Pleasant Valley/North Carver

Economic Opportunities Analysis

February 19, 2020

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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 employment land needs within the market area. This report provides an Economic Opportunities Analysis (EOA) 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 retail and office lands 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 employment, office, and retail development in Happy Valley and the surrounding area.

- Analyzed Census and local market data to identify further socioeconomic trends that define the Happy Valley area.

- Formulated recommendations that help inform a market-supportable development program for employment land needs in the Happy Valley 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.   ECONOMIC OVERVIEW

- The employment land need analysis for the PV/NC Plan area considers the broader economic climate of the region, state and nation.

- Nationally, economic growth is expected to continue over the near-term with moderate GDP increases projected by the Federal Reserve Bank.

- Happy Valley has grown significantly both in terms of population and income between 2000 and 2016. With regard to employment, Happy Valley has experienced more modest growth through the same timeframe.

- Potential future employment growth sectors in Happy Valley are expected to include health care, retail, and professional business services.

- The adopted Metro regional long-term forecasts expect the PV/NC Plan area to add 4,234 households and 1,384 jobs over the 2015 to 2040 timeframe.

I.B.   MARKET ANALYSIS

The market analysis indicates positive regional trends that will support housing construction and limited community commercial development in the near term, and office and industrial/flex development in the long term. Happy Valley is presently experiencing a significant trade "leakage" in which retail shoppers living in Happy Valley travel outside of the City to purchase goods.

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In the long run, industrial employment growth within the PV/NC area could be significant, especially for "flex space" but is largely contingent on the completion of the "Sunrise Corridor" highway project.

I.C. GROWTH FORECAST SCENARIOS

The potential employment creation within the PV/NC Plan area will be influenced by not only national and regional economic factors but also transportation accessibility and infrastructure capacity. As such, a range of low, medium and high employment growth scenarios were evaluated. All of the growth scenarios result in long-term growth for the PV/NC Plan area that would likely exceed the Metro 2015-2040 growth forecasts, which anticipates 1,384 net new jobs.

Scenario A is intended to reflect current market patterns within the Happy Valley area; and results in the lowest amount of expected employment growth for the PV/NC Plan area. Scenario A is projected to result in approximately 1,891 jobs added inside the City and the Pleasant Valley/North Carver Plan area by year 2040, which equates to 3.9 percent of the net new Clackamas County jobs. This level of development activity would not necessarily require the completion of the Sunrise Expressway Phase 2 extension to 172nd Ave.

Scenarios B and C are intended to reflect the enhanced business attraction that would be afforded after completion of the Sunrise Expressway Phase 2.

Scenario B reflects the mid-point between Scenarios A and C. This would result in approximately 3,434 jobs added by year 2040, which equates to seven percent of the net new Clackamas County jobs. While the all scenarios exceed Metro's 2040 job growth forecasts for the plan area, Scenario B would likely reflect longer term growth potential that's consistent with emerging market conditions due to increasingly limited industrial development opportunities in urban Clackamas County.

Scenario C reflects the upper limit of potential 20-year job growth by assuming all the net gains in employment within Happy Valley occur within the PV/NC Plan area. This would result in approximately 5,000 jobs added inside the plan area, which equates to 10 percent of the net new Clackamas County jobs. The level of growth associated with Scenario C is not recommended since it is likely to go well beyond the 2040 planning horizon.

The additional land needed to be zoned to support the projected employment growth ranges from 62 acres in Scenario A; 185 acres in Scenario B; and 276 acres in Scenario C (**see Table I.1**).

Table I.1: Pleasant Valley/North Carver Plan Area Employment Land Needs (buildable acres)

Land Use Classification	Scenario A	Scenario B	Scenario C
Commercial (retail, office, lodging)	23.7	27.2	39.5
General Industrial & Flex*	15.4	116.0	175.9
Public & Education (excl. open space & parks)	23.0	41.8	60.3
Total (unconstrained acres)	**62.1**	**185.0**	**275.8**

*Source: Appendix B tables. * Note, Employment land need shown has been reduced by 17.6 acres to account for recent rezoning in study area west of 172nd Ave.*

During the planning process, the Community Advisory Committee (CAC) and Technical Advisory Committee expressed general support for Scenario B as the most likely 2040 market demand forecast. However, the CAC found it challenging to find suitable locations for the land areas required

by Scenario B. After considering multiple alternatives, they ultimately recommended land use designations that are closer to the Scenario A forecast.

I.D.   POLICY CONSIDERATIONS

Draft Comprehensive Land Use Plan Amendments

To address Metro Urban Growth Management Functional Plan goals and policies, particularly Title 4 (Industrial and Other Employment Lands) and Title 4 (Planning for New Urban Areas), it is recommended that the city consider adoption of the following Comprehensive Land Use Plan amendments (shown in red) to Chapter 5 Economic Development:

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ED-1.3A: Mixed Commercial Center (MCC). The MCC district is intended to establish locations for the development of general commercial centers providing a broad range of shopping and service requirements to meet city-wide needs. The MCC, as applied in East Happy Valley and Pleasant Valley/North Carver, corresponds to the Damascus/Boring Concept Plan's designation of Neighborhood Centers. These mixed-use centers in East Happy Valley accommodate retail services with a focus on meeting resident's daily shopping needs. They are planned to be well served by transit and be integrated with mixed use and higher density housing – thus supporting less auto-dependent lifestyles. These centers are also appropriate locations for civic uses such as post offices and branch libraries. Their design is intended to be highly pedestrian-oriented

ED-1.3C(1): MC location and compatibility.

In the East Happy Valley Comprehensive Plan area and the Pleasant Valley/North Carver Comprehensive Plan area, one MCC designation in each of these areas may exceed the 15-acre limit described above, but may not exceed 20 acres of contiguous property. In this these centers, the maximum building footprint size is limited to 150,000 square feet per structure, provided the entire contiguous 20-acre area is master planned prior to new development. If the entire contiguous area of this a center is not master planned together, the maximum building footprint size is limited to 60,000 square feet per structure.

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Rock Creek and Pleasant Valley/North Carver Economic Development Policies

ED-1.4: Due to rapid growth and staffing constraints, the City of Happy Valley has found it necessary to adopt a number of separate, geographically specific, "Comprehensive Plans" in the overall land use planning for the City. These include the Rock Creek Comprehensive Plan, the Aldridge Road Sub-Area Comprehensive Plan; the Rock Creek Mixed Employment Comprehensive Plan; the East Happy Valley Comprehensive Plan; the Pleasant Valley/North Carver Comprehensive Plan; and, the Happy Valley Town Center Plan. The following policy sections and sub-sections detail specific policies associated with these "mini Comprehensive Plans" that have been added to the City's greater Comprehensive Plan policies.

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Add new policies for Pleasant Valley/North Carver Plan area.

Pleasant Valley/North Carver Economic Development Policies

ED-1.6: Pleasant Valley/North Carver Employment. Pleasant Valley/North Carver Comprehensive Plan areas will include a diverse range of employment opportunities. Employment lands will provide:

a)   Reasonable amounts of industrial and employment areas to address the employment needs of those living in the area, as well as contribute to sub-regional needs.

b)   Employment areas that are served by adequate public facilities and accessible by a full range of transportation modes (i.e., automobile, freight/truck, transit, shared ride, pedestrian and bicycle).

c)   A new master planned Pleasant Valley "Downtown District" mixed use center near the Hemrich/Foster intersection) with mixed-use zoning that allows for commercial, civic, workforce housing and related uses.

d)   Community Commercial Center zoning in the Carver Junction area to support a future "Carver Riverfront District" with a mix of uses that allow for a wide range of commercial uses and medium-to-high density housing.

e)   Employment uses that are integrated with the natural resource qualities of the land, including bluffs, streams/river, agriculture and viewpoints.

Section II.   ECONOMIC OVERVIEW

FCS GROUP conducted an 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.

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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 similar. 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

	2000 Census		2010 Census		2012-2016 ACS		Change, 2000-2016	
Income Level	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

II.B.2. Employment Trends

In 2016 (latest year in which data were available), the Happy Valley area (which includes businesses with a Happy Valley, OR 97086 zip code that are outside of the city limits) was comprised of 804 business entities with 5,575 workers. As indicated in **Table II.5**, this represented about 3.6 percent of the total "covered employment" within Clackamas County. The largest local employment sector in the Happy Valley area is services with 2,949 jobs, followed by retail with 1,533 jobs. The industrial and government/education sectors round out the remaining jobs with 583 and 510 jobs, respectively.

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Table II.5: Happy Valley Area Employment Characteristics (2016)

Sector	Happy Valley Area*	Clackamas County	HV Area Share
Industrial	583	49,115	1.2%
Retail	1,533	18,934	8.1%
Service	2,949	71,837	4.1%
Government/Education	510	15,102	3.4%
Total	**5,575**	**154,988**	**3.6%**

* reflects businesses with Happy Valley zip code.
Source: Oregon Employment Department.

Within the Happy Valley area, it is estimated that nearly 3,000 employees work within the existing city limits. As shown in **Table II.6**, total employment in the City of Happy Valley increased by 3.2 percent between 2002 and 2015. In 2015, the leading industries (measured by employment) in Happy Valley were retail trade, accommodations/food service, and health care. Significant shifts have occurred in Happy Valley's employment mix with some industries losing jobs such as manufacturing, transportation and warehousing, and administration & support, waste management and remediation. This is consistent with the City's significant residential growth between 2002 and 2015.

Table II.6 Employment by Industry, City of Happy Valley, 2002 and 2015

Sector	2002 Employment	2015 Employment	% Change
Agriculture, Forestry, Fishing and Hunting	4	18	350.0%
Mining, Quarrying, and Oil and Gas Extraction	-	-	0.0%
Utilities	21	25	19.0%
Construction	203	403	98.5%
Manufacturing	164	33	-79.9%
Wholesale Trade	231	76	-67.1%
Retail Trade	265	655	147.2%
Transportation and Warehousing	160	24	-85.0%
Information	3	14	366.7%
Finance and Insurance	184	81	-56.0%
Real Estate and Rental and Leasing	92	65	-29.3%
Professional, Scientific, and Technical Services	99	100	1.0%
Management of Companies and Enterprises	4	1	-75.0%
Administration & Support, Waste Management and Remediation	221	55	-75.1%
Educational Services	70	251	258.6%
Health Care and Social Assistance	753	435	-42.2%
Arts, Entertainment, and Recreation	28	54	92.9%
Accommodation and Food Services	231	436	88.7%
Other Services (excluding Public Administration)	113	204	80.5%
Public Administration	29	36	24.1%
Total	**2,875**	**2,966**	**3.2%**

Source: U.S. Census Bureau

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II.B.3.   Target Business Cluster Analysis

FCS GROUP developed a business cluster analysis similar to the analysis performed for the City's 2012 Economic Opportunities Analysis (EOA), which is summarized in **Figure II.1**. The analysis identifies the business sectors in Happy Valley using broad categories tracked by the Oregon Employment Department (OED). The data used for this analysis is derived from a classified OED database of businesses in Clackamas County which can be sub-aggregated by industry type and location, among other factors.

The size of the bubbles in the chart indicates the total wages earned in that cluster in Happy Valley, based on 2016 data. The bubble's location along the horizontal axis indicates the cluster's location quotient (LQ), which represents the propensity of an industry to locate in Happy Valley relative to Clackamas County. The vertical access corresponds with the growth forecast for each cluster in the Portland Metro Area (tri-county region) according to OED.

The cluster analysis classifies the existing business sectors in Happy Valley into four categories:

"Star" industries (high LQ and growth projections): Educational Services & Health Care

"Emerging" industries (small LQ, high growth projections): Construction, Professional Business Services, Transportation & Warehousing

"Mature" industries (high LQ, low growth projections): Miscellaneous Services & Retail Trade

"Challenged" industries (low LQ, low growth projections): Manufacturing, Wholesale Trade, Information, Government and Financial Activities.

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Figure II. 2: Existing Business Clusters in Happy Valley (2016)
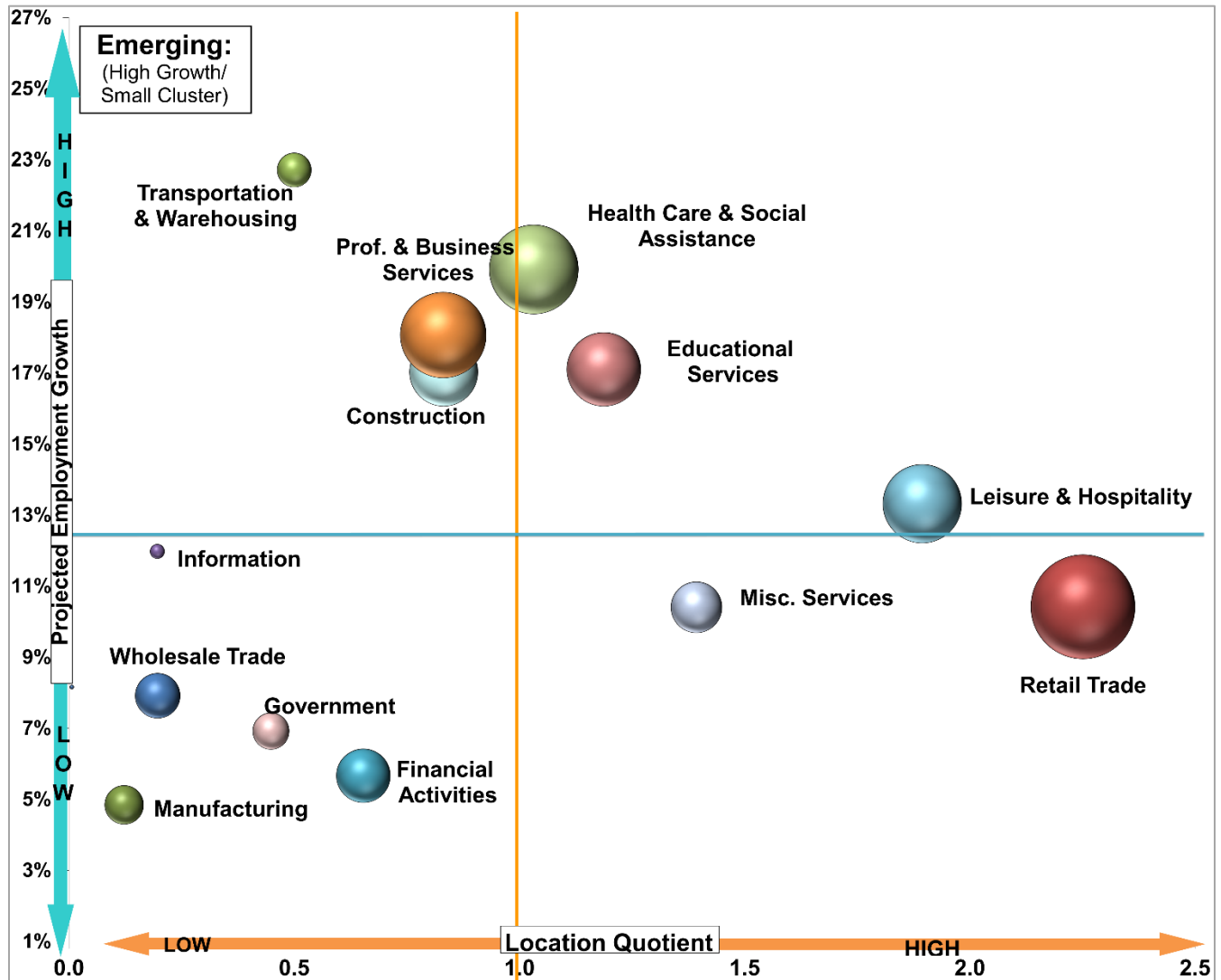
The PV/NC Plan area includes a significant amount of future employment land (as designated by Metro Title 4 maps) that could become a viable location for a wide mix of businesses. In the near-term, the types of businesses that are attracted to the area will be "local serving" retail and service establishments that benefit from proximity to household buying power within a 10-minute drive or short-walk or bike trip.

Longer-term opportunities will stem from improved transportation accessibility once Phase 2 of the Sunrise Expressway is constructed. The $130M Phase 1 Sunrise Expressway improvement was completed on July 1, 2016. It provides a two-mile long, four-lane highway connecting the Milwaukie Expressway to 122nd Avenue where it links up with OR 212/224. A shared use path for pedestrians and cyclists parallels the highway. A five-mile Phase 2 segment is still in the planning

phase and funding has not been identified at this time. However, once it is constructed, it will provide improved access and reduced travel times between I-205 and areas east of 172nd Avenue.

As part of this project, FCS GROUP interviewed real estate brokers from the Portland office of Jones, Lang, Lasalle to establish an understanding of how the annexation of the PV/NC Plan area might impact the real estate market. In discussions with commercial and industrial real estate brokers, the Sunrise Expressway is expected to significantly improve the marketability and attractiveness of future office and general industrial development along 172nd Avenue. The 172nd Avenue corridor would become a magnet for Class A Office, back-office operations, research and development, and light industrial uses that require flexible (flex) building formats. Until the Sunrise Expressway is extended to 172nd Ave.

The types of businesses that will be most attracted to the plan area will include local-serving clusters such as:

- Retail trades, entertainment, lodging, food services
- Health care and medical office
- Professional and business services (i.e., financial and legal services, management of companies)

Improved transportation accessibility provided by the Sunrise Expressway extension to 172nd Ave. would enhance attraction and development of regional business activity such as:

- Research and development
- Education and training facilities
- Back office operations (insurance, call centers, financial)
- Light manufacturing and food/beverage processing (with retail storefronts)
- Sub-regional warehousing and distribution

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.2**.

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Figure II. 2: Happy Valley Employment and Households figures 2000-2040
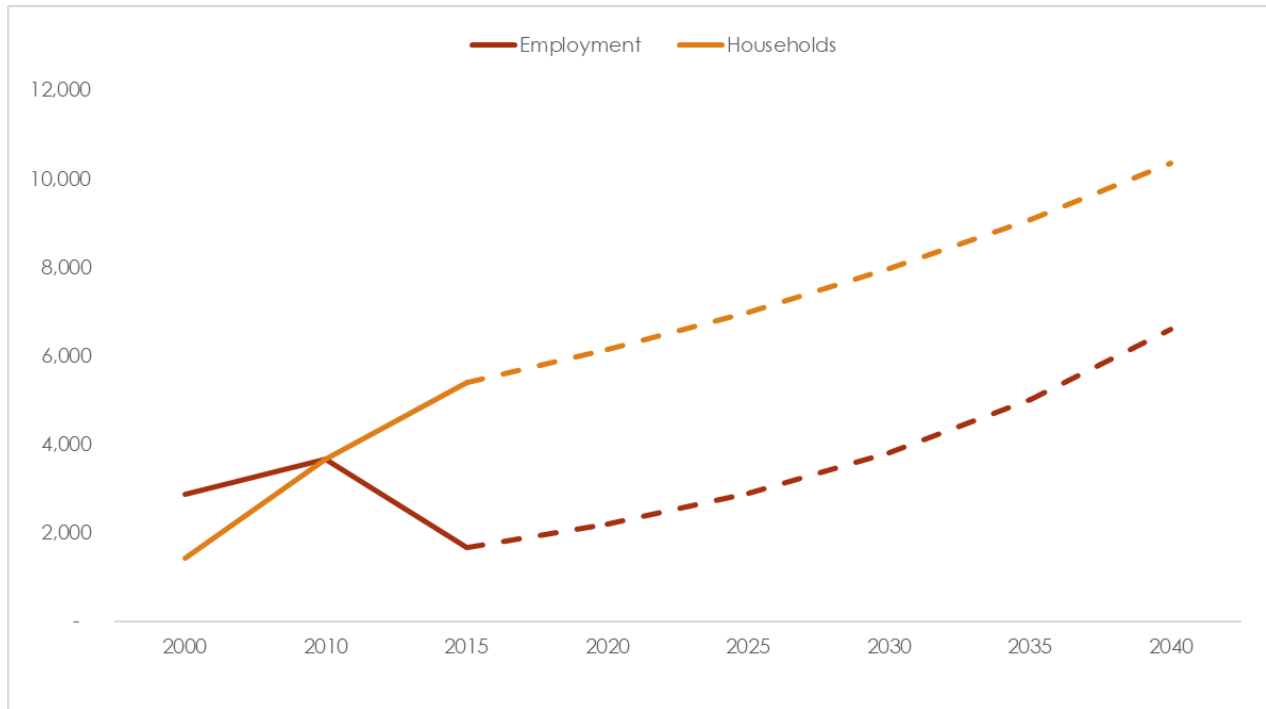
Note: Dashed line indicates projections provided by Metro.
Source: U.S. Census (data from 2000-2010) and Metro (Data from 2025 to 2040).

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.7**).[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.

Table II.7: 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.

The PV/NC Plan area will be an important location for accommodating regional job growth, especially within urban portions of Clackamas County. It is estimated that within the tri-county region, Clackamas County currently accommodates approximately 16.4 percent of the total employment or 170,391 jobs.

If we extrapolate the most current 10-year job growth forecast by the Oregon Employment Department into the future and assume the current ratio of Clackamas County jobs remains fairly constant among broad industry sectors, Clackamas County would add approximately 49,116 net new jobs by year 2040 (see **Table II.8**).

Table II.8: Forecasts for Households and Employment (2017-2040)

Sector	2017 Estimates			Happy Valley Area Share of County
	Tri-County Metro Area [1]	Clackamas County [2]	Happy Valley Area [2]	
Industrial	243,300	50,588	583	1.2%
Retail	95,000	19,502	1,533	7.9%
Service	495,700	73,992	2,949	4.0%
Government/Education	136,900	15,555	510	3.3%
Self-employment	65,400	10,753	376	3.5%
Total	**1,036,300**	**170,391**	**5,951**	**3.5%**

Sector	2017-2040 Growth Forecast		Clackamas County Share of Region
	Tri-County Metro Area [1]	Clackamas County [2]	
Industrial	59,340	12,338	20.8%
Retail	22,770	4,674	20.5%
Service	173,650	25,920	14.9%
Government/Education	27,140	3,084	11.4%
Self-employment	19,090	3,139	16.4%
Total	**301,990**	**49,116**	**16.3%**

[1] Source: Oregon Employment Department (OED), published June 26, 2018, extrapolated to 2040.

[2] OED 2016 Qquarterly Census of Emp. & Wages (QCEW) estimates, adjusted to 2017, extrapolated to 2040.

[3] OED 2016 QCEW estimates for Happy Valley zipcode, adjusted to 2017, extrapolated to 2040.

II.D. MARKET ANALYSIS

II.D.1. Retail

At the time of this analysis (year 2018) within the City of Happy Valley, there is a sizable retail sales leakage, which occurs when households must travel outside of an area to make desired retail purchases. **Table II.9** reflects two broad retail categories (general retail and food/drink) within the current City of Happy Valley (municipal boundary) which experienced a trade leakage during 2018. The retail inflow/outflow analysis indicates that the current retail trade leakage from exi sting households in Happy Valley supports 508,000 square feet of commercial floor area in places outside the city, such as the Clackamas and Damascus town centers.

The PV/NC Plan area can address a portion of this trade leakage and meet the commercial needs of future residents by adding new commercial centers with both general retail as well as restaurants.

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Table II.9: Existing Retail Trade Leakage, City of Happy Valley 2018

Population	16,853
Households	5,381
Median Income	$78,293
Per Capita Income	$44,220

	Demand	Supply	Retail Gap (Trade Leakage)	Supportable Floor Area (SF)	Supportable Acres
Retail	$269,816,400	$49,682,857	$220,133,543	458,612	30.0
Food & Drink	$30,402,076	$6,978,535	$23,423,541	48,799	3.2
Total	$300,218,475	$56,661,392	$243,557,083	507,411	33.2

Source: ESRI Business Analyst Online; assumes $480 sales per SF, and 0.35 FAR.

A similar analysis was conducted for the plan area. **Table II.10** displays data derived using the net new growth expected within the plan area boundaries. The findings indicate that by year 2040, the projected growth in households and related buying power is expected to support nearly 372,000 square feet of retail floor area, which would require at least 24.3 acres of buildable land.

Table II.10: Growth-related Retail Potential, PV/NC Plan Area (2018-2040)

Net New Retail Demand

Households	4,234

	Demand	Supply	Retail Gap (Trade Leakage)	Supportable Floor Area (SF)	Supportable Acres
Retail	$171,666,554	$10,583,126	$161,083,428	335,590	21.9
Food & Drink	$18,995,585	$1,489,589	$17,505,996	36,471	2.4
Total	$190,662,139	$12,072,712	$178,589,427	372,061	24.3

Source: ESRI Business Analyst Online; with Metro growth forecast for households.

II.D.2. Office

Real estate brokers consider Happy Valley and the PV/NC Plan area to be within the "Eastside" office submarket of the Portland Region. According to Jones Lang Lasalle (JLL), the Eastside has a total Class A office inventory of 1.1 million square feet, of which only 1.9 percent is currently vacant. Average annual rental rates for Class A office in the Eastside are at an all-time high of $32.29 per square foot (2018 2nd quarter statistics). The Clackamas/Milwaukie subarea accounted for 595,032 square feet of the Class A space, most of which is situated near I-205. Like other markets outside of the Urban Core (downtown Portland) very little new office inventory is being added (see **Table II.11**).

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Table II.11 Class A Office Characteristics, Eastside Market Area, Q2 2018

Market	Inventory	YTD Total Net Absorption	Vacancy	YTD Under Development	Average Asking Rent (per sq. ft.)
Airport Way/Columbia Corridor	437,634	7,409	2.8%	-	$27.17
Clackamas / Milwaukie	595,032	3,140	1.6%	-	$26.51
North / Northeast Close In	107,310	-	0.0%	43,546	$39.98
Total Eastside	1,139,976	10,549	1.9%	43,546	$32.29

Source: Jones Lang LaSalle IP Portland Office Insight Q 2 2018

II.D.3.   Industrial

Real estate brokers consider Happy Valley and the PV/NC Plan area to be located within the Clackamas/Milwaukie industrial submarket. According to JLL, the Clackamas/ Milwaukie subarea has a total industrial and flex inventory of 23.4 million square feet of which 5.2 percent is vacant with an average lease rate of $0.60 per square foot (**Table II.12**).

Real estate professionals suggested that upon completion of the Sunrise Expressway Phase 2, the plan area will have the potential to attract major industrial employers, especially near the confluence of OR 224/172nd Avenue. JLL representatives were also optimistic that the plan area will be an attractive location for flex industrial space. Flex space and co-working space is now viewed as an economic alternative to office space for many small businesses within the Clackamas/Milwaukie submarket, where vacancy for flex space is only 0.9 percent. In fact, one of the largest industrial leases in 2018 came from NW Flex Space, which leased 205,000 SF in Milwaukie.

Table II.12: Industrial Property Characteristics, Clackamas/Milwaukie Market Area, Q2 2018

Market	Inventory	YTD Total Net Absorption	Vacancy	YTD Under Development	Average Asking Rent
Warehouse / Distribution	17,500,874	54,279	3.0%	-	$0.52
Manufacturing	5,078,641	(504,757)	13.3%	-	$0.77
Subtotal	**22,579,515**	**(450,478)**	**5.4%**	**-**	**$0.68**
Flex	790,772	6,359	0.9%	12,000	$1.14
Total	**23,370,287**	**(444,119)**	**5.2%**	**12,000**	**$0.60**

Source: Jones Lang LaSalle IP Portland Industrial Insight Q 2 2018

II.E.   GROWTH FORECAST SCENARIOS

The PV/NC Plan area employment land needs forecast evaluated three alternative scenarios. Each scenario is intended to account for emerging market characteristics along with Metro employment forecasts for Happy Valley and the PV/NC Plan area.

All job growth scenarios are intended to reflect the most likely distribution of market demand among the broad employment sectors over the forecast time frame.

Scenario A is intended to reflect current market patterns within the Happy Valley area, which reflects a proportionate share of Clackamas County employment growth. This level of development

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activity would not necessarily require the completion of the Sunrise Expressway Phase 2 extension to 172nd Ave. Scenario A is projected to result in approximately 1,891 jobs added inside the City and the Pleasant Valley/North Carver Plan area by year 2040, which equates to 3.9 percent of the net new Clackamas County jobs.

Scenarios B and C are intended to reflect the enhanced business attraction that would be afforded after completion of the Sunrise Expressway Phase 2.

Scenario B reflects the mid-point between Scenarios A and C. This would result in approximately 3,434 jobs added inside the City and the plan area by year 2040, which equates to seven percent of the net new Clackamas County jobs.

Scenario C is intended to be consistent with the overall Metro employment growth forecast for the City of Happy Valley and the plan area. This scenario reflects the upper limit of potential 20-year job growth by assuming all the net gains in employment projected by Metro over the 2017-2040 timeframe for Happy Valley occur within the plan Area. This would result in approximately 5,000 jobs added inside the plan area by year 2040, which equates to 10 percent of the net new Clackamas County jobs.

The key assumptions for each scenario are shown below in **Tables II.13 & 14**.

Table II.13: Happy Valley and Pleasant Valley/North Carver Plan Area Job Growth Scenarios, (Percent Growth, 2017-2040)

Sector	Percent Employment Growth		
	Scenario A	Scenario B	Scenario C
Industrial	2.0%	3.6%	5.3%
Retail	8.0%	14.5%	21.1%
Service	4.0%	7.3%	10.5%
Government/Education	3.5%	6.4%	9.2%
Self-employment	4.0%	7.3%	10.5%
Total	**3.9%**	**7.0%**	**10.1%**

Source: derived from Table 8.

Table II.14: Happy Valley and Pleasant Valley/North Carver Plan Area Job Growth Scenarios, (Total Employment Growth, 2017-2040)

Sector	Employment Growth		
	Scenario A	Scenario B	Scenario C
Industrial	247	448	649
Retail	374	679	984
Service	1,037	1,883	2,728
Government/Education	108	196	284
Self-employment	126	228	330
Total	**1,891**	**3,434**	**4,976**

Source: derived from Table 8.

The projected level of employment that would be "captured" within the plan area under each scenario is depicted in **Table II.15**. The results indicate that the plan area will likely exceed the level of net

new job growth for the area that has been projected by Metro. Excluding self-employed (home-based) workers, Scenario A would result in 1,765 jobs added inside the plan area, which is over one-third higher than Metro's 2040 job growth forecast (see **Appendix A**). Scenarios B and C anticipate far greater job growth for the plan area due to the potential construction of the Sunrise Corridor (Phase 2).

Table II.15: Pleasant Valley/North Carver Plan Area Employment Growth Forecasts

Happy Valley & PV/NC Area Net New Employment Forecast: 2017-2040*			
	Scenario A	Scenario B	Scenario C
Industrial	247	448	649
Retail	374	679	984
Services	1,037	1,883	2,728
Government & Education	108	196	284
Total	**1,765**	**3,206**	**4,646**

* excludes self-employed (home based) workers.

Pleasant Valley/North Carver Area Job Growth Capture Rates: 2017-2040			
	Scenario A	Scenario B	Scenario C
Industrial	100%	100%	100%
Retail	60%	60%	60%
Services	60%	60%	60%
Government & Education	95%	95%	95%

Pleasant Valley/North Carver Area Job Growth Forecast: 2017-2040			
	Scenario A	Scenario B	Scenario C
Industrial	247	448	649
Retail	224	407	590
Services	622	1,130	1,637
Government & Education	103	186	270
Total	**1,196**	**2,171**	**3,147**

Source: Derived from Table 12.

The land needed to accommodate the employment growth within the plan area ranges from approximately 80 acres in Scenario A; 203 acres in Scenario B; and, 293 acres in Scenario C. After adjusting for land within the PV/NC Plan area that has already been rezoned to industrial, the residual employment land needs to accommodate the planned job growth is shown in **Exhibit II.16**.

While all scenarios would exceed Metro's job growth forecasts for the plan area, Scenario B would likely reflect potential growth that is most consistent with emerging market conditions due to increasingly limited industrial development opportunities in urban Clackamas County and the primary office and industrial sub-markets. Please refer to **Appendix B** for detailed land needs assumptions.

Table 16: Pleasant Valley/North Carver Plan Area Employment Land Needs (buildable acres)

Land Use Classification	Scenario A	Scenario B	Scenario C
Commercial (retail, office, lodging)	23.7	27.2	39.5
General Industrial & Flex*	15.4	116.0	175.9
Public & Education (excl. open space & parks)	23.0	41.8	60.3
Total (unconstrained acres)	**62.1**	**185.0**	**275.8**

*Source: Appendix B tables. * Note, Employment land need shown has been reduced by 17.6 acres to account for recent rezoning in study area west of 172nd Ave.*

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II.E.1.   Reconciliation of Land Need

The draft Buildable Land Inventory (BLI) for the PV/NC Plan area is summarized below in **Table II.17**. The land designations presented in this table are based on the Metro 2040 Growth Concept designations for the plan area.

Table II.17: Pleasant Valley / North Carver Area Buildable Land Inventory

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 the amount of vacant unconstrained net buildable land area (436 acres) within the "employment," "industrial" and "regional significant industrial" designations can accommodate the planned increase of employment jobs and land area under each land needs scenario.

As shown in **Tables II.18-20**, throughout each scenario, a portion of the land demand for public and educational facilities could be derived from a portion of the land currently designated as "industrial" and "RSI" to address future land demand.

Table 18: Scenario A Employment Land Need

Pleasant Valley/North Carver Plan Area, Employment Land Need Forecast (net buildable acres)

Employment Type	Current General Landuse Classification	Scenario A Vacant Land Demand	Existing Vacant Land Supply in PV/NC Area	Net Land Need
Commercial (retail, office, lodging)	Employment	23.7	39.9	(16.2)
General Industrial & Flex	Industrial & RSI*	15.4	396.2	(380.8)
Public & Education (excl. open space & parks)	n/a	23.0	-	23.0
Total (unconstrained acres)		62.1	436.1	(374.0)

Buildable land supply reflects 367 acres of Industrial and 29 net buildable acres of Regionally Signicant Industrial (RSI) land.
Source: findings based on assumptions provided in prior tables and Appendix B.

Table 19: Scenario B Employment Land Need

Pleasant Valley/North Carver Plan Area, Employment Land Need Forecast (net buildable acres)

Employment Type	Current General Landuse Classification	Scenario B Vacant Land Demand	Existing Vacant Land Supply in PV/NC Area	Net Land Need
Commercial (retail, office, lodging)	Employment	27.2	39.9	(12.7)
General Industrial & Flex	Industrial & RSI*	116.0	396.2	(280.2)
Public & Education (excl. open space & parks)	n/a	41.8	-	41.8
Total (unconstrained acres)		185.0	436.1	(251.1)

Buildable land supply reflects 367 acres of Industrial and 29 net buildable acres of Regionally Signicant Industrial (RSI) land.
Source: findings based on assumptions provided in prior tables and Appendix B.

Table II.20: Scenario C Employment Land Need

Pleasant Valley/North Carver Plan Area, Employment Land Need Forecast (net buildable acres)

Employment Type	Current General Landuse Classification	Scenario C Vacant Land Demand	Existing Vacant Land Supply in PV/NC Area	Net Land Need
Commercial (retail, office, lodging)	Employment	39.5	39.9	(0.4)
General Industrial & Flex	Industrial & RSI*	175.9	396.2	(220.3)
Public & Education (excl. open space & parks)	n/a	60.3	-	60.3
Total (unconstrained acres)		**275.8**	**436.1**	**(160.3)**

* Buildable land supply reflects 367 acres of Industrial and 29 net buildable acres of Regionally Signicant Industrial (RSI) land.
Source: findings based on assumptions provided in prior tables and Appendix B.

In all three scenarios the quantity of land zoned for employment, industrial, and regionally significant industrial exceeds even the high end of what can be expected in the plan area by 2040. Absent a significant upward shift in forecast employment, consideration should be given to land reclassification in the forthcoming planning process.

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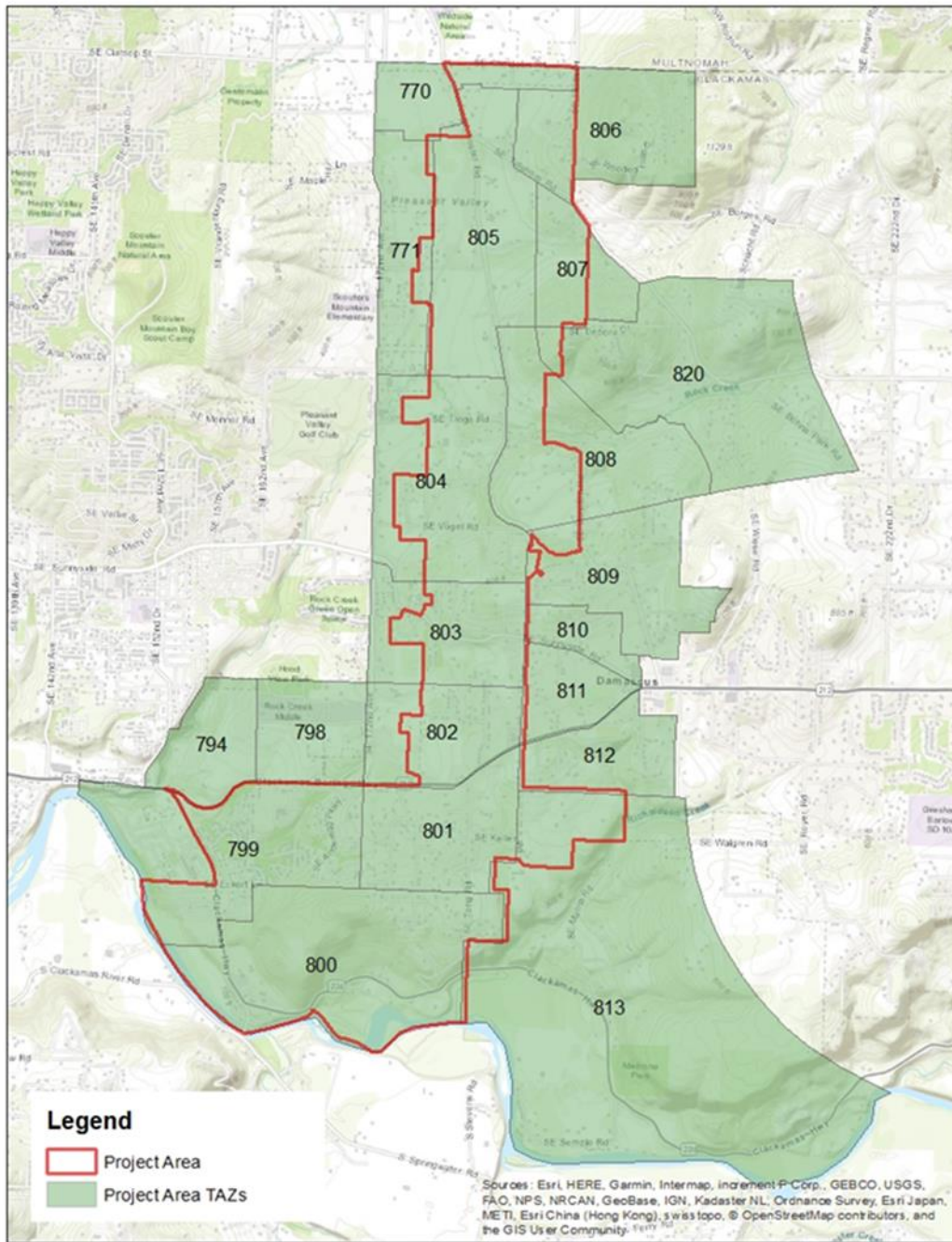
APPENDIX A (continued)

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: EMPLOYMENT LAND NEEDS ASSUMPTIONS

Employment Sectors to Building Type Assignment Assumptions

Employment Sectors	Building Types					
	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Retail	0%		10%	0%	90%	100%
Services	60%		10%	0%	30%	100%
Industrial			30%	70%	0%	100%
Government/Education/Other Public		100%		0%		100%

Source: reflects local assumptions by FCS GROUP.

Net New Employment Forecast by Building Type, Scenario A Forecast for 2040

Employment Sectors	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Retail	-	-	22	-	202	224
Services	373	-	62	-	187	622
Industrial	-	-	74	173	-	247
Government/Other Public	-	103	-	-	-	103
Total	**373**	**103**	**159**	**173**	**389**	**1,196**

Net New Employment Forecast by Building Type, Scenario B Forecast for 2038

Employment Sectors	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Retail Trades	-	-	45	-	403	448
Services	244	-	41	-	122	407
Industrial	-	-	339	791	-	1,130
Government/Other Public	-	186	-	-	-	186
Total	**244**	**186**	**424**	**791**	**525**	**2,171**

Source: FCS GROUP based on local market assumptions.

Net New Employment Forecast by Building Type, Scenario C Forecast for 2040

Employment Sectors	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Retail Trades	0	0	65	0	584	649
Services	354	0	59	0	177	590
Industrial	0	0	491	1146	0	1637
Government/Other Public	0	270	0	0	0	270
Total	**354**	**270**	**615**	**1,146**	**762**	**3,147**

Source: FCS GROUP based on local market assumptions.

Building Type to Land Needs Assumptions*

	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail
Refill/Redevelopment Job Allocation [1]	0%	0%	0%	0%	2%
Jobs Needing Vacant Land Allocation [2]	100%	100%	100%	100%	98%
Building SF Per Job [2]	250	750	550	1,000	500
Floor-Area-Ratio [2]	0.35	0.10	0.25	0.20	0.30
Public Facility Net:Gross Adjustment [3]	1.15	1.30	1.15	1.20	1.15

* assumptions are intended to reflect a long-term average.
1/ Adjusts for building refill & vacancy allowances.
2/ Building density derived from Metro Urban Growth Report assumptions.
3/ Allowances take into account land dedicated to public/utility easements.
Source: assumptions reflect local observations.

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APPENDIX B: Employment Land Needs Assumptions (continued)

Net New Redevelopment Building Space Needs (Floor Area) - 2040 Forecast

	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Scenario A	-	-	-	-	4,000	4,000
Scenario B	-	-	-	-	5,000	5,000
Scenario C	-	-	-	-	8,000	8,000

Net New Building Floor Area Development on Vacant Lands (Floor Area) - 2040 Forecast

	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Scenario A	93,000	77,000	87,000	173,000	190,000	620,000
Scenario B	61,000	140,000	233,000	791,000	257,000	1,482,000
Scenario C	89,000	202,000	338,000	1,146,000	373,000	2,148,000

Vacant Land Need (gross buildable acres) - 2040 Forecast

	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Scenario A	7.0	23.0	9.2	23.8	16.7	79.7
Scenario B	4.6	41.8	24.6	109.0	22.6	202.6
Scenario C	6.7	60.3	35.7	157.9	32.8	293.4

Building to Land Use Assignment Assumptions

Land Use Classification	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail
Commercial (retail, office, lodging)	100%	0%	0%	0%	100%
Mixed Use	0%	0%	0%	0%	0%
Public	0%	100%	0%	0%	0%
General Industrial & Flex	0%	0%	100%	100%	0%
Total	100%	100%	100%	100%	100%

Assumptions by FCS GROUP and City staff based on local observations.

Vacant Land Needs Forecast by Zoning Classification, Scenario A Forecast for 2038

Land Use Classification	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Commercial (retail, office, lodging)	7.0	-	-	-	16.7	23.7
Mixed Use	-	-	-	-	-	-
Public	-	23.0	-	-	-	23.0
General Industrial & Flex	-	-	9.2	23.8	-	33.0
Total	**7.0**	**23.0**	**9.2**	**23.8**	**16.7**	**79.7**

Vacant Land Needs Forecast by Zoning Classification, Scenario B Forecast for 2040

Land Use Classification	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Commercial (retail, office, lodging)	4.6	-	-	-	22.6	27.2
Mixed Use	-	-	-	-	-	-
Public	-	41.8	-	-	-	41.8
General Industrial & Flex	-	-	24.6	109.0	-	133.6
Total	**4.6**	**41.8**	**24.6**	**109.0**	**22.6**	**202.6**

Vacant Land Needs Forecast by Zoning Classification, Scenario C Forecast for 2040

Land Use Classification	Office	Government	Flex/Bus. Park	Gen. Industrial	Retail	Total
Commercial (retail, office, lodging)	6.7	-	-	-	32.8	39.5
Mixed Use	-	-	-	-	-	-
Public	-	60.3	-	-	-	60.3
General Industrial & Flex	-	-	35.7	157.9	-	193.5
Total	**6.7**	**60.3**	**35.7**	**157.9**	**32.8**	**293.4**

Pleasant Valley / North Carver Planning Area 2040 Land Needs for Employment

Land Use Classification	Scenario A	Scenario B	Scenario C		
Commercial (retail, office, lodging)	23.7	27.2	39.5		
General Industrial & Flex	33.0	133.6	193.5		
Public & Education (excl. open space & parks)	23.0	41.8	60.3		
Total (unconstrained acres)	**79.7**	**202.6**	**293.4**		

Source: Appendix B tables.