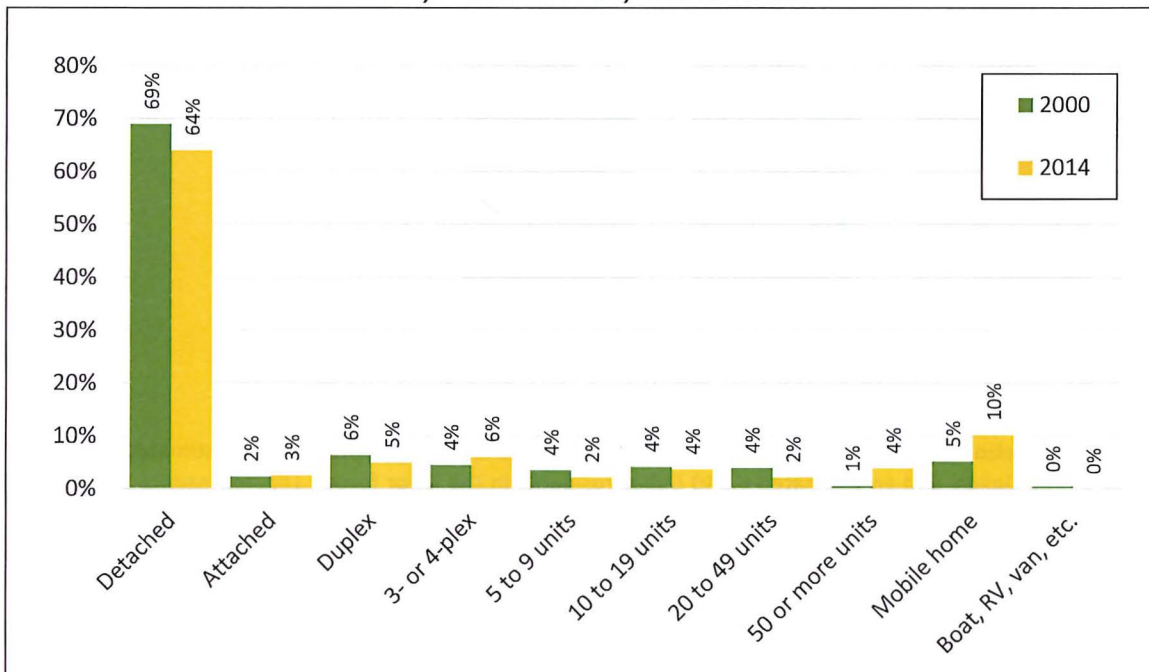
The Dalles has a greater share of homeowner households than renter households. The 2014 American Community Survey estimates that 61% of occupied units were owner occupied, and 39% renter occupied. (The 2010 Census features a lower margin of error than more recent ACS data.) The ownership rate in The Dalles has fallen slightly since 2000 from 63%. During this period the statewide rate fell from 64% to 62%. Nationally, the homeownership rate has nearly reached the historical average of 65%, after the rate climbed from the late 1990's to 2004 (69%).

The estimated ownership rate is higher in Wasco County (65%) but roughly equal statewide (61%). The estimated ownership rate in Hood River is a much lower 48.5%.

B. HOUSING STOCK

As shown in Figure 1.1, The Dalles UGB had an estimated 6,925 housing units in 2016, with a vacancy rate of 2% (includes ownership and rental units). The housing stock has increased by roughly 600 units since 2000, or growth of 9.4%.

FIGURE 2.1: ESTIMATED SHARE OF UNITS, BY PROPERTY TYPE, 2000 AND 2014



SOURCE: US Census

Census Tables: H030 (2000); B25024 (2014 ACS 5-year Estimates)

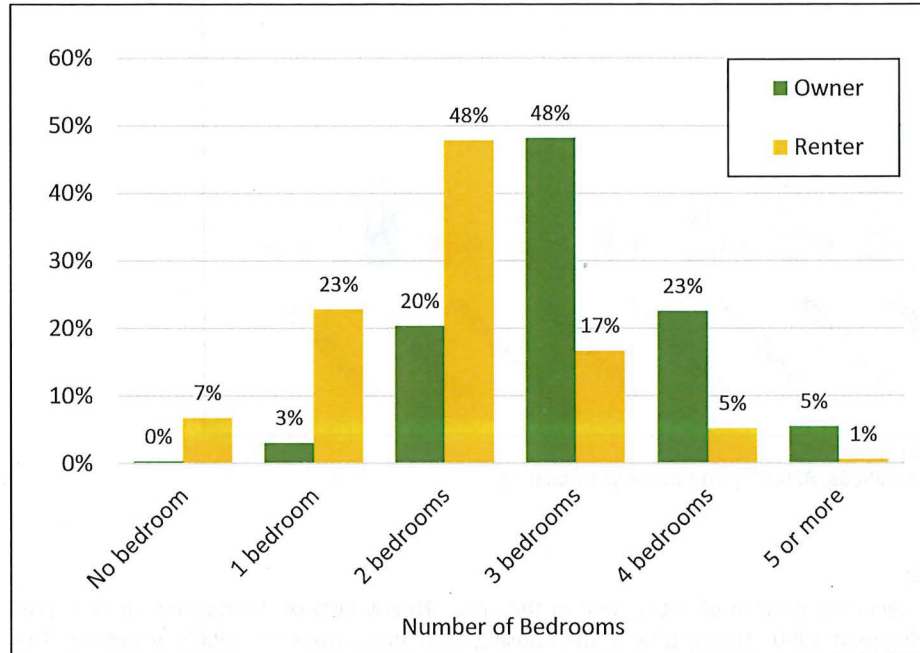
Figure 2.1 shows the estimated number of units by type between the 2000 Census and the 2014 American Community Survey. Detached single-family homes represent an estimated 64% of housing units. Though the estimated *share* of detached homes is down, the total number grew during this period. The share of mobile homes has grown since 2000, from 5% to 10%, making mobile homes a sizable subset of the local housing inventory.

Units in larger apartment complexes of 50 or more units represent just 4% of units, and other types of attached homes represent 22% of units. (Attached single family generally includes townhomes, some condos, and plexes which are separately metered.)

C. NUMBER OF BEDROOMS

Figure 2.2 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 two or fewer bedrooms.

FIGURE 2.2: NUMBER OF BEDROOMS FOR OWNER AND RENTER UNITS, 2014



SOURCE: US Census
Census Tables: B25042 (2014 ACS 5-year Estimates)

D. UNITS TYPES BY TENURE

As Figure 2.3 and 2.4 show, a large share of owner-occupied units (82%) are detached homes, or mobile homes (15%), which is related to why owner-occupied units tend to have offer more bedrooms. Renter-occupied units are much more distributed among a range of structure types. 38% of rented units are estimated to be detached homes or mobile homes, while the remainder are some form of attached unit.

FIGURE 2.3: CURRENT INVENTORY BY UNIT TYPE, FOR OWNERSHIP AND RENTAL HOUSING

OWNERSHIP HOUSING

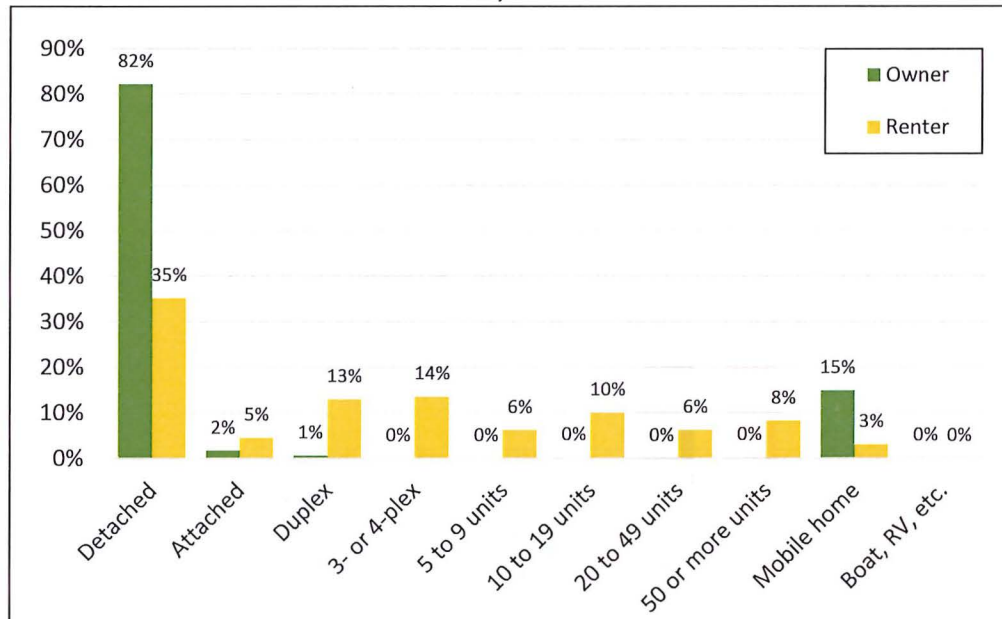
Price Range	Single Family Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Mobile home	Boat, RV, other temp	Total Units
Totals:	3,520	72	27	0	21	637	5	4,282
Percentage:	82.2%	1.7%	0.6%	0.0%	0.5%	14.9%	0.1%	100.0%

RENTAL HOUSING

Price Range	Single Family Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Mobile home	Boat, RV, other temp	Total Units
Totals:	931	120	343	359	811	81	0	2,645
Percentage:	35.2%	4.6%	13.0%	13.6%	30.7%	3.0%	0.0%	100.0%

Sources: US Census, JOHNSON ECONOMICS
Census Tables: B25004, B25032, B25063, B25075 (2014 ACS 4-yr Estimates)

FIGURE 2.4: CURRENT INVENTORY BY UNIT TYPE, BY SHARE

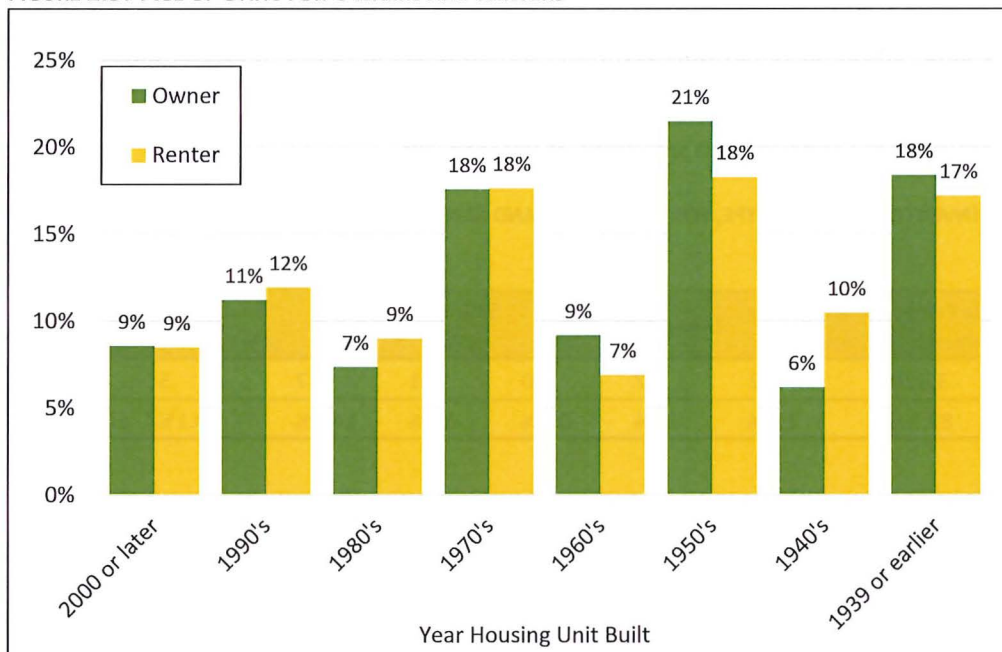


Sources: US Census, JOHNSON ECONOMICS
 Census Tables: B25004, B25032, B25063, B25075 (2014 ACS 4-yr Estimates)

E. AGE OF HOUSING STOCK

The Dalles' housing stock reflects the pattern of settlement in the area. Nearly 80% of the housing stock is pre-1990 with the remainder being post-1990. Nearly 50% of the housing stock dates from the 1950's or earlier. The following figure shows that there is not a large difference between owners and renters in the age of housing stock in which they live.

FIGURE 2.5: AGE OF UNITS FOR OWNERS AND RENTERS



SOURCE: US Census
 Census Tables: B25036 (2014 ACS 5-year Estimates)

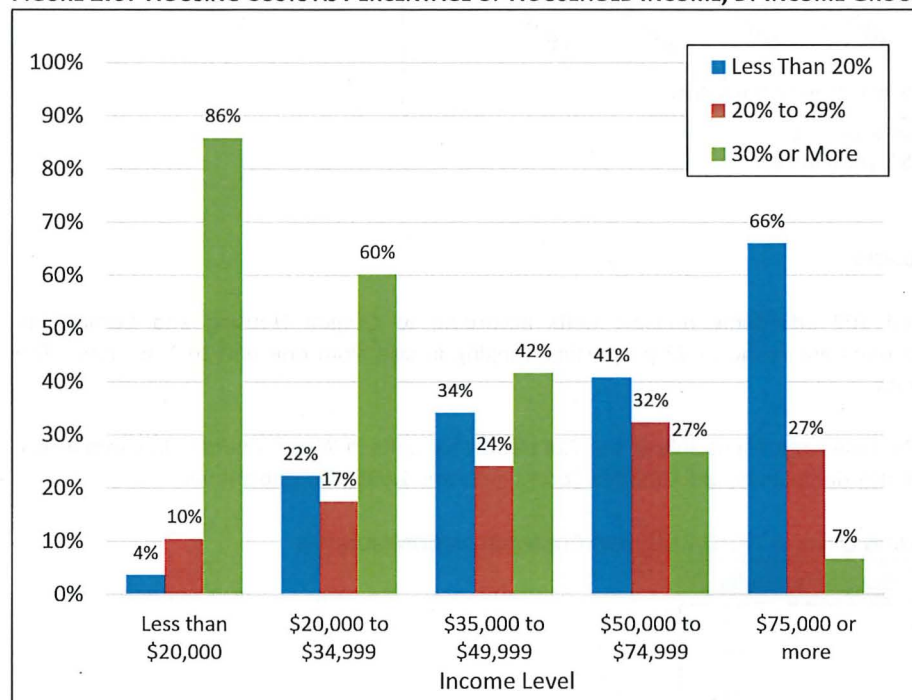
F. HOUSING COSTS VS. LOCAL INCOMES

Figure 2.6 shows the percentage of income that local households are spending on housing based on their income group. As one might expect, lower income households spend a larger percentage of their income on housing costs than higher income households. Of those earning less than \$20,000, 86% of households spend more than 30% of income on housing costs. (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.)

Even 40% of those households earning \$35,000 to \$49,000 pay more than 30% of income towards housing costs. Only those earning more than \$50,000 have a relatively small percentage paying more than 30%.

In total, over 2,900 The Dalles households (43%) are estimated to pay more than 30% of income towards housing costs.

FIGURE 2.6: HOUSING COSTS AS PERCENTAGE OF HOUSEHOLD INCOME, BY INCOME GROUP

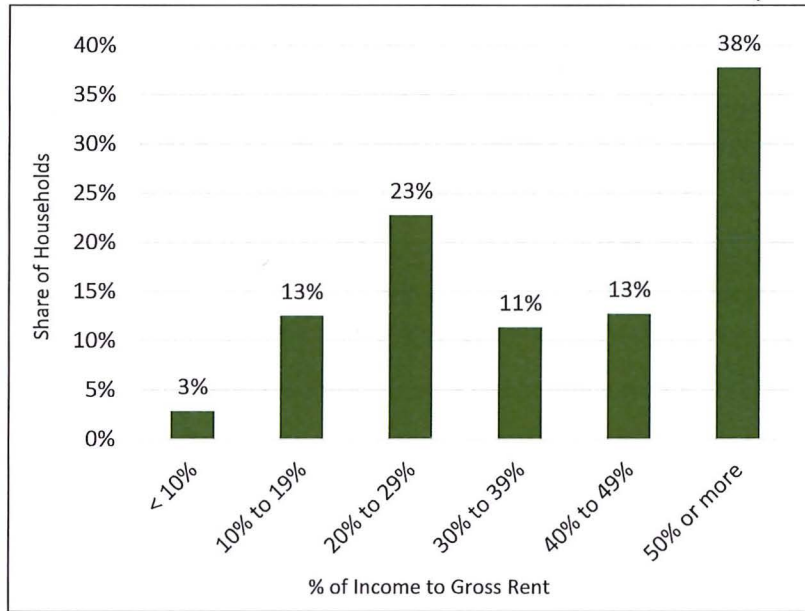


Sources: US Census, JOHNSON ECONOMICS
Census Table: B25106 (2014 ACS 5-yr Estimates)

The following figures shows the percentage of household income spent towards gross rent for local renter households only. This more fine grained data shows that not only are 62% of renters spending more than 30% of their income on rent, but an estimated 38% of renters are spending 50% or more of their income.

Renters are disproportionately lower income relative to homeowners. The burden of housing costs are felt more broadly for these households, and as the analysis presented in later section shows there is a need for more affordable rental units in The Dalles, as in most communities.

FIGURE 2.7: PERCENTAGE OF HOUSEHOLD INCOME SPENT ON GROSS RENT, THE DALLES RENTER HOUSEHOLDS



Sources: US Census, JOHNSON ECONOMICS
 Census Table: B25070 (2014 ACS 5-yr Estimates)

G. PUBLICLY-ASSISTED HOUSING

The Dalles has an estimated 702 affordable housing units according to Oregon Housing and Community Development (OHCS). These units are found in 37 properties, ranging in size from one unit to 156 units. The average property size is 21 units.

The 702 affordable units in The Dalles represent 98% of the 714 affordable units in Wasco County. In comparison, Hood River County offers 668 affordable units, and Umatilla County features 1,536 affordable units.

FIGURE 2.8: SUBSIDIZED HOUSING UNITS IN THE DALLES, AND COMPARISON COMMUNITIES

Geography	Subsidized Units
The Dalles	702
Wasco County (Total)	714
Hood River City	595
Cascade Locks	38
Hood River County (Total)	668
Umatilla County (Total)	1,536

Sources: Oregon Housing and Community Services

The estimated 702 subsidized housing units in The Dalles represents over 10% of total local households (6,801). Despite this, the estimate of current housing need finds a need for roughly 575 rental units at the lowest price points (Section 3 below). This reflects the high number of renters paying over 30% of their income towards housing costs.

A Point-in-Time count of homeless individuals in Wasco County conducted in January of 2015 found 47 homeless individuals on the streets, in shelters, or other temporary and/or precarious housing. *These figures are for the entire county.*⁴ This included:

- 14 people in emergency shelter, warming shelter, or transitional housing programs;
- 33 people unsheltered;
- 79% of those counted single individuals (37 people);
- 21% were people in families (10 people).

An analysis of the ability of current and projected housing supply to meet the needs of low-income people, and the potential shortfall is included in the following sections of this report.

⁴ Figures via OHCS

III. CURRENT HOUSING NEEDS (CITY OF THE DALLES)

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 that have been further forecasted to 2016. The PRC methodology incorporates the estimated population from within the City boundary and an estimated population from those areas within the UGB, but outside of the City boundary. To estimate the additional population within the UGB area, the PRC assigned a share of the population from the relevant Census tracts.

FIGURE 3.1: CURRENT HOUSING PROFILE (2016)

CURRENT HOUSING CONDITIONS (2016)		SOURCE
Total 2015 Population:	16,823	PSU Pop. Research Center
- Estimated group housing population:	500 (3.0% of Total)	US Census
Estimated Non-Group 2016 Population:	16,323 (Total - Group)	
Avg. HH Size:	2.40	US Census
Estimated Non-Group 2016 Households:	6,801 (Pop/HH Size)	
Total Housing Units:	6,927 (Occupied + Vacant)	Census 2010 + permits
Occupied Housing Units:	6,801 (= # of HH)	
Vacant Housing Units:	126 (Total HH - Occupied)	
Current Vacancy Rate:	1.8% (Vacant units/ Total units)	

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

*This table reflects population, household and housing unit projections shown in Figure 1.1

We estimate a current population of roughly 16,800 residents, living in 6,800 households (excluding group living situations). Average household size is 2.4 persons.

There are an estimated 6,927 housing units in the city, with 126 units vacant. The estimated 2016 vacancy rate of housing units is just 2%. 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, 2014 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 3.2 presents a snapshot of current housing demand (i.e. preferences) equal to the number of households in the study area (6,801). The breakdown of tenure (owners vs. renters) is slightly different from the 2014 ACS, as current demographics indicate that slightly more households could afford to own their homes (62% vs.61%).

FIGURE 3.2: ESTIMATE OF CURRENT HOUSING DEMAND (2016)

Ownership				
Price Range	# of Households	Income Range	% of Total	Cumulative
\$0k - \$90k	168	Less than \$15,000	4.0%	4.0%
\$90k - \$130k	313	\$15,000 - \$24,999	7.4%	11.4%
\$130k - \$190k	512	\$25,000 - \$34,999	12.1%	23.5%
\$190k - \$230k	907	\$35,000 - \$49,999	21.4%	44.9%
\$230k - \$320k	750	\$50,000 - \$74,999	17.7%	62.7%
\$320k - \$410k	718	\$75,000 - \$99,999	17.0%	79.6%
\$410k - \$510k	395	\$100,000 - \$124,999	9.3%	89.0%
\$510k - \$600k	147	\$125,000 - \$149,999	3.5%	92.5%
\$600k - \$810k	183	\$150,000 - \$199,999	4.3%	96.8%
\$810k +	136	\$200,000+	3.2%	100.0%
Totals:	4,230		% of All:	62.2%

Rental				
Rent Level	# of Households	Income Range	% of Total	Cumulative
\$0 - \$400	758	Less than \$15,000	29.5%	29.5%
\$400 - \$600	456	\$15,000 - \$24,999	17.7%	47.2%
\$600 - \$900	486	\$25,000 - \$34,999	18.9%	66.1%
\$900 - \$1100	434	\$35,000 - \$49,999	16.9%	83.0%
\$1100 - \$1500	277	\$50,000 - \$74,999	10.8%	93.8%
\$1500 - \$1900	101	\$75,000 - \$99,999	3.9%	97.7%
\$1900 - \$2400	35	\$100,000 - \$124,999	1.4%	99.1%
\$2400 - \$2800	9	\$125,000 - \$149,999	0.3%	99.5%
\$2800 - \$3800	7	\$150,000 - \$199,999	0.3%	99.7%
\$3800 +	7	\$200,000+	0.3%	100.0%
Totals:	2,571		% of All:	37.8%

All Households
6,801

Sources: PSU Population Research Center, Claritas Inc., Census, JOHNSON ECONOMICS

Census Tables: B25007, B25106, B25118 (2014 ACS 5-yr Estimates)

Claritas: 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 \$90,000 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 last decade, 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.

CURRENT HOUSING INVENTORY

The profile of current housing demand (Figure 3.2) represents the preference and affordability levels of households. In reality, the current housing supply (Figure 3.3 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 The Dalles was determined using Census data from the most recently available 2014 ACS, which provides a profile of housing values, rent levels, and housing types (single family, attached, mobile home, etc.). The 5-year estimates from the ACS were used because 3-year and 1-year estimates are not yet available for The Dalles geography.

- An estimated 62% of housing units are ownership units, while an estimated 38% of housing units are rental units. This very closely matches the estimated demand profile shown in Figure 3.2. (The inventory includes vacant units, so the breakdown of ownership vs. rental does not exactly match the tenure split of actual households.)
- 82% of ownership units are detached homes, and 15% are mobile homes. 35% of rental units are single family homes, and 31% are in structures of 5 units or more.
- Of total housing units, an estimated 64% are detached homes, 10% are mobile homes, while 26% are some sort of attached type.
- Subsidized affordable housing units found in The Dalles are represented by the inventory found at the lowest end of the rental spectrum. Ownership housing found at the lower end of the spectrum generally reflect mobile homes, or homes in poor condition on small or irregular lots. These properties may be candidates for redevelopment when next they sell, but are currently estimated to have low value.

FIGURE 3.3: PROFILE OF CURRENT HOUSING SUPPLY (2016)

OWNERSHIP HOUSING										
Price Range	Single Family Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Mobile home	Boat, RV, other temp	Total Units	% of Units	Cummulative %
\$0k - \$90k	135	23	0	0	0	452	5	615	14.4%	14.4%
\$90k - \$130k	228	49	27	0	0	185	0	489	11.4%	25.8%
\$130k - \$190k	1,401	0	0	0	21	1	0	1,423	33.2%	59.0%
\$190k - \$230k	642	0	0	0	0	0	0	642	15.0%	74.0%
\$230k - \$320k	737	0	0	0	0	0	0	737	17.2%	91.2%
\$320k - \$410k	253	0	0	0	0	0	0	253	5.9%	97.1%
\$410k - \$510k	66	0	0	0	0	0	0	66	1.5%	98.7%
\$510k - \$600k	24	0	0	0	0	0	0	24	0.6%	99.2%
\$600k - \$810k	24	0	0	0	0	0	0	24	0.6%	99.8%
\$810k +	9	0	0	0	0	0	0	9	0.2%	100.0%
Totals:	3,520	72	27	0	21	637	5	4,282	% of All Units:	61.8%
Percentage:	82.2%	1.7%	0.6%	0.0%	0.5%	14.9%	0.1%	100.0%		

RENTAL HOUSING										
Price Range	Single Family Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Mobile home	Boat, RV, other temp	Total Units	% of Units	Cummulative %
\$0 - \$400	0	0	0	0	119	81	0	200	7.6%	7.6%
\$400 - \$600	0	14	89	89	254	0	0	446	16.8%	24.4%
\$600 - \$900	193	96	214	246	321	0	0	1,071	40.5%	64.9%
\$900 - \$1100	91	10	40	23	117	0	0	281	10.6%	75.5%
\$1100 - \$1500	381	0	0	0	0	0	0	381	14.4%	89.9%
\$1500 - \$1900	71	0	0	0	0	0	0	71	2.7%	92.6%
\$1900 - \$2400	156	0	0	0	0	0	0	156	5.9%	98.5%
\$2400 - \$2800	39	0	0	0	0	0	0	39	1.5%	100.0%
\$2800 - \$3800	0	0	0	0	0	0	0	0	0.0%	100.0%
\$3800 +	0	0	0	0	0	0	0	0	0.0%	100.0%
Totals:	931	120	343	359	811	81	0	2,645	% of All Units:	38.2%
Percentage:	35.2%	4.6%	13.0%	13.6%	30.7%	3.0%	0.0%	100.0%		

TOTAL HOUSING UNITS									
	Single Family Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Mobile home	Boat, RV, other temp	Total Units	% of Units
Totals:	4,451	193	370	359	832	718	5	6,927	100%
Percentage:	64.3%	2.8%	5.3%	5.2%	12.0%	10.4%	0.1%	100.0%	

Sources: US Census, PSU Population Research Center, JOHNSON ECONOMICS
Census Tables: B25004, B25032, B25063, B25075 (2014 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.

In general, this identifies that there is currently support for more ownership housing at price ranges above \$190,000. This is because most housing in The Dalles is clustered at the lower price points, while analysis of household incomes and ability to pay indicates that some could afford housing at higher price points.

The analysis identifies a well of need for rental units at the lowest price level to serve those households currently paying a high share of their income towards rent. There are levels of estimated surplus for apartments (\$600 to \$900 per month). This represents the current average rent prices in The Dalles, where most units can be expected to congregate. Rentals at more expensive levels generally represent single family homes for rent.

FIGURE 3.4: COMPARISON OF CURRENT NEED TO CURRENT SUPPLY (2016)

Ownership				Rental			
Price Range	Estimated Current Need	Estimated Current Supply	Unmet (Need) or Surplus	Rent	Estimated Current Need	Estimated Current Supply	Unmet (Need) or Surplus
\$0k - \$90k	168	615	447	\$0 - \$400	758	200	(558)
\$90k - \$130k	313	489	176	\$400 - \$600	456	446	(10)
\$130k - \$190k	512	1,423	911	\$600 - \$900	486	1,071	585
\$190k - \$230k	907	642	(265)	\$900 - \$1100	434	281	(153)
\$230k - \$320k	750	737	(14)	\$1100 - \$1500	277	381	104
\$320k - \$410k	718	253	(465)	\$1500 - \$1900	101	71	(31)
\$410k - \$510k	395	66	(329)	\$1900 - \$2400	35	156	121
\$510k - \$600k	147	24	(124)	\$2400 - \$2800	9	39	30
\$600k - \$810k	183	24	(159)	\$2800 - \$3800	7	0	(7)
\$810k +	136	9	(126)	\$3800 +	7	0	(7)
Totals:	4,230	4,282	51	Totals:	2,571	2,645	74

Occupied Units:	6,801
All Housing Units:	6,927
Total Unit Surplus:	126

Sources: PSU Population Research Center, Claritas Inc., Census, JOHNSON ECONOMICS
This table is a synthesis of data presented in Figures 3.2 and 3.3.

There are an estimated 126 units more than the current number of households, which reflects the city's current estimated vacancy rate of 2%.

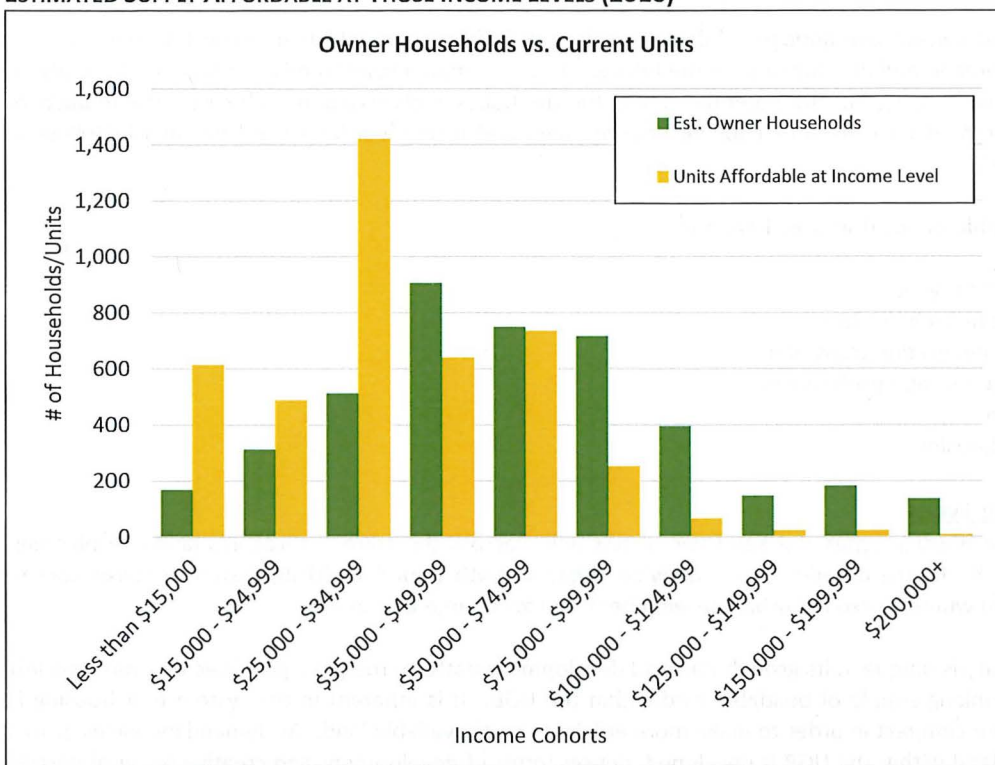
Figure 3.4 is illustrating where current market-level pricing is in The Dalles. Housing prices and rent levels will tend to congregate around those price levels. These levels will be too costly for some (i.e. require more than 30% in gross income) or "too affordable" for others (i.e. they have income levels that indicate they could afford more expensive housing if it were available). In general, these findings demonstrate that there are fewer housing opportunities at lower price points than might be considered "affordable" for many renter households. While the community may be able to support some new single family housing a higher price point.

Figures 3.5 and 3.6 (following page) present this information in chart form, comparing the estimated number of households in given income ranges, and the supply of units currently affordable within those income ranges. The data is presented for owner and renter households.

* * *

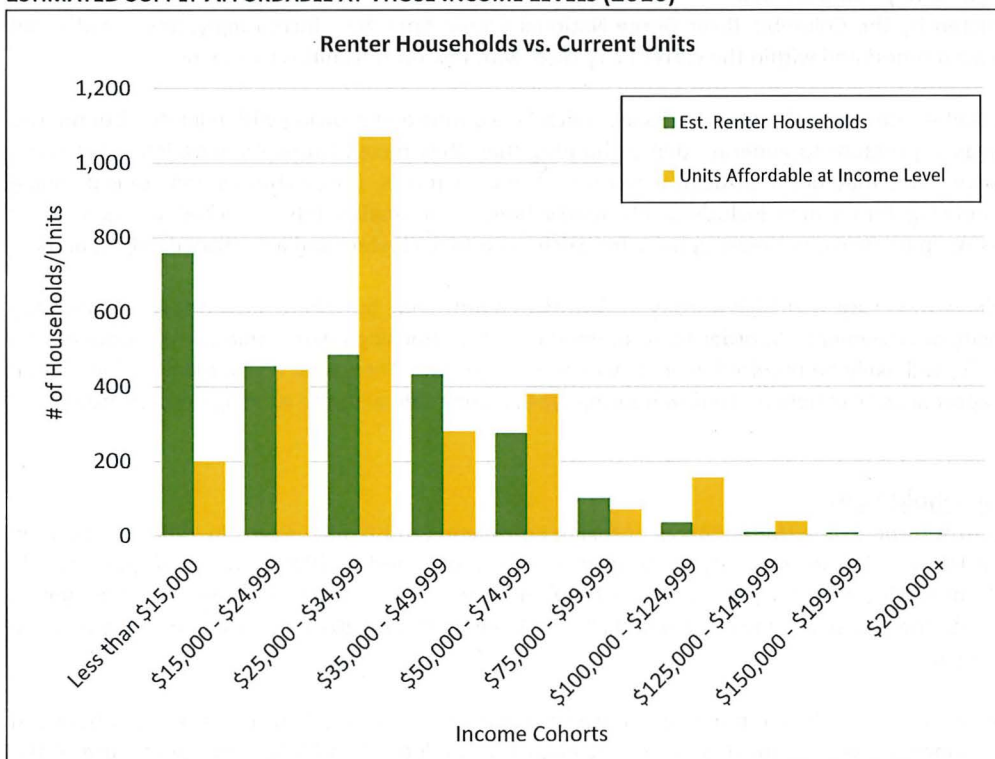
The findings of current need form the foundation for projected future housing need, presented in a following section.

FIGURE 3.5: COMPARISON OF OWNER HOUSEHOLD INCOME GROUPS TO ESTIMATED SUPPLY AFFORDABLE AT THOSE INCOME LEVELS (2016)



Sources: PSU Population Research Center, Claritas Inc., Census, JOHNSON ECONOMICS

FIGURE 3.6: COMPARISON OF RENTER HOUSEHOLD INCOME GROUPS TO ESTIMATED SUPPLY AFFORDABLE AT THOSE INCOME LEVELS (2016)



Sources: PSU Population Research Center, Claritas Inc., Census, JOHNSON ECONOMICS

IV. ANTICIPATED HOUSING TRENDS

This section discusses current and anticipated demographic and market trends which are expected to impact the nature of housing demand and development in the future. These are macro-level trends which generally apply on a regional or nationwide scale, but the potential impact for The Dalles is discussed in each case. The impacts of these trends are factored into the projection of housing need and residential land need detailed in following sections of this report.

The major demographic trends discussed here are:

- Future housing types
- Diminishing household sizes
- Baby Boom generation transitions
- Millennial generation preferences
- Immigration
- Workforce housing

A. Future Housing Types

The nature of future housing types is a key topic of discussion across the state as Oregon's land use planning system has entered its fourth decade. The statewide Urban Growth Boundary (UGB) system requires careful planning of when and where to expand urban development for towns large and small.

While each community is unique in its growth rate and development pattern, the passage of decades has now left many cities with shrinking supply of buildable land within the UGB. It is inherent in the system that housing is likely to become more compact in order to make more efficient use of available land. As demand increases, prices rise, and remaining land within the UGB is developed, denser forms of development and creative reuse of parcels through infill and redevelopment become more economically viable.

This is increasingly the case for communities such as The Dalles, which offer few opportunities for large-scale development of single-family subdivisions. At the same time, The Dalles is surrounded by lands where development is restricted by the Columbia River Gorge National Scenic Area Act. Increasingly, any growth that occurs will largely be accommodated within the current city UGB, with few opportunities to expand.

Implications for The Dalles: Communities like The Dalles which face a future of growing within limited boundaries are likely to see increased pressure to generate denser housing than they have historically experienced in some parts of the community. This may occur through a mixture of market forces, policy choices and state planning mandates. Denser housing forms may include single family homes on smaller lots, attached forms such as duplexes, townhomes or apartments, or newer approaches such as cottage clusters and accessory dwelling units.

The Dalles has ample mid-density and high-density residential zoned land, but these areas have traditionally experienced low-density development. In order to accommodate future housing need within current boundaries, some increase in density will likely be required in areas where it is allowed. The use of transitional zoning, design standards and other approaches can help make new housing types compatible with the existing neighborhoods.

B. Diminishing Household Sizes

There is a clear long-term trend in the United States of falling household (and family) sizes. In 1900, the average household size in the US was 4.6 persons. By 1950, it was 3.4 persons, and in 2010 it was 2.58 persons (US Census). This is a rate of decline of -0.5% per year since 1900. However, in recent decades the trend has slowed considerably. Since 1980, the rate of decline has been -0.2%. Between 2000 and 2010, the average household size was essentially unchanged.

In The Dalles, the Census estimates that the average household size remained constant at 2.4 persons between 2000 and 2010. This happened even as the share of family households fell (66% to 63%), because the size of the average family household increased from 2.9 to 3.0.

Nationally, a continued slow decline of household size is expected over coming decades. Younger baby boomers will transition to empty nest status as kids leave the households. Older boomers will transition to single-person households as spouses pass away, if not in the coming decade than the following decade. At the same time, the trend for younger generations to delay having children and having fewer children than previous generations will continue. However, the rate of decline will continue to slow and the average household size is likely to reach a stable level eventually, as it cannot realistically approach a size of 1.0 person per household.

Implications for The Dalles: Because The Dalles has achieved a stable average household size since 2000, the size is assumed to remain constant at 2.4 into the future. This is the conservative assumption as recent trends do not provide a baseline rate of decline to apply. This will likely be accompanied by some continued fall in the share of family households even as the families which do remain are larger on average. The growing Latino population in the community is also associated with larger than average household size.

C. Baby Boom Generation Transitions

Due to its sheer size, the baby boom generation has dominated US demographic trends since its appearance between 1946 and 1965 (the generally accepted definition of the baby boom generation.) There are an estimated 78 million boomers, making them approximately 26% of the US population. In 2016, this generation is roughly 51 to 71 years old.

Demographers often split the baby boom generation into an older and younger cohort when discussing their needs and preferences.⁵ The prospects of these two cohorts are likely to be very different given the different economic circumstances in which they came of age, and severity of the last recession.

The older cohort, aged 60 to 70, is closer to retirement or retired, with less time to repair household finances if it is needed. Many in this generation lost retirement resources and significant home equity in the economic downturn of 2007-09.

Nevertheless, many in this older cohort were already near to retirement when the recession hit, and had built sufficient nest eggs and pension benefits to retire as planned. This cohort was able to take advantage of generally rising income growth and national prosperity over their careers. Many have access to pension and health benefits in retirement that are no longer offered to most workers.

The younger cohort (aged 50-60) is larger, representing about 2/3 of the generation. Much of this cohort is still in the prime of its earning years, many with children still at home or in college. Though they may have suffered a setback to saving and job prospects during the recession, there is still the opportunity to retrench for retirement.

Economically, this younger boomer cohort has more in common with younger generations, in that it has experienced wage stagnation over the last two decades. They did not necessarily share in the constant income growth and retirement benefits sometimes associated with older boomers.

In terms of housing, the baby boom generation is more likely to own their homes, having decades to enter the ownership market and build equity. They are more likely to have greater equity in their homes, providing some cushion from the recent downturn. The improving housing market has now alleviated most of those with underwater mortgages and other forms of housing distress, allowing them to move for jobs and retirement and see greater equity from their homes.

Since baby boomers are likely to remain healthier and more active for longer than the previous generation, they are likely to delay downsizing and seeking out senior-focused facilities for some time. However, some of this cohort are already facing these decisions as they reach their 70's. Creating more senior housing options for this

⁵ Most of this discussion draws from the following reports:
McIlwain, John. "Housing in America: The Next Decade." ULI, 2010.
"State of the Nation's Housing 2011." Joint Center for Housing Studies of Harvard University, 2011.

outsized generation will become an increasing focus among developers and policymakers alike over the next 20 years.

A subset of the baby boom generation will be interested in opportunities to live in well-planned and safe mixed-use communities in the future, including senior communities that allow seniors to age through multiple phases of post-retirement life into assisted care. The demand from older households for multi-family housing opportunities in town centers should be significant enough to be addressed by the market, but should not be overstated. Most retirees specify a preference to age in place as long as possible. Also, older seniors may prefer or require single-level housing.

Implications for The Dalles: The baby boom generation's share of The Dalles' population (24%) is lower than that of the state (27%), and the nation (26.5%). Wasco County's estimated baby boom population is higher at 28%, meaning the population outside of The Dalles tends to be older than within the city.

Over the coming 20 years, the baby boom generation will remain healthier and more independent for longer than their parents, meaning that the transition to retirement communities may be postponed or never undertaken for some of these households. The youngest in this generation won't reach the traditional retirement age for another 15 years. Their housing legacy may be in leaving behind a stock of existing homes to younger generations over the next 20 years.

The Dalles currently features many senior living communities including assisted living and nursing home communities. Due to the proximity of the Mid-Columbian Medical Center the community will remain popular with retirees and seniors seeking to be near medical care, live in senior housing, or who anticipate needing it in the foreseeable future.

D. Millennial Generation Preferences

As the baby boom generation moves through mid-life and into retirement, the millennial generation has emerged as the dominant demographic group of the future. This generation, sometimes called the Echo Boomers or Generation Y, is actually larger than the baby boom generation at 83 million people. Definitions vary, but members of this generation were born roughly between 1980 and 2000 and are now in their mid-teens to mid-30's. As with the baby boomers, the difference between the older and younger members of this large cohort is significant.

Aside from being large, this generation is in the prime years of defining popular culture as its greatest consumers. In broad strokes, the millennial generation is more technologically savvy, networked, environmentally and socially responsible than previous generations. They value diversity and activity, and therefore gravitate to urban environments more-so than older generations.

This generation grew up in a time of generally rising economic prosperity in the 1980's and 1990's, but many find themselves at a disadvantage in the current economy. Quality entry-level jobs have been scarce since the recession, while average student debt has risen sharply. Incomes for people younger than 35 have fallen over the last decade, meaning that this generation is starting from behind. Many experts expect that over their lifetimes, millennials will make less money and have a more modest quality of life than their parents.

The reported desire of this generation to live in larger urban settings seems to be very real:

A 2008 survey by RCLCO found that 77 percent of generation Y reports wanting to live in an urban core, not in the suburbs where they grew up. They want to be close to each other, to services, to places to meet, and to work, and they would rather walk than drive. They say they are willing to live in a smaller space in order to be able to afford this lifestyle.⁶

A 2015 National Association of Realtors (NAR) survey of preferences found that those under 40 (which includes some of Generation X) place a higher priority on convenient alternatives to driving, revitalizing cities and suburbs,

⁶ McIlwain, John. "Housing in America: The Next Decade." ULI, 2010.

a mix of ages and ethnicities, and the availability of affordable housing. Given their age and current finances, this currently means that millennial households are much more likely to rent units than own.

Looking forward to the future housing needs of this large generation raises some questions. While some currently demand rental housing in larger metro areas, they will be less well-positioned to afford housing there as they change life-stages and seek ownership opportunities and room for families. In the urban core, where many prefer to live, single-family homes will be scarce and expensive, owned mostly by older generations. Like previous generations, they will seek a house with a yard at a price they can afford.

This may create opportunities for smaller cities and towns to attract more young households. The millennial generation may eventually provide a store of demand for the single family homes vacated by the older generation. Similarly, they will value well-planned town centers in cohesive communities. Suburbs that are able to revitalize their traditional mixed-use town centers or create new ones may be more attractive to young residents.

Implications for The Dalles: As of the 2010 Census, the generation born between 1980 and 2000 represented 25% of The Dalles' population, which is only a slightly smaller share than that found in Portland (27%). The Dalles can plan ahead for this generation by continuing to support the mixed-use town center which will provide livability amenities. Opportunities to walk and bike will also be attractive. However, attractive local employment opportunities will likely be the greatest factor in keeping and attracting young households.

Many of these households will seek good first-time home buying opportunities, meaning a stock of existing and new homes in low- to middle price ranges. The younger and lower income members of this generation will need a sufficient stock of multi-family rentals.

E. Immigration

Immigration is expected to be one of the key drivers of population growth nationwide, and therefore housing need over the coming decades. Immigrants and their U.S.-born children and grandchildren constitute one of the fastest growing population segments.

While native households are expected to trend towards smaller households, fewer children, and more childless households, the number of families and children among immigrant communities is expected to grow. Demographers credit the growth in immigrant households with slowing the decline in household size.⁷

The result of this rapid growth among immigrants and their children is that minorities are expected to account for most of the net population growth between now and 2050. Latinos and Asians are the key drivers of this trend.

Immigrant households and their children have some key characteristics which impact their housing needs. These households tend to be poorer and larger than average. This means that many immigrants are reliant on rental housing, and often in lower-priced areas. They may stay in rental housing for more of their lifetime than other populations. In rental and ownership housing, immigrants will need more space to house a larger average family size.

The long-term pattern of immigrants moving into major metropolitan areas when they come to the US still remains. However, rather than move directly into a central city as in the past, now many immigrant households move directly to suburban communities. One great exception to this pattern is Latino immigration in the West. These immigrants are just as likely to move to small cities, towns or rural areas for the types of work available there, as they are to move to a metropolitan area.

Due to these trends, communities of all sizes across the country, and particularly in the West can expect to see continued immigration and diversity in the decades to come.

Implications for The Dalles: As of the 2014 American Community survey, an estimated 8.2% of The Dalles' population is foreign-born, up from 6.8% in 2000. This is a smaller share than the 10% found statewide. Of these,

⁷ "State of the Nation's Housing 2011." Joint Center for Housing Studies of Harvard University, 2011.

80% were born in Latin America, 8% born in Europe, and 6.5% were born in Asia. Since 2000, the share born in Latin America has increased from 75%, while the others have fallen moderately.

In 2010, the percentage of the population speaking a language other than English at home was 16%, up from 12% in 2000.

The immigrant population is not homogeneous and might include households ranging from political refugees, to relatives joining resident family members, to skilled recruits to local companies.

The main impact of these groups in The Dalles and other suburbs will be continuing demand for low-to-moderate cost housing options, and larger housing units. As long as the policies and land inventory allow for the production of multi-family units, it will be possible to meet the rental need for immigrants and other populations. Demand for for-sale housing will largely be met by older existing housing units, rather than new housing.

F. Workforce Housing

Many communities seek to better align housing opportunities with employment opportunities. There are many benefits to housing the local workforce closer to the community in which the jobs are located, as well as bringing new employment closer to local households. This arrangement helps keep economic activity within the community. It also reduces local commuting, which helps reduce traffic congestion. Residents have more transportation choices and shorter commute periods. Many communities aspire to provide greater workforce housing opportunities in order to provide greater location equity among different classes of worker.

In terms of housing, workforce housing generally means offering a full spectrum of housing in proximity to employment at different levels of affordability. Depending on the community, there may be a lack of housing for lower-income workers who might have to commute from other communities. Or there may be a lack of higher-end or "executive" housing, meaning that higher-paid employees leave the community after work, taking their financial and other resources with them. While there is no standard definition, workforce housing often is used to describe housing for workers who are low to middle income but may not qualify for subsidized housing programs.

Implications for The Dalles: As of 2014, the most recent year available, the Census estimates 7,181 jobs located in The Dalles. 2,973 of these, or 41%, are held by local residents, while over 4,200 employees commute into the city from elsewhere.

Of the estimated 6,343 employed The Dalles residents, 53% of them commute elsewhere to employment. While Census data is incomplete, it seems that most of these residents work in nearby communities including Hood River, Dallesport, and Hermiston, and a small segment works at least part time in the Portland Metro area.

A comparison of the general income levels of these classes of employees (outflowing, inflowing, and interior) finds that regardless of the home and job location of the employee, the different commuting groups have very similar income characteristics. This does not show any clear relationship between the type and cost of housing available in The Dalles and the types of employment available in the community, or outside of the community.

Jobs/Household Ratio: The Dalles features a healthy jobs-to-households ratio. There are an estimated 7,200 jobs in the city of The Dalles, and an estimated 6,340 Dalles residents in the labor force. This represents 1.2 jobs per working adult, and more than one job per household.

Conclusions on Anticipated Housing Trends

These are the major demographic trends impacting future housing demand in The Dalles, the region and nation. These trends were considered in building assumptions for the household growth projections presented in the following section.

The general trends that The Dalles can expect to see over the next 20 years include:

- As demand increases, prices rise, and remaining land within the UGB is developed, denser forms of development and creative reuse of parcels through infill and redevelopment become more economically viable. Communities like The Dalles which face a future of growing within limited boundaries are likely to see increased pressure to generate denser housing than they have historically experienced in some parts of the community. This may occur through a mixture of market forces, policy choices and state planning mandates.
- Baby boomer households will have a preference towards aging in place as long as possible, particularly for homeowners, and will on average be healthier longer than previous generations. When they do transition to other housing, their stock of older existing single family homes will be attractive starter and move-up homes to younger family households. The Dalles will continue to be an attractive regional location for senior housing and assisted living due to the good local medical care.
- The Dalles can plan ahead for younger generations by continuing to support the mixed-use town center which will provide livability amenities. Opportunities to walk and bike will also be attractive. However, attractive local employment opportunities will likely be the greatest factor in keeping and attracting young households. Many of these households will seek good first-time home buying opportunities, meaning a stock of existing and new homes in low- to middle price ranges. The younger and lower income members of this generation will need a sufficient stock of multi-family rentals.
- According to the Census, The Dalles has a foreign-born population of 8%, lower than the statewide percentage. It is estimated that 80% of this population is from Latin America. The share of persons speaking a language other than English at home is 16%. As with the rest of the state and nation, immigrants will continue to make up an increasing share of households in coming decades. While not homogeneous, these household on average tend to be larger, have lower incomes and are more likely to rent their homes than the average household.
- The Dalles, like many communities, currently has a persistent shortage of housing available to the lowest-income households, particularly rental units.
- The following section presents the projected future housing needs and provides more detail on methodology, assumptions and findings.

V. FUTURE HOUSING NEEDS - 2036 (CITY OF THE DALLES)

The projected future (20-year) housing profile (Figure 5.1) in the study area is based on the current housing profile, multiplied by an assumed projected future household growth rate. The projected future growth is the official forecasted growth rate for 2035 generated by the PSU Oregon Forecast Program, and carried forward one year to 2036.

FIGURE 5.1: FUTURE HOUSING PROFILE (2036)

PROJECTED FUTURE HOUSING CONDITIONS (2016 - 2036)			SOURCE
2016 Population (Minus Group Pop.)	16,323		2010 Census, PSU
Projected Annual Growth Rate	1.13%	OR Population Forecast Program	PSU
2036 Population (Minus Group Pop.)	19,829	(Total 2036 Population - Group Housing Pop.)	
Estimated group housing population:	607	Share of total pop (3.0%) from 2010 Census	US Census
Total Estimated 2036 Population:	20,436	(PSU 2035 forecast, + one year at same growth rate)	PSU
Estimated Non-Group 2036 Households:	8,262	(2036 Non-Group Pop./Avg. Household Size)	
New Households 2016 to 2036	1,461		
Avg. Household Size:	2.40	Projected household size	US Census
Total Housing Units:	8,696	Based on estimated 5% vacancy rate	
Occupied Housing Units:	8,262	(= Number of Non-Group Households)	
Vacant Housing Units:	434	(Total Units - Occupied Units)	
Projected Vacancy Rate:	5.0%	(Vacant Units/ Total Units)	

Sources: PSU Population Research Center Oregon Population Forecast Program, Census, JOHNSON ECONOMICS LLC

*Projections are applied to estimates of 2016 population, household and housing units shown in Figure 1.1

The model projects growth in the number of non-group households over 20 years of roughly 1,460 households, with accompanying population growth of 3,600 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 (2036)

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 (8,262).

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* 2036 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 2016 dollars.

Figure 5.2 presents the projected occupied future housing demand (current and new households, without vacancy) in 2036.

FIGURE 5.2: PROJECTED OCCUPIED FUTURE HOUSING DEMAND (2036)

Ownership				
Price Range	# of Households	Income Range	% of Total	Cumulative
\$0k - \$90k	188	Less than \$15,000	3.7%	3.7%
\$90k - \$130k	375	\$15,000 - \$24,999	7.3%	11.0%
\$130k - \$190k	586	\$25,000 - \$34,999	11.4%	22.4%
\$190k - \$230k	1,078	\$35,000 - \$49,999	21.0%	43.3%
\$230k - \$320k	943	\$50,000 - \$74,999	18.3%	61.7%
\$320k - \$410k	827	\$75,000 - \$99,999	16.1%	77.7%
\$410k - \$510k	512	\$100,000 - \$124,999	10.0%	87.7%
\$510k - \$600k	221	\$125,000 - \$149,999	4.3%	92.0%
\$600k - \$810k	226	\$150,000 - \$199,999	4.4%	96.4%
\$810k +	185	\$200,000+	3.6%	100.0%
Totals:	5,141		% of All:	62.2%

Rental				
Rent Level	# of Households	Income Range	% of Total	Cumulative
\$0 - \$400	893	Less than \$15,000	28.6%	28.6%
\$400 - \$600	550	\$15,000 - \$24,999	17.6%	46.2%
\$600 - \$900	573	\$25,000 - \$34,999	18.3%	64.6%
\$900 - \$1100	534	\$35,000 - \$49,999	17.1%	81.7%
\$1100 - \$1500	358	\$50,000 - \$74,999	11.5%	93.2%
\$1500 - \$1900	125	\$75,000 - \$99,999	4.0%	97.2%
\$1900 - \$2400	50	\$100,000 - \$124,999	1.6%	98.8%
\$2400 - \$2800	16	\$125,000 - \$149,999	0.5%	99.3%
\$2800 - \$3800	11	\$150,000 - \$199,999	0.3%	99.7%
\$3800 +	11	\$200,000+	0.3%	100.0%
Totals:	3,121		% of All:	37.8%

All Units
8,262

Sources: Claritas, Census, JOHNSON ECONOMICS

It is projected that the homeownership rate in The Dalles will increase slightly over the next 20 years from 61% to 62%, matching the current statewide average (62%). The shift to older and relatively higher income households is moderate, but is projected to increase the homeownership rate somewhat. At the same time, the number of lower income households seeking affordable rentals is also anticipated to grow.

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 (7% vs. 3% in 2010). While the vacancy rate is much lower as of 2016 (estimated as low as 2.4%), a higher vacancy rate is assumed for the purpose of this analysis. This analysis maintains the discrepancy between rental and ownership

units going forward, so that the vacancy rate for rentals is assumed to be higher than the overall average, while the vacancy rate for ownership units is assumed to be less.

FIGURE 5.3: PROJECTED FUTURE NEED FOR NEW HOUSING UNITS (2036), THE DALLES

OWNERSHIP HOUSING										
Price Range	Single Family Detached	Single Family Attached	Multi-Family			Mobile home	Boat, RV, other temp	Total Units	% of Units	Cumulative %
			2-unit	3- or 4-plex	5+ Units MFR					
\$0k - \$90k	0	0	0	0	0	0	0	0	0.0%	0.0%
\$90k - \$130k	0	0	0	0	0	0	0	0	0.0%	0.0%
\$130k - \$190k	0	0	0	0	0	0	0	0	0.0%	0.0%
\$190k - \$230k	27	13	6	0	5	156	0	208	19.9%	19.9%
\$230k - \$320k	101	4	0	0	0	0	0	105	10.1%	30.0%
\$320k - \$410k	264	0	0	0	0	0	0	264	25.4%	55.4%
\$410k - \$510k	203	0	0	0	0	0	0	203	19.5%	74.9%
\$510k - \$600k	90	0	0	0	0	0	0	90	8.6%	83.5%
\$600k - \$810k	92	0	0	0	0	0	0	92	8.8%	92.3%
\$810k +	80	0	0	0	0	0	0	80	7.7%	100.0%
Totals:	856	17	6	0	5	156	0	1,041	% All Units:	58.8%
Percentage:	82.2%	1.7%	0.6%	0.0%	0.5%	15.0%	0.0%	100.0%		

RENTAL HOUSING										
Price Range	Single Family Detached	Single Family Attached	Multi-Family			Mobile home	Boat, RV, other temp	Total Units	% of Units	Cumulative %
			2-unit	3- or 4-plex	5+ Units MFR					
\$0 - \$400	44	0	64	85	212	22	0	427	58.7%	58.7%
\$400 - \$600	12	21	25	14	12	0	0	83	11.4%	70.1%
\$600 - \$900	0	0	0	0	0	0	0	0	0.0%	70.1%
\$900 - \$1100	148	12	5	0	0	0	0	165	22.7%	92.8%
\$1100 - \$1500	3	0	0	0	0	0	0	3	0.5%	93.3%
\$1500 - \$1900	36	0	0	0	0	0	0	36	4.9%	98.2%
\$1900 - \$2400	0	0	0	0	0	0	0	0	0.0%	98.2%
\$2400 - \$2800	0	0	0	0	0	0	0	0	0.0%	98.2%
\$2800 - \$3800	7	0	0	0	0	0	0	7	0.9%	99.1%
\$3800 +	7	0	0	0	0	0	0	7	0.9%	100.0%
Totals:	256	33	94	99	223	22	0	728	% All Units:	41.2%
Percentage:	35.2%	4.5%	13.0%	13.6%	30.6%	3.0%	0.0%	100.0%		

TOTAL HOUSING UNITS									
	Single Family Detached	Single Family Attached*	Multi-Family			Mobile home	Boat, RV, other temp	Total Units	% of Units
			2-unit	3- or 4-plex	5+ Units MFR				
Totals:	1,112	50	101	99	228	178	0	1,769	100%
Percentage:	62.8%	2.8%	5.7%	5.6%	12.9%	10.1%	0.0%	100.0%	

Sources: PSU Population Research Center, Claritas Inc., Census, Johnson Economics

* Uses Census definition, including townhomes/rowhouses and duplexes attached side-by-side, separately metered.

- The results show a need for 1,770 new housing units by 2036.
- Of the new units needed, roughly 59% are projected to be ownership units, while 41% are projected to be rental units.
- The table shows no new need for ownership housing at the low-end of the pricing spectrum. This is because these are the price levels where a majority of the city's housing is currently found. Therefore, what Figure 5.3 represents is that there may be support for units at higher price points.

- The greatest need for rental units is found at lowest price points. This reflects the findings shown in Figure 2.7 that an estimated 62% of The Dalles renter households currently pay more than 30% of their income towards housing costs. There is still a strong need for affordable housing.
- At the same time, there is also support for some units in the \$900 to \$1,100 category, which is above most current market rents. This shows that there is some support for new, more expensive rental supply.

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 an estimated 93% of permitted units in The Dalles (471 total). In keeping with development trends, and the buildable land available to The Dalles (discussed in the next section), single family units are expected to make up less of the overall new housing development over the next 20 years, while still remaining a majority of the new *ownership* housing.

- 63% of the new units are projected to be single family detached homes, while 27% is projected to be some form of attached housing, and 10% are projected to be mobile homes.
- Single family attached units (townhomes on individual lots) are projected to meet 3% 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 an additional 11% 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.
- 10% of new needed units are projected to be mobile home units, which meet the needs of some low-income households for both ownership and rental.
- Of ownership units, 82% are projected to be single-family homes, and 15% mobile homes.
- About two thirds of new rental units are projected to be found in new attached buildings, with 31% projected in rental properties of 5 or more units, and 14% in buildings of three to four units.

Needed Affordability Levels

- The needed affordability levels presented here are based on current 2016 dollars. Over time, incomes and housing costs will both inflate, so the general relationship projected here is expected to remain unchanged.
- The future needed affordability types (2036) reflect the same relationship shown in the comparison of current (2016) need and supply (shown in Figure 3.4). Generally, based on income levels there is a shortage of units in the lowest pricing levels, particularly for renter households.
- Figure 5.3 presents the *net NEW* housing unit need over the next 20 years. Figure 5.3 shows that in order for projected *new* renter households in 2036 to pay 30% or less of their income towards housing, a total of 510 additional rental units affordable at \$600 or less would be required.
- HOWEVER, there is also a strong *current* need for additional affordable units. In order for all households, current and new to pay 30% or less of their income towards housing in 2036, a total of 900 rental units affordable at \$600 or less 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 lack of new need in the middle of the rental spectrum (\$600 to \$900 and \$1,900 to \$2,800). As was discussed in the comparison of current need and supply, this reflects where the majority of market-rate rent levels are at the current time. As with the 2016 comparison, a future need is projected for both low-rent, but also higher rent units. This analysis shows that some renter households have the ability pay for a larger, newer and/or higher quality unit than may be currently available.
- Projected needed ownership units show that the supply at the lowest end of the spectrum is currently sufficient. (This reflects the estimated *value* of the total housing stock, and not necessarily the average pricing for housing currently for sale.) And the community could support more housing at higher price points, mostly in the \$200,000 to \$300,000 range.

VI. RECONCILIATION OF FORECASTED NEED AND BUILDABLE CAPACITY

This section presents the results of the Buildable Lands Inventory (BLI).

The following table present the estimated new unit capacity of the buildable lands identified in the City of The Dalles. There is a total remaining capacity for nearly 3,689 units of different types within the study area. 71% of this capacity is within the current city limits (2,631 units), and 29% of the capacity is within the UGB, but outside current city limits (1,059 units).

FIGURE 6.1: ESTIMATED BUILDABLE LANDS CAPACITY BY RESIDENTIAL UNIT (2016)

BUILDABLE LANDS INVENTORY	Unit Type			TOTAL
	Single Family Detached	Medium-Density Attached*	Multi-Family	
Low Density Resid. - RL	1,350			1,350
Medium Density Resid. - RM		445		445
High Density Resid. - RH			1,883	1,883
CBC (Assumes 50% for Resid. Use)			11	11
Gorge Mgmt. Area (R1 & R5)*	1			1
Total:	1,351	445	1,894	3,689
Inside City Limits:	807	320	1,504	2,631
Outside City Limits, in UGB:	544	125	390	1,059

* Medium Density Residential (MDR) units include single-family attached (townhomes) to four-plexes.

Multi-family Units (MFR) are defined as units in attached structures of 5 units or more.

Source: City of The Dalles, Angelo Planning Group

Map of the BLI is appended at the end of this report.

The following tables summarize the forecasted future unit need for the City of The Dalles. These are the summarized results from Section V of this report.

FIGURE 6.3: SUMMARY OF FORECASTED FUTURE UNIT NEED (2036)

TOTAL HOUSING UNITS									
	Multi-Family							Total Units	% of Units
	Single Family Detached	Single Family Attached*	2-unit	3- or 4-plex	5+ Units MFR	Mobile home	Boat, RV, other temp		
Totals:	1,112	50	101	99	228	178	0	1,769	100%
Percentage:	62.8%	2.8%	5.7%	5.6%	12.9%	10.1%	0.0%	100.0%	

Sources: PSU Population Research Center, Claritas Inc., Census, Johnson Economics

Comparison of Housing Need and Capacity

There is a total forecasted need for 1,769 units over the next 20 years. This is well below the estimated capacity of 3,689 units. As Figure 6.4 below demonstrates, there is sufficient capacity to accommodate all projected new unit types. After this need is accommodated, there is an estimated remaining capacity of over 1,900 additional units, mostly in the high-density residential zone.

FIGURE 6.4: COMPARISON OF FORECASTED FUTURE UNIT NEED (2036) WITH AVAILABLE CAPACITY

<u>LAND INVENTORY VS. LAND NEED</u>	Unit Type			<u>TOTAL</u>
	Single Family Detached	Medium- Density Attached*	Multi- Family	
Buildable Land Inventory (Units):	1,351	445	1,894	3,689
Estimated Land Need (Units):	1,112	429	228	1,769
Land Surplus (Inventory - Need:)	239	16	1,665	1,920

Sources: City of The Dalles BLI, Johnson Economics

The following table shows the same comparison, converting the forecasted residential need and capacity by acres, rather than units. There is a projected need for 232.5 acres of new residential development, but a buildable capacity of 480 acres.

FIGURE 6.5: COMPARISON OF FORECASTED FUTURE LAND NEED (2036) WITH AVAILABLE CAPACITY

<u>LAND INVENTORY VS. LAND NEED</u>	Unit Type			<u>TOTAL</u>
	Single Family Detached	Medium- Density Attached*	Multi- Family	
Buildable Land Inventory (Acres):	304.4	49.4	126.3	480.0
Estimated Land Need (Acres):	185.3	35.7	11.4	232.5
Land Surplus (Inventory - Need:)	119.1	13.7	114.8	247.6

Sources: City of The Dalles BLI, Johnson Economics

FINDING: There is currently sufficient buildable capacity within The Dalles to accommodate projected need. Much of this capacity is in the form of parcels with the potential for infill or redevelopment for future multi-family units. The character of this supply can help guide housing policy and strategy recommendations to be included in subsequent reports and ultimately integrated in the City's updated Comprehensive Plan.

