City of McMinnville
Planning Department
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Economic Opportunities Analysis (EOA) and Urbanization Study
Project Advisory Committee
Meeting #2: Agenda
Thursday, September 5, 2019, 4:30pm-6:30pm
Police Department Training Room, 121 SW Adams Street

Committee Members	Time	Agenda Items

Citizen Advisory Committee (CAC):
 Kellie Menke
 Roger Lizut
 Susan Dirks
 Sid Friedman
 Mark Davis
 Paul Davis
 Andrew Burton
 Beth Caster
 Michael Jester
 Robert J. Banagay
 Amanda Perron
 Matt Deppe
 Patty O'Leary
 	
 Doug Hurl
 Scott Cooper
 Alan Amerson
 Kelly McDonald
 Mike Morris
 Jeff Knapp
 Gioia Goodrum
 Ed Gormley
 Kyle Faulk
 Jody Christensen
 John Dietz
 	
 Technical Advisory Committee (TAC):
 Tom Schauer - Lead
 Heather Richards
 Chuck Darnell
 Jamie Fleckenstein
 Mike Bisset
 Susan Muir (Parks Director)
 Angela Carnahan (DLCD)
 Stephanie Armstrong (Yamhill County)
	4:30pm
	
	 4:40pm
	
	 4:50pm
	
	 6:10pm
	
	 6:20pm
	
	 6:25pm
	
	 6:30pm
		1. Call to Order/Introductions (10 mins)
		
		 2. General: PAC Meeting #2- *Exhibit 1: Cover Memo*
		   a. Summary of PAC Meeting #1 (July 16, 2019)
		   b. Summary of PAC Meeting #2 Materials & PAC Guidance
		
		 3. Economic Opportunities Analysis -
		   a. Discuss PAC recommendations for EOA Assumptions
		   Exhibit 2: Employment Forecast Memo
		   Exhibit 3: Employment Trends Memo
		
		 4. Urbanization Study -
		   a. Other Land Needs, Accounting for Employment Uses on Residential Land & Residential Uses on Employment Land
		
		 5. Next Steps (5 mins)
		
		 6. Comments (5 mins)
		
		 7. Adjournment

EXHIBIT 1

ECONorthwest
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DATE: August 29, 2019
TO: McMinnville Economic Opportunities Analysis Project Advisory Committee
CC: Heather Richards and Tom Schauer, City of McMinnville
FROM: Bob Parker and Margaret Raimann, ECONorthwest
SUBJECT: COVER MEMO - PAC MEETING 2

The second meeting of the City of McMinnville's Economic Opportunities Analysis (EOA) Project Advisory Committee (PAC) is scheduled to occur on September 5, 2019 from 4:30 to 6:30 p.m. The purpose of this memo is to outline the key decisions and discussion points from the first PAC meeting on July 16, 2019, as well as provide a summary of the materials included in the packet for PAC meeting #2.

Summary of Previous Meeting

PAC meeting #1 occurred on July 16, 2019 from 4:30 to 6:30 p.m. The purpose of the meeting was to provide an overview of the EOA and Urbanization Study. (Remaining discussions of the Urbanization Study will occur as a separate subcommittee of this PAC, along a similar timeline.) Along with an overview of the project and PAC role in the process, ECONorthwest presented preliminary data points related to McMinnville's economy; discussed necessary updates to the 2013 EOA to align with current land needs; and key decision points for the PAC to consider. PAC members specifically requested additional data to assist in making recommendations. A list of these requests is provided below, along with a description of how the request was addressed in the materials for PAC meeting #2:

- **Food and beverage manufacturing.** ECONorthwest presented information related to employment in McMinnville by sector. A PAC member asked about manufacturing employment and the detailed industries included in this sector. Specifically, the PAC member was interested in the share of food and beverage manufacturing employment as part of the total manufacturing employment in McMinnville.

  o ECONorthwest included detailed information on employment in manufacturing industries in the employment trends memorandum included in the materials for meeting #2.

- **Employment forecast rate.** ECONorthwest presented the two safe-harbor options available to McMinnville for estimating the amount of new employment in the McMinnville UGB within the planning period. The PAC requested additional information about how the rates would translate to land demand, and the substantial evidence requirements for assuming a higher (non-safe-harbor) growth rate.

  o ECONorthwest prepared a memorandum as part of the materials for PAC meeting #2. A summary of what is covered in this memo is provided in the next section.

- **Land use types.** ECONorthwest presented general categories of land use types for the forecast of new employment over the planning period—industrial, retail commercial, office commercial, and government.[1] PAC members asked to separate tourism-related services from office commercial, since tourism is a key industry identified in the 2032 MAC Town Economic Development Strategic Plan.

  - ECONorthwest prepared a memorandum as part of the materials for PAC meeting #2. A summary of what is covered in this memo is provided in the next section.

- **Employment density.** ECONorthwest presented the previous assumptions related to employment density from the 2013 EOA document. PAC members asked for a "sensitivity analysis" to show how changes in employees per acre by land use type would change the overall land demand.

  - ECONorthwest prepared a memorandum as part of the materials for PAC meeting #2. A summary of what is covered in this memo is provided in the next section.

- **Buildable lands inventory.** ECONorthwest presented previous methods used in the 2013 EOA for the Buildable Lands Inventory (BLI), and proposed updates to include a public and exempt category and decreasing the assumption for steep slopes to 15% (instead of 25%) for the environmental constraint considerations. The public and exempt assumption would better align with assumptions in the HNA, and the steep slope would provide a more accurate illustration of development of commercial or industrial land.

  - ECONorthwest is continuing to work with City staff on updating the BLI. PAC meeting #2 focuses on the background information and demand portion of the EOA. Subsequent meetings will address the supply portion (i.e., BLI results), site needs considerations, and overall land sufficiency for commercial and industrial land.

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[1] The grouping of NAICS codes for each land use type are: Industrial (*private* employment in sectors 11, 21, 22, 23, 31, 32, 33, 42, 48, and 49); Retail Commercial (*private* employment in sectors 44 and 45); Office Commercial (*private* employment in sectors 51, 52, 53, 54, 55, 61, 62, and 81); Tourism (*private* employment in sectors 71 and 72); and Government (non-private employment in all sectors, i.e., ownership code of 1, 2, or 3 in the Quarterly Census of Employment and Wages).

Summary of Meeting #2 Materials and PAC Guidance

This section summarizes the key decisions for the PAC to decide during meeting #2. Supplemental materials provided to assist PAC members in making recommendations for this portion of the analysis include:

- Employment forecast memorandum

- Employment trends memorandum (excerpt from draft 2019 EOA document)

A key focus of the September 5 PAC meeting will be getting PAC input on assumptions related to the employment land need calculations. We started this discussion at the July meeting and have done considerable research based on the EOA methods and PAC input to inform the discussion. Consistent with the 2013 EOA, land need is estimated using a 10-step process. The table on the following page outlines the steps, explains the purpose of each step, describes potential options, and recommended assumptions where appropriate.

Step	Purpose	Options	Recommended Option/Rationale	Covered in forecast memo?
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	Yes, pages 4-5
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.	Yes, pages 4-5
Step 3. Evaluate UGB Employment Trend	Inform allocations of employment to land use types.	This is an analytical step and does not require assumptions.		Yes, pages 4-5
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.	NOTE: ECO recommends the population safe harbor.	Yes, pages 6-7
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 for above plus a tourism category).		Yes, pages 8-9
Step 6. Allocate Job Growth by land Development Status	This step makes deductions for employment that will not require vacant land.	Option 1: 17% *Other options may be justified based on PAC input*	The 2013 EOA used 17% and the 2001 EOA used a range of 14-17% based on land use type.	Yes, pages 10-12
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	We'll need to do more analysis to verify the assumptions	Yes, pages 12-15; Appendix A
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		Yes, pages 15-16

Step	Purpose	Options	Recommended Option/Rationale	Covered in forecast memo?
Step 9. 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.		Information will be discussed in future PAC meetings.	No
Step 10. 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 2018 Strategy Documents. Some modifications may be required to reflect changing conditions.		Information will be discussed in future PAC meetings. This will also include considerations for site needs.	No

EXHIBIT 2

DATE: August 29, 2019
TO: McMinnville Economic Opportunities Analysis Project Advisory Committee
CC: Heather Richards and Tom Schauer, City of McMinnville
FROM: Bob Parker and Margaret Raimann, ECONorthwest
SUBJECT: MCMINNVILLE 2019 EOA EMPLOYMENT FORECAST SCENARIOS

To complete the city's evaluation of land supply and needs, ECONorthwest is working with McMinnville on an Economic Opportunities Analysis (EOA) and an Urbanization Study. The City contracted with ECONorthwest to develop the EOA in collaboration with City of McMinnville staff, decisionmakers, and stakeholders in McMinnville. The purpose of the EOA is to inventory employment lands and forecast employment land needs in a manner that is consistent with Statewide Planning Goal 9 and OAR 660-009. The geographic focus of the EOA is the McMinnville UGB.

McMinnville completed an EOA in 2013. This process will help the City update the previous EOA with new information about economic trends affecting McMinnville; an updated forecast growth and land needs for employment within the UGB to align with the current planning periods; an updated inventory of buildable commercial and industrial land within the UGB; and a summary of the economic development potential and target industries as documented in the 2013 EOA and 2018 Economic Development Strategy.

This memorandum presents assumptions used in the updated employment growth forecast for the McMinnville UGB. The purpose of this memorandum to assist Project Advisory Committee (PAC) members in making recommendations on the assumptions ECONorthwest should use to update the employment forecast section of the EOA.

Introduction

At the July 16th, 2019 PAC meeting, ECONorthwest presented an introduction to the EOA process, key trends in the McMinnville economy, and discussed the key assumptions for the PAC to consider for updating the 2013 EOA. PAC members requested a better illustration of how these assumptions affect the number of new employees and the resulting land needs in the planning period, for discussion at the next meeting. ECONorthwest has prepared this memo using the 2021 to 2041 20-year planning period to test options for these assumptions. Once the PAC makes final recommendations, ECONorthwest will calculate land needs for all of McMinnville's planning periods.

This memo is organized to first describe the methodology, then walk through each step of the employment forecast and estimate of land need. Each section contains **bolded** text with green highlights that indicates assumptions that the PAC needs to decide. These assumptions are summarized below:

- Forecast rate (low, medium, or high)

- Future year share of total employment growth increments for each land use type

- Percentage of total new employment that will not require vacant (or partially vacant) commercial or industrial land (i.e., on redevelopment or infill sites).

- Employment density of new employment (i.e., employees per acre) for each land use type

- Net-to-gross conversion factor for resulting land demand in gross acres

Methodology

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 preliminary 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. As stated in the previous section, the PAC will provide input on the share of future employment allocated by land use type. These assumptions can be based on the City's goals and policies for economic development and have implications for land need.

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 of 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 which steps are covered in this memorandum. For steps not covered in this memorandum, the table notes when it will occur in the process. This table also presents key assumptions for the PAC to make recommendations and considerations for updated assumptions since the 2013 EOA.

Step	Purpose	Options	Recommended Option/Rationale	Covered in this memo?
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	Yes, pages 4-5
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.	Yes, pages 4-5
Step 3. Evaluate UGB Employment Trend	Inform allocations of employment to land use types.	This is an analytical step and does not require assumptions.		Yes, pages 4-5
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.	NOTE: ECO recommends the population safe harbor.	Yes, pages 6-7
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).		Yes, pages 8-9
Step 6. Allocate Job Growth by land Development Status	This step makes deductions for employment that will not require vacant land.	Option 1: 17% *Other options may be justified based on PAC input*	The 2013 EOA used 17% and the 2001 EOA used a range of 14-17% based on land use type.	Yes, pages 10-12
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	We'll need to do more analysis to verify the assumptions	Yes, pages 12-15; Appendix A
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		Yes, pages 15-16

Step	Purpose	Options	Recommended Option/Rationale	Covered in this memo?
Step 9. 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.		Information will be discussed in future PAC meetings.	No
Step 10. 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 2018 Strategy Documents. Some modifications may be required to reflect changing conditions.		Information will be discussed in future PAC meetings. This will also include considerations for site needs.	No

Employment Forecast Scenarios

This section provides a description of the employment base used for the forecast of employment during the 2021-2041 planning period; three options for the assumption of the rate of employment growth during this period; and the forecast by land use types for each of the three scenarios. Each section notes which steps of the process it addresses.

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 1 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.[1] 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 1 shows McMinnville had an estimated 20,990 *total* employees within its UGB in 2017.

Exhibit 1. 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.

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[1] **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 date from the U.S. Department of Commerce. Total employment includes all covered employees, plus sole proprietors and other non-covered workers.

Forecast rates

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

The PAC will need to determine the forecast rate to use in the updated EOA.

The employment forecast covers the 2021 to 2067 period, requiring an estimate of total employment for McMinnville in 2021. While we have illustrated the 2021 to 2067 change in employment for each forecast rate option, the remainder of this memorandum proceeds with the 20-year planning period of 2021 to 2041 to illustrate the implications for the three potential scenarios for the forecast rate. The final updated EOA will include all planning periods, including short-term periods of 2021 to 2067.[2]

While there is no required method for employment forecasting, OAR 660-024-0040(9) sets out some optional "safe harbors"[3] that allow a city to determine employment land need. ECONorthwest presents three scenarios for the forecast below, 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).[4] The regional employment projection for the 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%.

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[2] In the 2019 EOA, McMinnville will be planning for land need for 5-, 10-, 20-, and 46-year periods.

[3] 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."

[4] 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

(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.

- **High-growth scenario (1.70%).** The high-growth option aligns with the moderate (referred to as "baseline") forecast rate used in the 2013 EOA. 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 2 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.[5] The estimated number of employees for the beginning of the planning period is extrapolated from the estimate of total employment in 2017 from Exhibit 1 (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.

Exhibit 2. Employment growth scenarios, total employment, McMinnville UGB, 2021–2041

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
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

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[5] For the remainder of this memo, we are using the 20-year planning period of 2021-2041 to more clearly illustrate the options for assumptions for the PAC to consider. In the final updated EOA, we will include the 5, 10, and 46-year planning periods as well, using the forecast rate as decided by the PAC.

Allocation to land use types

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

> **The PAC will need to determine the shares of employment for each land use type, based on McMinnville's economic development potential and target industries. Land use types where McMinnville has advantages for growth or where city policy encourages growth may grow faster (have increases in the share of employment) than other land use types.**

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. We 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.[6] 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. These land use types typically 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.

Exhibit 3 to Exhibit 5 show 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. As a baseline assumption for each land-use type, we assumed that the future share of total employment will change based on a combination of 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 employment in industrial sectors will remain about the same; the share of retail commercial as well as government employment will decrease slightly; and the share of office and commercial services and tourism services will increase slightly.[7] These trends closely align with McMinnville's future economic development goals, though the MAC-Town 2032 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.

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[6] The generalized land use type categories are defined by the NAICS sectors listed in Exhibit 2.

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

The values highlighted in <mark>green</mark> in Exhibit 3 to Exhibit 5 show the future share of total new employment for each land use type in 2041, based on the information summarized above. Through expanded discussion of the City's economic development goals, the PAC can determine a refined reasonable assumption for the share of total employment for each land use type in the planning period.

Exhibit 3. Low-growth scenario (based on OED Forecast):
Forecast of employment growth by land use type, McMinnville UGB, 2021–2041

| Land Use Type | 2021 | | 2041 | | Change |
	Employment	% of Total	Employment	% of Total	2021 to 2041
Industrial	4,391	20%	5,775	21%	1,384
Retail Commercial	3,074	14%	3,575	13%	501
Office & Commercial Services	10,100	46%	12,925	47%	2,825
Tourism Services	2,196	10%	3,025	11%	829
Government	2,196	10%	2,200	8%	4
Total	**21,957**	**100%**	**27,501**	**100%**	**5,544**

Source: ECONorthwest

Exhibit 4. Medium-growth scenario (based on PSU Forecast):
Forecast of employment growth by land use type, McMinnville UGB, 2021–2041

| Land Use Type | 2021 | | 2041 | | Change |
	Employment	% of Total	Employment	% of Total	2021 to 2041
Industrial	4,431	20%	6,099	21%	1,667
Retail Commercial	3,102	14%	3,775	13%	673
Office & Commercial Services	10,192	46%	13,650	47%	3,458
Tourism Services	2,216	10%	3,195	11%	979
Government	2,216	10%	2,323	8%	108
Total	**22,157**	**100%**	**29,042**	**100%**	**6,885**

Source: ECONorthwest

Exhibit 5. High-growth scenario (based on 2013 EOA moderate scenario):
Forecast of employment growth by land use type, McMinnville UGB, 2021–2041

| Land Use Type | 2021 | | 2041 | | Change |
	Employment	% of Total	Employment	% of Total	2021 to 2041
Industrial	4,491	20%	6,606	21%	2,115
Retail Commercial	3,144	14%	4,089	13%	946
Office & Commercial Services	10,329	46%	14,785	47%	4,456
Tourism Services	2,245	10%	3,460	11%	1,215
Government	2,245	10%	2,517	8%	271
Total	**22,454**	**100%**	**31,457**	**100%**	**9,003**

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 employment forecast includes all new employment in the McMinnville UGB but some of this employment will not be located on vacant commercial or industrial land. Other lands that will accommodate new employment growth include residential land and redevelopment sites.[8] Another factor in estimating the demand for commercial and industrial land is consideration for employment density, or employees per acre.

The next section describes the proposed 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. Both sets of assumptions are initially based on those used in the 2013 EOA. Through expanded discussion, the PAC will determine the appropriate assumptions for employment on redevelopment and employment densities for the 2019 EOA.

Employment that does not require vacant commercial and industrial land (redevelopment and infill)

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

The PAC will need to determine the amount (in terms of percentage) of employment by land use type that will not require vacant commercial and industrial land because of redevelopment or infill considerations.

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 accommodate 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 due to redevelopment.[9] An excerpt from the 2013 EOA describes the basis for the 17% assumption:

"With this 2013 EOA update, redevelopment rates are increased to a recommended 17% across all employment land use types. The EOA Advisory Committee made this recommendation after requesting further research to assist in determining whether the vacant land allocations remain valid or should be adjusted.

Of particular interest was the question of whether increased commercial and/or industrial space vacancies experienced during the recession might offer more opportunity to refill existing space before developing vacant land. Based on a listing of vacant commercial and industrial building space

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[8] This memo accounts for employment on redevelopment sites only. Later in this process, the PAC will discuss implications for employment on residential land. This factor will need to be a consideration in aligning with McMinnville's Great Neighborhoods Principles.

[9] 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, and could be considered as another option.

MEDP compiled, it would appear that the current pattern of vacancies are not appreciably different than normalized vacancy rates typically needed to support new construction.

A review of redevelopment and building reuse rates as are being applied by other communities from the Portland metro area and mid-Willamette Valley was also conducted. From this review, the 83-87% development rate applied to vacant land that has been applied with the prior EOA appears generally consistent with, if not below, greenfield site development rates being used by other comparable communities. The exception would be in the more urbanized portions of the Portland metro rate which generally assume higher rates of redevelopment than is the case elsewhere in Oregon including the mid-valley region.

Also noted from this review is what has been described in other EOAs as the challenge associated with attempting to quantify redevelopment rates in jurisdictions throughout the state. Detailed results of this comparable jurisdiction review are provided by the Appendix to this report.

In summary, the EOA Advisory Committee recommended that some modest adjustment be made in assumed redevelopment rates as a policy objective and to reflect redevelopment anticipated, for example, with the Granary District. Assumed with this updated EOA analysis is that redevelopment rates can be increased with commercial and institutional uses to match the more aggressive rates already assumed for industrial – with an overall redevelopment rate of 17% applied across all employment uses."[10]

Exhibit 6 to Exhibit 8 show the estimate of employment on redeveloped land by land use type for each scenario, using the 17% assumption from the 2013 EOA as a baseline. Each 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 land based on 17% of the new employment growth; and results in the amount of new employment growth on vacant industrial and commercial land.

Using this assumption, the range of estimated new employment growth that will require vacant land is between 4,602 employees and 7,471 employees.

Exhibit 6. Low-growth scenario (based on OED Forecast):
Estimate of employment on redeveloped land by land use type, McMinnville UGB, 2021–2041

Land Use Type	New Employment Growth	Emp. on Redev Land	New Emp. on Vacant Land
Industrial	1,384	235	1,149
Retail Commercial	501	85	416
Office & Commercial Services	2,825	480	2,345
Tourism Services	829	141	688
Government	4	1	3
Total	5,544	942	4,602

Source: ECONorthwest

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[10] McMinnville Economic Opportunities Analysis. E.D. Hovee & Company, LLC. 2013. Pp. 49-50.

Exhibit 7. Medium-growth scenario (based on PSU Forecast):
Estimate of employment on redeveloped land by land use type, McMinnville UGB, 2021–2041

Land Use Type	New Employment Growth	Emp. on Redev Land	New Emp. on Vacant Land
Industrial	1,667	283	1,384
Retail Commercial	673	114	559
Office & Commercial Services	3,458	588	2,870
Tourism Services	979	166	813
Government	108	18	90
Total	**6,885**	**1,169**	**5,716**

Source: ECONorthwest

Exhibit 8. High-growth scenario (based on 2013 EOA moderate scenario):
Estimate of employment on redeveloped land by land use type, McMinnville UGB, 2021–2041

Land Use Type	New Employment Growth	Emp. on Redev Land	New Emp. on Vacant Land
Industrial	2,115	360	1,755
Retail Commercial	946	161	785
Office & Commercial Services	4,456	758	3,698
Tourism Services	1,215	207	1,008
Government	271	46	225
Total	**9,003**	**1,532**	**7,471**

Source: ECONorthwest

Employment density

This section addressed Step 7: Apply Job Density Factors.

The PAC will need to determine employment density (i.e., employees per acre) for each land use type. The PAC will also need to review and confirm the net-to-gross acre assumption.

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 expanded discussion during the PAC meeting, the PAC will determine updated employment densities, if necessary:[11]

> "With this update, the EOA Advisory Committee discussed whether the density assumptions applied with the 2001 EOA remain valid in 2013. Of particular interest were questions as to: a) whether commercial job density factors should be adjusted upward as a means for greater intensity of land use; and b) whether there should be a distinction between commercial retail and

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[11] ECONorthwest will bring additional information to the September 5th PAC meeting that provides more examples of employment densities for both the City of McMinnville and other comparable cities. At the time of this memorandum, ECONorthwest and City staff are still working to define study areas.

office/service density factors, recognizing that office use densities are often greater than for retail commercial activity.

As with redevelopment rates, there is little detailed empirical analysis readily available for jurisdictions outside the urbanized portion of the Portland metro (tri-county) area. However, in conjunction with updating its non-residential buildable lands inventory (BLI), it has been possible to assess current employment densities for commercial uses in McMinnville's UGB. Based on review of the updated BLI together with employment data, the job density for commercial retail and service/office uses is estimated at an overall average of approximately 22 employees per acre. In discussion with the EOA Advisory Committee, four criteria were identified as a means to address employment density questions for commercial uses:

- Meet at least the minimum DLCD Goal 9 Guidebook guidelines for employment densities. Both the prior EOA and alternative commercial job density methods considered with this update are well above the DLCD range of 14-20 jobs per acre for commercial uses.

- Use locally driven information. Comparison to other communities can be useful as general guide to bracket a potential range of alternatives. This EOA process has included comparisons to a diversity of other western Oregon communities – including Salem-Keizer, Corvallis, Albany, Newberg, Beaverton and the Portland metro area.[31] Each comparable is associated with its own pros and cons; none appears as directly applicable to McMinnville's economic profile or opportunities. DLCD input indicates that McMinnville need not compare itself with any other city, so long as EOA data and accompanying narrative clearly describe why a McMinnville-specific density figure is being selected.

- Provide empirical support for EOA findings whenever possible. Coming up with valid empirical employment density information has proven to be one of the more daunting data challenges with EOAs across Oregon. However, the updated BLI coupled with employment data have made it possible to provide a reasonable quantitative estimate of existing McMinnville commercial employment densities. To the extent that the forecast process reflects this data as a basis for findings, the resulting adopted EOA should also prove to be more defensible in the event of potential challenges.

- Balance historic community trends with current conditions and aspirations. As DLCD representatives have noted throughout the Committee discussion process, the Goal 9 process allows for considerable local community discretion so long as final recommendations and findings are clearly explained and supported by EOA documentation.

Based on supplemental analysis and discussion, the EOA Advisory Committee has recommended that 2001/03 employment densities for industrial and institutional uses remain at 11 and 35 employees per acre, respectively. Commercial retail and service job densities are recommended to increase from an overall average of 22 jobs per acre to 26 jobs per acre to encourage increased utilization of land with future employment growth. This job density target also recognizes that there may be considerable diversity of commercial densities experienced, with retail uses generally at densities below and office densities generally above the overall 26 jobs per acre average."[12]

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[12] McMinnville Economic Opportunities Analysis. E.D. Hovee & Company, LLC. 2013. Pp. 50-51.

For each forecast rate scenario, ECONorthwest completed a sensitivity analysis (provided in Appendix A) that shows how a 10% increase or decrease in employment density assumptions (i.e., employees per acre) affects the resulting land demand. The assumptions used in Exhibit 12 to Exhibit 20 are:

- **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.[13]

    - **Baseline employment density:** Exhibit 12 to Exhibit 14 assume the following numbers of net employees per acre: Industrial will have an average of 11 employees per acre, Retail Commercial, Office and Commercial Services, and Tourism Services will have an average of 26 employees per acre, and Government will have an average of 35 employees per acre. These numbers are based on the assumptions used in the 2013 EOA.

    - **Higher employment density:** Exhibit 15 to Exhibit 17 show a 10% increase from the baseline employment density assumptions. With more employees per acre, this results in a *smaller* demand for land.

    - **Lower employment density:** Exhibit 18 to Exhibit 20 show a 10% decrease from the baseline employment density assumptions. With fewer employees per acre, this results in a *larger* demand for land.

- **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.[14] 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.[15] 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

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[13] 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 overestimated 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.

[14] The 2013 EOA does not describe a method for converting net to gross acres.

[15] 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.

commercial, retail, and tourism. (For government employment, we assumed the same net-to-gross ratio as commercial.)

The next section summarizes the resulting land demand (in gross acres), based on the sensitivity analysis calculations shown in Appendix A.

Summary of Demand for Commercial and Industrial Land

This section addresses Step 8: Estimate 20-Year Employment Land Demand.

Exhibit 9 to Exhibit 11 summarize the results from the sensitivity analysis in Appendix A for each employment density assumption and forecast rate scenario by land use type. Across these assumptions, the total estimated land demand (in gross acres) is between 248 acres and 483 acres. The difference is as follows:

- Low-growth scenario baseline land demand is 273 acres, varying by -25 or +30 acres in the sensitivity analysis.

- Medium-growth scenario baseline land demand is 336 acres, varying by -31 or +37 acres in the sensitivity analysis.

- High-growth scenario baseline land demand is 483 acres, varying by -40 or +48 acres in the sensitivity analysis.

Exhibit 9. Baseline employment density: (11/26/35) Demand for vacant employment land to accommodate employment growth, McMinnville UGB, 2021–2041

Land Use Type	Land Demand (Gross Acres)		
	Low growth	Medium growth	High growth
Industrial	111	134	170
Retail Commercial	20	26	37
Office & Commercial Services	110	135	173
Tourism Services	32	38	47
Government	0	3	8
Total	273	336	435

Source: ECONorthwest

Exhibit 10. 10% Higher employment density (smaller land demand): (12/29/39) Demand for vacant employment land to accommodate employment growth, McMinnville UGB, 2021–2041

Land Use Type	Land Demand (Gross Acres)		
	Low growth	Medium growth	High growth
Industrial	101	122	154
Retail Commercial	18	24	33
Office & Commercial Services	100	122	158
Tourism Services	29	35	43
Government	0	3	7
Total	248	305	396

Source: ECONorthwest

Exhibit 11. 10% Lower employment density (larger land demand): (10/23/32) Demand for vacant employment land to accommodate employment growth, McMinnville UGB, 2021–2041

Land Use Type	Land Demand (Gross Acres)		
	Low growth	Medium growth	High growth
Industrial	123	149	189
Retail Commercial	22	29	41
Office & Commercial Services	122	150	193
Tourism Services	36	42	53
Government	0	3	9
Total	**303**	**373**	**483**

Source: ECONorthwest

Next Steps

During the PAC meeting on September 5, 2019, committee members will discuss the assumptions presented in this memorandum and other supporting background information. To complete the update of the 2013 EOA, ECONorthwest will need recommendations from the PAC on the assumptions described in this memorandum. In summary, these assumptions are as follows:

- Forecast rate (low, medium, or high)

- Future year share of total employment growth increments for each land use type

- Percentage of total new employment that will not require vacant (or partially vacant) commercial or industrial land (i.e., on redevelopment or infill sites).

- Employment density of new employment (i.e., employees per acre) for each land use type

- Net-to-gross conversion factor for resulting land demand in gross acres

Future PAC meetings will discuss the results of the buildable lands inventory (i.e., supply of employment land); considerations for site needs; and overall land sufficiency.

Appendix A. Employment Density Sensitivity Analysis

Baseline employment density

Exhibit 12. Low-growth scenario (based on OED Forecast):
Demand for vacant employment land to accommodate employment growth, McMinnville UGB, 2021–2041

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,149	11	104	111
Retail Commercial	416	26	16	20
Office & Commercial Services	2,345	26	90	110
Tourism Services	688	26	26	32
Government	3	35	0	0
Total	**4,602**		**237**	**273**

Source: ECONorthwest
Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

Exhibit 13. Medium-growth scenario (based on PSU Forecast):
Demand for vacant employment land to accommodate employment growth, McMinnville UGB, 2021–2041

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	559	26	22	26
Office & Commercial Services	2,870	26	110	135
Tourism Services	813	26	31	38
Government	90	35	3	3
Total	**5,716**		**292**	**336**

Source: ECONorthwest
Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

Exhibit 14. High-growth scenario (based on 2013 EOA moderate scenario):
Demand for vacant employment land to accommodate employment growth, McMinnville UGB, 2021–2041

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,755	11	160	170
Retail Commercial	785	26	30	37
Office & Commercial Services	3,698	26	142	173
Tourism Services	1,008	26	39	47
Government	225	35	6	8
Total	**7,471**		**377**	**435**

Source: ECONorthwest
Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

Sensitivity analysis: 10% Higher employment density (smaller land demand)

Exhibit 15. Low-growth scenario (based on OED Forecast):
Demand for vacant employment land to accommodate employment growth,
McMinnville UGB, 2021–2041

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,149	12	95	101
Retail Commercial	416	29	15	18
Office & Commercial Services	2,345	29	82	100
Tourism Services	688	29	24	29
Government	3	39	0	0
Total	**4,602**		**216**	**248**

Source: ECONorthwest
Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

Exhibit 16. Medium-growth scenario (based on PSU Forecast):
Demand for vacant employment land to accommodate employment growth,
McMinnville UGB, 2021–2041

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,384	12	114	122
Retail Commercial	559	29	20	24
Office & Commercial Services	2,870	29	100	122
Tourism Services	813	29	28	35
Government	90	39	2	3
Total	**5,716**		**265**	**305**

Source: ECONorthwest
Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

Exhibit 17. High-growth scenario (based on 2013 EOA moderate scenario):
Demand for vacant employment land to accommodate employment growth,
McMinnville UGB, 2021–2041

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,755	12	145	154
Retail Commercial	785	29	27	33
Office & Commercial Services	3,698	29	129	158
Tourism Services	1,008	29	35	43
Government	225	39	6	7
Total	**7,471**		**343**	**396**

Source: ECONorthwest
Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

Sensitivity analysis: 10% Lower employment density (larger land demand)

Exhibit 18. Low-growth scenario (based on OED Forecast):
Demand for vacant employment land to accommodate employment growth, McMinnville UGB, 2021–2041

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,149	10	116	123
Retail Commercial	416	23	18	22
Office & Commercial Services	2,345	23	100	122
Tourism Services	688	23	29	36
Government	3	32	0	0
Total	**4,602**		**264**	**303**

Source: ECONorthwest
Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

Exhibit 19. Medium-growth scenario (based on PSU Forecast):
Demand for vacant employment land to accommodate employment growth, McMinnville UGB, 2021–2041

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,384	10	140	149
Retail Commercial	559	23	24	29
Office & Commercial Services	2,870	23	123	150
Tourism Services	813	23	35	42
Government	90	32	3	3
Total	**5,716**		**324**	**373**

Source: ECONorthwest
Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

Exhibit 20. High-growth scenario (based on 2013 EOA moderate scenario):
Demand for vacant employment land to accommodate employment growth, McMinnville UGB, 2021–2041

Land Use Type	New Emp. on Vacant Land	Employees per Acre (Net Acres)	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,755	10	177	189
Retail Commercial	785	23	34	41
Office & Commercial Services	3,698	23	158	193
Tourism Services	1,008	23	43	53
Government	225	32	7	9
Total	**7,471**		**419**	**483**

Source: ECONorthwest
Note: Vacant land includes land identified in the buildable lands inventory as vacant or partially vacant.

EXHIBIT 3

![ECONorthwest - ECONOMICS · FINANCE · PLANNING]

DATE: August 29, 2019
TO: McMinnville Economic Opportunities Analysis Project Advisory Committee
CC: Heather Richards and Tom Schauer, City of McMinnville
FROM: Bob Parker and Margaret Raimann, ECONorthwest
SUBJECT: EMPLOYMENT TRENDS IN MCMINNVILLE AND YAMHILL COUNTY

This memorandum provides an excerpt from the draft 2019 Economic Opportunities Analysis, with information related to employment trends in the McMinnville UGB in the context of Yamhill County. This supplemental information is intended to provide necessary background for the Project Advisory Committee to make recommendations, as outlined in the employment forecast memorandum.

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 1 shows covered employment[1] in Yamhill County for 2001 and 2018. Employment increased by 8,202 jobs, or 29%, over this period. 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 trade, Transportation, and Utilities, decreased by 204 jobs over the 2001 to 2018 time period.

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[1] **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.

Exhibit 1. 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%
Trade, Transportation, 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 2 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 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 2 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 2. 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.
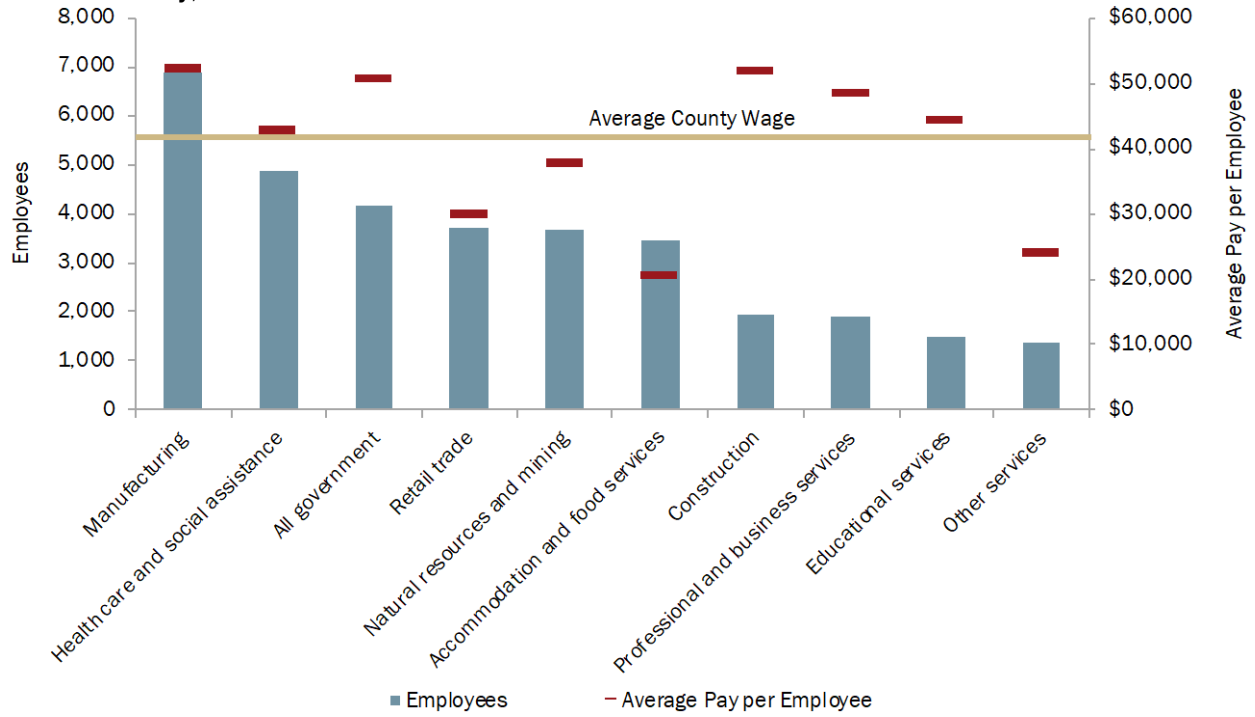
Between 2007 and 2017, employment in McMinnville increased by about 1,123 employees (8%) at an annual average growth rate of 0.8%. Employment in Accommodation and food services and Retail trade increased by 372 employees and 309 employees respectively, while employment in Transportation and warehousing and Utilities decreased by about 229 (Exhibit 3).

Exhibit 3. Change in Covered Employment, McMinnville UGB, 2007-2017

| | Employment | | | | |
	2007	2017	Change in Employment	Percent	AAGR
Sector					
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 4 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 5 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 4. 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 Serv.	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 5. 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 6 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 6. Covered Employment and Average Pay by Sector, McMinnville UGB, 2017
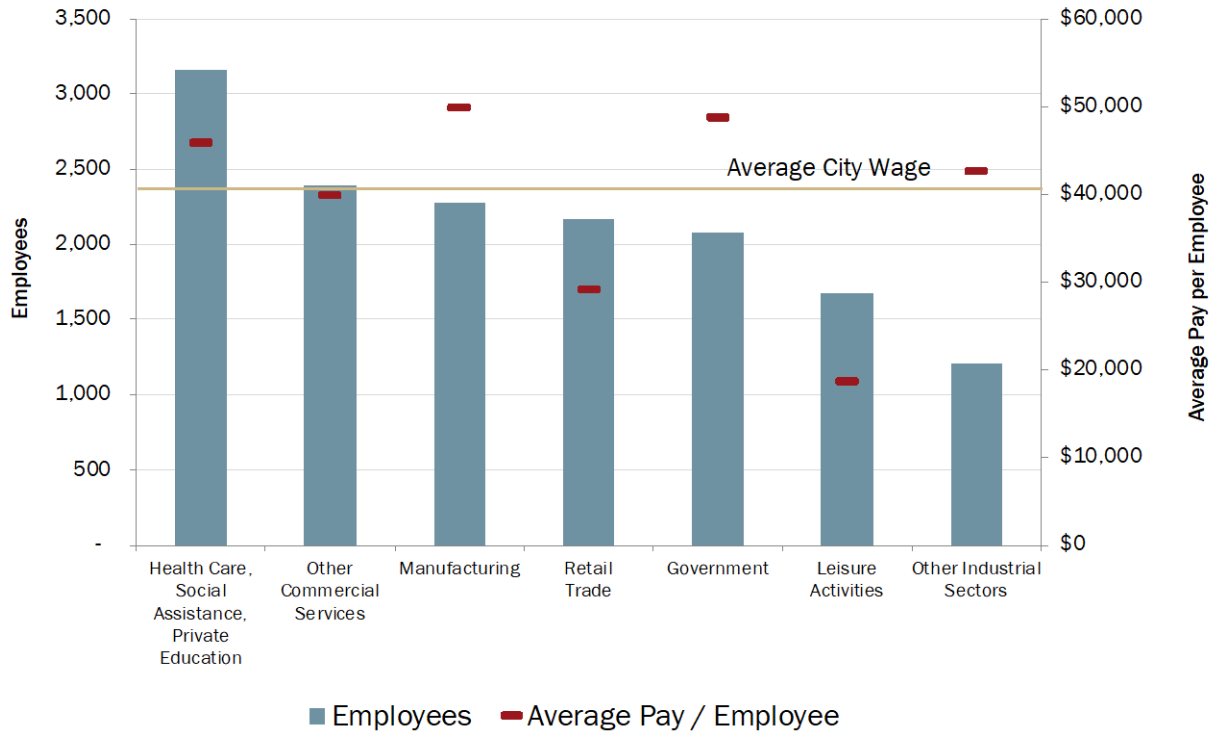
Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2017.

Outlook for growth in Yamhill County

Exhibit 7 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 7. 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.