
City of McMinnville Economic Opportunities Analysis

January-February 2020

Prepared for:
City of McMinnville

DRAFT REPORT

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Acknowledgments

ECONorthwest prepared this report for the City of McMinnville. ECONorthwest and the City thank the many people who helped to develop the McMinnville Economic Opportunities Analysis.

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1. Introduction

This report presents an update to the 2013 Economic Opportunities Analysis (EOA) for the City of McMinnville. The purpose of an EOA is to develop information as a basis for policies that capitalize on McMinnville's opportunities and help address the City's challenges. In 2019, the City adopted the *MAC-Town 2032 Economic Development Strategic Plan*. This EOA Update is intended to:

- Provide the analysis and land use foundation necessary to achieve the City's economic development strategy.
- Identify policy issues that will need to be reflected in the Comprehensive Plan to achieve the economic development strategy.
- Update the trend data and forecasting, the buildable land inventory, and employment land needs to a common planning period with the City's housing needs analysis and other land needs. This update is part of an urbanization report to inform the strategy and identify land needs for a 20-year planning period to determine sufficiency of buildable lands and land use policies to meet identified needs consistent with the City's vision. Additional long-term and short-term planning periods are also analyzed consistent with planning for Urban Reserves and to ensure adequate short-term supply of needed sites.

This version of the EOA is intended to provide an update to the previous 2013 EOA, and thus retains portions of the content and narrative throughout. Where necessary, this update uses updated data on employment trends and commercial and industrial land needs, as well as refined approaches to methods for forecasting employment growth. The competitive advantages (i.e., advantages and disadvantages) for economic development in McMinnville did not change substantially since evaluation of these factors in the 2013 EOA or the *MAC-Town 2032 Economic Development Strategic Plan* adopted in 2019. This 2020 EOA updates the information included in the 2013 EOA to include the new information on competitive advantages and the target industries identified in the Strategic Plan, with consideration for any outdated information.

Contents, Format, and Guiding Requirements

The EOA includes technical analysis to address a range of questions that McMinnville faces in managing its commercial and industrial land. For example, the EOA includes an employment forecast that describes how much growth McMinnville should plan for over the planning period and identifies the amount and type of employment land necessary to accommodate growth in McMinnville over that period. The EOA also includes an inventory of commercial and industrial land within McMinnville's urban growth boundary (UGB) to provide information about the amount of land available to accommodate employment growth.

This EOA complies with the requirements of statewide planning Goal 9, the Goal 9 administrative rules (OAR 660 Division 9), and the court decisions that have interpreted them. Goal 9 requires cities to identify the characteristics of sites needed to accommodate industrial and other employment uses (OAR 660-009-0025(1)) over the 2021-2041 20-year planning period. This approach could be characterized as a *site-based* approach that projects land need based on the forecast for employment growth, the City's economic development objectives, and the specific needs of target industries. This updated analysis is more comprehensive than the State requires, as it looks at the employment needs for a 5-, 10-, and 46-year period, in addition to the 20-year period. The shorter-term analyses are intended to identify immediate employment land needs and strategies given current land-need deficiencies, and the 46-year analysis can provide a basis for the establishment of urban reserve areas (URAs).

Background

The City adopted an updated EOA in 2013. It provided the following history of work prior to the 2013 EOA update:

McMinnville's Comprehensive Plan, as adopted in 1981, consists of three interrelated volumes:

- Volume I – covering background information for the plan process
- Volume II – listing adopted goals and policies
- Volume III – consisting of implementation ordinances and measures including the comprehensive plan and zoning maps, annexation, zoning and land division ordinances, and planned development overlays on areas of special significance

In 2001, the City of McMinnville completed an Economic Opportunities Analysis (EOA) aimed to "inventory all non-residential lands and conduct an analysis of its future commercial and industrial land needs, consistent with the requirements of current Statewide Planning Goals, laws, and administrative rules." The EOA identified a potential surplus of industrial land and a deficit of commercial land over what was then a 20-year forecast horizon of 2000-2020. The EOA was approved by the City Council in February 2002 and subsequently acknowledged by the State Land Conservation and Development Commission (LCDC).

In 2003, a McMinnville Growth Management and Urbanization Plan (MGMUP) was adopted as an element of the Comprehensive Plan. This document provided guiding principles and a development concept for future growth, including a proposed expansion of McMinnville's Urban Growth Boundary (UGB).

In conjunction with this process, the City also updated the work of the 2001 EOA with respect to a revised Population and Employment Justification and a Revised Buildable Land Analysis, to bring these analyses current to the January 1, 2003 starting benchmark of the UGB review process. In effect, the 20-year planning horizon was shifted from 2000-2020 by three years to 2003-2023. In addition, the buildable lands analysis was updated to reflect changes that occurred between 2001 and 2003, and land need projections were adjusted accordingly.

The MGMUP documented the need for UGB expansion approaching 1,125 buildable acres (to meet needs for 2003-2023), with more than 90% of the need accounted by proposed expansion of land for residential, parks and related public uses. The remaining 9% represented land documented as needed for commercial development. The MGMUP was approved by LCDC, but then appealed by private parties to the Oregon Court of Appeals for issues related to prioritization of the types of agricultural land that can be added to the UGB. The Court eventually reversed and remanded LCDC's approval; LCDC subsequently reversed and remanded their action to the City of McMinnville.

2013 EOA Update

The City of McMinnville last conducted a Goal 9-compliant analysis and evaluation of economic trends in the 2013 EOA update, which was based on 2010 Census and other employment data. The 2019 Economic Development Strategic Plan also included a Demographic and Economic profile of McMinnville.

The 2013 EOA acknowledged that due to the prior Court of Appeals decision, "a previously determined 106-acre deficiency of commercial land for McMinnville's 20-year need has not been fully remedied. While the City of McMinnville is not pursuing any proposal to increase its UGB at this time, the need to address the potential imbalance of commercial and industrial land requirements has become more apparent due to the effects of a changing global, regional and local economy..."

The 2013 EOA stated, "As noted, while always an option for potential consideration, this EOA update assumes that McMinnville's UGB will not be expanded during the updated 20-year forecast period for purposes of providing non-residential (or employment) land need; rather, any needs for added forecast employment growth are anticipated to be accommodated through efficiency or other measures as available to avoid UGB expansion." The 2013 EOA found a 36-acre shortfall of commercial land for the 2013-2033 planning period, and a surplus of industrial land. This resulted in findings that led to subsequent rezoning of some of the surplus industrially-zoned acreage to commercially-zoned acreage in response to identified commercial land deficits.

Planning Area Definition

The EOA provides the data and analysis necessary to evaluate the sufficiency of McMinnville's UGB to meet needs for the identified planning period. As such, it includes an evaluation of the buildable lands within McMinnville's current UGB (as illustrated by the Comprehensive Plan map on the following page). This EOA also provides discussion of the Yamhill County, regional, statewide and national context within which local economic development opportunities are appropriately framed. The report provides information that will be needed to address UGB and Urban Reserve needs for any deficit of lands that isn't met within the current UGB. It also provides information about site needs and characteristics that will assist with UGB an Urban Reserve alternatives analysis. The analysis area for alternatives analysis is articulated in state law and will be addressed in a separate step in this review.

Community Economic Development Objectives

Current community objectives for economic development can be found as part of the following City documents:

MAC-Town 2032 Strategic Plan (adopted 2019)

In 2019, McMinnville adopted the *MAC-Town 2032 Strategic Plan*, which includes new vision, mission, and values statements. It also includes goals for seven strategic priorities, and for each goal, there are identified objectives and priority actions. Additional actions are also identified.

Vision, Mission, Values

Vision

A collaborative and caring city inspiring an exceptional quality of life.

Mission

The City of McMinnville delivers high-quality services in collaboration with partners for a prosperous, safe, and livable community.

Values

- **Stewardship.** We are responsible caretakers of our shared public assets and resources. We do this to preserve the strong sense of community pride which is a McMinnville trademark.
- **Equity.** We are a compassionate and welcoming community for all – different points of view will be respected. Because not all members of our community are equally able to access our services or participate in public process, we commit ourselves to lowering these barriers.
- **Courage.** We are future-oriented, proactively embracing and planning for change that is good for our community and consistent with our values.
- **Accountability.** We believe healthy civil discourse is fostered through responsive service and clear, accurate, useful information.

Strategic Priorities. To move McMinnville toward its vision, the City believes it will need to make disproportionate investment in time and resources in these areas.

One of these strategic priorities is Economic Prosperity, with the following goal and objectives. Each objective also has associated priority actions.

- Goal: Provide economic opportunity for all residents through sustainable growth across a balanced array of traditional and innovative industry sectors.
- Objectives:
 - Accelerate growth in living wage jobs across a balanced array of industry sectors

- Improve systems for economic mobility and inclusion
- Foster opportunity in technology and entrepreneurship
- Be a leader in hospitality and place-based tourism
- Locate higher job density activities in McMinnville
- Encourage connections to the local food system and cultivate a community of exceptional restaurants

MAC-Town 2032 Economic Development Strategic Plan (adopted 2019)

In 2019, McMinnville adopted the *MAC-Town 2032 Economic Development Strategic Plan*, which updated the City's mission and goals related to economic development, as a supplement to the goals and policies in the Strategic Plan and Comprehensive Plan. The mission in the Plan states:

“McMinnville provides economic opportunity for all residents through sustainable growth across a balanced array of traditional and innovative industry sectors, from steel manufacturing to technology. Economic growth is collaborative, and inclusive of individuals from diverse backgrounds. Businesses leverage local and regional talent pipelines while attracting new employees and residents who value McMinnville’s high quality of life. Our strong downtown serves residents and visitors alike, featuring unique shops and world-class restaurants that offer locally-produced food products and globally-renowned wine. As we evolve, we prize our small-town roots and we maintain McMinnville’s character.”

The “foundational goals and strategies” defined in the plan are:

1. Accelerate growth in living-wage jobs across a balanced array of industry sectors
2. Improve systems for economic mobility and inclusion
3. Maintain and enhance our high quality of life

The “target sector goals and strategies” defined in the plan are:

4. Sustain and innovate within traditional industry and advanced manufacturing
5. Foster opportunity in technology and entrepreneurship
6. Be a leader in hospitality and place-based tourism
7. Align and cultivate opportunities in craft beverages and food systems
8. Proactively assist growth in education, medicine, and other sciences

Economic Opportunities Analysis (2013)

McMinnville last completed an EOA in 2013, as an update to the 2001/2003 EOA process. Section 6 of the EOA provided discussion and findings for each relevant goal in the Comprehensive Plan for community economic development objectives. Chapter 6 provides updated discussion of these Goals. The 2013 EOA also recommended updates to the list of cluster target industries to include Advanced Manufacturing and Healthcare/Traded Sector Services. A full discussion of these sectors is included in Chapter 4 of this EOA.

Comprehensive Plan (Adopted 1981, and subsequently amended).

McMinnville's Comprehensive Plan consists of three interrelated volumes.

- Volume I – covering background information for the plan process
- Volume II – listing adopted goals and policies
- Volume III – consisting of implementation ordinances and measures including the comprehensive plan and zoning maps, annexation, zoning and land division ordinances, and planned development overlays on areas of special significance

A more detailed statement of economic development goals is embodied by the Comprehensive Plan (Volume II Goals and Policies), Chapter IV – Economy of McMinnville (as amended)

General:

Goal IV 1: To encourage the continued growth and diversification of McMinnville's economy in order to enhance the general well-being of the community and provide employment opportunities for its citizens.

Commercial Development:

Goal IV 2: To encourage the continued growth of McMinnville as the commercial center of Yamhill County in order to provide employment opportunities, goods, and services for the city and county residents.

Goal IV 3: To ensure commercial development that maximizes efficiency of land use through utilization of existing commercially designated lands, through appropriately locating future neighborhood and community serving commercial lands and discouraging strip development.

Goal IV 4: To promote the downtown as a cultural, administrative service, and retail center of McMinnville.

Industrial Development:

Goal IV 5: To continue the growth and diversification of McMinnville's industrial base through the provision of an adequate amount of properly designated lands.

Goal IV 6: To insure industrial development that maximizes efficiency of land uses, that is appropriately located in relation to surrounding land uses, and that meets necessary environmental standards.

Each goal has associated policies and proposals. The Comprehensive Plan includes a series of general, locational and design policies as “more precise and limited statements intended to further define the goals.” Also included as part of the Economic Development element of the existing adopted plan are three proposals as “possible courses of action” to further implement the goals and policies.

The 2020 EOA draws on information from numerous data sources, such as the Oregon Employment Department, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and the U.S. Census. In addition to retaining all relevant information from the 2013 EOA, the EOA update also uses information from the Three Mile Lane market analysis, completed in March 2019.

Statewide Planning Guidance

The content of this report is designed to meet the requirements of Oregon Statewide Planning Goal 9 and the administrative rule that implements Goal 9 (OAR 660-009). The analysis in this report is designed to conform to the requirements for an Economic Opportunities Analysis in OAR 660-009 as amended.

1. *Economic Opportunities Analysis (OAR 660-009-0015)*. The Economic Opportunities Analysis (EOA) requires communities to identify the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the planning area based on information about national, state, regional, county or local trends; identify the number of sites by type reasonably expected to be needed to accommodate projected employment growth based on the site characteristics typical of expected uses; include an inventory of vacant and developed lands within the planning area designated for industrial or other employment use; and estimate the types and amounts of industrial and other employment uses likely to occur in the planning area. Local governments are also encouraged to assess community economic development potential through a visioning or some other public input-based process in conjunction with state agencies.
2. *Industrial and commercial development policies (OAR 660-009-0020)*. Cities are required to develop commercial and industrial development policies based on the EOA. Local comprehensive plans must state the overall objectives for economic development in the planning area and identify categories or particular types of industrial and other employment uses desired by the community. Local comprehensive plans must also include policies that commit the city or county to designate an adequate number of employment sites of suitable sizes, types and locations. The plan must also include policies to provide necessary public facilities and transportation facilities for the planning area.

3. *Designation of lands for industrial and commercial uses (OAR 660-009-0025).* Cities and counties must adopt measures to implement policies adopted pursuant to OAR 660-009-0020. Appropriate implementation measures include amendments to plan and zone map designations, land use regulations, public facility plans, and transportation system plans. More specifically, plans must identify the approximate number, acreage and characteristics of sites needed to accommodate industrial and other employment uses to implement plan policies, and must designate serviceable land suitable to meet identified site needs.

Public Process

At the broadest level, the purpose of the project was to understand how McMinnville's employment has changed since the completion of the 2013 EOA, as well as update the city's employment land needs to align with planning periods used in the 2019 HNA. In 2019, the city adopted an economic development strategy that provided a framework for policies and implementation actions for economic development. The update to the EOA requires a broad range of assumptions that influence the outcomes. Public engagement during the project was accomplished through facilitation of a Project Advisory Committee as described below.¹

Project Advisory Committee Meetings

The City of McMinnville and ECONorthwest solicited public input from an ad-hoc Project Advisory Committee. The Project Advisory Committee met 5 times² to discuss project assumptions, results, and implications. The project relied on the Project Advisory Committee to:

- Review work products, advise on public involvement, and consider public input when making recommendations.
- Advise the project team on matters regarding employment needs and the buildable lands inventory in McMinnville.
- Work collaboratively with, and provide guidance to, the staff and consultant project team in the preparation for the McMinnville Economic Opportunities Analysis.

A public lands work group was also established to review and make recommendation regarding unique land needs associated with employment and land uses for public and semi-public organizations.

¹ In addition to Project Advisory Committee meetings, the City of McMinnville also maintained a project website and social media presence.

² Project Advisory Committee meeting dates: July 10, 2019; September 5, 2019; October 10, 2019; November 13, 2019; and January 21, 2020.

Organization of this Report

This report is organized as follows:³

- **Chapter 2. The McMinnville Economy** – as a review of pertinent population, demographic and economic trends for McMinnville in the context of what is occurring throughout Yamhill County, a larger economic region, statewide and nationally.
- **Chapter 3. National, State & Regional Outlook** – covering recent economic experience and forecasts external to the community that could influence employment uses reasonably expected to locate or expand in the McMinnville UGB over the 5-, 10-, 20-, and 46-year planning horizons of this EOA.
- **Chapter 4. Economic Development Potential** – focused on factors that currently and prospectively affect economic development in McMinnville.
- **Chapter 5. Forecast Employment & Land Needs** – detailing an updated UGB employment forecast together with industrial/commercial buildable lands inventory and determination of long- and short- term needs, parcel size evaluation, site characteristics, and commercial/industrial policy options necessary to provide the land use foundation for the City's economic development strategy.

This report also includes two appendices:

- **Appendix A, Buildable Lands Inventory Methodology**
- **Appendix B, Employment on Other Land and Employment Density**

³ The organization of the report is intended to align as closely as possible to the 2013 EOA. Some subsections may differ due to changes in methodology or alternative data sources.

2. The McMinnville Economy

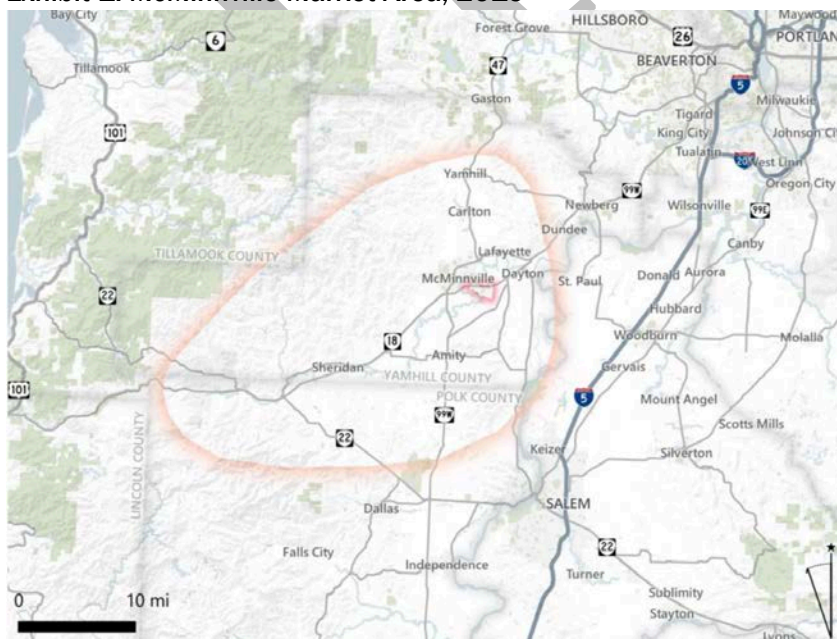
This chapter describes the factors affecting economic growth in McMinnville within the context of national and regional economic trends. The analysis presents the City's competitive advantages for growing and attracting businesses, which forms the basis for identifying potential growth industries in McMinnville.

McMinnville exists within the context of the county, market area, region, state, national, and international context and economies. OAR 660-009-0015 (1) requires a review of national, state, regional, county and local trends.

Regions are defined differently for different purposes. McMinnville exists as part of the economy of the following regions. Also included, as available, are pertinent comparable data for Yamhill County, the state of Oregon and United States.

- 10-County Economic Region. (used for 2013 EOA)
- 7-County Portland MSA (US Census Bureau-defined economically integrated region)
- 6-County North Valley Region (used in 2001/03 EOA, which also used "Willamette valley with three additional counties for some indicators)
- 4-County Mid-Valley Region (defined by the Oregon Employment Department and used in their reporting): Linn, Marion, Polk, Yamhill
- Market Area (relates predominantly to retail trade) (Exhibit 1). Market area will vary depending on the type of attractor. Larger regional shopping may have a larger market areas while neighborhood retail will have a smaller market area).

Exhibit 1. McMinnville Market Area, 2019



Source: McMinnville Three Mile Lane Area Plan: Market Analysis; TIGER, Leland Consulting Group.

Employment Trends in McMinnville and Yamhill County

The economy of the nation changed substantially between 1980 and 2018. These changes affected the composition of Oregon’s economy, including McMinnville’s economy. At the national level, the most striking change was the shift from manufacturing employment to service-sector employment. The most important shift in Oregon during this period has been the shift from a timber-based economy to a more diverse economy, with the greatest employment in services. This section focuses on changes in the economy in Yamhill County since 2001 and in McMinnville since 2007.

Exhibit 2 shows covered employment⁴ in Yamhill County for 2001 and 2018. Employment increased by 8,202 jobs, or 29%, over this period, which included the Great Recession and subsequent recovery. The sectors with the largest increases in numbers of employees were Arts, entertainment, and recreation; Healthcare and social assistance; Other services; Accommodation and food services; and Professional and business services.

The average wage for employment in Yamhill County in 2018 was about \$42,321. Employment in higher wage industries, such as Information and Transportation, Warehousing, and Utilities, decreased by 204 jobs over the 2001 to 2018 time period.

Exhibit 2. Covered Employment by Industry, Yamhill County, 2001-2018

Sector	2001	2018	Change 2001 to 2018		
			Difference	Percent	AAGR
Natural Resources and Mining	2,824	3,668	844	30%	1.6%
Construction	1,492	1,977	485	33%	1.7%
Manufacturing	5,584	6,901	1,317	24%	1.3%
Wholesale trade	560	629	69	12%	0.7%
Retail trade	3,157	3,728	571	18%	1.0%
Transportation, Warehousing and Utilities	645	468	-177	-27%	-1.9%
Information	269	242	-27	-10%	-0.6%
Financial Activities	972	1,007	35	4%	0.2%
Professional and Business Services	1,371	1,936	565	41%	2.1%
Educational Services	1,166	1,512	346	30%	1.5%
Health care and social assistance	2,792	4,881	2,089	75%	3.3%
Arts, entertainment, and recreation	172	350	178	103%	4.3%
Accommodation and food services	2,145	3,441	1,296	60%	2.8%
Other Services	852	1,378	526	62%	2.9%
Unclassified	19	10	-9	-47%	-3.7%
Government	4,090	4,184	94	2%	0.1%
Total	28,110	36,312	8,202	29%	1.5%

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2001-2018.

Exhibit 3 shows covered employment and average wage for the 10 largest employment industries in Yamhill County in 2018. Jobs in manufacturing account for about 19% of the

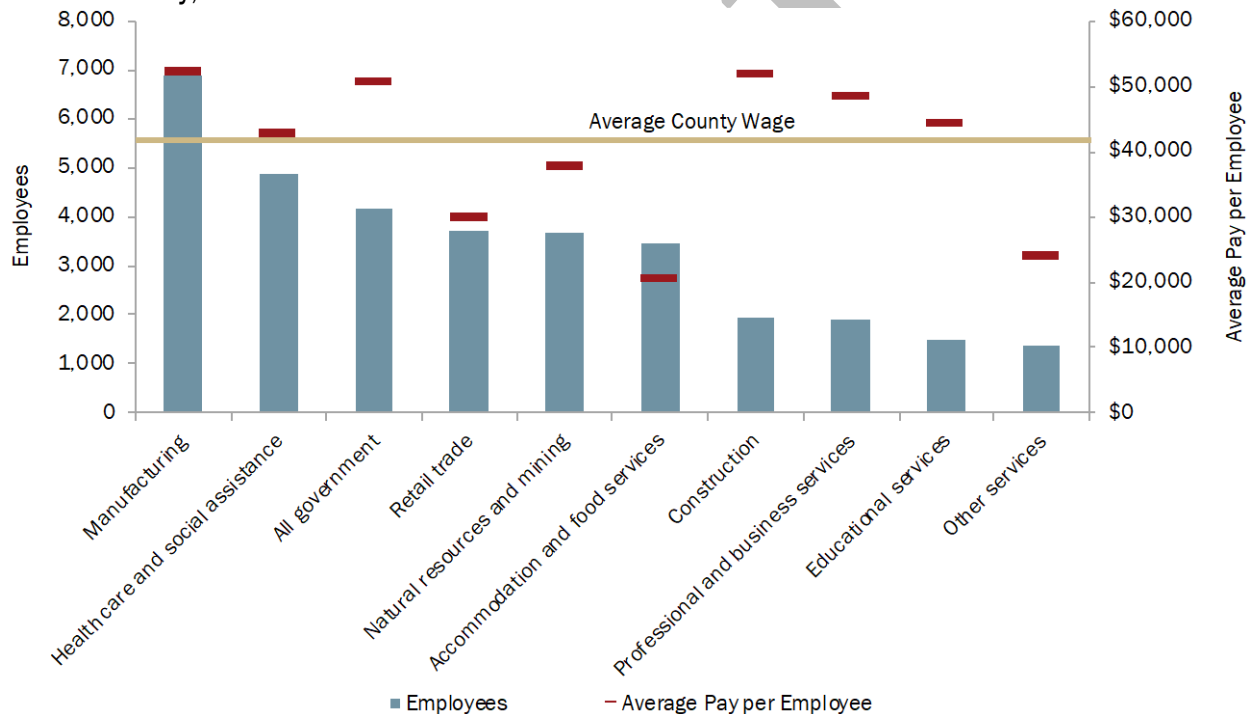
⁴ **Covered** employment includes employees covered by unemployment insurance. Examples of workers not included in covered employment are sole proprietors, some types of contractors (often referred to as “1099 employees”), or some railroad workers. Covered employment data is from the Oregon Employment Department.

county’s covered employment and these jobs pay approximately 24% more than the county average wage (\$52,303 compared to \$42,321). Healthcare and social assistance jobs are the next largest employment sector, making up about 13% of Yamhill County’s covered employment. Wages in this industry are closer to the county average, paying employees an average of \$42,952. Government jobs account for 12% of the county’s covered employment. These jobs pay roughly 20% more than the county average (\$50,765 compared to \$42,321).

Though not shown in Exhibit 3 due to relatively low employment levels, wholesale trade, on average, pays employees \$62,411, 47% above the county average wage. This sector only makes up about 2% of Yamhill County’s total covered employment, though it pays the highest wages.

Additionally, jobs in construction (\$51,947), professional and business services (\$48,497), and educational services (\$44,398), pay more per year than the county average. However, these three sectors make up a smaller employment base than Retail trade, Natural resources and mining, and Accommodation and food services, which pay below the average county wage.

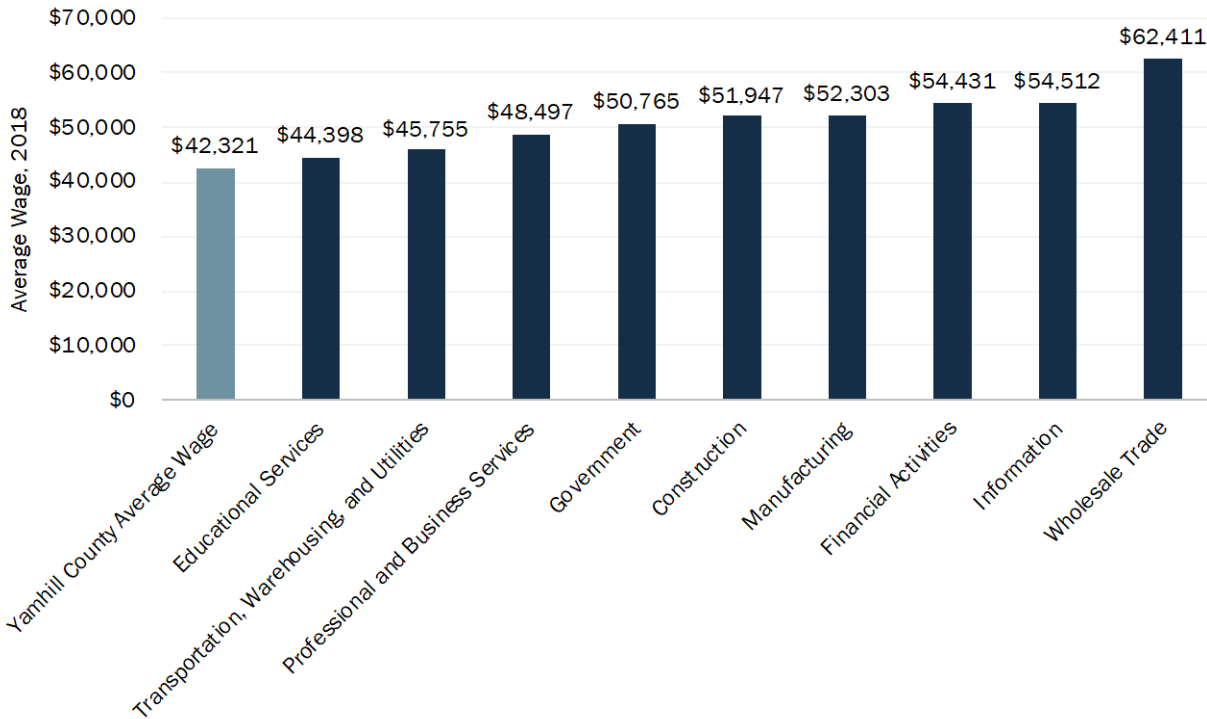
Exhibit 3. Covered Employment and Average Pay by Sector, 10 Largest Employment Sectors Yamhill County, 2018



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2018.

Exhibit 4 shows the sectors in Yamhill County that pay an annual average wage above the countywide average wage. Some of these sectors, such as wholesale trade and construction, are shown in Exhibit 3; however, other higher paying sectors include information (\$54,512), financial activities (\$54,431), and manufacturing (\$52,303).

Exhibit 4. Highest Paying Sectors in Yamhill County, 2018



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2018.

Between 2007 and 2017, employment in McMinnville increased by about 1,123 employees (8%) at an annual average growth rate of 0.8%. Employment in Accommodation and food services and Retail trade increased by 372 employees and 309 employees respectively, while employment in Transportation and warehousing and Utilities decreased by about 229 (Exhibit 5).

Exhibit 5. Change in Covered Employment, McMinnville UGB, 2007-2017

Sector	Employment		Change in Employment	Percent	AAGR
	2007	2017			
Agriculture, Forestry, and Mining	244	356	112	46%	3.8%
Construction	634	585	(49)	-8%	-0.8%
Manufacturing	2,300	2,277	(23)	-1%	-0.1%
Wholesale Trade	264	127	(137)	-52%	-7.1%
Retail Trade	1,861	2,170	309	17%	1.5%
Transportation and Warehousing and Utilities	369	140	(229)	-62%	-9.2%
Information	136	127	(9)	-7%	-0.7%
Finance and Insurance	511	459	(52)	-10%	-1.1%
Real Estate and Rental and Leasing	138	113	(25)	-18%	-2.0%
Professional and Technical Services	265	367	102	38%	3.3%
Management of Companies	221	117	(104)	-47%	-6.2%
Admin. and Support/Waste Mgmt/Remediation Serv.	494	584	90	18%	1.7%
Health Care and Social Assistance; Private Education Serv.	2,564	3,159	595	23%	2.1%
Arts, Entertainment, and Recreation	134	168	34	25%	2.3%
Accommodation and Food Services	1,131	1,503	372	33%	2.9%
Other Services	417	630	213	51%	4.2%
Government	2,158	2,082	(76)	-4%	-0.4%
Total	13,841	14,964	1,123	8%	0.8%

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2007 and 2017.

Exhibit 6 shows a summary of covered employment data for the McMinnville UGB in 2017. The sectors with the greatest number of employees were Health care and social assistance and Private education (21%); Manufacturing (15%); and Retail trade (15%). Exhibit 7 shows employment in McMinnville in 2017 for detailed industries in the manufacturing sector. Employment in Food manufacturing and Beverage and tobacco product manufacturing accounted for about one quarter of McMinnville’s manufacturing employment overall.

Exhibit 6. Covered Employment and Average Pay by Sector, McMinnville UGB, 2017

Sector	Establishments	Employees	Payroll	Average pay per employee
Agriculture, Forestry, and Mining	24	356	\$ 11,188,173	\$ 31,427
Construction	104	585	\$ 27,931,863	\$ 47,747
Manufacturing	71	2,277	\$ 113,267,986	\$ 49,744
Wholesale Trade	41	127	\$ 7,778,100	\$ 61,245
Retail Trade	141	2,170	\$ 62,991,136	\$ 29,028
Transportation and Warehousing and Utilities	20	140	\$ 4,582,386	\$ 32,731
Information	19	127	\$ 5,010,927	\$ 39,456
Finance and Insurance	51	459	\$ 29,183,634	\$ 63,581
Real Estate and Rental and Leasing	38	113	\$ 3,815,372	\$ 33,764
Professional and Technical Services	100	367	\$ 21,852,471	\$ 59,544
Management of Companies	9	117	\$ 7,033,600	\$ 60,116
Admin. and Support/Waste Mgmt./Remediation Serv.	49	584	\$ 14,681,454	\$ 25,139
Health Care and Social Assistance; Private Education :	173	3,159	\$ 144,631,456	\$ 45,784
Arts, Entertainment, and Recreation	9	168	\$ 3,128,546	\$ 18,622
Accommodation and Food Services	99	1,503	\$ 27,941,666	\$ 18,591
Other Services	218	630	\$ 13,857,430	\$ 21,996
Government	42	2,082	\$ 101,259,952	\$ 48,636
Total	1,208	14,964	\$ 600,136,152	\$ 40,105

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2017.

Exhibit 7. Covered Employment in Manufacturing Industries, McMinnville UGB, 2017

Sector	Establishments	Employees
Food Manufacturing	14	448
Beverage and Tobacco Product Manufacturing	18	134
Wood, Plastic, and Chemical Product Manufacturing	18	536
Metal, Electronic, and Other Product Manufacturing	21	1,159
Total	71	2,277

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2017.

The average size for a private business in McMinnville is 12 employees per business, compared to the State average of 11 employees per private business. Businesses with 50 or fewer employees account for 55% of private employment and 10 or fewer account for 19% of private employment. Exhibit 8 shows the distribution of establishments by size class (i.e., number of employees). Over 75% of the private (i.e., non-government) establishments are businesses with fewer than 10 employees.

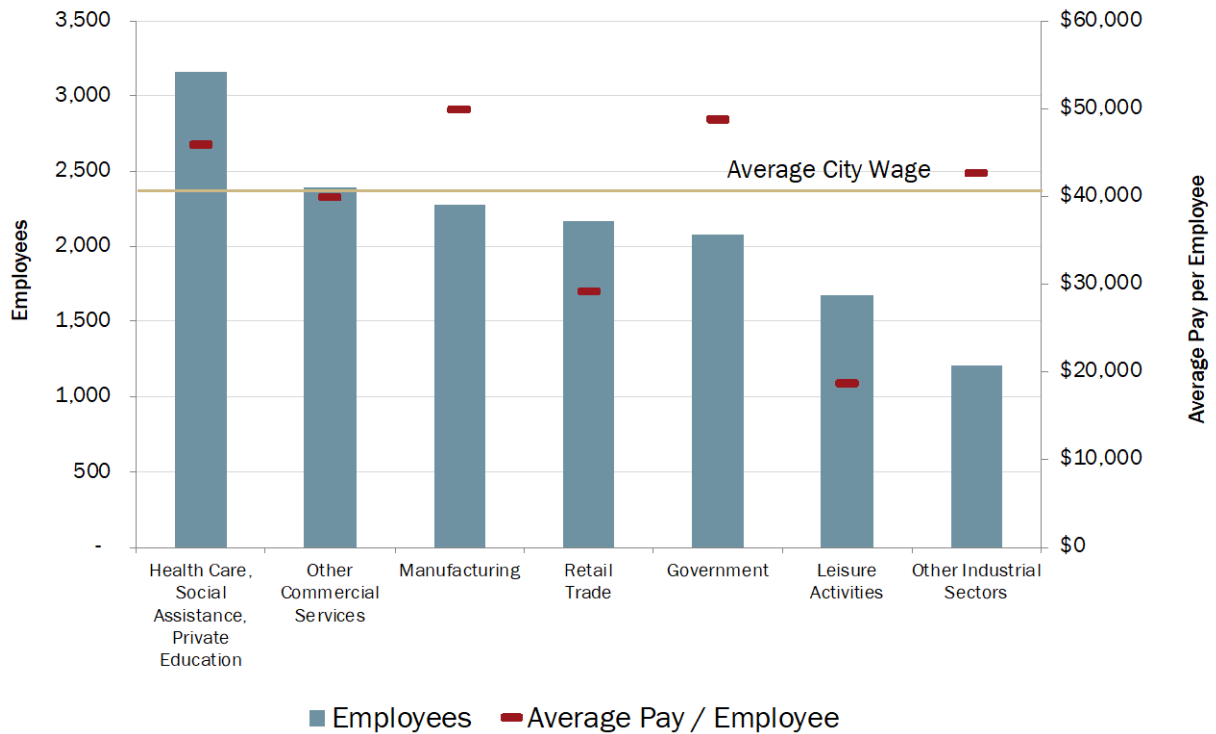
Exhibit 8. Covered Private Employment by Size Class, McMinnville UGB, 2017

Establishment size (number of employees)	Number of establishments
0 to 4	682
5 to 9	211
10 to 19	141
20 to 49	87
50 to 99	27
100+	18
Total	1,166

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2017.

Exhibit 9 shows the employment and average pay per employee for sectors in McMinnville. Average pay for all employees (\$40,105) is shown as a light brown line across the graph and average pay for individual sectors as short red lines. The figure shows that Health care, social assistance, and Private education; Manufacturing; Government; and Other industrial sectors had above average wages. The lowest wages were in Retail trade and Leisure activities, which includes arts, entertainment, and recreation and accommodation and food services.

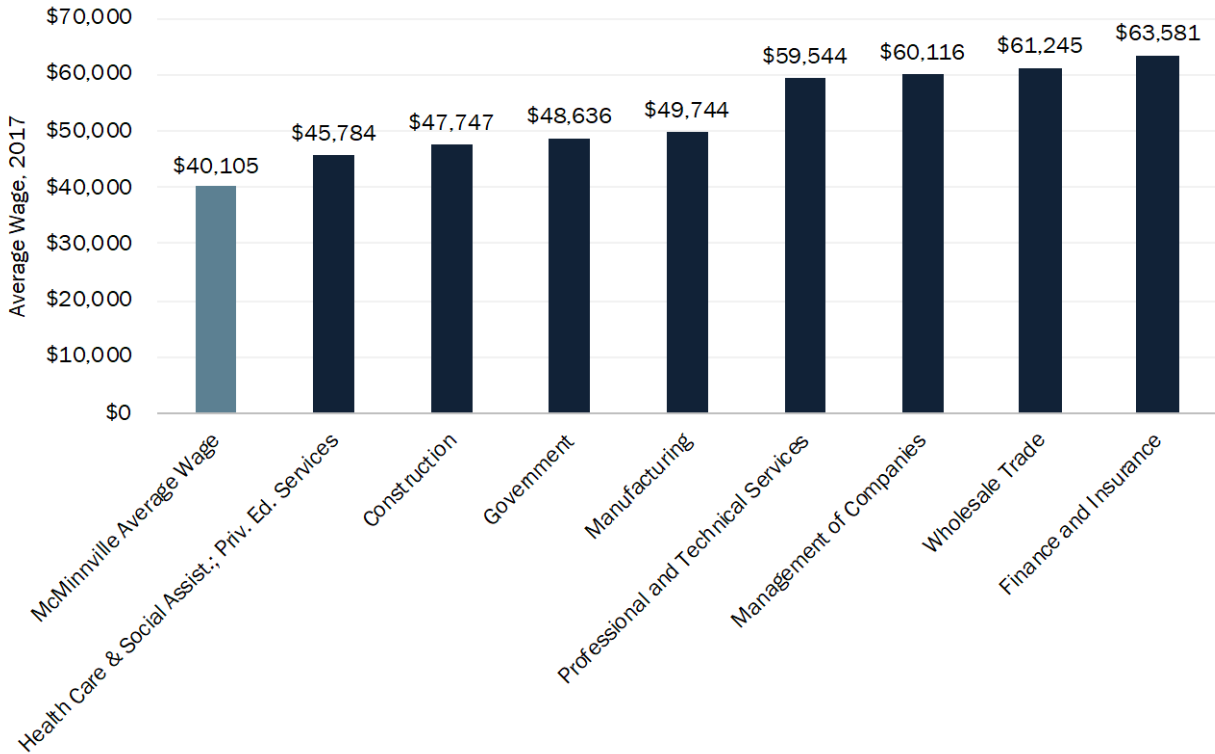
Exhibit 9. Covered Employment and Average Pay by Sector, McMinnville UGB, 2017



Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2017.

Exhibit 10 shows the sectors with average annual wages that exceed the McMinnville City average. The three highest paying sectors, finance and insurance, wholesale trade, and management of companies, all paid over \$60,000 in 2017. Other higher paying sectors include professional and technical services, manufacturing, government, and construction.

Exhibit 10. Highest Paying Sectors Exceeding Average Wage in McMinnville UGB, 2017



Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2017.

DRAFT

Outlook for growth in Yamhill County

Exhibit 11 shows the Oregon Employment Department's forecast for employment growth by industry for the Mid-Valley Region (Linn, Marion, Polk, and Yamhill Counties) over the 2017 to 2027 period. Employment in the region is forecasted to grow at an average annual growth rate of 1.1%.

The sectors that will lead employment in the region for the 10-year period are: Private educational and health services (adding 8,100 jobs), Trade, transportation, and utilities (5,100), Government (3,500), Construction (3,000), Leisure and hospitality (3,000), and Manufacturing and Natural resources and mining (2,400 each). In sum, these sectors are expected to add 27,500 new jobs or about 88% of employment growth in the Mid-Valley Region. Yamhill County accounts for about 14% of employment in these four counties, and McMinnville accounts for about 42% of the County's employment.

Exhibit 11. Regional Employment Projections, 2017-2027, Mid-Valley Region (Linn, Marion, Polk, and Yamhill Counties)

Industry Sector	2017	2027	Change 2017 - 2027		
			Number	Percent	AAGR
Total private	208,800	236,400	27,600	13%	1.2%
Natural resources and mining	17,700	20,100	2,400	14%	1.3%
Mining and logging	1,200	1,300	100	8%	0.8%
Construction	14,700	17,700	3,000	20%	1.9%
Manufacturing	27,700	30,100	2,400	9%	0.8%
Durable goods	16,300	17,700	1,400	9%	0.8%
Nondurable goods	11,400	12,400	1,000	9%	0.8%
Trade, transportation, and utilities	42,500	47,600	5,100	12%	1.1%
Wholesale trade	6,200	6,900	700	11%	1.1%
Retail trade	27,800	30,200	2,400	9%	0.8%
Transportation, warehousing, and utilities	8,500	10,500	2,000	24%	2.1%
Information	1,800	1,900	100	6%	0.5%
Financial activities	9,200	9,700	500	5%	0.5%
Professional and business services	19,000	21,000	2,000	11%	1.0%
Private educational and health services	43,700	51,800	8,100	19%	1.7%
Health care and social assistance	35,300	42,500	7,200	20%	1.9%
Leisure and hospitality	22,400	25,400	3,000	13%	1.3%
Accommodation and food services	19,900	22,600	2,700	14%	1.3%
Other services and private households	10,100	11,100	1,000	10%	0.9%
Government	52,200	55,700	3,500	7%	0.7%
Federal government	2,100	2,100	0	0%	0.0%
State government	21,900	23,900	2,000	9%	0.9%
Local government	28,200	29,700	1,500	5%	0.5%
Local education	16,000	16,900	900	6%	0.5%
Total payroll employment	261,000	292,100	31,100	12%	1.1%

Source: Oregon Employment Department. Employment Projections by Industry 2017-2027.

3. National, State, and Regional Outlook

Consistent with Oregon Administrative Rules (OAR 660), McMinnville's Economic Opportunities Analysis is set within the context of broader nationwide, state, and regional trends. Recent trends and conditions at a national and state level are considered first, followed by detailed information at a regional and local level.

National Trends

Economic development in McMinnville over the next 20 years will occur in the context of long-run national trends. The most important of these trends include:

- **Economic growth will continue at a moderate pace.** Analysis from the Congressional Budget Office (CBO) estimates after the 3.1% real GDP growth in 2018, real GDP will grow by approximately 2.3% in 2019. After 2019, the CBO forecasts the annual average growth of real GDP to slow and stabilize around 1.7% across the 2020 to 2029 period. The primary reason they provide for this slowing growth is that they expect the labor force to grow at a slower rate than historical trends.⁵

The unemployment rate is forecasted to decrease to 3.5% in the second-half of 2019, which is the rate's lowest point since the 1960s. After this year, the CBO predicts the unemployment rate will rise between 2020 and 2023 due to slower growth in economic output.⁶

- **The aging of the Baby Boomer generation, accompanied by increases in life expectancy.** As the Baby Boomer generation continues to retire, the number of Social Security recipients is expected to increase from 62.5 million in 2018 to over 87.0 million in 2040, a 39% increase. However, due to lower-birth rate replacement generations, the number of covered workers is only expected to increase 12% over the same time period, from 176.0 million to 196.4 million in 2040. Currently, there are 35 Social Security beneficiaries per 100 covered workers in 2018 but by 2040 there will be 44 beneficiaries per 100 covered workers. This will increase the percent of the federal budget dedicated to Social Security and Medicare.⁷

Baby Boomers are expecting to work longer than previous generations. An increasing proportion of people in their early- to mid-50s expect to work full-time after age 65. In 2004, about 40% of these workers expect to work full-time after age 65, compared with

⁵ Congressional Budget Office. *The Budget and Economic Outlook: 2019 to 2029. January 2019.* Retrieved from: <https://www.cbo.gov/system/files/2019-03/54918-Outlook-3.pdf>.

⁶ *Ibid.*

⁷ The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, *The 2019 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, April 25, 2019. Retrieved from: <https://www.ssa.gov/OACT/TR/2019/tr2019.pdf>.

about 30% in 1992.⁸ This trend can be seen in Oregon, where the share of workers 65 years and older grew from 2.9% of the workforce in 2000 to 4.1% of the workforce in 2010. In 2017, this share reached 5.5%. Over the same eighteen-year period, the share of workers 45 to 64 years increased from 35% of all employed Oregonians in 2000 to 37% in 2017.⁹

- **Need for replacement workers.** The need for workers to replace retiring Baby Boomers will outpace job growth. According to the Bureau of Labor Statistics, total employment in the United States will grow by about 11.5 million jobs over 2016 to 2026. Annually, they estimate there will be 18.7 million occupational openings over the same period. This exhibits the need for employees over the next decade as the quantity of openings per year is large relative to expected employment growth. About 71% of annual job openings are in occupations that do not require postsecondary education.¹⁰
- **The importance of education as a determinant of wages and household income.** According to the Bureau of Labor Statistics, a majority of the fastest growing occupations will require an academic degree, and on average, they will yield higher incomes than occupations that do not require an academic degree. The fastest-growing occupations requiring an academic degree will be registered nurses, software developers, general and operations managers, accountants and auditors, market research analysts and marketing specialists, and management analysts. Occupations that do not require an academic degree (e.g., retail sales person, food preparation workers, and home care aides) will grow, accounting for approximately 71% of all new jobs by 2026. These occupations typically have lower pay than occupations requiring an academic degree.¹¹

The national median income for people over the age of 25 in 2018 was about \$48,464. Workers without a high school diploma earned \$19,708 less than the median income, and workers with a high school diploma earned \$10,504 less than the median income. Workers with some college earned \$6,760 less than median income, and workers with a bachelor's degree earned \$13,832 more than median. Workers in Oregon experience the same patterns as the nation but pay is generally lower in Oregon than the national average.¹²

- **Increases in labor productivity.** Productivity, as measured by output per hour of labor input, increased in most sectors between 2000 and 2010, peaking in 2007. However, productivity increases were interrupted by the recession. After productivity decreases from 2007 to 2009, many industries saw large productivity increases from 2009 to 2010.

⁸ "The Health and Retirement Study," 2007, National Institute of Aging, National Institutes of Health, U.S. Department of Health and Human Services.

⁹ Analysis of 2000 Decennial Census data, 2010 U.S. Census American Community Survey, 1-Year Estimates, and 2017 U.S. Census American Community Survey, 1-Year Estimates, for the table Sex by Age by Employment Status for the Population 16 Years and Over.

¹⁰ "Occupational Employment Projections to 2016-2026," Bureau of Labor Statistics, 2018.

¹¹ "Occupational Employment Projections to 2016-2026," Bureau of Labor Statistics, 2018.

¹² Bureau of Labor Statistics, Employment Projections, March 2019. <http://www.bls.gov/emp/epchart001.htm>.

Industries with the fastest productivity growth were Information Technology-related industries. These include wireless telecommunications carriers, computer and peripheral equipment manufacturing, electronics and appliance stores, and commercial equipment manufacturing wholesalers.¹³

Since the end of the recession (2010), labor productivity has increased across a handful of large sectors but has also decreased in others. In wholesale trade, productivity—measured in output per hour—increased by 19% over 2009 to 2017. Retail trade gained even more productivity over this period at 25%. Food services, however, have remained stagnant since 2009, fluctuating over the nine-year period and shrinking by 0.01% over this time frame. Additionally, the Bureau of Labor Statistics reports multifactor productivity in manufacturing has been slowing down 0.3% per year over the 2004 to 2016 period. Much of this, they note, is due to slowdown in semiconductors, other electrical component manufacturing, and computer and peripheral equipment manufacturing.¹⁴

- **The importance of entrepreneurship and growth in small businesses.** According to the U.S. Small Business Office of Advocacy, small businesses are those that have fewer than 500 employees. However, the Oregon Office of Small Business Advocacy defines small businesses as those with fewer than 100 employees. For consistency in our small business data comparisons, we will maintain the definition of small businesses to be those with fewer than 100 employees.

The U.S. Census Bureau's Statistics of U.S. Businesses (SUSB) shows in 2016 that about 98% of all firms in the United States had fewer than 100 employees. Their employees accounted for approximately 33% of American workers.¹⁵ The National League of Cities suggests ways that local governments can attract entrepreneurs and increase the number of small businesses including strong leadership from elected officials; better communication with entrepreneurs, especially about the regulatory environment for businesses in the community; and partnerships with colleges, universities, small business development centers, mentorship programs, community groups, businesses groups, and financial institutions.¹⁶

- **Increases in automation across sectors.** Automation is a long-running trend in employment, with increases in automation (and corresponding increases in productivity) over the last century and longer. The pace of automation is increasing, and the types of jobs likely to be automated over the next 20 years (or longer) is broadening.

¹³ Brill, Michael R. and Samuel T. Rowe, "Industry Labor Productivity Trends from 2000 to 2010." Bureau of Labor Statistics, *Spotlight on Statistics*, March 2013.

¹⁴ Michael Brill, Brian Chanksy, and Jennifer Kim. "Multifactor productivity slowdown in U.S. manufacturing," *Monthly Labor Review*, U.S. Bureau of Labor Statistics, July 2018. Retrieved from: <https://www.bls.gov/opub/mlr/2018/article/multifactor-productivity-slowdown-in-us-manufacturing.htm>.

¹⁵ U.S. Census Bureau, Statistics of U.S. Businesses. Data by Enterprise Employment Size, 2016. Retrieved from: <https://www.census.gov/data/tables/2016/econ/susb/2016-susb-annual.html>

¹⁶ National League of Cities "Supporting Entrepreneurs and Small Businesses" (2012). <https://www.nlc.org/supporting-entrepreneurs-and-small-business>.

Lower paying jobs are more likely to be automated, with potential for automation of more than 80% of jobs paying less than \$20 per hour over the next 20 years. About 30% of jobs paying \$20 to \$40 per hour and 4% of jobs paying \$40 or more are at risk of being automated over the next 20 years.¹⁷

Low- to middle-skilled jobs that require interpersonal interaction, flexibility, adaptability, and problem solving will likely persist into the future as will occupations in technologically lagging sectors (e.g. production of restaurant meals, cleaning services, hair care, security/protective services, and personal fitness).¹⁸ This includes occupations such as (1) recreational therapists, (2) first-line supervisors of mechanics, installers, and repairers, (3) emergency management directors, (4) mental health and substance abuse social workers, (5) audiologists, (6) occupational therapists, (7) orthotists and prosthetists, (8) healthcare social workers, (9) oral and maxillofacial surgeons, and (10) first-line supervisors of firefighting and prevention workers. Occupations in the service and agricultural or manufacturing industry are most at-risk of automation because of the manual-task nature of the work.^{19,20,21} This includes occupations such as (1) telemarketers, (2) title examiners, abstractors, and searchers, (3) hand sewers, (4) mathematical technicians, (5) insurance underwriters, (6) watch repairers, (7) cargo and freight agents, (8) tax preparers, (9) photographic process workers and processing machine operators, and (10) accounts clerks.²²

- **Consolidation Transformation of retail.** Historical shift in retail businesses, starting in the early 1960s, was the movement from one-off, ‘mom and pop shops’ toward superstores and the clustering of retail into centers or hubs. Notably, we still see this trend persist; for example, in 1997, the 50 largest retail firms accounted for about 26% of retail sales and by 2007, they accounted for about 33%.²³ The more recent shift began in the late 1990s, where technological advances have provided consumers the option to buy goods through e-commerce channels. The trend toward e-commerce has become increasingly preferential to millennials and Generation X, who are easier to reach online and are more responsive to digital ads than older generations.²⁴ Since 2000, e-commerce

¹⁷ Executive Office of the President. (2016). Artificial Intelligence, Automation, and the Economy.

¹⁸ Autor, David H. (2015). Why Are There Still So Many Jobs? The History and Future of Workplace Automation. *Journal of Economic Perspectives*, Volume 29, Number 3, Summer 2015, Pages 3–30.

¹⁹ Frey, Carl Benedikt and Osborne, Michael A. (2013). *The Future of Employment: How Susceptible Are Jobs to Computerisation?* Oxford Martin School, University of Oxford.

²⁰ Otekhile, Cathy-Austin and Zeleny, Milan. (2016). Self Service Technologies: A Cause of Unemployment. *International Journal of Entrepreneurial Knowledge*. Issue 1, Volume 4. DOI: 10.1515/ijek-2016-0005.

²¹ PwC. (n.d.). Will robots really steal our jobs? An international analysis of the potential long-term impact of automation.

²² Frey, Carl Benedikt and Osborne, Michael A. (2013). *The Future of Employment: How Susceptible Are Jobs to Computerisation?* Oxford Martin School, University of Oxford.

²³ Hortaçsu, Ali and Syverson, Chad. (2015). The Ongoing Evolution of US Retail: A Format Tug-of-War. *Journal of Economic Perspectives*, Volume 29, Number 4, Fall 2015, Pages 89-112.

²⁴ Pew Research Center (2010b). *Generations 2010*. Retrieved Online at: <http://www.pewinternet.org/Reports/2010/Generations-2010.aspx>

sales grew from 0.9% of total retail sales to 9.7% (2018). Over 2000 to 2018, e-commerce retail sales have grown at a rate 18% per year.²⁵ It is reasonable to expect this trend to continue. While it is unclear what impact e-commerce will have on employment and brick and mortar retail, it seems probable that e-commerce sales will continue to grow, shifting business away from some types of retail. Over the next decades, communities must begin considering how to redevelop and reuse retail buildings in shopping centers, along corridors, and in urban centers.

- ~~▪ With it has come closures of retail stores. By 2027 for example, an estimated 15% of about 1,050 U.S. malls in smaller markets will close, impacting local employment levels, local government revenue streams (tax dollars), and neighborhood character.~~

~~While it is unclear what impact e-commerce will have on employment and brick and mortar retail, it seems probable that e-commerce sales will continue to grow, shifting business away from some types of retail. Over the next decades, communities must begin considering how to redevelop and reuse retail buildings in shopping centers, along corridors, and in urban centers.~~

The types of retail and related services that remain will likely be sales of goods that people prefer to purchase in person or that are difficult to ship and return (e.g., large furniture), specialty goods, groceries and personal goods that maybe needed immediately, restaurants, and experiences (e.g., entertainment or social experiences). According to the Urban Land Institute, in the post-disruption era of retail, new trends in this sector are beginning to emerge. These changes include the convergence of technology and shopping, as businesses focus on brand awareness and customer engagement via digital channels in the physical retail space.²⁶

In addition to dynamics with e-commerce, other factors influencing changes in retail include the growth of big box stores, income inequality, and changing preferences. The New York Times reported that while Amazon had \$38 billion in sales between 2000 and 2013, Costco had about \$50 billion and Sam's Club had about \$32 billion.²⁷ The other factors influencing traditional retail—income inequality and emphasis on services over goods—result in either less consumer spending overall or changes in preferences of consumers who increasingly spend more on services or experiences.

This shift in the retail industry is also described in the *Three-Mile Lane Area Plan: Market Analysis*, which documents proactive steps to adapt to the changing retail landscape by "commissioning studies of the marketplace and developing new strategies to maintain

²⁵ U.S. Census Bureau, Monthly Retail Trade, Latest Quarterly E-Commerce Report. Retrieved online at: <https://www.census.gov/retail/index.html#ecommerce>

²⁶ Diane Hoskins. "Three Trends Shaping Retail's Great Transformation." *Urban Land Institute*, September 3, 2019. Retrieved from: <https://urbanland.uli.org/economy-markets-trends/three-trends-shaping-retails-great-transformation/>

²⁷ Austan Goolsbee. "Never Mind the internet. Here's What's Killing Malls." *The New York Times*. February 14, 2020 <https://www.nytimes.com/2020/02/13/business/not-internet-really-killing-malls.html>

and foster better retail environments.”²⁸ It specifically describes the difference between “experiential consumerism” and other types of retail that are more likely to directly compete with e-commerce. Examples of “experiential consumerism” include dining, grocery, health and fitness clubs, etc.²⁹ These types of retail are typically located on main streets and neighborhood or commercial centers.

- **The importance of high-quality natural resources.** The relationship between natural resources and local economies has changed as the economy has shifted away from resource extraction. High-quality natural resources continue to be important in some states, especially in the Western U.S. Increases in the population and in households’ incomes, plus changes in tastes and preferences have dramatically increased demands for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such amenities contribute to a region’s quality of life and play an important role in attracting both households and firms.³⁰
- **Continued increase in demand for energy.** Energy prices are forecasted to increase over the planning period. While energy use per capita is expected to decrease through 2050, total energy consumption will increase with rising population. Energy consumption is expected to grow primarily from industrial (0.7%) and, to a lesser extent, commercial users (0.2%). Residential and transportation consumption are forecasted to decrease (-0.2% for both). This decrease in energy consumption for transportation is primarily due to increased federal standards and increased technology for energy efficiency in vehicles. The unspecified sector, which is made up of consumption not attributed to residential, commercial, industrial, or transportation, is forecasted to increase consumption by 1.4% through 2050. Going forward through the projection period, potential changes in federal laws (such as decreases in car emissions) leave energy demand somewhat uncertain.

Energy consumption by type of fuel is expected to change over the planning period. By 2050, the U.S. will continue to shift from crude oil towards natural gas and renewables. For example, from 2018 to 2050, the Energy Information Administration projects that U.S. energy consumption of motor gasoline will average a 0.9% annual decrease, while consumption of renewable sources will grow at 1.6% per year and natural gases liquefied for exporting will grow 5.0% per year through 2050. With increases in energy efficiency, strong domestic production of energy, and relatively flat demand for energy by some industries, the U.S. will be able to be a net exporter of energy over the 2018 to

²⁸ McMinnville Three Mile Lane Area Plan: Market Analysis, Leland Consulting Group, April 2019.

²⁹ Ibid. pg 36.

³⁰ For a more thorough discussion of relevant research, see, for example, Power, T.M. and R.N. Barrett. 2001. *Post-Cowboy Economics: Pay and Prosperity in the New American West*. Island Press, and Kim, K.-K., D.W. Marcouiller, and S.C. Deller. 2005. “Natural Amenities and Rural Development: Understanding Spatial and Distributional Attributes.” *Growth and Change* 36 (2): 273-297.

2050 period. Demand for electricity is expected to increase 0.2% per year annually over 2018 to 2050 as the population grows and economic activity increases.³¹

- **Impact of rising energy prices on commuting patterns.** As energy prices increase over the planning period, energy consumption for transportation will decrease. These increasing energy prices may decrease willingness to commute long distances, though with expected increases in fuel economy, it could be that people commute further while consuming less energy.³² Over 2018 to 2038, the U.S. Energy Information Administration estimates in its forecast that the decline in transportation energy consumption is a result of increasing fuel economy offsetting the total growth in vehicle miles traveled (VMT). VMT for passenger vehicles is forecasted to increase through 2050.
- **Potential impacts of global climate change.** The consensus among the scientific community that global climate change is occurring expounds important ecological, social, and economic consequences over the next decades and beyond.³³ Extensive research shows that Oregon and other western states already have experienced noticeable changes in climate and predicts that more change will occur in the future.³⁴

In the Pacific Northwest, climate change is likely to (1) increase average annual temperatures, (2) increase the number and duration of heat waves, (3) increase the amount of precipitation falling as rain during the year, (4) increase the intensity of rainfall events, and 5) increase sea level. These changes are also likely to reduce winter snowpack and shift the timing of spring runoff earlier in the year.³⁵

³¹ Energy Information Administration, 2019, *Annual Energy Outlook 2019 with Projections to 2050*, U.S. Department of Energy, January 2019. <https://www.eia.gov/outlooks/aeo/pdf/AEO2019.pdf>. Note, the cited growth rates are shown in the Executive Summary and can be viewed here: <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=1-AEO2019&cases=ref2019&sid=&sourcekey=0>.

³² Energy Information Administration, 2019, *Annual Energy Outlook 2019 with Projections to 2050*, U.S. Department of Energy, January 2019.

³³ Karl, T.R., J.M. Melillo, and T.C. Peterson, eds. 2009. *Global Climate Change Impacts in the United States*. U.S. Global Change Research Program. June. Retrieved June 16, 2009, from www.globalchange.gov/usimpacts; and Pachauri, R.K. and A. Reisinger, eds. 2007. *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II, and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*.

³⁴ Doppelt, B., R. Hamilton, C. Deacon Williams, et al. 2009. *Preparing for Climate Change in the Upper Willamette River Basin of Western Oregon*. Climate Leadership Initiative, Institute for a Sustainable Environment, University of Oregon. March. Retrieved June 16, 2009, from <http://climlead.uoregon.edu/pdfs/willamettereport3.11FINAL.pdf> and Doppelt, B., R. Hamilton, C. Deacon Williams, et al. 2009. *Preparing for Climate Change in the Rogue River Basin of Southwest Oregon*. Climate Leadership Initiative, Institute for a Sustainable Environment, University of Oregon. March. Retrieved June 16, 2009 from <http://climlead.uoregon.edu/pdfs/ROGUE%20WSFINAL.pdf>

³⁵ Mote, P., E. Salathe, V. Duliere, and E. Jump. 2008. *Scenarios of Future Climate for the Pacific Northwest*. Climate Impacts Group, University of Washington. March. Retrieved June 16, 2009, from <http://cses.washington.edu/db/pdf/moteetal2008scenarios628.pdf>; Littell, J.S., M. McGuire Elsner, L.C. Whitely Binder, and A.K. Snover (eds). 2009. "The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate - Executive Summary." *In The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate*, Climate Impacts Group, University of Washington. Retrieved June 16, 2009, from www.cses.washington.edu/db/pdf/

These anticipated changes point toward some of the ways that climate change is likely to impact ecological systems and the goods and services they provide. There is considerable uncertainty about how long it would take for some of the impacts to materialize and the magnitude of the associated economic consequences. Assuming climate change proceeds as today's models predict, however, some of the potential economic impacts of climate change in the Pacific Northwest will likely include:³⁶

- *Potential impact on agriculture and forestry.* Climate change may impact Oregon's agriculture through changes in growing season, temperature ranges, and water availability.³⁷ Climate change may impact Oregon's forestry through an increase in wildfires, a decrease in the rate of tree growth, a change in the mix of tree species, and increases in disease and pests that damage trees.³⁸
- *Potential impact on tourism and recreation.* Impacts on tourism and recreation may range from (1) decreases in snow-based recreation if snow-pack in the Cascades decreases, (2) negative impacts to tourism along the Oregon Coast as a result of damage and beach erosion from rising sea levels,³⁹ (3) negative impacts on availability of water summer river recreation (e.g., river rafting or sports fishing) as a result of lower summer river flows, and (4) negative impacts on the availability of water for domestic and business uses.

Short-term national trends will also affect economic growth in the region, but these trends are difficult to predict. At times, these trends may run counter to the long-term trends described above. A recent example is the downturn in economic activity in 2008 and 2009 following declines in the housing market and the mortgage banking crisis. The result of the economic downturn was decreases in employment related to the housing market, such as construction and real estate. As these industries recover, they will continue to play a significant role in the national, state, and local economy over the long run. This report takes a long-run perspective on economic conditions (as the Goal 9 requirements intend) and does not attempt to predict the impacts of short-run national business cycles on employment or economic activity.

wacciaexecsummary638.pdf; Madsen, T. and E. Figdor. 2007. *When it Rains, it Pours: Global Warming and the Rising Frequency of Extreme Precipitation in the United States*. Environment America Research & Policy Center and Frontier Group.; and Mote, P.W. 2006. "Climate-driven variability and trends in mountain snowpack in western North America." *Journal of Climate* 19(23): 6209-6220.

³⁶ The issue of global climate change is complex and there is a substantial amount of uncertainty about climate change. This discussion is not intended to describe all potential impacts of climate change but to present a few ways that climate change may impact the economy of cities in Oregon and the Pacific Northwest.

³⁷ "The Economic Impacts of Climate Change in Oregon: A preliminary Assessment," Climate Leadership Initiative, Institute for Sustainable Environment, University of Oregon, October 2005.

³⁸ "Economic Impacts of Climate Change on Forest Resources in Oregon: A Preliminary Analysis," Climate Leadership Initiative, Institute for Sustainable Environment, University of Oregon, May 2007.

³⁹ "The Economic Impacts of Climate Change in Oregon: A preliminary Assessment," Climate Leadership Initiative, Institute for Sustainable Environment, University of Oregon, October 2005.

State Trends

Short-Term Trends

According to the Oregon Office of Economic Analysis (OEA), the Oregon economy “is on firmer ground today following a rocky start to the year...” They emphasize, however, that the economy continues to strike the “sweet spot” despite a rocky start to 2019.⁴⁰ The OEA also reports that although the Oregon economy has been slowing down over the last couple of years and is not outpacing the nation any longer, its “growth is strong enough to keep up with a growing population but also deliver economic and income gains to Oregonians.”⁴¹

Wages in Oregon continue to remain below the national average, but they continue to rise and remain strong, staying at their highest point relative to the state’s mill closures in the 1980s.⁴² By the end of 2019, the OEA forecasts 39,800 jobs will be added to Oregon’s economy. This is an approximate 2.1% annual growth in total nonfarm employment relative to 2018 levels.⁴³ The health services, professional and business services, leisure and hospitality, retail trade, and manufacturing industries are forecasted to account for well over half of the total job growth in Oregon for 2019. Oregon continues to have an advantage in job growth compared to other states, due to its industrial sector and in-migration flow of young workers in search of jobs.

The housing market continues to recover as Oregon’s economy improves, though new supply is not keeping up with demand. As a result, prices continue to rise to considerable levels and the OEA reports housing “(in)affordability is becoming a larger risk” to Oregon’s economic outlook.⁴⁴ Oregon is seeing an increase in household formation rates, which is good for the housing market as this will “help drive up demand for new houses.”⁴⁵ Though younger Oregonians are tending to live at home with their parents longer, the aging Millennial generation (from their early 20s to mid-to-late 30s) and the state’s increase in migration will drive demand for homes in the coming years. Housing starts in 2019 are on track to reach 20,600 units and in 2020, starts are expected to increase to 21,800. Beyond 2020, the OEA forecasts an average growth of 24,000 units per year to satisfy the demand for Oregon’s growing population and to make up for the under development of housing post-recession.⁴⁶

The Oregon Index of Leading Indicators (OILI) continues to grow quite rapidly in 2019 despite a decrease in 2018. The leading indicators showing improvement are: air freight, consumer sentiment, and withholding. Indicators that are slowing down include: help wanted ads, housing permits, industrial production, initial claims, the manufacturing purchasing managers

⁴⁰ Office of Economic Analysis. Oregon Economic and Revenue Forecast, May 2019. Vol. XXXIX, No. 2, page 2. Retrieved from: <https://www.oregon.gov/das/OEA/Documents/forecast0519.pdf>.

⁴¹ *Ibid*, page 2.

⁴² *Ibid*, page 6.

⁴³ *Ibid*, page 36.

⁴⁴ *Ibid*, page 13.

⁴⁵ *Ibid*, page 12.

⁴⁶ *Ibid*, page 12.

index (PMI), new incorporations, and the Oregon Dollar Index. The one indicator not improving at this point in time is semiconductor billings. Relative to their September 2018 forecast, many economic indicators in their May 2019 forecast have changed from *improving* to *slowing*, which further illustrates the slowing down of Oregon's economy after several years of extended growth.⁴⁷

Oregon's economic health is dependent on export markets. The value of Oregon exports in 2018 was \$22.3 billion, a 2% growth from 2017. In 2018, Oregon's exports made up approximately 9.4% of its total 2018 GDP.⁴⁸ The countries that Oregon exports the most to are China (21.4% of total Oregon exports), Canada (14.4%), Japan (9.8%), South Korea (7.6%), Malaysia (6.6%), and Vietnam (5.0%).⁴⁹ With the escalating trade war occurring overseas, specifically with China, Oregon exports are left potentially vulnerable, as China is a top destination for Oregon exports.⁵⁰ The OEA notes that it is too soon to assess the disruptiveness of the trade war on global supply chains, however, developments will be tracked as it continues. An economic slowdown across many parts of Asia will have a spillover effect on the Oregon economy.

Long-term Trends

State, regional, and local trends will also affect economic development in McMinnville over the next 20 years. The most important of these trends includes: continued in-migration from other states, distribution of population and employment across the state, and change in the types of industries in Oregon.

- **Continued in-migration from other states.** Oregon will continue to experience in-migration (more people moving *to* Oregon than *from* Oregon) from other states, especially California and Washington. From 1990 to 2018, Oregon's population increased by about 1.35 million, 69% of which was from people moving into Oregon (net migration). The average annual increase in population from net migration over the same time period was approximately 32,000 persons. During the early- to mid-1990's, Oregon's net migration was highest, reaching over 60,000 in 1991, with another relatively high peak of 57,100 persons in 2017. Oregon has not seen negative net migration since the early- to mid-1980's.⁵¹
- **Forecast of job growth.** Total nonfarm employment is expected to increase from 1.95 million in 2019 to 2.04 million in 2022, an increase of 88,000 jobs. The industries with the largest growth are forecasted to be Government, Health Services, Professional and

⁴⁷ *Ibid*, page 9.

⁴⁸ U.S. Bureau of Economic Analysis. Gross Domestic Product (GDP) by State (Millions of current dollars). Retrieved from: <https://apps.bea.gov/iTable/indexregional.cfm>

⁴⁹ United States Census Bureau. State Exports from Oregon, 2015-2018. Retrieved from: <https://www.census.gov/foreign-trade/statistics/state/data/or.html>.

⁵⁰ Office of Economic Analysis. Oregon Economic and Revenue Forecast, May 2019. Vol. XXXIX, No. 2, page 2.

⁵¹ Portland State University Population Research Center. 2018 Annual Population Report Tables. April 2019. Retrieved from: <https://www.pdx.edu/prc/population-reports-estimates>.

Business Services, Leisure and Hospitality, and Retail, accounting for 89% of employment growth.⁵²

- **Continued importance of manufacturing to Oregon’s economy.** Oregon’s exports totaled \$19.4 billion in 2008, nearly doubling since 2000, and reached \$22.3 billion in 2018. The majority of Oregon exports go to countries along the Pacific Rim, with China, Canada, Japan, South Korea, Malaysia, and Vietnam as top destinations. Oregon’s largest exports are tied to high tech and mining, as well as agricultural products.⁵³ Manufacturing employment is concentrated in five counties in the Willamette Valley or Portland area: Washington, Multnomah, Lane, Clackamas, and Marion Counties.⁵⁴
- **Shift in manufacturing from natural resource-based to high-tech and other manufacturing industries.** Since 1970, Oregon started to transition away from reliance on traditional resource-extraction industries. A significant indicator of this transition is the shift within Oregon’s manufacturing sector, with a decline in the level of employment in the Lumber & Wood Products industry and concurrent growth of employment in other manufacturing industries, such as high-technology manufacturing (Industrial Machinery, Electronic Equipment, and Instruments), Transportation Equipment manufacturing, and Printing and Publishing.⁵⁵
- **Income.** Oregon’s income and wages are below that of a typical state. However, Oregon wages continue to grow and remain strong, and they are at their highest point relative to the mill closures resulting from the early 1980’s recession. In 2018, the average annual wage in Oregon was \$53,058, and in 2017, the median household income in Oregon was \$60,212 (compared to national average wages of \$57,265 in 2018, and national household income of \$60,336 in 2017).⁵⁶ Total personal income (all classes of income, minus Social Security contributions, adjusted for inflation) in Oregon is expected to increase by 22%, from \$219.5 billion in 2019 to \$267.6 billion in 2023.⁵⁷ Per capita income is expected to increase by 16% over the same time period, from \$51,700 (thousands of dollars) in 2019 to \$60,200 in 2023 (in nominal dollars).⁵⁸

⁵² Office of Economic Analysis. Oregon Economic and Revenue Forecast, May 2019. Vol. XXXIX, No. 2, page 36.

⁵³ United States Census Bureau. State Exports from Oregon, 2015-2018. Retrieved from: <https://www.census.gov/foreign-trade/statistics/state/data/or.html>.

⁵⁴ Oregon Employment Department. *Employment and Wages by Industry (QCEW)*. 2018 Geographic Profile, Manufacturing (31-33). Retrieved from: qualityinfo.org.

⁵⁵ Although Oregon’s economy has diversified since the 1970’s, natural resource-based manufacturing accounts for about 37% of employment in manufacturing in Oregon in 2018, with the most employment in Food Manufacturing (29,900) and Wood Product Manufacturing (23,400) (QCEW).

⁵⁶ Average annual wages are for “Total, all industries,” which includes private and public employers. Oregon Quarterly Census of Employment and Wages, 2018. Retrieved from: <https://www.qualityinfo.org>; Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2017; Total, U.S. Census American Community Survey 1-Year Estimates, 2017, Table B19013.

⁵⁷ Office of Economic Analysis. Oregon Economic and Revenue Forecast, May 2019. Vol. XXXIX, No. 2, page 36.

⁵⁸ *Ibid*, page 36.

- **Small businesses continue to account for a large share of employment in Oregon.** While small firms played a large part in Oregon’s expansion between 2003 and 2007, they also suffered disproportionately in the recession and its aftermath (64% of the net jobs lost between 2008 and 2010 was from small businesses).

In 2016, small businesses (those with 100 or fewer employees) accounted for 95% of privately-owned businesses in Oregon. Said differently, most businesses in Oregon are small (in fact, 76% of all businesses have fewer than 10 employees), but the largest share of Oregon’s employees work for medium-to-large businesses (those with 100 or more employees).⁵⁹

The average annualized payroll per employee for small businesses was \$37,958 in 2016, which is considerably less than that for large businesses (\$57,488) and the statewide average for all businesses (\$47,746).⁶⁰ Younger workers are important to continue growth of small businesses across the nation. More than one-third of Millennials (those born between 1980 - 1999) are self-employed, with approximately half to two-thirds interested in becoming an entrepreneur. Furthermore, in 2011, about 160,000 startup companies were created each month; 29% of these companies were founded by people between 20 to 34 years of age.⁶¹ According to the Kauffman Indicators of Entrepreneurship, in 2018, about 79% of startups nationwide were still active after one year. On average, startups nationwide created approximately 5.2 jobs in their first year (when normalized by population).⁶² However, it is typically the case that startups are important for job creation on a longer time horizon, well beyond their first year, as “fewer than half of all startups in America are still in business after five years.”⁶³

- **Entrepreneurship in Oregon.** The creation of new businesses is vital to Oregon’s economy as their formations generate new jobs and advance new ideas and innovations into markets. They also can produce more efficient products and services to better serve local communities. The Kauffman Foundation reports several statistics at the state level related to entrepreneurship. They report: the rate of new entrepreneurs, the opportunity share of new entrepreneurs (new entrepreneurs who created a business by choice instead of necessity), startup early job creation (the average number of jobs created by startups in their first year, normalized by population), and startup early survival rate (the percent of startups that are still active after one year).

According to Kauffman’s indicators, Oregon’s opportunity share of new entrepreneurs is at its highest relative point post-recession, reaching approximately 80% in 2017, up

⁵⁹ U.S. Census Bureau, 2016 Statistics of U.S. Businesses, Annual Data, Enterprise Employment Size, U.S and States.

⁶⁰ *Ibid.*

⁶¹ Cooper, Rich, Michael Hendrix, Andrea Bitely. (2012). "The Millennial Generation Research Review." Washington, DC: The National Chamber Foundation. Retrieved from: <https://www.uschamberfoundation.org/sites/default/files/article/foundation/MillennialGeneration.pdf>.

⁶² Kauffman Foundation. *Kauffman Indicators of Entrepreneurship*. Indicators: Startup Early Job Creation and Startup Early Survival Rate. Information retrieved on December 19, 2019 from: <https://indicators.kauffman.org/data-table>

⁶³ Nish Acharya. “Small Business Are Having A Bigger Impact on Job Creation Than Large Corporations.” Forbes, May 5, 2019. <https://www.forbes.com/sites/nishacharya/2019/05/05/who-is-creating-jobs-in-america/#5c74c156597d>

from its post-recession low of 71% in 2012. Startup early job creation also continues to increase. In 2017, the average number of jobs created by startups in their first year reached 5.24, which is comparable to the national average of 5.27. Relative to Oregon's post-recession low of 3.80 in 2010, the average number of startup jobs have increased approximately 38%. However, the two remaining entrepreneurial indicators, the rate of new entrepreneurs and startup early survival rate, are declining somewhat in Oregon. In 2017, the rate of new entrepreneurs decreased by 0.02 percentage points, from 0.34% in 2016 to 0.32% in 2017, though Oregon's 2017 rate aligns closely with the national average of 0.33%. For Oregon's startup early survival rate, it declined to 78.4% in 2017 from a post-recession peak of 80.1% in 2015. Though this decline is not substantially large, the downward trend suggests startups, on average, are not persisting as well as they used to relative to two years ago. Oregon's startup early survival rate in 2017 is 1.4 percentage points below the national average of 79.8%.⁶⁴

Moreover, in 2018, the Oregon OEA reports new business applications in Oregon are increasing. They do, however, simultaneously note startup businesses "are a smaller share of all firms than in the past."⁶⁵ Though this measurement of economic activity does not constitute a full understanding of how well entrepreneurship is performing, it does provide an encouraging signal.

Regional and Local Trends

Throughout this section and the report, McMinnville is compared to Yamhill County and the State of Oregon. These comparisons are to provide context for changes in McMinnville's socioeconomic characteristics.

Availability of Labor

The availability of trained workers in McMinnville will impact development of its economy over the planning period. A skilled and educated populace can attract well-paying businesses and employers and spur the benefits that follow from a growing economy. Key trends that will affect the workforce in McMinnville over the next 20 years include its growth in its overall population, growth in the senior population, and commuting trends.

Growing Population

Population growth in Oregon tends to follow economic cycles. Oregon's population grew from 2.8 million people in 1990 to nearly 4.2 million people in 2018, an increase of over 1,350,000 people at an average annual growth rate of 1.4%. Oregon's growth rate slowed to 1.1% annual growth between 2000 and 2018.

⁶⁴ Kauffman Foundation. *Kauffman Indicators of Entrepreneurship. State Profile: Oregon*. Retrieved from: <https://indicators.kauffman.org/state/oregon>

⁶⁵ Lehner, Josh. (August 2018). "Start-Ups, R&D, and Productivity." Salem, OR: Oregon Office of Economic Analysis. Retrieved from: <https://oregoneconomicanalysis.com/2015/03/13/start-ups-and-new-business-formation/>.

McMinnville’s population increased by 15,916 residents over 1990 to 2018, nearly doubling in size. This growth is reflected in its average annual growth rate (AAGR) of 2.3% (and notably, the growth rate used for the 2000-2020 period in the 2002 McMinnville Housing Needs Analysis), which is 0.9 percentage points higher than the State’s rate of 1.4%. Similar to McMinnville, Yamhill County’s population grew more rapidly than the State, averaging 1.8% growth year-over-year. The County added 41,864 residents over 1990 to 2018 and McMinnville accounts for about 38% of this growth.

Exhibit 12. Population Growth, McMinnville, Yamhill County, and Oregon, 1990 – 2018

Geography					Change, 1990 - 2018		
	1990	2000	2010	2018	Number	Percent	AAGR
McMinnville	17,894	26,499	32,930	33,810	15,916	89%	2.3%
Yamhill County	65,551	84,992	95,925	107,415	41,864	64%	1.8%
Oregon	2,842,337	3,421,399	3,844,195	4,195,300	1,352,963	48%	1.4%

Source: U.S. Census Bureau, 1990, 2000, and 2010. Portland State University Population Estimates, 2018.

Age Distribution

The number of people aged 65 and older in the U.S. is expected to increase by nearly three-quarters by 2050, while the number of people under age 65 will only grow by 16%. The economic effects of this demographic change include a slowing of the growth of the labor force, need for workers to replace retirees, aging of the workforce for seniors that continue working after age 65, an increase in the demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.⁶⁶

Exhibit 13 through Exhibit 16 show the following trends:

- McMinnville’s population is aging slightly faster than Yamhill County’s population. Populations of both McMinnville and Yamhill County are aging faster than Oregon’s population with respect to each region’s growth in median age.
- Over the 2000 to 2013-2017 period, those in the age groups of 45 to 64 and 65 years and older in McMinnville increased by 59% and 48%, respectively. These age groups grew substantially more than all other age categories. This suggests that McMinnville may be retaining residents throughout their mid-to-late careers as they age and/or attracting more people in their mid-to-late careers.
- Yamhill County’s population is expected to continue to age, with people 60 years and older increasing from 23% of the population in 2017 to 28% of the population in 2035. This is consistent with statewide trends. McMinnville and Yamhill County may continue to attract mid-life and older workers over the twenty-year planning period. While the share of retirees in these respective areas may increase over the next 20 years, availability of people nearing retirement (e.g., 55 to 70 years old) is likely to increase.

⁶⁶ The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2017, *The 2017 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, July 13, 2017. *The Budget and Economic Outlook: Fiscal Years 2018 to 2028*, April 2018.

People in this age group may provide sources of skilled labor, as people continue to work until later in life. These skilled workers may provide opportunities to support business growth in these areas.

McMinnville’s median age increased by about 4.6 years between 2000 and 2013-2017.

This change is slightly larger than Yamhill County’s increase of 4.1 years. Median age increases for both regions exceeded Oregon’s change of 2.8.

Exhibit 13. Median Age, McMinnville, Yamhill County, and Oregon, 2000 to 2013-2017

Source: U.S. Census Bureau, 2000 Decennial Census, Table P013; American Community Survey 2013-2017 5-year estimates, Table B01002.

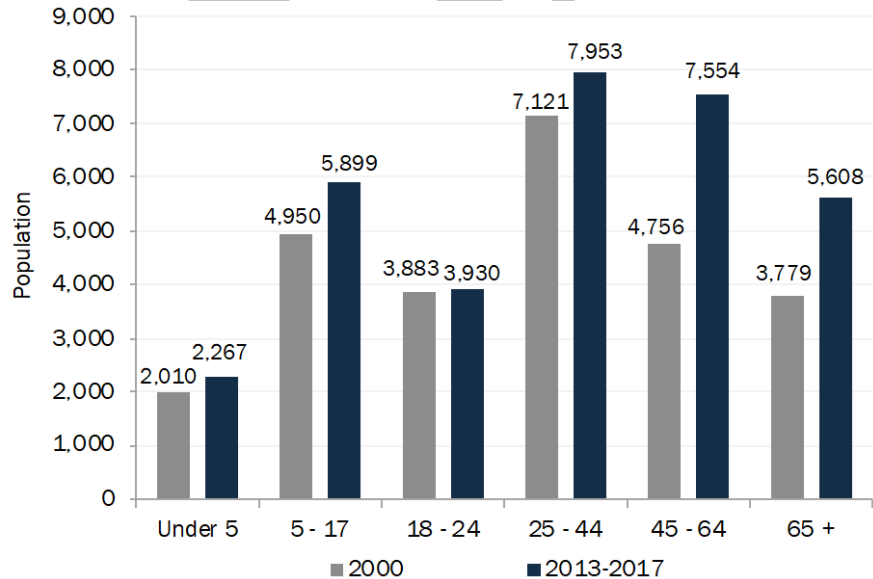
2000	31.5 McMinnville	34.1 Yamhill County	36.3 Oregon
2013-17	36.1 McMinnville	38.2 Yamhill County	39.2 Oregon

Over the 2000 to 2013-2017 period, McMinnville’s largest population increase was for those 45 to 64 (59%) and those aged 65 and older (48%).

This is consistent with statewide trends, where the aforementioned age categories increased the most relative to younger age categories. The Oregon population of those 45 to 64 years of age increased by 30% and those 65 and older increased by 50%.

Exhibit 14. McMinnville Population Change by Age Group, 2000 to 2013-2017

Source: U.S. Census Bureau, 2000 Summary File; American Community Survey 2013-2017 5-year estimates, Table B01001.



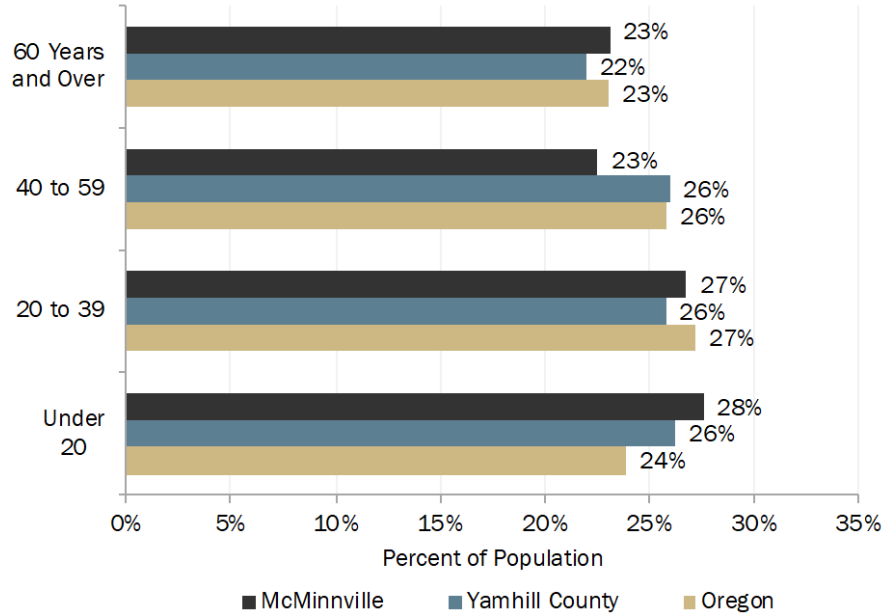
During the 2013-2017 period, the age distribution of McMinnville residents was roughly even across each category, with a slightly smaller proportion of middle-to-older aged adults (40 and older) relative to those 39 years of age and younger.

About 46% of McMinnville residents are 40 years and older and 54% are 39 and younger.

Additionally, the proportion of McMinnville residents under 20 years of age was four percentage points higher than Oregon.

Exhibit 15. Population Distribution by Age, McMinnville, Yamhill County, and Oregon, 2013-2017

Source: U.S. Census Bureau, American Community Survey, 2013-2017 5-year estimate, Table B01001.

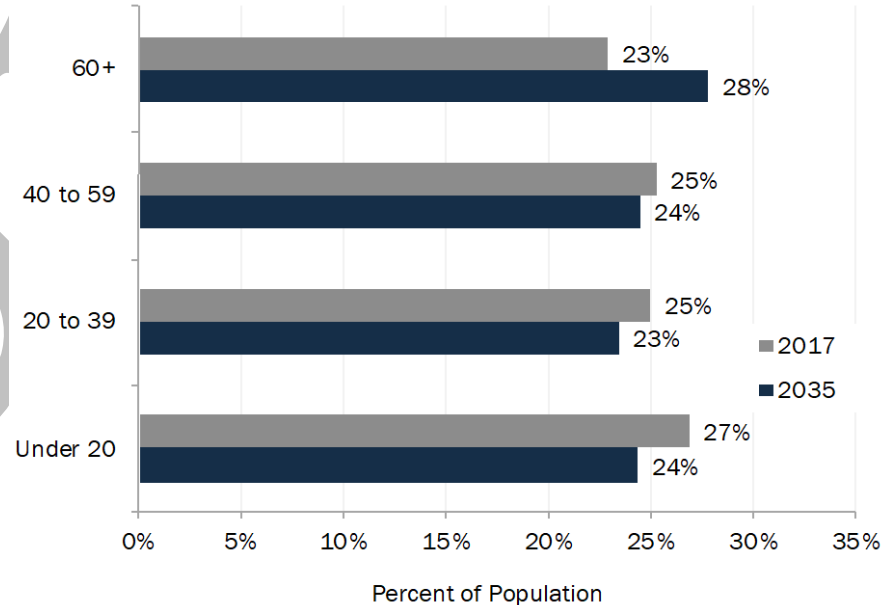


By 2035, Yamhill County will have a larger share of residents older than 60 than it does today. The population forecast for all other age groups projects smaller County population shares by 2035.

The share of residents aged 60 years and older will account for 28% of Yamhill County's population, compared to 23% in 2017.

Exhibit 16. Population Growth by Age Group, Yamhill County, 2017 - 2035

Source: Oregon Population Forecast, 2017.



Income

Income and wages affect business decisions for locating in a city. Areas with higher wages may be less attractive for industries that rely on low-wage workers. McMinnville’s median household income (\$50,299) was below the County median (\$58,392) during the 2013-2017 period. Average wages at businesses in McMinnville (\$40,105) were lower than the County average (\$42,315).⁶⁷

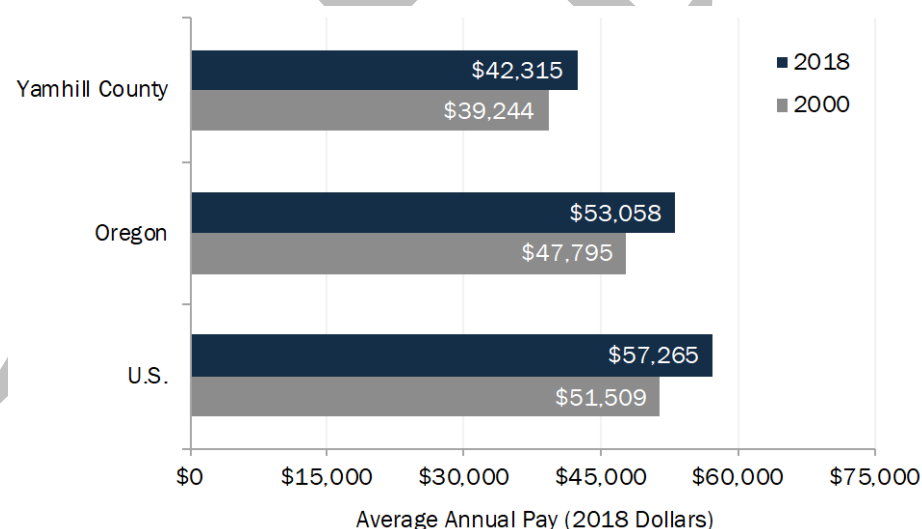
Between 2000 and 2018, Yamhill County’s average wages increased as they also did in Oregon and the nation. When adjusted for inflation to 2018 dollars, average annual wages grew by 8% in Yamhill County, 11% in Oregon, and 11% in the nation.

From 2000 to 2018, average annual wages rose in Yamhill County, Oregon, and the nation.

In 2018, average annual wages were \$42,321 in Yamhill County, \$53,058 in Oregon, and \$57,265 across the nation.

Exhibit 17. Average Annual Wage, Covered Employment, Yamhill County, Oregon, and the U.S., 2000 to 2018, Inflation-adjusted 2018 Dollars

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages.
Note: 2018 average annual pay estimates are preliminary, according to the BLS.



Over the 2013-2017 period, the median household income in McMinnville was below that of Yamhill County and Oregon by 14% and 10%, respectively.

Exhibit 18. Median Household Income (MHI),⁶⁸ 2013-2017, Inflation-adjusted 2017 Dollars

Source: U.S. Census Bureau, American Community Survey 2013-2017 5-year estimates, Table B19013.

\$50,299	\$58,392	\$56,119
McMinnville	Yamhill County	Oregon

⁶⁷ According to the Census, Household income includes the income of the householder and other income earners ages 15 or older, thus the mix of sources of income ranges in reporting of household income. Average wage is calculated using Quarterly Census of Employment and Wages data, based on payroll information and number of employees by establishment.

⁶⁸ The Census calculated household income based on the income of all individuals 15 years old and over in the household, whether they are related or not.

McMinnville median family income during the 2013-2017 period, similar to median household income, was below the median family income of both Yamhill County and Oregon by 12% and 15%, respectively.

Exhibit 19. Median Family Income,⁶⁹ 2013-2017

Source: U.S. Census Bureau, American Community Survey 2013-2017 5-year estimates, Table B19113.

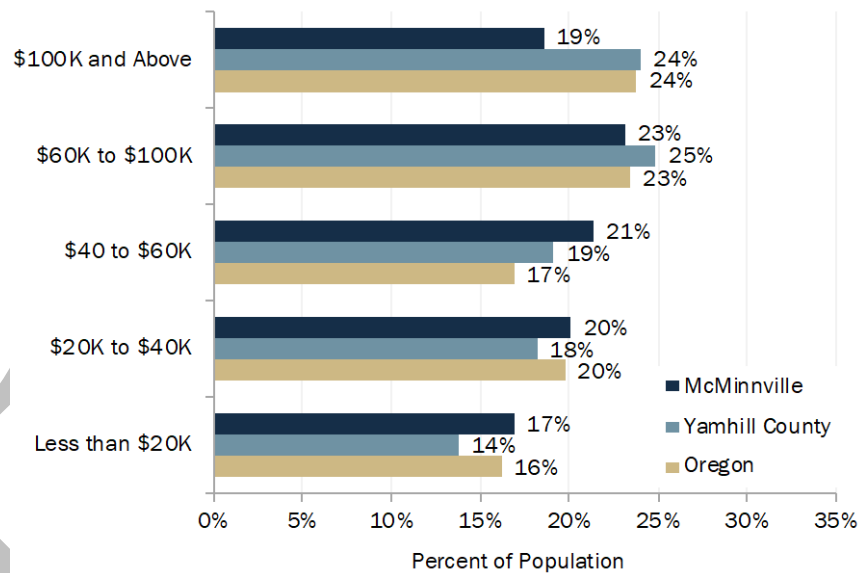
\$58,620 McMinnville	\$66,732 Yamhill County	\$69,031 Oregon
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During the 2013-2017 period, 37% of McMinnville households earned less than \$40,000 annually, compared to 32% of Yamhill County households and 36% of Oregon households.

Over the same period, McMinnville households had a lower proportion of higher income earnings (\$100,000 and above) relative to Yamhill County and Oregon.

Exhibit 20. Household Income by Income Group, McMinnville, Yamhill County, and Oregon, 2013-2017, Inflation-adjusted 2017 Dollars

Source: U.S. Census Bureau, American Community Survey 2013-2017 5-year estimates, Table B19001.



⁶⁹ The Census calculated family income based on the income of the head of household, as identified in the response to the Census forms, and income of all individuals 15 years old and over in the household who are related to the head of household by birth, marriage, or adoption.

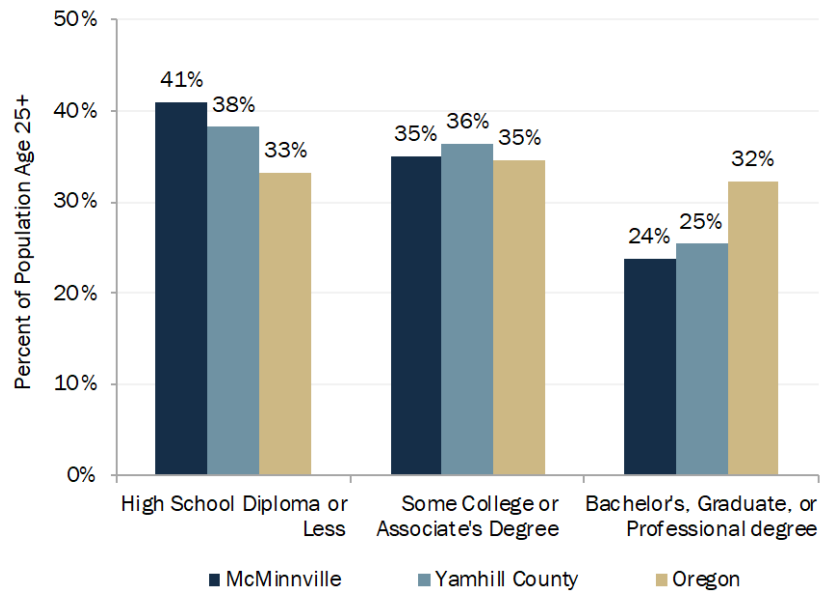
Educational Attainment

The availability of trained, educated workers affects the quality of labor in a community. Educational attainment is an important labor force factor because firms need to be able to find educated workers.

McMinnville's residents are consistent with residents statewide regarding their completion of some college or attainment of an Associate degree; however, attainment of a Bachelor's degree or a professional degree is lower for McMinnville's residents relative to statewide trends.

Exhibit 21. Educational Attainment for the Population 25 Years and Over, McMinnville, Yamhill County, and Oregon, 2013-2017

Source: U.S. Census Bureau, American Community Survey 2013-2017 5-year estimates, Table B15003.



Labor Force Participation and Unemployment

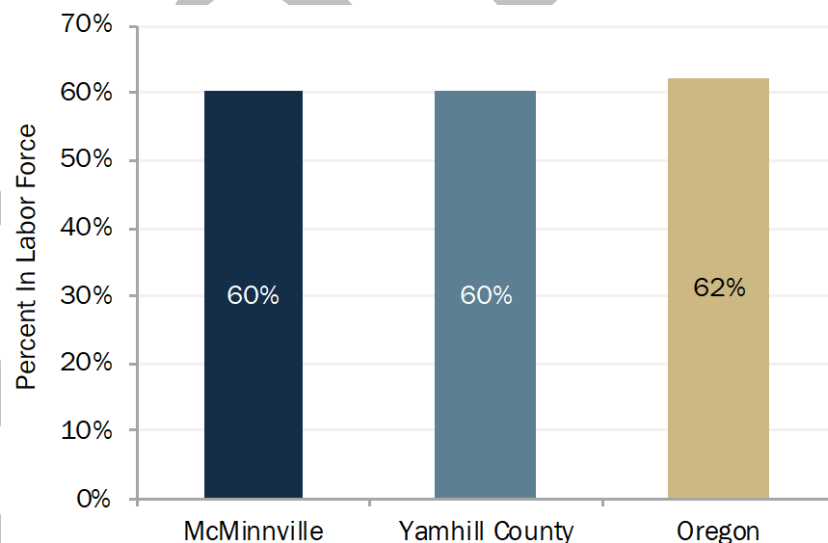
The current labor force participation rate is an important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. Children, retirees, students, and people who are not actively seeking work are not considered part of the labor force. According to the 2013-2017 American Community Survey, Yamhill County had more than 49,000 people in its labor force during that period and McMinnville had close to 15,500 people in its labor force.

In 2017, the Oregon Office of Economic Analysis reported that 64% of job vacancies were difficult to fill. The most common reason for difficulty in filling jobs included a lack of applications (30% of employers' difficulties), lack of qualified candidates (17%), unfavorable working conditions (14%), a lack of soft skills (11%), and a lack of work experience (9%).⁷⁰ These statistics indicate a mismatch between the types of jobs that employers are demanding and the skills that potential employees can provide.

McMinnville's labor force participation rate for the 2013-2017 period is comparable to Yamhill County.

Exhibit 22. Labor Force Participation Rate, McMinnville, Yamhill County, and Oregon, 2013-2017

Source: U.S. Census Bureau, American Community Survey 2013-2017 5-year estimates, Table B23001.



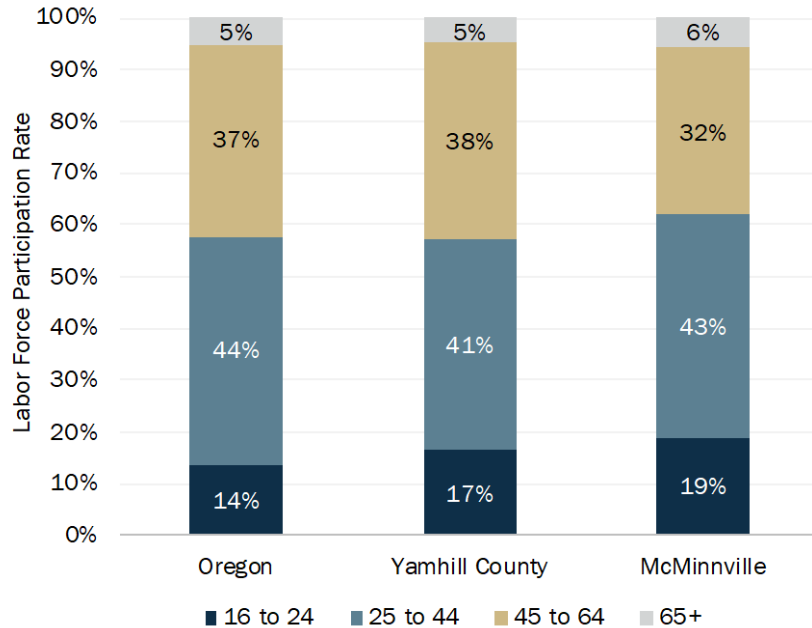
⁷⁰ Oregon's Current Workforce Gaps: Difficult-to-fill Job Openings, Oregon Job Vacancy Survey, Oregon Employment Department, June 2018.

By age group, McMinnville has a larger share of residents aged 16 to 24 participating in the labor force relative to Yamhill County and Oregon.

In contrast, McMinnville has a smaller share of residents aged 45 to 64 participating in the labor force compared to Yamhill County and Oregon.

Exhibit 23. Labor Force Participation Rate, McMinnville, Yamhill County, and Oregon, 2013-2017

Source: U.S. Census Bureau, American Community Survey 2013-2017 5-year estimates, Table S2301.

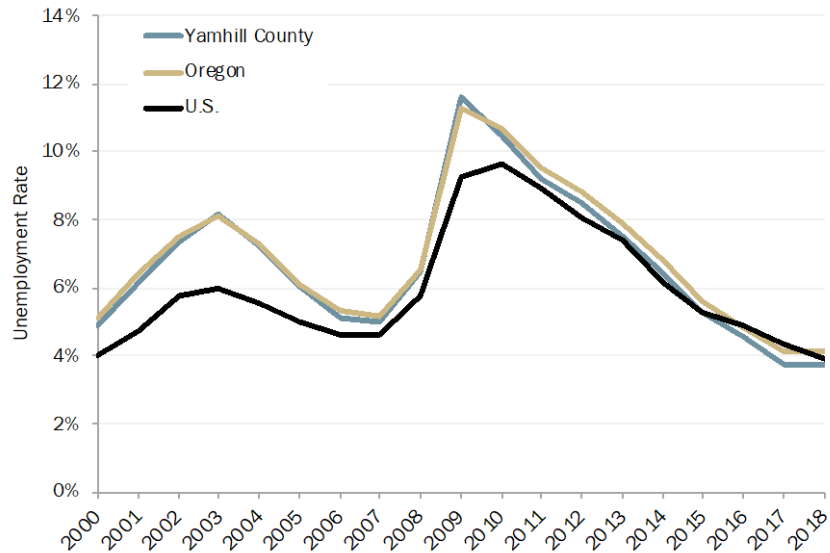


The unemployment rates in Yamhill County, Oregon, and the nation have declined below their respective 2000 rates.

Yamhill County closely follows Oregon's unemployment rate. In 2018, the unemployment rate in Yamhill County was 3.8%. In Oregon, the rate was 3.9%, and in the nation, 4.2%.

Exhibit 24. Unemployment Rate, Yamhill County, Oregon, and the U.S., 2000 - 2018

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics and Labor Force Statistics.



Commuting Patterns

Commuting plays an important role in the McMinnville's economy because employers in these areas are able to access workers from people living in cities across Yamhill County and from the broader Mid-Willamette Valley Region.

Exhibit 26 shows that 38% of people who work in McMinnville reside in McMinnville, 4% commute from Salem, 3% commute from Portland, and 3% from Newberg. The remaining workers commute from various other cities located across the Region.

McMinnville is part of an interconnected regional economy.

Of the approximate 15,080 persons employed in McMinnville (as of 2017), 62% of workers commute to their jobs from outside of the City. The remaining 38% of workers both live and are employed in McMinnville.

Exhibit 25. Commuting Flows, McMinnville, 2017

Source: U.S. Census Bureau, Census On the Map.



As of 2017, about 38% of all people who work in McMinnville also live in McMinnville.

Exhibit 26. Places Where McMinnville Workers Lived,⁷¹ 2017

Source: U.S. Census Bureau, Census On the Map.

38%	4%	3%	3%	3%
McMinnville	Salem	Portland	Newberg	Sheridan

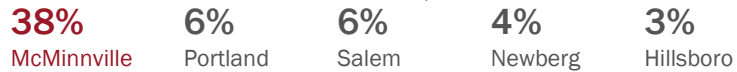
⁷¹ In 2017, 15,080 people worked at businesses in McMinnville, with 38% (5,721) people both employed and working in McMinnville.

About 38% of residents who live in McMinnville also work in McMinnville.

Six percent of McMinnville residents commute to Portland for work and another six percent commute to Salem.

Exhibit 27. Places Where McMinnville Residents were Employed,⁷² 2017

Source: U.S. Census Bureau, Census On the Map.



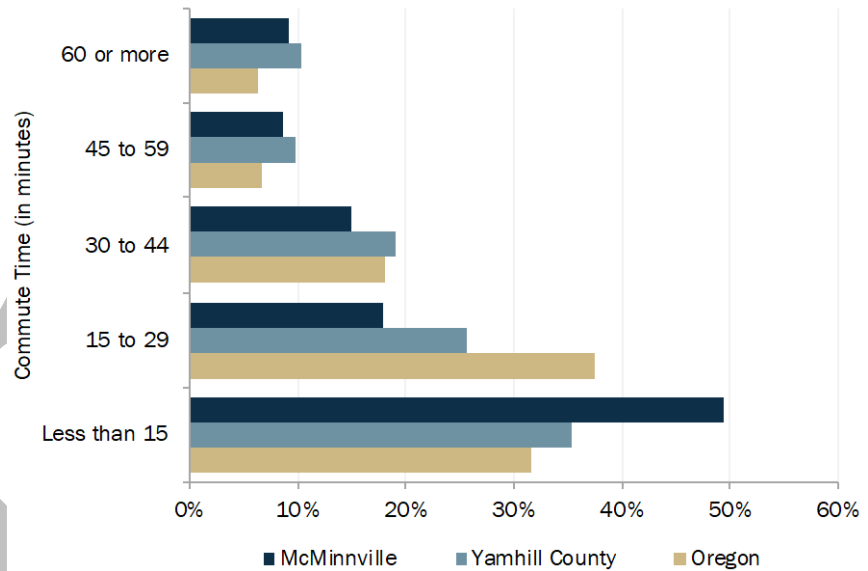
During the 2013-2017 period, about 49% of McMinnville workers had a commute of less than 15 minutes, compared to 35% of Yamhill County workers and 32% of Oregon workers.

Relative to Yamhill County and Oregon workers, McMinnville workers tend to have shorter commute times.

Where the majority (55%) of Oregon workers have commutes between 15 to 44 minutes, only 33% of McMinnville workers have commute times of that length. However, at the higher end of commuting times (45 minutes or more), almost one-fifth (18%) of McMinnville workers spend a sizable amount of time on the road.

Exhibit 28. Commute Time by Place of Residence, McMinnville, Yamhill County, and Oregon, 2013-2017

Source: U.S. Census Bureau, American Community Survey 2013-2017 5-year estimates, Table B08303.



⁷² In 2017, 5,569 residents of McMinnville worked, with 38% of McMinnville residents (5,569 people) both living and employed in McMinnville.

Tourism in the Willamette Valley Region and Yamhill County

Longwoods International provides regional statistics on travel. The following information is from Longwoods International's 2017 Regional Visitor Report for the Willamette Valley Region, which is defined as Benton, Lane (eastern, non-coastal region), Linn, Marion, Polk, and Yamhill counties.⁷³ Broadly, travelers to the Willamette Valley Region accounted for:⁷⁴

- 5.5 million overnight trips in 2017, or 16% of all Oregon overnight travel that year.
- The primary market area for travelers over 2016 and 2017 were Oregon, California, and Washington.⁷⁵ 48% of Willamette Valley visitors came from Oregon, 19% came from California, and 14% came from Washington.
- About 53% of visitors stayed 2 or fewer nights over 2016 and 2017 in the Willamette Valley, 32% stayed 3 to 6 nights, and 15% stayed 7 or more nights. The average nights spent in the Willamette Valley Region was 4.3.
- The average per person expenditures on overnight trips in 2017 ranged from \$9 on recreation, sightseeing, and entertainment to \$35 per night on lodging.
- About 75% of visits to the Willamette Valley Region over 2016 and 2017 were via personally-owned automobiles/trucks, 18% were by rental car, and 13% were via an online taxi service (such as Lyft or Uber).
- Over 2016 and 2017, visitors tended to be middle-to-older aged adults, with the average age being about 48.7. Those aged 18 to 34 made up 24% of overnight visits, 34% were between 35 and 54, and 42% were 55 and older. About 56% of visitors graduated college or completed a post-graduate education. Additionally, 44% of visitors earned less than \$50,000 in household income, 37% earned between \$50,000 and \$99,999, and 19% earned more than \$100,000. The average household income for Willamette Valley visitors was about \$64,560.

⁷³ Travel Oregon. "Oregon 2017: Regional Visitor Report, Willamette Valley Region," Longwoods International, October 2018. Retrieved from: <http://industry.traveloregon.com/research/archive/willamette-valley-oregon-overnight-travel-study-2017-longwoods-international/>.

⁷⁴ Longwoods International issues caution in interpreting these tourism estimates in the Willamette Valley Region as the sample size for the marketable trips this region is low. For this reason, the data reported is a combination of survey data from 2016 and 2017.

⁷⁵ The data reported in this bullet as well as other bullets noting years "2016 and 2017" are based on *marketable trips*. Longwoods International states marketable trips "are defined as those trip types that can be influenced by marketing efforts and include leisure and business-leisure trips."

Yamhill County's direct travel spending increased 139% from 2000 to 2018.

The Willamette Valley Region's direct travel spending increased by 100% over the same period.

Exhibit 29. Direct Travel Spending (\$ millions), 2000 and 2018

Source: Dean Runyan Associates, Oregon Travel Impacts, 1991-2018.

2000	\$1,000	\$56.7
	Willamette Valley Region	Yamhill County
2018	\$2,000	\$135.7
	Willamette Valley Region	Yamhill County

Yamhill County's lodging tax receipts increased 653% over 2006 to 2018.

Exhibit 30. Lodging Tax Receipts (\$ millions), 2006 and 2018

Source: Dean Runyan Associates, Oregon Travel Impacts, 1991-2018.

2006	\$111.0
	Yamhill County
2018	\$835.8
	Yamhill County

Yamhill County's largest visitor spending for purchased commodities is accommodation and food services.

Exhibit 31. Largest Visitor Spending Categories (\$ millions), Yamhill County, 2018

Source: Dean Runyan Associates, Oregon Travel Impacts.

\$27.9	\$6.3	\$3.9
Accommodations and Food Services	Arts, Entertainment, and Recreation	Retail

Yamhill County's largest employment generated by travel spending is also in the accommodations and food services industry.

Exhibit 32. Largest Industry Employment Generated by Travel Spending (thousands), Yamhill County, 2018

Source: Dean Runyan Associates, Oregon Travel Impacts.

1.1 jobs	0.5 jobs	0.1 jobs
Accommodations & Food Services	Arts, Entertainment, and Recreation	Retail

The number of person nights spent in Yamhill County increased from 1,706,000 in 2017 to 1,773,000 in 2018, an increase of 67,000 overnight stays, or 4%. Over the last nine years, from 2010 to 2018, person nights increased approximately 19%.

4. Economic Development Potential

The fundamental purpose of Goal 9 is to make sure that a local government plans for economic development. The planning literature provides many definitions of economic development, both broad and narrow. Broadly,

“Economic development is the process of improving a community’s well-being through job creation, business growth, and income growth (factors that are typical and reasonable focus of economic development policy), as well as through improvements to the wider social and natural environment that strengthen the economy.”⁷⁶

That definition acknowledges that a community’s wellbeing depends in part on narrower measures of economic wellbeing (e.g., jobs and income) and on other aspects of quality of life (e.g., the social and natural environment). In practice, cities and regions trying to prepare an economic development strategy typically use a narrower definition of economic development; they take it to mean business development, job growth, and job opportunity. The assumptions are that:

- Business and job growth are contributors to and consistent with economic development, increased income, and increased economic welfare. From the municipal point of view, investment and resulting increases in property tax are important outcomes of economic development.
- The evaluation of tradeoffs and balancing of policies to decide whether such growth is likely to lead to overall gains in wellbeing (on average and across all citizens and businesses in a jurisdiction, and all aspects of wellbeing) is something that decision makers do after an economic strategy has been presented to them for consideration.

That logic is consistent with the tenet of the Oregon land-use planning program: all goals matter, no goal dominates, and the challenge is to find a balance of conservation and development that is acceptable to a local government and the State. Goal 9 does not dominate, but it legitimizes and requires that a local government focus on the narrower view of economic development regarding economic variables.

In that context, a major part of local economic development policy is about local support for business development and job growth; that growth comes from the creation of new firms, the expansion of existing firms, and the relocation or retention of existing firms. Specifically, new, small businesses (those with fewer than 100 employees) are accounting for a larger share of the job growth in the United States.⁷⁷ This shift toward a focus on entrepreneurship, innovation, and small businesses presents additional options for local support for economic development

⁷⁶ *An Economic Development Toolbox: Strategies and Methods*, Terry Moore, Stuart Meck, and James Ebenhoh, American Planning Association, Planning Advisory Service Report Number 541, October 2006.

⁷⁷ According to the 2018 Small Business Profile from the US Small Business Office of Advocacy, small businesses account for over 99 percent of total businesses in the United States, and their employees account for nearly 50% of American workers. <https://www.sba.gov/sites/default/files/advocacy/2018-Small-Business-Profiles-US.pdf>

beyond firm attraction and retention. Thus, a key question for economic development policy is: *What are the factors that influence business and job growth, and what is the relative importance of each?* Specifically, OAR 660-009-0015(4) requires that cities conduct an assessment of community economic development potential, as part of the EOA. This assessment considers: market factors, infrastructure and public facility availability and access, labor, proximity to suppliers and other necessary business services, regulations, and access to job training.

The local factors that form McMinnville’s competitive advantage are summarized in the subsections below.

Factors Affecting Community Economic Development Potential

OAR 660-009-0015(4) stipulates that relevant economic advantages and disadvantages considered with the EOA “may include but are not limited to” factors of: location, size and buying power of markets; availability of transportation facilities for access and freight mobility; public facilities and public services; labor market factors; access to suppliers and utilities; necessary support services; limits on development due to federal and state environmental protection laws; and educational and technical training programs.” This 2020 EOA update is organized to address these considerations together with other factors distinctive to economic development in McMinnville.

Location, Size & Buying Power of Markets. Location is an economic factor that is prominently mentioned in prior planning documents. The 2019 *MAC-Town 2032 Economic Development Strategic Plan* identifies both strengths and weaknesses related to McMinnville’s location and associated transportation factors. Comparative advantages and disadvantages and their implications for economic opportunity in McMinnville are drawn from the 2013 EOA together with more recent MEDP, SEDCOR, and related industry analyses, summarized as follows.⁷⁸

Advantages:

- *Ease of access – with proximity to Portland, Salem & the Oregon coast.* McMinnville is only 40 miles from Portland, 27 miles from Salem, and 51 miles from Lincoln City on the Oregon coast.⁷⁹
- *Central location to serve local community and regional employment and commercial service needs.* McMinnville is well situated to serve the employment and commercial needs of the local community and a larger market area of approximately 75,000 residents, according to the Three Mile Lane market analysis. The City’s market area encompasses

⁷⁸ The 2020 EOA update provides updated information related to comparative advantages and disadvantages, while keeping the structure of the 2013 EOA. Factors that are no longer relevant to McMinnville were removed.

⁷⁹ Source is www.maps.google.com.

North Willamette Valley region—comprised of Yamhill-Carlton, Chehalem Mountains, McMinnville, Ribbon Ridge, Dundee Hills, and Eola-Amity Hills – has been identified with 503 wineries and 20,279 acres of grapes as of 2018.

In addition to recognition as the leading production area for Oregon’s wine industry, Yamhill County agricultural production adds to both local and visitor appeal. The area is known for quality fresh-to-market products including berries, nuts, milk, eggs, fruits and vegetables – and increasingly for custom/organic livestock production. Nursery crops, grass and legume seeds, Christmas trees, grain and hay add to the diversity of Yamhill County agricultural production – as the 6th leading county in terms of value of production in Oregon in 2017.⁸³

The Evergreen Air Museum attracted an estimated 88,400 visitors in 2018. With over 3 million annual visitors, the Spirit Mountain Casino located 24 miles from downtown McMinnville is widely cited as one of the top visitor draws in the state.⁸⁴

McMinnville also is recognized statewide for its remarkable comeback and current vitality of its historic downtown core area. Promoted as “Oregon’s favorite main street,” the McMinnville Downtown Association characterizes the appeal of downtown in these terms:

“Quaint boutiques, unique shops, and local galleries abound. Music fills the air from our farmers’ market performers and outdoor concerts all summer long, and pours out of our restaurants and pubs on winter evenings.”⁸⁵

Disadvantages:

- *Retail sales leakage occurring due to lack of major comparison retail.* As described by the Three Mile Lane market analysis, there is a considerable retail sales leakage of an estimated \$208 million annually throughout the McMinnville Market Area. Factoring in household growth projections, the market analysis forecasts demand for an additional 539,000 square feet of retail development in the McMinnville market area over the coming decade, with 150,000 square feet (or about 28%) being captured in the Three Mile Lane area.⁸⁶

Sites in the McMinnville UGB offer the potential to serve a local and regional market extending to Sheridan/Willamina, Polk County and even some coastal communities – with improved opportunity to serve the Newberg-Dundee area as a result of the recently completed bypass construction. Centrally located sites with good highway access and street visibility can be instrumental to attract commercial businesses that may require market areas of 50,000-100,000+ population.

⁸³ U.S. Census of Agriculture. Yamhill County Profile. 2017.

⁸⁴ As cited by Memorandum #2, Market Study Current Conditions, prepared as part of Northeast Gateway Plan by Leland Consulting Group for the City of McMinnville, May 23, 2011.

⁸⁵ As cited by www.downtownmcminnville.com, as of September 2012.

⁸⁶ McMinnville Three Mile Lane Area Plan: Market Analysis, Leland Consulting Group, April 2019.

- *Need for additional value-added opportunities for visitors.* A key challenge for the future is to provide more and better value-added opportunities for visitors to spend more time and money while visiting the McMinnville area.

Also, the 2019 *Willamette Valley Winery Association Visitor Profile Study* reported that about 53.8% of domestic visitors to the area are non-Oregon residents. Survey respondents noted difficulty of travel to the Willamette Valley as a key factor in not returning to the area. The study also stated that the typical Oregon resident wine tourist spends about \$151.63 per person per day, while the typical non-Oregon resident spends about \$416.43 per person per day.

Note: The 2013 EOA noted the following disadvantage at that time:

“Limited duration of tourism visitation & low expenditure capture. While the McMinnville area and Yamhill County can now boast some of the state’s top tourism attractions, visitor spending does not appear to match visitation. This is because visitors tend not to stay overnight (but are often day visitors) and do not appear to be making substantial expenditures while in the area.”

This has changed substantially. Visit McMinnville reports that visitor spending in Yamhill County has doubled in the last ten years. Lodging statistics in McMinnville are up across the board, including demand, rate, length of stay, occupancy, revenue, and number of properties & inventory of rooms.

Availability of Transportation Facilities for Access & Mobility. Location, size and buying power of markets are substantially affected by current and planned transportation facilities. This is particularly the case in Yamhill County which increasingly has experienced the negative economic development effects of highway congestion on the 99W corridor. However, completion of Phase 1 of the Newberg-Dundee Bypass in January of 2018 has partially reduced congestion, especially for local residents of the region.

Economic development opportunities may be substantially enhanced with further plans for transportation improvements—as with the second phase of the Newberg-Dundee bypass, which is currently in its design phase. A broader look at the role transportation plays in shaping McMinnville’s economic opportunities is outlined as follows.

Advantages:

- *Western & mid-valley cross-roads.* McMinnville is directly served by Highway 99W – as a historically significant central organizing spine to access commercial and industrial businesses throughout the community. Highway 18 has come to play an increasingly important role, not only as a by-pass route for through traffic traveling between the Oregon coast and the Portland metro area but also as a means of accessing more local and regional employment/institutional uses as well as the McMinnville airport. While not directly in McMinnville, Highway 22 (via 99W) provides access to Salem and to Interstate 5 (within approximately 30 miles).

- *Changing traffic patterns.* While serving as one indicator of overall economic activity, this is of particular importance for retail and service businesses as well as tourism oriented destinations reliant on high traffic counts. As of 2018, an estimated 22,900 vehicles per day traveled Highway 18 in the vicinity of the McMinnville airport – an increase of 44% over 2005 counts.⁸⁷

On Highway 99W, up to an estimated 21,900 vehicles traveled daily through McMinnville in 2018, (representing an increase in 99W in-town traffic with 18,900 vehicles in 2013).⁸⁸

- *Air and rail accessibility.* As a general aviation airport, McMinnville Municipal Airport has the capacity to handle corporate jet aircraft – together with availability of aircraft rentals, flight instruction, aircraft maintenance, and fuel. The Portland International Airport (PDX) is located 36 miles from McMinnville, offering daily direct flights with passenger and freight service to Asia, Europe, and Mexico as well as cities throughout the U.S.

The Willamette and Pacific Railroad maintains freight service to McMinnville industrial users. This short-line carrier connects to the Burlington Northern Santa Fe and Union Pacific carriers for transcontinental shipments to and from McMinnville.

Disadvantages:

- *Poor linkages to Interstate freeway access.* Congestion on the 99W corridor in the area of Dundee and further north is cited as a disincentive to business investment from existing and prospective new firms in documents including the 2019 *MAC-Town 2032 Economic Development Strategic Plan*. Of particular concern is the approximate 30-mile distance from McMinnville to the Interstate 5 corridor, exacerbated by substantial congestion affecting connecting routes during much of the business day, especially for the segment of the 99W corridor extending from the Highway 18 merge north of McMinnville through Newberg. The *MAC-Town 2032 Economic Development Strategic Plan* notes that the development of the Highway 99 bypass will likely “improve access to McMinnville.”
- *Challenging Air & Rail Service.* While the distance to PDX for scheduled air service is less than 50 miles, regional roadway congestion makes travel times unpredictable during business hours and about half this distance from McMinnville occurs on two-lane roadways. With increasing regional traffic congestion, access to Portland International Airport is ever more problematic both for freight shippers and employees who must travel for their jobs.

As described by the 2001 EOA, “lack of convenient and efficient access to Portland International Airport was one factor cited by Hewlett-Packard in its decision to leave McMinnville, and it may discourage other existing or prospective firms from expanding

⁸⁷ Annual Average Daily Traffic counts (point near McMinnville Airport). Oregon Department of Transportation. <https://gis.odot.state.or.us/transgis/>

⁸⁸ Annual Average Daily Traffic counts (point near McMinnville High School). Oregon Department of Transportation. <https://gis.odot.state.or.us/transgis/>

or locating in McMinnville.” Also noted is that rail traffic bound for Portland has been routed south, then north, due to the unsuitability of existing trackage north of McMinnville.

The Oregon Department of Transportation (ODOT) completed construction of Phase 1 of the Newberg-Dundee Bypass and has proceeded into the design phase for Phase 2, which will affect economic opportunities in the coming years. Per the fact sheet associated with Phase 1 of the Bypass project, congestion was reduced by approximately 20% in downtown Newberg and by 40% in downtown Dundee. Freight traffic was also reduced by approximately 45% in Newberg and 68% in Dundee. These congestion reductions have the added benefit of increasing safety on 99W and simultaneously diminishing travel time during peak commute periods.⁸⁹ The Phase 2 improvement (currently in a design phase) is expected to have the effect of further reducing travel times on the 99W corridor north of McMinnville to Newberg via an extension of the Phase 1 Bypass.

Public-Private Facilities, Services & Environmental Factors. This discussion combines related items of OAR 660-009-0015(4) as related to public facilities and public services, access to suppliers and utilities, necessary support services, and environmental limitations. This is due to the inter-connected roles of these factors in affecting overall economic activity for both industrial and commercial business activities.

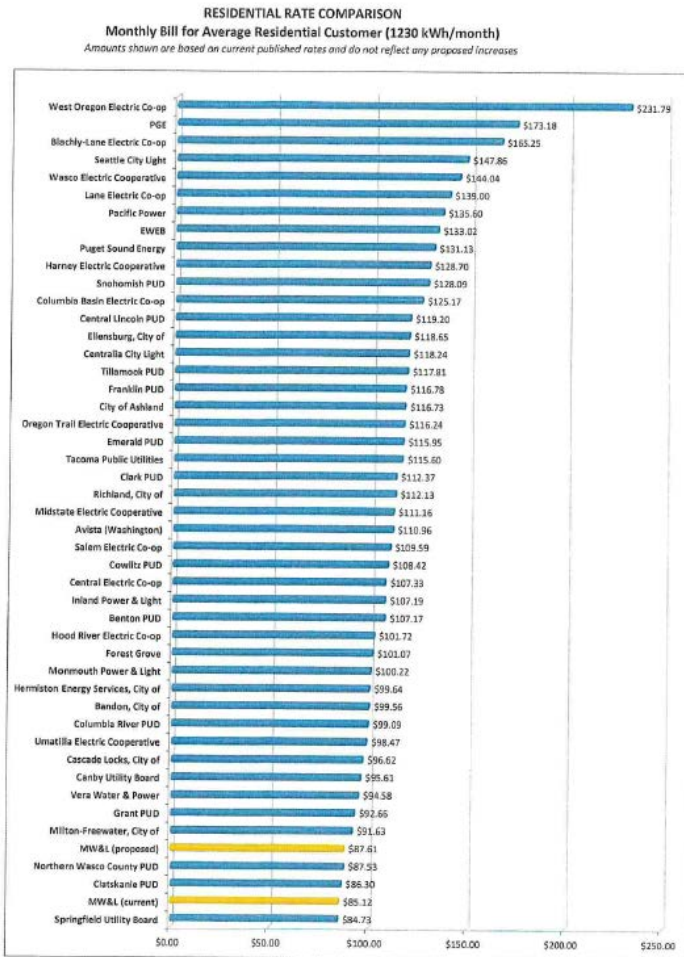
The availability and cost of both public and private support services can affect the costs of living or doing business in McMinnville. Environmental factors can similarly serve to constrain or, in some cases, benefit economic development investments. A firm’s location decision may reflect consideration of the comparative value versus cost of doing business in McMinnville or other potentially viable locations in Oregon or elsewhere.

Advantages:

- *Low public utility rates.* McMinnville is recognized as offering low electricity and water rates compared with other public and private utilities region-wide and statewide (Exhibit 34). The public utility provider, McMinnville Water and Light (MW&L), was founded in 1889 and continues to provide low cost, reliable water and power services.

⁸⁹ Oregon Department of Transportation. 2014. *Newberg-Dundee Bypass Project*. Retrieved from: <http://oregonjta.org/region2/files/highway99w/docs/overall-fact-sheet-for-web-dec-2014.pdf>

Exhibit 34. Residential Rate Comparison for Oregon Utility Services



Source: McMinnville Water and Light.

- *Water & sewer capacity for growth.*
 - *Water supply and water rights.* Water supply is from the Yamhill and Nestucca River basins. In 2005, MW&L completed expansion of McGuire Reservoir, more than doubling reservoir capacity, providing ample water supply through at least 2025. Beyond 2025, MW&L has sufficient capacity for water rights and supply to meet needs through at least 2075. This will address needs for the City's 20-year planning horizon of 2041 and the longer 2067 planning horizon.
 - *Treatment capacity.* In 2010, MW&L completed expansion of the Water Treatment Plant (WTP). This increased capacity from 13 MGD to 22 MGD. The WTP can be expanded from the current 22 MGD to a maximum of 30 MGD. MW&L's 2010 master plan projects that this will provide treatment capacity through 2045. This addresses needs through the City's 20-year planning horizon through 2041, and MW&L can either expand treatment capacity at this location or supplement with new treatment capacity from the new intake on the Willamette to meet needs beyond 2045 through the 2067 planning horizon.

- *Long-Term Water Supply.* Previously noted as a disadvantage in the 2013 EOA, recent actions have turned long-term water supply into an advantage. While recent expansions to McGuire Reservoir are expected to provide ample supply through about 2025, actions are also being undertaken to address longer-term needs. A 2008 Yamhill County Water Supply Analysis concluded that most providers in Yamhill County have adequate water rights to meet projected maximum day demands to 2050; exceptions are noted for Dayton, Lafayette, McMinnville Water and Light (MWL), and Yamhill. As a result, MWL is partnering with the Cities of Carlton, Dayton and Lafayette in an application to the state to secure a water permit to the Willamette River as a potential second municipal source. In addition, this will provide McMinnville with a secondary source, as well as adequate supply and water rights through 2075.

In 2011, the Yamhill Regional Water Authority (YRWA) acquired a water right on the Willamette River with a 2011 priority date. In 2016, MW&L acquired an additional right with a priority date of 1982. In 2017, MW&L purchased a site on the Willamette River for a future intake and pump station. In 2018, MW&L procured the services of Carrollo Engineering to verify that the site would support facilities for a 50 MGD intake and pump station. In 2019, MW&L signed an agreement to supply water to the City of Lafayette. Engineering Design of the inter-tie is underway with construction in 2020. Tentative plans are to start supplying Lafayette with water in the summer of 2020. In 2020, MWL anticipates acquiring an additional senior water right from the Willamette for 4.8 MGD. For McMinnville, this means there will be adequate supply and water rights to meet needs through at least 2075.

- *Internet Services.* In the 2019 strategic plan, goal 1.4.3, which is to "identify and complete high-priority infrastructure projects that serve McMinnville's current and future business community," details a potential project where City staff will evaluate a 10GB fiber network with local Internet Service Provider, Online Northwest.
- *Local business entrepreneurship – with a record of technological innovation.* Focus groups conducted in 2007 for the MEDP strategic economic development plan coupled with interviews for the Marion-Polk-Yamhill County regional economic development strategy have pointed to this factor as a major distinctive strength of the mid-Willamette Valley region. The *MAC-Town 2032 Economic Development Strategic Plan* dedicates one of its target sector goals to foster opportunities in technology and entrepreneurship. This goal is comprised of four strategies, which include making McMinnville a location for small- and medium-sized technology firms to relocate and grow, provide co-working and other work arrangements enabled by telecommunications technology, incubate new businesses and start-ups, and create new talent pipelines for tech-related occupations.⁹⁰

⁹⁰ City of McMinnville. *MAC-Town 2032: Economic Development Strategic Plan*. Retrieved from: <https://www.mcminnvilleoregon.gov/sp/page/mac-town-2032-economic-development-strategic-plan>

Perhaps less readily recognized is the diversity of other small manufacturing and industrial companies that serve global markets through technological innovation and astute market positioning. Examples range from area aerospace and metals component manufacturers to technology companies to wineries.

- *Comparative property tax rates.* While the significance of property and other taxes to business investment decisions is debated nationally and regionally, there is no question that McMinnville's relative tax burden has changed appreciably in a more favorable direction in recent years.
- *Economic development assistance.* A public services advantage noted with the 2001 EOA is the presence of the McMinnville Downtown Association, providing economic development assistance for businesses locating or expanding in the historic downtown. Since its formation in 1976, the association has been recognized for successful downtown revitalization and leadership among Oregon Main Street communities. Formed in 2006, the public-private organization, McMinnville Economic Development Partnership (MEDP), continues to serve as a single point of contact for economic development assistance for industrial and other firms throughout the McMinnville community. Further, the 2019 *MAC-Town 2032 Economic Development Strategic Plan* identified a "positive business climate perceptions and a sense of civic leadership" as a strength in McMinnville.

Disadvantages:

- *Environmental Effects on Land Supply.* The City of McMinnville has identified lands in steep slopes (of 15% or greater), floodplains, and wetlands identified in the National Wetlands Inventory (NWI) as environmental constraints. Lands with any of these characteristics are considered as constrained or unbuildable and have been deducted from lands identified as available whether vacant or partially vacant.

Labor Market Factors (including Training). This discussion combines two factors listed by OAR 660-009-0015(4) – notably items (d) labor market factors and (h) education and technical training programs – due to their mutual interdependence.

The availability of adequate, qualified labor is critical for economic development. This labor force is not limited to local McMinnville residents as local firms can draw workers from surrounding communities situated within a reasonable commute distance. Similarly, a portion of the McMinnville adult population may find employment in other communities – both nearby as well as extending into the Salem and Portland metro areas.

While direct information on the quality of the workforce is not always readily available, demographic characteristics that are typically used to indicate the quality of the labor force include age distribution, educational attainment, employment by occupation or industry, and race/ethnicity. Also of importance are opportunities for workforce training.

Advantages:

- *Favorable workforce demographics.* As detailed with the comparative demographic and economic data in Chapters 2 and 3 of this EOA update, factors conducive to adequacy of abundant labor supply in McMinnville include above average population growth rates, low median age of population, and high proportion of McMinnville residents who are able to find work locally. A well-represented Latino population also offers advantages for businesses that benefit from greater cultural diversity in accessing customers in a more diverse marketplace both regionally and nationally.
- *Ability to access much larger metro area workforce pool.* With an in-city labor pool of over 15,000, McMinnville employers have ready access to a countywide labor market of nearly 50,000. For some specialty positions in which the local market may not have adequate depth, there is an even larger regional Mid-Valley labor pool on which to draw – much of which is located within a 20-40 mile drive from McMinnville. However, employers have noted the immediately available labor pool in McMinnville as an issue.
- *Moderate local & countywide unemployment.* The 2013 EOA noted that McMinnville unemployment in McMinnville (in 2010) was 9.3%—above the U.S. rate of 9.0% and below the statewide rate of 10.4%. Comparatively, unemployment has improved since the recession. In 2018, the unemployment rate in Yamhill County was 3.8%.
- *The Linfield/Chemeketa Community College connection.* As a top-ranked U.S. News & World Report college in the western U.S., Linfield College has established a west coast if not national reputation for academic excellence and value. In December 2019, Linfield was ranked #117 among national liberal arts colleges by the national magazine U.S. News & World Report.⁹¹ A question for the future may be how best to leverage this reputation for greater community and economic benefit.

The Chemeketa Community College – Yamhill Campus offers increasing opportunity for linkages with economic development, particularly through workforce training targeted to the needs of local employers. Another example of a partnership opportunity would be the creation of an entrepreneurship program – marketed cooperatively to area businesses. The Yamhill Valley Campus was expanded to a new location directly adjacent to the Highway 18 corridor in 2011.

- *Workforce training resources.* Workforce recruitment programs are available through the McMinnville WorkSource Center (Oregon’s public workforce system), Express Employment Professionals, and the Oregon Employment Department. For young professionals, career centers at Linfield College, Chemeketa Community College (Yamhill Valley Campus), George Fox University, Portland Community College (Newberg), and McMinnville High School, provide support for improving skills and

⁹¹ U.S. News. *Best Colleges Rankings*. Linfield College, 900 S.E. Baker St., McMinnville, OR. Rank information retrieved on December 19, 2019 from: <https://www.usnews.com/best-colleges/linfield-college-3198>

connecting them with businesses in the broader Yamhill County region.⁹² Additionally, the MDEP operates a summer internship program named McMinnville WORKS, which assists in connecting local businesses with talented collegiate youth.⁹³

Disadvantages:

- The most significant labor force disadvantage is indicated by relatively low rates of college graduates. Only 24% of McMinnville adults have college degrees, compared to 25% in Yamhill County and 32% in Oregon, according to 2013-2017 ACS 5-year estimates.
- A related disadvantage may lie with relatively high proportions of service workers – as compared with the entire county, Mid-Valley region, entire state and U.S. This is one reason that McMinnville household incomes are also below those of the comparison geographies.

However, in some cases this available labor force will constitute a comparative advantage for firms that depend on service occupations. This is especially the case if local work force skills can also be enhanced over time to allow for improved wages and career options.

Other Factors. In addition to the factors identified in conjunction with OAR 660-009-0015(4), there are other factors of importance specifically to the McMinnville community. These relate to local demographics and also land availability. Key advantages and disadvantages as noted from this and other similar analyses pertinent to McMinnville are outlined below.

Advantages:

- *Diverse industry mix.* McMinnville has a relatively diverse mix of industry for a community its size, a factor noted by the 2001 EOA. This diverse employment base is attributed, in part, to the actions of McMinnville Economic Development Partnership (MEDP). Also noted by the 2001 EOA, the 2007 MEDP Strategic Plan, and more recently in the 2019 *MAC-Town 2032 Economic Development Strategic Plan*, is that the local diversity of employment is due in part to the perceived quality of life in McMinnville. This factor is important to attracting businesses and entrepreneurs seeking quality communities for themselves and their employees.
- *A relatively young & diverse population – with increased Latino presence.* Median age of McMinnville residents is three years less than that of the entire state of Oregon. Higher proportions of residents are found locally for all age cohorts from childhood to young adults (to age 39). Companies looking for youthful workforce can find it in McMinnville.

⁹² McMinnville Economic Development Partnership (MDEP), Find Your Workforce. <https://www.mcminnvillebusiness.com/workforce>

⁹³ MDEP, The McMinnville WORKS Summer Internship Program. <https://www.mcminnvillebusiness.com/mcminnville-works-internship-program>

McMinnville is at the leading edge of Oregon's population transformation. The community's Latino population increased from less than 15% of the city-wide total in 2000 to 22% in 2013-2017 (well above the statewide proportion of 13%). Throughout the entire mid-Willamette Valley region as well as statewide, the Hispanic/Latino population is expected to represent an increasingly important component of the next generation of workers and of customers for commercial services. McMinnville has an opportunity to lead the way – providing new career options for Latino workers and business development options for Hispanic-owned businesses.

- *Small-town residential charm including a walkable downtown.* While quality of life is often considered difficult to quantitatively assess, perceptions of quality of life relative to other communities can affect business location and expansion decisions. This is especially the case for entrepreneurial and other individually owned, non-corporate enterprises.

The 2018 Economic Development Strategic Plan's mission states, "Businesses leverage local and regional talent pipelines while attracting new employees and residents who value McMinnville's high quality of life... As we evolve, we prize our small-town roots and we maintain McMinnville's character."⁹⁴ As described by the website of the McMinnville Area Chamber of Commerce, "McMinnville is located in the western portion of Oregon's agriculturally rich Willamette Valley on U.S. Highway 99W."

The quiet, friendly city enjoys a central location to Pacific Ocean beaches (50 miles), the big city (Portland - 30 miles to the northeast), and the state capitol (Salem - 25 miles southeast), with an easy scenic drive to Mt. Hood and other ski areas. "McMinnville offers small-town charm in a full-service city."⁹⁵

- *Adequacy of buildable industrial land.* The previous EOA process concluded that the McMinnville UGB had a surplus of buildable industrial land during a 20-year planning period. The 2020 EOA update shows that McMinnville continues to have a surplus of industrial land, with 323 unconstrained buildable industrial acres. About 266 of those acres are on lots greater than 10 acres. Further discussion of the industrial land supply and forecast is provided with Chapter 5 of this report.

Disadvantages:

- *Restricted population growth.* Since 2000, population has been increasing somewhat more rapidly than the state, but at an approximate 1.4% per year average rate. In the past, City services have been able to match without experiencing major fiscal issues. However, continued population growth at a somewhat reduced coordinated population growth rate averaging about 1.2% per year is now forecast through 2067. Constrained land supply is restricting growth and the cost of services is increasing faster than increases in assessed values.

⁹⁴ MAC-Town 2032 Economic Development Strategic Plan. 2019. p.10.

⁹⁵ Cited from www.mcminnville.org, as of September 2012.

- *Vulnerability to eroding incomes & standard of living.* As of 2013-2017, median household incomes for McMinnville are 14% below Yamhill County and 10% below statewide medians. Average wages for the McMinnville UGB are comparable to Yamhill County but below comparable regional, statewide and national figures.

As is occurring statewide and nationally, wages are now accounting for less than a 50% share of total personal income. Yamhill County residents also are more dependent on transfer payments than is the case regionally or nationally.

Future prosperity may be jeopardized to the extent that non-wage sources of income are subject to changing federal policies and the status of national/global investment markets – combined with social service needs for those dependent on transfer payments. Improving the ratio of wage to non-wage income will be influenced directly through the combination of providing more jobs and better paying job opportunities locally.

- *Tentative integration of Latino population into community & business leadership.* As noted with the 2007 MEDP Strategic Plan, in many communities with rapidly growing Hispanic populations, it has proven challenging to effectively draw Latinos into positions of community leadership and business ownership. The result can be lost opportunity for Latino business patronage and a more dynamic cultural environment that draws new blood, new ideas and new investment. A foundational strategy in the *MAC-Town 2032 Economic Development Strategic Plan* is to “improve systems for economic mobility and inclusion,” with emphasis on training, resources, and support for underrepresented entrepreneurs and workers.
- *Inadequacy of commercial buildable land.* The 2001/03 and 2013 EOA processes all concluded that the McMinnville UGB would experience a deficit of buildable commercial land over a 20-year time horizon. The 2013 EOA resulted in a 36-acre deficit for the 2013 to 2033 planning period, while the results in Chapter 5 show a 179-acre deficit of commercial land for the 2021 to 2041 planning period.

McMinnville’s Strengths, Weaknesses, Opportunities, and Threats

As part of the *MAC-Town 2032 Economic Development Strategic Plan*, McMinnville community members completed a SWOT analysis for economic development in McMinnville. It describes McMinnville’s Strengths, Weaknesses, Opportunities, and Threats.

<p>Strengths</p> <ul style="list-style-type: none"> • High quality of life to boast about and attract investment • Strong, widely-recognized downtown • Robust wine and tourism economy, as well as cultural (e.g. Air and Space Museum) and recreational amenities that bring visitors • Well known regionally and nationally as a destination for wine and food, with some supporting tourist assets • Balanced employment across industry sectors • Presence and involvement of postsecondary educational institutions (Linfield College and Chemeketa Community College) • Location advantages: • Good location in proximity to major metro area • High quality soils in surrounding areas, climate suited for agriculture • Natural environment assets nearby, including Yamhill River, access to the ocean and mountains • Inexpensive power and water, with sustainable sources • Major infrastructure assets: major highways, freight rail, airport • Various parks and recreational assets • Positive business climate perceptions and a sense of civic leadership 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Relatively low educational attainment • A limited labor pool for local companies and those looking to relocate • Difficult access to and from I-5 and no near near-term possibility of a more direct connection • End-of -the-line location for wine country visitors coming from the Portland area • Lack of housing options • Low levels of professional and office office-using employment • Comparatively high poverty rates and low median household income
<p>Opportunities</p> <ul style="list-style-type: none"> • Proximity to Portland allows McMinnville to capitalize on urban infrastructure and amenities • Local airport has comparative advantages over other regional airports • Highway 99 bypass : future completion will improve access to McMinnville • A stronger framework for regional collaboration , improved opportunity in surrounding communities • Opportunity sites for new downtown development • New housing development – higher density , diversity of types, live live-work units • Improved connections to the University of Oregon and Oregon State University • Stronger branding and improved gateways into McMinnville • Innovation in agriculture and food systems • Wine -oriented makerspace • Food hub • \$6M gift to Linfield College’s wine program • Expanded culinary and craft beverage retail offerings 	<p>Threats</p> <ul style="list-style-type: none"> • Limited land availability for residential, commercial and industrial development • Regulatory challenges associated with UGB expansion • Worsening housing affordability • Brain drain due to local graduates leaving for other job markets • Absorption of projected growth without detrimental impacts to character, congestion, affordability • Future oversaturation of wine/tourism and increasing concentration of low-wage service industry jobs • Need to find a sustainable solution to homelessness • Future impacts of climate change on agriculture and related industries, including tourism

Target Industries

The characteristics of McMinnville will affect the types of businesses most likely to locate in the city. McMinnville's attributes that may attract firms are: McMinnville's access to land and resources; recreational opportunities; and quality of life.

2013 Updated Cluster Targets

The 2013 EOA recommended a short list of cluster target industries, described as:

- **Advanced Manufacturing.** Corresponds to an industry cluster pivotal to the Oregon Business Plan and Business Oregon (the Business Development Department). In McMinnville, this cluster is exemplified by major McMinnville employers including Cascade Steel, Meggitt Polymers and Composites, NW Unmanned Aerial Systems, Betty Lou's, Inc., and Freelin-Wade Co. Also included are agricultural producers ranging from employers in the emerging breweries to small boutique wineries as in the Granary district which also serve to complement the Yamhill County Agri-Business Economic and Community Development Plan.
- **Healthcare/Traded Sector Services.** Aimed to facilitate continued competitiveness and future expansion of non-manufacturing businesses that serve area residents plus customers located beyond the immediate McMinnville/Yamhill County community. Willamette Valley Medical Center and associated health care facilities can be expected to continue to experience employment growth in the years ahead. Examples of traded sector service activities are diverse, ranging from Linfield College to Evergreen International Airlines to Oregon Mutual Insurance. Also included is a significant component of small firms as the export-focused portion of McMinnville's fast growing and entrepreneurial service business sector such as Precision Analytical, Hurst Berry Farms Corporate Headquarters, and NW Rapid Manufacturing.

MAC-Town 2032 Economic Development Strategic Plan Target Sectors

Furthermore, Goals 4-8 of the *MAC-Town 2032 Economic Development Strategic Plan* outline the "target sector goals and strategies," as well as potential tasks and projects, as follows:

- **4. Sustain and Innovate within Traditional Industry and Advanced Manufacturing**
 - 4.1 Ensure workforce availability in trades and other mid-skill positions.
 - Encourage expansion and allocate resources for middle, high school, and community and technical college programs that encourage career exploration and skills development in trades and mid-skill occupations
 - Convene a panel of business leaders from traditional industry and advanced manufacturing employers in McMinnville to pioneer a collaborative approach to expanding apprenticeships and volunteering employee time to teach in-demand skills to individuals evaluating trade-based careers.

- 4.2 Connect traditional industry and advanced manufacturing to innovation resources for sustainable growth.
 - Highlight industrial innovation in McMinnville through periodic events, posts and other marketing, connecting innovators through storytelling and innovation partnerships.
 - Plan and participate in an industrial innovation working group or recurring social event to facilitate idea sharing and cross-pollination among business leaders.
 - Connect business leaders with regional innovation resources through Business Oregon and other innovation-oriented organizations.
 - Consider an international sister city program to share innovative practices.
- 4.3 Expand and market land availability for industrial activities.
 - Promote and market the McMinnville Industrial Park as a target area for advanced manufacturing investment within Yamhill County.
 - Coordinate with McMinnville Industrial Promotion to ensure leadership succession and continued engagement.
- **5. Foster Opportunity in Technology and Entrepreneurship**
 - 5.1 Become a place where small and medium technology firms can relocate and grow.
 - Foster physical connections to existing tech and entrepreneurship hubs through low-cost air services.
 - Market McMinnville as a destination for young and aspiring employees to find opportunity in business, entrepreneurship, computer and software engineering and other programs in Oregon's post-secondary institutions.
 - Survey local "tech" employers to identify current regulatory shortcomings or infrastructural needs for business relocation and expansion.
 - Promote the concept of McMinnville's "tech terroir" to emphasize McMinnville's potential assets to entrepreneurs, business owners and others involved in tech-oriented occupations.
 - Explore opportunities to improve connections to and otherwise better leverage McMinnville's dark fiber ring for business use.
 - Hire an innovation officer and/or complete a comprehensive strategy around smart cities and innovation in urban sustainability.
 - Create an "Invest in the Future" grant program that is targeted towards private investment and business development with living wage job outcomes.

- 5.2 Provide opportunities for co-working, teleworking, and other arrangements enabled by telecommunications technology.
 - Collaborate to develop a coworking space to foster entrepreneurship, innovation and to enable convenient telecommuting to regional employers in Portland or elsewhere. Explore unique partnership opportunities for cooperative or pop-up telecommuting spaces.
- 5.3 Incubate new businesses and start-ups.
 - Maintain a list of funding sources for start-up and expansion grants for locally-owned businesses.
 - Coordinate with partners to improve access to funding and resources available through local foundations, non-profits and other funders in McMinnville to empower local capacity-building efforts.
 - Study the feasibility of aggregators or cooperatives to efficiently distribute locally-made products from McMinnville businesses to larger metropolitan markets.
- 5.4 Create new talent pipelines for tech-related occupations.
 - Connect business leaders with interested local educators to develop extracurricular activities and to improve current curricula and align education and training with emerging employer needs.
 - Cultivate relationships with post-secondary institutions to ensure awareness of job opportunities in McMinnville, and ensure that McMinnville job opportunities are represented on school job boards, in job fairs, and other promotional events.
- **6. Be a Leader in Hospitality and Place-Based Tourism**
 - 6.1 Make downtown the best it can be.
 - Evaluate current zoning, historical districts and designations, and existing land use patterns, including underutilized parcels, to ensure that key downtown parcels offer the highest and best use for their location.
 - Communicate with County officials to explore the potential for a purpose-built County facility, outside of downtown, that includes a courthouse, commissioners offices, and clerks office.
 - Continue to evaluate new downtown events to diversify downtown events and activities and publicize emerging retailers or other non-retail organizations.
 - Evaluate the feasibility of improving or expanding the provision of public restrooms in the downtown area.
 - 6.2 Become the preferred destination for wine-related tourism.

- Collaborate to expand marketing of McMinnville and Yamhill Valley products and to improve national and international recognition of local wine.
 - Connect hoteliers and other hospitality professionals in Oregon and elsewhere to local opportunities for high-quality additions to McMinnville’s current hospitality offerings.
 - Collaborate with Travel Oregon to host a tourism workshop for McMinnville business owners to establish and leverage competitive advantages of over similar regional offerings.
 - Leverage Linfield’s wine studies program to identify opportunities to increase visitation to the Willamette Valley region and to the viticultural areas immediately surrounding McMinnville
 - 6.3 Diversify tourism destinations beyond wine.
 - Create branded itineraries for a range of activities and distribute online and in hard copy throughout McMinnville and at local and regional airports to offer pre-planned adventures for visitors.
 - Optimize social media performance by continuing and expanding the use of hash tags, branded icons, slogans, and other techniques to highlight and encourage sharing of McMinnville-based experiences.
 - Conduct a feasibility study to identify the potential costs and economic and fiscal impacts of building an indoor sports complex for local recreation and regional event use.
 - Engage the Wings and Waves water park to identify and pursue opportunities for growth and expansion.
 - Become a national destination for bicycle tourism and other recreational and leisure activities.
 - 6.4 Market and promote McMinnville.
 - Develop and maintain robust relationships with Travel Oregon, and seek promotion opportunities accordingly.
 - Document and track the economic impact of tourism and outdoor recreation to Yamhill Valley communities.
 - Work with visit McMinnville and local hoteliers to identify gaps in available conference space and to establish a plan to expand McMinnville’s offerings for small and large conferences.
- **7. Align and Cultivate Opportunities in Craft Beverages and Food Systems**
 - 7.1 Maintain prominence in wine while looking for opportunities to innovate within supply chains, viticulture and production.

- Convene a technical assistance panel to identify new opportunities in urban wine-making and distribution and to establish a framework for collaboration and innovation in wine-making that best leverages public and private resources and identifies critical public/private partnerships.
 - Expand programming at IPNC to include a technical component for knowledge sharing between wine-makers and other professionals in viticulture and oenology.
 - Encourage collaborative research at Linfield and Chemeketa CC and facilitate connections between these schools and other viticulture programs nationally.
 - Proactively recruit beverage-makers that complement existing wineries and breweries, such as cideries and distilleries.
- 7.2 Locate higher job-density food and beverage activities within McMinnville.
- Ensure the sufficiency of regulations in applicable zones to accommodate urban wine-making and other non-retail aspects of the wine industry, including transportation and distribution.
 - Encourage further clustering of wine-oriented business in the Granary/Alpine District.
 - Contact wineries throughout the region to identify growth-oriented operations needing new or larger space, and target marketing and recruitment efforts accordingly.
 - Recruit food processing and production companies that offer synergies with wineries, such as charcuterie and cheese companies.
 - Coordinate with educational institutions to anticipate needs and ensure that McMinnville remains a hub for wine education while expanding culinary education and training locally
 - Hire an Agriculture Coordinator or Resource Officer to connect producers with resources and coordinate efforts to innovate within wine and agriculture.
 - Convene a group of wine-makers and entrepreneurs to evaluate the feasibility of a wine maker-space or similarly collaborative wine-making space for small producers, experimental products, or research.
 - Conduct a feasibility study and potentially complete a business plan for an integrated food hub and permanent, year-round farmer's market.
 - In partnership with other Oregon cities and counties, commission a study of value-added industry successes and best practices related to agriculture in western U.S. and Canadian communities.

- Liaise with researchers at OSU’s Small Farms Program and other similar agricultural programs throughout the state and the region.
 - Invite educators in the region to conduct research and teaching based in the Yamhill Valley, including possible distance learning and online college course options.
 - Explore opportunities for expanded agricultural production using hydroponics, aquaponics and other similar cultivation methods
- 7.4 Open new markets for local agricultural products.
 - Establish a branding and marketing program for local agricultural products, such as “Yamhill County Grown” or similar.
 - Develop and market a local Farm-to-Table program by connecting Yamhill Valley farmers with local restaurants.
 - Explore the potential for a cooperative distribution model to move McMinnville’s agricultural products to restaurants in the Portland metro.
- 7.5 Encourage a holistic approach to local food culture, improving connections to the local producers and cultivating a community of exceptional restaurants and culinary establishments.
 - Create a forum for local restaurateurs to connect with local agricultural producers and improve culinary offerings.
 - Work with stakeholders to establish a local demonstration or innovation kitchen that can be rented to test new recipes, host small events, or otherwise incubate local culinary endeavors.
 - Publicize local food offerings across all price levels through a branded guide to local cuisine, and distribute at and regional hotels, wineries, airports and other places frequented by travelers.
 - Partner on development of a “Farm-for-a-Day” agri-tourism program connecting local farming operations to paying guests.
 - Evaluate alignment of current food cart regulations with community goals.
- 7.6 Preserve natural assets while ensuring long-term stability in agricultural production.
 - Espouse an approach to environmental stewardship and encourage participation and support by local farmers for initiatives in keeping with this approach.
 - Establish and facilitate a business leadership group to identify solutions to sustainability challenges.

- Establish local resiliency infrastructure and training through programs like FEMA’s Community Emergency Response Teams (CERT) or other community-based models
- **8. Proactively Assist Growth in Education, Medicine and Other Sciences**
 - 8.1 Leverage institutional land assets and support planning for institutional growth and clustering.
 - Ensure that the Willamette Valley Medical Center can accommodate future growth through a master plan that includes supportive zoning, targeted capital improvements and other tools.
 - Use regulatory tools and constructive dialogue with businesses to encourage clustering of medical-professional uses near the Willamette Valley Medical Center and to create a regional anchor for health care.
 - Engage McMinnville’s large institutions in a dialogue about proactive planning for large and underutilized land assets.
 - Assess the desirability and potential feasibility of the creation of a “university district” or similar near one or more of McMinnville’s college campuses.
 - 8.2 Assist in recruitment and training to fill specific workforce needs.
 - Identify and fill gaps in education and training opportunities at local educational institutions for in-demand skills in “Eds and Meds” occupations.
 - Connect employers in education and health care to national skilled workforce pools through branding, recruitment, relocation incentives and other tools.
 - Explore public-private and other partnerships to improve amenities for students and employees, potentially including an expanded supply of student housing or housing appropriate for students on or near Linfield and Chemeketa campuses, and improved transportation to campuses and other institutions.
 - 8.3 Support the expansion of programmatic offerings at local institutions.
 - Work with Linfield College and Chemeketa CC to assess demand for education and training in health care and related services and to expand programming accordingly.
 - Engage Chemeketa CC leadership in a dialogue to explore the creation an on-site culinary and hospitality program.
 - Collaborate with leadership at the school district and at Linfield and Chemeketa to better engage Oregon’s four-year public universities.

- Connect local students with opportunities to work with OSU Extension, in labs or to participate in other UO and OSU programs prior to high school graduation.
- Explore the creation of an aviation education program that leverages McMinnville's existing infrastructure and workforce assets.
- Identify opportunities to bring programming offered at other Chemeketa Community College campuses to McMinnville, particular when serving established local industries.
- Foster R&D opportunities for existing and emerging industries.
- 8.4 Improve and expand connections between key institutions and the City of McMinnville.
 - Create safer and more intuitive physical connections to McMinnville from Linfield and Chemeketa, including better sidewalks, lighting and public transportation, particularly along Davis Street.
 - Proactively engage students in community events to improve dialogue between permanent residents and college attendees.

5. Forecast Employment and Land Needs

Goal 9 requires cities to prepare an estimate of the amount of commercial and industrial land that will be needed over a 20-year planning period. The estimate of employment land need and site characteristics for McMinnville is based on expected employment growth and the types of businesses that are likely to locate in McMinnville over the 5-, 10-, 20-, and 46-year periods. This chapter presents the buildable land inventory, analysis of target industries that build from recent economic trends, an employment forecast and associated land needs, and other land needs that aren't accounted for by the employment forecast.

EOA Update Process

The updated employment forecast and land needs estimates started with discussion of the assumptions used in the 2013 EOA. The project team conducted a detailed review of the 2013 assumptions and presented the assumptions, along with updated and new data to the Project Advisory Committee (PAC) for review and discussion during the September and October PAC meetings. The information generated considerable discussion at the PAC and ultimately resulted in PAC recommendations regarding the assumptions. The employment forecasts and land need estimates presented in this chapter reflect the PAC recommendations.

Buildable Lands Inventory

The buildable lands inventory is intended to identify commercial and industrial lands that are available for development for employment uses within the McMinnville UGB. The inventory is sometimes characterized as *supply* of land to accommodate anticipated employment growth. Population and employment growth drive *demand* for land. The amount of land needed depends on the type of development and other factors.

This chapter presents results of the commercial and industrial buildable lands inventory for the McMinnville UGB. The results are based on analyses of Yamhill County GIS property data and State of Oregon GIS employment data by ECONorthwest and reviewed by City staff. The remainder of this chapter summarizes key findings of the draft buildable lands inventory.

The general steps in the buildable lands inventory are:

1. Generate UGB "land base"
2. Classify lands by development status
3. Identify constraints
4. Verify inventory results
5. Tabulate and map results

A key step in the buildable lands analysis is to classify each tax lot into a set of mutually exclusive categories based on development status. For the purpose of this study, all commercial

and industrial tax lots in the UGB are classified into one of the following categories and based on a tax lot's status as of January 2019:

- *Vacant land.* Vacant land is defined as tax lots either (a) Equal to or larger than on half-acre not currently containing permanent buildings or improvements; or (b) Equal to or larger than five acres where less than one half-acre is occupied by permanent buildings or improvements. This is consistent with OAR 660-009-005(14).
- *Partially vacant land.* Partially vacant land is defined as tax lots between one and five acres occupied by a use that could still be further developed based on the zoning. The final determination of partially vacant land was based on a visual assessment of aerial imagery and City staff verification.
- *Developed land.* OAR 660-009-0005(1) defines developed land as “Non-vacant land that is likely to be redeveloped during the planning period.” Lands not classified as vacant, partially-vacant, or public or exempt are considered developed.
- *Public or exempt land.* Lands in public or semi-public ownership are considered unavailable for commercial or industrial development. This includes lands in Federal, State, County, or City ownership as well as lands owned by churches, institutions, and other semi-public organizations, and properties with conservation easements. Public lands were identified using the Yamhill County Assessment property tax exemption codes and City staff verification.

The next section provides a summary of the results of the commercial and industrial buildable lands inventory for the McMinnville UGB in both tabular and map formats. Appendix A presents the detailed methodology for developing the inventory.

Buildable Lands Inventory Results

Exhibit 35 summarizes all land included in the employment land base (e.g., lands with plan designations that allow employment) in the McMinnville UGB. ECONorthwest used this land base in the buildable lands inventory for McMinnville. The land base includes traditional employment designations within the McMinnville UGB, which includes about 1,388 acres in 958 tax lots in total.⁹⁶

Exhibit 35. Tax lots and total acres in employment land, McMinnville UGB, 2019

Source: ECONorthwest analysis of data from Yamhill County and City of McMinnville.

Zone/Plan Designation	Number of taxlots	Percent	Total taxlot acreage	Percent (total)
Commercial	708	74%	580	42%
C-1 Neighborhood Business	1	0%	1	0%
C-2 Travel Commercial	3	0%	13	1%
C-3 General Commercial	641	67%	487	35%
O-R Office Residential	58	6%	12	1%
Commercial Plan Des.	4	0%	54	4%
EF-80 (County Zone)	1	0%	13	1%
Industrial	250	26%	809	58%
M-1 Light Industrial	43	4%	74	5%
M-2 General Industrial	199	21%	594	43%
M-L Limited Light Industrial	2	0%	115	8%
Industrial Plan Des.	6	1%	25	2%
Total	958	100%	1,388	100%

Development Status

Exhibit 36 shows commercial and industrial land in McMinnville by development status. Of the 1,388 total acres, about 861 acres (62%) are in classifications with no development capacity (or, “committed acres”). Of the remaining 527 acres, 111 acres (8%) are constrained and 416 acres (30%) are buildable land with development capacity. Appendix A provides more detail about the constraints associated with employment land, as recommended by the PAC.

Exhibit 36. Employment acres by classification and plan designation, McMinnville UGB, 2019

Source: ECONorthwest analysis of data from Yamhill County and City of McMinnville.

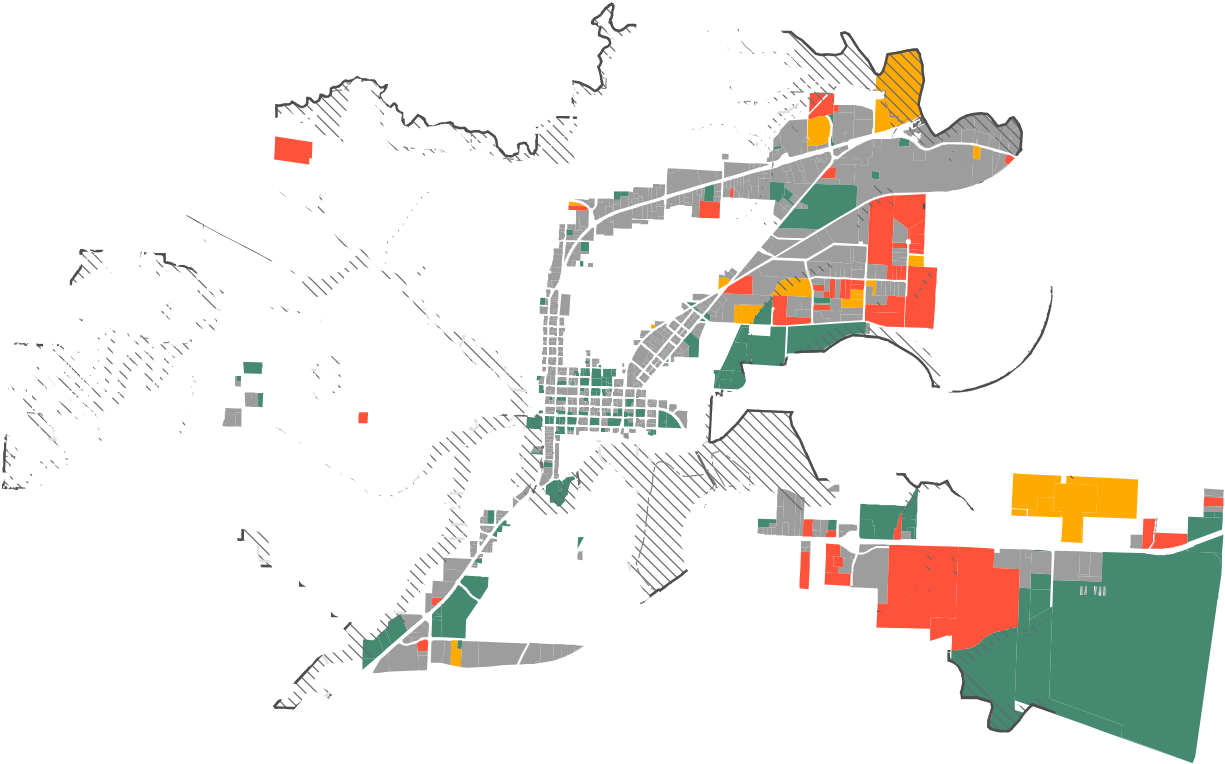
⁹⁶ Note: the 2013 EOA reported a total acreage that included land with a public or semi-public (i.e., institutional) use. Since the 2020 update accounted for public and semi-public land need separately, the resulting total acreage of employment land is lower.

Zone/Plan Designation	Total acres	Committed acres	Constrained acres	Buildable acres
Commercial	580	432	54	94
C-1 Neighborhood Business	1	1	0	-
C-2 Travel Commercial	13	0	-	12
C-3 General Commercial	487	418	6	63
O-R Office Residential	12	11	0	-
Commercial Plan Des.	54	1	48	5
EF-80 (County Zone)	13	-	-	13
Industrial	809	429	57	323
M-1 Light Industrial	74	55	5	14
M-2 General Industrial	594	347	26	221
M-L Limited Light Industrial	115	25	3	88
Industrial Plan Des.	25	2	22	-
Total	1,388	861	111	416

Draft

Exhibit 37. Employment land by classification with development constraints, McMinnville UGB, 2019

Status



Vacant Buildable Land

The next step in the commercial and industrial buildable land inventory was to net out portions of vacant tax lots that are unsuitable for development. Areas unsuitable for development fall into three categories: (1) developed areas of partially vacant tax lots, (2) areas with service constraints, (3) areas with physical constraints (areas with wetlands, floodways, floodplain, and steep slopes as summarized in Appendix A).

Exhibit 38 shows unconstrained buildable acres for vacant and partially vacant land by zone (or plan designation). The results show that McMinnville has about 416 unconstrained buildable acres in commercial and industrial designations. Of this, 22% (94 acres) is in commercial designations, and 78% (323 acres) is in industrial designations.

Also, in McMinnville, it is common that development applications include approvals for “Planned Developments” which may modify the underlying zoning regulations, and may include an associated master plan for a property. Permitted uses in zoning districts may be amended to include other uses on a portion of the property, or certain uses otherwise permitted in the underlying zoning may be precluded by the Planned Development overlay regulations. For example, while the Evergreen property is zoned C-3 General Commercial, it is subject to a Planned Development overlay that restricts uses to certain tourism-related uses.

Exhibit 38. Employment land with unconstrained development capacity (vacant and partially vacant) by plan designation, McMinnville UGB, 2019

Source: ECONorthwest analysis of data from Yamhill County and City of McMinnville.

Zone/Plan Designation	Total buildable acres	Buildable acres on vacant lots	Buildable acres on partially vacant
Commercial	94	60	33
C-1 Neighborhood Business	-	-	-
C-2 Travel Commercial	12	12	-
C-3 General Commercial	63	35	28
O-R Office Residential	-	-	-
Commercial Plan Des.	5	-	5
EF-80 (County Zone)	13	13	-
Industrial	323	305	17
M-1 Light Industrial	14	12	2
M-2 General Industrial	221	206	15
M-L Limited Light Industrial	88	88	-
Industrial Plan Des.	-	-	-
Total	416	366	50

Exhibit 39 shows the size of lots by plan designations for buildable employment land. McMinnville has 18 lots between 0.5 and 1 acres (12.7 acres of land), 34 lots between 1 and 5 acres in size (72.4 acres of land), 10 lots between 5 and 10 acres in size (64.6 acres of land), 3 lots between 10 and 20 acres in size (39.9 acres), and 4 lots over 20 acres in size (226.7 acres of land).

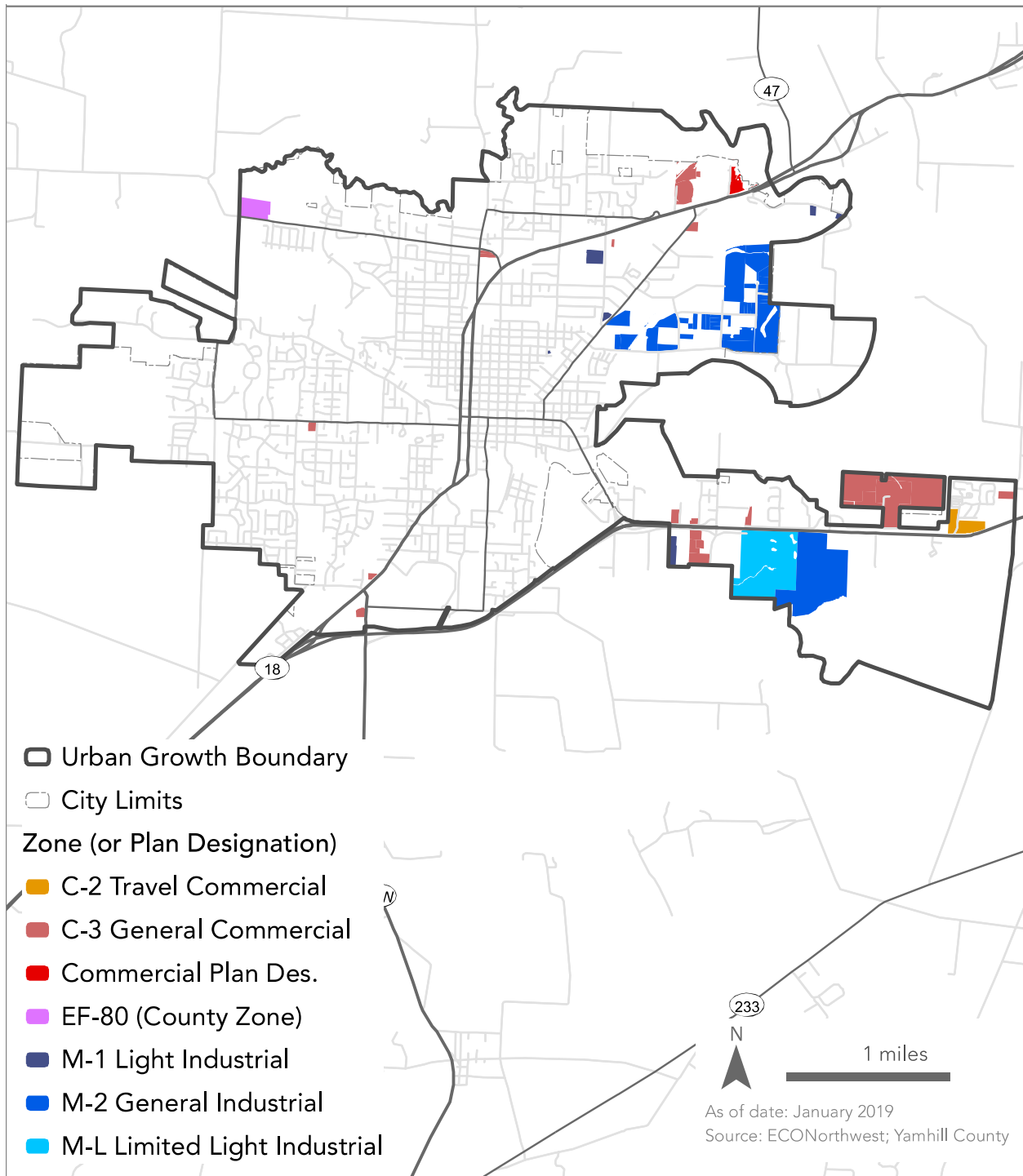
Exhibit 39. Lot size by plan designation, buildable acres, McMinnville UGB, 2019

	Buildable acres in taxlots								Total
	<0.50 acre	0.50-0.99 acres	1.00-1.99 acres	2.00-4.99 acres	5.00-9.99 acres	10.00- 19.99 acres	20.00- 49.99 acres	50.00+ acres	
Buildable acres on partially vacant tax lots									
<i>Commercial</i>	0.4	0.8	1.5	4.5	13.8	12.1	-	-	33
C-3 General Commercial	0.4	0.8	1.5	4.5	8.8	12.1	-	-	28
Commercial Plan Des.	-	-	-	-	5.0	-	-	-	5
<i>Industrial</i>	0.5	3.5	5.0	8.1	-	-	-	-	17
M-1 Light Industrial	0.1	-	2.3	-	-	-	-	-	2
M-2 General Industrial	0.4	3.5	2.7	8.1	-	-	-	-	15
Buildable acres on vacant tax lots									
<i>Commercial</i>	-	2.0	7.5	24.6	12.9	13.5	-	-	60
C-2 Travel Commercial	-	-	-	5.0	7.2	-	-	-	12
C-3 General Commercial	-	2.0	7.5	19.7	5.6	-	-	-	35
EF-80 (County Zone)	-	-	-	-	-	13.5	-	-	13
<i>Industrial</i>	-	5.4	15.8	5.3	37.9	14.4	49.5	177.1	305
M-1 Light Industrial	-	1.0	-	-	10.9	-	-	-	12
M-2 General Industrial	-	4.4	15.8	5.3	27.0	14.4	49.5	89.6	206
M-L Limited Light Industrial	-	-	-	-	-	-	-	87.5	88
Acreage subtotal	0.9	11.8	29.8	42.6	64.6	39.9	49.5	177.1	416
Number of partially vacant taxlots with buildable acreage									
<i>Commercial</i>	1	1	1	1	2	1	-	-	7
C-3 General Commercial	1	1	1	1	1	1	-	-	6
Commercial Plan Des.	-	-	-	-	1	-	-	-	1
<i>Industrial</i>	2	5	4	2	-	-	-	-	13
M-1 Light Industrial	1	-	2	-	-	-	-	-	3
M-2 General Industrial	1	5	2	2	-	-	-	-	10
Number of vacant taxlots with buildable acreage									
<i>Commercial</i>	-	3	5	8	2	1	-	-	19
C-2 Travel Commercial	-	-	-	1	1	-	-	-	2
C-3 General Commercial	-	3	5	7	1	-	-	-	16
EF-80 (County Zone)	-	-	-	-	-	1	-	-	1
<i>Industrial</i>	-	6	11	2	6	1	2	2	30
M-1 Light Industrial	-	1	-	-	2	-	-	-	3
M-2 General Industrial	-	5	11	2	4	1	2	1	26
M-L Limited Light Industrial	-	-	-	-	-	-	-	1	1
Lot subtotal	3	15	21	13	10	3	2	2	69

Source: ECONorthwest analysis of data from Yamhill County and City of McMinnville.

Buildable Lands Inventory

Vacant and Partially Vacant Commercial and Industrial Land



Forecast of Employment Growth and Commercial and Industrial Land Demand

Demand for industrial and commercial land will be driven by the expansion and relocation of existing businesses and by the growth of new businesses in McMinnville. The employment projections in this section build off of McMinnville's existing employment base, assuming overall future growth is similar to Yamhill County's long-term historical employment growth rates.

The employment forecasts do not take into account a major change in employment that could result from the location (or relocation) of one or more large employers in the community during the planning period that would account for a substantial portion of the overall forecast. Such a major change in the community's employment would exceed the growth anticipated by the city's employment forecast and its implied land needs (for employment, but also for housing, parks, and other uses). Major economic events, such as the successful recruitment of a very large employer, are difficult to include in a study of this nature. The implications, however, are relatively predictable: more demand for land (of all types) and public services.

The 2013 EOA defined the process of projecting demand for industrial and commercial land as a series of 10 steps. The table below outlines these steps and identifies the recommendations, if applicable, decided by the PAC during meetings held between July and November of 2019. Generally, the PAC started with a discussion of the assumptions used in the 2013 EOA, and reviewed alternatives for the 2020 update.

Exhibit 41. Steps to project demand for commercial and industrial land in McMinnville

Step	Purpose	Options	Recommended Option
Step 1. Set Forecast Time Period	Establish the 20-year planning period; select a base year	2021-2041 with adjustments to account for 2019-21	The state requires a 20-year planning period; 2021-41 is used for consistency with the Housing Needs Analysis
Step 2. Population Forecast	The population forecast does not serve a direct purpose other than being the basis for one of the safe harbor employment forecast methods.	Use the required PSU forecast.	State policy allows no flexibility in this process.
Step 3. Evaluate UGB Employment Trend	Inform allocations of employment to land use types.	This is an analytical step and does not require assumptions.	
Step 4. Evaluate and Select Job Forecast	Develop a 20- and 46-year employment forecast.	Option 1 (low-growth, 1.13%): OED safe harbor method Option 2 (medium-growth, 1.36%): PSU safe harbor population forecast Option 3 (high-growth, 1.70%): Non-safe harbor method used as the baseline in the 2013 EOA.	Option 2
Step 5. Allocate Job Growth by Land Use Type Scenarios	Allocate jobs to land using land use types.	Option 1: 2013 EOA Method Option 2: Four land use types (service commercial, retail, industrial, govt) Option 3: Five land use types (the four above plus a tourism category).	Option 3
Step 6. Allocate Job Growth by Land Development Status	This step makes deductions for employment that will not require vacant land.	Option 1: 17% (per 2013 EOA) Option 2: Alternative assumption justified by PAC.	5% for all land use types
Step 7. Apply Job Density Factors	Analyze existing job densities to inform density factors (expressed in employees per acre - EPA)	Option 1: use factors from the 2013 EOA Option 2: use modified factors based on analysis	11 employees per acre for industrial land use type 23 employees per acre for commercial land use types
Step 8. Estimate 20-Year Employment Land Demand	Apply all of the assumptions to the land demand model to estimate 20- and 46- year land demand.	No options - this is an analytical step	n/a
Step 9. Estimate Additional Land Need Not Determined in Forecast	This step accounts for other types of employment land need including exogenous other needed sites and retail leakage.	Option 1: Do not assume additional need Option 2: Provide findings and analysis that supports additional land needs.	Option 2.
Step 10. Compare Land Demand to Supply	Compare land need to the supply as documented in the buildable land inventory. Conduct one further step of assessing land suitability.	No options - this is an analytical step	n/a
Step 11. Evaluate Policy Options and Objectives	This update will not include a top to bottom review of policy options and objectives - those were assessed in the 2013 EOA and in the 2019 EDSP. Some modifications may be required to reflect changing conditions.		

Employment Base for Projection

This section addresses Step 1: Set Forecast Time Period, Step 2: Population Forecast, and Step 3: Evaluate UGB Employment Trend.

The purpose of the employment projection is to model future employment land need for general employment growth. The forecast of employment growth in McMinnville starts with a base of employment growth on which to build the forecast. Exhibit 42 shows ECONorthwest's estimate of total employment in McMinnville in 2017.

To develop the figures, ECONorthwest started with estimated covered employment in the McMinnville UGB from confidential Quarterly Census of Employment and Wages (QCEW) data provided by the Oregon Employment Department. Based on this information, McMinnville had about 14,964 covered employees in 2017.

Covered employment, however, does not include all workers in an economy. Most notably, covered employment does not include sole proprietors. Analysis of data shows that *covered* employment reported by the Oregon Employment Department for Yamhill County is only about 76% of *total* employment reported by the U.S. Department of Commerce.⁹⁷ We evaluated this ratio for each industrial sector for Yamhill County and used the resulting ratios to determine the number of non-covered employees. This allowed us to determine the total employment in McMinnville. Exhibit 42 shows McMinnville had an estimated 20,990 *total* employees within its UGB in 2017.

The PAC approved the use of the covered to total employment ratios shown in Exhibit 42.

⁹⁷ **Covered** employment includes employees covered by unemployment insurance. Examples of workers not included in covered employment are sole proprietors, some types of contractors (often referred to as "1099 employees"), or some railroad workers. Covered employment data is from the Oregon Employment Department.

Total employment includes all workers based on data from the U.S. Department of Commerce. Total employment includes all covered employees, plus sole proprietors and other non-covered workers.

Exhibit 42. Estimated total employment by sector, McMinnville UGB, 2017

Sector	Generalized Land Use Type	Covered Employment	Estimated Total Employment	Covered % of Total
Agriculture, Forestry, and Mining	Industrial	356	356	100%
Construction	Industrial	585	852	69%
Manufacturing	Industrial	2,277	2,549	89%
Wholesale Trade	Industrial	127	180	71%
Retail Trade	Retail Commercial	2,170	2,842	76%
Transportation and Warehousing and Utilities	Industrial	140	250	56%
Information	Office & Commercial Services	127	211	60%
Finance and Insurance	Office & Commercial Services	459	912	50%
Real Estate and Rental and Leasing	Office & Commercial Services	113	867	13%
Professional and Technical Services	Office & Commercial Services	367	998	37%
Management of Companies	Office & Commercial Services	117	161	73%
Admin. and Support/Waste Mgmt/Remediation Serv.	Office & Commercial Services	584	1,044	56%
Health Care and Social Assistance; Private Education Serv.	Office & Commercial Services	3,159	4,457	71%
Arts, Entertainment, and Recreation	Tourism Services	168	458	37%
Accommodation and Food Services	Tourism Services	1,503	1,666	90%
Other Services	Office & Commercial Services	630	1,105	57%
Government	Government	2,082	2,082	100%
Total Non-Farm Employment		14,964	20,990	76%

Source: 2017 covered employment from confidential Quarterly Census of Employment and Wage (QCEW) data provided by the Oregon Employment Department.

Forecast growth rates

This section addresses Step 4: Evaluate and Select Job Forecast.

The employment forecast covers the 2021 to 2067 period, with increments of 5, 10, 20, and 46-years. This forecast requires an estimate of total employment for McMinnville in 2021. While there is no required method for employment forecasting, OAR 660-024-0040(9) sets out some optional “safe harbors”⁹⁸ that allow a city to determine employment land need. The PAC evaluated three options for the forecast, including use of two safe harbors from OAR 660-024.

- **Low-growth scenario (1.13%).** The low-growth option uses the safe harbor that allows a city to base their employment forecast on regional employment projections from the Oregon Employment Department (OED).⁹⁹ The regional employment projection for the

⁹⁸ A safe harbor is an assumption that a city can use in a housing needs analysis that the State has said will satisfy the requirements of Goal 14. OAR 660-024 defines a safe harbor as, “... an optional course of action that a local government may use to satisfy a requirement of Goal 14. Use of a safe harbor prescribed in this division will satisfy the requirement for which it is prescribed. A safe harbor is not the only way or necessarily the preferred way to comply with a requirement and it is not intended to interpret the requirement for any purpose other than applying a safe harbor within this division.”

⁹⁹ OAR 660-024-0040(9) states: “The following safe harbors may be applied by a local government to determine its employment needs for purposes of a UGB amendment under this rule, Goal 9, OAR chapter 660, division 9, Goal 14 and, if applicable, ORS 197.296.

(a) A local government may estimate that the current number of jobs in the urban area will grow during the 20-year planning period at a rate equal to either:

(A) The county or regional job growth rate provided in the most recent forecast published by the Oregon Employment Department; or

Mid-Valley Area (Linn, Marion, Polk, and Yamhill Counties) for the 2017 to 2027 period shows that employment will grow at an average annual growth rate of 1.13%.

- **Medium-growth scenario (1.36%).** The medium-growth option is another safe harbor, based on the rate of growth from the current population projections from Portland State University. The coordinated population forecast for the McMinnville UGB between 2021 and 2041 shows that population will grow at an average annual growth rate of 1.36%, and long-term average annual growth rate between 2021 and 2067 of 1.19%.
- **High-growth scenario (1.70%).** The high-growth option aligns with the moderate (referred to as “baseline”) forecast rate used in the 2013 EOA. The 2013 EOA evaluated low, moderate, and high growth alternative scenarios. At the time the 2013 EOA was completed, the OED forecast for the Mid-Valley region was the “low-growth” scenario at 1.5%, and the “high-growth” scenario of 1.9% was based on the OED forecast for the Portland metro area. This option does not conform to the safe harbors in OAR 660-024-0040(9) and would require substantial evidence as a factual basis for choosing a non-safe harbor growth rate. Examples of substantial evidence to justify a non-safe harbor growth rate include adopted and relevant economic development policies or site needs considerations.

Exhibit 43 shows employment growth in McMinnville between 2021 and 2041, as well as 2021 and 2067, based on the average annual growth rate of each forecast scenario. The estimated number of employees for the beginning of the planning period is extrapolated from the estimate of total employment in 2017 from Exhibit 42 (20,990 employees), using the appropriate forecast rate for each scenario.

For the 2021 to 2041 period, the low-growth scenario would result in an increase of 5,544 employees; an increase of 6,885 employees in the medium-growth scenario; and an increase of 9,003 employees in the high-growth scenario.

(B) The population growth rate for the urban area in the appropriate 20-year coordinated population forecast determined under rules in OAR chapter 660, division 32.

Exhibit 43. Employment growth scenarios, total employment, McMinnville UGB, 2021–2067

Year	Low-growth (based on OED forecast)	Medium-growth (based on PSU population forecast)	High-growth (based on 2013 EOA moderate forecast)
2021	21,957	22,157	22,454
2026	23,228	23,708	24,429
2031	24,573	25,367	26,577
2041	27,501	29,042	31,457
2067	36,853	38,158	48,759
Change 2021 to 2041			
Employees	5,544	6,885	9,003
Percent	25%	31%	40%
AAGR	1.13%	1.36%	1.70%
Change 2021 to 2067			
Employees	14,896	16,001	26,305
Percent	68%	72%	117%
AAGR	1.13%	1.19%	1.70%

Source: ECONorthwest

The PAC recommended using the medium-growth option (1.36% AAGR) for the employment forecast for the 2021-2067 planning period. The results of the employment forecast presented in the EOA reflect this growth rate.

Allocation to land use types

This section addresses Step 5: Allocate Job Growth by Land Use Type Scenario

The next step in forecasting employment is to allocate future employment to broad categories of land use. Firms wanting to expand or locate in McMinnville will look for a variety of site characteristics, depending on the industry and specific circumstances. For example, small retail stores may look for an existing space in a shopping center in an area with high visibility for attracting customers, while a new food product manufacturer may need a mid-sized site of 5 to 10 acres in an area with direct access to a state highway.

At direction from the PAC, ECONorthwest grouped employment into five broad proposed categories of land use based on North American Industrial Classification System (NAICS): industrial, retail commercial, office and commercial services, tourism services, and government.¹⁰⁰ This approach differs from the 2013 EOA, which defined three land use types—commercial, industrial, and institutional. The primary difference in the proposed updated categories is a separation of different types of commercial land into retail, office, and tourism commercial. Some of these land use types might have different site needs considerations, and these land use types better align with the City’s economic development goals, such as a focus on tourism-related employment. This was based on identifying commercial sub-types associated with the target industries in the Economic Development Strategy, to assess whether land needs

¹⁰⁰ The generalized land use type categories are defined by the NAICS sectors listed in Exhibit 42.

might differ for these commercial sub-types. ECONW informed the PAC that the sub-types could ultimately be recombined at the end of the analysis if the differentiation didn't prove useful. Ultimately, the three commercial subtypes were recombined into a single commercial category, as the employment sectors didn't necessarily correlate to distinct land uses that would be differentiated through zoning. For example, the NAICS codes included in the tourism category included food and beverage, which are typically permitted in the same zones as retail commercial. Ultimately, the land uses almost exclusively related to destination tourism uses that weren't consistent with the [employment forecast and](#) employment density factors were instead addressed as [other needed sites and](#) that is addressed in more detail in the respective section in this chapter.

Exhibit 44 shows the expected share of employment by land-use type in 2021 and the forecast of employment growth by land-use type in 2041 in the McMinnville UGB, and Exhibit 45 shows employment growth for all growth increments. The PAC recommended the future share of land use types will align with both projections from the Oregon Employment Department (OED) for the Mid-Valley Area, as well as economic development goals and policies as stated in the *MAC-Town 2032 Economic Development Strategic Plan* and *Three Mile Lane Area Plan*.

OED projects that in the 2017 to 2027 period, the share of future employment in industrial sectors will increase; the share of retail commercial as well as government employment will decrease; and the share of office and commercial services and tourism services will increase.¹⁰¹ These trends closely align with McMinnville's future economic development goals, though the *MAC-Town 2032 Economic Development Strategic Plan* estimates growth in office employment, as well as an emphasis on tourism-related services, advanced manufacturing (i.e., industrial), and food and beverage manufacturing target industries.

The values highlighted in green in Exhibit 44 show the future share of total new employment for each land use type in 2041, based on the information summarized above. **The green highlighted percentages in the 2041 “% of Total” column are assumptions recommended by the PAC.**

Exhibit 44. Forecast of employment growth by land use type, McMinnville UGB, 2021–2041

Land Use Type	2021		2041		Change 2021 to 2041
	Employment	% of Total	Employment	% of Total	
Industrial	4,431	20%	6,099	21%	1,667
Retail Commercial	3,102	14%	3,485	12%	383
Office & Commercial Services	10,192	46%	13,650	47%	3,458
Tourism Services	2,216	10%	3,485	12%	1,269
Government	2,216	10%	2,323	8%	108
Total	22,157	100%	29,042	100%	6,885

Source: ECONorthwest

¹⁰¹ Oregon Employment Department Industry Employment Forecast 2017-2027, Mid-Valley Area (Linn, Marion, Polk, and Yamhill Counties). Published June 26, 2018.

Exhibit 45. Forecast of employment growth by land use type, McMinnville UGB, 2021–2026, 2021–2031, 2021–2041, and 2021–2067

Land Use Type	New Employment Growth			
	5-year (2021-2026)	10-year (2021-2031)	20-year (2021-2041)	46-year (2021-2067)
Industrial	417	834	1,667	3,582
Retail Commercial	96	192	383	1,477
Office & Commercial Services	864	1,729	3,458	7,742
Tourism Services	317	635	1,269	2,363
Government	27	54	108	837
Total	1,721	3,443	6,885	16,001

Source: ECONorthwest

Estimate of Demand for Commercial and Industrial Land

The next step in the employment forecast is to estimate the demand of commercial and industrial land.

The estimate of demand for commercial and industrial land included three components: (1) employment forecast and employment density assumptions, with deduction for employment that won't require vacant employment land, (2) recapture of existing retail leakage, and (3) [exogenous other needed sites](#) which are not accounted for in the [employment forecast and average](#) employment density factors; these are target industries and uses in the *MAC-Town 2032 Economic Development Strategic Plan*. In addition, employment for public/semi-public uses was backed out of the employment forecast and land needs were calculated separately.

The employment forecast includes all new employment in the McMinnville UGB. Some of this employment, however, will not be located on vacant commercial or industrial land. Other lands that will accommodate new employment growth include residential land and redevelopment sites. Another factor in estimating the demand for commercial and industrial land is consideration for employment density, or employees per acre. Appendix B provides additional background information developed for the PAC to make recommendations for new employment on vacant commercial and industrial land, as well as employment density. Government employment was also backed out of the forecast because government land need was addressed as part of the public/semi-public land need process.

The next section describes the approach for (1) estimating employment on vacant commercial and industrial land with considerations for employment on redevelopment sites, and (2) estimating employees per acre by land use type.¹⁰²

¹⁰² Note: the government land use type is excluded from the remaining employment forecast calculations, as we account for government employment in calculations for other land needs. Deductions for private education were also made in the office and commercial services category, based on employment reported (IPEDS data) for Linfield College of 360 employees. Adjustments for future employment at Linfield assumed the share of Linfield employment would remain the same.

Employment that does not require vacant commercial and industrial land

This section addresses Step 6: Allocate Job Growth by Land Development Status

Some employment growth in McMinnville will not require vacant (or partially vacant) employment land over the planning period. This includes redevelopment of areas with existing employment, where redevelopment increases the intensity of employment uses (i.e., more employees are accommodated on the same amount of land). The 2013 EOA assumed that 17% of employment for each land use type would not require vacant commercial or industrial land.¹⁰³ **Based on the information presented in Appendix B, the PAC determined that a reasonable assumption would be 5% refill/redevelopment for both commercial and industrial employment.**

Exhibit 46 shows the estimate of employment on vacant commercial and industrial land by land use type for each scenario, using the 5% assumption for employment that will occur through redevelopment, refill, or on non-employment sites. The table (reading left to right) starts with the number of new employment growth calculated over the planning period; then calculates the amount of employment that does not require vacant employment land based on 5% of the new employment growth; and results in the amount of new employment growth on vacant industrial and commercial land. From this point in the analysis forward, the commercial land use types (i.e., retail commercial, office and commercial services, and tourism services) were combined as the land needs for these land use types overlap.

Exhibit 46. Estimate of employment on vacant land by land use type, McMinnville UGB, 2021–2041

Land Use Type	New Employment Growth	Emp. on Other Land	New Emp. on Vacant Land
Industrial	1,667	83	1,584
Commercial	4,998	249	4,749
Total	6,665	332	6,333

Source: ECONorthwest Note: As described above, government employment is calculated separately and is not included in Exhibits 45-48.

Exhibit 47. Estimate of employment on vacant land by land use type, McMinnville UGB, 2021–2026, 2021–2031, 2021–2041, and 2021–2067

Land Use Type	Employment on Vacant Land			
	5-year (2021-2026)	10-year (2021-2031)	20-year (2021-2041)	46-year (2021-2067)
Industrial	396	792	1,584	3,403
Commercial	1,187	2,373	4,749	10,756
Total	1,582	3,165	6,333	14,159

Source: ECONorthwest

¹⁰³ The 2013 EOA used a 17% assumption, based on a PAC recommendation. The 2001/03 EOA assumed 14-17%, depending on the land use type. This EOA updated used 5% based on empirical analysis that showed refill and redevelopment rates didn't achieve employment densities that would be associated with 17% refill/redevelopment on employment land.

Employment density

This section addresses Step 7: Apply Job Density Factors and Step 8: Estimate 20-Year Employment Land Demand.

This section shows the resulting demand for vacant (including partially vacant) land in McMinnville over the 20-year period, accounting for potential variations in employment density. The assumptions about employment density are based on the 2013 EOA, as stated in text excerpt below. Based on information provided in Appendix B, the PAC recommended using an employment density of 11 employees per acre for industrial employment and 23 employees per acre for commercial employment (i.e., retail commercial, office and commercial services, and tourism services). Further explanation of employment density and the conversion of net to gross acres is provided below.

- **Employment density.** Employees per acre is a measure of employment density based on the ratio of the number of employees per acre of employment land that is developed for employment uses. Employment densities factor in all employment on a site, whether full or part time or different shifts in a workday. Thus, employment at a given site may overrepresent the number of employees at a site at a specific time. For example, retail service locations often have many part-time employees who work different shifts. Despite the potential for overestimating the number of employees on site at a given time, the data do provide a reasonable estimate of total employment on a site and therefore total employees per acre, and this is reflected in the analysis of historic employment density, too.
- **Conversion from net-to-gross acres.** The data about employment density is in *net* acres, which does not include land for public right-of-way.¹⁰⁴ Future land need for employment should include land in tax lots needed for employment plus land needed for public right-of-way. One way to estimate the amount of land needed for employment, including public right-of-way, is to convert from *net* to *gross* acres based on assumptions about the amount of land needed for public right-of-way.¹⁰⁵ A net-to-gross conversion is expressed as a percentage of gross acres that are in public right-of-way.

Based on empirical evaluation of McMinnville’s existing net-to-gross ratios, ECONorthwest uses a net-to-gross conversion factor of 6% for industrial and 18% for commercial, retail, and tourism.

Using these assumptions, the forecasted growth of 6,333 new employees between 2021 and 2041 will result in the following demand for vacant (and partially vacant) employment land: 153

¹⁰⁴ The 2013 EOA does not describe a method for converting net to gross acres.

¹⁰⁵ OAR 660-024-0010(6) uses the following definition of net buildable acre. “Net Buildable Acre” consists of 43,560 square feet of residentially designated buildable land after excluding future rights-of-way for streets and roads. While the administrative rule does not include a definition of a gross buildable acre, using the definition above, a gross buildable acre will include areas used for rights-of-way for streets and roads. Areas used for rights-of-way are considered unbuildable.

gross acres of industrial land and 252 gross acres of commercial land (Exhibit 48). Exhibit 49 shows the demand for vacant land to accommodate employment growth in the 5-, 10-, 20-, and 46-year planning periods.

Exhibit 48. Demand for vacant land to accommodate employment growth, McMinnville UGB, 2021–2041

Land Use Type	New Emp. on Vacant Land	Employees per	Land Demand (Net Acres)	Land Demand (Gross Acres)
		Acre (Net Acres)		
Industrial	1,584	11	144	153
Commercial	4,749	23	206	252
Total	6,333		351	405

Source: ECONorthwest

Exhibit 49. Demand for vacant land to accommodate forecasted employment growth, McMinnville UGB, 2021–2026, 2021–2031, 2021–2041, and 2021–2067

Land Use Type	Land Demand (Gross Acres)			
	5-year (2021-2026)	10-year (2021-2031)	20-year (2021-2041)	46-year (2021-2067)
Industrial	38	77	153	329
Commercial	63	126	252	570
Total	101	202	405	899

Source: ECONorthwest

Estimated Land Need 2019-2021

The buildable lands inventory (BLI) shows employment land status as of January 2019, while the forecast of need for employment land begins in 2021. We estimated land needed for employment between 2019 and 2021 using the same assumptions as the other planning periods. McMinnville employment in 2019¹⁰⁶ was about 21,566 employees, resulting in an increase of 591 employees between 2019 and 2021. About 496 of these 591 employees will require vacant commercial or industrial land. Using data on vacant unconstrained land from Exhibit 38, Exhibit 50 shows that McMinnville has supply of 323 gross acres of industrial land and 93 gross acres of commercial land. Between 2019 and 2021, the McMinnville UGB has a demand for 11 gross acres of industrial land and 20 gross acres of commercial land. This results in a surplus of 312 gross acres of industrial and 73 gross acres of commercial land as of 2021. These values are used as the land supply in the land sufficiency calculations starting in 2021.

¹⁰⁶ 2019 total employment was extrapolated from the 2017 Quarterly Census of Employment and Wages, using the methods described in the “Employment Base for Projection” section. We assumed the 20-year growth rate of 1.36%.

Exhibit 50. Comparison of the capacity of unconstrained vacant land with employment land demand by land use type, McMinnville UGB, 2019-2021

Land Use Type	Land Supply		Land Sufficiency (Deficit)
	(Suitable Gross Acres)	Land Demand (Gross Acres)	
Industrial	323	11	312
Commercial	93	20	73

Source: ECONorthwest

Retail Leakage

In 2018, the city of McMinnville initiated development of a plan for the Three Mile Lane Area Plan (3MLAP). The project updates the 1981 Three Mile Lane Overlay District (amended in 1994) and the 1996 Highway 18 Corridor Refinement Plan. The 3MLAP will integrate a wide range of land uses and a multi-modal transportation system that serves both local and state transportation needs and provides active connectivity within the plan area as well as to the City’s downtown core. Leland Consulting Group performed the market analysis for the project.

The project analyzed a market area that represents the area from which the most demand for residential, commercial, and industrial uses will originate, and where most of the competitive development is located. The market area (shown in Exhibit 1 and Exhibit 33) is roughly bounded by the Willamette River to the east, Tillamook State Forest to the west, and Polk County to the south—although the market does extend into Polk County, there are few residents or jobs located in this area—and the City of Yamhill to the north. The study includes a retail leakage analysis, with the express intent that the city would capture some of the retail spending that is occurring in the larger Salem, Portland, and I-5 corridor markets.¹⁰⁷

Leland characterizes retail leakage as follows:

“Retail sectors in which household spending is not fully captured are called “leakage” categories, while retail categories in which sales are higher than estimated household demand generated by existing residents are called “surplus” categories. A retail sales surplus indicates that a community pulls consumers and retail dollars in from outside the trade area, thereby serving as a regional market. Conversely, when local demand for a specific product is not being met within a trade area, consumers are going elsewhere to shop, creating retail leakage.”¹⁰⁸

The study reports overall demand for 529,000 square feet of retail space in the study area for a 10-year period (Table ES-3, pg 4). The study also shows a breakdown of the 10-year demand broken out by demand from household growth, leakage recapture, and replacement space (Figure 38, pg 51). Data provided by Leland show that the leakage

¹⁰⁷ Note: As discussed in Chapter 3, while retail environments are changing at a national level, the extent to which e-commerce will replace all types of retail is unclear and unlikely. The need for certain types of retail will persist both nationwide and in places like McMinnville.

¹⁰⁸ McMinnville Three Mile Lane Area Plan: Market Analysis, Leland Consulting Group, April 2019.

recapture component of the 10-year demand is 131,808 square feet. This is an element of retail land need that is not reflected in the employment forecast.

Exhibit 51 shows an estimate of land needed to accommodate recapture of retail leakage. The analysis builds from the Leland estimates and assumes 470 square feet per employee. The square feet per employee assumption comes from Metro’s Employment Density Study (pg 17). Dividing recapturable existing leakage by square feet per employee provides an estimate of the amount of employment generated by the space; dividing that by the PAC approved assumption of 23 employees per acre yields the land need assumption. The results show that McMinnville needs an additional 12.2 acres of land to accommodate recapture of retail leakage.

Exhibit 51. Demand for Regional Commercial and Office Space

Sector	Recapture-able Existing Leakage (s.f.)	SF/Emp	Employees (20 years)	Employees Per Acre (EPA)	Acres
Furniture & Home Furnishings	6,257	470	13	23	0.6
Electronics and Appliance	4,450	470	9	23	0.4
Building Material, Garden Equip	-	470	-	23	-
Food & Bev. (grocery)	0	470	-	23	-
Health & Personal Care	-	470	-	23	-
Clothing & Accessories	9,600	470	20	23	0.9
Sporting Gds, Hobby, Books, Music	6,076	470	13	23	0.6
General Merchandise	83,278	470	177	23	7.7
Misc. Store Retailers	-	470	-	23	-
Food & Drinking Places	21,611	470	46	23	2.0
Other (incl. cinema, prof./med office, banks)	538	470	1	23	0.0
Totals	131,808		280		12.2

Source: Demand estimates by Leland Consulting Group; sq ft per employee assumptions from the Metro Employment Density Study; EPA assumptions from EOA PAC

Land Needs Not Addressed in the [Average Employment Densities \(Other Needed Sites\)](#)

This section addresses Step 9: Estimate Additional Land Need Not Determined in Forecast

Statewide planning Goal 9 requires cities to “Provide for at least an adequate supply of sites of suitable sizes, types, locations, and service levels for a variety of industrial and commercial uses consistent with plan policies.”¹⁰⁹ McMinnville has identified several employment land needs that ~~are exogenous (outside of, or not reflected in) to the employment forecast~~ have **other needed sites**. [These related to](#) target industry sectors identified in the *MAC-Town 2032 Economic Development Strategic Plan*. These are addressed in the respective subsections below, describing these land needs and the factual basis for each need.

¹⁰⁹ <https://www.oregon.gov/lcd/OP/Documents/goal9.pdf>

Other Needed Sites Calculated Separately from Average Employment Densities

The City's Economic Development Strategic Plan provides the City's economic development opportunities, vision, and strategy. The City need not be bound by history and past trends, but can rather seek to achieve the community's economic vision, supported by data, and realistically achievable given competitive advantage, as supported by data and emerging trends.

Statewide Planning Goal 9 states that comprehensive plans for urban areas shall: "Provide for at least an adequate supply of sites of suitable sizes, types, locations, and service levels for a variety of industrial and commercial uses consistent with plan policies." This indicates that cities have some degree of flexibility in determining land needs as long as (1) they are consistent with plan policies, and (2) are justifiable. The land needs described in this section are all identified in existing city plans, but are not considered in the employment forecast.

~~Cities have found that when there are large firms seeking sites that aren't available in a region, this precludes economic development organizations such as Business Oregon and MEDP from marketing the area to these prospects. Attracting such activities to the region may be newly identified in the economic development strategy and additive to past economic development efforts. An otherwise Goal 9-compliant Economic Opportunities Analysis based on projected growth reflective of traditional patterns may not account for these new efforts, and attraction of a large site user would be considered an exogenous impact to these projections. This often applies to industrial users, but also applies to uses such as destination tourism uses that can require unique sites.~~

The needs analysis also needs to account for these "~~exogenous sites~~" other needed sites for uses anticipated as part of the Economic Development Strategy. Below are some examples of ~~exogenous~~ other needed sites in McMinnville and other Oregon communities:

- For example, when McMinnville's UGB was established in the early 1980s, it wasn't anticipated that there would be a need for a large site for the Evergreen Museum or water park. These facilities occupy approximately 70 acres of their sites. These have substantial economic benefits to the McMinnville economy. In 2018, they had over 88,000 visitors. They also require large sites, differ from traditional employment uses, don't fit neatly within an employment ~~forecast~~ density assumptions, and they consume a significant amount of the land supply in the UGB.
- Another example of a needed site for tourism is the US Cellular Park in Medford. The park is 132 acres with 15 sports fields. The 2018 Annual Report shows that in 2018 it generated \$11.5 million estimated economic impact, surpassing \$100 million cumulative local economic impact since its inception in 2008, helping to sustain 110 jobs in the local economy based on the direct spending of visiting teams.¹¹⁰

¹¹⁰ U.S. Cellular Community Park Annual Report. Medford Parks, Recreation & Facilities. 2018. <https://www.sportsmedford.com/Assets/48/2018%20USCCP%20Annual%20Report.pdf>

- The City of Redmond is expanding its UGB to add nearly 949 acres for several employment uses. This allows the Deschutes County Fair and Expo Center to build out and become more of a regional player (with an additional 120 acres), while providing a new home for the Oregon National Guard's Redmond Armory (approximately 40 acres). It also provides nearly 700 acres for large industrial projects.¹¹¹
- The Allison Inn and Spa in Newberg takes advantage of place-based tourism. It is on a 35 acre site in the City of Newberg. It is situated adjacent to rural land with surrounding views of wine country and farmland. It includes accommodations, restaurant and bar, spa and meeting and event center. This could be considered an adaptation of one of the prototypes described in the agri-tourism plan described below, but adapted for an urban location interfacing with a rural setting, rather than located in a rural location.
- Over a decade ago, a County-wide plan was undertaken related to agri-tourism. It identified six prototype projects, each with specific assumptions about characteristics. These were predominantly rural prototypes, but the opportunities for these prototypes haven't been realized.¹¹²

The Economic Development Strategic Plan identifies 57 items that potentially have site-related needs. Based on further review and discussions, we assume the approximately 47 other items not included in the list of ten site needs below would be addressed through traditional sites needs within the [standard site needs and average employment density calculations. work completed on the employment forecast and/or public/semi-public land needs analysis.](#) Exhibit 52 summarizes the land needs for these [exogenous other needed sites.](#)

¹¹¹ "Fairground expansion, armory and more coming to SE Redmond." Stephen Hamway. The Bulletin. Feb 3, 2019. <https://www.bendbulletin.com/localstate/6884610-151/fairgrounds-expansion-armory-and-more-coming-to-se-redmond>

¹¹² *Yamhill County Agri-Business Economic and Community Development Plan Summary Report.* Barney & Worth, Inc. June 2009. https://www.co.yamhill.or.us/sites/default/files/Summary_Report_-_Yamhill_County_Agri-Business.pdf

Exhibit 52. Land needs identified in the MAC-Town 2032 Economic Development Strategic Plan (EDSP): Other needed sites that are not represented in the employment forecast have special site needs not reflected in average employment density calculations

Draft

Use	Description or Example*	Land Need	Employment Adjustment (Source)	EDSP or Other Reference
1. Community Center/Recreation Facility	Update, improve, expand and add recreational facilities that serve the community's needs <u>including a</u> (Community Center and Aquatic Center).	10 acres	<u>22 FTE</u> (Source: Parks Director)	3.2.2
2. Outdoor Stage/ Amphitheater	<u>Britt, Jacksonville</u> <u>Cuthbert, Eugene</u> <u>Bi-Mart, Central Point</u> <u>Les Schwab, Bend</u>	5 acres plus parking	<u>30 FTE</u> (Source: Britt Festival - 2,200 seating capacity)	3.2.1.
3. See Ya Later Foundation – Champions Center	The Champions Center is planned as a youth and family recreational and educational complex.	28 acres (4 acres for buildings, 6 acres for parking, 12 acres for 6 athletic fields, 6 acres for associated facilities)	<u>20 FTE</u> (Source: See Ya Later Foundation Proposal)	See Ya Later Foundation UGB Application
4. Arts and culture focused event center	Chehalem Cultural Center, Newberg)	3.5 acres	<u>9 FTE</u> (Source: Chehalem Cultural Center)	3.3
5. Evergreen Aviation and Space Museum and Yamhill County Heritage Museum	Support existing facilities; <u>based on facilities in master plan</u>	27 acres	<u>30 FTE</u> (Source: Evergreen Master Plan)	<u>3.3</u>
6. Wings and Waves	Opportunities for growth and expansion	Location-specific land need at existing partially vacant site	<u>Included in Evergreen Master Plan, see above</u>	6.3.
7. Conference Center:	40,000 sf conference space, accommodation, and parking:	5 acres	<u>13 FTE</u> (Source: Feasibility Analysis)	6.4
8. Equestrian center with supporting commercial activity inside UGB	Would include facilities that cannot be developed on EFU land	20 acres in UGB, larger footprint outside	<u>80 FTE</u> (Source: Comparable feasibility studies)	(6.3)
9. Food hub and public market	Focused on local craft foods & beverages	3.5 acres	<u>13 FTE</u> (Source: USDA Regional Food Hub Resource Guide)	3.2.2.
10. Makerspace/innovation hub/ fabrication center	Supports local innovation & entrepreneurial ecosystem	2 acres	<u>3 FTE</u> (Source: Talent Maker City)	6.3.
TOTAL		104 acres		
NET	<u>Deduct 220 employees @ 23 emp/ac = 10 ac</u>	<u>104 ac – 10 ac = 94 net additional acres</u>		

*Additional examples are provided in the following narrative.

1. COMMUNITY CENTER/RECREATION FACILITY

Strategy 3.2.2 of the MAC-Town 2032 EDSP seeks to cultivate partnerships to develop and market McMinnville’s recreation amenities. A specific action in that section is to add recreational facilities that serve the community’s needs including a Community Center and Aquatic Center.

The McMinnville Parks Department is in the process of completing a feasibility analysis for a facility and is currently estimating demand of 10 acres. Further information is expected to be available in February 2020.

This is consistent with other examples reviewed by ECONorthwest. ECONorthwest reviewed characteristics of comparable community centers. These include two facilities run by the Salvation Army (Kroc centers in Salem and Coeur d’Alene), and three city-managed facilities in Eugene, Portland, and Federal Way Washington. Exhibit 53 provides a summary of the facilities.

Exhibit 53. Community Center Characteristics

Facility	Facility Size (sq ft)	Site Size (acres)	Description
Salem Kroc Center	91,500	22.0	LEED certified with a waterpark (including a Jr. Olympic competition pool, water slide, lazy river, hot tub, and splash pad), Fitness Center, Gymnasium, Game Room, Art Studio, Library/Media Center, Amphitheater, Chapel/Performing Arts Center, 4000 ft ² of Event Space
Coeur d’Alene Kroc Center	132,000	12.0	Competition and leisure pools, health and wellness center, gym and climbing wall, game room, and classrooms
East Portland Community Center	45,000	5.7	Full-size gymnasium with retractable bleachers Transverse bouldering wall Fitness center with cardiovascular and circuit strength equipment Exercise studio with sprung wood floor and mirrors Multi-purpose, and poolside rooms Outdoor courtyard Indoor 4-lane Pool Indoor zero-depth entry leisure pool with current channel, waterslide, splashdown
Federal Way Community Center	72,000	10.0	Aquatics center, three gyms, fitness center, climbing pinnacle and Splash Café
Eugene Amazon Community Center	n/a	12.0	Outdoor pool, two community centers with many amenities, parking

Based on information from the Parks Department, and consistent with review of comparable facilities, the land need for this use is assumed to be 10 acres.

2. OUTDOOR STAGE/AMPHITHEATER

Strategy 3.2.1 of the MAC-Town 2032 EDSP seeks to update City Plans to evaluate and prioritize investments in recreation infrastructure. The strategy specifically identifies the desire to “add an outdoor stage or amphitheater to one of McMinnville’s existing parks.” The following list provides capacity and site sizes for amphitheaters in other Oregon cities.

- Les Schwab Amphitheater, Bend ~8,000 capacity ~5 acres plus parking (parking co-located with other uses)
- Bi-Mart Amphitheater, Central Point: ~6,000+ total capacity (~1985 fixed seats plus lawn), (parking co-located with other uses); ~5+ acres, plus parking & other support areas
- Britt Festival, Jacksonville: 2,200 total capacity (1,000 fixed seating plus lawn), parking co-located with other uses); Approximately 4 acres plus parking, (includes main stage, small stage, concession buildings, seating, staging area)
- Cuthbert Amphitheater, Eugene: 5,000 total capacity; parking co-located with Alton Baker Park; Approximately 4.3 acres without patron parking (includes main stage, seating, concession areas, and performer/equipment parking).

Based on review of comparable facilities, the land need for this use is assumed to be 5 acres. Assume shared parking, otherwise additional land will be needed for dedicated parking.

Note: This is calculated separate from the See Ya Later Foundation Champion Center. While that facility proposed an amphitheater. That site plan identified an amphitheater, but the concept is a different facility than what is identified in the Economic Development Strategic Plan. The Champion center would rely on use of two athletic fields for area comparable to above facilities ranging from 2,200-8,000 capacity (plus parking).

3. SEE YA LATER FOUNDATION-CHAMPIONS CENTER

In 2015, the See Ya Later Foundation (SYLF) proposed a UGB amendment for a sports complex which was not further pursued at that location given access constraints. The Foundation is still moving forward with the concept and envisions a 165,000 sf indoor recreational and educational building with the following amenities:

- Six athletic fields
- Sport fields, court gyms, fitness equipment
- Art, music, technology, and mentoring
- Outdoor amphitheater and regulation sports courts (for large-scale events, drawing visitors and dollars to McMinnville year-round)
- Meeting rooms and facilities for use by non-profits and social service organizations
- Non-denominational prayer room
- Great hall for events, commercial kitchen, coffee shop, variety of meeting facilities
- Parking (shared for uses)

To accommodate these facilities, SYLF requires a 28-acre site that meets specific suitability requirements and is accessible to the school-aged children it is intended to serve. A year-round site on the west side of McMinnville is preferred - recognizing that Joe Dancer Park is closed

from November to March, and the west side is rapidly growing with two additional planned schools.

Based on the 2015 application, we assume a land need of 28 useable acres (4 acres for buildings, 6 acres for parking, 12 acres for 6 athletic fields, 6 acres for associated facilities (walkways, landscaping, bleachers, campus open space, and driveways)).

Note: The ESDP identifies needs for regional athletic events and an indoor sports complex. These uses are assumed as part of a single site complex as represented in the Se Ya Later Foundation Champions Center described above. Therefore, these are not calculated separately. Other examples of these types of facilities of various scale and scope include the following:

- Facility for regional athletic events: 132 acres (US Cellular Park, Medford), 15 sports fields: 3 full-size baseball, 7 softball/baseball, 5 soccer/football
- Separate indoor sports complex: 5-8 acres

4. ARTS AND CULTURE FOCUSED EVENT CENTER

Strategy 3.3 (Leverage arts and culture amenities) of the MAC-Town 2032 EDSP identifies the desire for an arts and culture focused center. Specifically, the plan states “Initiate a conversation between local artists, arts organizations, philanthropies and other parties to identify the potential for an arts and culture-focused event center in McMinnville.” The strategy also includes the need for a community art space “Evaluate the feasibility of a public private partnership to create a community art space or collaborative studio and cooperative gallery.” Following is a summary of similar cultural centers:

- Chehalem Cultural Center, Newberg – is located in a historic building and houses a fine arts gallery and exhibition hall, three multipurpose arts studio classrooms, a state-of-the-art clay studio, a recording studio with four music practice studios, meeting space, and a 5,200 square foot grand ballroom for public and private events.

Based on review of comparable facilities, the land need for this use is assumed to be 3.5 acres.

5. OPPORTUNITIES TO SUPPORT EVERGREEN AVIATION AND SPACE MUSEUM-AND YAMHILL COUNTY HERITAGE MUSEUM

This opportunity is identified as part of Strategy 3.3 – Leverage arts and culture amenities. Specifically, the project is to establish periodic, formal dialogue with the Evergreen Aviation and Space Museum ~~and the Yamhill County Heritage Museum~~ to anticipate their needs and identify opportunities to provide support.

This expansion is consistent with the adopted Evergreen Master Plan and would build out about 27 additional buildable acres of the property (with constrained areas left intact –wetlands, ravine, etc.) The master plan also includes an adventure course and associated features that extend would outside the UGB. The use of the site is limited by the Planned Development Ordinance to the master plan unless the PD Ordinance is amended.

This opportunity assumes expansion onto ownership of partially vacant land of 27 acres. This deduction is included as part of the ~~exogenous land need~~ other needed sites since a portion of the site (27 acres) was inventoried as vacant in the buildable lands inventory.

6. WINGS AND WAVES OPPORTUNITIES FOR GROWTH AND EXPANSION

This opportunity is related to Strategy 3.3 and is part of McMinnville’s overall tourism strategy. The Waterpark was bought by The Falls Event Center in 2017, and is now run as a separate organization.

This opportunity assumes expansion onto ownership of partially vacant land.

7. CONFERENCE SPACE

This opportunity relates to Strategy 6.4 – Market and promote McMinnville. The plan includes a project to “Work with visit McMinnville and local hoteliers to identify gaps in available conference space and to establish a plan to expand McMinnville’s offerings for small and large conferences.” Towards that end, Visit McMinnville retained Johnson Consulting to complete a market analysis for conference facilities. The January 2018 report, titled *McMinnville Conference Center and Destination Analysis*, identifies need for a 40,000 sq ft conference space not including accommodations and parking. We looked at the following comparable facilities:

- Washington County Event Center: 89,000 sf; ~8 acres with parking
- Seaside: 25,000 sf, 10 meeting rooms; 4 acres with parking
- Pendleton: 28,000 sf, 9 meeting rooms; 12.5 acres with parking
- Blair County Convention Center, PA. 2 levels, ~50,000 sf; 11 acres with parking
- Blue Water Convention Center, MI: ~40,000 sf; 12 acres

Based on review of comparable facilities, the land need for this use is assumed to be 5 acres.

8. EQUESTRIAN CENTER

In 2012, developer JW Millegan proposed a major equestrian center in Yamhill County. The concept was not further pursued, due in part to restrictions on EFU lands. As proposed, the facility would require approximately 325 acre and would include a gallop track, polo fields, steeplechase facilities, plus resort, RV park, distillery, brewpub, and cobblestone plazas. In effect, this would be a rural/urban interface tourism use with supporting commercial activity inside UGB.

Due to land use restrictions, elements such as resort, RV park, distillery, brewpub, would need to be sited within the UGB at a location interfacing with rural lands.

Other equestrian facilities in the region include:

- Hunter Creek Equestrian Park, 14441 SW Wilsonville Rd, Wilsonville, (120 ac site)
- Wilsonville Equestrian Center, 24040 SW 8nd Avenue, Tualatin
- Swan Training/Whip ‘n Spur, 16091 SW Wilsonville Rd

- Arbor Grove Equestrian Center, 7359 Hwy 219 NE, Woodburn

An example of an RV Park near McMinnville includes:

- Willamette Wine Country RV Park and the Vintages are 191 sites on 14.5 acres

Based on the facility concept, and review of comparable facilities, the portion of the land need within the UGB for this use is assumed to be 20 acres.

9. CRAFT FOOD AND BEVERAGE FOOD HUB/FARMERS MARKET

McMinnville wants to develop an integrated food hub and year-round farmers market. Farmers markets are physical retail marketplaces intended to sell foods directly by farmers to consumers. Food hubs offer a combination of aggregation, distribution, and marketing services at an affordable price. Food hubs make it possible for many producers to gain entry into new larger-volume markets that boost their income and provide them with opportunities for scaling up production. Combining food hubs and farmers markets creates opportunities to better integrate local food value chains. Examples of farmers markets and food hubs include:

- Olympia Farmers Market, Olympia WA - supports local sustainable agriculture by connecting the public with local farmers, artisans, and other producers in an economically viable marketplace, has over 100 vendors and an estimated 400,000 visitors per year; 4.7 acres
- Bellingham Farmers Market, Bellingham WA – promotes and encourages the development of local, small scale agriculture and ensure a market balance for small, local growers and has over 100 vendors and is co-located at a transit station in downtown Bellingham; 1.5 acres
- Fallon Food Hub Co-op, Fallon NV – has the mission of educate residents about the benefits of eating seasonally and healthfully in order to create a thriving and expanding local food scene resulting in increased opportunities for area producers; 2.2 acres
- Catskills Food Hub, Sullivan County NY – a non-profit organization working to strengthen local agriculture, increase access to fresh food, and improve health outcomes for Sullivan County and the region; 2.7 acres
- Puget Sound Food Hub, Mt. Vernon WA – supports the relationship between regional farmers and their customers, enabling a values-based supply chain for food safety and transparency; 3.2 acres

Based on review of comparable facilities, the land need for this use is assumed to be 3.5 acres.

10. MAKERSPACE/INNOVATION HUB/ FABRICATION CENTER

Most industrial land demand is already reflected in the employment forecast. McMinnville wants to develop additional strategies to bolster the local maker community and the entrepreneurial ecosystems. Makerspace and fabrication laboratories are strategies that communities are pursuing. Makerspaces are community-operated, often nonprofit, workspaces

where people with common interests, such as computers, machining, technology, science, digital art, or electronic art, can meet, socialize and collaborate. CraterWorks Makerspace, located in Central Point, also includes a commercial kitchen and market space. It is about 2 acres in size.

Based on review of comparable facilities, the land need for this use is assumed to be 2 acres.

Site Characteristics and Needed Sites

OAR 660-009-0015(2) requires the EOA to “identify the number of sites by type reasonably expected to be needed to accommodate the expected [20-year] employment growth based on the site characteristics typical of expected uses.” The Goal 9 rule does not specify how jurisdictions conduct and organize this analysis.

The rule, OAR 660-009-0015(2), states that “[i]ndustrial or other employment uses with compatible site characteristics may be grouped together into common site categories.” The rule suggests, but does not require, that the City “examine existing firms in the planning area to identify the types of sites that may be needed.” For example, site types can be described by: (1) plan designation (e.g., heavy or light industrial), (2) general size categories that are defined locally (e.g., small, medium, or large sites), or (3) industry or use (e.g., manufacturing sites or distribution sites). For purposes of the EOA, McMinnville groups its future employment uses into three general categories based on land use types: (1) commercial (includes retail commercial, office & commercial services, and tourism services)¹¹³; (2) industrial; and (3) sites needed to meet specific economic development objectives (e.g., other land needs not addressed in the employment forecast as discussed above).

In short, in addition to estimating the acreage needed to accommodate current and future employment, it is necessary for the city to determine if it has sites with characteristics suitable for the development to address needs and opportunities. This includes site size, topography, access, utilities, and other characteristics such as location and proximity to other uses and amenities.

As a first step, ECO analyzed the size distribution of developed employment sites in McMinnville by land use type. Exhibit 54 shows the results. The majority of commercial lots are small – 89% of commercial lots are less than 1 acre, and 43% of the commercial land (in acres) is in lots less than 1 acre. No developed commercial lots are larger than 20 acres. (Some shopping centers include multiple tax lots).

¹¹³ At early stages of the EOA, McMinnville broke commercial out into separate land use categories, but found that many overlap and do not have distinct site needs from other commercial categories by NAICS sector.

Industrial sites show a different pattern. Seven industrial sites (about 2 percent of all industrial sites) are greater than 20 acres but account for 25% of all industrial land in acres. While McMinnville has 126 industrial sites less than 1 acre, those sites account for only 7% of developed industrial land (in acres). Some industrial users occupy multiple buildings and/or tax lots.

Exhibit 54. Size distribution of developed employment sites by land use type, McMinnville UGB, 2019

Land Use Type	Developed acres size								Total
	<0.50 acre	0.50-0.99 acres	1.00-1.99 acres	2.00-4.99 acres	5.00-9.99 acres	10.00- 19.99 acres	20.00- 49.99 acres	50.00+ acres	
Commercial									
Acres	99	54	57	90	26	34	-	-	360
Percent of Acres	28%	15%	16%	25%	7%	9%	0%	0%	100%
Tax Lots	524	80	41	30	4	3	-	-	682
Percent of Tax Lots	77%	12%	6%	4%	1%	0%	0%	0%	100%
Industrial									
Acres	13	19	43	87	91	61	25	79	418
Percent of Acres	3%	4%	10%	21%	22%	15%	6%	19%	100%
Tax Lots	100	26	32	29	13	5	1	1	207
Percent of Tax Lots	48%	13%	15%	14%	6%	2%	0%	0%	100%

In addition to basic logistical considerations, there are workforce considerations for locating within a community. For example, in the Three Mile Lane study, it was found that employers located to the area because there were sites that had land needed for expansion; however, employees preferred to be in amenity-rich locations. Employers have had to adjust business practices to accommodate employees in these locations absent the presence of amenities, such as those which were available in prior locations before relocating to accommodate space needs. This largely illustrates the need for the city's growth management strategy of balanced land uses that provide for a nearby mix of uses and opportunities to reduce vehicle miles travelled.

For certain development types, there is a standardized taxonomy and these types have specific site characteristic needs. The City's economic development vision and strategy may deviate from some of these typical prototypes in order to promote an authentic place-based experience, but the real estate principles must still function properly. Exhibit 55 and Exhibit 56 show taxonomies for industrial and commercial categories. It should be noted that certain development types need larger sites that must be planned and located all at one time, even if future phases within the development build out over time. Therefore, those sites need to be accounted for up-front, rather than incrementally. Other land uses have needs that don't fit into these broad categories but have other programmatic needs that define the site needs. Examples of these ~~exogenous~~ other needed sites apply to uses such as convention/ conference space, regional athletic facilities, etc. For those facilities identified in the Economic Development Strategy that have special sites needs that aren't sufficiently accounted for in the land needs calculated by the employment forecast and employment density, site characteristics have been separately described below.

Exhibit 55. Shopping Center Taxonomy, ICSC



U.S. Shopping-Center Classification and Typical Characteristics*								
Type of Shopping Center	Concept	Typical GLA Range (Sq. Ft.)	Acres	# of Anchors	% Anchor GLA	Typical Number of Tenants	Typical Type of Anchors	Trade Area Size
General-Purpose Centers								
Super-Regional Mall	Similar in concept to regional malls, but offering more variety and assortment.	800,000+	60-120	3+	50-70%	N/A	Full-line department store, mass merchant, discount department store, fashion apparel store, mini-anchor, cineplex or other large-scale entertainment attraction, and food-and-beverage service cluster.	5-25 miles
Regional Mall	General merchandise or fashion-oriented offerings. Typically, enclosed with inward-facing stores connected by a common walkway. Parking surrounds the outside perimeter.	400,000-800,000	40-100	2+	50-70%	40-80 stores	Full-line department store, mass merchant, discount department store, fashion apparel store, mini-anchor, cineplex or other large-scale entertainment attraction, and food-and-beverage service cluster.	5-15 miles
Community Center ("Large Neighborhood Center")	General merchandise or convenience-oriented offerings. Wider range of apparel and other soft goods offerings than neighborhood centers. The center is usually configured in a straight line as a strip, or may be laid out in an L or U shape, depending on the site and design.	125,000-400,000	10-40	2+	40-60%	15-40 stores	Discount store, supermarket (toys, books, electronics, home improvement/furnishings or sporting goods, etc.)	3-6 miles
Neighborhood Center	Convenience-oriented.	30,000-125,000	3-5	1+	30-50%	5-20 stores	Supermarket	3 miles
Strip/Convenience	Attached row of stores or service outlets managed as a coherent retail entity, with on-site parking usually located in front of the stores. Open canopies may connect the storefronts, but a strip center does not have enclosed walkways linking the stores. A strip center may be configured in a straight line, or have an "L" or "U" shape. A convenience center is among the smallest of the centers, whose tenants provide a narrow mix of goods and personal services to a very limited trade area.	< 30,000	<3	Anchor-less or a small convenience-store anchor.	N/A	N/A	Convenience store, such as a mini-mart.	<1 mile
Specialized-Purpose Centers								
Power Center	Category-dominant anchors, including discount department stores, off-price stores, wholesale clubs, with only a few small tenants.	250,000-600,000	25-80	3+	70-90%	N/A	Category killers, such as home improvement, discount department, warehouse club and off-price stores	5-10 miles
Lifestyle	Upscale national-chain specialty stores with dining and entertainment in an outdoor setting.	150,000-500,000	10-40	0-2	0-50%	N/A	Large-format upscale specialty	8-12 miles
Factory Outlet	Manufacturers' and retailers' outlet stores selling brand-name goods at a discount.	50,000-400,000	10-50	N/A	N/A	N/A	Manufacturers' and retailers' outlets	25-75 miles
Theme/Festival	Leisure, tourist, retail and service-oriented offerings with entertainment as a unifying theme. Often in urban areas, they may be adapted from older—sometimes historic—buildings, and part of a mixed-use project.	80,000-250,000	5-20	Unspecified	N/A	N/A	Restaurants, entertainment	25-75 miles
Limited-Purpose Property								
Airport Retail	Consolidation of retail stores located within a commercial airport.	75,000-300,000	N/A	N/A	N/A	N/A	No anchors; retail includes specialty retail and restaurants	N/A

*Disclaimer: While every effort is made to ensure the accuracy and reliability of the information contained in this report, ICSC does not guarantee and is not responsible for the accuracy, completeness or reliability of the information contained in this report. Use of such information is voluntary, and reliance on it should only be undertaken after an independent review of its accuracy, completeness, efficiency, and timeliness. Criteria used in the definitions above are intended to be only typical of general features, rather than covering all situations.



Exhibit 56. Industrial Development Profile Matrix, Business Oregon and Johnson Reid

	General Site	Clean Tech Campus		Heavy Industrial/	General	Food	High-Tech	Campus	Warehouse/	Call Center/
		Regional	Global	Manufacturing	Manufacturing	Processing	Manufacturing Processes	Industrial/Electronic	Distribution	Business Services
Physical Site Characteristics										
Net Contiguous Developable Area										
50-100 acres	x	x		x	x	x	x	x	x	x
101-200 acres	x	x	x	x	x	x	x	x	x	x
200+ acres	x	x	x	x	x	x	x	x	x	x
Maximum Slope	5%	5%	5%	5%	5%	5%	7%	10%	5%	12%
Infrastructure										
Transportation										
Auto/Truck	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req
Interstate - Miles	10	15	10	10	20	30	15	10	5	NA
Trip Generation - ADT/Acre	65-192	76-106	76-106	42-58	76-106	76-106	76-106	76-106	65-86	144-192
Rail	Pref	Pref	Pref	Pref	Pref	Pref	NR	NR	Pref	NR
Marine	NA	Pref	Pref	Pref	Pref	Pref	NR	NR	Pref	NR
Airport - Regional Commercial	Pref	Pref	Pref	Pref	Pref	Pref	Pref	Pref	Pref	Pref
Max Distance - Miles	30	60	30	60	60	60	30	30	60	60
Airport - International	Pref	Pref	Pref	Pref	Pref	Pref	Pref	Pref	Pref	Pref
Distance - Miles	300	100	100	300	300	300	100	100	300	300
Water										
Min. Domestic Line Size/inches	8	10	8	8	8	10	10	10	4	4
Min. Fire Line Size/inches	10	10	10	10	10	10	10	8	10	8
High Pressure Supply	Pref	Pref	Pref	Pref	Pref	Pref	Pref	Pref	NR	NR
Flow/GPD	50-75,000	74,300	74,300	36,100	17,000	24,900	65,300	74,300	11,700	4,600
Sanitary Sewer	Req	Req	Req	Req	Req	Req	Req	Req	Req	Req
Min. Size/inches	8-10	10	10	8	8	10	10	8	4	4
Natural Gas/Preferred Min./inches										
		6	6	6	4	6	6	2	2	2
Electricity										
Min. Service Demand/kva	30-100 kva	50	100	30	30	30	30	30	10	30
Proximity to Substation	Pref	Req	Req	Pref	Pref	NR	Pref	Pref	NR	Pref
Secondary System Dependency	Pref	Req	Req	Req	NR	NR	Req			
Telecommunications										
High Capacity	Req	Req	Req	Pref	Pref	Pref	Req	Req	Pref	Req
Route Diversity	Pref	Req	Req	NR	NR	NR	Req	Pref	NR	Req
Fiber Optics	Req	Req	Req	Pref	Pref	Pref	Req	Req	Pref	Req
Location										
Workforce/50 Mile Radius	20,000-50,000	50,000	300,000	30,000	30,000	20,000	50,000	50,000	20,000	25,000
Executive & Workforce Housing	Pref									

Req Required
 Pref Preferred
 NR Not Required
 NA Not Applicable

Business Oregon and Johnson Reid



To meet the requirements of OAR 660-009-0015(2) to identify the number of needed sites by type, we analyzed the existing distribution of developed sites by size (Exhibit 57) and applied it to overall land need for the 2021-2041 period. Acres are converted to number of sites using average acres per tax lot (0.531.65 for commercial, and 2.023.78 for industrial).¹¹⁴ Note that this method likely underestimates the need for larger sites as many employment developments – both commercial and industrial – are on multiple tax lots.

Exhibit 57 shows that McMinnville has a deficit of sites needed in both commercial and industrial land, across most size classes. Discussions with McMinnville Industrial Promotions (MIP) also confirmed need for industrial sites in the 5 to 30 acre range. Currently, McMinnville has about nine industrial sites in this range, and an estimated need for 7 sites in this range.

Exhibit 57. Size distribution of needed employment sites compared to sites with buildable acres, by land use type, McMinnville UGB, 2021-2041

Land Use	Developed acres size							Total
	<1 acre	1.00-1.99 acres	2.00-4.99 acres	5.00-9.99 acres	10.00-19.99 acres	20.00-49.99 acres	50.00+ acres	
Number of Sites								
Commercial	422	29	21	3	2	0	0	477
Industrial	44	12	11	5	2	1	1	76
Total	466	40	32	8	4	1	1	553

Land Use	Acre size							Total
	0.50-0.99 acre	1.00-1.99 acres	2.00-4.99 acres	5.00-9.99 acres	10.00-19.99 acres	20.00-49.99 acres	50.00+ acres	
Number of Needed Sites								
Commercial	77	40	29	4	3	0	0	153
Industrial	10	12	11	5	2	0	0	40
Number of Sites with Buildable Acres								
Commercial	4	6	9	4	2	0	0	25
Industrial	11	15	4	6	1	2	2	41
Surplus (Deficit)								
Commercial	(73)	(34)	(20)	0	(1)	-	-	(128)
Industrial	1	3	(7)	1	(1)	2	2	1

Source: ECONorthwest

Land Sufficiency

This section addresses Step 10: Compare Land Demand to Supply

Exhibit 58 shows commercial and industrial land sufficiency within the McMinnville UGB. It shows:

- **Vacant or partially vacant unconstrained land** from Exhibit 50 within the UGB. Exhibit 58 shows that McMinnville will have 312 gross acres of industrial land, and 73 gross acres of commercial land in 2021.

¹¹⁴ We excluded sites less than 0.5 acres from this table based on the OAR 660-009-0005(14) definition for vacant land, which was used for the BLL. Those sites are assumed to be available to meet identified refill and development needs.

- **Demand for commercial and industrial land** from Exhibit 48. Exhibit 58 shows McMinnville will need a total of 153 gross acres for industrial uses and ~~368~~358 gross acres for commercial uses over the 2021-2041 period based on portion of demand determined through the forecast.
- Retail Leakage Additional needs, addressed previously in this Chapter, include retail leakage that is current demand that predates the employment forecast associated with new population growth(12-acre demand over the 20-year period)
- Demand for ~~additional~~ commercial land needs **with other needed sites** not identified in the forecast adequately accounted for in the average employment density calculations. Forecast commercial land includes land use types of retail commercial, office and commercial services, and tourism services. Additional needs, addressed previously in this Chapter, include retail leakage (12-acre demand over the 20-year period) and other These uses **withfor other needed sites** exogenous commercial land needs for target sectors are identified in the Economic Development Strategic Plan (104-acre demand over the 20-year period), a net difference of 94 additional acres after adjusting for associated employment.
- Needed site sizes from Exhibit 57 shows that McMinnville has a deficit of needed site sizes for commercial land for sites between 0.5 and 5 acres, as well as between 10 and 20 acres. McMinnville also has a deficit of industrial sites between 2 and 5 acres, as well as between 10 and 20 acres.

Note to reviewers: This evaluation may change depending on decision to adjust needs based on MIP and MEDP letters.

Exhibit 58 shows that McMinnville has:

- A 159-acre surplus of industrial land in 2041
- A ~~286~~95-acre deficit of commercial land in 2041.

Exhibit 58. Comparison of the capacity of unconstrained vacant land with employment land demand by land use type, McMinnville UGB, 2021-2041

Land Use Type	Land Supply (Suitable Gross Acres)	Demand (Gross Acres)	Land Sufficiency (Deficit)
Industrial	312	153	159
Commercial	73	358	(286)
<i>Forecast</i>		252	
<i>Retail leakage</i>		12	
<i>Other needed sites</i>		94	

Land Use Type	Land Supply (Suitable Gross Acres)	Demand (Gross Acres)	Land Sufficiency (Deficit)
Industrial	312	153	159
Commercial	73	368	(295)
<i>Forecast</i>		252	
<i>Retail leakage</i>		12	
<i>Exogenous</i>		104	

Source: ECONorthwest

Summary of Land Sufficiency for Employment Land in McMinnville

This section summarizes the analysis completed in Chapter 5 and the findings related to land sufficiency for employment land in McMinnville.

Demand

McMinnville will need at least 512 gross acres (153 industrial and 358 commercial) for employment for the 2021 to 2041 period and 899 gross acres (329 industrial and 570 commercial) for the 2021 to 2067 period (Exhibit 4).

Demand was calculated in following components:

- By developing an employment forecast and assigning employment density factors to determine associated land needs, Employment forecasts indicate that McMinnville will add 6,885 jobs between 2021 and 2041 and 16,001 jobs between 2021 and 2067. For this component of the demand, McMinnville will need at least 405 gross acres (153 industrial and 252 commercial) for employment for the 2021 to 2041 period and 783 gross acres (329 industrial and 454 commercial) for the 2021 to 2067 period (Exhibit 4).

~~Demand was calculated in following components:~~

- ~~▪ By developing an employment forecast and assigning employment density factors to determine associated land needs, Employment forecasts indicate that McMinnville will add 6,885 jobs between 2021 and 2041 and 16,001 jobs between 2021 and 2067. Based on this employment forecast and employment density estimates, McMinnville will need at least 521 gross acres (153 industrial and 368 commercial) for employment for the 2021 to 2041 period and 899 gross acres (329 industrial and 570 commercial) for the 2021 to 2067 period (Exhibit 59)~~
- By removing the following employment from the employment forecast, and instead estimating land needs for these employers based on interviews with the respective entities: local government, K-12, and higher education. *These are discussed in the public and semi-public land needs section of the Urbanization Summary report, and are not discussed in the land sufficiency analysis for commercial and industrial employment.*
- By identifying the existing retail leakage identified in a market analysis, which identifies existing deficits in the base year which are not otherwise accounted for in the forecast of future employment from 2021-2041. *McMinnville will need about 12.2 acres to address existing retail leakage.*
- By estimating “exogenous” special site needs other needed sites which are not accounted for in the average density assumption employment forecast. The sites for these uses are unique and not accounted for in the employment forecast and standard employment density factors. These are target industries and uses in the Mac Town 2032 Economic Development Strategic Plan. *McMinnville will need 104 acres for exogenous-commercial land special site needs other needed sites (e.g., land needs not accounted for in the employment projections) in the 2021 to 2041 period. A net increase of 94 acres when*

[adjusting the employment forecast to reflect these unique site needs and adjustments to average density assumptions for these sites and uses.](#)

The City assumed 5% of new employment would be accommodated on sites that don't require new vacant land, through infill, redevelopment, and locations that don't require new employment land.

Draft

Supply

In 2019, within the UGB, McMinnville has 416 buildable acres of employment land, with 366 buildable acres in vacant lots and 50 buildable acres in partially-vacant lots. This includes 93 buildable acres of commercial land and 323 buildable acres of industrial land. By 2021, the forecast assumes there will have been demand for 31 gross acres of employment land: 11 gross acres of industrial land and 20 gross acres of commercial land. That leaves a 2021 supply of 385 buildable acres of employment land: 312 buildable acres of industrial land and 73 buildable acres of commercial land

- Commercial.** Of the 93 buildable acres of commercial land, about 60 acres are in vacant lots, and 33 acres are in partially-vacant lots. About 27 acres (approximately 30% of the buildable commercial land) is on the Evergreen property, which is subject to a Planned Development that limits uses to tourism-related uses consistent with the master plan. There are only about two dozen tax lots with buildable commercial acreage, and only some of these contiguous. There are only about a half dozen sites or contiguous properties that have buildable acreage over five acres, accounting for about 72% of the buildable acres.
- Industrial.** Of 323 buildable acres of industrial land, about 305 acres are in vacant lots, and 17 acres are in partially-vacant lots. About 55% of the supply (177 acres) is in two tax lots over 50 acres, about 88 and 90 acres. One site is just under 50 buildable acres (15% of the supply), and the remaining sites are below 15 buildable acres.

Sufficiency

Exhibit 59 shows the capacity of unconstrained vacant land and the demand for employment land over the 5-, 10-, 20-, and 46-year planning periods, as well as the pre-2021 period.

Exhibit 59. Comparison of the capacity of unconstrained vacant land with employment land demand by land use type, McMinnville UGB, 2019-2021, 2021-2026, 2021-2031, 2021-2041, and 2021-2067

Land Use Type	2019-2021			5-year (2021-2026)			10-year (2021-2031)			20-year (2021-2041)			46-year (2021-2067)		
	Land Supply	Land Demand	Land Sufficiency (Deficit)	Land Supply	Land Demand	Land Sufficiency (Deficit)	Land Supply	Land Demand	Land Sufficiency (Deficit)	Land Supply	Land Demand	Land Sufficiency (Deficit)	Land Supply	Land Demand	Land Sufficiency (Deficit)
Industrial	323	11	312	312	38	274	312	77	236	312	153	159	312	329	(17)
Commercial	93	20	73	73	63	10	73	126	(53)	73	368	(295)	73	570	(498)

Land Use Type	2019-2021			5-year (2021-2026)			10-year (2021-2031)			20-year (2021-2041)			46-year (2021-2067)		
	Land Supply	Land Demand	Land Sufficiency (Deficit)	Land Supply	Land Demand	Land Sufficiency (Deficit)	Land Supply	Land Demand	Land Sufficiency (Deficit)	Land Supply	Land Demand	Land Sufficiency (Deficit)	Land Supply	Land Demand	Land Sufficiency (Deficit)
Industrial	323	11	312	312	38	274	312	77	236	312	153	159	312	329	(17)
Commercial	93	20	73	73	63	10	73	126	(53)	73	358	(286)	73	570	(498)

Source: ECONorthwest.

The next chapter provides a discussion of McMinnville's existing Comprehensive Plan goals and policies related to economic development. It suggests updates to policies that may not align with the findings of this EOA or recent updates to supporting planning work including the MAC-Town 2032 Economic Development Strategic Plan.

6. Comprehensive Plan Policies

OAR 660-009-0020 outlines requirements for industrial and other economic development policies.

Local comprehensive plans are to provide a commitment to provide a competitive short-term supply together with a commitment to provide adequate sites and facilities. With this EOA, also identified are fulfillment of community economic development objectives.

Economic Development Goals and Policies

As noted at the outset of this EOA update report, the 2019 MAC-Town Economic Development Strategic Plan states the City of McMinnville's mission related to economic development:

"McMinnville provides economic opportunity for all residents through sustainable growth across a balanced array of traditional and innovative industry sectors, from steel manufacturing to technology. Economic growth is collaborative, and inclusive of individuals from diverse backgrounds. Businesses leverage local and regional talent pipelines while attracting new employees and residents who value McMinnville's high quality of life. Our strong downtown serves residents and visitors alike, featuring unique shops and world-class restaurants that offer locally-produced food products and globally-renowned wine. As we evolve, we prize our small-town roots and we maintain McMinnville's character."

The currently adopted Comprehensive Plan also includes more detailed goal statements, and some goals include specific policies. This EOA update provides suggested changes to goals and policies that may not align with the city's current vision for economic development. The suggested changes are indicated with items to **remove** or items to consider **adding**.

Goal IV 1: To encourage the continued growth and diversification of McMinnville's economy in order to enhance the general well-being of the community and provide employment opportunities for its citizens.

Goal IV 2: To encourage the continued growth of McMinnville as the commercial center of Yamhill County in order to provide employment opportunities, goods, and services for the city and county residents.

Policy:

- 21.00 Commercial uses and services which are not presently available to McMinnville residents will be encouraged to locate in the City. Such uses shall locate according to the goals and policies in the comprehensive plan.
- 21.01 The City shall periodically update its economic opportunities analysis to ensure that it has within its urban growth boundary (UGB) a 20-year supply of lands designated for commercial and industrial uses. The City shall provide an adequate

number of suitable, serviceable sites in appropriate locations within its UGB. If it should find that it does not have an adequate supply of lands designated for commercial or industrial use it shall take corrective actions which may include, but are not limited to, redesignation of lands for such purposes, or amending the UGB to include lands appropriate for industrial or commercial use. (Ord.4796, October 14, 2003)

- 21.02 The City shall encourage and support the start up, expansion or relocation of high-wage businesses to McMinnville.
 - 1. The City shall coordinate economic efforts with the Greater McMinnville Area Chamber of Commerce, McMinnville Industrial Promotions, McMinnville Downtown Association, Yamhill County, Oregon Economic and Community Development Department, and other appropriate groups.
 - 2. Economic development efforts shall identify specific high-wage target industries and ensure that adequately sized, serviced, and located sites exist within the McMinnville urban area for such industries. (Ord.4796, October 14, 2003)
- 21.03 The City shall support existing businesses and industries and the establishment of locally owned, managed, or controlled small businesses. (Ord.4796, October 14, 2003)
- 21.04 The City shall make infrastructure investments that support the economic development strategy a high priority, in order to attract high-wage employment. (Ord.4796, October 14, 2003)
- 21.05 Commercial uses and services which are not presently available to McMinnville residents will be encouraged to locate in the city. Such uses shall locate according to the goals and policies in the comprehensive plan. (Ord.4796, October 14, 2003)

Goal IV 3: To ensure commercial development that maximizes efficiency of land use through utilization of existing commercially designated lands, through appropriately locating future neighborhood and community serving commercial lands and discouraging strip development.

General Policies:

- 22.00 The maximum and most efficient use of existing commercially designated lands will be encouraged as will the revitalization and reuse of existing commercial properties.
- 23.00 Areas which could in the future serve as commercial sites shall be protected from encroachment by incompatible uses.
- 24.00 The cluster development of commercial uses shall be encouraged rather than auto-oriented strip development. (Ord.4796, October 14, 2003)

Locational Policies:

- 24.50 The location, type, and amount of commercial activity within the urban growth boundary shall be based on community needs as identified in the Economic Opportunities Analysis. (Ord.4796, October 14, 2003)

- 25.00 Commercial uses will be located in areas where conflicts with adjacent land uses can be minimized and where city services commensurate with the scale of development are or can be made available prior to development.
- 26.00 The size of, scale of, and market for commercial uses shall guide their locations. Large-scale, regional shopping facilities, and heavy traffic-generating uses shall be located on arterials or in the central business district, and shall be located where sufficient land for internal traffic circulation systems is available (if warranted) and where adequate parking and service areas can be constructed.
- 27.00 Neighborhood commercial uses will be allowed in residential areas. These commercial uses will consist only of neighborhood oriented businesses and will be located on collector or arterial streets. More intensive, large commercial uses will not be considered compatible with or be allowed in neighborhood commercial centers.
- 28.00 A commercial planned development should be encouraged in the proximity of the intersection of Hill Road and West Second Street. Such a development should service the needs of people in western McMinnville. The development should be anchored by a grocery store.

Design Policies:

- 29.00 New direct access to arterials by large-scale commercial developments shall be granted only after consideration is given to the land uses and traffic patterns in the area of development as well as at the specific site. Internal circulation roads, acceleration/deceleration lanes, common access collection points, signalization, and other traffic improvements shall be required wherever necessary, through the use of planned development overlays.
- 30.00 Access locations for commercial developments shall be placed so that excessive traffic will not be routed through residential neighborhoods and the traffic-carrying capacity of all adjacent streets will not be exceeded.
- 31.00 Commercial developments shall be designed in a manner which minimizes bicycle/pedestrian conflicts and provides pedestrian connections to adjacent residential development through pathways, grid street systems, or other appropriate mechanisms. (Ord.4796, October 14, 2003)
- 32.00 Where necessary, landscaping and/or other visual and sound barriers shall be required to screen commercial activities from residential areas.
- 33.00 Encourage efficient use of land for parking; small parking lots and/or parking lots that are broken up with landscaping and pervious surfaces for water quality filtration areas. Large parking lots shall be minimized where possible. All parking lots shall be interspersed with landscaping islands to provide a visual break and to provide energy savings by lowering the air temperature outside commercial structures on hot days, thereby lessening the need for inside cooling. (Ord.4796, October 14, 2003)
- 34.00 The City of McMinnville shall develop and maintain guidelines concerning the size, placement, and type of signs in commercial areas.

- 35.00 The City of McMinnville shall encourage the development of a sign system that directs motorists to parking areas.

Goal IV 4: To promote the downtown as a cultural, administrative service, and retail center of McMinnville.

Downtown Development Policies:

- 36.00 The City of McMinnville shall encourage a land use pattern that:
 - 1. Integrates residential, commercial, and governmental activities in and around the core of the city;
 - 2. Provides expansion room for commercial establishments and allows dense residential development;
 - 3. Provides efficient use of land for adequate parking areas;
 - 4. Encourages vertical mixed commercial and residential uses; and,
 - 5. Provides for a safe and convenient auto-pedestrian traffic circulation pattern. (Ord.4796, October 14, 2003)
- 37.00 The City of McMinnville shall strongly support, through technical and financial assistance, the efforts of the McMinnville Downtown Steering Committee to implement those elements of Phase II of the “Downtown Improvement Plan” that are found proper, necessary, and feasible by the City. (Ord.4796, October 14, 2003)
- 38.00 The City of McMinnville shall encourage the renovation and rehabilitation of buildings in the downtown area, especially those of historical significance or unique design.
- 39.00 The City of McMinnville shall encourage and allow the development of pocket parks, landscaping, and other natural amenities to provide a visual contrast between streets and parking lots and buildings to enhance the general appearance of the downtown.
- 40.00 The City of McMinnville shall encourage and develop a policy of cooperation with federal, state, and local governments and agencies regarding the location of public administrative and service facilities in the downtown area and further encourage these same agencies to develop off-street parking opportunities and transportation alternatives for their employees.
- 41.00 The City of McMinnville shall encourage the expansion of retail and other commercial enterprises east of the railroad tracks and north and south of Third Street consistent with the adopted “Downtown Improvement Plan.” (Ord.4796, October 14, 2003)
- 42.00 The City of McMinnville shall continue to redesignate streets and traffic patterns in and around the downtown area to facilitate the movement of automobile traffic and provide for the safety and convenience of pedestrians.

- 43.00 The City of McMinnville shall allow the closing and/or vacating of streets to provide additional areas for off-street parking where such closure will not affect the ability of the police and fire departments, and public utilities to provide their designated service functions or where such closures will not negatively affect the overall traffic circulation in the downtown area.
- 44.00 The City of McMinnville shall encourage, but not require, private businesses downtown to provide off-street parking and on-site traffic circulation for their employees and customers.
- 45.00 The City of McMinnville shall study the feasibility of developing bicycle and pedestrian paths and/or lanes between residential areas and the activity centers in the downtown. (Ord.4961, January 8, 2013)
- 46.00 The City shall work to implement the recommendations of the adopted "McMinnville Downtown Improvement Plan."
- 46.01 The City shall, through its Landscape Review Committee, develop a list of street trees acceptable for planting within the public rights-of-way, parks and open spaces, and downtown. In addition, the committee shall develop standards for the planting of these trees, particularly within the downtown area, such that sidewalk and tree root conflicts are minimized. This effort should be coordinated with McMinnville Water and Light in an effort to minimize conflicts with utility lines.
- 46.02 The City shall, as funding permits and generally in the following order, periodically inventory trees within its public rights-of-way, parks and open spaces, and downtown area in order to assess the overall health of the city's urban forest and to determine those specific trees that may require maintenance, or removal and replacement. As a goal, the City seeks to maintain a diverse urban forest in terms of age and species.
- 46.03 The City shall take steps to minimize hardships to property owners situated adjacent to street trees that may have been found to be the cause of, but not limited to, the cracking or raising of a public sidewalk, or interfering with sewer lines that serve his/her property. In such cases, the City shall install root barriers, if practicable, or remove the offending tree(s). (Ord. 4816, December 14, 2004; Ord.4796, October 14, 2003)

Proposals:

- 6.00 A planned development overlay should be placed on the large cluster commercial development areas and the entrances to the City to allow for review of site design, on-site and off-site circulation, parking, and landscaping. The areas to be overlaid by this designation shall be noted on the zoning map and/or comprehensive plan map.
- 7.00 The City of McMinnville should study the feasibility of designating areas fronting Third Street east of the railroad tracks for retail commercial only, and designated areas on the fringes of the downtown as office residential.

- 8.00 The City of McMinnville should encourage the development of a commercial planned development center in the southwestern portion of the city large enough in scale to serve the needs of the area’s population. The center should be in proximity of the intersection of Old Sheridan Road, U.S. Highway 99W, and Oregon Highway 18.

Goal IV 5: To continue the growth and diversification of McMinnville’s industrial base through the provision of an adequate amount of properly designated lands.

Goal IV 6: To insure industrial development that maximizes efficiency of land uses, that is appropriately located in relation to surrounding land uses, and that meets necessary environmental standards.

General Policies:

- 47.00 Industries that locate in the community shall meet federal, state, and local environmental standards. These standards shall be given full weight in evaluating the desirability of the industry. Criteria for evaluation shall include, but not be limited by the effect the industry would have on:
 - 1. The natural environment, including air and water quality, natural drainage ways, and soil properties and other physical characteristics of the land including topography.
 - 2. The human environment, including the amount of noise and traffic generated and the ability of the housing industry to provide sufficient dwelling units with at least an adequate level of required urban services.
 - 3. The physical facilities of the community, including the ability of sanitary and storm sewer systems, water supply and distribution system, energy supply distribution systems, police and fire, and schools to provide designated services.
- 48.00 The City of McMinnville shall encourage the development of new industries and expansion of existing industries that provide jobs for the local (McMinnville and Yamhill County) labor pools.

Locational Policies:

- 49.00 The City of McMinnville shall use its zoning and other regulatory methods to prevent encroachment into industrial areas by incompatible land uses.
- 49.01 The City shall designate an adequate supply of suitable sites to meet identified needs for a variety of different parcel sizes at locations which have direct access to an arterial or collector street without having to pass through residential neighborhoods. (Ord. 4961, January 8, 2013)
- 49.02 The location, type, and amount of industrial activity within the Urban Growth Boundary shall be based on community needs as identified in the Economic Opportunities Analysis. (Ord. 4961, January 8, 2013)

- 49.03 In designating new industrial properties, and in redesignating properties to industrial zoning from other designations, the City shall work to provide employment opportunities in locations that are reasonably accessible to McMinnville residents, while minimizing the need to drive through existing or planned residential neighborhoods. (Ord. 4961, January 8, 2013)
- 50.00 The City of McMinnville shall encourage industrial uses to locate adjacent to the airport and south of Three Mile Lane, adjacent to the existing Riverside Drive industrial area, and in existing industrial areas through the proper designation of lands on the comprehensive plan and zoning maps. Comprehensive plan and/or zoning map changes to industrial designations in other areas may be granted if all the applicable goals and policies of the plan can be met.
 - *The City should consider updating this policy to reflect findings of the Three Mile Lane Area Plan, which discusses potential commercial uses in this area.*
- 51.00 The City of McMinnville shall encourage the location of airport-related industrial uses only on the industrial land which is adjacent to the airport. Those lands so reserved shall be designated in the planned development overlay covering this area.
 - *The City should consider updating this policy to reflect updated goals for the area near the airport.*
- ~~52.00—The City of McMinnville shall create a new "limited light industrial" zone which shall be placed on the industrial areas on the south side of Three Mile Lane in those areas where residential development is expected on the north side of the road. The new zone will allow only those types of industrial uses that will not conflict with the residential uses.~~
- ~~53.00—The City of McMinnville shall encourage the phased development of industrial land so that a moderate rate of growth occurs. A moderate rate of growth will be considered that rate which enables the City to provide urban services in a timely, orderly, and economic fashion, and which allows the private sector to provide for the needs of the new residents.~~
- 54.00 The City of McMinnville shall establish industrial planned development ordinances which shall be placed over the future industrial areas designated on the McMinnville Comprehensive Plan Map, the industrial reserve area, and certain existing industrially designated areas within the city limits. The overlay shall also be applied to any areas which are in the future designated for future industrial use through an amendment to the comprehensive plan map. The overlays shall provide standards to control the nuisance and negative environmental effects of industries. These controls shall cover, but not be limited to, the following areas:
 - 1. Landscaping and screening
 - 2. Noise suppression
 - 3. Light and heat suppression
 - 4. Pollution control for air, water, and land

- 5. Energy impacts
- 6. Traffic impacts
- 55.00 Deleted as per Ord. 4796, October 14, 2003.
- 56.00 Deleted as per Ord. 4796, October 14, 2003.
- 57.00 Agricultural activities shall be encouraged on industrially designated lands until such time as the lands are utilized for industrial purposes.

Draft

Appendix A. Buildable Lands Inventory

ECONorthwest prepared a Goal 10 compliant Economic Opportunities Analysis (EOA) for the City of McMinnville to assess whether the city has sufficient land within its Urban Growth Boundary (UGB) to accommodate population and employment growth forecast for the 20-year period between 2021 and 2041, as well as 5-, 10-, and 46-year planning periods. A key component of this study is the buildable lands inventory (BLI).

The legal requirements that govern the BLI for the City of McMinnville are defined in Statewide Planning Goal 10, OAR 660-009-0005, and OAR 660-009-0015(3). This Appendix summarizes the methods ECONorthwest used to conduct employment buildable lands inventory.

Study Area

The Commercial and Industrial BLI for McMinnville includes all commercial and industrial land within the McMinnville UGB. From a practical perspective, this means that all lands within tax lots identified by the Yamhill County Assessment and Taxation Office that fall within a commercial or industrial plan designation were inventoried. Note that tax lots do not generally include road or railroad rights-of-way or water. ECONorthwest used a July 2018 tax lot shapefile (the same data used for the residential BLI) from Yamhill County for the analysis, as well as previous information used for the 2013 EOA. The inventory then builds from the tax lot-level database to estimates of buildable land by plan designation.

Methods for Inventory of Commercial and Industrial Lands

For commercial and industrial land, the general structure is similar to the residential lands process with a few differences. The buildable lands inventory uses methods and definitions that are consistent with OAR 660-009 and OAR 660-024. Following are the administrative rules that provide guidance on the commercial and industrial BLI.

OAR 660-009-0005:

(1) *"Developed Land"* means non-vacant land that is likely to be redeveloped during the planning period.

(2) *"Development Constraints"* means factors that temporarily or permanently limit or prevent the use of land for economic development. Development constraints include, but are not limited to, wetlands, environmentally sensitive areas such as habitat, environmental contamination, slope, topography, infrastructure deficiencies, parcel fragmentation, or natural hazard areas.

(11) *"Site Characteristics"* means the attributes of a site necessary for a particular industrial or other employment use to operate. Site characteristics include, but are not limited to, a minimum acreage or site configuration including shape and topography, visibility, specific types or levels of public facilities, services or energy infrastructure, or proximity to a particular transportation or freight

facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes.

(12) "Suitable" means serviceable land designated for industrial or other employment use that provides, or can be expected to provide the appropriate site characteristics for the proposed use.

(13) "Total Land Supply" means the supply of land estimated to be adequate to accommodate industrial and other employment uses for a 20-year planning period. Total land supply includes the short-term supply of land as well as the remaining supply of lands considered suitable and serviceable for the industrial or other employment uses identified in a comprehensive plan. Total land supply includes both vacant and developed land.

(14) "Vacant Land" means a lot or parcel:

(a) Equal to or larger than one half-acre not currently containing permanent buildings or improvements; or

(b) Equal to or larger than five acres where less than one half-acre is occupied by permanent buildings or improvements.

Unlike with residential lands, the rules for employment lands include the concept of "suitability" which can be affected by factors other than the physical attributes of land. (See OAR 660-009-0005 (11) and (12) above.) The proposed BLI methods do not fully address the suitability factors, rather, they more narrowly assess whether a parcel is buildable based solely on attributes of the land. ECONorthwest had additional discussions with City staff about the assumptions embedded in the BLI as well as whether to apply additional suitability factors to employment lands, and if so, what factors to use.

Inventory Steps

The steps in the inventory of commercial and industrial buildable lands are:

1. Generate UGB "land base"
2. Classify lands by development status
3. Identify constraints
4. Verify inventory results
5. Tabulate and map results

Step 1: Generate UGB "land base"

The commercial and industrial inventory used all of the tax lots in the McMinnville UGB with the appropriate plan designations. Specific designations that were used include:

- Commercial
- Industrial

Step 2: Classify lands

In this step, ECONorthwest classified each tax lot with a plan designation of Commercial or Industrial (based on the lot's status as of January 2019) into one of five mutually exclusive categories based on development status:

- Developed land
- Vacant land
- Partially vacant land
- Public or exempt land

ECONorthwest initially identified buildable land and classify development status using a rule-based methodology. The rules are described below.

Development Status	Definition	Statutory Authority
Vacant Land	<p>A tax lot: (a) Equal to or larger than on half-acre not currently containing permanent buildings or improvements; or (b) Equal to or larger than five acres where less than one half-acre is occupied by permanent buildings or improvements</p> <p>For the purpose of criteria (a) above, lands with improvement values of \$0 were be considered vacant.</p>	OAR 660-009-005(14)
Partially Vacant Land	Partially vacant tax lots are those between one and five acres occupied by a use that could still be further developed based on the zoning. This determination is based on a visual assessment and City staff verification.	No statutory definition
Public or Exempt Land	Lands in public or semi-public ownership are considered unavailable for commercial or industrial development. This includes lands in Federal, State, County, or City ownership as well as lands owned by churches and other semi-public organizations and properties with conservation easements. Public lands are identified using the Yamhill County Assessment property tax exemption codes.	No statutory definition
Developed Land	<p>OAR 660-009-005(1) defines developed land as "Non-vacant land that is likely to be redeveloped during the planning period."</p> <p>Lands not classified as vacant, partially-vacant, undevelopable, or public or exempt are considered developed.</p>	OAR 660-009-005(1)

Step 3: Identify constraints

The commercial and industrial inventory uses development constraints consistent with guidance in OAR 660-009-0005(2). Most of the development constraints are the same as those used for residential lands. (The exception is steep slopes, which are defined as 15% or greater for employment lands and 25% or greater for residential lands.) Note that the previous EOA in 2013 used the 25% threshold for steep slopes. In the 2020 update, the PAC recommended using 15% to better reflect needs for development of employment land.

Constraint	Statutory Authority	Threshold	File name
Goal 5 Natural Resource Constraints			
Regulated Wetlands	OAR 660-009-0005(2)	Within National Wetlands Inventory	NWI
Natural Hazard Constraints			
Floodways	OAR 660-009-0005(2)	Lands within FEMA FIRM identified floodway	Floodplains_and_Floodways
100 Year Floodplain	OAR 660-009-0005(2)	Lands within FEMA FIRM 100-year floodplain	Floodplains_and_Floodways
Steep Slopes	OAR 660-009-0005(2)	Slopes greater than 15%	TBD

These areas were treated as prohibitive constraints (unbuildable). All constraints were merged into a single constraint file, which was then used to identify the area of each tax lot that is constrained. These areas were deducted from lands that were identified as vacant or partially vacant.

Step 4: Verify inventory results

As with the residential BLI, ECONorthwest used a multi-step verification process. This included review of aerial imagery, discussion and verification with City staff, and review of 2013 EOA results.

Step 5: Tabulate and map results

The results of the commercial BLI are presented in tabular and map format in Chapter 5.

Appendix B. Employment on Other Land and Employment Density

This appendix presents research and findings that ECONorthwest completed to provide rationale for employment density and “refill” and redevelopment assumptions for the 2020 update of the City of McMinnville’s EOA. It presents empirical analysis of existing employment densities in McMinnville and information on assumptions used for EOAs in comparison cities noted in *Exhibit 1*.

Exhibit 1. Cities used for comparison to the City of McMinnville by population and county

City	Population (2018 PSU Estimate)	County
Ashland	20,815	Jackson
Newberg	23,795	Yamhill
Redmond	29,190	Deschutes
Grants Pass	37,285	Josephine
Albany	53,145	Linn & Benton
Corvallis	59,280	Benton
Bend	89,505	Deschutes

In addition, with the 2013 EOA, the City also previously collected comparative data from other cities and the 2001/03 EOA for employment density and “refill” and redevelopment factors. That is summarized in Figure 40 of the 2013 EOA, which is also attached at the end of this document. It also includes guidelines from DLCD’s Goal 9 Guidebook. The City elected to add additional comparable cities to the analysis as three of the five cities in Figure 40 are metro cities with considerably different economic development opportunities and strategies.

Employment on Other (Non-Vacant) Land

ECONorthwest compiled information from the comparison cities on assumptions used in each city’s EOA for employment that doesn’t require vacant commercial or industrial land. (This corresponds to step 6 in the EOA summary matrix.) The 2013 McMinnville EOA used an overall assumption for employment on non-vacant land of 17%. Exhibit 2 summarizes assumptions used in other Oregon comparison cities.

Exhibit 2. Employment on other land assumptions for comparison cities

City	Emp. on Other Land	Rationale/Approach	Date
Ashland	20%	Empirical analysis of capacity on redevelopable lands.	2007
Newberg	5% (retail only)	Empirical analysis. (See Figure 40 on pg. 85 of 2013 McMinnville EOA)	2006
Redmond	10%	Reasonable judgement. (pg. 5-29).	2005
Grants Pass	10%	Reasonable judgement based on comparison areas. (pg. 8-46)	2007
Albany	0%	Redevelopment was accounted for in the BLI, so they did not account for it again in the forecast. (pg. 11)	2005
Corvallis	Industrial: 11% Retail: 12% Office: 29%	Reasonable judgement based on available buildable land. (pg. 4-56)	2016
Bend		Note: Bend used a site-based approach for estimating land need. We do not recommend this approach.	2016

DLCD's Goal 9 workbook presented guidelines of 85-90% growth on vacant land, based on 10-15% refill and redevelopment cited as a rule of thumb.

The effect of applying refill and redevelopment rates to existing developed land is to implicitly increase the employment density on those lands. Employment density is discussed further in the next section, but must be evaluated together with assumptions about refill and redevelopment. As discussed in the next section, the observed density of employment in commercial and industrial plan designations is currently about 10 employees/net acre in industrial plan designations (down slightly from the 2013 EOA) and 23 employees/net acre in commercial plan designations (up slightly from the 2013 EOA). Exhibits 3A-3C show the effective densities resulting from applying 17%, 10%, and 5% of new employment to developed commercial and industrial sites.

For industrial employment, this ranges from absorbing between 96 to 325 additional employees from present through 2041, and increasing to absorb between 191 to 650 additional employees from present through 2067 on *currently* developed properties. This would increase the employment density for these sites from 10 employees/acre to between 11 to 12 employees/acre.

For commercial development, this ranges from absorbing between 295 to 1,003 additional employees from present through 2041, and increasing to absorb between 619 to 2,103 additional employees from present through 2067 on *currently* developed properties. This would increase the employment density for these sites from 23 employees/acre to between 25 to 29 employees per acre.

Exhibit 3A. Effective Employment Densities with 17% Refill/Redevelopment Assumption on Current Developed Commercial and Industrial Sites

Plan Designation	Covered Employment by Plan Des.	Total Emp. Calc. by Plan Des.	Net Unconstrained Developed Acres in Plan Designation	Effective Employment per Net Acre on Current Developed, Non-Vacant Sites							
				Current Calc Emp Density	17% of Add'l Emp to 2041	Tot Emp Exist Sites by Plan Des. In 2041	Emp. Density Exist Sites with 17% of emp to 2041	17% of Add'l Emp to 2067	Tot Emp Exist Sites by Plan Des. In 2067	Emp. Density Exist Sites with 17% of emp to 2067	
Industrial	3,422	4,485	428	10	325	4,810	11	650	5,135	12	
Commercial	6,245	8,184	357	23	1,003	9,187	26	2,103	10,287	29	

Exhibit 3B. Effective Employment Densities with 10% Refill/Redevelopment Assumption on Current Developed Commercial and Industrial Sites

Plan Designation	Covered Employment by Plan Des.	Total Emp. Calc. by Plan Des.	Net Unconstrained Developed Acres in Plan Designation	Effective Employment per Net Acre on Current Developed, Non-Vacant Sites							
				Current Calc Emp Density	10% of Add'l Emp to 2041	Tot Emp Exist Sites by Plan Des. In 2041	Emp. Density Exist Sites with 10% of emp to 2041	10% of Add'l Emp to 2067	Tot Emp Exist Sites by Plan Des. In 2067	Emp. Density Exist Sites with 10% of emp to 2067	
Industrial	3,422	4,485	428	10	191	4,676	11	383	4,868	11	
Commercial	6,245	8,184	357	23	590	8,774	25	1,237	9,421	26	

Exhibit 3C. Effective Employment Densities with 5% Refill/Redevelopment Assumption on Current Developed Commercial and Industrial Sites

Plan Designation	Covered Employment by Plan Des.	Total Emp. Calc. by Plan Des.	Net Unconstrained Developed Acres in Plan Designation	Effective Employment per Net Acre on Current Developed, Non-Vacant Sites							
				Current Calc Emp Density	5% of Add'l Emp to 2041	Tot Emp Exist Sites by Plan Des. In 2041	Emp. Density Exist Sites with 5% of emp to 2041	5% of Add'l Emp to 2067	Tot Emp Exist Sites by Plan Des. In 2067	Emp. Density Exist Sites with 5% of emp to 2067	
Industrial	3,422	4,485	428	10	96	4,581	11	191	4,676	11	
Commercial	6,245	8,184	357	23	295	8,479	24	619	8,803	25	

Both the industrial and commercial employment densities have remained nearly the same over time: from the 2001/03 EOA, the empirical calculations in the 2013 EOA, and the empirical calculations in the current analysis. Industrial densities have decreased slightly from about 11 employees/acre to about 10 employees/acre. Commercial densities have increased slightly from about 22 employees/acre to about 23 employees/acre.

The 2001/03 EOA used variable assumptions for refill/redevelopment, with 17% for industrial, 15% for commercial, and 13% for institutional, while the 2013 EOA increased these all to 17%.

Average employment densities don't appear to have increased consistent with those rates. Actual changes compared to assumptions about refill/redevelopment of the existing developed sites may be the result of:

- Refill/redevelopment has not occurred, or has occurred at lower rates than assumed in McMinnville's prior EOAs
- Employment densities of existing businesses may have declined, through reduction of employees or through expansion of facilities without commensurate increases in employment densities
- Increases in employment density in some cases may have been offset by reductions in employment density in other cases

Potential reasons may include:

- Increases in automation, where operations occupy the same space, but with fewer employees
- More new businesses/new land use of types with the same or lower employment densities than previous business' employment densities
 - Potential increases in area devoted to storage, cold storage, warehousing, and distribution, some of which may increase together with surrounding agricultural uses.
 - Potential increases in area devoted to indoor grow operations, potentially further increasing from the growth of industrial hemp production.¹¹⁵

The dynamics of new job creation should also be considered in evaluating refill and redevelopment.

- How strongly is job growth correlated with the size or age of a business? How much job growth is created through newer start-ups vs. long-term growth of more established businesses? How many smaller entrepreneurial businesses intend to grow to be larger businesses vs. remain smaller?
- While there may be capacity to add employees within established space for existing businesses, new businesses may need their own facilities that can't be located within the facilities of other businesses. Some existing businesses may retain partially vacant sites in the event they need to expand. Some businesses will require ownership of their land and facilities rather than leasing space on existing developed sites.

An assumption of 5% industrial refill/redevelopment would result in an increase in employment density from about 10 emp/ac to about 11 emp/ac on existing developed sites. This is generally consistent with McMinnville's historic trends.

¹¹⁵ <https://www.forbes.com/sites/andrebourque/2019/01/31/how-hemp-is-moving-oregon-marijuana-to-an-indoor-grow-crop/#10ff80b960ed>

The empirical calculated density for commercial sites in the 2013 EOA was 22 emp/acre, but an aspirational policy of 26 emp/acre was adopted. Any of the three scenarios calculated above (5%, 10%, or 17%) for refill/redevelopment on *currently* developed sites would result in an increase in density on these sites that would exceed currently observed densities, ranging from 24 to 26 emp/acre by 2041. Carrying over the 17% assumption from the 2013 EOA would mean an assumed employment density of 29 emp/acre on these sites by 2067, compared to the current 23 emp/acre, and exceeding even the aspirational overall assumption of 26 emp/acre used in the 2013 EOA. An assumption of 5% commercial refill/redevelopment would result in an increase in employment density from 23 emp/ac to 25 emp/ac on these sites in 2067.

Recommended approach and assumptions

This update could simply carry forward the 17% refill/redevelopment assumption from the 2013 EOA for all categories, but the analysis of empirical data, calculations of effective density, and comparisons with other cities and the DLCDC Goal 9 Guidebook suggest that assumption is high, and that McMinnville hasn't achieved this historically. Further, even if that level of refill/redevelopment had been achieved historically, carrying over an assumption for each planning period would have a compounding effect of assuming unlimited, successively higher capacity of the same existing developed sites to absorb more employment each time. This would push the employment density for those developed lands up each planning cycle, where infill and redevelopment would have already theoretically occurred and increased in each previous planning cycle.

A reasonable assumption would be 5% refill/redevelopment for both commercial and industrial employment, which is what we would recommend. This would result in an increase in employment density on currently developed sites, still exceeding the empirical employment densities from the 2013 EOA.

The assumed 17% refill/redevelopment rate from the 2013 EOA would be an aspirational assumption that exceeds the empirical densities and exceeds the aspirational density from the 2013 EOA. It is an estimate that we don't anticipate will be achieved, and is higher than most comparisons. The 2001/03 EOA refill/redevelopment assumption of 17% for industrial and 15% for commercial is another aspirational assumption that hasn't been observed historically.

The tables below show the result of the 5%, 10%, and 17% refill/redevelopment assumptions for comparison for the 2021-2041 period.

The government land use type is excluded from the remaining employment forecast calculations, as we account for government employment in calculations for other land needs.

Exhibit 4a. Estimate of new employment that will require vacant land, McMinnville UGB, 2021 to 2041 (17% Assumption)

Land Use Type	New Employment Growth	Emp. on Other Land	New Emp. on Vacant Land
Industrial	1,667	283	1,384
Retail Commercial	383	65	318
Office & Commercial Services	3,346	569	2,777
Tourism Services	1,269	216	1,053
Total	6,665	1,133	5,532

Exhibit 4b. Estimate of new employment that will require vacant land, McMinnville UGB, 2021 to 2041 (10% Assumption)

Land Use Type	New Employment Growth	Emp. on Other Land	New Emp. on Vacant Land
Industrial	1,667	167	1,500
Retail Commercial	383	38	345
Office & Commercial Services	3,346	335	3,011
Tourism Services	1,269	127	1,142
Total	6,665	667	5,998

Exhibit 4c. Estimate of new employment that will require vacant land, McMinnville UGB, 2021 to 2041 (5% Assumption)

Land Use Type	New Employment Growth	Emp. on Other Land	New Emp. on Vacant Land
Industrial	1,667	83	1,584
Retail Commercial	383	19	364
Office & Commercial Services	3,346	167	3,179
Tourism Services	1,269	63	1,206
Total	6,665	332	6,333

Employment Density

ECONorthwest completed an empirical analysis of the overall employment density in commercial and industrial areas, as well as in sample areas for the following land use types included in the employment forecast—industrial, office commercial, and retail commercial.¹¹⁶ The 2013 McMinnville EOA used the following assumptions for employment density:

- **Industrial:** 11 employees per acre
- **Commercial:** 26 employees per acre

The 2013 EOA included an empirical analysis of employment density. The 11 employee/acre industrial density was the empirical calculated density. The empirical commercial employment density was 22 employees per acre. The 26 employee/acre density was an aspirational, policy-based assumption.

In the PAC materials provided for the meeting on September 5, 2019, we completed a sensitivity analysis for employment density based on the 2013 EOA assumptions. The analysis shows the effect of a 10% increase and 10% decrease of the 2013 employment density assumptions and the range of resulting needed acreage. The PAC requested further research based on existing employment density in McMinnville. The results of that analysis are provided in this section.

Overall employment density for existing employment in McMinnville

The analysis of overall employment density for commercial and industrial areas included lots identified as “developed” in the buildable lands inventory (BLI) and summarized the employment per acre on these sites by plan designation (commercial or industrial land only). Land in wetlands was removed from the acreage calculation to better account for land used for employment. We calculated employment density, expressed here as total employees per acre, by dividing the number of employees on developed sites in commercial and industrial plan designations by the acreage (less wetlands) of those developed sites. The results of this calculation were:

- **Industrial:** 10 employees per acre
- **Commercial:** 23 employees per acre

Exhibit 5 shows the results of applying these employment density assumptions for the remaining land use types.

¹¹⁶ The other land use types—tourism services and government—were excluded from the sample area analysis. The PAC will be discussing site characteristics. The sites needed for tourism services are typically similar to the needs for retail commercial. Thus, it is reasonable to assume the same employment density for both tourism services and retail commercial. Government employment will not require vacant commercial and industrial land, so we did not analyze employment density for this land use type.

Exhibit 5a. Estimate of future land demand for new employment (plan designation approach), McMinnville UGB, 2021 to 2041, after 17% deduction

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,467	10	147	156
Retail Commercial	337	23	15	18
Office & Commercial Services	2,945	23	128	156
Tourism Services	1,117	23	49	59
Total	5,866		338	389

Exhibit 5b. Estimate of future land demand for new employment (plan designation approach), McMinnville UGB, 2021 to 2041, after 10% deduction

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,500	10	150	160
Retail Commercial	345	23	15	18
Office & Commercial Services	3,011	23	131	160
Tourism Services	1,142	23	50	61
Total	5,998		346	398

Exhibit 5c. Estimate of future land demand for new employment (plan designation approach), McMinnville UGB, 2021 to 2041, after 5% deduction

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,584	10	158	169
Retail Commercial	364	23	16	19
Office & Commercial Services	3,179	23	138	169
Tourism Services	1,206	23	52	64
Total	6,333		365	420

While this approach provides a reasonable indication of employment densities in McMinnville, the mix of types of employment on sites may affect the overall result (i.e., not all employment in industrial areas is classified as industrial employment). However, these results align with comparable areas and previous guidelines for calculating employment density, and are therefore reasonable assumptions for the purposes of the EOA.

Sample area employment density for existing employment in McMinnville

ECONorthwest also analyzed sample areas representative of employment in McMinnville by land use type. City staff assisted in choosing these areas for further analysis based on local knowledge as well as requirements for data confidentiality. Again, we calculated the employment density by dividing the number of total employees in each sample area by the total acreage of the sample area site. The results by land use type were:

- **Industrial:** 11 employees per acre
- **Office commercial:** 29 employees per acre
- **Retail commercial:** 19 employees per acre

Similar to the first approach to calculate overall employment density, a sample area approach also has limitations. Sample areas, by definition, do not provide information on employment density across McMinnville. However, these areas were chosen based on a representation of typical employment areas in McMinnville. Limitations in data availability, reporting, and confidentiality also present limitations in results.

The results of both approaches align with results from other studies in comparable cities, as well as the guidelines in DLCD's *Industrial and Other Employment Lands Analysis—Basic Guidebook*, which states:

“Typical employment densities per net acre range from 8 - 12 jobs for industrial; 14 - 20 jobs for commercial; and 6 - 10 jobs for institutional/other jobs.”

The next section provides background information on employment density assumptions used in cities that are comparable to McMinnville.

Exhibit 6 shows the results of applying these employment density assumptions for the remaining land use types.

Exhibit 6a. Estimate of future land demand for new employment (sample area approach), McMinnville UGB, 2021 to 2041, after 17% deduction

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,384	11	126	134
Retail Commercial	318	19	17	20
Office & Commercial Services	2,777	29	96	117
Tourism Services	1,053	19	55	68
Total	5,532		294	339

Exhibit 6b. Estimate of future land demand for new employment (sample area approach), McMinnville UGB, 2021 to 2041, after 10% deduction

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,500	11	136	145
Retail Commercial	345	19	18	22
Office & Commercial Services	3,011	29	104	127
Tourism Services	1,142	19	60	73
Total	5,998		319	367

Exhibit 6c. Estimate of future land demand for new employment (sample area approach), McMinnville UGB, 2021 to 2041, after 5% deduction

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,584	11	144	153
Retail Commercial	364	19	19	23
Office & Commercial Services	3,179	29	110	134
Tourism Services	1,206	19	63	77
Total	6,333		336	388

Employment density comparison

City of McMinnville staff provided ECONorthwest with a list of cities typically used for comparison purposes. The cities and their population are listed in Exhibit 7.

Exhibit 7. Cities used for comparison to the City of McMinnville by population and county

City	Population (2018 PSU Estimate)	County
Ashland	20,815	Jackson
Newberg	23,795	Yamhill
Redmond	29,190	Deschutes
Grants Pass	37,285	Josephine
Albany	53,145	Linn & Benton
Corvallis	59,280	Benton
Bend	89,505	Deschutes

Each city listed above has completed an EOA between 2005 and 2016. Methodologies for each EOA varied, and information related to employment density assumptions was not consistently reported. The assumptions document in each EOA are listed in Exhibit 8, along with a description of the rationale or approach used for arriving at the employment density numbers, if available. These approaches generally fell into two categories, either (1) a reasonable judgement based on comparable cities or (2) an empirical analysis of existing employment density or other metric.

Exhibit 8. Employment densities for comparison cities

City	Employment Density (employees per acre)			Rationale/Approach	Date
	Industrial	Commercial	Retail		
Ashland	12	17	--	Reasonable judgement/comparison (pg. C-6)	2007
Newberg	11	21	21	Empirical analysis (pg. 84 McMinnville 2013 EOA)	2010
Redmond	5 (low) – 12 (high)	12 (low) – 20 (high)	--	Empirical analysis/comparison (pg. 5-29)	2005
Grants Pass	10	17	17	Reasonable judgement/comparison (pg.8-47)	
Albany	12	--	20	Reasonable judgement/comparison (pg 11)	2007
Corvallis	10	35	25	Empirical analysis (pg 4-60)	2016
Bend	--	--	--	<i>Note: Bend did not use an EPA approach for the 2016 EOA.</i>	2016

Recommended assumptions and approach

The results of the empirical analysis are within reasonable ranges for employment densities. Exhibit 9 shows the recommended approach of 11 employees per acre for industrial and 23 employees per acre for all other land use types. It would also be possible to use the commercial density as a total control for the commercial subcategories and allocate a proportion of the total acreage to each subcategory based on the share from the sampled employment densities if preferred, but we believe this method is reasonable.

Exhibit 9. Estimate of future land demand for new employment (recommended approach), McMinnville UGB, 2021 to 2041, after 5% refill/redevelopment deduction

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,584	11	144	153
Retail Commercial	364	23	16	19
Office & Commercial Services	3,179	23	138	169
Tourism Services	1,206	23	52	64
Total	6,333		351	405

These calculations do not include the government land needs, which are calculated separately.

During discussion of site characteristics, a portion of the commercial uses will be split out and assigned to neighborhood-serving commercial and services to be located in neighborhood areas.

Figure 40. Comparative Employment Density & Redevelopment Factors

Reference	Employment Density (Jobs per Acre)	% of Job Growth on Vacant Employment Land
2001 McMinnville EOA	11 industrial 22 commercial 35 institutional	83% industrial 85% commercial 87% institutional (based on factors including 1-5% requires no non-res built space or land, 5-7% on existing developed land, and 5% vacancy rate)
DLCD Goal 9 Guidebook (2005)	8-12 industrial 14-20 commercial 6-10 institutional & other (demand for net acres; also noted is that each acre can accommodate 10-15 jobs for general commercial and office-park industrial, 20 for offices in non-metro downtowns & suburban settings)	85-90% job growth on vacant land (based on 10-15% use of vacant or redeveloped buildings cited as general rule of thumb)
Salem-Keizer Metro Area Regional EOA 2012-2032 (May 2011)	Forecast densities @: 20 light industrial (above 12-15 current) 36 general office (reflecting current average with range from 27 in retail areas to 73 in Salem central business area) Retail/personal service uses forecast not by jobs per acre (but @ 0.30 FAR)	95% industrial 83% general office (based on assumption that 5% of industrial and 17% of office new employment will locate in existing space or sites not requiring new land; EOA also notes that "there is no study that quantifies how much employment is commonly accommodated in existing built space over a 20-year period in a city.")
Albany EOA Update (2007)	12 industrial 20 commercial retail/services 10 government	100% job growth on vacant land (was at 90% with 2000 EOA @ 10% refill rate but adjusted to 0% rate as the updated 2007 BLI already accounted for infill and redevelopment on supply side of analysis)
Newberg EOA (2010)	11 industrial (including 10% increase in density as efficiency measure) 21 commercial retail & office (overall average with office calculated @ 40% FAR & avg 201 sf/job; retail estimated @ 14.8 net buildable acres per 1,000 new households)	See density for industrial Office appears to assume 100% development on vacant land Retail assumes 95% use of vacant land (with 5% assumed for infill & redevelopment)
City of Beaverton Final Draft EOA (2010)	18 general industrial 10 warehouse 23 flex/business park 58 office 30 retail 38 institutional (@ Metro method of jobs/bldg sf & FAR for densities)	94.2% industrial 92.7% commercial (calculated for excess vacancy above 6% target normalized rate with excess figures at 5.8% industrial, 7.3% commercial)
Metro Urban Growth Report (2009)	6 general industrial & warehouse 23 flex/business park 46 office 27 retail 27 institutional (Calculated using jobs/bldg sf & FAR for densities; @ low end of spectrum for outer ring suburbs)	80-90% general industrial, warehouse & flex/business park (10-20% refill) 70% office (30% refill) 40-70% retail (or 30-60% refill with most (generally @ lower end of refill rates) 60-65% institutional (or 35-40% refill) (Eange for outer ring suburbs, 2015-30 time period)

Sources: From documents prepared by ECONorthwest, Johnson-Gardner and E. D. Hovee & Company, LLC.