# Pleasant Valley/North Carver

## Housing Needs Analysis

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# TABLE OF CONTENTS

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# Section I.   SUMMARY

As part of the larger Pleasant Valley/North Carver (PV/NC) Comprehensive Plan process, FCS GROUP evaluated the housing land needs within the Plan area. This report provides a Housing Needs Analysis (HNA) and related land needs that are expected for PV/NC Plan area to address local, regional and state planning requirements. FCS GROUP performed the following activities:

- Evaluated current real estate trends in residential development within the Portland Metro area as well as primary market areas for the Happy Valley and PV/NC Plan area.
- Evaluated state and regional data which identifies projected growth patterns in population, households and housing in Happy Valley and the surrounding area.
- Analyzed Census and local market data to identify trends that will shape the PV/NC Plan area.
- Formulated recommendations that help inform a market-supportable development program for residential land needs in the PV/NC Plan area over a long-term planning period.

The technical analysis included in this report was originally generated by FCS GROUP in 2018 using available data at that time.  Draft findings were subsequently discussed and refined during the planning process. Important conclusions from this effort are summarized below.

## I.A.   MARKET OVERVIEW

- Household growth forecasts from Metro estimate an additional 4,809 households in the City of Happy Valley (current city limits) between 2015 and 2040. In addition, the Pleasant Valley/North Carver area is expected to add 4,234 households during this same timeframe.
- Happy Valley's housing stock is predominantly single family detached, however, there is an increasing trend towards development of townhomes and apartments in recent years.
- Home values in Happy Valley are stable and relatively high compared with similar markets in the Portland Metropolitan Area.
- Rental units have increased as a share of Happy Valley's housing stock, moving from 5% of occupied housing units in the city in 2000 to 15% in 2016.

## I.B.   GROWTH SCENARIOS

- Two housing growth scenarios were evaluated based on the above-mentioned 4,234 housing units expected to be added to the Pleasant Valley/North Carver Plan area.
- Variations between the two scenarios considered different housing mix, densities and tenancy (owner/renter) splits.
- Both growth forecast scenarios meet the regional (Metro) 2040 forecasts for net new households in the Plan area.

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## I.B.1.    Residential Land Needs

The residential land needs analysis indicates that the projected growth in households for the PV/NC Plan area will require between 576 and 611 buildable acres of residential land area for adding 4,381 housing units by year 2040 (see **Exhibit I.1**).  Both scenarios would meet the regional and state planning requirements regarding planned housing mix and density levels.

**Table I.1: Pleasant Valley/North Carver Plan Area Residential Land Needs**

| Housing Type | Dwelling Units | | Land Need (buildable acres) | |
|---|---|---|---|---|
| | Scenario A | Scenario B | Scenario A | Scenario B |
| Large Lot Single family detached | 305 | 438 | 88 | 126 |
| Standard Lot Single family detached | 953 | 1,147 | 219 | 264 |
| Small Lot Single family detached | 922 | 592 | 122 | 78 |
| Townhomes/plexes | 754 | 671 | 72 | 64 |
| Apartments (5+ units per structure) | 1,426 | 1,513 | 75 | 79 |
| Total | 4,361 | 4,361 | 576 | 611 |

*Source: Pleasant Valley/North Carver HNA, Dec. 2018.*

## I.B.2.    Housing Affordability Considerations

- According to HUD guidelines (for year 2018), houses in the Portland Metropolitan Area priced at $323,000 or less or renting for $1,628 a month or less would be affordable to households earning 80% of median family income.

- The projected mix of housing types in the Pleasant Valley/North Carver Plan are expected to result in higher densities, including construction of townhomes and apartments.

- Presently, median rents for housing in Happy Valley are $1,282 per month, well under the above-mentioned "affordability" threshold established by HUD.

- Based on this information, a market-oriented approach is possible for providing affordable rental housing in the Pleasant Valley/North Carver area.

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# Section II.  OVERVIEW

FCS GROUP conducted a demographic and economic overview of the geographic area that influences the Primary Market Area (PMA). The PMA was identified based on an understanding of the PV/NC Plan area's role within the broader tri-county Metro Region (consisting of Clackamas, Multnomah and Washington counties), with particular emphasis on the East Happy Valley and former Damascus portion of Clackamas County.

For analysis purposes, the PMA includes Clackamas County and the plan area as defined by Traffic Analysis Zones (TAZs) within the plan area. The basis for the PMA is the relevance the plan area has with respect to real estate submarkets within the greater Portland region as they pertain to commercial, office, and industrial leasing activity. In addition, the PMA considers the long-term Metro growth forecasts for the planning area and the area's contribution to urban Clackamas County.

## II.A.     NATIONAL AND REGIONAL OVERVIEW

The current economic recovery, which began in June of 2009, has entered its 9th year, among the longest economic upturns in modern history. Overall consumer confidence continues to be high while unemployment has consistently ticked down. In Oregon, 38,900 jobs were added between 2016 and 2017, the 7th consecutive year of overall statewide job growth. Meanwhile, the unemployment rate in Oregon fell to 4.1 percent at the end of 2017 from 4.3 percent in 2017, the 8th consecutive year of falling unemployment in the state.

The U.S. and Oregon economies are expected to continue their steady recoveries according to many economic indicators. National economic growth (as measured by Gross Domestic Product) is expected to increase by between 2.6 and 3 percent in 2018, between 2.2 and 2.6 percent in 2019 and by 1.8 to 2.1 percent in 2020 according to the Federal Reserve Bank[1].

Like many regions along the U.S. West Coast, the Portland Metropolitan Area is experiencing rapid increases in home values along with modest increases in income levels, decreasing unemployment, and relatively low office and industrial vacancies within the last few years. These factors, along with in-migration will lead to emerging development opportunities.

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[1] March 21, 2018: FOMC Projections materials, Accessible version, (https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20180321.htm )

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The population in the Portland-Beaverton-Vancouver Primary Metropolitan Statistical Area (PMSA) increased from 1.9 million in 2000 to over 2.2 million by 2010 and nearly 2.5 million by 2017[2]. According to Metro, the regional planning authority, Metro population is forecasted to increase over the foreseeable future. Metro projections suggest the region may add around 700,000 residents between 2015 and 2040[3]. Within Clackamas County, the historic 2000 to 2017 population growth rate averaged 1.2 percent per year, as county population increased from 338,391 in 2000 to 413,000 in 2017[4].

Increasing population within the greater Portland Region will also result in an expanding labor force, which will lead to increased employment as businesses add jobs. Long-term job growth forecasts by Metro expect around 470,000 jobs to be added to the PMSA between 2015 and 2040[5].

## II.B.  HAPPY VALLEY OVERVIEW

### II.B.1.  Demographic Trends

According to the U.S. Census, the City of Happy Valley had a population of 19,985 in 2017, up from 4,519 in 2000, adding 12,955 residents and 4,148 households over that timeframe. Nearly 100 percent of the employment growth which occurred in Happy Valley since 2000 is attributed to new construction rather than annexation of developed properties. As identified in **Table II.1**, population growth in Happy Valley far exceeds the growth rates for Clackamas County, the Tri-county Metro Region, and Oregon statewide growth rates.

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[2] Sources: US Census 2000 population estimate and Portland State University Population Research Center for 2010 and 2017 population estimates. Estimates represent a combination of Clackamas, Columbia, Multnomah, Washington, and Yamhill Counties in Oregon and Clark and Skamania Counties in Washington.

[3] 2014 Metro Urban Growth Report Appendix 1a "Population and Employment Forecast for the Portland-Vancouver-Hillsboro Metropolitan Statistical Area (2015-2035)" pg. 3 2014 Vintage Regional Forecast Population Column.

[4] Sources: US Census 2000 population estimate and Portland State University Population Research Center for 2017 population estimate.

[5] 2014 Metro Urban Growth Report Appendix 1a "Population and Employment Forecast for the Portland-Vancouver-Hillsboro Metropolitan Statistical Area (2015-2035)" pg. 3 2014 Vintage Regional Forecast Employment Column.

**Table II.1: Population Trends 2000-2017**

| | 2000 | 2010 | 2017 | Change, 2000-2017 |
|---|---|---|---|---|
| Happy Valley | 4,519 | 14,330 | 19,985 | 342.2% |
| Clackamas County | 338,391 | 376,780 | 413,000 | 22.0% |
| Tri County Region * | 1,444,219 | 1,644,635 | 1,811,860 | 25.5% |
| Oregon | 3,421,399 | 3,837,300 | 4,141,100 | 21.0% |

*Source: U.S. Census Bureau and Portland State University Population Research Center.*

The median age of households in Happy Valley has fluctuated over time, dropping from 37.1 years in 2000 to 33.4 years in 2010 and increasing to 38.6 years in 2016 (**Table 2**). In comparison, the median age of households in the Portland-Vancouver-Hillsboro Metropolitan Statistical Area was 37.6 in 2016.

**Table II.2: Happy Valley Demographic and Socioeconomic Trends 2000-2016**

| | 2000 | 2010 | 2016 |
|---|---|---|---|
| Population | 4,519 | 14,330 | 17,474 |
| Group Quarters Population | - | - | 41 |
| Households | 1,431 | 3,674 | 5,579 |
| Family Households | 1,335 | 3,337 | 4,433 |
| Nonfamily Households | 96 | 337 | 1,146 |
| | | | |
| Population per Household | 3.2 | 3.9 | 3.1 |
| Average Household Size | 3.2 | 3.4 | 3.1 |
| Median Age | 37.1 | 33.4 | 38.6 |
| | | | |
| Median Household Income | $90,978 | $103,633 | $106,197 |
| Median Family Income | $95,922 | $108,769 | $114,965 |
| Per Capita Income | $36,665 | $35,648 | $41,790 |

*Note: Incomes for 2000 are reported in 1999 dollars, incomes for 2010 are reported in 2009 dollars and incomes for 2016 are reported in 2015 dollars.*
*Source: U.S. Census Bureau and Portland State University Population Research Center*

Income levels have risen notably in Happy Valley since 2000 and they are significantly higher than income levels in Clackamas County and the statewide average (see **Table II.3**).

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**Table II.3: Demographic and Socioeconomic Characteristics (2016)**

|  | Happy Valley | Clackamas County | Oregon |
|---|---|---|---|
| Average Household Size | 3.2 | 2.6 | 2.5 |
| Median Age | 38.6 | 41.4 | 39.1 |
| Median Household Income | $106,197 | $68,915 | $53,270 |
| Median Family Income | $114,965 | $83,308 | $65,479 |
| Per Capita Income | $41,790 | $35,506 | $28,822 |

*Note: Incomes reported in 2015 dollars.*
*Source: U.S. Census Bureau*

As household counts have rapidly increased in Happy Valley, the income characteristics of those households have remained fairly constant over the past 16 years. As indicated in **Table II.4**, the share of households earning over $75,000 has remained consistent while the number of such households has increased dramatically.

**Table II.4: Households by Income Level, Happy Valley**

| Income Level | 2000 Census | | 2010 Census | | 2012-2016 ACS | | Change, 2000-2016 | |
|---|---|---|---|---|---|---|---|---|
|  | Number | Dist. % | Number | Dist. % | Number | Dist. % | Number | Dist. % |
| Less than $10,000 | 9 | 0.6% | 82 | 2.2% | 89 | 1.6% | 80 | 2.0% |
| $10,000 to $14,999 | 9 | 0.6% | 19 | 0.5% | 78 | 1.4% | 69 | 1.7% |
| $15,000 to $24,999 | 72 | 4.7% | 56 | 1.5% | 173 | 3.1% | 101 | 2.5% |
| $25,000 to $34,999 | 57 | 3.7% | 145 | 3.9% | 128 | 2.3% | 71 | 1.8% |
| $35,000 to $49,999 | 151 | 9.9% | 282 | 7.6% | 262 | 4.7% | 111 | 2.7% |
| $50,000 to $74,999 | 263 | 17.3% | 472 | 12.7% | 1,071 | 19.2% | 808 | 19.9% |
| $75,000 to $$99,999 | 273 | 17.9% | 691 | 18.6% | 764 | 13.7% | 491 | 12.1% |
| $100,000 to $149,999 | 376 | 24.7% | 917 | 24.7% | 1,451 | 26.0% | 1,075 | 26.5% |
| $150,000 to $199,999 | 128 | 8.4% | 583 | 15.7% | 736 | 13.2% | 608 | 15.0% |
| $200,000 or more | 185 | 12.1% | 468 | 12.6% | 826 | 14.8% | 641 | 15.8% |
| Total | 1,523 | 100% | 3,714 | 100% | 5,579 | 100% | 4,056 | 100% |

*Note: Incomes for 2000 are reported in 1999 dollars, incomes for 2010 are reported in 2009 dollars and incomes for 2016 are reported in 2015 dollars.*
*Source: U.S. Census Bureau*

Happy Valley has experienced an increase in population in virtually all age cohorts, with the exception of the very young (under age 9 category). The fastest growing age cohort between 2010 and 2016 is in the age 50-64 category, as indicated in **Table II.5**.

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**Table II.5 Population by Age Cohort, Happy Valley 2010-2016**

| Income Level | 2010 Census | | 2012-2016 ACS | | Change | |
|---|---|---|---|---|---|---|
| | Number | Dist. % | Number | Dist. % | Number | Dist. % |
| Under 5 Years | 1,591 | 11.1% | 1,083 | 6.2% | (507) | -12.5% |
| 5 to 9 Years | 1,591 | 11.1% | 1,206 | 6.9% | (385) | -9.5% |
| 10 to 14 Years | 1,404 | 9.8% | 1,590 | 9.1% | 186 | 4.6% |
| 15 to 19 Years | 931 | 6.5% | 1,083 | 6.2% | 152 | 3.7% |
| 20 to 24 Years | 659 | 4.6% | 1,206 | 6.9% | 547 | 13.5% |
| 25 to 29 Years | 487 | 3.4% | 961 | 5.5% | 474 | 11.7% |
| 30 to 34 Years | 731 | 5.1% | 594 | 3.4% | (137) | -3.4% |
| 35 to 39 Years | 1,275 | 8.9% | 1,398 | 8.0% | 123 | 3.0% |
| 40 to 44 Years | 1,490 | 10.4% | 1,468 | 8.4% | (23) | -0.6% |
| 45 to 49 Years | 1,247 | 8.7% | 1,380 | 7.9% | 134 | 3.3% |
| 50 to 54 Years | 802 | 5.6% | 1,468 | 8.4% | 665 | 16.4% |
| 55 to 59 Years | 717 | 5.0% | 1,363 | 7.8% | 646 | 15.9% |
| 60 to 64 Years | 573 | 4.0% | 1,083 | 6.2% | 510 | 12.6% |
| 65 to 69 Years | 344 | 2.4% | 489 | 2.8% | 145 | 3.6% |
| 70 to 74 Years | 229 | 1.6% | 419 | 2.4% | 190 | 4.7% |
| 75 to 79 Years | 201 | 1.4% | 280 | 1.6% | 79 | 1.9% |
| 80 to 84 Years | 43 | 0.3% | 262 | 1.5% | 219 | 5.4% |
| 85 Years and Over | 57 | 0.4% | 175 | 1.0% | 117 | 2.9% |
| Total | 14,330 | 100% | 17,474 | 100% | 3,144 | - |

*Source: U.S. Census Bureau*

## II.C.    LONG-TERM GROWTH FORECASTS

The most current long-term growth forecast by Metro anticipates that Happy Valley (current city limits excluding the PV/NC Plan area portion) will add approximately 4,809 households and 4,836 jobs between 2015 and 2040 as indicated in **Figure II.1**.

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**Figure II. 1: Happy Valley Employment and Households figures 2000-2040**
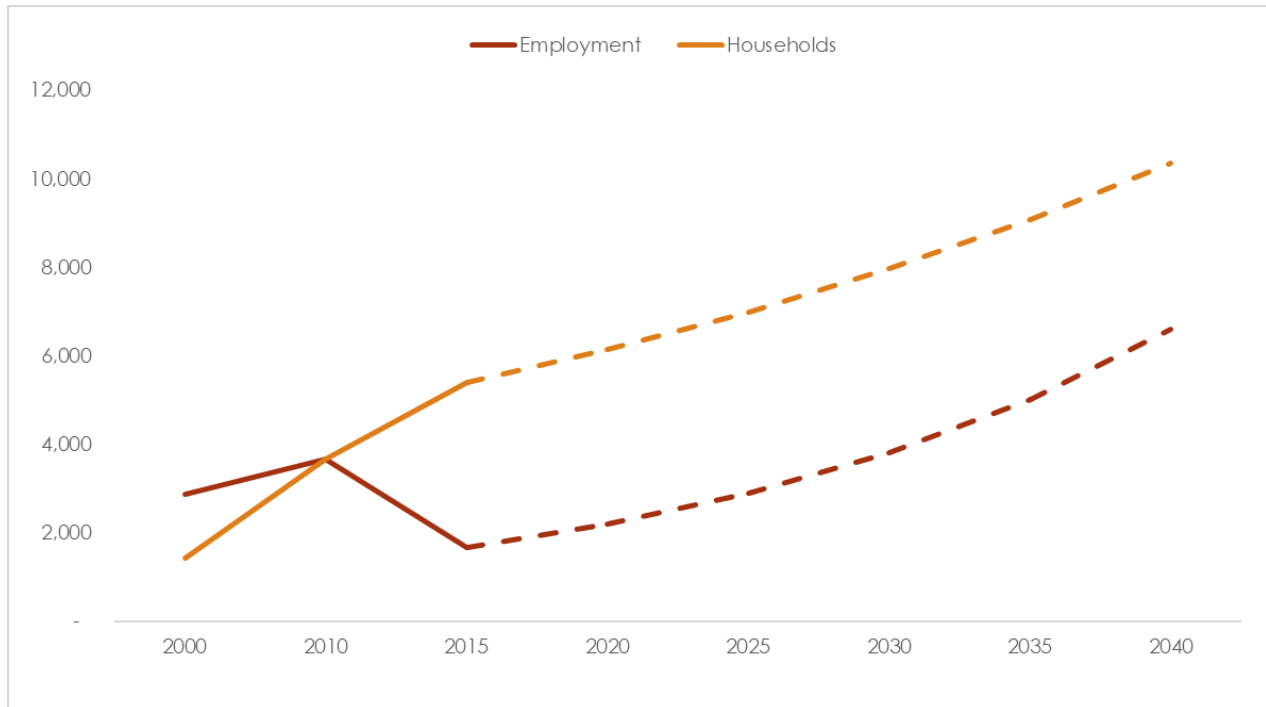


*Note: Dashed line indicates projections provided by Metro.*
*Source: U.S. Census (data from 2000-2010) and Metro (Data from 2025 to 2040).*

The PV/NC Plan area (see analysis provided in Appendix A) is expected to add approximately 4,234 households and up to 1,384 jobs according to Metro forecasts (**Table II.6**).[6]

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[6] Metro Source: *2015-2040 Distributed Forecast (Scenario #1610)*. Oregon Metro Research Center. Metro Region Data Adopted 2016 by Metro Ordinance 16-1371. Clark County Data Provided by Regional Transportation Commission. The 2015 and 2040 household allocations have been reviewed by local jurisdictions and adopted by the Metro Council in 2016.
**Model Vintage:** Scenario 1610, William 2 forecast, file created 07/21/2017
See Appendix A for detailed estimates and forecasts for the Pleasant Valley/North Carver Plan area.

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**Table II.6: Forecasts for Households and Employment (2015-2040)**

| | 2015 | 2040 (Projected) | Projected Change (2015-2040) | Projected CAGR (2015-2040) |
|---|---|---|---|---|
| Pleasant Valley/North Carver Households | 1,735 | 5,969 | 4,234 | 5.1% |
| Happy Valley Households* | 5,381 | 10,190 | 4,809 | 2.6% |
| Clackamas County Households | 151,352 | 199,420 | 48,068 | 1.1% |
| Tri-County Metro Region Households | 687,123 | 961,317 | 274,194 | 1.4% |
| | | | | |
| Pleasant Valley/North Carver Employment | 324 | 1,708 | 1,384 | 6.9% |
| Happy Valley Employment | 1,646 | 6,482 | 4,836 | 5.6% |
| Clackamas County Employment | 152,401 | 226,537 | 74,136 | 1.6% |
| Tri-County Metro Region Employment | 888,658 | 1,289,052 | 400,394 | 1.5% |

*excluding Pleasant Valley/North Carver Plan area portion.

*Source: Metro.*

## II.D.    MARKET ANALYSIS

### II.D.1.    Housing Market

Citywide, Happy Valley's residential development patterns are primarily characterized by single-family detached housing. However, recent growth shows more of a mix of housing types. Happy Valley added 1,105 single-family detached units between 2010 and 2016, according to the U.S. Census. During this time frame, Happy Valley added 267 townhomes, 444 multifamily units, and 8 mobile homes (**Table II.7**).

Median home values at the end of 2016 were $425,800, while median rents were $1,282, according to the U.S. Census.  Citywide home values and rents decreased slightly between 2010 and 2016 according to US Census data due in part to an increase in mid-market housing and apartment construction. More recent trends indicate that home prices are starting to increase as vacancy rates decline.

Housing vacancy rates have grown tight in recent years with the most recent data suggesting a 1.8 percent vacancy rate for all housing units in Happy Valley.

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**Table II.7: Happy Valley Housing Inventory (2010-2016)**

| | 2010 | 2016 | 2000-2010 Avg. Annual Absorption | 2010-2016 Avg. Annual Absorption |
|---|---|---|---|---|
| Owner Occupied | 3,354 | 4,728 | 193 | 229 |
| Renter Occupied | 360 | 851 | 29 | 82 |
| Vacant | 344 | 104 | 28 | (40) |
| Total | 4,058 | 5,683 | 249 | 271 |
| | | | | |
| Owner Occupied % | 90.3% | 84.7% | 87.0% | 73.7% |
| Renter Occupied % | 9.7% | 15.3% | 13.0% | 26.3% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% |
| | | | | |
| Vacant Dwellings % | 8.5% | 1.8% | | |
| | | | | |
| Single-Family Detached | 3,448 | 4,552 | 326 | 184 |
| Townhome/Plexes | 84 | 351 | 13 | 45 |
| Multifamily | 158 | 603 | 26 | 74 |
| Mobile Home | 24 | 73 | 4 | 8 |
| Total | 3,714 | 5,579 | 369 | 311 |
| | | | | |
| Median Home Value | $472,700 | $425,800 | | |
| Median Gross Rent | $1,341 | $1,282 | | |

*Source: U.S. Census Bureau*

In comparison to other market areas, Happy Valley home values are relatively stable, having increased 2.4 percent year-over-year between June 2017 and June 2018. As indicated on **Table II.8**, median home sales prices in Happy Valley increased to $509,000 in June of this year according to Zillow.com.

**Table II.8: Median Home Sales Price Trends in Selected Markets**

| | June 2017 | June 2018 | Change % |
|---|---|---|---|
| Happy Valley | $497,000 | $509,000 | 2.4% |
| Canby | $322,000 | $379,000 | 17.7% |
| Lake Oswego | $540,000 | $602,000 | 11.5% |
| Oregon City | $356,000 | $406,000 | 14.0% |
| Portland | $388,000 | $411,000 | 5.9% |
| Tualatin | $417,000 | $447,000 | 7.2% |
| West Linn | $475,000 | $525,000 | 10.5% |
| Wilsonville | $436,000 | $446,000 | 2.3% |

*Source: Zillow.com*

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FCS GROUP compiled statistics for the Happy Valley area which reflects real estate sales over the past 24 months. Results indicate that as of August 15th 2018 there were 240 homes listed for sale, of which the majority were over $450,000 (**Table II.9**).

Over the past 24 months there have been 1,288 recorded home sales in Happy Valley. The pace of sales indicates that the current standing inventory of unsold homes in Happy Valley now stands at just 4.5 months overall, and well below 3 months for units priced less than $450,000.

**Table II.9: Happy Valley Area Home Sales Trends**

| Price Level | Homes Sold (Past 24 Months) | Homes Listed (AS of August 13, 2018) | Inventory (Months Until Sold) |
|---|---|---|---|
| Less than $150,000 | 26 | 16 | 15 |
| $150,001 to $250,000 | 64 | 6 | 2 |
| $250,001 to $350,000 | 199 | 14 | 2 |
| $350,001 to $450,000 | 265 | 18 | 2 |
| $450,001 to $550,000 | 288 | 53 | 4 |
| $550,001 or more | 446 | 133 | 7 |
| **Total** | **1,288** | **240** | **4.5** |

*Source: Zillow.com*

FCS GROUP also analyzed home sales figures for the Damascus area given that most of the annexation area is located due east of the Pleasant Valley/North Carver Plan area. Currently, 64 homes are on the market in the Damascus area and like Happy Valley, the majority of those homes have asking prices above $450,000 (**Table II.10**).

Over the last 24 months 498 home sales have been recorded in the Damascus area, the pace of which suggests that the presently available inventory will be absorbed in just over three months.

**Table II.10: Damascus Area Home Sales Trends**

| Price Level | Homes Sold (Past 24 Months) | Homes Listed (AS of August 13, 2018) | Inventory (Months Until Sold) |
|---|---|---|---|
| Less than $150,000 | 16 | 4 | 6 |
| $150,001 to $250,000 | 16 | - | - |
| $250,001 to $350,000 | 70 | 3 | 1 |
| $350,001 to $450,000 | 187 | 11 | 1 |
| $450,001 to $550,000 | 122 | 17 | 3 |
| $550,001 or more | 87 | 29 | 8 |
| **Total** | **498** | **64** | **3.1** |

*Source: Zillow.com*

Despite a slight drop in 2017 compared with the prior 5 years, Happy Valley and Clackamas County have experienced a significant uptick in residential building permits since the end of the "Great Recession" (**Tables II.11 and II.12**). County-wide total permit volume was 1,702 in 2017, down

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from 2,450 permits recorded in 2016. It should be noted that over the past three years, there has been a measurable increase in multifamily development permits in Clackamas County.

**Table II.11: Privately-Owned Residential Units Permitted, Clackamas Cnty. (2012-2017)**

| Units in Structure | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| Single Family | 1,142 | 1,344 | 1,278 | 1,607 | 1,368 | 1,228 |
| 2 Unit Multifamily | 4 | 14 | 32 | 12 | 14 | 18 |
| 3 & 4 Unit Multifamily | - | 14 | 19 | 32 | 23 | 19 |
| 5+ Unit Multifamily | 435 | 131 | 151 | 180 | 1,045 | 437 |
| Total Units Permitted | 1,581 | 1,503 | 1,480 | 1,831 | 2,450 | 1,702 |

*Source: U.S. Department of Housing and Urban Development.*

Similar to the patterns found County-wide, residential permit volume in Happy Valley has seen an uptick in multifamily permitting while single family permitting has stabilized. The city issued 225 total residential dwelling units in 2017, a drop from the prior 4 years but was still relatively high for the post-recession era.

**Table II.12: Privately-Owned Residential Units Permitted, Happy Valley (2012-2017)**

| Units in Structure | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| Single Family | 200 | 309 | 354 | 317 | 281 | 154 |
| 2 Unit Multifamily | - | - | - | 4 | - | - |
| 3 & 4 Unit Multifamily | - | - | - | 29 | - | - |
| 5+ Unit Multifamily | - | - | - | 6 | 308 | 71 |
| Total Units Permitted | 200 | 309 | 354 | 356 | 589 | 225 |

*Source: U.S. Department of Housing and Urban Development.*

According to City permit records, Happy Valley permitted 234 new single-family (detached and townhome) dwelling units annually during the current economic expansion (2010-2017). As the number of buildable home sites within the City declines, so too has the rate of housing absorption.

**Figure II.3: New Single-Family Dwelling Units, City of Happy Valley (2003-2018)**
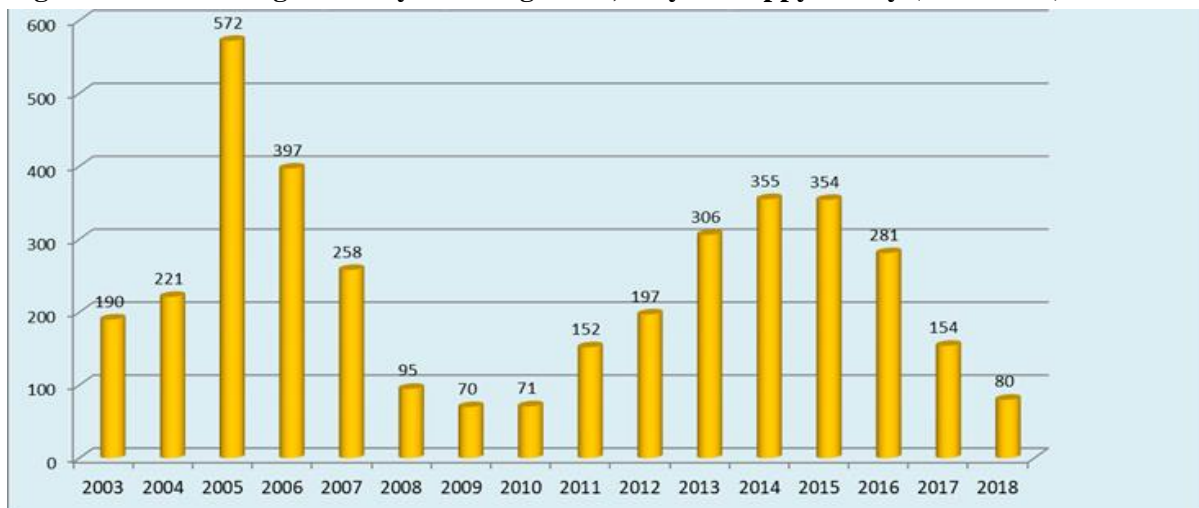


*Source: City of Happy Valley.*

As the number of multifamily dwelling units in Happy Valley has increased, the residential market characteristics in Happy Valley are changing. As shown in **Table II.13**, the citywide ratio of detached to multifamily/attached housing in Happy Valley has changed from 99:1 to 82:18 over the past 16 years. During this time frame, the mix of new housing that was added to the City consisted of: 57.9 percent single family detached; 12.5 percent single family attached (townhomes); 27.2 percent multifamily; and 2.4 percent mobile homes (manufactured housing). Fully 42 percent of new housing in this recent period has been non-detached homes.

**Table II.13: Occupied housing units by structure type, City of Happy Valley**

|  | 2000 | | 2006-2010 | | 2012-2016 | | Change (2008-2014) | |
|---|---|---|---|---|---|---|---|---|
|  | Units | % | Units | % | Units | % | Units | % |
| **Occupied housing units** | **1,499** | **100%** | **3,714** | **100%** | **5,579** | **100%** | **1,865** | **Mix** |
| Single Family Detached | 1,490 | 99.4% | 3,476 | 93.6% | 4,555 | 81.6% | 1,079 | 57.9% |
| Townhomes / Plexes[1] | 9 | 0.6% | 117 | 3.2% | 351 | 6.3% | 234 | 12.5% |
| Multi family[2] | 0 | 0.0% | 95 | 2.6% | 603 | 10.8% | 508 | 27.2% |
| Mobile home / other[3] | 0 | 0.0% | 26 | 0.7% | 70 | 1.3% | 44 | 2.4% |

**Source:** 2006-2010 and 2012-2016 American Community Survey 5-Year Estimates and 2000 SF4 sample data.
[1] Townhomes / Plexes: 1-unit attached, 2 units, 3 or 4 units
[2] Multifamily: 5 to 9 units, 10 to 19 units, 20 to 49 units, and 50 or more
[3] Mobile home / other: Mobile home, boat, RV, van, etc.

Consistent with the trend towards multifamily permitting activity, the number of renters within the City of Happy Valley has increased measurably during the 2008 to 2014 time frame (**Table II.14**).

**Table II.14: Occupied housing units by tenure, City of Happy Valley**

|  | 2000 | | 2006-2010 | | 2012-2016 | | Change (2008-2014) | |
|---|---|---|---|---|---|---|---|---|
|  | Units | % | Units | % | Units | % | Units | % |
| Owner Occupied | 1,428 | 95% | 3,354 | 90% | 4,728 | 85% | 1,374 | 74% |
| Renter Occupied | 71 | 5% | 360 | 10% | 851 | 15% | 491 | 26% |
| **Total Occupied** | **1,499** | **100%** | **3,714** | **100%** | **5,579** | **100%** | **1,865** | **100%** |

**Source:** 2006-2010 and 2012-2016 American Community Survey 5-Year Estimates and 2000 SF4 sample data.

The current housing inventory within the City of Happy Valley as estimated by the U.S. Census, American Community Survey (ACS) 2012-2016 is shown in **Table II.15**. These "base year" estimates are utilized along with the changing market characteristics described above to ascertain the general level of demand that is likely to occur in the future.

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**Table II.15: City of Happy Valley Housing Inventory, 2012-2016 ACS Estimates**

| Housing Type | Owner-Occupied Dwelling Units | Renter-Occupied Dwelling Units | Other Vacant Units | All Dwelling Units |
|---|---|---|---|---|
| Single Family Detached | 4,323 | 232 | 82 | 4,637 |
| Townhomes / Plexes | 319 | 32 | 6 | 357 |
| Multi family (5+ units) | 51 | 552 | 11 | 614 |
| Mobile home / other | 35 | 35 | 1 | 71 |
| Total Units | **4,728** | **851** | **100** | **5,679** |
| Distribution | 83.2% | 15.0% | 1.8% | 100.0% |

| Housing Type | Owner-Occupied Dwelling Units | Renter-Occupied Dwelling Units | Other Vacant Units | All Dwelling Units |
|---|---|---|---|---|
| Single Family Detached | 91% | 27% | 82% | 82% |
| Townhomes / Plexes | 7% | 4% | 6% | 6% |
| Multi family (5+ units) | 1% | 65% | 11% | 11% |
| Mobile home / other | 1% | 4% | 1% | 1% |
| Total | 100% | 100% | 100% | 100% |

**Source:** American Community Survey, 2012-2016; compiled by FCS GROUP.

## II.E.  SUMMARY OF HOUSING NEEDS

Based on Metro growth projections for the Pleasant Valley/North Carver Planning Area (detailed in **Table II.6**), it is assumed that 4,234 additional housing units will be added in the area between 2015 and 2040. This represents a proportional share of traffic analysis zones (TAZs) within the planning area boundary (consult Appendix A for further information). Determining the mix of housing types in the planning area will factor in housing mix observed in Happy Valley (discussed above) and state planning requirements (discussed below).

### II.E.1.  Housing Growth Forecast Scenarios

This housing needs forecast considers two alternative land use scenarios. Both scenarios are intended to take into account emerging market characteristics along with state and regional regulations for planning urban areas.  As part of the Comprehensive Plan amendment, the PV/NC housing element must address the requirements of Goal 10 (OAR 660-008), and its implementing/guiding measure: Division 7 Metropolitan Housing Rule (OAR 660-007).

In short, the Metropolitan Housing Rule (MHR) requires that Happy Valley designate sufficient buildable land to *provide the opportunity* for meeting the minimum density and dwelling mix. According to the MHR, new residential units in the City of Happy Valley is to consist of ***at least 50***

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*percent attached single family housing or multifamily housing[7]*; and the City must provide "clear and objective"[8] zoning and development code standards that provide an overall density of *six or more* dwelling units per net buildable acre[9].

Both Scenarios are intended to accommodate the net increase in households that has been projected by Metro for the PV/NC plan area, meet or exceed the MHR requirements for minimum housing density and housing mix, and address the housing needs summarized above.

Based on recent development activity reported by City of Happy Valley planning staff, the ensuing analysis assumes average residential density levels as follows:

- Large Lot: 10,000 sf (4 units per acre)
- Standard Lot: 8,500 sf (5 units per acre)
- Small Lot: 5,000 sf (8.7 units per acre)

The Pleasant Valley / North Carver Planning Area can meet the projected housing need of 4,361 dwelling units and achieve density and housing mix requirements through planned land use regulations that guide the overall housing mix. Two residential forecast scenarios have been identified and are consistent with the housing trends discussed previously.

**Scenario A**: plans for a mix of standard and large-lot single family home sites, townhomes and multifamily apartments, with a relatively higher orientation of owner-occupants in comparison with Scenario B.

**Scenario B**: plans for a mix of standard and small-lot single family home sites, townhomes and multifamily apartments with a relatively higher orientation of renter-occupants in comparison with Scenario A.

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[7] OAR 660-007-0030(1): "Jurisdictions other than small developed cities must either designate sufficient buildable land to provide the opportunity for at least 50 percent of new residential units to be attached single family housing or multiple family housing or justify an alternative percentage based on changing circumstances."

[8] OAR 660-007-0015(1): "…a local government may adopt and apply only clear and objective standards, conditions and procedures regulating the development of needed housing on buildable land. The standards, conditions and procedures may not have the effect, either in themselves or cumulatively, of discouraging needed housing through unreasonable cost or delay."

[9] OAR 660-007-0035(1): "The Cities of Cornelius, Durham, Fairview, Happy Valley and Sherwood must provide for an overall density of six or more dwelling units per net buildable acre."

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The key assumptions for each scenario are shown below in **Table II.16**.

**Table II.16: Pleasant Valley/North Carver Area Residential Forecast Assumptions**

| | Owner-Occupied Dwelling Units | Renter-Occupied Dwelling Units | Vacancy Factor (@2%) | All Dwelling Units | Avg. Density (DU per Net Buildable Acre) |
|---|---|---|---|---|---|
| **Housing Tenure Distribution:** | **70.0%** | **30.0%** | | **100%** | |
| | | | | | |
| **Housing Unit/Type Distribution** | | | | | |
| Large Lot SFD | 10% | 0% | | 7.0% | 4.0 |
| Standard Lot SFD | 31% | 0.5% | | 21.9% | 5.0 |
| Small Lot SFD | 30% | 0.5% | | 21.2% | 8.7 |
| Townhomes / Plexes | 23% | 4% | | 17.3% | 12.0 |
| Multi family (5+ units) | 6% | 95% | | 32.7% | 22.0 |
| **Total** | **100%** | **100%** | | **100%** | |

**Scenario B: 20-Year Residential Land Need Baseline Forecast, PV/NC Area**

| | Owner-Occupied Dwelling Units | Renter-Occupied Dwelling Units | Vacancy Factor (@2%) | All Dwelling Units | Avg. Density (DU per Net Buildable Acre) |
|---|---|---|---|---|---|
| **Housing Tenure Distribution:** | **67.0%** | **33.0%** | | **100%** | |
| | | | | | |
| **Housing Unit/Type Distribution** | | | | | |
| Large Lot SFD | 15% | 0% | | 10.5% | 4.0 |
| Standard Lot SFD | 39% | 0.5% | | 27.5% | 5.0 |
| Small Lot SFD | 20% | 0.5% | | 14.2% | 8.7 |
| Townhomes / Plexes | 21% | 4% | | 15.9% | 12.0 |
| Multi family (5+ units) | 5% | 95% | | 32.0% | 22.0 |
| **Total** | **100%** | **100%** | | **100%** | |

The resulting housing land needs for each scenario are depicted in **Table II.17**. While both scenarios would achieve the MHR density and mix requirements, Scenario A would require more land area to accommodate approximately 4,234 net new households projected for the plan area.

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**Table II.17: Pleasant Valley/North Carver Area Residential Land Needs Forecast**

| Scenario A: Dwelling Unit Baseline Forecast, PV/NC Area | | | | 4,234 | households |
|---|---|---|---|---|---|
| | Owner Units | Renter Units | Vacancy Factor (@2%) | Net New Dwelling Units | Average Density (DU per Net Buildable Acre) | Potential Land Need (Net Buildable Acres)* |
| Housing Tenure Distribution: | 2,667 | 1,567 | 127 | 4,361 | 6.8 | 645.4 |
| | 63% | 37% | 3% | 100% | | |
| Housing Unit/Type Distribution | | | | | | |
| Large Lot SFD | 133 | 16 | 4 | 154 | 4.0 | 44.1 |
| Standard Lot SFD | 1,947 | 16 | 59 | 2,022 | 5.0 | 465.0 |
| Small Lot SFD | | | | | | |
| Townhomes / Plexes | 427 | 63 | 15 | 504 | 12.0 | 48.3 |
| Multi family (5+ units) | 160 | 1,473 | 49 | 1,682 | 22.0 | 87.9 |
| Total | 2,667 | 1,567 | 127 | 4,361 | 6.8 | 645.4 |
| Percent Multifamily and Attached | | | | 50% | | |
| Scenario B: Dwelling Unit Baseline Forecast, PV/NC Area | | | | 4,234 | households |
| | Owner Units | Renter Units | Vacancy Factor (@2%) | Net New Dwelling Units | Average Density (DU per Net Buildable Acre) | Potential Land Need (Net Buildable Acres)* |
| Housing Tenure Distribution: | 2,540 | 1,694 | 127 | 4,361 | 7.0 | 621.2 |
| | 60% | 40% | 3% | 100% | | |
| Housing Unit/Type | | | | | | |
| Large Lot SFD | | | | | | |
| Standard Lot SFD | 1,982 | 0 | 59 | 2,041 | 5.0 | 469.4 |
| Small Lot SFD | 76 | 17 | 3 | 96 | 8.7 | 12.7 |
| Townhomes / Plexes | 356 | 152 | 15 | 523 | 12.0 | 50.2 |
| Multi family (5+ units) | 127 | 1,524 | 50 | 1,701 | 22.0 | 88.9 |
| Total | 2,540 | 1,694 | 127 | 4,361 | 7.0 | 621.2 |
| Percent Multifamily and Attached | | | | 51% | | |

* assumes 15% of land area dedicated to public roads and other infrastructure.

## II.E.2.  Reconciliation of Land Need

The draft Buildable Land Inventory (BLI) for the PV/NC area is summarized below in **Table II.18**.

**Table II.18: Pleasant Valley/North Carver Area Buildable Land Inventory (net buildable acres)**

| Unconstrained Vacant Land Supply, PV/NC Area (net buildable acres) | | | | |
|---|---|---|---|---|
| | Taxlot Size | | | |
| Land Designation | <1 Acre | 1-5 Acres | >5 Acres | Total |
| Neighborhood | 85 | 316 | 206 | 607 |
| Employment | 6 | 29 | 4 | 40 |
| Industrial | 8 | 130 | 228 | 367 |
| Regionally Significant Industrial | 1 | 11 | 18 | 29 |
| Total | 102 | 486 | 456 | 1,043 |

Source: Angelo Planning Group, Buildable Land Inventory, December 4, 2018.

The findings indicate that there is an adequate supply of vacant net buildable land area (607 acres) within the "neighborhood" designation to accommodate a planned increase of 4,234 households under Scenario A but additional residential land would be required under Scenario B. It is recommended that the Pleasant Valley/North Carver Plan area be planned to accommodate at least

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4,361 dwelling units which would require approximately 621 acres (Scenario B) to 645 acres (Scenario A) of net unconstrained land area.

## II.E.3.    Housing Affordability Considerations

The Pleasant Valley/North Carver Comprehensive Plan will need to meet State Land Use Planning Goal 10, and MHR requirements.  The development program for the Pleasant Valley/North Carver Comprehensive Plan is based upon a current housing market analysis with pending review by Metro staff, the study technical advisory committee, and a local stakeholder workgroup.  The draft housing market analysis identifies trends in Happy Valley households by income level, housing mix, tenancy, home sales median prices, gross rents, median home value, and approved permitted dwelling units by housing type.  The Pleasant Valley/North Carver Comprehensive Plan indicates that the existing median home sales prices within Happy Valley are higher than most comparative cities in the Metro region.

The Pleasant Valley/North Carver Comprehensive Plan considers housing affordability criteria consistent with Housing and Urban Development (HUD) guidelines. A summary analysis of housing affordability price points is provided in **Table II.19 and Appendix B**.  The findings indicate that at the current fiscal year 2018 median family income (MFI) level for the region ($81,400); homes priced at $323,000 or less (monthly payment of $1,628 or less) would qualify as being "affordable" to households earning 80 percent of the median household income.  Hence homes priced at or below $323,000 and apartments that rent less than $1,628 are assumed to be "affordable" in the Portland-Vancouver-Hillsboro MSA.

Given regional MFI levels and the broad assumption that housing costs should be near 30 percent of total income, homes priced at $202,000 would be affordable to those at 50 percent MFI and homes priced at $323,000 to $403,000 would be affordable to households at 80 percent to 100 percent of MFI. While affordable housing at 50 percent of the MFI is not currently feasible without public subsidy in the Pleasant Valley/North Carver area, "market rate" housing at 80 percent to 100 percent (or higher) of the MFI is expected.

**Table II.19: Analysis of Affordability, Pleasant Valley/North Carver Comprehensive Plan**

| FY 2018 HUD Portland Region Median Family Income (MFI)[1]: | | | | $81,400 | |
|---|---|---|---|---|---|
| **HUD Guideline** | **Percent of MFI** | **Qualifying Income Level** | **Annual Housing Payment** | **Affordable Gross Monthly Housing Payment** | **Homes Sales Price[3]** |
| Very Affordable | 50% | $40,700 | $12,210 | $1,018 | $202,000 |
| Affordable[2] | 80% | $65,120 | $19,536 | $1,628 | $323,000 |
| Somewhat Affordable | 100% | $81,400 | $24,420 | $2,035 | $403,000 |

[1] based on HUD user guide income thresholds for Portland-Vancouver-Hillsboro MSA.

[2] based on Metro Code, Section 3.07.1120.D guidelines.

[3] assumes 30-year fixed rate mortgage with 20 percent down payment at 6 percent interest.

As discussed above, the Pleasant Valley/North Carver area is expected to add approximately 4,361 dwelling units (at permitted density levels by year 2040) on land to be residentially zoned. It should be noted that additional housing could also be accommodated in commercial mixed-use areas and through the provision of accessory dwelling units.

It is expected that between 50 and 51 percent of the housing types proposed in the Pleasant Valley/North Carver area are "medium" and "high" density (multifamily and townhomes/plexes). These would include approximately 1,682 to 1,701 apartments/condos and 504 to 523 townhomes and duplex units. "Affordable" units would need to be priced at or below $323,000-$403,000 (for sale units) or have rents at or below $1,600-2,035/month. New multifamily and townhome dwelling units are likely to be "affordable" to households earning between 80 percent of the regional MFI.

A range of single-family detached housing types (with 2,177 dwellings) would also be expected at densities between 4.0 and 8.7 units per acre. Single-family detached dwellings would appeal to middle- and upper-income homeowners with starting prices of approximately $425,000 (2018 dollars). Townhomes would appeal to lower-income and entry level households as well as seniors that are downsizing, with entry-level sales prices at about $323,000.

For rental housing, it should be noted that the current median rent level in Happy Valley ($1,282/month in Happy Valley per the American Community Survey 2012-2016) is affordable for households making 80 percent or more than regional MFI. New apartment units within the Pleasant Valley/North Carver Plan area are expected to be constructed at density levels ranging from 18-22 units per acre. Based on the findings shown in Table 19, it is expected that the majority of new apartment units would have rents that would comply with Metro Title 11 affordable housing price points (with units offered at median rents at or below $1,628/month).

Senior assisted living and congregate care housing developments are also expected as part of the overall housing mix, including both for-sale and rental opportunities.

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If we assume an average size of 850 square feet per new apartment dwelling, a developer would be able to charge up to $1.92 per square foot per month to abide by the 80 percent MFI affordability levels that meet affordable housing guidelines contained in Metro Title 11 (based on the analysis of MFI in the area shown in Table 19).  The Q1 2018 multifamily market report published by Colliers indicates that average monthly rents in Clackamas County are $1.40 per square foot and vacancy rates are only 4 percent. Hence, it is very likely that Pleasant Valley/North Carver developers can provide new apartments in the area at a price point that is above the current median rate ($1.40/sf) and well below the "affordable" price level of $1.92/sf (which is 1.4 times the current median rent level in the area).

The housing market analysis and recommended land use classifications contained in the Pleasant Valley/North Carver Plan include a general approach to meeting the housing mix, density and affordability requirements, including:

1. A market-driven approach to providing a wide mix of housing types though the development of market-rate homes at affordable price points.  The housing market analysis concluded that the housing demand within the Plan area (2040 forecast) should be comprised of approximately 49 percent single family detached dwellings, and 51 percent attached/townhome/multifamily units.  This housing mix will improve Happy Valley's current mix of non-single-family detached dwellings which currently account for 18.4 percent of the housing inventory (as of 2012-2016 American Community Survey).

2. Compared with existing conditions in Happy Valley, the projected mix of housing in the Pleasant Valley/North Carver area is weighted more towards attached/townhome/multifamily dwelling units; which will be more affordable (on average) per dwelling unit than single family detached dwellings.

3. Based on the projected mix of housing types within the Pleasant Valley/North Carver Plan (as described in the Draft Land Use Map Memorandum by APG dated November 27, 2019), the average housing density of the residential land base is expected to accommodate between 6.0 (minimum density) and 8.5 (maximum) dwelling units per acre.

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# APPENDIX A: METRO TRAFFIC ANALYSIS ZONES WITHIN PV/NC PLAN AREA
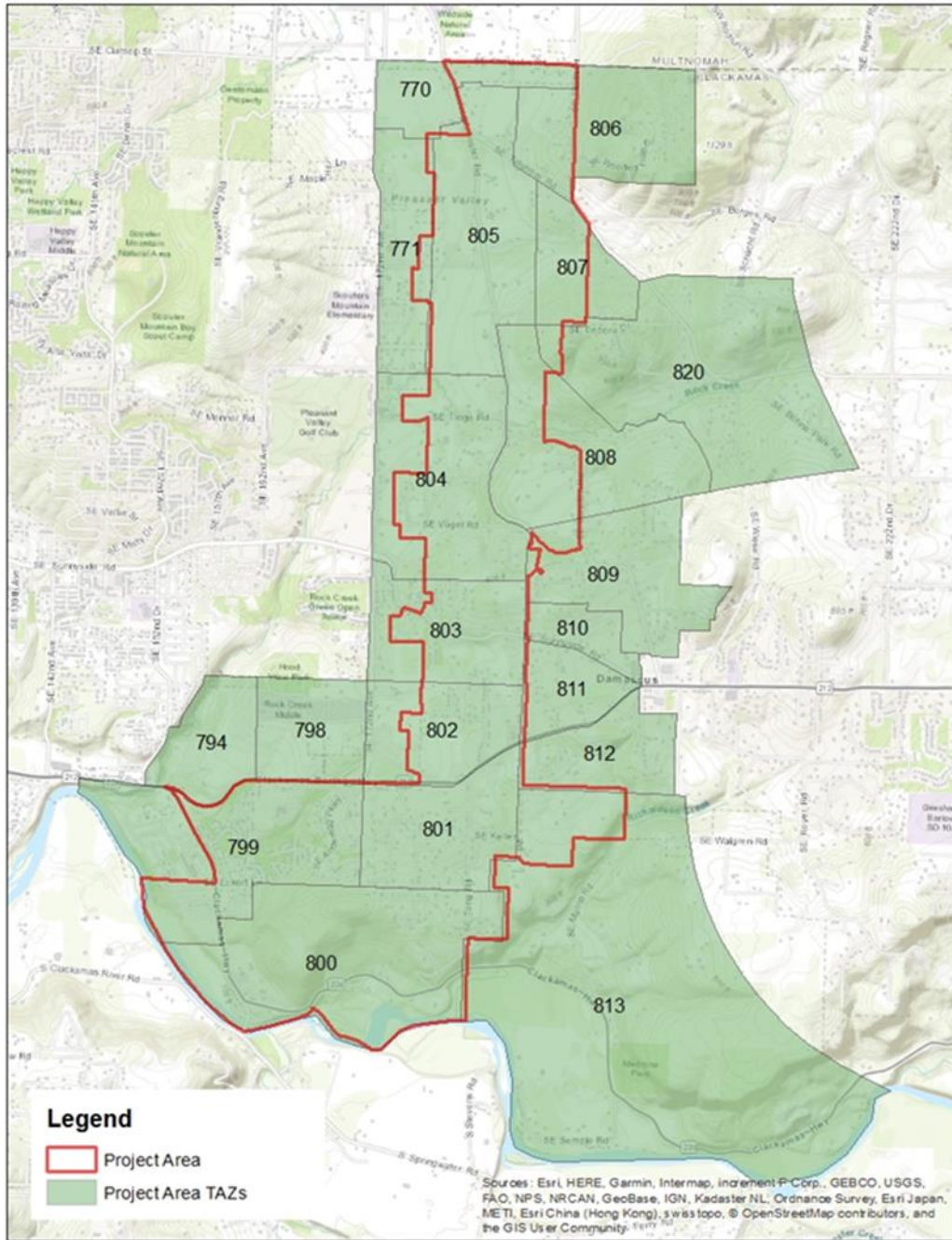
## APPENDIX A (continued)

**Traffic Analysis Zones and Metro Households and Employment Estimates and Forecasts**

| TAZ | | 2015 HH | 2040 HH | HH Change | 2015 Employment | 2040 Employment | Employment Change |
|---|---|---|---|---|---|---|---|
| 471 | Total | 87 | 1,087 | 1,000 | 14 | 762 | 748 |
| 770 | Total | 17 | 240 | 223 | 29 | 250 | 221 |
| 771 | Total | 43 | 859 | 816 | 51 | 287 | 236 |
| 799 | Total | 1,094 | 1,780 | 686 | 139 | 316 | 177 |
| 800 | Total | 168 | 1,262 | 1,094 | 56 | 271 | 215 |
| 801 | Total | 145 | 295 | 150 | 19 | 67 | 48 |
| 802 | Total | 92 | 179 | 87 | 32 | 392 | 360 |
| 803 | Total | 134 | 511 | 377 | 1 | 91 | 90 |
| 804 | Total | 109 | 1,039 | 930 | 32 | 326 | 294 |
| 806 | Total | 64 | 118 | 54 | 1 | 2 | 1 |
| 808 | Total | 80 | 841 | 761 | 7 | 94 | 87 |
| 805 | Total | 46 | 637 | 591 | 39 | 308 | 269 |
| 807 | Total | 28 | 352 | 324 | 10 | 20 | 10 |
| 809 | Total | 133 | 411 | 278 | 25 | 120 | 95 |
| 810 | Total | 23 | 93 | 70 | 84 | 199 | 115 |
| 811 | Total | 52 | 62 | 10 | 29 | 154 | 125 |
| 812 | Total | 49 | 127 | 78 | 13 | 130 | 117 |
| 813 | Total | 107 | 185 | 78 | 35 | 155 | 120 |
| 820 | Total | 153 | 953 | 800 | 27 | 52 | 25 |
| 821 | Total | 50 | 308 | 258 | 10 | 15 | 5 |
| 899 | Total | 169 | 197 | 28 | 165 | 162 | (3) |
| 900 | Total | 153 | 953 | 800 | 27 | 52 | - |
| 928 | Total | 393 | 425 | 32 | 131 | 153 | 22 |
| **Subtotal PV/NC Planning Area+** | | **3,389** | **12,914** | **9,525** | **974** | **4,378** | **3,379** |

| TAZ | In Project Area? | 2015 HH | 2040 HH | HH Change | 2015 Employment | 2040 Employment | Employment Change |
|---|---|---|---|---|---|---|---|
| 471 | Mostly Out | 0 | 1 | 1 | 0 | 1 | 1 |
| 770 | Mostly Out | 6 | 84 | 78 | 10 | 87 | 77 |
| 771 | Mostly Out | 4 | 84 | 80 | 5 | 28 | 23 |
| 799 | Mostly In | 1,034 | 1,683 | 649 | 132 | 299 | 167 |
| 800 | Mostly In | 165 | 1,241 | 1,076 | 55 | 266 | 211 |
| 801 | Mostly In | 144 | 294 | 149 | 19 | 67 | 48 |
| 802 | Mostly In | 62 | 121 | 59 | 22 | 264 | 243 |
| 803 | Mostly In | 93 | 355 | 262 | 1 | 63 | 63 |
| 804 | Mostly In | 77 | 736 | 659 | 23 | 231 | 208 |
| 806 | Mostly Out | 19 | 35 | 16 | 1 | 1 | 0 |
| 808 | Mostly Out | 38 | 400 | 362 | 3 | 45 | 42 |
| 805 | Mostly In | 45 | 621 | 576 | 39 | 300 | 262 |
| 807 | Mostly In | 18 | 232 | 214 | 7 | 13 | 7 |
| 809 | Mostly Out | 11 | 33 | 23 | 2 | 10 | 8 |
| 810 | Mostly Out | 0 | 2 | 1 | 2 | 4 | 2 |
| 811 | Mostly Out | 3 | 3 | 0 | 1 | 8 | 6 |
| 812 | Mostly Out | 3 | 7 | 4 | 1 | 7 | 7 |
| 813 | Mostly Out | 8 | 14 | 6 | 3 | 11 | 9 |
| 820 | Mostly Out | 4 | 23 | 19 | 1 | 1 | 1 |
| 821 | Mostly Out | 0 | 0 | 0 | 0 | 0 | 0 |
| 899 | Mostly Out | 0 | 0 | 0 | 0 | 0 | 0 |
| 900 | Mostly Out | 0 | 0 | 0 | - | 0 | 0 |
| 928 | Mostly Out | 0 | 0 | 0 | 0 | 0 | 0 |
| **PV/NC Plan Area (adjusted)** | | **1,735** | **5,969** | **4,234** | **324** | **1,708** | **1,384** |

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# APPENDIX A (continued)

TAZ Adjustment Factors for PV/NC Area **

| TAZ | Area In | Area Out | Total | Share In |
|---|---|---|---|---|
| 471 | 24,699 | 18,958,344 | 18,983,043 | 0% |
| 770 | 1,987,261 | 3,692,631 | 5,679,892 | 35% |
| 771 | 815,333 | 7,502,621 | 8,317,955 | 10% |
| 794 | 37,908 | 6,504,941 | 6,542,849 | 1% |
| 798 | 84,535 | 7,317,300 | 7,401,835 | 1% |
| 799*** | 14,144,248 | 5,445,319 | 19,589,566 | 95% |
| 800 | 24,466,130 | 415,760 | 24,881,890 | 98% |
| 801 | 10,885,549 | 52,212 | 10,937,761 | 100% |
| 802 | 6,388,115 | 3,082,931 | 9,471,046 | 67% |
| 803 | 7,465,812 | 3,276,349 | 10,742,160 | 70% |
| 804 | 12,602,676 | 5,194,637 | 17,797,314 | 71% |
| 806 | 3,749,564 | 9,022,710 | 12,772,274 | 29% |
| 808 | 7,549,797 | 8,331,304 | 15,881,101 | 48% |
| 805 | 16,474,085 | 417,245 | 16,891,331 | 98% |
| 807 | 4,204,146 | 2,171,298 | 6,375,443 | 66% |
| 809 | 1,000,240 | 11,340,139 | 12,340,379 | 8% |
| 810 | 61,533 | 3,210,873 | 3,272,406 | 2% |
| 811 | 250,757 | 4,797,969 | 5,048,726 | 5% |
| 812 | 416,026 | 6,869,213 | 7,285,238 | 6% |
| 813 | 4,813,511 | 60,795,455 | 65,608,967 | 7% |
| 820 | 641,986 | 26,371,014 | 27,013,000 | 2% |
| 821 | 35,020 | 20,121,464 | 20,156,484 | 0% |
| 899 | 37,794 | 42,101,280 | 42,139,074 | 0% |
| 900 | 9,134 | 10,032,362 | 10,041,496 | 0% |
| 928 | 17,101 | 335,796,753 | 335,813,854 | 0% |

Notes:

* Denotes data suppressed due to confidentiality restrictions.

** Area (share) was calculated in ArcGIS based on portions of TAZs inside and outside of PV/NC area

*** Most of area outside of TAZ 799 is developed so it is assumed that 95% of remaining development will occur within PV/C Area

TAZ = traffic analysis zone.

Source: Metro RLIS Data and Metro TAZ Data; compiled by FCS GROUP.

Metro Source: *2015-2040 Distributed Forecast (Scenario #1610)* . Oregon Metro Research Center. Metro Region Data Adopted 2016 by Metro Ordinance 16-1371. Clark County Data Provided by Regional Transportation Commission. The 2015 and 2040 household allocations have been reviewed by local jurisdictions and adopted by the Metro Council in 2016.

**Model Vintage:** Scenario 1610, William 2 forecast, file created 07/21/2017

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# APPENDIX B: HOUSING AFFORDABILITY ANALYSIS

| Portland MSA Median Family Income Level (2018)* | $81,400 |
| --- | --- |

| Market Segment by Income Level | Lower-end | Upper-End |
| --- | --- | --- |
| High (100% or more of MFI) | 100% | 120% |
| Upper Middle (80% to 100% of MFI) | 80% | 100% |
| Lower Middle (50% to 80% of MFI) | 50% | 80% |
| Low (30% to 50%) | 30% | 50% |
| Very Low (less than 30% of MFI) | 30% | |

| Qualifying Income Level | Lower-end | Upper-End |
| --- | --- | --- |
| High (100% or more of MFI) | $81,400 | or more |
| Upper Middle (80% to 100% of MFI) | $65,120 | $81,400 |
| Lower Middle (50% to 80% of MFI) | $40,700 | $65,120 |
| Low (30% to 50%) | $24,420 | $40,700 |
| Very Low (less than 30% of MFI) | $24,420 | or less |

| Available Annual Housing Payment (@30% of income level) | Lower-end | Upper-End |
| --- | --- | --- |
| High (100% or more of MFI) | $24,420 | or more |
| Upper Middle (80% to 100% of MFI) | $19,536 | $24,420 |
| Lower Middle (50% to 80% of MFI) | $12,210 | $19,536 |
| Low (30% to 50%) | $7,326 | $12,210 |
| Very Low (less than 30% of MFI) | $7,326 | or less |

| Available Monthly Rent or Payment (@30% of income level) | Lower-end | Upper-End |
| --- | --- | --- |
| High (100% or more of MFI) | $2,035 | or more |
| Upper Middle (80% to 100% of MFI) | $1,628 | $2,035 |
| Lower Middle (50% to 80% of MFI) | $1,018 | $1,628 |
| Low (30% to 50%) | $611 | $1,018 |
| Very Low (less than 30% of MFI) | $611 | or less |

| Approximate Attainable Home Price** | Lower-end | Upper-End |
| --- | --- | --- |
| High (100% or more of MFI) | $403,000 | or more |
| Upper Middle (80% to 100% of MFI) | $323,000 | $403,000 |
| Lower Middle (50% to 80% of MFI) | $202,000 | $323,000 |
| Low (30% to 50%) | $121,000 | $202,000 |
| Very Low (less than 30% of MFI) | $121,000 | or less |

Notes:

*based on Housing and Urban Development thresholds for The Portland-Vancouver-Hillsboro MSA for FY 2018

Note, this analysis is generally consistent with 4-person household size characteristics.

**assumes 20% down payment on 30-year fixed mortgage at 6.0% interest.

Source: analysis by FCS Group using Housing and Urban Development, and US Census data. (https://www.huduser.gov/portal/datasets/il/il2018/2018MedCalc.odn)

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