



City of McMinnville
 Planning Department
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Economic Opportunities Analysis (EOA) and Urbanization Study

Project Advisory Committee

Meeting #3: Agenda

Thursday, October 10, 2019, 4:30pm-6:30pm

Police Department Training Room, 121 SW Adams Street

Committee Members	Time	Agenda Items
<u>Citizen Advisory Committee (CAC):</u> 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	4:30pm	1. Call to Order/Introductions
	4:40pm	2. General: PAC Meeting #3- Exhibit 1: Cover Memo a. Summary of PAC Meeting #2 (September 5, 2019) b. Summary of PAC Meeting #3 Materials & PAC Guidance c. Assumptions Matrix
	4:55pm	3. Economic Opportunities Analysis - a. Employment Density and Redevelopment- Exhibit 2: Appendix B
	5:25pm	4. Urbanization Study – a. Public/Institutional Land Needs- Exhibit 3: Public Lands Memo
	5:55pm	5. Introduce Site Characteristics/Needs Discussion
	6:20pm	6. Next Steps
	6:25pm	7. Comments
	6:30pm	8. Adjournment
<u>Technical Advisory Committee (TAC):</u> Tom Schauer - Lead Heather Richards Chuck Darnell Jamie Fleckenstein Mike Bisset Susan Muir (Parks Director) Angela Carnahan (DLCD) Stephanie Armstrong (Yamhill County)		

DATE: October 7, 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 3

The third meeting of the City of McMinnville's Economic Opportunities Analysis (EOA) Project Advisory Committee (PAC) is scheduled to occur on October 10, 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 second PAC meeting on September 5, 2019, as well as provide a summary of the materials included in the packet for PAC meeting #3.

Key decision points for PAC #3 include:

- Infill and redevelopment rate
- Employee per acre assumptions
- Incorporation of public/institutional land needs which are based on site needs rather than employment forecast and employment density calculations

Summary of Previous Meeting

PAC meeting #2 occurred on September 5, 2019 from 4:30 to 6:30 p.m. The purpose of the meeting was to review the preliminary employment forecast and the options for each assumption included in the forecast. A summary of key decisions and PAC recommendations is provided below. Detailed notes of the discussion that occurred at the meeting is provided in the summary notes document.

Growth rate. PAC members discussed the three growth rate options and the implications of choosing a higher growth rate. The low and mid-growth options presented are safe harbors, while the high-growth option would need substantial evidence (findings) to support. After this discussion, *the PAC recommended using the medium-growth rate of 1.36% (1.2% for the 46-year period) based on the growth rates in the PSU population forecast.*

Land use types. PAC members discussed the distribution of employment across five land use types (Industrial, Retail Commercial, Office Commercial, Tourism Services, and Government.) They agreed on the definition of the five categories, and discussed the distribution of the share of employment of each land use type. *The PAC recommended adjustments to future year share, resulting in the following: 21% Industrial, 12% Retail Commercial, 47% Office & Commercial Services, 12% Tourism Services, and 8% Government.*

Employment on non-vacant commercial or industrial land. The PAC discussed the assumption for *new* employment that will not require vacant commercial or industrial land. The preliminary forecast used 17%, an assumption carried over from the 2013 EOA. PAC members did not make

a recommendation during this meeting, instead requesting more information to make an informed decision.

Employment density and net to gross conversion. The PAC did not have sufficient time remaining in the meeting to discuss assumptions on employment density. ECONorthwest and city staff had already planned to bring more information on these assumptions to the next meeting. PAC members agreed that they need more context and data to make an informed decision.

Summary of Meeting #3 Materials and PAC Guidance

This section summarizes the key decisions for the PAC to decide during meeting #3. Supplemental materials provided to assist PAC members in making recommendations for this portion of the analysis include:

- **Appendix B. Employment on Other Land and Employment Density.** The discussion at PAC meeting #3 will be based on the information presented in this document. It will ultimately be included as Appendix B in the final EOA document. It is intended to provide the background information needed for the PAC to make the remaining recommendations related to assumptions of employment density and employment on other land, including infill and redevelopment rates.

A key focus of the October 10 PAC meeting will be getting PAC input on remaining assumptions related to the employment land need calculations. ECONorthwest started this discussion at the July and September meetings 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 attached table on the following page outlines the steps, explains the purpose of each step, and describes potential options.

This table also provides recommendations for steps that require a PAC decision. For steps where the PAC has made a decision, the final recommendation is stated. For steps that still require a PAC decision in meeting #3, we have provided *preliminary* recommendations. These preliminary recommendations are based on ECONorthwest's review and analysis of relevant information and vetted by city staff.

- **Summary of Public and Institutional Land Needs Data.** This discussion will be based on the information presented in a memo summarizing the results of conversations with public and institutional organizations.

At the prior meetings, data was presented about the method of calculating public and institutional land needs using a ratio of acres per 1,000 population for those uses where the site needs don't lend themselves to calculations based on the employment forecast and associated employment density. Since PAC Meeting #2, staff has outreached to City and County government, Linfield, Chemeketa, and the McMinnville School District to review methods for estimating land needs and obtain feedback. That information will be shared and vetted with the public lands work group and presented to the PAC.

Land Use & Siting Characteristics

At PAC Meeting #3, we will introduce the discussion of site characteristics needed for the identified land use categories (industrial, retail commercial, office commercial, tourism services, and government). This will have a bearing on locational determinations in the next phase of work, and may inform whether new zoning districts should be established for these land use categories. A portion of the commercial use will need to be designated for sites to provide neighborhood services and commercial uses consistent with the Great Neighborhood Principles. In addition, public and government uses may be assigned to a new public facilities and uses zone, and/or may be assigned to existing plan designations and zones.

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Step	Item	Decision Needed?	Method				Result/Outcome	Notes
			Options	Data	Staff/Consultant Recommendation	PAC Recommendation		
1	Planning Period	<i>No decision needed</i>	N/A	N/A	N/A	N/A	Pre-2021 (2017) – 2021 2021-2041 2041-2067	Already established.
2	Population Forecast	<i>No decision needed</i>	N/A	June 2019 Housing Needs Analysis, Exhibits 29 and 30.	N/A	N/A	<p>Total Population: 2021: 36,238 2041: 47,498 2067: 62,803</p> <p>Population Change:</p> <p>Consecutive Periods: 2017-2021: 1,480 2021-2041: 11,260 2041-2067: 15,305</p> <p>Cumulative from 2017: 2017-2041: 12,740 2017-2067: 28,045</p> <p>Cumulative from 2021: 2021-2041: 11,260 2021-2067: 26,565</p>	Must use PSU forecast.
3	UGB Employment Trend	<i>No decision needed</i>	N/A	PAC 9/5/19 Packet: Attachment 3: 8/29/19 Employment Trends Memo Additional data to be presented in EOA	N/A	N/A	N/A	This is data only.
4	Employment Forecast (Total Number)	<i>Decision made</i>	1.-OED Safe Harbor (low) 2.-PSU Safe Harbor (med) 3.-2013 EOA (high) 4.-Other?	PAC 9/5/19 Packet: Attachment 2: 8/29/19 Employment Forecast Memo, Exhibit 2. PAC 10/10/19 Packet: Meeting #2 Notes: Employment Forecast Scenarios-Growth rate		PSU Population Forecast Safe Harbor (9/5/2019 Meeting)	<p>Total: Pre-2021 (as of 2017): 20,907 2021: 22,157 2041: 29,042 2067: 38,158</p> <p>Change: Consecutive Periods: 2017-2021: 1.36% (+1,163) 2021-2041: 1.36% (+6,885) 2041-2067: 1.06% (+9,116)</p> <p>Cumulative from 2017: 2017-2041: 1.36% (+8,048) 2017-2067: 1.19% (+17,164)</p> <p>Cumulative from 2021: 2021-2041: 1.36% (+6,885) 2021-2067: 1.19% (+16,001)</p>	The 2013 EOA had three forecasts and used the midpoint forecast derived from the 2012 population forecast. That was higher than either of the safe harbors (including the current population forecast), and carrying the 2013 forecast forward didn't currently appear justified based on the latest forecast and trend data.

Employment Forecast and Land Need Assumptions

Step	Item	Decision Needed?	Method				Result/Outcome	Notes
			Options	Data	Staff/Consultant Recommendation	PAC Recommendation		
5a	Select Land Use Categories	Decision made	<p>2001/03 & 2013 EOAs: -3 Land Use Types (commercial, industrial, institutional)</p> <p>ECO Recommendation: -4 Land Use Types: (industrial, retail commercial, office commercial, government)</p> <p>PAC Recommendation: -5 Land Use Types: (industrial, retail commercial, office commercial, tourism services, government)</p>	<p>PAC 7/16/19 Packet: 7/12/19 Summary Memo</p> <p>PAC 9/5/19 packet: Attachment 1, 8/29/19 Cover Memo, Summary of Previous Meeting</p>		Five Categories (7/16/2019 and 9/5/19 meetings)	<p>Five categories: Industrial Retail Commercial Office Commercial Tourism Services Government</p>	Using these categories now allows the option to later compress them into commercial and industrial land use categories if needed, but provides opportunity to analyze potential differences in employment density and site characteristics separately before deciding whether to keep them separate or combine them. This could potentially lead to new land use categories and/or spatial planning options.
-	Assign employment sectors to land use categories	Decision made		PAC 9/5/19 Packet: Attachment 2, 8/29/19 Employment Forecast Memo, Exhibit 1.		Assignment to five categories as presented in Exhibit 1.	18 employment sectors assigned to 5 land use categories per Exhibit 1.	See Note 1.
-	Assign Land Use Categories to Plan Designations	Concurrence needed			As presented		<p>Industrial Plan Designation: -Industrial</p> <p>Commercial Plan Designation: -Retail Commercial -Office Commercial -Tourism Services</p> <p>-Government – See Notes.</p>	<p>Some government, public, and institutional land needs will either be assigned to a new “Public” plan designation to be created, or to the appropriate commercial, industrial, or residential plan designation appropriate to the type of use.</p> <p>Some public and institutional uses will be analyzed for site needs rather than estimating needs based on employment forecast and employment density.</p> <p>If needed, new plan designations or zones could be created for the land use sub-types assigned to the commercial plan designation. Otherwise these land use subcategories will be used together with site needs and siting characteristics to calculate commercial plan designation and zoning acreages needed for these categories.</p>

Employment Forecast and Land Need Assumptions

Step	Item	Decision Needed?	Method				Result/Outcome	Notes
			Options	Data	Staff/Consultant Recommendation	PAC Recommendation		
5b	Assign Employment Forecast to Land Use Categories	Decision made	-Keep Base Year Mix as Future Year Mix -Keep Base Year Mix with Policy-Based Adjustments -Change Future Year Mix by Extending Employment Forecast Trend	PAC 9/5/19 packet: Attachment 2, 8/29/19 Forecast Memo, Exhibits 3-6 PAC 10/10/19 Packet, Meeting #2 Notes, Employment Forecast Scenarios-Land use types		Use base year mix with policy-based adjustments for future years: (21/12/47/12/8) (9/5/2019 Meeting)	Total Employment: (adjusted from covered employment) 2017: Industrial: 20% (4,187) Retail Commercial: 14% (2,842) Office & Commercial Services: 46% (9,755) Tourism Services: 10% (2,124) Government: 10% (2,082) SUM: 20,990 2021: Industrial: 20% (4,431) Retail Commercial: 14% (3,102) Office & Comm. Services: 46% (10,192) Tourism Services: 10% (2,216) Government: 10% (2,216) SUM: 22,157 2041: Industrial: 21% (6,099) Retail Commercial: 12% (3,485) Office & Comm. Services: 47% (13,650) Tourism Services: 12% (3,485) Government: 8% (2,323) SUM: 29,042 2067: Industrial: 21% (8,013) Retail Commercial: 12% (4,579) Office & Comm. Services: 47% (17,934) Tourism Services: 12% (4,579) Government: 8% (3,053) SUM: 38,158	A portion of "retail commercial" and "office & commercial services" will need to be allocated to neighborhood-based sites/locations for neighborhood serving commercial and services

Employment Forecast and Land Need Assumptions

Step	Item	Decision Needed?	Method				Result/Outcome	Notes
			Options	Data	Staff/Consultant Recommendation	PAC Recommendation		
5c	Deduct Employment to be Calculated by Site Needs Rather than Employment Forecast and Employment Density	Calculation Only – No Decision Needed					<p>2021 estimate of distribution of gov't/institutional emp (% is share of total gov't or institutional emp number)</p> <p>Government: City Parks (1%): 29 City Other (12%): 267 County (24%): 525 State (6%): 126 Federal (2%): 44 Other local emp (3%): 71 SUM: 1,061 (in 2021)</p> <p>Education (52%): 1,154 MSD: XX acres Chemeketa: 0 acres Linfield: 0 acres</p> <p>SUM: 2,216 (in 2021)</p>	
5d	Determine Portion of Employment with Land Needs to be Calculated Using Employment Forecast and Employment Density	Calculation Only – No Decision Needed			<p>For purposes of forecasting employment that will be based on employment density, deduct the following from base year employment before forecasting. Land needs for these orgs will be based on separate site needs analysis rather than employment forecast:</p> <ul style="list-style-type: none"> -City Govt -City Parks -County Govt -Mac School District -Chemeketa -Linfield 		<p>Portion of Total Employment Subject to Employment Density Calculations:</p> <p>2021: Industrial: 4,431 Retail Commercial: 3,102 Office & Commercial Services: 9,382 (10,192, less 360 Linfield employees) Tourism Services: 2,216 Government: 0</p> <p>2041: Industrial: 21% Retail Commercial: 12% Office & Commercial Services: 45% (adj. for Linfield) Tourism Services: 12% Government:</p> <p>2067: Industrial: 21% Retail Commercial: 12% Office & Commercial Services: 45% (adj. for Linfield) Tourism Services: 12% Government: 0%</p>	

Employment Forecast and Land Need Assumptions

Step	Item	Decision Needed?	Method				Result/Outcome	Notes
			Options	Data	Staff/Consultant Recommendation	PAC Recommendation		
5e	Estimate Site and Land Needs for Organizations/Uses that were Deducted from Employment Forecast	Concurrence needed	Based on Meetings/Interviews with Key Personnel for the Following Organizations: -City of McMinnville -McMinnville Water & Light -Yamhill County -McMinnville School District -Chemeketa CC -Linfield College	See attached 10/10 public land needs memo summarizing meetings and results.	Use results from meetings and interviews		<i>See 10/10/2019 memo. Some results are forthcoming</i>	
6	Allocate Employment to Land Development Status (Percent of employment that won't consume vacant employment land).	Decision needed		<p>2001/03 EOA: Commercial: 15% Industrial: 17% Institutional: 13%</p> <p>2013 EOA: Commercial: 17% Industrial: 17% Institutional: 17%</p> <p>PAC 10/10/19 Packet: Employment Density Memo:</p> <p>Comparison Cities: See 10/7/2019 Memo</p> <p>Comparative Data from 2013 EOA See 10/7/2019 Memo</p> <p>Effective Density Resulting from Interaction of Density and Refill Assumptions: See 10/7/2019 Memo</p>	5% for commercial and industrial.		<p>See 10/7/19 memo (Appendix B) for results based on recommendation:</p> <p>5% commercial 5% industrial</p>	<p>See discussion in 10/7/2019 memo.</p> <p>Assumptions about the % of employment that doesn't require other land effectively assumes higher employment densities will be achieved on existing developed sites. This needs to be considered together with assumptions about employment density.</p> <p>On commercial and industrial sites, in cases of refill vs. redevelopment, that typically means this would occur through existing businesses adding jobs, but new businesses would still need sites if existing sites are occupied by existing businesses.</p>

Employment Forecast and Land Need Assumptions

Step	Item	Decision Needed?	Method				Result/Outcome	Notes
			Options	Data	Staff/Consultant Recommendation	PAC Recommendation		
7a	Apply Job Density Factors (Commercial/Industrial)	<i>Decision needed</i>	<p>Previously Presented:</p> <ul style="list-style-type: none"> -2001/03 EOA -2013 EOA -2013 EOA with Sensitivity Analysis, +/- 10% <p>Newly Presented:</p> <ul style="list-style-type: none"> -Empirical Calcs. By Plan Designation -Sample Area Calcs. -Calcs by Plan Designation as Control, Commercial Subcategory Allocation by Sample Area Data 	<p>PAC 7/16/19 Packet: 7/12/19 Summary Memo, Figure 21:</p> <p>2001/03 EOA:</p> <ul style="list-style-type: none"> -Commercial: 22 emp/ net ac -Industrial: 11 emp/ net ac -Institutional: 35 emp/ net ac <p>2013 EOA:</p> <ul style="list-style-type: none"> -Commercial: 26 emp/net c -Industrial: 11 emp/net ac -Institutional: 35 emp/net ac <p>PAC 9/5/19 Packet: Attachment 2, 8/29/19 Forecast Memo:</p> <p>Employment Density section and Appendix A-Employment Density Sensitivity Analysis (+/- 10% from 2013 EOA Densities))</p> <p>PAC 10/10/19 Packet: Employment Density Memo:</p> <ul style="list-style-type: none"> -Mac. Empirical Calcs by Plan Designation -Sample area calcs -Comparative Data from 2013 EOA (Figure 40) -Comparison City Data -DLCD Goal 9 Workbook Ranges 	<p>Per 10/7/19 memo:</p> <p>Industrial: 11 emp/ac</p> <p>Commercial: 23 emp/ac</p> <p>Government : Needs based on meetings/interviews</p>		<p>Commercial: 23 emp/ net acre Industrial: 11 emp/ net acre See 10/7/2019 memo for results</p> <p>Government and institutional based on data in 10/10 public land needs memo. Results pending for some agencies</p>	<p>See 10/7 memo re employment density.</p> <p>The 2013 EOA used an empirical method to calculate commercial density of 22 emp/ac and made a policy decision to increase the assumed density to 26 emp/ac. and assume refill on top of that. This has not occurred.</p> <p>This is denser than the guidelines in the DLCD Goal 9 Guidebook of 14-20 jobs/ac for commercial uses.</p> <p>The 2013 EOA used the 2001/03 EOA assumptions for industrial at 11 emp/ac and institutional at 35 emp/ac.</p>
7b	Apply Job Density Factors to Land Use Sub-Types	<i>Decision needed</i>	<p>Apply 11 emp/ac to industrial</p> <p>And either:</p> <p>Apply 23 emp/ac for each commercial subtype, or</p> <p>Apply sample area data to commercial subtypes, or</p> <p>Use 23 emp/ac as control total and proportion using sample data</p>	<p>PAC 10/1019 Packet: Employment Density Memo:</p> <p>Calculations provided in tables</p> <p>By Plan Des:</p> <p>Industrial:</p> <ul style="list-style-type: none"> -Industrial: 10 employees per acre <p>Commercial:</p> <ul style="list-style-type: none"> -Retail Commercial: 23 emp/ac -Office & Comm. Svc: 23 emp/ac -Tourism Services: 23 emp/ac <p>By Sample Areas:</p> <p>Industrial:</p> <ul style="list-style-type: none"> -Industrial: 11 employees per acre <p>Commercial:</p> <ul style="list-style-type: none"> -Retail Commercial: 19 -Office & Comm Svc: 29 -Tourism Services: *Assume 19 	<p>Use 11 emp/ac for industrial</p> <p>Use 23 emp/ac for comm – for each subtype or as a control and allocate by sample data</p>		<p>See 10/7/2019 memo for results</p>	

Employment Forecast and Land Need Assumptions

Step	Item	Decision Needed?	Method				Result/Outcome	Notes
			Options	Data	Staff/Consultant Recommendation	PAC Recommendation		
-	Net to Gross Conversion Factor	<i>Calculation Only- No decision needed</i>	Empirical evaluation	PAC 9/5/19 packet: Attachment 2, 8/29/19 Forecast Memo	Empirical evaluation		6% for Industrial 18% for commercial (retail commercial, office commercial, and tourism services) 18% for government	
8a	Land Demand-Based on Employment Density	<i>N/A Subtot. Only</i>						
8b	Land Demand- Based on Site Needs	<i>N/A Subtot. Only</i>						
8c	Total Land Demand	<i>N/A Total Only</i>						
	BLI-Land Supply	<i>Forthcoming</i>		<i>Forthcoming</i>				
	BLI-Constraints	<i>Decision Made</i>	Slope Constraints: -2013 EOA 25% slope -Update to 15% slope	PAC 9/5/19 Packet: Attachment 1, 8/29/19 Cover Memo		Update to 15% slope constraint	15% slope constraint	
9	Sufficiency (supply vs. demand)	<i>N/A Calc. Only</i>		<i>Forthcoming</i>				In some cases (including school district), site needs and existing acres may differ slightly if currently owned sites don't exactly match acreage associated with needed sites, where remnant acreage on one site can't be applied to meet needs for sites at other locations.
10	Policy Options and Objectives	<i>Forthcoming</i>						
10a.	Site Characteristics for Land Use Types	<i>Direction Needed</i>	Introduce at 10/10 meeting					

Note 1: Employment Sectors Assigned to Land Use Categories

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.

Note 2: Employment Density Analysis Calculations

By Land Use Type

Plan designation	Covered emp	Total emp	Total acres	Wetland acres	Unconstrained acres	Emp density (using unconstrained acres)
Industrial	3,422	4,485	442	13	428	10
Commercial	6,245	8,184	359	2	357	23

By Sample Areas

Land use type	Covered emp	Total emp	Acres	Emp density
Industrial	1,410	1,848	170	11.0
Retail Commercial	241	316	16	19.0
Office Commercial	59	77	3	29.0

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 2019 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.¹

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.

¹ <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.² 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.

² 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 BU 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) (Range for outer ring suburbs, 2015-30 time period)

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



City of McMinnville
Planning Department
231 NE Fifth Street
McMinnville, OR 97128
(503) 434-7311

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MEMORANDUM

DATE: October 10, 2019
TO: Economic Opportunities Analysis PAC and Public Lands Work Group
FROM: Tom Schauer, Senior Planner
SUBJECT: Public & Institutional Lands - Preliminary

Certain land uses don't lend themselves to forecasting land needs by use of an employment forecast and employment density assumptions. At a previous meeting, information was presented about public and institutional organizations and lands. Data was presented about calculations using a ratio of acreage per 1,000 population that can be used to forecast site needs. However, this method isn't always applicable to each of these entities. Following the September 5, 2019 PAC Meeting #2, staff held meetings with representatives of public and institutional organizations to discuss land needs and methods. This memo summarizes the results of the meetings and summarizes some information discussed at the last PAC meeting. For some organizations, there is still some data collection and analysis needed based on the methodologies discussed during the meetings. The other estimates in this memo are preliminary and for review, discussion, and verification.

City of McMinnville

Data Forthcoming

- **General, Misc. City Departments: (Administration, Office, Police, Public Works, Fleet, Library, Recreation Buildings, etc.)**
 - Currently, there is no formally adopted plan outlining space needs and plans for existing and future building/facility needs for the planning period.
 - Generally, there was a sense that a ratio of acreage per 1,000 population could over-estimate the City's future land needs. Given existing facilities and site arrangements, there are opportunities to consolidate facilities, redevelop/expand onto existing city sites, use land more efficiently, grow into more recent expansions that retain capacity, etc.
 - With a forecast population of about 48,000 in 2014 and 63,000 in 2067, it is not expected that the City would grow to a size that would necessitate substantial branch facilities or satellite locations during the planning period (such as a library branch etc.)
 - Existing data from cities of approximately 48,000 population and 63,000 population corresponding to the future year populations for McMinnville might help inform McMinnville's land needs. For example, as a comparison, analysis of current acres per population for cities of those sizes might help inform McMinnville's future needs.
Forthcoming.

- Use of an employment forecast growth rate for the office portion of the City's land need might also provide a useful comparison to help inform future land needs.
- **Fire:**
 - The Fire Department anticipates transition from single downtown station to three satellite stations at approximately 1.5 acres each: (1) Baker Creek/Hill Road area, (2) Airport area, (3) Northeast area. The estimated need would be about **4.5 acres for three substations**. There could be opportunities to co-locate police substations at sites. There is potential that they could be co-located on sites with other uses. The NE station may be within the current UGB or may be further to the northeast. There is potential for the current station to be re-used for other municipal or other uses.
- **Police:**
 - **No specific plans for new facilities.** Their needs can be accounted for as part of the overall City need using the same methods.
- **Airport:**
 - **No additional land needs identified.**
- **Sewer:**
 - **Treatment: No additional land needs anticipated.** The City owns 5 tax lots with approximately 70 acres east of the UGB where the sewer treatment plant is sited. No additional land need is anticipated. There is capacity to expand the treatment plan on the existing site. If there is a UGB expansion to east which includes this area, these properties won't be available for buildable land for other uses.
 - **Collection System: No significant additional land demand is assumed outside of the public right-of-way, so no calculation has been added or assumed for de minimus need.** Minimal needs for future pump stations may be needed for new development. Site needs for small pump stations are similar to or smaller than a residential lot. The lands needs for these facilities are relatively small and no additional acres are proposed. Depending on direction of growth, there could be needs for larger pumping facilities.
- **Parks:**
 - The Comprehensive Plan includes the following policies:
 - **159.00.** The City of McMinnville's Parks, Recreation, and Open Space Master Plan shall serve to identify future needs of the community, available resources, funding alternatives, and priority projects
 - **163.05.** The City of McMinnville shall locate future community and neighborhood parks above the boundary of the 100-year floodplain
 - **170.05.** For purposes of projecting future park and open space needs, the standards as contained in the adopted McMinnville Parks, Recreation, and Open Space Master Plan shall be used
 - The Master Plan level of service (LOS) standard is 14 acres/1,000 persons.

- The 2017 UGB population was 34,293.
 - The City has approximately 273 acres of developed park land and 76 acres of undeveloped park land, totaling about 349 acres (**See attached**).
 - The 2017 need was approximately 480 acres; there's a deficit of approximately 207 acres of developed park land.
 - Need for 665 total acres by 2041 (an additional need of 185 ac, or total of 392 ac with the current deficit)
 - Need for 879 total acres by 2067 (an additional need of 400 ac, or total of 660 ac with the current deficit)
 - Absent joint use agreements with other entities for public use of facilities consistent with the needs identified in the Park Master Plan, park sites and recreational facilities that aren't city-owned aren't assumed to meet the LOS for developed park needs. If there are separate standards for open space, that may be evaluated.
- **Other (stormwater):** While no specific need was identified, there was a sense that stormwater detention and water quality standards would likely increase the amount of land that will need to be dedicated for on-site stormwater management (detention and treatment) as best practices seek to manage stormwater close to "where the rain hits the ground" to reduce peaking of down stream flows and conveyance of sediment and/or contaminants in runoff. These sites may be privately or publicly owned and maintained, but should be accounted for.
 - **Other (transit related):** There was a sense that, as the community grows and the transit system expands and matures, it expected that there will be a more robust transit system with some additional land needs.

McMinnville Water & Light (MWL):

Estimated need of 21-24 acres, plus additional location/development specific needs

- General: It is estimated that in addition to sites already owned by MWL, they will need approximately 21 additional acres for power and water, and may have additional needs that are dependent on specific growth characteristics and developments. Some users require an on-site substation that requires a site and land. If growth occurs to the west further upslope into the west hills, that might include the 3-acre reservoir site needed to serve water pressure Zone 2, and could necessitate an additional reservoir/site if growth continues far enough upslope to result in a Zone 3 service area.
- The additional 21-acre need includes 16 acres for a treatment plant and pumping facilities which could co-locate with a power substation in the easterly portion of the UGB; an additional 2 acres in the easterly UGB area for power, and an additional 3 acres in the westerly UGB for additional storage for fire flow.

Yamhill County

Data forthcoming

- Currently, there is no formally adopted plan outlining space needs and plans for existing and future building/facility needs for the planning period.

Page 4

- The acreage per 1,000 population estimate is a reasonable method, first deducting the fairgrounds property before calculating the ratios.
- Current county-owned sites don't allow for much incremental on-site expansion, so additional capacity would likely require redevelopment or expansion onto additional land.
- Transit may have a need for expanded bus parking/storage area that doesn't require new structures
- Locational analysis: The County Parks Master Plan identifies potential lands for parks at key locations in proximity to McMinnville near confluence areas shown on vision map in the Master Plan)

Chemeketa Community College

No new land needs. Chemeketa Community College sold the property they previously owned, the former campus site, on Hill Road. Their McMinnville campus on Norton Lane houses their facilities as well as commercial and office tenants. For planning purposes, Chemeketa doesn't anticipate new land needs beyond their current ownership, and doesn't anticipate displacement of tenants.

Linfield College

No new land needs. Linfield College doesn't anticipate new land needs beyond current their ownership during the planning period. They recently sold a portion of the property to MV Advancements. For planning purposes, the City should not assume non-college use or sale of further property during the planning period.

McMinnville School District

Data forthcoming. ECONorthwest prepared a school needs forecasting model that staff shared with the Superintendent. They have more detailed data they will provide regarding student enrollment forecasting, school size, and site needs by school type to estimate their site and land needs for the planning period. That information is forthcoming.

MCMINNVILLE PARKS SYSTEM

COMMUNITY PARKS		ACRES
City Park		16.79
	R4420AD 09800	15.51
	R4420AD 05101	0.56
	R4420AD 06900	0.13
	R4420AD 07000	0.13
	R4420AD 07100	0.07
	R4420AD 07200	0.08
	R4420AD 07300	0.11
	R4420AD 07400	0.19
Joe Dancer Park		107.62
	R4422 02300	79.52
	R4421 00400*	23.90
	R4422 WATER*	4.20
Discovery Meadows Park		20.97
	R4429 00300	17.07
	R4429BB 02600	3.90
Kiwanis Marine Park		4.63
	R4421 00800	1.30
	R4421DB 04200	2.79
	E4421DB ROADS*	0.54
Riverside Dog Park		3.80
	R4421 00100*	
Wortman Park		21.66
	R4416AD00100	
COMMUNITY PARKS TOTAL		175.47

*Notes partial taxlot

MINI-PARKS/PLAYLOTS		ACRES
Bend-o-River		0.33
	R4422CD 00128	
Chegwyn Farms Park		3.94
	R4409CD 00100*	
Greenbriar		0.23
	R4417BC 00100	
Heather Hollow		3.22
	R4429BC 00100	
Jay Pearson Park		2.94
	R4418 00202*	
Kingwood		0.58
	R4422DD06000	
North Evans		0.34
	R4416BC03300	
Taylor		0.31
	R4420DC04900	
Thompson		2.28
	R4428BA04300	
Village Mill		0.49
	R4428BA00111	0.22
	R4428BA00105	0.27
West Hills Park		7.77
	R452400803	
MINI-PARKS/PLAYLOTS TOTAL		22.43

*Notes partial taxlot

TOTAL DEVELOPED PARK LANDS	272.81
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OPEN SPACE/UNDEVELOPED		ACRES
Angella		2.21
	R4428BD02100	
Ashwood/Derby		0.29
	R4420DB02401	
Barber Property		11.76
	R442901201	
Bennett		0.19
	R4416AA05800	
Brookview		0.72
	R4420BA00500	
Carlson		1.53
	R4420DB00300	
Creekside Cozine		3.69
	R4430DD00200	
Creekside #3 Cozine		15.31
	R4430DC03500	
Crestwood		2.08
	R4420BA00300	1.10
	R4420BA00301	0.60
	R4420BA ROADS*	0.38
Davis St. Fill		1.57
	R4421CC00900	0.91
	R4421CC02601	0.66

*Notes partial taxlot

TOTAL UNDEVELOPED PARK LANDS	75.76
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TOTAL PARK LANDS	348.57
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LINEAR/TRAIL PARKS		ACRES
Airport Park		18.82
	R442600203*	2.74
	R4426 ROADS*	0.62
	R442600500*	1.28
	R442600201*	14.18
Ash Meadows		1.29
	R4420CC00239	
BPA Pathway		2.84
	R4419AD02100	0.98
	R4419AC00200	0.08
	R4419AC00101	0.30
	R441901200*	0.32
	R4419AA11700	0.35
	R4419AA11800	0.45
	R4418DC04100	0.36
BPA II Pathway		4.23
	R4418DC00100	0.83
	R4418DC04400	0.14
	R4418DC07100	0.32
	R4418DC06600	0.32
	R4418DB12200	0.66
	R4418DB12000	1.04
	R441800202*	0.63
	R4418AD10800	0.29
Goucher St. Pathway		1.95
	R4420CC ROADS*	1.01
	R4420CC NONTL	0.02
	R4420CB ROADS*	0.92
James Addition		1.54
	R4420CC00124	1.27
	R4419DD00390	0.27
Jandina		2.25
	R4419DD02790	
Jandina III		2.78
	R4419DA13200	1.99
	R4419DA13300	0.79
Roma Sitton		1.69
	R4418AD10900	
Tice Rotary		33.82
	R441700101	32.82
	R441700100	1.00
Westvale		3.70
	R4419DB02400	
LINEAR/TRAIL PARKS TOTAL		74.91

OPEN SPACE/UNDEVELOPED		ACRES
Elmwood		3.07
	R4420DB00200	1.79
	R4420DA04300	1.28
Fir Ridge		0.69
	R4420AC02600	
Irvine St.		6.68
	R4421CA03200	4.00
	R4421CA03901	0.66
	R4421CA03401	1.63
	R4421CA ROADS*	0.39
Jay Pearson-East		1.16
	R4418 00202*	
Meadowridge		0.69
	R4420BA00409	
Quarry		11.54
	R4419AD00700	
Tall Oaks		12.58
	R442903200	9.60
	R4429BA14190	1.55
	R442900108	1.43

TOTAL UNDEVELOPED PARK LANDS	75.76
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TOTAL PARK LANDS	348.57
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