City of Lebanon
Economic Opportunities Analysis

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Draft Report

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Executive Summary

This report presents an economic opportunities analysis (EOA) for Lebanon, consistent with the requirements of Statewide Planning Goal 9 and the Goal 9 Administrative Rule (OAR 660-009). Goal 9 describes the EOA as:

> "an analysis of the community's economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends" and states that "a principal determinant in planning for major industrial and commercial developments should be the competitive advantage of the region within which the developments would be located."

The primary goals of the EOA are to (1) project the amount of land needed to accommodate the future employment growth within Lebanon between 2023 and 2043, (2) evaluate the existing employment land supply within the city to determine if it is adequate to meet that need, (3) help the City understand its economic opportunities in the context of Lebanon's comparative advantages and disadvantages, and (4) to fulfill state planning requirements for a 20-year supply of employment land.

How much buildable employment land does Lebanon currently have?

Lebanon has 2,174 total acres in its commercial or industrial plan designations. Of these 2,174 acres, about 1,104 acres (51%) are unconstrained and buildable within its UGB. Of Lebanon's buildable acres, 454 (21%) are designated for mixed uses, 30 (1.4%) are designated for commercial uses, and 620 (29%) are designated for industrial uses.

A key barrier to development of Lebanon's buildable land is the presence of wetlands. While the buildable lands inventory takes known wetlands into constraints, many wetlands in Lebanon are not on official databases. Industrial development is often hindered by wetland constraints. The City is working with regional partners to mitigate wetland issues where possible, but the expense and complexity of wetland mitigation makes industrial development difficult or impossible in some cases.

How much growth is Lebanon planning for?

Goal 9 requires that cities provide for an adequate supply of commercial and industrial sites consistent with plan policies. To meet this requirement, Lebanon needs an estimate of the amount of commercial and industrial land that will be needed over the 2023 to 2043 planning period.

Lebanon's estimated employment base is 9,776 total employees in 2023. Lebanon is forecast to have 13,965 employees by 2043. This is an increase of 4,189 jobs over the planning period, a 43% increase.

How much land will be required for employment?

The forecast for land needed to accommodate employment growth in Lebanon shows that the growth of 4,189 new employees will result in demand for about 289 gross acres of commercial and industrial employment lands.

Does Lebanon have enough land to accommodate employment growth?

Lebanon has sufficient land to accommodate demand for industrial and commercial employment in its UGB. Based on land demand, Lebanon is forecast to have a 551-gross-acre surplus of industrial land and a 346-gross-acre surplus of commercial land.

What are Lebanon's growth opportunities?

Lebanon's primary competitive advantages are:

- Lebanon's location along Highway 20 and proximity to I-5 provide good access to freight movement and labor from the mid-Willamette Valley, while also allowing for a high quality of life away from the major highway.
- The city's proximity to several automotive and freight rail transportation options and central location within the Willamette Valley makes Lebanon an attractive place to grow businesses. Lebanon businesses also have access to labor from nearby towns, including Albany, Corvallis, and Sweet Home.
- The City's availability of appropriately zoned land provides a competitive advantage for businesses looking to grow and or relocate. The City has recently upgraded its water and wastewater systems which will allow it to accommodate most types of commercial and industrial development.
- Lebanon's existing businesses are a mixture of manufacturing, warehousing, health care services and education, and locally serving businesses such as retail, restaurants, and personal services, give the city an advantage.
- Lebanon offers residents a high quality of life with a small-town feel, access to educational opportunities, access to cultural and retail opportunities in the mid-Willamette Valley, and access to outdoor recreation.

These factors make Lebanon attractive to residents and businesses that want a high quality of life where they live and work.

Lebanon's disadvantages for economic development are: presence of wetlands that make development difficult or infeasible, congestion on Highway 20, need for upgrades to the City's wastewater collection system (which the City is planning to upgrade), and limited public transit.

The types of businesses that have potential for growth in Lebanon include (but are not limited to): manufacturers (especially those associated with the Advanced Transportation Technology & Heavy Equipment Center at the Linn Benton Community College), health care service companies, warehousing, services for residents (such as motor vehicle and parts dealers, restaurants, food and beverage stores, or personal care stores), and services for visitors (such as spectator sports, performing arts, and restaurants).

What are the conclusions of the EOA?

- **Lebanon has a surplus of industrial-designated land.** Lebanon has about 551 acres more of unconstrained vacant industrial land than the forecast shows will be needed over the 20-year planning period.
- **Wetlands are a constraint to industrial land's future development, especially for uses requiring large sites**. While the buildable lands inventory takes known wetlands into constraints, many wetlands in Lebanon are not on official databases. Industrial development is often hindered by wetland constraints. The city is working with regional partners to mitigate wetland issues, where possible. But the expense and complexity of wetland mitigation makes industrial development difficult or impossible in some cases.
- **Lebanon has a surplus of land planned for commercial uses that can be accommodated within the existing UGB.** Lebanon has a surplus of about 346 acres of commercial and mixed-use land need for development over the 20-year planning period.
- **The city has a variety of sites in different sizes and locations that accommodate a wide range of development opportunities**. Lebanon's unconstrained vacant commercial and industrial land is in a wide range of site sizes, including 28 industrial sites larger than 10 acres, as well as many sites smaller than two acres. Lebanon's land base provides opportunities for a wide range of development on industrial land. Lebanon has only nine vacant lots between 25 and 50 acres in size. As certain target growth industries are dependent on large parcel size (25 to 50 acres) Lebanon should consider preserving large acreage parcels that are planned industrial. Lebanon has fewer opportunities for commercial development larger than two acres.
- **Lebanon has unique opportunities for growth**. Despite the issues with wetlands, Lebanon has a substantial base of employment land, including industrial sites with areas without wetlands and a substantial base of land zoned for mixed use. Lebanon has access to a skilled and trained workforce and opportunities for further training. In addition, Western University of Health Sciences presents growth opportunities and trains health care workers, making health care an increasingly important opportunity in Lebanon.

- **Infrastructure.** Lebanon's transportation, water, wastewater, and stormwater systems are sufficient to accommodate expected growth. The City recently completed master plans for water, wastewater, and stormwater systems and has plans to complete the upgrades described in the plans. The City also has plans to update the water and wastewater collection systems. These systems can provide sufficient services to Lebanon's target industries. These systems could require upgrades to provide services to businesses that use substantial amounts of water or wastewater, such as food processors or silicon chip fabrication.
- **The City's roads can generally accommodate expected employment growth.** Pinch points are congestion on Highway 20 and freight access and capacity to areas in the south and east of Lebanon. In addition, Lebanon's transit service, LINX, service operates a loop along Main Street north and south, and a deviated fixed route service that picks-up and drops off riders almost anywhere in town. Linn County operates a transit route that runs from Sweet Home to Albany providing inter-city alternatives. In addition, there are increased needs for more bicycle facilities throughout the city.

What are the key recommendations?

The following are ECONorthwest's recommendations for actions for Lebanon based on the analysis and conclusions in this report.

- **Update the Economic Element of the Comprehensive Plan.** The Economy Element has not been updated in recent years. This project includes recommendations for updated Comprehensive Plan goals and policies, as well as recommended actions for implementation. These recommendations are presented in the memorandum *Lebanon Economic Development Recommendations*, dated 2/15/2023.
- **Align the City's goals for economic development with planning for infrastructure development.** Aside from ensuring that there is sufficient land to support employment growth, one of the most important ways that the City can support economic development is through planning for and developing infrastructure (e.g., roads, water, sanitary sewer, and storm water systems). We recommend that the City continue to align its goals for economic development with infrastructure development through updates to the City's Capital Improvements Plan. In addition, the City should support development of other infrastructure, such as expansion of broadband internet connection.
- **Monitor and replenish the supply of commercial and industrial land on a regular, periodic basis.** The buildable lands inventory identifies the existing development status of employment land in Lebanon. While Lebanon will not completely update the buildable lands inventory on an annual basis, City staff should still monitor the development status of these employment lands and replenish short-term supply when possible.
- **Consider conducting a local wetlands inventory (LWI).** Lebanon does not have an LWI, which would map the locations of wetlands throughout the city. As a result, many

wetlands in Lebanon are not on official databases and cannot be accounted for in the inventory of buildable land. The presence of wetlands and lack of sufficient knowledge about wetlands hinders planning and development of some land, especially industrial land. The City should consider conducting a LWI to map the location of wetlands, especially in industrial areas, to provide more information about the actual amount of unconstrained vacant buildable land in the city. The City may be able to obtain a grant from the State to help pay the costs of conducting an LWI.

- **Support business growth and retention of Lebanon's existing businesses.** The existing businesses in Lebanon are one of the City's most important economic assets. The City should continue to work with local businesses to understand their challenges and identify opportunities to help businesses. The City should develop and implement a work plan for business outreach and engagement.
- **Continue to plan for development of a vibrant community.** Lebanon should support development of a vibrant downtown and commercial corridor along Highway 20 with a mixture of uses, encouraging infill and redevelopment where appropriate. The City can do so through projects to support placemaking in key areas, supporting the work of the Downtown Association, and other actions.
- **Work with partners to support development of regional economic development capacity.** In particular, the City should continue to partner with the Rural Economic Alliance (REAL) and provide resources and support to help REAL build capacity to have a greater focus on business attraction and regional coordination for economic development. As REAL develops its strategic plan, Lebanon should participate and understand the City's potential role in implementing the goals and actions in the strategic plan. Lebanon should also participate in the implementation of the Cascades West Economic Development District's 2020-2025 *Comprehensive Economic Development Strategy* and future iterations, collaborating with Oregon Cascades West Council of Governments (OCWCOG), Linn Economic Development Group (LEDG), City of Albany, Linn County, Corvallis Benton County Economic Development.

1. Introduction

This report presents an economic opportunities analysis (EOA) for the City of Lebanon. The purpose of an EOA is to develop information as a basis for policies that capitalize on Lebanon's opportunities and help address the City's challenges. The EOA includes technical analysis to address a range of questions that Lebanon faces in managing its commercial and industrial land. The EOA includes an employment forecast that describes how much growth Lebanon should plan for over the 2023 to 2043 period and identifies the amount and type of employment land necessary to accommodate growth in Lebanon over that period. The EOA also includes an inventory of commercial and industrial land within Lebanon's urban growth boundary (UGB) to provide information about the amount of land available to accommodate employment growth.

This EOA complies with the requirements of Statewide Planning Goal 9, the Goal 9 Administrative Rule (OAR 660 Division 9), and the court decisions that have interpreted them. Goal 9 requires cities to identify the characteristics of sites needed to accommodate industrial and other employment uses (OAR 660-009-0025[1]) over the 20-year planning period. This approach could be characterized as a site-based approach that projects land need based on the forecast for employment growth, the City's economic development objectives, and the specific needs of target industries.

Background

The City of Lebanon last significantly updated its Comprehensive Plan in 2004. Chapter 5, of the Comprehensive Plan describes the data sources and methods used in 2004 to project employment needs to the year 2020. Substantial changes have occurred in the national and regional economy since 2004 that have implications for economic growth in Lebanon. The 2023 EOA accounts for recent employment trends and changes in market conditions. A new set of data sources and methods are used to project employment needs to the year 2043. The EOA describes current conditions in the city and forecast potential future changes in economic activity in Lebanon within the context of the Mid-Willamette Valley.

The purpose of the EOA was to develop a factual base to provide the City with information about current economic conditions. This factual basis provides information necessary for updating the City's economic development Comprehensive Plan policies. This report identifies opportunities to meet the City's economic development objectives and develop Comprehensive Plan policies and implementation strategies that capitalize on the City's comparative advantages and address areas of economic weakness.

The EOA provides information that the City can use to identify and capitalize on its economic opportunities. It also provides information essential to addressing the City's challenges in managing economic development, such as the prevalence of wetlands in Lebanon's industrial

lands, infrastructure constraints that affects economic development, and a need for revised Comprehensive Plan goals and policies.

In addition to the information presented in the EOA, a key outcome of this project is recommendations for revised Comprehensive Plan goals and policies, with actions to implement the policies. These recommendations are presented in the ECONorthwest memorandum *Lebanon Economic Development Recommendations*, dated 2/15/2023.

The EOA draws on information from numerous data sources, such as the Oregon Employment Department, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and the U.S. Census. The EOA also uses information from the *Comprehensive Economic Development Strategy* developed by Cascades West Economic Development District (2020).

Framework for an Economic Opportunities Analysis

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

1. *Economic Opportunities Analysis (OAR 660-009-0015)*. The Economic Opportunities Analysis (EOA) requires communities to identify the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the planning area based on information about national, state, regional, county, or local trends; identify the number of sites by type reasonably expected to be needed to accommodate projected employment growth based on the site characteristics typical of expected uses; include an inventory of vacant and developed lands within the planning area designated for industrial or other employment use; and estimate the types and amounts of industrial and other employment uses likely to occur in the planning area. Local governments are also encouraged to assess community economic development potential through a visioning or some other public input–based process in conjunction with state agencies.
2. *Industrial and commercial development policies (OAR 660-009-0020)*. Cities are required to develop commercial and industrial development policies based on the EOA. Local comprehensive plans must state the overall objectives for economic development in the planning area and identify categories or particular types of industrial and other employment uses desired by the community. Local comprehensive plans must also include policies that commit the city or county to designate an adequate number of employment sites of suitable sizes, types, and locations. The plan must also include policies to provide necessary public facilities and transportation facilities for the planning area.
3. *Designation of lands for industrial and commercial uses (OAR 660-009-0025)*. Cities and counties must adopt measures to implement policies pursuant to OAR 660-009-0020. Appropriate implementation measures include amendments to plan and zone map

designations, land use regulations, public facility plans, and transportation system plans. More specifically, plans must identify the approximate number, acreage, and characteristics of sites needed to accommodate industrial and other employment uses to implement plan policies and must designate serviceable land suitable to meet identified site needs.

Stakeholder Engagement Process

A key part of developing the EOA was consulting community members to learn about their priorities, needs, and challenges related to economic development. The stakeholder outreach process for developing the analysis included input from the following groups:

- **Lebanon Economic Opportunities Analysis Project Advisory Committee.** Lebanon and ECONorthwest solicited input from the Economic Opportunities Analysis Project Advisory Committee (PAC) to develop the EOA. The PAC had 12 members, composed of economic development stakeholders in Lebanon, local businesses, and elected/appointed officials. The project relied on the PAC to review draft deliverables and provide input at key points. During the development of the EOA, the PAC met four times.
- **Planning Commission and City Council meetings.** ECONorthwest presented the draft EOA and Economic Development Recommendations at meetings on April 26, 2023 and May 10, 2023. ECONorthwest incorporated feedback from these meetings into the EOA.

Organization of This Report

This report is organized as follows:

- **Chapter 2. Factors Affecting Future Economic Growth** summarizes historic economic trends that affect current and future economic conditions in Lebanon, as well as Lebanon's competitive advantages for economic development.
- **Chapter 3. Employment Growth and Site Needs** presents a forecast for employment growth in Lebanon and describes potential growth industries and site needs for potential growth in industries.
- **Chapter 4. Buildable Lands Inventory** presents a summary of the inventory of employment lands.
- **Chapter 5. Land Sufficiency and Conclusions** compares the supply of and demand for buildable lands and presents key concluding recommendations for Lebanon.

This report also includes two appendices:

- Appendix A. National, State, Regional, and Local Trends
- Appendix B. Buildable Lands Inventory Methodology

2. Factors Affecting Future Economic Growth

Lebanon exists as part of the economy of the Cascades West region, which includes Benton, Linn, Lane, and Lincoln counties. Its close proximity to both Salem and Eugene, the largest cities in the region, provides opportunities for the city's residents and access to a larger labor pool for employers. Lebanon's economic focus consists of an industry mix of health care, manufacturing, transportation, and warehousing, and locally serving services, such as retail and government. The city's location in the Willamette Valley and proximity and access to I-5 also makes Lebanon an attractive place for businesses that depend on moving freight on I-5.

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

Factors that Affect Economic Development[1]

The fundamental purpose of Goal 9 (the Statewide Planning Goal for Economic Development) is to ensure that local governments plan for economic development. The planning literature provides many definitions of economic development, both broad and narrow. Broadly,

> "Economic development is the process of improving a community's well-being through job creation, business growth, and income growth (factors that are typical and reasonable focus of economic development policy), as well as through improvements to the wider social and natural environment that strengthen the economy."[2]

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

- Business and job growth are contributors to and consistent with economic development, increased income, and increased economic welfare. From a municipal point of view, investment and property tax increases are important economic development outcomes.
- The evaluation of trade-offs and balancing of policies to decide whether such growth is likely to lead to overall gains in well-being (on average and across all citizens and

[1] The information in this section is based on previous Goal 9 studies conducted by ECONorthwest, as well as "An Economic Development Toolbox: Strategies and Methods" published by the American Planning Association.

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

businesses in a jurisdiction) is something that decision makers do after an economic strategy has been presented to them for consideration.

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

In that context, a major part of local economic development policy is about local support for business development and job growth; that growth comes from the creation of new firms, the expansion of existing firms, and the relocation or retention of existing firms. Specifically, new small businesses are accounting for a larger share of the job growth in the United States. This shift toward a focus on entrepreneurship, innovation, and small businesses presents additional options for local support for economic development beyond firm attraction and retention. Thus, two key questions for economic development policy are addressed in depth in this document:

- What are the factors that influence business and job growth?
- What is the relative importance of each?

What Factors Matter?

Why do firms locate where they do? There is no single answer—different firms choose their locations for different reasons. Key determinants of a location decision are a firm's factors of production. For example, a firm that spends a large portion of total costs on unskilled labor will be drawn to locations where labor is relatively inexpensive. A firm with large energy demands will give more weight to locations where energy is relatively inexpensive. In general, firms choose locations they believe will allow them to maximize net revenues: If demand is held roughly constant, then revenue maximization is approximated by cost minimization.

The typical categories that economists use to describe a firm's production function are:

- **Labor.** Labor is often the most important factor of production. Other things equal, firms look at productivity—labor output per dollar. Productivity can decrease if certain types of labor are in short supply, which increases the costs by requiring either more pay to acquire the labor that is available, the recruiting of labor from other areas, or the use of the less productive labor that is available locally.
- **Land.** Demand for land depends on the type of firm. Manufacturing firms need more space and tend to prefer suburban locations where land is relatively less expensive and less difficult to develop. Warehousing and distribution firms need to locate close to interstate highways.
- **Local infrastructure.** An important role of government is to increase economic capacity by improving quality and efficiency of infrastructure and facilities, such as roads,

bridges, water and sewer systems, airport and cargo facilities, energy systems, and telecommunications.

- **Access to markets.** Though part of infrastructure, transportation merits special attention. Firms need to move their product (either goods or services) to the market, and they rely on access to different modes of transportation to do this.
- **Materials.** Firms producing goods, and even firms producing services, need various materials to develop products that they can sell. Some firms need natural resources (i.e., raw lumber) and others may need intermediate materials (i.e., dimensioned lumber).
- **Entrepreneurship**. This input to production may be thought of as good management, or more broadly as a spirit of innovation, optimism, and ambition that distinguishes one firm from another, even though most of their other factor inputs may be quite similar. Entrepreneurial activity, even when unsuccessful, can offer information about the local market that other entrepreneurs can use in starting a new firm. Entrepreneurs are typically willing to take on more risk in uncertain markets, and a strengthened entrepreneurial environment can help to reduce that risk and uncertainty.[3] Entrepreneurs also tend to have more mobility than larger firms and are more likely to locate to areas with a strong entrepreneurial environment.[4] To some degree, local governments can promote an area's high quality of life to attract entrepreneurs, in addition to adopting regulations with minimal barriers—or at least, clear guidelines—for new small businesses.

The supply, cost, and quality of any of these factors depend on market factors: on conditions of supply and demand locally, nationally, and even globally. But they also depend on public policy. In general, public policy can affect these factors of production through:

- **Regulation.** Regulations protect the health and safety of a community and help maintain quality of life. Overly burdensome regulations can be disincentives for businesses. Simplified bureaucracies and straightforward regulations can reduce the burden on businesses and help them react quickly in a competitive marketplace.
- **Taxes**. Firms tend to seek locations where they can optimize their after-tax profits. Tax rates are not a primary location factor—they typically matter only after businesses have made decisions based on labor, transportation, raw materials, and capital costs. The costs of these production factors are usually similar within a region. Therefore, differences in tax levels across communities within a region are more important in the location decision than are differences in tax levels between regions.
- **Financial incentives**. Governments can offer firms incentives to encourage growth. In recent years in Oregon (especially in the Portland region), incentives have been used more to attract business to consider locating in the Portland region, rather than

[3] Tessa Conroy and Stephan Weiler. "Local and Social: Entrepreneurs, Information Network Effects, and Economic Growth" (2017). https://redi.colostate.edu/wp-content/uploads/sites/50/2017/05/gender_gia_Jun2017-2.pdf

[4] Emil E. Malizia and Edward J. Feser. *Understanding Local Economic Development. (*1999).

substantially distinguishing among cities in the Portland region. For manufacturing industries with significant equipment costs, property or investment tax credit or abatement incentives can play a significant role in location decisions.

This discussion may make it appear that a location decision is based on a straightforward accounting of costs, with the best location being the one with the lowest level of overall costs. However, studies of economic development have shown that location decisions depend on a variety of factors that indirectly affect costs of production. These factors include agglomerative economies (also known as industry clusters), quality of life, and innovative capacity.

- **Industry clusters**. Firms with similar business activities can realize operational savings when they congregate in a single location or region. Clustering can reduce costs by creating economies of scale for suppliers. For this reason, firms tend to locate to areas where there is already a presence of other firms engaged in similar or related activities.
- **Quality of life.** A community that features many quality amenities, such as access to recreational opportunities, culture, low crime, good schools, affordable housing, and a clean environment can attract people simply because it is a nice place to be. A region's quality of life can attract skilled workers, and if amenities lure enough potential workers, the excess labor supply pushes their wages down so that firms in the region can find skilled labor for a relatively low cost. The characteristics of local communities can affect economic development distribution within a region, with different communities appealing to different types of workers and business owners. Sometimes location decisions by business owners are based on emotional or historical attachment to a place or set of amenities, without regard for the cost of other factors of production.
- **Innovative capacity.** Increasing evidence suggests that a culture promoting innovation, creativity, flexibility, and adaptability is essential to keeping U.S. cities economically vital and internationally competitive. Innovation is particularly important in industries that require an educated workforce. High tech companies need to have access to new ideas typically associated with a university or research institute. In addition to innovations in research and development within firms or research institutions, firms may also draw on the innovative capacity of entrepreneurs in an area. These entrepreneurs may be former employees of the larger firm or businesses that relocated to an area because of the proximity to an industry cluster. Strong networks and communication between firms, research institutions, and entrepreneurs are key components to leveraging innovative capacity in an area.[5] Local governments are well-equipped to help foster these networks through economic development tools such as small business assistance centers or incubation centers. Government can also be a key part of a community's innovative culture, through service provision and regulation of development and business activities that are responsive to changing business needs.

[5] Nancey Green Leigh and Edward Blakely. Planning Local Economic Development: Theory and Practice. 2013.

How Important Are These Factors?

To understand how changes in public policies affect local job growth, economists have attempted to identify the importance for firms with different locational factors. They have used statistical models, surveys, and case studies to examine detailed data on the key factors that influence the business location decision.

Economic theory says that firms locate where they can reduce the costs of their factors of production (assuming demand for products and any other factors are held constant). Firms locate in regions where they have access to inputs that meet their quality standards at a relatively low cost. Because firms are different, the relative importance of different factors of production varies both across industries and, even more importantly, across firms.

No empirical analysis can completely quantify firm location factors because numerous methodological problems make any analysis difficult. For example, some would argue simplistically that firms would prefer locating to a region with a low tax rate to reduce tax expenses. However, the real issue is the value provided by the community for the taxes collected. Because taxes fund public infrastructure that firms need, such as roads, water, and sewer systems, regions with low tax rates may end up with poor infrastructure, making it less attractive to firms. When competing jurisdictions have roughly comparable public services (type, cost, and quality) and quality of life, then tax rates (and tax breaks) can make a difference.

Further complicating any analysis is the fact that many researchers have used public expenditures as a proxy for infrastructure quality, but large expenditures on roads do not necessarily equal a quality road system. It is possible that the money has been spent ineffectively and the road system is in poor condition.

An important aspect of this discussion is that a location's business function matters more than a firm's industry. A single company may have offices spread across cities, with headquarters located in a cosmopolitan metropolitan area, with the research and development divisions located near a concentration of universities, the back office in a suburban location, and manufacturing and distribution located in areas with cheap land and good interstate access.

Local governments can provide support for new and existing small businesses through policies and programs that support entrepreneurship and innovation. The National League of Cities suggests strategies for local governments, including strong leadership from elected officials; better communication with entrepreneurs, especially regarding the regulatory environment for businesses in the community; and partnerships with colleges, universities, small business development centers, mentorship programs, community groups, businesses groups, and financial institutions.[6]

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

Local governments in Oregon also play a central role in the provision of buildable land through inclusion of lands in the urban growth boundary (UGB), as well as through the determination of plan designations, zoning, and the provision of public services. Typically, businesses need buildable land to locate or expand in a community. However, providing buildable land alone is not sufficient to guarantee economic development in a community—market conditions must create demand for this land, and local factors of production must be favorable for business activity. In the context of expected economic growth and the perception of a constrained land supply in Lebanon, the provision of buildable land has the potential to strongly influence the level and type of economic development in the city. The provision of buildable land is one of the most direct ways that Lebanon can affect the level and type of economic development.

Summary of the Effect of National, State, and Regional Trends on Economic Development in Lebanon

This section presents a summary and the implications of national, state, and regional economic trends on economic growth in Lebanon, which are presented in Appendix A.

- **County and local employment growth.** Employment increased in Linn County since 2001, with a gain of about 6,476 employees between 2001 and 2021. The largest increases were in manufacturing, health care, and social assistance. In 2019, jobs in Lebanon accounted for about 15% of employment in Linn County. Employment in Lebanon increased between 2008 and 2019 by about 1,276 employees (or 22%).
- **Increases in regional economic diversity.** Within the Cascades West region (which includes Benton, Lane, Linn and Lincoln Counties), businesses transitioned away from the traditional natural resource extraction-based economy to a more diverse economic base, which includes value-add agricultural products, metals and machinery, specialty product manufacturing, and professional and technical services.[7] The increases in regional economic development diversity provide opportunities for the development of new businesses in Lebanon, as clusters of similar businesses continue to locate in the Cascades West region. A key goal of the *Comprehensive Economic Development Strategy 2020-2025* for the Cascades West Economic Development District is increasing economic diversity through supporting growth of small businesses and increasing business resilience.
- **Changes in manufacturing and concentration of manufacturing in Oregon.** Lebanon's location in the Willamette Valley, as well as its access to highways, proximity to Salem and Eugene, and access to a skilled workforce, present opportunities for growth in manufacturing businesses. In 2019, manufacturing, transportation, and warehousing

[7] Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily*, Consumer prices up 9.1 percent over the year ended June 2022, largest increase in 40 years at https://www.bls.gov/opub/ted/2022/consumer-prices-up-9-1-percent-over-the-year-ended-june-2022-largest-increase-in-40-years.htm (visited *July 25, 2022*).

accounted for about 20% of Lebanon's total covered employment[8] and had an average wage of $49,273, higher than the city's average wage of $40,502. Between 2008 and 2019, Lebanon's manufacturing, transportation, and warehousing sectors increased from 1,323 to 1,439 employees, an increase of 116 employees or 11%.

- **Increases in automation.** Businesses in both industrial and commercial industries will continue to respond to increases in automated processes, decreasing employment in some types of manufacturing processes and conversely increasing demand for workers with skills in computers and other high-tech sectors. While automation has been a factor in industrial sectors for decades (e.g., manufacturing), recent increases in automation have occurred for commercial industries, such as certain functions of retail or office jobs. Oregon's overall risk of automation is similar to the nation with lower and middle-wage jobs at higher risk of being automated. Jobs that are considered to be at lower risk include those that provide personal services or experiences, such as food service and hospitality. Higher-wage jobs that are considered to be at a lower risk of automation include jobs that require social intelligence, perception, creativity, and fine motor skills.

  Most industrial sectors will still hire employees to complete certain tasks, though the types of skills required for these jobs may change as automation increases.

- **Importance of small businesses in Lebanon's economy.** The average business in Lebanon has 12 employees, consistent with the state average of 12 employees, based on Oregon Employment Department data. The creation of new businesses is vital to Oregon's—and Lebanon's—economy as their formations generate new jobs and advance innovations into markets. Lebanon's proximity to a young workforce from across the Willamette Valley presents opportunities for small businesses to grow.

- **Increased opportunities for remote work.** Working from home was a growing trend before the COVID-19 pandemic. Since the pandemic, the number of people primarily working from home increased nationally from 5.7% of workers in 2019 to 17.9% of workers in 2021. It is unclear if the number of people primarily working from home will continue at 2021 rates or will change over time. It is clear that work-from-home, at least for part of the work week, will continue to be an important factor in employment in the future.[9]

- **Changes in the retail sector.** The retail sector has reacted over the past two decades to changing consumer preferences for shopping at large supercenters as well as online shopping. The growth of shopping online is likely to continue, accelerated as a result of the COVID-19 pandemic. There will continue to be demand for the local purchase of retail goods. Consumers still prefer physical, brick-and-mortar stores for certain items,

[8] "Covered employment" is employment covered by unemployment insurance. "Total employment" includes all employees in an area, both those covered by unemployment insurance and those not covered by unemployment insurance, such as sole proprietors, 1099 employees, and other people not covered by unemployment insurance. This topic is discussed in more detail in upcoming sections of the report.

[9] Based on 2019 and 2021 American Community Survey data for the U.S.
https://www.census.gov/newsroom/press-releases/2022/people-working-from-home.html

such as large furniture, specialty goods, and groceries. Furthermore, consumer preferences have shifted to spending at restaurants and experience-focused series (e.g., entertainment or recreation). Retail businesses that compete with online retailers may become less common in Lebanon (and other cities), but businesses providing experiences or goods that cannot be purchased online may grow and expand in Lebanon. This presents opportunities for Lebanon's retail industry to build on the high quality of life, providing experiences for residents and visitors, including in agritourism.

- **Continued increase in demand for energy.** In 2022, energy prices, especially gasoline prices, increased sharply. Reasons for the increase include increased travel and international sanctions against Russia for the war in Ukraine, which results in less Russian fuel on the international market. Energy prices are forecasted to increase over the planning period, which, over the long-term, will likely affect workers' mode of commuting before affecting their willingness to commute. For example, commuters may choose to purchase a more energy-efficient car or carpool. In Lebanon, the options for modes of commuting into the city from other areas are more limited than in larger urban areas with access to transit and other transportation infrastructure. Very large increases in energy prices may affect workers' willingness to commute, especially workers living the farthest from Lebanon or workers with lower-paying jobs. In addition, very large increases in energy prices may make shipping freight long distances less economically feasible, resulting in a slowdown or reversal of offshore manufacturing, especially of large, bulky goods.
- **High rates of inflation.** For the last several decades, inflation rates have generally stayed below 3% for the nation. Inflation started to increase in 2021 and has accelerated in 2022, increasing to 9.06% in June 2022, their highest levels in about 40 years. Inflation increased most quickly in June 2022 for energy, motor vehicles, food, and household furnishings.[10] The average hourly earnings for nonfarm employees increased slightly through April 2022, but inflation-adjusted real average hourly earnings declined slightly due to continued inflation.[11] Continued high rates of inflation may slow economic growth, further erode purchasing power, discourage savings, and lead to a national recession.
- **A tight labor market that changed several times in recent years.** In 2019, the unemployment rate in Linn County was 4.3%, slightly higher than Oregon's rate of 3.7% and the national rate of 3.7%. However, the COVID-19 pandemic's sudden onset resulted in an abrupt increase in unemployment across the nation and in Oregon. In April 2020, unemployment rates increased to 13.8% in Linn County, 14.8% in Oregon,

[10] Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily*, Consumer prices up 9.1 percent over the year ended June 2022, largest increase in 40 years at https://www.bls.gov/opub/ted/2022/consumer-prices-up-9-1-percent-over-the-year-ended-june-2022-largest-increase-in-40-years.htm (visited *July 25, 2022*).

[11] *New Inflationary Concerns: A US Macroeconomic Update*, IBISWorld, June 03, 2022. https://www.ibisworld.com/blog/new-inflationary-concerns-us-macroeconomic-update/1/1126/

and 14.4% nationwide.[12] In June 2022 the unemployment rate in Linn County decreased to 4.0% (3.6% statewide).

In Linn County, approximately 1,218 jobs were lost initially, and 1,659 at the pandemic's peak. These losses were concentrated in the accommodations and food services, health services, manufacturing, and retail trade industries.[13] It is unclear how many of these jobs are lost in the long-term and how many will come back as the regional and statewide economies continue to reopen. By the first quarter in 2022, Linn County's employment exceeded Q1 2020 employment.

- **Availability of trained and skilled labor.** Availability of labor depends, in part, on population growth and in-migration. Lebanon's population increased by 6,172 people between 2000 and 2021, at an average annual growth rate of 1.9%.[14] Most of the population increase occurred between 2010 and 2021, with an increase of 3,152 residents. In comparison, Oregon's population grew at an average annual growth rate of 1.1% between 2000 and 2021.

  The current labor force participation rate is another important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. According to the 2015-2019 American Community Survey, Lebanon had about 7,716 people in its labor force and Linn County had over 58,700. The labor force participation rate in Lebanon (60%) was higher than Linn County (59%) and lower than Oregon (62%) in the 2015-2019 period. Nonparticipants in the labor force (the 40% of people not participating in Lebanon's labor force) include students 16 years and older, retirees, and unemployed people not actively seeking work.

  Commuting is common for residents and workers in Lebanon. Twenty-five percent of workers at businesses in Lebanon live in Lebanon. Other cities where people commute from are: 10% from Albany, 6% from Sweet Home, 3% from Corvallis, 2% from Salem, and 1% each from McMinnville, Brownsville, Springfield, and Eugene. Businesses in Lebanon draw employees from across Linn County as well as Benton and Marion Counties. In addition, 87% of residents of Lebanon commute to work across the region, including 13% who work at businesses in Albany, 10% who work in Corvallis, 7% in Salem, 4% each in Eugene and Portland, 2% who work in each Millersburg and Sweet Home, and 1% who work in each Springfield and Tangent.

- **Lower household income and average wages.** Lebanon's median household income is lower relative to both the county and the state. In the 2015–2019 period, Lebanon's median household income was $45,642, lower than Linn County's median household income of $55,893 and Oregon's median household income of $62,818. The average wage

[12] Note that these unemployment rate estimates are preliminary and may be revised as the year continues.

[13] Based on information from the Oregon Employment Department for Linn County as of May 2022. https://www.qualityinfo.org/covid-19

[14] U.S. Census Bureau and the Portland State University Population Research Center.

at private businesses in Lebanon was about $40,870 in 2019, which was lower than the Linn County average in 2019 of $45,211 and the state average of $55,019.[15]

- **Education as a determinant of wages.** Lebanon's population has a similar share (40%) of residents with a high school diploma (as their highest level of education) as in Linn County (40%) and higher than in Oregon (32%). About 44% of Lebanon's residents have some college or an associate degree, and about 16% have a bachelor's degree or higher. Businesses that need employees with a college degree may need to recruit employees from outside of the city. Lebanon businesses are in close proximity to students from the Linn-Benton Community College, Western University of Health Sciences, Oregon State University in Corvallis, as well as institutions in nearby Salem, including Willamette University, Corban University, and Chemeketa Community College.
- **Aging of the population and need for replacement workers.** Lebanon has a smaller percentage of residents 60 years and older (23%) relative to Linn County (25%) and Oregon (24%). Lebanon's median age, which was 35.9 in 2000, increased to 37.2 in the 2015–2019 period. By comparison, Linn County's median age was 39.6 and Oregon's median age was 39.3 in the 2015–2019 period.

  Linn County's population is expected to continue aging, with people 60 years and older increasing from 26% in 2020 to 29% of the population in 2040, consistent with statewide trends.[16] As workers retire, businesses need to replace them with new workers. This need for replacement workers will continue to drive need for workers.
- **Increases in racial and ethnic diversity.** Overall, both the nation and Oregon are becoming more racially and ethnically diverse. Between 2000 and 2015–2019, the Hispanic and Latino population in Oregon increased from 8% to 13%, while it increased in Lebanon from 4% to 8.8%. The population of people of color has increased from 13% to 16% in Oregon since 2000 and from 6% to 9% in Lebanon.

[15] Oregon Employment Department, Quarterly Census of Employment and Wages, 2019.

[16] Portland State University, College of Urban & Public Affairs: Population Research Center, Population Forecast, 2021.

Employment Trends in Lebanon and Linn County

The economy of the nation changed substantially between 2001 and 2022. These changes affected the composition of Oregon's economy, including Lebanon'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 service-based economy. This section focuses on changes in the economy in Linn County and Lebanon since 2001.

Employment Trends in Linn County

Exhibit 1 shows covered employment[17] in Linn County for 2001 and 2021. Employment increased by 6,476 jobs, or 16% over this period. The sectors with the largest increases in numbers of employees were health care and social assistance (3,031 jobs), transportation, warehousing and utilities (1,615 jobs), retail trade (1,173 jobs), and construction (845 jobs). The average wage for employment in Linn County in 2021 was about $48,967.

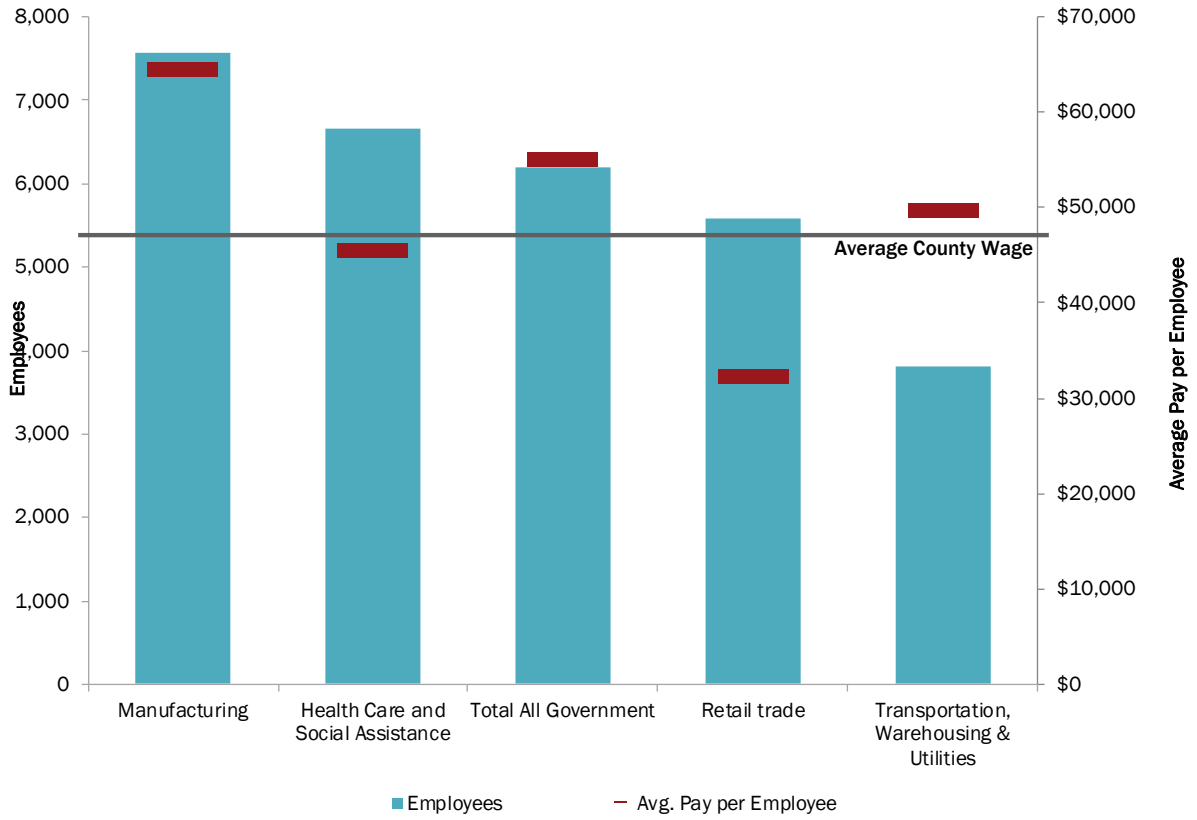
Exhibit 1. Covered Employment by Industry, Linn County, 2001–2021
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2001–2021.
*Average Annual Growth Rate

Sector	2001	2021	Change 2001 to 2021		
			Difference	Percent	AAGR*
Natural Resources and Mining	2,085	2,736	651	31%	1.4%
Construction	2,140	2,985	845	39%	1.7%
Manufacturing	8,801	7,576	- 1,225	-14%	-0.7%
Wholesale Trade	1,545	1,728	183	12%	0.6%
Retail trade	4,418	5,591	1,173	27%	1.2%
Transportation, Warehousing & Utilities	2,200	3,815	1,615	73%	2.8%
Information	639	291	- 348	-54%	-3.9%
Financial Activities	1,335	1,076	- 259	-19%	-1.1%
Professional and Business Services	3,206	3,165	- 41	-1%	-0.1%
Educational Services	232	505	273	118%	4.0%
Health Care and Social Assistance	3,634	6,665	3,031	83%	3.1%
Arts, Entertainment, and Recreation	302	376	74	25%	1.1%
Accommodation and Food Services	2,285	3,111	826	36%	1.6%
Other Services	1,379	1,333	- 46	-3%	-0.2%
Unclassified	13	52	39	300%	7.2%
Total All Government	6,521	6,206	- 315	-5%	-0.2%
Total	**40,735**	**47,211**	**6,476**	**16%**	**0.7%**

[17] **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 2 shows covered employment and average wage for the 5 largest industries in Linn County. Jobs in manufacturing accounted for approximately 16% of the county's total covered employment, followed by health care and social assistance (14%) and retail trade (12%). Of these sectors, manufacturing, government, transportation and warehousing, professional services, construction, wholesale trade, finance and information sectors pay above county wage.

Exhibit 2. Covered Employment and Average Pay by Sector, 5 Largest Sectors Linn County, 2021
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2019.



Employment in Lebanon

Between 2008 and 2019, employment in Lebanon increased by about 1,271 employees (21.7%), at an approximately 1.8% average annual growth rate. Employment in private educational services, health care, social assistance increased by about 809 employees (77%), while wholesale trade employment decreased by about 40 employees (28%) (Exhibit 3).

Exhibit 3. Change in Covered Employment, Lebanon UGB, 2008–2019
Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2008 and 2018.
Note: Sectors highlighted in blue have wages higher than the city average.
AAGR is Average Annual Growth Rate

Sector	Employees		Change in Employment 2008-2019		
	2008	2019	#	%	AAGR
Agriculture, Forestry, Fishing and Hunting & Mining	-	29	29	-	-
Construction	277	303	26	9.4%	0.8%
Manufacturing, Transportation, Warehousing and utilities	1,343	1,453	110	8.2%	0.7%
Wholesale Trade	144	104	(40)	-27.8%	-2.9%
Retail Trade	987	962	(25)	-2.5%	-0.2%
Information, Finance and Insurance	171	159	(12)	-7.0%	-0.7%
Real Estate and Rental and Leasing	79	69	(10)	-12.7%	-1.2%
Prof., Sci., and Tech. Services and Mgmt. of Companies	126	137	11	8.7%	0.8%
Admin. / Support and Waste Mgmt / Remediation Serv.	37	53	16	43.2%	3.3%
Private Educational Services, Health Care and Social Assis	1,050	1,859	809	77.0%	5.3%
Arts, Ent., and Rec., and Accom. and Food Services	536	849	313	58.4%	4.3%
Other Services	249	290	41	16.5%	1.4%
Government	866	869	3	0.3%	0.0%
Total	**5,865**	**7,136**	**1,271**	**21.7%**	**1.8%**

Employment in Lebanon accounted for about 15% of employment in Linn County in 2019. Exhibit 4 shows a summary of covered employment data for the Lebanon UGB in 2019. The sectors with the greatest number of employees were educational services, health care and social assistance (26% of Lebanon's total covered employment), manufacturing, transportation and warehousing (20%), retail trade (13%), and arts, entertainment, and recreation, and accommodations and food services and government (both 12%).

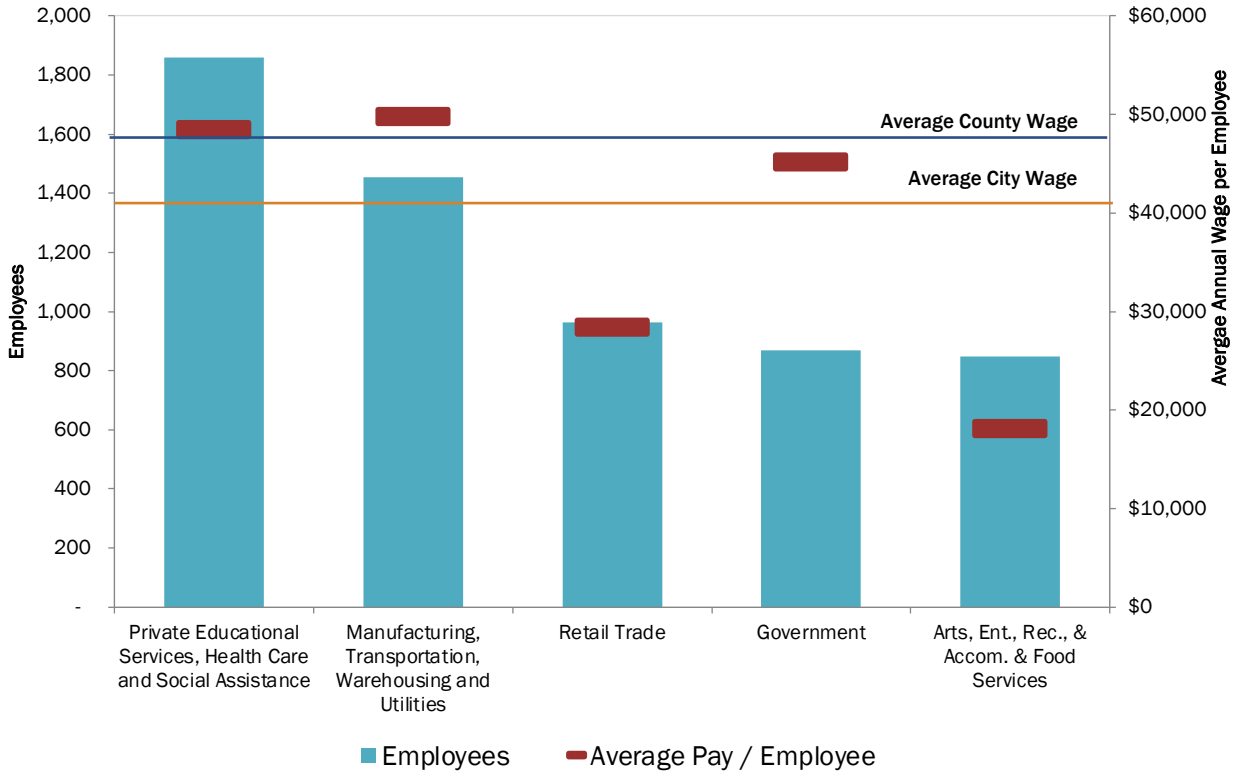
Exhibit 4. Covered Employment and Average Pay by Sector, Lebanon UGB, 2019
Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2019.

Sector	Establishments	Employees	Average Pay per Employee
Agriculture, Forestry, Fishing and Hunting & Mining	6	29	$50,465
Construction	33	303	$56,112
Manufacturing, Transportation, Warehousing and utilities	34	1,453	$49,787
Wholesale Trade	9	104	$46,959
Retail Trade	71	962	$28,421
Information, Finance and Insurance	43	159	$48,330
Real Estate and Rental and Leasing	27	69	$26,490
Prof., Sci., and Tech. Services and Mgmt. of Companies	21	137	$44,181
Admin. / Support and Waste Mgmt / Remediation Serv.	17	53	$26,917
Private Educational Services, Health Care and Social Assis	68	1,859	$48,482
Arts, Ent., and Rec., and Accom. and Food Services	58	849	$18,203
Other Services	145	290	$23,413
Government	25	869	$45,173
Total	**557**	**7,136**	**$40,870**

The average size for a private business in Lebanon was 12 employees per business, consistent with the state average of 12 employees based on Quarterly Census of Employment and Wages data in 2019. Businesses with 9 or fewer employees accounted for 37% of private employment, and businesses with 50 or fewer employees accounted for 65% of private employment.

Exhibit 5 shows the employment and average pay per employee for the five largest sectors in Lebanon. Average pay for all employees ($40,870) is shown as a yellow line across the graph, and average pay for individual sectors as short red lines. The figure shows manufacturing, transportation and warehousing, educational services, health care and social assistance and government sectors had above average wages. Construction and utilities, wholesale trade, information, finance, and insurance, professional, scientific, and technical services and management of companies also had higher than average wages. The lowest wages were in retail trade, entertainment, and recreation, and accommodations and food services, and public administration, and other services.

Exhibit 5. Covered Employment and Average Pay by Sector, Lebanon UGB, 2019[18]
Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2019.



Though data are not readily available at the city level to inform the impacts of the COVID-19 pandemic, OED reports that Linn County had higher rates of unemployment insurance (UI) claims as a share of labor force relative to all Oregon counties.[19] In the months following the onset of the pandemic (for data ending April 30, 2020), around 5,700 continued UI claims were made in Linn County. Of these claims, almost 1,190 were in the manufacturing sector (21% of the county's total claims). Health care and social assistance had the next largest share of continued claims at about 18% of the county total, followed by accommodations and food services and retail trade at 15% and 11%, respectively. As of April 2022, these continued insurance claims were down to under 540 claims.

Outlook for Growth in Linn County

Given the large change in the economy starting in March 2020 as a result of the COVID-19 pandemic, it is difficult to accurately understand the likely outlook for growth in Linn County. The best currently available data is as follows. Exhibit 6 shows the Oregon Employment Department's forecast for employment growth by industry for the Mid-Valley region (Linn,

[18] "Industrial sectors" includes natural resources, construction, transportation and warehousing, utilities, and wholesale trade. "Leisure activities" includes accommodation and food services and arts, entertainment, and recreation.

[19] Based on information from the Oregon Employment Department as of June 2022. https://www.qualityinfo.org/covid-19

Marion, Polk, and Yamhill Counties) over the 2020 to 2030 period. Employment in the region is forecasted to grow at an average annual growth rate of 1.5%.

The sectors that will lead employment in the region for the 10-year period are private educational and health services (adding 8,800 jobs); leisure and hospitality (2,300); trade, transportation, and utilities (6,600); professional and business services (4,600); manufacturing (4,100) and government (3,800). In sum, these sectors are expected to add 36,200 new jobs, or about 79% of employment growth in the Mid-Valley region. Linn County accounts for about 22% of employment in these four counties, and Lebanon accounts for about 15% of the county's employment.

Exhibit 6. Regional Employment Projections, 2020–2030, Mid-Valley Region (Linn, Marion, Polk, and Yamhill Counties)

Source: Oregon Employment Department. Employment Projections by Industry 2020-2030. *Average Annual Growth Rate

Industry	2020	2030	Change (2020 to 2030)		
			Number	Percent	AAGR*
Total Private Payroll Employment	**206,300**	**245,200**	**38,900**	**19%**	**1.7%**
Natural Resources and Mining	**18,200**	**19,600**	**1,400**	**8%**	**0.7%**
Mining and Logging	1,100	1,200	100	9%	0.9%
Construction	**17,300**	**20,000**	**2,700**	**16%**	**1.5%**
Manufacturing	**26,100**	**30,200**	**4,100**	**16%**	**1.5%**
Durable Goods	15,500	18,200	2,700	17%	1.6%
Wood Product Manufacturing	4,200	4,800	600	14%	1.3%
Nondurable Goods	**10,600**	**12,000**	**1,400**	**13%**	**1.2%**
Trade, Transportation, and Utilities	43,700	50,300	6,600	15%	1.4%
Wholesale Trade	6,300	7,200	900	14%	1.3%
Retail Trade	26,900	30,100	3,200	12%	1.1%
Transportation, Warehousing, and Utilities	**10,400**	**13,000**	**2,600**	**25%**	**2.3%**
Information	**1,900**	**2,300**	**400**	**21%**	**1.9%**
Financial Activities	**9,300**	**9,900**	**600**	**6%**	**0.6%**
Professional and Business Services	**19,100**	**23,700**	**4,600**	**24%**	**2.2%**
Private Educational and Health Services	43,900	52,700	8,800	20%	1.8%
Health Care and Social Assistance	**38,000**	**46,300**	**8,300**	**22%**	**2.0%**
Leisure and Hospitality	19,300	27,600	8,300	43%	3.6%
Accommodation and Food Services	**16,400**	**23,100**	**6,700**	**41%**	**3.5%**
Other Services and Private Households	**7,500**	**8,900**	**1,400**	**19%**	**1.7%**
Government	50,700	54,500	3,800	7%	0.7%
Federal Government	2,400	2,400	0	0%	0.0%
State Government	21,300	22,900	1,600	8%	0.7%
Local Government	27,000	29,200	2,200	8%	0.8%
Local Education	**14,000**	**15,000**	**1,000**	**7%**	**0.7%**
Total employment	**276,800**	**320,500**	**43,700**	**16%**	**1.48%**

Lebanon's Competitive Advantage

Economic development opportunities in Lebanon will be affected by local conditions as well as the national and state economic conditions addressed above. Economic conditions in Lebanon relative to these conditions in other portions of the Willamette Valley region form Lebanon's competitive advantage for economic development. Lebanon's competitive advantages have implications for the types of firms most likely to locate and expand in the area.

Lebanon's primary competitive advantages are access to automotive and freight rail transportation access; central location within the Willamette Valley; existing businesses in Lebanon; access to labor from Albany, Corvallis, and Sweet Home; the city's high quality of life resulting from the small-town feel; access to cultural and retail opportunities within the mid-Willamette Valley; and access to outdoor recreation. These factors make Lebanon attractive to residents and businesses that want a high quality of life where they live and work.

Chapter 2 reports industries that have shown growth and business activity in Lebanon and Linn County in the past, as well as projections for growth industries in Linn County. These industries are indicative of businesses that might locate or expand in Lebanon. The characteristics of Lebanon will affect the types of businesses most likely to locate in Lebanon:

The discussion earlier in this chapter provided information about Lebanon's existing base of businesses and access to labor, which are key to understanding Lebanon's competitive advantages. This section summarizes these and other local factors that form Lebanon's competitive advantage, with additional details in the sections following this summary.

Lebanon's advantages for economic development include:

- **Location**. Lebanon is located in Linn County and is part of the Cascades West and Willamette Valley region. Lebanon is located approximately eight miles east of I-5 between Salem and Eugene. It is about 36 miles southwest of Salem and 45 miles northeast of Eugene. Employers in Lebanon have access to labor in the broader Willamette Valley region, drawing employees from Albany (8 miles), Corvallis (19 miles), and Sweet Home (14 miles).

  Lebanon's location is a primary comparative advantage for economic development in Lebanon. Its proximity to I-5 and railroad access provides excellent access to transportation.

- **Industrial land supply.** The buildable lands inventory (BLI) in Chapter 4 shows that Lebanon has more than 1,000 acres of buildable land within the UGB. Lebanon has a variety of site sizes of industrial land with developable areas suitable for a variety of businesses ranging from manufacturing and other industrial uses to smaller sites.

- **Commercial land supply.** The BLI in Chapter 4 shows that Lebanon has **162** acres of buildable commercial land in the UGB and **936** of mixed-use commercial land. While Lebanon has a well-developed downtown area, the area south of downtown on

Highway 20 presents opportunities for investments to increase activity in this area, such as street beautification and other improvements to this area a welcoming place.

- **Transportation.** Lebanon sits where Highway 34 and Highway 20 meet and an eight-minute drive east from I-5. Lebanon is located about eight miles from I-5, along Highway 34, which provides a relatively straight, flat connection with I-5. Highway 20 runs through Lebanon's downtown, connecting the City with Albany, Corvallis, and the Oregon Coast to the west and Sweet Home and Central Oregon to the east.

  Lebanon has a public use airport– Lebanon State Airport. Air transport is available at the airport, located approximately one mile west of downtown Lebanon. The airport is owned and operated by the Aeronautics Division, State of Oregon Department of Transportation. According to the City of Lebanon's website, the runway is a 2,747-feet long and 60-feet wide paved surface. The Eugene airport is 40 miles away, Portland International Airport is 95 miles away.

  Lebanon has rail access through Union Pacific & Burlington Northern (dual service rail) and Albany & Eastern Railroad for freight service.

  Transportation access and capacity is one of Lebanon's most important advantages. Firms require transportation access so that workers and customers can reach their location, and so that shipments of supplies and products can easily reach and leave the site. Lebanon's transportation system provides relatively easy access to potential customers and suppliers in the Willamette Valley, west coast, and national markets.

- **Infrastructure.** The City has made upgrades to the water system and is making upgrades to the wastewater system that allow the City to accommodate most types of commercial and industrial development. The City's water and wastewater master plans have been recently updated and include plans for maintenance and replacement of water and wastewater lines, as well as needed upgrades to the wastewater treatment plant.

- **Manufacturing.** The types of manufacturing businesses likely to locate in Lebanon are those that need easy access to transportation, a semi-skilled labor force, proximity to existing businesses, or proximity to agricultural production. Manufacturing that is already well concentrated in plastics and rubber products manufacturing, machinery manufacturing, miscellaneous manufacturing and beverage and tobacco product manufacturing (with location quotients of 6.89, 6.15, 2.75 and 1.05 respectively).

  - Lebanon recently welcomed an expansion to the Linn Benton Community College Advanced Transportation Technology & Heavy Equipment Center.

  - Key manufacturing and construction employers include ENTEK, Santiam Lumber and Linn Gear Co.[20]

- **Health care services**. According to the City of Lebanon, Lebanon is the first city in Oregon in over 100 years to become the home of a new medical university with the new

[20] https://www.ci.lebanon.or.us/ed/page/key-industries

health occupations.[21] Hospitals, nursing and residential care facilities and social assistance businesses have high concentrations in Lebanon (location quotients of 1.8, 3.8 and 1.5 respectively).

Western University of Health Sciences is a nonprofit university, with degree programs in dental medicine, nursing, health sciences, physical therapy, and other medical specialties. In Fall 2022, Western University of Health Science's Lebanon campus had enrollment of about 520 students. Students at the University were predominantly female and about 41% are Asian, 34% White, and 16% Latino. The university had about 155 employees at its Lebanon campus.

  - Other key employers include Samaritan Community Hospital or Edward C. Allworth Veterans' Home.[22]

- **Warehousing.** Lebanon's access to I-5, central location within the Willamette Valley, and availability of large industrial sites may make Lebanon attractive to warehousing and distribution firms. Large warehouse facilities that serve large areas appear to favor central locations, similar to Lebanon's location. As of 2019, warehousing and storage and postal service-related business had a strong concentration in Lebanon (location quotients of 11.03 and 5.48 respectively).

  The access to dual carrier rail in Lebanon provides cost savings to industries that transport goods by rail. It may attract rail dependent industries that transport products such as lumber, agricultural products, or other bulky low to medium value commodities.

  - Key transportation and warehousing employers include Lowes Regional Distribution Center and Rick Franklin Corp.[23]

- **Services for residents and visitors.** There are a number of strong sectors that provide services to residents, including motor vehicle and parts dealers, food and beverage stores, health and personal care stores, miscellaneous store retailers, miscellaneous store retailers and even religious, grantmaking, civic, professional, and similar organizations. Other services which may serve both residents and visitors such as performing arts, spectator sports, and related industries and food services and drinking places were strong in Lebanon.

- **Labor market.** Businesses in Lebanon are able to draw employees from across the mid-Willamette Valley, pulling workers from Albany, Sweet Home, Corvallis, and Salem, as well as other communities within the Willamette Valley. Lebanon's labor force participation rate (60%) is slightly higher than the county average (59%). Although the

[21] City of Lebanon. 2022. *Choose Lebanon*. Choose Lebanon | City of Lebanon Oregon. Retrieved September 9, 2022, from https://www.ci.lebanon.or.us/ed

[22] https://www.ci.lebanon.or.us/ed/page/key-industries

[23] https://www.ci.lebanon.or.us/ed/page/key-industries

share of Lebanon's working age population with a bachelor's degree or higher (16%) is lower relative to the county average (19%), the city has a higher share (44%) of residents with an associate degree or some college.

- **Access to education and workforce training.** Residents in Lebanon can access education and training from the Linn-Benton Community College, Western University Health Sciences, Oregon State University in Corvallis, and institutions in nearby Salem, including Willamette University, Corban University, and Chemeketa Community College.
- **Quality of life.** Lebanon has a small-town atmosphere with a quaint downtown, low-density residential areas, and proximity to farmland and open space.

  Livability is also impacted by the quality of schools. Lebanon Community Schools include six elementary schools, one middle school and one high school. Additionally, there is one charter school (K-8) and one private school (PK-12) serving youth. Post-secondary institutions include Linn Benton Community College, Oregon State University and Western University of Health Sciences.

  Not only does Lebanon have quality medical schools in the area, but these also attract quality workers and provides the local community access to quality health care. In recent years, there have been expansions of a community access health care hospital, expansion of urgent care and helipad.
- **Tourism and access to outdoor recreation.** Lebanon, similar to other places in the Willamette Valley region, attracts visitors for its access to outdoor recreation opportunities and wineries. In addition to cultural amenities, Lebanon's location provides easy access to scenic and recreational opportunities. Located in the western foothills of the Cascade Range, Lebanon is a short drive from fishing, hunting, boating, camping, backpacking, hiking, and skiing.

  A variety of parks and trailheads are located to the east along Highway 20. Lebanon has good access to recreational opportunities. For example, Lebanon also offers a 45 minutes' drive to the Coast and 1.15 hours to skiing, good trail system, Cheadle Lake is an asset, and South Santiam River for recreation and fishing and small boating.

  The City is also responsible for over 11 parks, such as the Pioneer Cemetery and the Santiam River Corridor. These landscaped areas range in size, with the largest, River Park, at 22.4 acres.

Lebanon's disadvantages for economic development include:

- **Wetlands on industrial land.** While Lebanon has a comparatively large supply of buildable industrial land, wetlands are very common on industrial land, many of which are not documented in the existing inventories of wetlands in Lebanon. The presence of wetlands increases development costs and complexities on industrial land, sometimes making it infeasible for industrial development.

- **Transportation needs.** Highway 20 is two-lanes and often congested. There are areas where freight and truck traffic may conflict with pedestrian areas, such as in downtown. Other routes, such as roads south of the highways are not considered suitable or preferred for freight.
- **Wastewater collection system.** The City's wastewater collection system is aging and has leaking pipes, with infiltration a concern during high precipitation events. While the City is planning maintenance and replacement of wastewater lines, this replacement will take time and could be a disadvantage for development of businesses who are substantial producers of wastewater (such as food processors) on sites where the wastewater lines have not been replaced.
- **Transit Needs.** While the Lebanon Inter-Neighborhood eXpress. (LINX) Loop runs along Main Street, north and south, there is little other public transit option and an increasing need for more bicycle facilities, including on highways and city streets. This is particularly noted on Highway 20 which has 2 lanes, with residential turn offs, no middle lane and is highly congested.

Public Facilities and Services

Provision and costs of public facilities and services can impact a firm's decision regarding location within a region. One of the primary considerations about developing a site is whether it has infrastructure to or near the site, including water, wastewater, stormwater, and transportation. If infrastructure is not developed to or near the site, the consideration becomes whether infrastructure can be extended in a timely manner and at a financially feasible cost.

This section discusses Lebanon's large infrastructure systems, including the water system, wastewater system, and stormwater system. It answers the question of whether Lebanon has or is planning to have sufficient capacity to support the amount and types of development proposed in the EOA.

Water

Residents and businesses in Lebanon receive water from the South Santiam River, with a new water treatment plant built in 2018. The maximum amount of treated water available in Lebanon currently is 4.5 million gallons per day, with a peak demand of 3.6 million gallons per day in 2022. The water treatment plant can easily be adjusted to provide 6.0 million gallons per day, if needed.

Overall the water distribution system is in relatively good shape and has the ability to provide needed water to commercial and industrial area. The City is doing maintenance and replacement of water lines as needed. As commercial and industrial areas need to be serviced, the City will need to do extensions of existing water lines, which are conditioned on development.

The City's supply of potable water should be sufficient to supply expected employment growth. The supply of potable water is not expected to be a constraint for commercial and industrial growth unless the City attracts water intensive industries, such as food processors or a silicon chip fabrication plant.

Wastewater

The City of Lebanon maintains the sewer system, including wastewater collection and treatment and sludge disposal. The system experiences inflow and infiltration problems, especially with high precipitation events. The wastewater system has a capacity of 9.0 million gallons per day. In the case of large precipitation events that exceed the capacity of the treatment plant, the City may only be able to do primary treatment of excess effluent (chlorine treatment) as a result of infiltration. The City has been able to treat the excess waste and comply with EPA standards for effluent discharge.

The City expects to do upgrades to the wastewater treatment plant. The City is updating the Wastewater Treatment System Plan, expected to be completed in summer 2023. Key upgrades to the system include addressing need for biosolids handling, improvements to the headworks, building a new administrative building, and other items identified in the updated System Plan.

The sewer collection system has aging and leaking pipes. The City is doing a replacement of a major collector line on the west side of Lebanon, the Westside Interceptor project. The City expects to replace other sewer collection lines based on an annual program for replacement of failing sewer lines.

The capacity to collect and treat wastewater should not be a significant constraining factor to accommodate employment growth, once the Westside Interceptor project is completed. If the City attracts water intensive industries, the City could have constraints on treatment of wastewater.

Stormwater

The City finished the Stormwater Master Plan in 2022. Most projects identified in the Plan are upgrades to bottle necks in the stormwater systems. The City has adequate stormwater drainage and storage facilities for most weather events, except larger than 10-year storms.

3. Employment Growth and Site Needs

Goal 9 requires cities to prepare an estimate of the amount of commercial and industrial land that will be needed over a 20-year planning period. The estimate of employment land need and site characteristics for Lebanon is based on expected employment growth and the types of firms that are likely to locate in Lebanon over the 20-year period. This chapter presents an employment forecast and analysis of potential growth industries that build from recent economic trends.

Forecast of Employment Growth and Commercial and Industrial Land Demand

Demand for industrial and nonretail commercial land will be driven by the expansion and relocation of existing businesses and by the growth of new businesses in Lebanon. This employment land demand is driven by local growth independent of broader economic opportunities, including the expansion of potential growth industries.

The employment projections in this section build off Lebanon's existing employment base, assuming future growth is similar to Linn County's long-term historical employment growth rates. The employment forecast does 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. 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.

ECONorthwest has four steps to project demand for industrial and nonretail commercial land:

1. **Establish base employment for the projection.** We start with the estimate of covered employment in Lebanon presented in Exhibit 4. Covered employment does not include all workers, so we adjust covered employment to reflect total employment in the city.
2. **Project total employment.** The total employment projection considers forecasts and factors that may affect employment growth in Lebanon over the 20-year planning period.
3. **Allocate employment.** This step involves allocating types of employment to different land use types.
4. **Estimate land demand.** This step estimates general employment land demand based on employment growth and assumptions about future employment densities.

This analysis applies methods established by administrative rule and input received from the Lebanon Technical Advisory Committee (TAC), the Lebanon Planning Commission, and the Lebanon City Council.

Employment Base for Projection

The purpose of the employment projection is to model future employment land need for general employment growth. The forecast of employment growth in Lebanon starts with a base of employment growth on which to build the forecast. Exhibit 7 shows ECONorthwest's estimate of total employment in Lebanon in 2019.

To develop the figures, ECONorthwest started with estimated covered employment in the Lebanon UGB from confidential Quarterly Census of Employment and Wages (QCEW) data provided by the Oregon Employment Department. Based on this information, Lebanon had about 7,141 covered employees in 2019. 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 Linn County is only about 80% of *total* employment reported by the U.S. Department of Commerce.[24] We evaluated this ratio for each industrial sector for Linn County and used the resulting ratios to determine the number of noncovered employees. This allowed us to determine the total employment in Lebanon. Exhibit 7 shows Lebanon had an estimated 9,103 *total* employees within its UGB in 2019.

[24] **Covered** employment includes employees covered by unemployment insurance. Examples of workers not included in covered employment are sole proprietors, some types of contractors (often referred to as "1099 employees"), or some railroad workers. Covered employment data is from the Oregon Employment Department. Total employment includes all workers based on data from the U.S. Department of Commerce. Total employment includes all covered employees, plus sole proprietors and other noncovered workers.

Exhibit 7. Estimated Total Employment by Sector, Lebanon UGB, 2019
Source: 2019 covered employment from confidential Quarterly Census of Employment and Wage (QCEW) data provided by the Oregon Employment Department.

Sector	Covered Employment	Estimated Total Employment	Covered % of Total
Agriculture, Forestry, Fishing and Hunting & Mining	29	36	80%
Construction	303	395	77%
Manufacturing, Transportation, Warehousing and utilities	1,453	1,675	87%
Wholesale Trade	104	120	87%
Retail Trade	962	1,236	78%
Information, Finance and Insurance	159	246	65%
Real Estate and Rental and Leasing	69	346	20%
Prof., Sci., and Tech. Services and Mgmt. of Companies	137	257	53%
Admin. / Support and Waste Mgmt / Remediation Serv.	53	75	71%
Private Educational Services, Health Care and Social Assistance	1,859	2,235	83%
Arts, Ent., and Rec., and Accom. and Food Services	849	1,049	81%
Other Services	290	497	58%
Government	869	936	93%
Total Non-Farm Employment	**7,136**	**9,103**	**78%**

Employment Projection

The employment forecast covers the 2023 to 2043 period, requiring an estimate of total employment for Lebanon in 2023. The base employment starts with the estimate of 9,103 total jobs in Lebanon in 2019, shown in Exhibit 7.

Lebanon does not have an existing employment forecast, and there is no required method for employment forecasting. OAR 660-024-0040(9)(a) sets out some optional "safe harbors" that allow a city to determine employment land need. ECONorthwest presented the TAC and City Council with options for the employment forecast rate, including the two safe harbor options.

Exhibit 8 shows the forecast rate options, which include employment growing at the rate of either the PSU population growth rate (0.39%), the OED regional employment growth rate (1.48%), or the historic employment growth rate in Lebanon between 2008 and 2019 (1.80%). The PSU and OED growth rates are the safe harbor options in OAR 660-024-0040(9)(a)(A) and OAR 660-024-0040(9)(a)(B).

Exhibit 8. Forecast Rate Options for Employment Growth in Lebanon UGB, 2023–2043
Source: ECONorthwest *Average Annual Growth Rate

Year	Jobs grow at the rate of...		
	Population Growth (2023-2043) (0.39%)	Regional Employment Growth (1.48%)	Historic Employment Growth (2008-2019) (1.81%)
2023	9,246	9,653	9,776
2043	9,994	12,942	13,965
Change 2023 to 2043			
Employees	748	3,289	4,189
Percent	8%	34%	43%
AAGR*	0.39%	1.48%	1.80%

Based on discussions with stakeholder, this EOA uses the Historic Employment Growth scenario to forecast future growth. The city is to assume that the current number of jobs in the Lebanon UGB will grow during the 20-year planning period at a rate equal to the 2008 to 2019 historic employment growth rate, shown in Exhibit 3. The latest forecast shows that the population in Lebanon will grow at an average annual growth rate of 0.39%.[25] Exhibit 9 shows employment growth in Lebanon between 2023 and 2043, based on the assumption that the city will grow at an average annual growth rate of 1.8%. Lebanon will have 13,965 employees within the UGB by 2043, which is an increase of 4,189 employees (42.8%) between 2023 and 2043.

Exhibit 9. Employment Growth in Lebanon UGB, 2023–2043
Source: ECONorthwest

Year	Total Employment
2023	9,776
2043	13,965
Change 2023 to 2043	
Employees	4,189
Percent	42.8%
AAGR*	1.80%

[25] Final Population Forecasts prepared by Population Research Center, Portland State University, June 30th, 2021.

Allocate Employment to Different 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 Lebanon will look for a variety of site characteristics, depending on the industry and specific circumstances. We grouped employment into four broad categories of land use based on the North American Industrial Classification System (NAICS): industrial, retail commercial, office and commercial services, and government.

Exhibit 10 shows the expected share of employment by land use type in 2023 and the forecast of employment growth by land use type in 2043 in the Lebanon UGB. For each land use type, we assumed that the number of jobs will increase.

Exhibit 10 assumes that the share of employment in retail commercial will decrease from 14% to 12% of all employment, consistent with national trends in declines in local retail. It also assumes that government employment will decrease from 10% to 9% of overall employment, based on the assumption that school, county, and local employment will grow slower than other types of employment. Exhibit 10 shows industrial increasing from 24% to 25% based on opportunities for industrial development in Lebanon. The analysis assumes that office and commercial services increases the share of employment by around 3%, from 52% to 55%, consistent with potential for growth in industries such as medical services and education.

Exhibit 10. Forecast of Employment Growth by Land Use Type, Lebanon UGB, 2023–2043
Source: ECONorthwest. Note: The shaded percentages denote an assumption about the future change in the share of employment (as a percent of total) by land use type

Land Use Type	2023		2043		Change
	Employment	% of Total	Employment	% of Total	2023 to 2043
Industrial	2,391	24%	3,421	25%	1,030
Retail Commercial	1,327	14%	1,676	12%	349
Office & Commercial Services	5,053	52%	7,681	55%	2,628
Government	1,005	10%	1,187	9%	182
Total	**9,776**	**100%**	**13,965**	**100%**	**4,189**

Estimate of Demand for Commercial and Industrial Land

This section shows demand for vacant (including partially vacant) land in Lebanon over the 20-year period. The assumptions used in this analysis 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. Exhibit 11 assumes the following numbers of net employees per acre: industrial will have an average of eight employees per acre and commercial (retail and office) will have an average of 20 and 25 employees per acre. These employment densities are consistent with Oregon cities similar in size to Lebanon. Some types of employment will have higher employment densities (e.g., a multistory office building), and some will have lower employment densities (e.g., a convenience store with a large parking lot).
- **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. 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.[26] 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 Lebanon's existing net-to-gross ratios in areas designated for and developed with industrial and commercial uses, ECONorthwest uses a net-to-gross conversion factor of 8% for industrial and 18% for commercial.

Using these assumptions, the forecasted 4,189 new employees will result in the following demand for vacant (and partially vacant) employment land: 140 gross acres of industrial land, 21 acres of retail commercial land, and 128 gross acres of office commercial land.

Exhibit 11. Vacant Land Demand to Accommodate Employment Growth, Lebanon UGB, 2023–2043
Source: ECONorthwest

Land Use Type	New Employment	Employees per Net Acre	Land Demand (Net Acres)	Land Demand (Gross Acres)
Industrial	1,030	8	129	140
Retail Commercial	349	20	17	21
Office & Commercial Services	2,628	25	105	128
Total	**4,007**	**-**	**251**	**289**

[26] 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.

This analysis assumes that new employment will generally locate on employment land. Some of the new employees, especially those in office and commercial services, may work from home part of the time or all the time. The increases in working from home may decrease need for land, primarily for office and commercial services.

Target Industries

Lebanon's characteristics will affect the types of businesses that are most likely to locate to the city. Attributes that may attract firms are Lebanon's access to industrial land, labor market, and quality of life.

Lebanon's existing businesses are concentrated in the industries defined in

Exhibit 12. The industries in green highlight are industries with a high location quotient (i.e., highly specialized compared to national employment in the industry), high employment (i.e., have more than 50 employees in Lebanon), and higher than average city wages. These industries have the highest potential for growth, given existing businesses and the higher concentration of employment.

Lebanon also has opportunities for employment growth in industries without a concentration of employment or a high location quotient.

Exhibit 12. Concentration of Industries and Employment, Lebanon, 2019

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2019. Note: Green highlighting indicates higher than Lebanon's average wage.

	High Employment (more than 50 employees)	Low Employment (at least 10 employees)
High Location Quotient	▪ Plastics and Rubber Products Manufacturing ▪ Machinery Manufacturing ▪ Motor Vehicle and Parts Dealers ▪ Health and Personal Care Stores ▪ Hospitals ▪ Miscellaneous Manufacturing ▪ Warehousing and Storage ▪ Nursing and Residential Care Facilities ▪ Food and Beverage Stores ▪ General Merchandise Stores ▪ Miscellaneous Store Retailers ▪ Social Assistance ▪ Food Services and Drinking Places ▪ Religious, Grantmaking, Civic, Professional, and Similar Organizations ▪ Private Households	▪ Forestry and Logging ▪ Beverage and Tobacco Product Manufacturing ▪ Performing Arts, Spectator Sports, and Related Industries
Low Location Quotient	▪ Specialty Trade Contractors ▪ Merchant Wholesalers, Nondurable Goods ▪ Credit Intermediation and Related Activities ▪ Educational Services ▪ Ambulatory Health Care Services ▪ Professional, Scientific, and Technical Services ▪ Construction of Buildings ▪ Real Estate ▪ Administrative and Support Services ▪ Accommodation ▪ Repair and Maintenance	▪ Utilities ▪ Heavy and Civil Engineering Construction ▪ Chemical Manufacturing ▪ Fabricated Metal Product Manufacturing ▪ Securities, Commodity Contracts, and Other Financial Investments and Related Activities ▪ Management of Companies and Enterprises ▪ Electronics and Appliance Stores ▪ Building Material and Garden Equipment and Supplies Dealers ▪ Gasoline Stations ▪ Sporting Goods, Hobby, Musical Instrument, and Book Stores ▪ Non-store Retailers ▪ Insurance Carriers and Related Activities ▪ Rental and Leasing Services ▪ Amusement, Gambling, and Recreation Industries ▪ Personal and Laundry Services

Potential Growth Industries

An analysis of growth industries in Lebanon should address two main questions: (1) Which industries are most likely to be attracted to Lebanon? and (2) Which industries best meet Lebanon's economic development goals? The selection of potential growth industries is based on Lebanon's goals for economic development, economic conditions in Lebanon and Linn County, and the city's competitive advantages.

Given the current employment base, which is composed of several large employers and many smaller-sized businesses, it is reasonable to assume that much of the city's business growth will come from small-sized businesses. This growth will either come from businesses already in Lebanon or new businesses that start or relocate to Lebanon from within or outside of the Cascades West region.

The industries identified as having potential for growth in Lebanon are:

- **Manufacturing.** Lebanon has existing concentrations of employment in manufacturing industries like plastics and rubber manufacturing and machinery manufacturing. Given Lebanon's location in the Willamette Valley and the access to agricultural products, Lebanon also has opportunities for food and beverage manufacturing. Other types of manufacturing may locate to Lebanon over time, as well. As automation continues to shape manufacturing industries, Lebanon's target manufacturing industries will also evolve. Access to workforce training in manufacturing at regional educational facilities can continue to bolster manufacturing capabilities.
- **Warehouse and distribution.** Lebanon has existing concentrations of warehouse and distribution, such as warehousing and storage, motor vehicle parts warehousing, and nondurable goods. Lebanon could attract larger warehousing businesses to the community on industrial land on the west side of Lebanon where there is sufficient freight access to Highway 34. In addition, businesses in other industries, such as food and beverage manufacturing, may need warehouse and distribution sites.
- **Medical services and education.** Lebanon has medical care services for residents and the surrounding areas. In addition, Western University of Health Sciences provides education for health care professionals, which provides a growing number of health care professionals, some of whom may prefer to live and work in Lebanon. As population grows, health care services will grow.
- **Aviation-related industries.** Given the presence of the Lebanon Airport, aviation-related industries may be attracted to Lebanon.
- **Services for residents.** As Lebanon's population grows, demand for services for residents will grow. These services include retail, restaurants, medical services, childcare services, and other services. These types of services present opportunities for entrepreneurship and small business development in Lebanon.

- **Services for visitors.** Lebanon has access to parks and other outdoor recreational opportunities. Visitors that stop in Lebanon create demand for services such as hotels, restaurants, specialty retail, and experiences available in or near Lebanon.

Site Needs for Potential Growth Industries

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

OAR 660-009-0015(2) does state that "industrial or other employment uses with compatible site characteristics may be grouped together into common site categories." The rule suggests, but does not require, that the City "examine existing firms in the planning area to identify the types of sites that may be needed." For example, site types can be described by (1) plan designation (e.g., heavy or light industrial), (2) general size categories that are defined locally (e.g., small, medium, or large sites), or (3) industry or use (e.g., manufacturing sites or distribution sites). For the purposes of the EOA, Lebanon groups its future employment uses into categories based on their need for land with a particular plan designation (i.e., industrial or commercial) and by their need for sites of a particular size.

The potential growth industries described in the prior section are a mixture of business sizes, which will require a mixture of site sizes. Exhibit 13 shows the typical site needs for manufacturing businesses in Oregon.

Exhibit 13. Industrial Development Competitiveness Matrix, Business Oregon
Source: Business Oregon, Infrastructure Finance Authority, "Industrial Development Competitiveness Matrix."
Note: Items identified as "preferred" are those that increase the feasibility of the subject property and its future reuse. Items identified as "required" are factors seen as mandatory in most cases and have become industry standards.

Industry Sector	Site size (Acres)	Site Topography (Slope)	Trip Generation (ADT/Acre)	Site Access Max distance in miles to interstate or major arterial	Railroad or Port Access	Telecommunications (major communications dependency)
Regionally to Nationally Scaled Clean-Tech Manufacturer	5-100+	0-5%	40 - 60	10	Preferred	Required
Heavy Industrial/ Manufacturing	10-100+	0-5%	40 - 60	10	Preferred	Preferred
General Manufacturing	5-15+	0-5%	40 - 50	20	Preferred	Required
Food Processing	5-25+	0-5%	50 - 60	30	Preferred	Preferred
Regional (multistate) Distribution Center	20-100+	0-5%	40 - 80	5 Only Interstate highway or equivalent	Preferred	Preferred
Warehouse/Distribution (local)	10-25	0-5%	40 - 80	5 Only Interstate highway or equivalent	Preferred	Preferred
Call Center / Business Services	5-15	0 to 12%	170 - 180	Not applicable	Preferred	Required
Advanced Manufacturing & Assembly	5-25+	0-7%	40 - 60	15	Not Required	Required
Business Park and R&D Campus	20 - 100+	0-7%	60 to 150	N/A	Preferred	Required
UVA Manufacturing / Research	10-25+	0-7%	40 - 80	N/A	Not Required	Required
Data Center	10-25+	0-7%	20 - 30	30	Avoid / Not Required	Required
Rural Industrial	5-25+	0-5%	40 - 50	N/A	N/A	Preferred

For the most part, the size of sites needed by most potential growth industries will range from space in an existing building to flat sites of one acre or less to sites of 25 acres for manufacturing businesses. In a few instances, such as in industrial or business parks, sites larger than 25 acres (and up to 100 acres or larger) may be necessary to meet the needs of businesses or developments to support businesses. Manufacturing and other industrial businesses likely to locate in Lebanon will have a range of space needs:

- **Small-scale manufacturing space.** Businesses would locate in an industrial building with many other users. These businesses will need access to arterial roads and highways. There may be opportunities for a building with multiple small-scale manufacturers located in the building. Supporting entrepreneurship and growth of small businesses is a goal of Lebanon, as well as a key priority in the Cascade Wests Economic Development District's Comprehensive Economic Development Strategy. Having spaces for small-scale manufacturers available is a key part of supporting growth of these small businesses. This may require new construction or conversion of existing buildings to provide opportunities for development of this type of space.
- **Space in an existing building.** Most businesses that work with Business Oregon on site selection request space in existing buildings, either in vacant buildings or in buildings with other manufacturers. These spaces are key for small businesses to grow into, when they need more space than is available in the above small spaces.

- **Midsized manufacturing.** Some midsized manufacturers may prefer to locate in a building with one or two other businesses. Others may prefer to locate in newly developed buildings on sites from five to 15 acres. These businesses will need access to arterial roads and highways and may need greater access to water and wastewater.
- **Large manufacturing space.** Some larger manufacturers may prefer newly developed buildings on sites larger than 15 acres, often in purpose-built buildings. These businesses will need direct access to arterial roads and highways and may need greater access to water and wastewater.
- **Warehouse and distribution.** Lebanon will need sites of a variety of sizes for warehouse and distribution. Most warehouse sites may be for local distribution, requiring sites 10 to 25 acres in size. It is possible that a regional distributor could locate to Lebanon, requiring a site of 20 acres to 100 acres or more.

Commercial businesses, including service and hospitality, require high-visibility locations near other businesses and neighborhoods, especially along Highway 20, in downtown and south of downtown. Professional and commercial service businesses have a variety of space needs, ranging from:

- **Space in an existing building.** Businesses would be located as one of several or many firms within the building.
- **Space in a building dominated by one firm.** This could potentially be with commercial space in the building.
- **Land for construction of a building designed for the firm.** However, in the case where the business needs to build a building, they are typically seeking existing space rather than land to build a new facility.

Commercial sites are typically smaller than 2 acres but can be larger for new shopping centers. Some commercial sites could be larger, such as 5 acres, for uses like a new hotel. Some commercial businesses may locate closer to residential neighborhoods, typically one business in a building with several small commercial businesses, on a site of one to four acres.

4. Buildable Lands Inventory

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

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

The general steps in the buildable lands inventory are:

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

The next section provides a summary of the results of the commercial and industrial buildable lands inventory for the Lebanon UGB in both tabular and map formats. **Appendix B presents more details on the methodology for developing the inventory.**

Land Base

The land base for the Lebanon employment BLI includes all tax lots in the urban growth boundary (UGB) in plan designations that allow for employment. Exhibit 14 shows the land base by plan designation and zoning in the UGB.

Exhibit 14. Employment Land Base by Plan Designation, Lebanon UGB, 2022
Source: ECONorthwest analysis, City of Lebanon, Linn County. Note: The number of tax lots represented is greater than the actual total number of tax lots in the analysis due to split plan designations.

Plan Designation/Zone	Number of taxlots	Percent	Total taxlot acreage	Percent (total acreage)
Commercial (C-CM)	**414**	**53%**	**162**	**7%**
City Limits				
Central Business Commercial (Z-CCM)	213	27%	49	2%
Highway Commercial (Z-HCM)	184	24%	104	5%
Neighborhood Commercial (Z-NCM)	1	0%	0	0%
Residential Mixed Density (Z-RM)	1	0%	3	0%
UGB (County Zoning)				
Rural Commercial (UGA-RCM)	8	1%	4	0%
Urban Growth Management: 10 Units Per Acre (UGA-UGM-10)	7	1%	3	0%
Mixed Use (C-MU)	**204**	**26%**	**784**	**36%**
City Limits				
Highway Commercial (Z-HCM)	2	0%	5	0%
Industrial (Z-IND)	3	0%	24	1%
Mixed Use (Z-MU)	121	16%	614	28%
Residential Low Density (Z-RL)	9	1%	14	1%
Residential Mixed Density (Z-RM)	13	2%	5	0%
UGB (County Zoning)				
Exclusive Farm Use (UGA-EFU-80)	1	0%	0	0%
Heavy Industrial (UGA-HI)	1	0%	1	0%
Urban Growth Management: 10 Units Per Acre (UGA-UGM-10)	53	7%	68	3%
Urban Growth Management: 20 Units Per Acre (UGA-UGM-20)	1	0%	52	2%
Industrial (C-IND)	**161**	**21%**	**1,227**	**56%**
City Limits				
Industrial (Z-IND)	117	15%	997	46%
Public Use (Z-PU)	1	0%	1	0%
UGB (County Zoning)				
Exclusive Farm Use (UGA-EFU-80)	20	3%	183	8%
Heavy Industrial (UGA-HI)	3	0%	12	1%
Limited Industrial (UGA-LI)	2	0%	5	0%
Urban Growth Management: 10 Units Per Acre (UGA-UGM-10)	12	2%	9	0%
Urban Growth Management: 20 Units Per Acre (UGA-UGM-20)	6	1%	20	1%
Total	**779**	**100%**	**2,174**	**100%**

Development Status

Exhibit 15 shows the total acres of residential tax lots classified by development status. We used a rule-based classification (described in Appendix B) to define an initial development status. We confirmed development status through a series of reviews by ECONorthwest and City staff, based on local knowledge and review of aerial maps.

Exhibit 15. Employment Acres by Classification and Plan Designation, Lebanon UGB, 2022
Source: ECONorthwest analysis, City of Lebanon, Linn County.

Plan Designation/Zone	Total Acres	Committed Acres	Constrained Acres	Buildable Acres Unconstrained Vacant & Partially Vacant
Commercial (C-CM)	**162**	**130**	**3**	**30**
City Limits				
Central Business Commercial (Z-CCM)	49	43	1	4
Highway Commercial (Z-HCM)	104	78	1	25
Neighborhood Commercial (Z-NCM)	0	0	-	-
Residential Mixed Density (Z-RM)	3	3	1	-
UGB (County Zoning)				
Rural Commercial (UGA-RCM)	4	4	-	-
Urban Growth Management: 10 Units Per Acre (UGA-UGM-10)	3	2	-	1
Mixed Use (C-MU)	**784**	**211**	**119**	**454**
City Limits				
Highway Commercial (Z-HCM)	5	3	0	2
Industrial (Z-IND)	24	12	0	12
Mixed Use (Z-MU)	614	165	101	348
Residential Low Density (Z-RL)	14	6	1	8
Residential Mixed Density (Z-RM)	5	3	1	1
UGB (County Zoning)				
Exclusive Farm Use (UGA-EFU-80)	0	-	0	-
Heavy Industrial (UGA-HI)	1	1	0	1
Urban Growth Management: 10 Units Per Acre (UGA-UGM-10)	68	22	16	31
Urban Growth Management: 20 Units Per Acre (UGA-UGM-20)	52	-	1	52
Industrial (C-IND)	**1,227**	**426**	**182**	**620**
City Limits				
Industrial (Z-IND)	997	354	172	471
Public Use (Z-PU)	1	0	-	1
UGB (County Zoning)				
Exclusive Farm Use (UGA-EFU-80)	183	51	3	128
Heavy Industrial (UGA-HI)	12	9	1	2
Limited Industrial (UGA-LI)	5	1	-	4
Urban Growth Management: 10 Units Per Acre (UGA-UGM-10)	9	4	3	2
Urban Growth Management: 20 Units Per Acre (UGA-UGM-20)	20	6	3	12
Total	**2,174**	**767**	**303**	**1,104**

Development Constraints

The buildable lands inventory identifies the following conditions as constraints that prohibit development: FEMA 100-Year Floodplains and Regulatory Floodway, landslide susceptibility, slopes greater than 15%, and a specific wetlands area identified by city staff. Exhibit 16 shows these constraints.

Exhibit 16. Development Constraints, Lebanon UGB, 2022
Source: ECONorthwest analysis, City of Lebanon, Linn County.

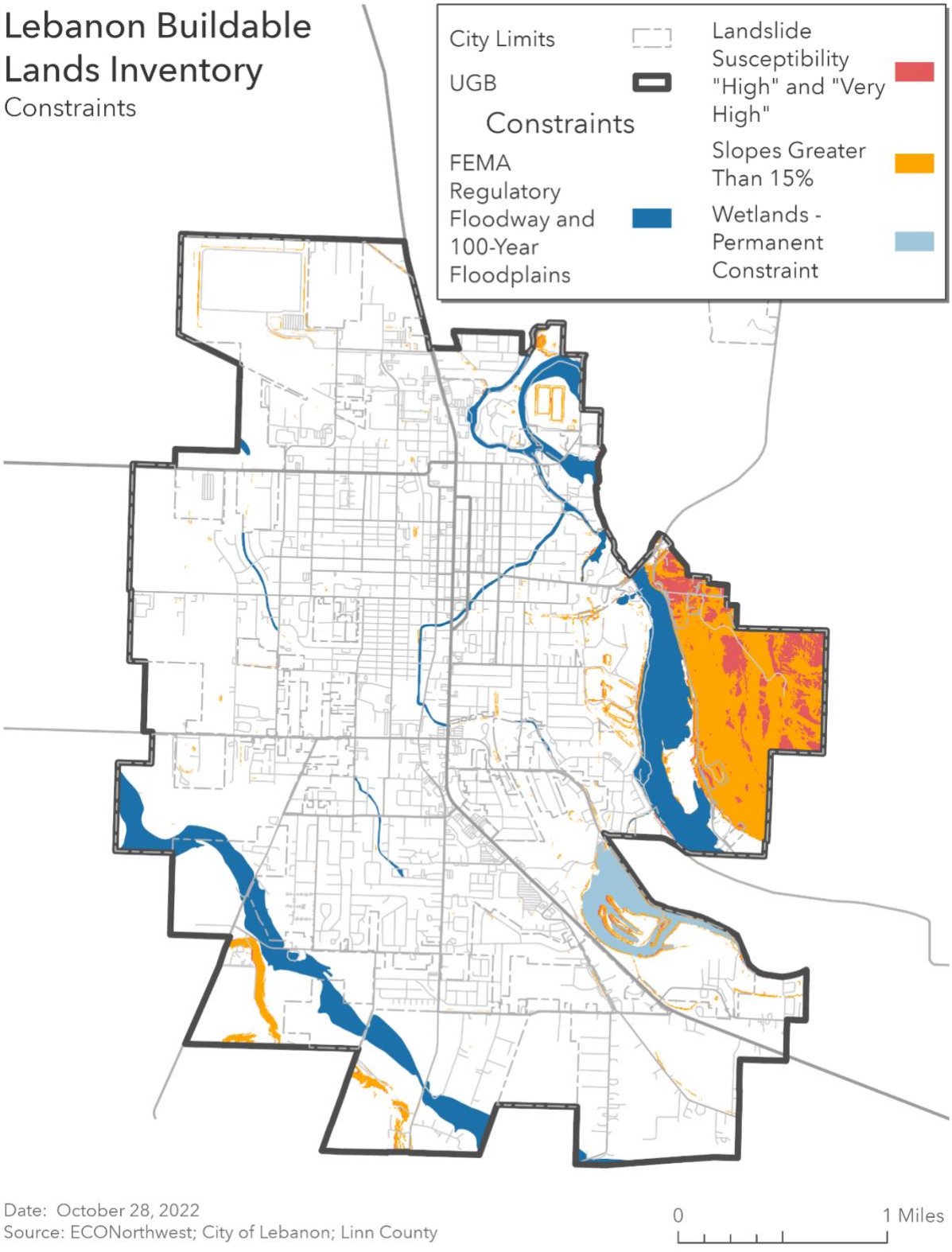
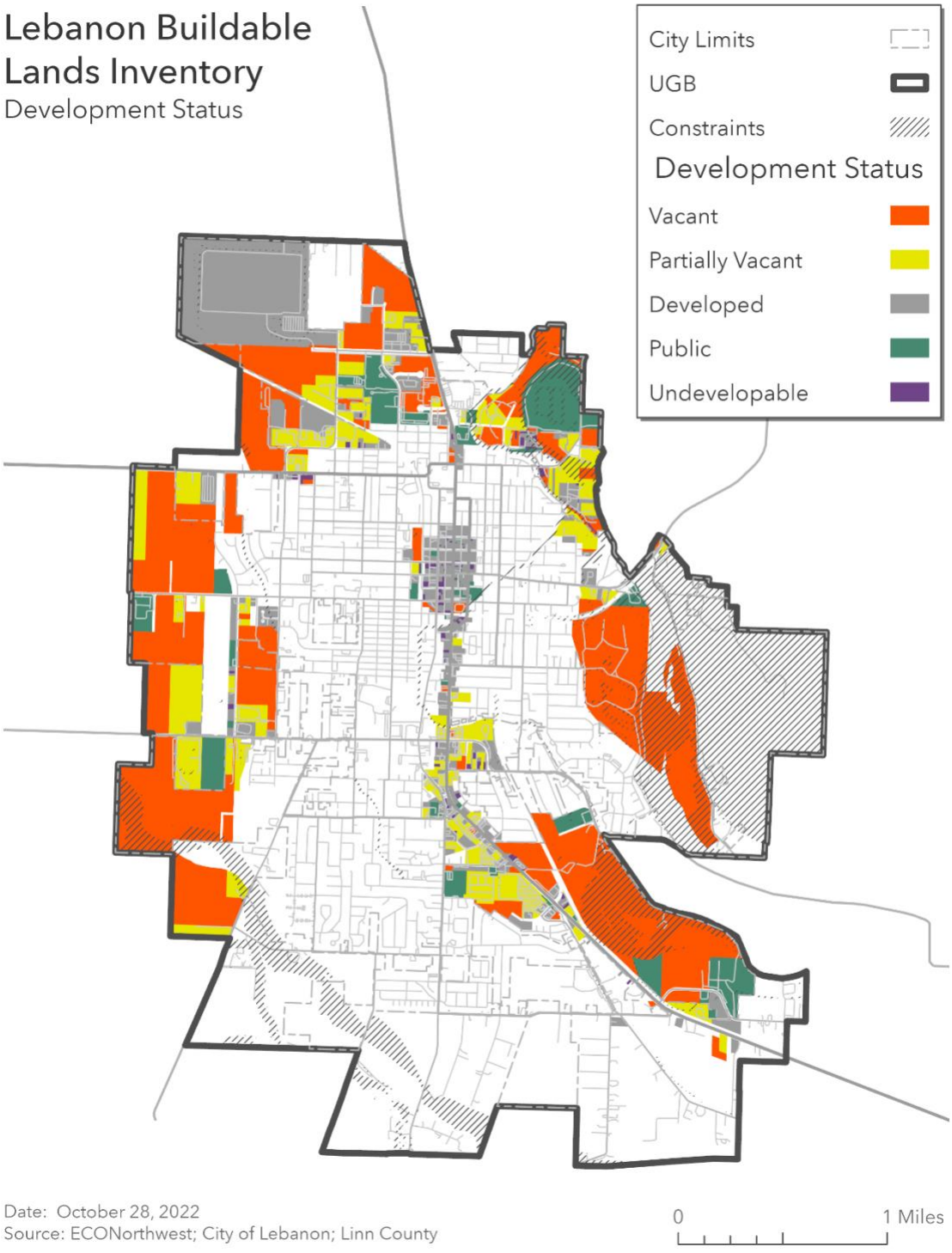


Exhibit 17 shows development status with constraints applied, resulting in buildable acres. Vacant or partially vacant land with these constraints is considered unavailable for development and removed from the inventory of buildable land.

Exhibit 17. Development Status with Constraints, Lebanon UGB, 2022
Source: ECONorthwest analysis, City of Lebanon, Linn County.



Vacant Unconstrained Buildable Land

The next step in the commercial and industrial buildable lands inventory was to net out portions of vacant tax lots that are unsuitable for development. Areas unsuitable for development fall into two categories: (1) developed areas of partially vacant tax lots, and (2) areas with physical constraints (areas with wetlands, floodways, riparian setback areas, and steep slopes).

Exhibit 18 shows buildable acres (i.e., acres in tax lots after constraints are deducted) for vacant and partially vacant land by plan designation.

Note that partially vacant land in the map in Exhibit 17 shows the entire tax lot as being partially vacant, without distinguishing the part of the tax lot that is not available for development. The buildable lands inventory database accounts for the portion of the tax lot that is developed (and considered unavailable for future development) and the portion of the tax lot that is vacant is shown in Exhibit 17.

Exhibit 18. Buildable Acres in Vacant/Partially Vacant Tax Lots by Plan Designations, Lebanon UGB, 2022

Source: ECONorthwest analysis, City of Lebanon, Linn County.

Plan Designation/Zone	Total Buildable Acres	Buildable Acres on Vacant Lots	Buildable Acres on Partially Vacant Lots
Commercial (C-CM)	**30**	**12**	**18**
City Limits			
Central Business Commercial (Z-CCM	4	4	0
Highway Commercial (Z-HCM)	25	8	17
UGB (County Zoning)			
Urban Growth Management: 10 Units	1	1	-
Mixed Use (C-MU)	**454**	**401**	**54**
City Limits			
Highway Commercial (Z-HCM)	2	1	2
Industrial (Z-IND)	12	10	2
Mixed Use (Z-MU)	348	318	29
Residential Low Density (Z-RL)	8	0	7
Residential Mixed Density (Z-RM)	1	1	-
UGB (County Zoning)			
Heavy Industrial (UGA-HI)	1	-	1
Urban Growth Management: 10 Units	31	18	13
Urban Growth Management: 20 Units	52	52	-
Industrial (C-IND)	**620**	**510**	**110**
City Limits			
Industrial (Z-IND)	471	419	51
Public Use (Z-PU)	1	-	1
UGB (County Zoning)			
Exclusive Farm Use (UGA-EFU-80)	128	84	45
Heavy Industrial (UGA-HI)	2	-	2
Limited Industrial (UGA-LI)	4	3	1
Urban Growth Management: 10 Units	2	0	1
Urban Growth Management: 20 Units	12	3	8
Total	**1,104**	**923**	**182**

Exhibit 19 shows Lebanon's buildable vacant and partially vacant residential land by plan designation.

Exhibit 19. Buildable Employment Land by Plan Designation with Development Constraints, Lebanon UGB, 2022

Source: ECONorthwest analysis, City of Lebanon, Linn County.

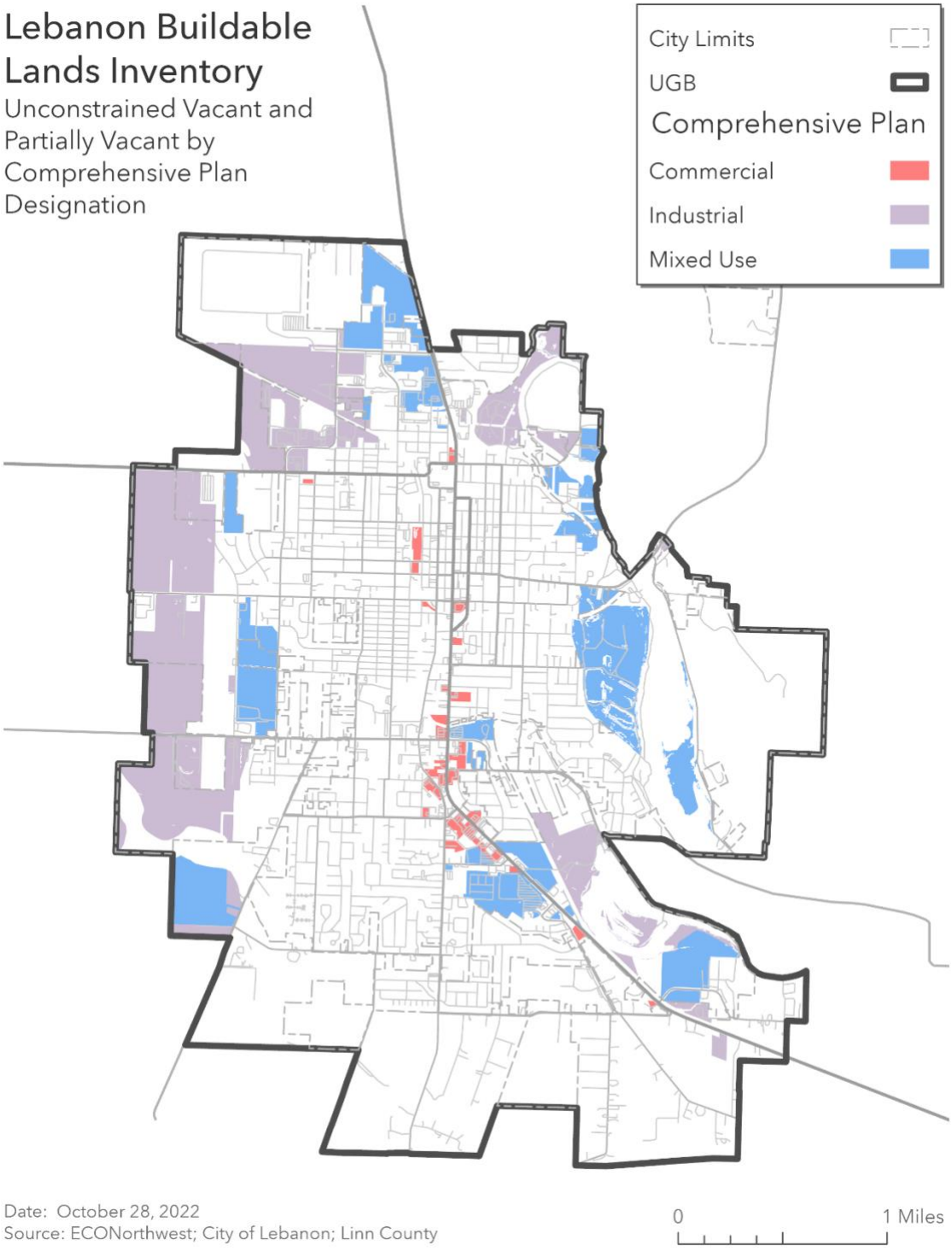


Exhibit 20 shows the size of lots by plan designations for buildable employment land. Lebanon has 29 lots that are smaller than 0.5 acres (with 10 acres of land); 82 lots between 0.5 and 2 acres (83 acres of land); 34 lots between 2 and 5 acres in size (107 acres of land); 20 lots between 5 and 10 acres in size (140 acres of land); 16 lots between 10 and 25 acres in size (259 acres of land); 9 lots between 25 and 50 acres in size (295 acres of land); and 3 lots over 50 acres in size (211 acres of land).

Exhibit 20. Taxlot Size by Plan Designation, Buildable Acres, Lebanon UGB, 2022
Source: ECONorthwest analysis, City of Lebanon, Linn County.

Plan Designation/Zone	Buildable Site Size								
	0 - 0.5 Acres	0.5 - 1 Acres	1 - 2 Acres	2 - 5 Acres	5 - 10 Acres	10 - 25 Acres	25 - 50 Acres	50+ Acres	Total
Commercial (C-CM)	**3**	**8**	**10**	**9**	**-**	**-**	**-**	**-**	**30**
City	3	7	10	9	-	-	-	-	30
UGB	-	1	-	-	-	-	-	-	1
Industrial (C-IND)	**3**	**9**	**22**	**70**	**69**	**123**	**268**	**56**	**620**
City	3	8	11	39	56	123	176	56	471
UGB	1	1	11	31	13	-	92	-	148
Mixed Use (C-MU)	**3**	**17**	**17**	**28**	**71**	**136**	**27**	**155**	**454**
City	1	12	12	24	65	126	27	103	371
UGB	2	5	5	4	5	10	-	52	83
Acreage Subtotal	**10**	**34**	**49**	**107**	**140**	**259**	**295**	**211**	**1104**
Commercial (C-CM)	**8**	**12**	**7**	**3**	**-**	**-**	**-**	**-**	**30**
City	8	11	7	3	-	-	-	-	29
UGB	-	1	-	-	-	-	-	-	1
Industrial (C-IND)	**9**	**12**	**16**	**22**	**10**	**7**	**8**	**1**	**85**
City	7	11	8	13	8	7	5	1	60
UGB	2	1	8	9	2	-	3	-	25
Mixed Use (C-MU)	**12**	**23**	**12**	**9**	**10**	**9**	**1**	**2**	**78**
City	3	17	8	7	9	8	1	1	54
UGB	9	6	4	2	1	1	-	1	24
Lot Subtotal	**29**	**47**	**35**	**34**	**20**	**16**	**9**	**3**	**193**

5. Land Sufficiency and Conclusions

This chapter presents conclusions about Lebanon's employment land sufficiency for the 2023–2043 period. The chapter then concludes with a discussion about Lebanon's land base and its ability to accommodate growth over the next 20 years, as well as recommendations for the City to consider, ensuring it meets its economic growth needs throughout the planning period.

Land Sufficiency

Exhibit 21 shows commercial and industrial land sufficiency within the Lebanon UGB. It shows:

- **Vacant unconstrained land** from Exhibit 18 within the UGB. Exhibit 21 shows that Lebanon has **551 gross acres of industrial land and 346 gross acres of commercial and mixed-use land**.
- **Demand for commercial and industrial land** from Exhibit 11. Exhibit 21 shows Lebanon will need a total of 140 gross acres for industrial uses and 149 gross acres for office and commercial and mixed uses over the 2023–2043 period. The demand for commercial and industrial land is based on the forecast of employment growth at 1.8% in Exhibit 9 and the mix of employment in Exhibit 10. The employment conversion to acres of land demand is based on Exhibit 11 analysis.

Exhibit 21. Comparison of the Capacity of Unconstrained Vacant Land with Employment Land Demand by Land Use Type, Lebanon UGB, 2023–2043
Source: ECONorthwest

General Plan Designation	Land Supply *(Suitable Gross Acres)*	Land Demand *(Gross Acres)*	Land Sufficiency *(Surplus, Gross Acres)*
Industrial	691	140	551
Commercial & Mixed Use	495	149	346

A consideration of site needs and the supply of buildable land by site sizes (Exhibit 20) suggests that Lebanon has sufficient sites to accommodate the forecast of growth for industrial and commercial and mixed-use land.

Conclusions

The conclusions about commercial and industrial land sufficiency are:

- **Lebanon has a surplus of industrial-designated land.** Lebanon has about 551 acres more of unconstrained vacant industrial land than the forecast shows will be needed over the 20-year planning period.[27]
- **Wetlands are a constraint to future development of industrial land, especially for uses requiring large sites**. While the buildable lands inventory takes known wetlands into constraints, many wetlands in Lebanon are not on official databases. Industrial development is often hindered by wetland constraints. The City is working with regional partners to mitigate wetland issues where possible, but the expense and complexity of wetland mitigation makes industrial development difficult or impossible in some cases.
- **Lebanon has a surplus of land planned for commercial uses that can be accommodated within the existing UGB.** Lebanon has a surplus of about 346 acres of commercial and mixed-use land need for development over the 20-year planning period.
- **The City has a variety of sites in different sizes and locations that accommodate a wide range of development opportunities**. Lebanon's unconstrained vacant commercial and industrial land is in a wide range of site sizes, including 28 industrial sites larger than 10 acres, as well as many sites smaller than two acres. Lebanon's land base provides opportunities for a wide range of development on industrial land. As Exhibit 20 shows, Lebanon has only nine vacant lots between 25 and 50 acres in size. Because certain target growth industries depend on large parcel size (25 to 50 acres), Lebanon should consider preserving large acreage parcels that are planned industrial. Lebanon has fewer opportunities for commercial development larger than two acres.
- **Lebanon has unique opportunities for growth**. Despite the issues with wetlands, Lebanon has a substantial base of employment land, including industrial sites with areas without wetlands and a substantial base of land zoned for mixed use. Lebanon has access to a skilled and trained workforce and opportunities for further training. In addition, Western University of Health Sciences presents growth opportunities and trains health care workers, making health care an increasingly important opportunity in Lebanon.
- **Infrastructure.** Lebanon's transportation, water, wastewater, and stormwater systems are sufficient to accommodate expected growth. The City recently completed master plans for water, wastewater, and stormwater systems and has plans to complete the

[27] As of the date of this document, City of Lebanon has not adopted a local wetland inventory (LWI) or conducted environmental assessment of certain properties within the UGB that are vacant and planned for industrial. Only delineated wetlands, on record with the Department of State Lands, were removed from the buildable lands inventory (BLI). Potential presence of wetlands identified by the draft LWI were not removed from the BLI. Accordingly, the total amount of surplus industrial land (551 acres) is likely less.

upgrades described in the plans. These systems can provide sufficient services to Lebanon's target industries. These systems would require upgrades to provide services to businesses that use substantial amounts of water or wastewater, such as food processors and silicon chip fabrication.

- **The City's roads can generally accommodate expected employment growth.** Pinch points are congestion on Highway 20 and freight access and capacity to areas in the south and east of Lebanon. In addition, Lebanon's transit service, LINX, service operates a loop along Main Street north and south, and a deviated fixed route service that picks-up and drops off riders almost anywhere in town. Linn County operates a transit route that runs from Sweet Home to Albany providing inter-city alternatives. In addition, there are increased needs for more bicycle facilities throughout the city.

The following are ECONorthwest's recommendations for actions for Lebanon based on the analysis and conclusions in this report.

- **Update the Economic Element of the Comprehensive Plan.** The Economy Element has not been updated in recent years. This project includes recommendations for updated Comprehensive Plan goals and policies, as well as recommended actions for implementation. These recommendations are presented in the memorandum *Lebanon Economic Development Recommendations*, dated 2/15/2023.
- **Align the City's goals for economic development with planning for infrastructure development.** Aside from ensuring that there is sufficient land to support employment growth, one of the most important ways that the City can support economic development is through planning for and developing infrastructure (e.g., roads, water, sanitary sewer, and storm water systems). We recommend that the City continue to align its goals for economic development with infrastructure development through updates to the City's Capital Improvements Plan. In addition, the City should support development of other infrastructure, such as expansion of broadband internet connection.
- **Monitor and replenish the supply of commercial and industrial land on a regular, periodic basis.** The buildable lands inventory identifies the existing development status of employment land in Lebanon. While Lebanon will not completely update the buildable lands inventory on an annual basis, City staff should still monitor the development status of these employment lands and replenish short-term supply when possible.
- **Consider conducting a local wetlands inventory (LWI).** Lebanon does not have an LWI, which would map the locations of wetlands throughout the city. As a result, many wetlands in Lebanon are not on official databases and cannot be accounted for in the inventory of buildable land. The presence of wetlands and lack of sufficient knowledge about wetlands hinders planning and development of some land, especially industrial land. The City should consider conducting a LWI to map the location of wetlands, especially in industrial areas, to provide more information about the actual amount of

unconstrained vacant buildable land in the city. The City may be able to obtain a grant from the State to help pay the costs of conducting an LWI.

- **Support business growth and retention of Lebanon's existing businesses.** The existing businesses in Lebanon are one of the City's most important economic assets. The City should continue to work with local businesses to understand their challenges and identify opportunities to help businesses. The City should develop and implement a work plan for business outreach and engagement.
- **Continue to plan for the development of a vibrant community.** Lebanon should support the development of a vibrant downtown and commercial corridor along Highway 20 with a mixture of uses, encouraging infill and redevelopment where appropriate. The City can do so through projects to support placemaking in key areas, supporting the work of the Downtown Association, and other actions.
- **Work with partners to support development of regional economic development capacity.** In particular, the City should continue to partner with the Rural Economic Alliance (REAL) and provide resources and support to help REAL build capacity to have a greater focus on business attraction and regional coordination for economic development. As REAL develops its strategic plan, Lebanon should participate and understand the City's potential role in implementing the strategic plan's goals and actions. Lebanon should also participate in implementation of the Cascades West Economic Development District's 2020-2025 *Comprehensive Economic Development Strategy* and future iterations, collaborating with Oregon Cascades West Council of Governments (OCWCOG), Linn Economic Development Group (LEDG), City of Albany, Linn County, Corvallis Benton County Economic Development.

The memorandum *Lebanon Economic Development Recommendations*, dated 2/15/2023, provides detailed recommendations about actions the City can take to support these recommendations for economic development.

Appendix A. National, State, Regional, and Local Trends

The economic trends discussed in this appendix are based on long-term trends that are generally expected to continue on national, state, and regional scales. During this document's development, the effects of the global COVID-19 pandemic continued to evolve, as the worst effects the pandemic had on the labor force resolved.

National Trends

Economic development in Lebanon over the next 20 years will occur in the context of long-run national trends. The most important of these trends are as follows:

- **Economic growth was interrupted by the effects of the COVID-19 pandemic but is expected to continue from 2022 through 2031.** The Congressional Budget Office (CBO) estimates that by mid 2022 real GDP growth and employment growth will surpass pre-pandemic levels. While the CBO states the economy is stronger than previously forecasted, goods, supply and services trail demand and is contributing to inflationary pressures.
- **As the U.S. economy recovers from the COVID-19 pandemic, inflation has increased significantly.** In March 2022, the personal consumption expenditures (PCE) price index increased 6.6% year-over-year.[28] Excluding food and energy, which are more volatile, the PCE price index rose 5.2%. The average hourly earnings for nonfarm employees increased slightly through April 2022 but inflation-adjusted real average hourly earnings declined slightly due to continued inflation.[29]

  The exact drivers of the rise in inflation are the subject of ongoing debate. Supply chain disruptions triggered by the pandemic have dramatically increased shipping rates, which in turn has led to higher prices for goods and services.[30] Exacerbating this trend is pent up demand among households, many of which received three direct assistance payments from the federal government in 2020 and 2021. Lastly, the expansion in the money supply generated by the Federal Reserve's monetary policy has also been cited as a contributor to inflation.[31] The Federal Open Market Committee increased lending rates several times in 2022 and expects to continue to raise rates again in 2022.

[28] U.S. Department of Commerce, Bureau of Economic Analysis. Personal Consumption Expenditures Price Index. March 2022.

[29] *New Inflationary Concerns: A US Macroeconomic Update*, IBISWorld, June 03, 2022. https://www.ibisworld.com/blog/new-inflationary-concerns-us-macroeconomic-update/1/1126/

[30] Martin, F. M. (October 2021). What Are the Risks for Future Inflation? Federal Reserve Bank of St. Louis, *On The Economy Blog*.

[31] Martin, F.M. (April 2022). 2021: The Year of High Inflation. Federal Reserve Bank of St. Louis, *On The Economy Blog*.

- **After declining sharply during the COVID-19 pandemic, employment has mostly recovered, and employers now face a tight labor market**. As of April 2022, the unemployment rate was 3.6%, which is about the same as pre-pandemic levels in February 2020.[32] Despite the addition of over 500,000 jobs each month during the first quarter of 2022,[33] the labor force participation rate remains slightly below pre-pandemic levels,[34] suggesting there are those who do not yet feel the need to or have the ability to return to work. In April 2022, wages increased year-over-year by 5.5%[35] faster growth than in recent pre-pandemic years but a smaller rise than the increase in inflation over the same period.
- **The aging of the baby boomer generation accompanied by increases in life expectancy.** Over the forecast period, the interest rate on 10-year Treasury notes is projected to rise gradually, reaching 3.2% in 2031.[36] As the baby boomer generation continues to retire, the number of Social Security recipients is expected to increase from almost 65 million in 2020 to over 88 million in 2045, a 36% increase. But due to lower birth-rate replacement generations, the number of covered workers is only expected to increase 10% over the same time period, from over 178 million to almost 197 million in 2045. In 2020, there are 36 Social Security beneficiaries per 100 covered workers, but by 2045, there will be 45 beneficiaries per 100 covered workers. This will increase the percent of the federal budget dedicated to Social Security and Medicare.[37]
- **Baby boomers are retiring sooner as a result of the COVID-19 pandemic.** In the third quarter of 2021, about half of U.S. adults age 55 and older had retired, up from 48% in the third quarter of 2019.[38] This trend can be seen in Oregon, where the annual number of retirements among workers age 60 and older increased dramatically in 2020 and 2021.[39] However, there is evidence to suggest that these retirements are temporary and that some of these workers will return to the labor force as the economy recovers from the impacts of the pandemic, consistent with pre-pandemic trends.[40]

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[32] Bureau of Labor Statistics. (2022). *The Employment Situation – April 2022*. https://www.bls.gov/news.release/pdf/empsit.pdf

[33] White House Council of Economic Advisers. (2022). *The Employment Situation in April*. https://www.whitehouse.gov/cea/written-materials/2022/05/06/the-employment-situation-in-april-2/

[34] Bureau of Labor Statistics. (2022). *The Employment Situation – April 2022.* https://www.bls.gov/news.release/pdf/empsit.pdf

[35] Bureau of Labor Statistics. (2022). *The Employment Situation – April 2022.* https://www.bls.gov/news.release/pdf/empsit.pdf

[36] Congressional Budget Office. *An Update to the Budget and Economic Outlook: 2021 to 2031, July 2021.* https://www.cbo.gov/publication/57339

[37] The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2021 https://www.ssa.gov/OACT/TR/2021/tr2021.pdf

[38] Pew Research Center. *Amid the pandemic, a rising share of older U.S. adults are now retired. November 2021.*

[39] Oregon Office of Economic Analysis. (2021). *Older Workers and Retirements*.

[40] Pew Research Center. (2021). *Amid the pandemic, a rising share of older U.S. adults are now retired*.

- **Need for replacement workers.** The need for workers to replace retiring baby boomers will outpace job growth. Between 2018 and 2028, the Bureau of Labor Statistics (BLS) estimates that total employment in the United States will grow by about 8.4 million jobs. Over this same period, BLS forecasts an annual average of 19.7 million occupational openings, indicating that the number of job openings per year exceeds expected employment growth. About 78% of annual job openings are in occupations that do not require postsecondary education.[41]
- **The importance of education as a determinant of wages and household income.** According to BLS, a majority of the fastest growing occupations will require an academic degree, and on average, they will yield higher incomes than occupations that do not require a degree. The fastest growing occupations requiring an academic degree will be nurse practitioners, agents and business managers, occupational therapy assistants, statisticians, physical therapist assistants, and information security analysts.[42] Of the top 10 fastest-growing occupations, the top three do not require an academic degree – from 2020 to 2030, the fastest-growing occupations are motion picture projectionists, wind turbine service technicians, ushers and lobby attendants, nurse practitioners, and solar photovoltaic installers. However, because 2020 serves as the base year for these projections, many occupations are expected to experience cyclical recoveries in the first few years of the decade as they return to their long-term growth patterns. For example, motion picture projectionists are concentrated in an industry that experienced significant yet temporary employment losses in 2020. To account for this, the BLS has also listed the fastest growing occupations from 2020-2030 that do not include occupations with above-average cyclical recovery. These occupations include wind turbine service technicians, nurse practitioners, solar photovoltaic installers, statisticians, physical therapist assistants, and information security analysts. However, the two nondegree-requiring occupations – wind turbine service technicians and home health and personal care aids – had lower median annual wages in 2020 than the degree-requiring occupations.

  Three sectors are projected to decline from 2020 to 2030.[43] These include the federal government, retail trade, and utilities. The BLS estimates that retail trade will decrease by 586,800 positions, possibly due to the rise of e-commerce. Conversely, this shift in shopper preference is increasing occupations in transportation and warehousing. Retail positions typically have lower pay than occupations requiring an academic degree. The national median income for people over the age of 25 in 2019 was about $48,464. Workers without a high school diploma earned $19,708 less than the median income, while those with a high school diploma earned $10,504 less than the median income.

[41] Bureau of Labor Statistics. (2019). *Occupational Employment Projections 2018-2028*. https://www.bls.gov/news.release/pdf/ecopro.pdf .

[42] Bureau of Labor Statistics. (2021). Occupational *Employment Projections to 2020-2030* https://www.bls.gov/news.release/pdf/ecopro.pdf.

[43] Bureau of Labor Statistics. (2021). Occupational *Employment Projections to 2020-2030* https://www.bls.gov/news.release/pdf/ecopro.pdf..

Workers with some college earned $6,760 less than median income, and workers with a bachelor's degree earned $13,832 more than median. Workers in Oregon experience the same patterns as the nation but pay is generally lower in Oregon than the national average.

- **Increases in labor productivity.** Productivity, as measured by output per hour of labor input, increased in most sectors between 2000 and 2010, peaking in 2007. However, productivity increases were interrupted by the recession. After productivity decreases from 2007 to 2009, many industries saw large productivity increases from 2009 to 2010. Industries with the fastest productivity growth were information technology–related industries. These include wireless telecommunications carriers, computer and peripheral equipment manufacturing, electronics and appliance stores, and commercial equipment manufacturing wholesalers.[44]

  Since 2010, labor productivity has increased across a handful of large sectors but has also decreased in others. In wholesale trade, productivity—measured in output per hour—increased by 19% over 2009 to 2017. Retail trade gained even more productivity over this period at 25%. Food services, however, have remained stagnant since 2009, fluctuating over the nine-year period and shrinking by 0.01% over this time frame. Additionally, the Bureau of Labor Statistics reports multifactor productivity in manufacturing has been slowing down 0.3% per year over the 2004 to 2016 period. Much of this, they note, is due to slowdown in semiconductors, other electrical component manufacturing, and computer and peripheral equipment manufacturing.[45]

- **The importance of entrepreneurship and growth in small businesses.** According to the 2021 Small Business Profile from the U.S. Small Business Office of Advocacy, small businesses account for over 99% of total businesses in the United States, and their employees account for nearly 47% of American workers.[46] Women and People of Color make up 43% and 19%, respectively, of small business owners.[47] The National League of Cities suggests ways that local governments can attract entrepreneurs and increase the number of small businesses, including strong leadership from elected officials; better communication with entrepreneurs, especially regarding the regulatory environment for businesses in the community; and partnerships with colleges, universities, small

[44] Brill, M.R., & Rowe, S.T. (March 2013). Industry Labor Productivity Trends from 2000 to 2010. Bureau of Labor Statistics, *Spotlight on Statistics.*

[45] Brill, M., Chanksy, B., & Kim, J. (July 2018). Multifactor productivity slowdown in US manufacturing. *Monthly Labor Review*, U.S. Bureau of Labor Statistics. https://www.bls.gov/opub/mlr/2018/article/multifactor-productivity-slowdown-in-us-manufacturing.htm.

[46] Small businesses are defined by the US Small Business Office of Advocacy as having between zero and 500 employees.

[47] U.S. Small Business Office of Advocacy. (2021). 2021 Small Business Profile. https://cdn.advocacy.sba.gov/wp-content/uploads/2021/08/30143723/Small-Business-Economic-Profile-US.pdf

business development centers, mentorship programs, community groups, businesses groups, and financial institutions.[48]

Increases in automation across sectors. Automation is a long-running trend in employment, with increases in automation (and corresponding increases in productivity) over the last century and longer. The pace of automation is increasing, and the types of jobs likely to be automated over the next 20 years (or longer) are broadening. Lower-paying jobs are more likely to be automated, with the potential for automation of more than 80% of jobs paying less than $20 per hour over the next 20 years. About 30% of jobs paying $20 to $40 per hour, and 4% of jobs paying $40 or more per hour, are at risk of being automated over the next 20 years.[49]

Low to middle-skilled jobs that require interpersonal interaction, flexibility, adaptability, and problem solving will likely persist into the future, as will occupations in technologically lagging sectors (e.g., production of restaurant meals, cleaning services, hair care, security/protective services, and personal fitness).[50] This includes occupations such as (1) recreational therapists, (2) first-line supervisors of mechanics, installers, and repairers, (3) emergency management directors, (4) mental health and substance abuse social workers, (5) audiologists, (6) occupational therapists, (7) orthotists and prosthetists, (8) health-care social workers, (9) oral and maxillofacial surgeons, and (10) first-line supervisors of firefighting and prevention workers.

Occupations in the service and agricultural or manufacturing industry are most at-risk of automation because of the manual-task nature of the work.[51,52,53] This includes occupations such as (1) telemarketers, (2) title examiners, abstractors, and searchers, (3) hand sewers, (4) mathematical technicians, (5) insurance underwriters, (6) watch repairers, (7) cargo and freight agents, (8) tax preparers, (9) photographic process workers and processing machine operators, and (10) accounts clerks.[54]

- **Continued transformation of retail.** In the last two decades, retail sales by e-commerce and warehouse clubs/supercenters (a lower-cost model to the traditional department store) have increased steadily, pulling the industry in two different directions. On one

[48] National League of Cities. (2012). Supporting Entrepreneurs and Small Businesses. https://www.nlc.org/supporting-entrepreneurs-and-small-business

[49] Executive Office of the President. (2016). Artificial Intelligence, Automation, and the Economy.

[50] Autor, D.H. (2015). Why Are There Still So Many Jobs? The History and Future of Workplace Automation. *Journal of Economic Perspectives, 29*(3), 3–30.

[51] Frey, C.B, & Osborne, M.A. (2013). The Future of Employment: How Susceptible Are Jobs to Computerisation? Oxford Martin School, University of Oxford.

[52] Otekhile, C.A., & Zeleny, M. (2016). Self Service Technologies: A Cause of Unemployment. *International Journal of Entrepreneurial Knowledge, 4*(1). DOI: 10.1515/ijek-2016-0005.

[53] PwC. (n.d.). Will robots really steal our jobs? An international analysis of the potential long-term impact of automation. 2019 https://www.pwc.com/hu/hu/kiadvanyok/assets/pdf/impact_of_automation_on_jobs.pdf.

[54] Frey, C.B., & Osborne, M.A. (2013). The Future of Employment: How Susceptible Are Jobs to Computerisation? Oxford Martin School, University of Oxford.

hand, the trend toward warehouse/supercenters is increasing the average scale of retail operations, increasing market concentrations, reducing business dynamism, and shifting retail activity toward more populated areas. On the other hand, the trend toward e-commerce generates "smaller [retailers], less market concentration, more geographical dispersion, and higher productivity."[55] Since 2012, e-commerce sales grew from 5% of total retail sales to 14.5% (Q4 2021). Total e-commerce sales for 2021 were about $870.8 billion, an increase of 14.2% from 2020.[56]

Ultimately, the growth in online shopping and the increasing dominance of large supercenters has made it difficult for small and medium-sized retail firms (offering a narrower selection of goods) to compete. Declining net profits and increased competitive pressures have led many well-known retailers (e.g., J.C. Penney, Macy's, Sears) to declare bankruptcy or to scale back their operations.

In the future, the importance of e-commerce will likely continue to grow, and despite the highly publicized closures of brick-and-mortar stores, physical retail is likely to remain an important part of the retail sector. In fact, retail sales at brick-and-mortar stores accounted for 85.5% of all retail sales in the Q4 of 2021.[57]

Modern consumers are increasingly price sensitive, less brand loyal, and (since the advent of internet) able to substitute between retailers easily. To compete, retailers must be nimble, adept in recognizing the changing needs of their consumers, and quick to differentiate themselves from their competitors.

- **Opportunities for local retail and service.** The types of retail and related services that remain will likely be sales of goods that people prefer to purchase in person or that are difficult to ship and return (e.g., large furniture), specialty goods, groceries and personal goods that maybe needed immediately, restaurants, and experiences (e.g., entertainment or social experiences). According to the Urban Land Institute, in the post-disruption era of retail, new trends in this sector are beginning to emerge. These changes include the convergence of technology and shopping, as businesses focus on brand awareness and customer engagement via digital channels in the physical retail space.[58]
- **The importance of high-quality natural resources.** The relationship between natural resources and local economies has changed as the economy has shifted away from resource extraction. High-quality natural resources continue to be important in some states, especially in the western United States. Increases in the population and in

[55] Ali Hortaçsu and Chad Syverson. (2015). The Ongoing Evolution of US Retail: A Format Tug-of-War. *Journal of Economic Perspectives, 29*(4), 89–112, p. 109.

[56] U.S. Census Bureau, Monthly Retail Trade, Latest Quarterly E-Commerce Report. Retrieved from: https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf

[57] U.S. Census Bureau, Monthly Retail Trade, Latest Quarterly E-Commerce Report. Retrieved from: https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf .

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

household incomes, plus changes in tastes and preferences, have dramatically increased demands for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such amenities contribute to a region's quality of life and play an important role in attracting both households and firms.[59]

- **Continued increase in demand for energy.** Energy prices were unusually high in early 2022. Total energy consumption will increase because the rising population and economic growth will outpace efficiency gains in energy consumption. Energy consumption is expected to grow primarily from industrial and, to a lesser extent, commercial users. Residential and transportation consumption are forecasted to decrease remain flat through about 2040 and possibly growth slightly through 2050. Electric vehicles are expected to continue to gain market share, but gasoline powered vehicles are expected to continue to account for a substantial amount of vehicle sales through 2050. The share of electric vehicles is expected to grow from less than 3% in 2021 to 13% in 2050. Energy consumption by type of fuel is expected to change over the planning period. By 2050, the United States will continue to shift from crude oil toward natural gas and renewables.[60]
- **High rates of inflation.** For the last several decades, inflation rates have generally stayed below 3% for the nation. Inflation started to increase in 2021 and has accelerated in 2022, increasing to 9.06% in June 2022, to their highest levels in about 40 years. Inflation increased most quickly in June 2022 for energy, motor vehicles, food, and household furnishings.[61] Continued high rates of inflation may slow economic growth, further erode purchasing power, discourage savings, and lead to a national recession.
- **Impact of rising energy prices on commuting patterns.** As energy prices increase over the planning period, energy consumption for transportation will decrease. These increasing energy prices may decrease willingness to commute long distances, though with expected increases in fuel economy, it could be that people commute farther while consuming less energy.[62] Moreover, lower-income households tend to have fewer options for commuting and are more likely to have jobs that require them to commute. Over 2019 to 2035, the U.S. Energy Information Administration estimates in its forecast that the decline in transportation energy consumption as a result of increasing fuel

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

[60] Energy Information Administration, 2019, Annual Energy Outlook 2019 with Projections to 2050, U.S. Department of Energy, January 2019. https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf. Note, the cited growth rates are shown in the interactive tables and can be viewed here: https://www.eia.gov/outlooks/aeo/data/browser/.

[61] Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily*, Consumer prices up 9.1 percent over the year ended June 2022, largest increase in 40 years at https://www.bls.gov/opub/ted/2022/consumer-prices-up-9-1-percent-over-the-year-ended-june-2022-largest-increase-in-40-years.htm (visited *July 25, 2022*).

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

economy more than offsets the total growth in vehicle miles traveled (VMT). VMT for passenger vehicles is forecasted to increase through 2050.

- **Potential impacts of global climate change.** The consensus among the scientific community that global climate change is occurring expounds important ecological, social, and economic consequences over the next decades and beyond.[63] Extensive research shows that Oregon and other western states have already experienced noticeable changes in climate and that more change will occur in the future.[64]

  In the Pacific Northwest, climate change is likely to (1) increase average annual temperatures, (2) increase the number and duration of heat waves, (3) increase the amount of precipitation falling as rain during the year, (4) increase the intensity of rainfall events, (5) increase sea level, (6) increase wildfire frequency, and (7) increase forest vulnerability to tree disease.[65] These changes are also likely to reduce winter snowpack and shift the timing of spring runoff earlier in the year.[66]

  The Oregon Climate Change Research Institute (OCCRI) evaluated potential scenarios for "Climate Change Influence on Natural Hazards in Oregon Counties" in 2018. OCCRI specifically focused on Counties in the Gorge and Eastern Oregon and evaluated the potential increased or decreased risk for natural hazards such as heat waves, cold waves, heavy rains, river flooding, drought, wildfire, poor air quality, windstorms, dust storms, increased invasive species, and loss of wetland ecosystems. Across the eight counties evaluated, the hazards most likely to increase with the effects of climate change are heat waves, heavy rains, river flooding, wildfires, increased invasive species, and loss of wetland ecosystems.[67]

  These anticipated changes point toward some of the ways that climate change is likely to impact ecological systems and the goods and services they provide. There is

[63] U.S. Global Change Research Program. *National Climate Assessment*. 2018. https://nca2018.globalchange.gov/

[64] Oregon Global Warming Commission. *2020 Biennial Report to the Legislature.* 2020. https://www.keeporegoncool.org/reports/

[65] U.S. Global Change Research Program. *National Climate Assessment*. "Chapter 24: Northwest." 2018. https://nca2018.globalchange.gov/chapter/24/

[66] Mote, P., Salathe, E., Duliere, V., & Jump, E. (2008). *Scenarios of Future Climate for the Pacific Northwest.* Climate Impacts Group, University of Washington. March. http://cses.washington.edu/db/pdf/moteetal2008scenarios628.pdf; Littell, J.S., McGuire Elsner, M., Whitely Binder, L.C., and Snover, A.K. (eds). (2009). "The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate - Executive Summary." *In The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate*, Climate Impacts Group, University of Washington. www.cses.washington.edu/db/pdf/wacciaexecsummary638.pdf; Madsen, T., & Figdor, E. (2007). *When it Rains, it Pours: Global Warming and the Rising Frequency of Extreme Precipitation in the United States.* Environment America Research & Policy Center and Frontier Group.; Mote, P.W. (2006). Climate-driven variability and trends in mountain snowpack in western North America. *Journal of Climate, 19*(23), 6209-6220.

[67] Mote, P.W., Abatzoglou, J., Dello, K.D., Hegewisch, K., & Rupp, D.E. (2019). Fourth Oregon Climate Assessment Report. Oregon Climate Change Research Institute. occri.net/ocar4; Oregon Climate Change Research Institute. Climate Change Influence on Natural Hazards in Eight Oregon Counties. August 2018. https://www.oregon.gov/lcd/CL/Documents/OCCRI_PDM16_AllCountyOverview2018.pdf

considerable uncertainty about how long it would take for some of the impacts to materialize and the magnitude of the associated economic consequences. Assuming climate change proceeds as today's models predict, the Pacific Northwest will experience potential economic impacts:[68]

- *Potential impact on agriculture and forestry.* Climate change may impact Oregon's agriculture through changes in growing season, temperature ranges, and water availability.[69] Climate change may impact Oregon's forestry through an increase in wildfires, a decrease in the rate of tree growth, a change in the mix of tree species, and increases in diseases and pests that damage trees.[70]
- *Potential impact on tourism and recreation.* Impacts on tourism and recreation may include (1) decreases in snow-based recreation if snowpack in the Cascades decreases; (2) negative impacts to tourism along the Oregon Coast as a result of damage and beach erosion from rising sea levels;[71] (3) negative impacts on availability of summer river recreation (e.g., river rafting or sports fishing) as a result of lower summer river flows; and (4) negative impacts on the availability of water for domestic and business uses.

Short-term national trends will also affect economic growth in the region, but these trends are difficult to predict. At times, these trends may run counter to the long-term trends described above. The most prevalent example is the recession and subsequent recovery triggered by the global COVID-19 pandemic. While the unemployment rate rose quickly to a high of 14.7% in April 2020, it has since gradually declined to 3.6% as of March 2022, close to the pre-pandemic (February 2020) rate.[72] However, employment in some industries that were most severely impacted by the pandemic, such as leisure and hospitality, have not yet fully returned to pre-pandemic levels. Nonetheless, this report takes a long-run perspective on economic conditions (as the Goal 9 requirements intend) and does not attempt to predict the impacts of short-run macroeconomic trends on employment of economic activity.

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

[69] Resource Innovations & Institute for a Sustainable Environment. (2005). The Economic Impacts of Climate Change in Oregon: A Preliminary Assessment. https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/2299/Consensus_report.pdf?sequence=1

[70] Climate Leadership Initiative & Institute for Sustainable Environment. (2007). Economic Impacts of Climate Change on Forest Resources in Oregon: A Preliminary Analysis.

[71] Resource Innovations & Institute for a Sustainable Environment. (2005). The Economic Impacts of Climate Change in Oregon: A Preliminary Assessment. https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/2299/Consensus_report.pdf?sequence=1

[72] The Employment Situation – March 2022. News Release, Bureau of Labor Statistics. Retrieved from: https://www.bls.gov/news.release/pdf/empsit.pdf.

State Trends

Short-Term Trends

According to the Oregon Office of Economic Analysis (OEA), Oregon's economy is following the trends affecting the national economy: fast growth (with continued recovery from the COVID-19 pandemic recession), high demand for labor, and high inflation. The biggest economic challenges are supply chain issues, resulting from strong consumer demand and problems that started with the COVID-19 pandemic. [73]

The biggest risk to the economic outlook is persistently high inflation. In early 2021, higher inflation was tied to reopening the economy and semiconductor shortages in the automobile industry. Over the last year, pressure from inflation has broadened and is more persistent than originally expected. In addition, the tight labor market is putting upward pressure on wages, with the average wage in Oregon up 17% since March 2020. Businesses are passing most of the cost increases (from increases in costs for goods and labor) onto consumers, who are showing a willingness to pay higher prices. As a result, business incomes remain high.[74]

The Orgon economy has added back most of the jobs lost during the COVID-19 pandemic, with an expectation that the remaining lost jobs will be regained by Fall 2022. The labor market remains tight for several reasons, including workers who have not returned to the workforce because they are caring for sick family members or for childcare challenges and employees who are quitting jobs at record rates.[75]

The outlook for growth is a continuation of growth of the entire economy, with faster growth of selected sectors. Leisure and hospitality are still 12% below pre-pandemic employment and expected to have strong growth through 2023. Professional and business services, health care, and transportation and warehousing are also expected to have strong growth through 2023. Demand for housing will drive growth in the construction industry. Growth in high-tech manufacturing will continue, supported by demand for automobiles, computers, and other electronics. However, growth in high-tech has not translated into more employment because of increases in productivity. And the industry is set to grow nationally, with some investments in Oregon but with investments in other states as well. [76]

[73] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

[74] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

[75] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

[76] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

Oregon has underbuilt about 111,000 housing units in recent decades, which contributes to the high demand for housing and low vacancy rates.[77] Housing starts in 2019 reached approximately 20,700 units, 18,000 in 2020 and 21,300 in 2021, an increase of 17.5%. In the years following the recession, they anticipate a partial recovery of housing starts, with a slight contraction in 2022 (0.6% decrease), with growth increasing again in 2023 (2.2% increase) and 2024 (3.5% increase).[78]

Oregon's economic health is dependent on the export market, which is also affected by the COVID-19 pandemic. The value of Oregon exports in 2020 was $24.977 billion. In 2020, the countries that Oregon exported the most to were China (38% of total Oregon exports), Canada (11%), Vietnam (6%), South Korea (6%), Japan (6%), and Malaysia (6%).[79] Any strains on the relationship between the United States and China could impact Oregon's economy. Additionally, China's public debt burden poses a threat not only to the state and region but also to the global economy.[80]

Long-Term Trends

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

- **Continued in-migration from other states.** Oregon will continue to experience in-migration (more people moving *to* Oregon than *from* Oregon) from other states, especially California and Washington. From 2010-2020, Oregon's population increased by 406,491, 77% of which was from people moving into Oregon (net migration)[81]. The average annual increase in population from net migration over the same time period was about 31,412. During the early to mid-1990s, Oregon's net migration was highest, reaching over 60,000 in 1991, with another smaller peak of almost 42,100 in 2006. In 2020, net migration reached just over 26,028 persons.[82]
- **Increasing ethnic diversity.** Oregon's population has continued to get more ethnically and racially diverse, with the Latino population growing from 12% of the population in

[77] Office of Economic Analysis. (2022). Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1. https://www.oregon.gov/das/OEA/Documents/forecast0322.pdf

[78] Office of Economic Analysis. (2021). Oregon Economic and Revenue Forecast, December 2021. Vol. XLI, No. 4, p. 32.

[79] United States Census Bureau. State Exports from Oregon, 2017-2020. https://www.census.gov/foreign-trade/statistics/state/data/or.html .

[80] Office of Economic Analysis. Oregon Economic and Revenue Forecast, December 2019. Vol. XXXIX, No. 4, p. 14. https://www.oregon.gov/das/OEA/Documents/forecast1219.pdf.

[81] Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, p. 58.

[82] Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, p. 58.

2010 to 13% of the population in 2015–2019.[83] The population of people of color grew from 13.3% of the population to 16% of the population over the same period. The share of Latino and people of color populations increased in Lebanon since 2000 as well.

- **Forecast of job growth.** Total nonfarm employment is forecasted to increase 10% from 1.82 million in 2020 to just over 2 million in 2025. The OEA forecasts total private nonfarm employment to increase 11% from 1.54 million in 2020 to 1.71 million in 2025.[84]
- **Manufacturing is an important part of Oregon's economy.** The manufacturing sector has long been a crucial component of Oregon's economy. Since 2010, employment in manufacturing has grown 12% compared to the nation's 7%.[85] However, as a result of the COVID-19 pandemic, employment in the sector has declined 8% compared with a 4% decline across the nation.[86]

  Manufacturing remains an important piece of Oregon's economy, and the sector is evolving. Only a few decades ago, Oregon's manufacturing economy was dependent on forestry and wood products. But between 1990 and 2018, annual average employment in wood product manufacturing dropped by 22,600 jobs or 46%.[87]

  Growth in Oregon's electronic component manufacturing, however, has filled the gap left by the decline in wood manufacturing. In 2018, there were a total of 37,900 jobs in Oregon's electronic component manufacturing (i.e., manufacturing of computer chips, computers and related equipment, and communications equipment), making it Oregon's largest manufacturing industry. Employment in this industry is over six times more concentrated in Oregon than it is nationally and is driving much of the growth in Oregon manufacturing.[88]

  Continued growth, spurred by electronic component manufacturing, is expected in the future for Oregon's manufacturing sector. Although Oregon's economy is shifting, the state's roots in forestry and wood product manufacturing remain important, particularly for rural areas. Douglas County, for example, had 8.3% of its total employment and 10.7% of its total payroll in wood product manufacturing in 2018.[89]

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[83] U.S. Census Bureau, American Community Survey 2019 5-year estimates, Tables B02001 and B03002, 2010 Decennial Census P003001 and P005001.

[84] Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, p. 35.

[85] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector

[86] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector.

[87] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector.

[88] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector.

[89] Oregon Employment Department (2021). Made in Oregon: A Profile of the State's Manufacturing Sector. https://www.qualityinfo.org/-/made-in-oregon-a-profile-of-the-state-s-manufacturing-sector.

- **Advancements in technology and increases in automation of jobs.**[90] In decades past, automation was focused on manufacturing. In the coming decades, jobs at risk for automation will tend to be those without "computerization bottlenecks" or jobs that do not require social intelligence, perception, creativity, or fine motor skills. Jobs in industries lacking customer service component, such as those in transportation and material moving, are also at greater risk. Most researchers agree that "less-educated workers in low-skill, lower-wage jobs featuring routine tasks are those most likely to be displaced by automation."[91] Oregon's overall risk of automation is similar to the nation's, with lower and middle-wage jobs at higher risk.
- In 2017, 144,200 jobs in Oregon were found to be at risk of automation and 93% of jobs in food preparation and serving were found to be at risk.[92] However, automation risk does not imply automation certainty. For example, consumer preferences for personalized and genuine experiences/interactions will likely slow job automation, particularly in the food services and hospitality sectors. In addition, there is a notable difference between task automation and full automation of jobs. One research study speculates that only 5% of jobs are fully automated, and that the "activities most susceptible to automation involve physical activities in highly structured and predictable environments, as well as the collection and processing of data."[93]
- **Income and wages continue to increase.** Despite Oregon's income and wages falling below the average among states, Oregon wages are at their highest point relative to other states since the recession in the early 1980s, mainly due to the wage growth over the last two to three years. In 2019, the average annual wage in Oregon was $55,023, and the median household income was $67,058 (compared to national average wages of $59,209 in 2019 and national household income of $65,712).[94] Total personal income (all classes of income, minus Social Security contributions) in Oregon is expected to increase by 78%, from $221.2 billion in 2019 to $395.4 billion in 2030 (in nominal dollars).[95] Per capita income is expected to increase by 64% over the same time period, from $52,500 in 2019 to $86,200 in 2030 (in nominal dollars).[96]

[90] Portland Business Alliance. (2017). Automation and the Future of Work. https://portlandalliance.com/assets/pdfs/2017-VOJ-Automation-summary.pdf

[91] Marcus Casey and Sarah Nzau. (2019). Searching for clarity: How much will automation impact the middle class? Brookings.

[92] Portland Business Alliance. (2017). Automation and the Future of Work. https://portlandalliance.com/assets/pdfs/2017-VOJ-Automation-summary.pdf

[93] McKinsey & Company. (2017). A Future that Works: Automation, Employment, and Productivity.

[94] Average annual wages are for "total, all industries," which includes private and public employers. Oregon Quarterly Census of Employment and Wages, 2019. Retrieved from: https://www.qualityinfo.org; Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2019; Total, U.S. Census American Community Survey 1-Year Estimates, 2019, Table B19013.

[95] Oregon Office of Economic Analysis. Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, pg. 37.

[96] Oregon Office of Economic Analysis. Oregon Economic and Revenue Forecast, March 2022. Vol. XLII, No. 1, pg 37.

- **Small businesses continue to account for a large share of employment in Oregon**. Between 1994 and 2018, employment in Oregon small businesses grew by 30% - exceeding the national average growth rate.[97]

  In 2018 small businesses (those with 100 or fewer employees) accounted for 95% of all businesses and 40% of all private-sector employment in Oregon. Phrased differently, most businesses in Oregon are small (in fact, 76% of all businesses have fewer than 10 employees), but the largest share of Oregon's employees work for large businesses (those with more than 100 employees).[98] The average annualized payroll per employee for small businesses was $43,949 in 2019, which is considerably less than that for large businesses ($64,335) and the statewide average for all businesses ($53,253).[99]

  Younger workers are important for the continued growth of small businesses across the nation. More than one-third of millennials (those born between 1980 and 1999) are self-employed, with approximately one-half to two-thirds interested in becoming an entrepreneur. According to the Kauffman Indicators of Entrepreneurship, in 2020, about 78.09% of start-ups nationwide were still active after one year.[100] On average, start-ups nationwide created approximately 5.03 jobs in their first year (when normalized by population).[101] In Oregon, just 77.57% survive the first year and just 4.85 jobs were created on average.[102] It is typically the case that start-ups are important for job creation on a longer-time horizon, well beyond their first year, as "fewer than half of all start-ups in America are still in business after five years."[103]

- **Entrepreneurship in Oregon.** The creation of new businesses is vital to Oregon's economy as their formations generate new jobs and advance new ideas and innovations into markets. They also can produce more efficient products and services to better serve local communities. According to the Kauffman Early-Stage Entrepreneurship (KESE) Index, Oregon ranked 25th in the country in 2020 for its Early-Stage Entrepreneurship activity, a measurement comprised of four statistics: rate of new entrepreneurs,

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[97] U.S. Small Business Office of Advocacy. (2021). 2021 Small Business Profile. https://cdn.advocacy.sba.gov/wp-content/uploads/2021/08/30143123/Small-Business-Economic-Profile-OR.pdf

[98] U.S Census Bureau, 2019 Statistics of U.S. Businesses, Annual Data, Enterprise Employment Size, U.S and States. https://www.census.gov/data/tables/2019/econ/susb/2019-susb-annual.html.

[99] U.S Census Bureau, 2019 Statistics of U.S. Businesses, Annual Data, Enterprise Employment Size, U.S and States. https://www.census.gov/data/tables/2019/econ/susb/2019-susb-annual.html..

[100] Kauffman Foundation. *Kauffman Indicators of Entrepreneurship*. Indicators: Startup Early Job Creation and Startup Early Survival Rate. Information retrieved on January 26, 2022. https://indicators.kauffman.org/indicator/startup-early-survival-rate.

[101] Kauffman Foundation. *Kauffman Indicators of Entrepreneurship*. Indicators: Startup Early Job Creation and Startup Early Survival Rate. Information retrieved on January 26, 2022. https://indicators.kauffman.org/indicator/startup-early-survival-rate.

[102] Kauffman Foundation. *Kauffman Indicators of Entrepreneurship*. State Profiles: Oregon Early-Stage Entrepreneurship. https://indicators.kauffman.org/state/oregon.

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

opportunity share of new entrepreneurs, start-up density, and start-up early survival rate.[104] This ranking is higher than its 2017 rank of 30. Oregon's rate of new entrepreneurs (the percent of adults that became an entrepreneur in a given month) was in steady decline post-recession, but since 2012, it has gradually declined until 2019 where it dropped to 0.26%. In 2020, the rate increased to 2020, to 0.29%, still well below Oregon's prerecession peak of 0.43% in 2000.

Moreover, in January 2021, the Oregon Office of Economic Analysis reported new business applications in Oregon were increasing since shelter in place orders were lifted.[105] However, since then, in December 2021, new business filings have slowed while active business licenses maintain some growth.[106] Though this measurement of economic activity does not constitute a full understanding of how well entrepreneurship is performing, it does provide an encouraging signal.

Regional and Local Trends

Throughout this section and report, Lebanon is compared to Linn County and the State of Oregon. These comparisons contextualize changes in Lebanon's socioeconomic characteristics.

Availability of Labor

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

Population Change

Population growth in Oregon tends to follow economic cycles. Oregon's population grew from 2.8 million people in 1990 to 4.2 million people in 2021, an increase of almost 1,400,000 people or 1.4% each year. In the most recent decade (i.e., 2010 to 2020), the state's average annual growth rate fell slightly from 1.4% to 1.1%.

Between 2000 and 2021, Lebanon's population increased by 6,172 residents at an average annual growth rate of 1.9%, exceeding both Linn County and Oregon's growth rates during the same period (1.1% each).

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[104] Kauffman Foundation. *Kauffman Indicators of Entrepreneurship*. Early-Stage Entrepreneurship. The Kauffman Index, Oregon. https://indicators.kauffman.org/.

[105] Josh Lehner. "So Far Fewer Business Closures than Expected." Oregon Office of Economic Analysis, March 2, 2021. https://oregoneconomicanalysis.com/2021/03/02/so-far-fewer-business-closures-than-expected/

[106] Oregon Secretary of State. (February 2022). *Oregon Business Statistics. https://sos.oregon.gov/business/Documents/business-reports-current/0222.pdf*

Exhibit 22. Population Growth, Lebanon, Linn County, and Oregon, 2000–2021
Source: U.S. Census Bureau, 2000, and 2010. Portland State University Population Estimates, 2021.

				Change, 2000 - 2021		
Geography	2000	2010	2021	Number	Percent	AAGR
Lebanon	12,950	15,600	19,122	6,172	48%	1.9%
Linn County	103,069	111,355	130,440	27,371	27%	1.1%
Oregon	3,421,399	3,831,074	4,266,560	845,161	25%	1.1%

Age Distribution

By 2060, the population of people 65 years and older in the United States is projected to nearly double from 52 million in 2018 to 95 million.[107] The economic effects of this change include a slowing of labor force growth, the need for workers to replace retirees, the aging workforce of seniors who continue working after age 65, an increase in demand for health-care services, and an increase in percent of the federal budget dedicated to Social Security and Medicare.[108]

Exhibit 23 through Exhibit 26 show the following trends:

- During the 2015–2019 period, 23% of Lebanon residents were 60 years and older (Exhibit 25). This, coupled with the increase in median age between 2000 and 2015–2019, suggests that Lebanon is attracting people in their later adult lives.
- Linn County's population is expected to continue aging, with people 60 years and older increasing slightly from 26% of the population in 2020 to 29% in 2040. This is consistent with statewide trends. Linn County may continue to attract those in their late adult years (i.e., 70 years and older) over the planning period. While the share of retirees in these respective areas may increase over the next 20 years, the share of youth (i.e., under 20 years old) or people in their early adult lives (i.e., 20 to 39 years old) is likely to decrease. As the working population continues to exit the labor force later in life, those approaching retirement provide a valuable source of skilled labor and experience to younger generations entering the workforce.

[107] Mather, M., Scommegna, P., & Kilduff, L. (2019). Fact Sheet: Aging in the United States. https://www.prb.org/aging-unitedstates-fact-sheet/

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

Lebanon's median age has increased by 1.3 years since 2000, smaller than Linn County's change of 2.2 years and Oregon's change of 3 years.

This increase suggests Lebanon is attracting more workers in their later adult lives.

Exhibit 23. Median Age, Lebanon, Linn County, and Oregon, 2000 to 2015–2019

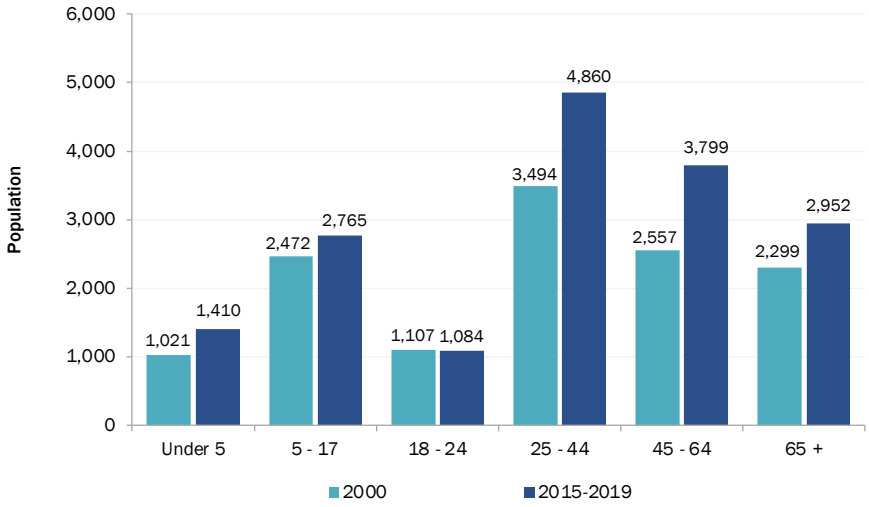
Source: U.S. Census Bureau, 2000 Decennial Census, Table P013; American Community Survey 2015–2019 5-Year Estimates, Table B01002.

2000	35.9 Lebanon	37.4 Linn County	36.3 Oregon
2015-19	37.2 Lebanon	39.6 Linn County	39.3 Oregon

From 2000 to 2015–2019, Lebanon's largest population increases were for those aged 25-64, consistent with statewide trends.

Exhibit 24. Lebanon Population Change by Age Group, 2000 to 2015–2019

Source: U.S. Census Bureau, 2000 Summary File; American Community Survey 2015–2019 5-Year Estimates, Table B01001.



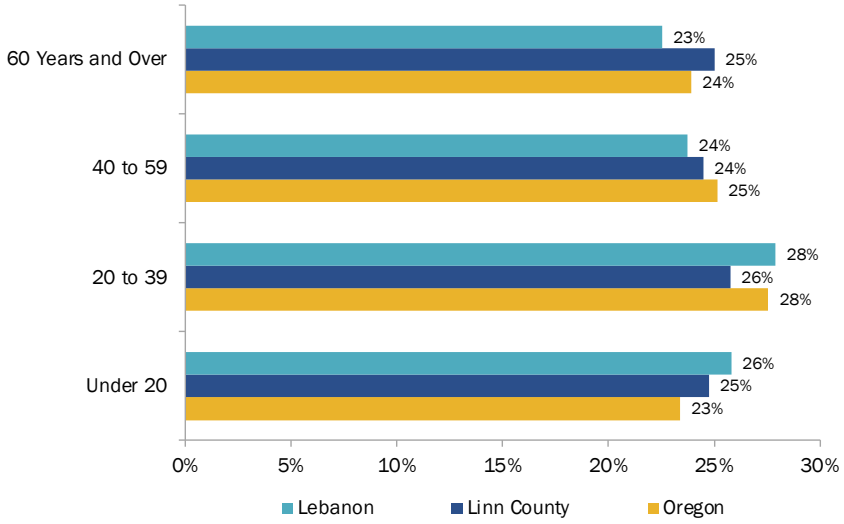
During the 2015–2019 period, 23% of Lebanon residents were over 60 years of age.

The proportion of Lebanon's older residents was lower than that of both the state and Linn County.

Conversely, the proportion of Lebanon residents 39 years of age and younger was higher relative to Linn County and Oregon.

Exhibit 25. Population Distribution by Age, Lebanon, Linn County, and Oregon, 2015–2019

Source: U.S. Census Bureau, American Community Survey, 2015–2019 5-Year Estimates, Table B01001.

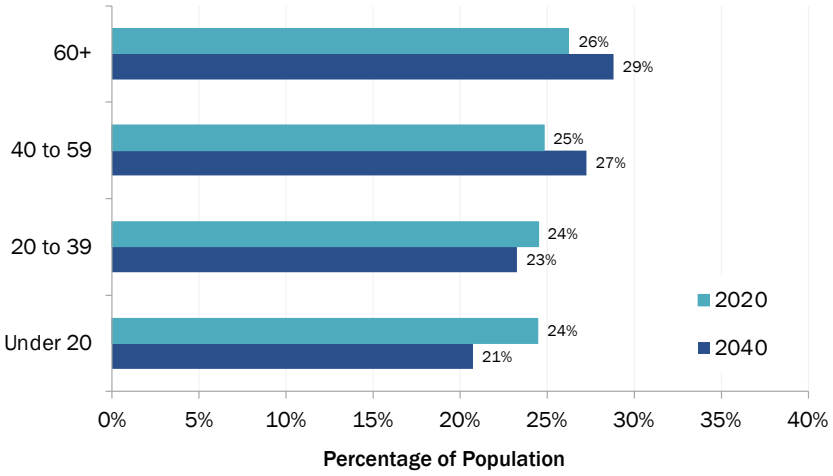


By 2040, Linn County will have a larger share of residents 40 years and older than it does today.

The share of residents 60 years and older will account for 29% of Linn County's population, compared to 26% in 2020. Similarly, the share of residents between the ages of 40 and 59 will increase from 25% to 27%.

Exhibit 26. Population Growth by Age Group, Linn County, 2020–2040

Source: Portland State University, College of Urban & Public Affairs: Population Research Center, Population Forecast, 2020.



Race and Ethnicity

Linn County, like Oregon overall, is becoming more racially and ethnically diverse. Both the Hispanic, Latino, and people of color populations increased in Lebanon between 2000 and 2015–2019. The Hispanic and Latino population increased from 4% to 9%, while the population of people of color increased from 6% to 9%. Similar to the city, Linn County's population of people of color increased slightly from 7% to 10%, and the Hispanic and Latino population grew from 4% to 9% during the same time period. Lebanon is less ethnically diverse than the state and providing culturally specific services to Spanish-speaking community members can help improve their participation in the workforce and economy.

The population of people of color is defined as the share of the population that identifies as another race other than "white alone" according to Census definitions. The small population in Lebanon results in small sample sizes, and thus the margin of error is considerable for the estimate of these populations.

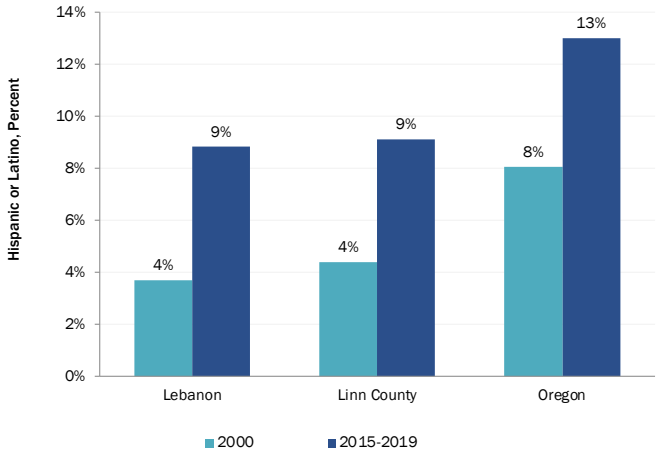
Exhibit 27 and Exhibit 28 show the change in the share of Hispanic and Latino and people of color populations in Lebanon, compared to Linn County and Oregon, between 2000 and 2015–2019. The groups with the largest share of the population of people of color in 2015–2019 include those that identify as "some other race alone" or two or more races, representing 2% and 5%, respectively, of Lebanon's total population.[109]

Lebanon's Hispanic/Latino population increased between 2000 and 2015–2019 from 4% to 9%.

Lebanon is less ethnically diverse than the state.

Exhibit 27. Hispanic or Latino Population as a Percentage of the Total Population, Lebanon, Linn County, and Oregon, 2000, 2015–2019

Source: U.S. Census Bureau, 2000 Decennial Census, Table P008; 2015–2019 American Community Survey, 2015–2019 5-Year Estimates, Table B03002.



[109] "Some other race alone" also includes individuals who identify as American Indian or Alaska Native or Native Hawaiian and other Pacific Islander.

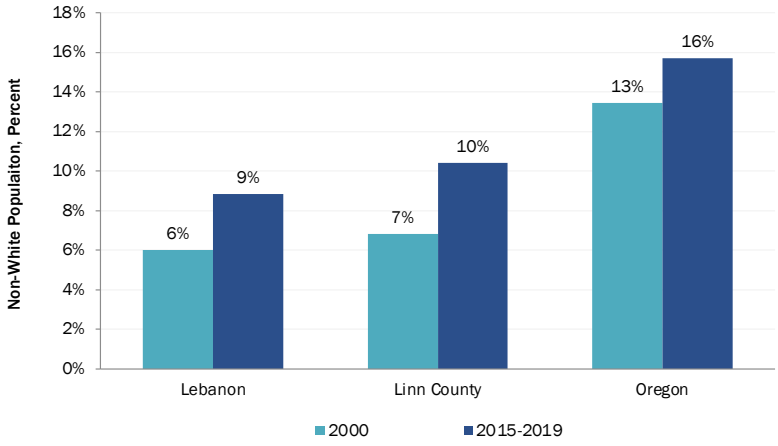
The population of people of color in Lebanon increased between 2000 and 2015–2019.

Lebanon and Linn County are less racially diverse than the state. In 2015–2019, the share of people of color in both Lebanon and Linn County was 9% and 10%, respectively, compared to 16% statewide.

During this same time period, the groups with the largest share of the population of people of color were "some other race alone" and two or more races, representing 2% and 5%, respectively, of Lebanon's residents,

Exhibit 28. Population of People of Color as a Percentage of the Total Population, Lebanon, Linn County, and Oregon, 2000, 2015–2019

Source: U.S. Census Bureau, 2000 Decennial Census Table P007; 2015–2019 American Community Survey, 2015–2019 5-Year Estimates, Table B02001.



Income

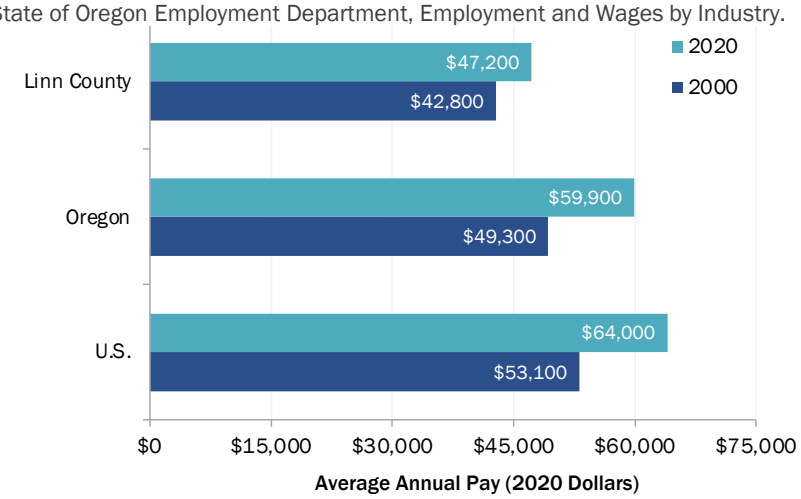
Income and wages affect business decisions for locating in a city. Areas with higher wages may be less attractive for industries that rely on low-wage workers. Lebanon's median household income ($45,642) was below the county median ($55,893). In 2020, average wages in Linn County ($47,196) were below the state average ($59,927).

Between 2000 and 2020, Linn County's average wages increased, as did average wages across the state and the nation. When adjusted for inflation, average annual wages grew by 21% in Linn County, 22% in Oregon, and 10% across the nation.

From 2000 to 2020, average annual wages rose in Linn County, Oregon, and the nation.

In 2020, average annual wages were $47,196 in Linn County, $59,927 in Oregon, and $54,021 across the nation.

Exhibit 29. Average Annual Wage, Covered Employment, Linn County, Oregon, and the U.S., 2000 to 2020, Inflation-Adjusted 2020 Dollars
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages; State of Oregon Employment Department, Employment and Wages by Industry.



Over the 2015–2019 period, the median household income in Lebanon was 18% below Linn County's median household income and 27% below Oregon's.

Exhibit 30. Median Household Income (MHI),[110] 2015–2019
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B19013.

$45,642	$55,893	$62,818
Lebanon	Linn County	Oregon

Lebanon's median family income during the 2015–2019 period, was also below the median family income of both Linn County and Oregon - 17% and 28%, respectively.

Exhibit 31. Median Family Income,[111] 2015–2019
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B19113.

$54,885	$66,596	$76,946
Lebanon	Linn County	Oregon

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

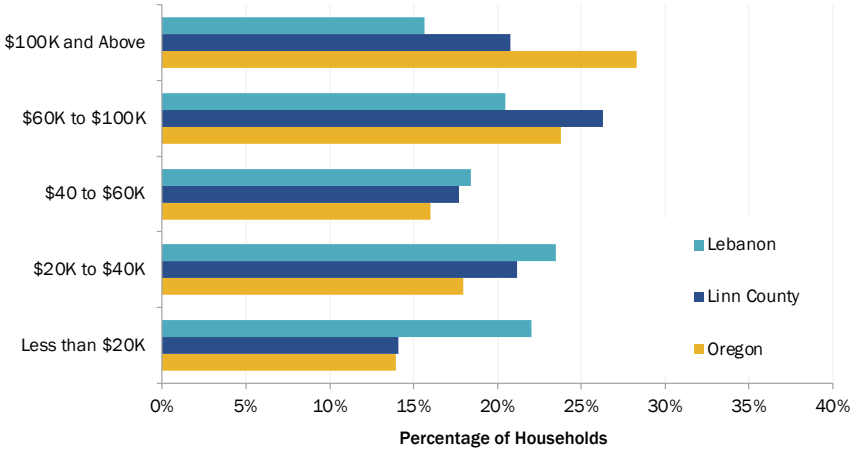
[111] Census calculated family income based on head of household income, as identified in Census forms, and of all individuals 15 years old and over in the household related to the head of household by birth, marriage, or adoption.

During the 2015–2019 period, 55% of Lebanon households earned less than $40,000 annually, compared to 35% of Linn County households and 32% of Oregon households.

Over the same period, 18% of Lebanon households earned between $40,000 and $59,999, a proportion equal to Linn County residents and larger than residents statewide (16%).

Exhibit 32. Household Income by Income Group, Lebanon, Linn County, and Oregon, 2015–2019, Inflation-Adjusted 2019 Dollars

Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B19001.

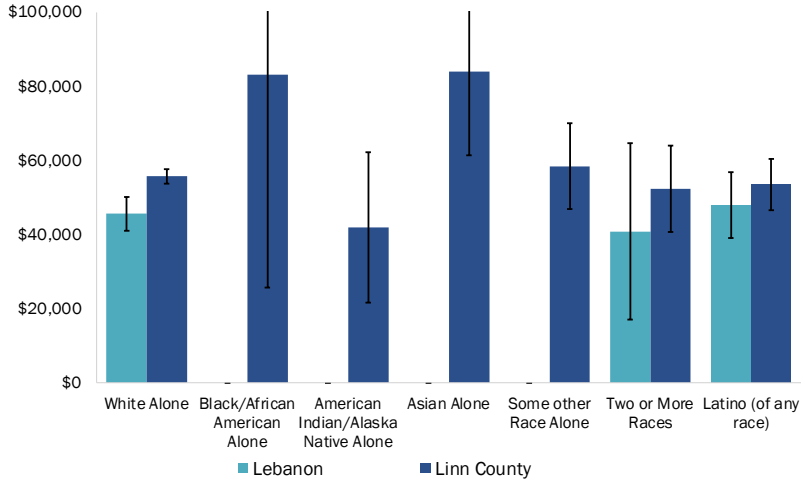


Householders that identified as Latino (of any race had a higher median household income ($47,895).

Householders who identified as Two or More Races were more likely to have had lower median household incomes ($40,801) than White Alone householders ($45,573).

Exhibit 32. Median Household Income by Race/Ethnicity, Lebanon and Linn County, 2015–2019, Inflation-Adjusted 2019 Dollars

Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B19013 A-I. Note: In Lebanon, data was unavailable for Black/African American alone, American Indian/Alaska Native Alone, Asian Alone and Some other race alone and have not been shown in this exhibit.

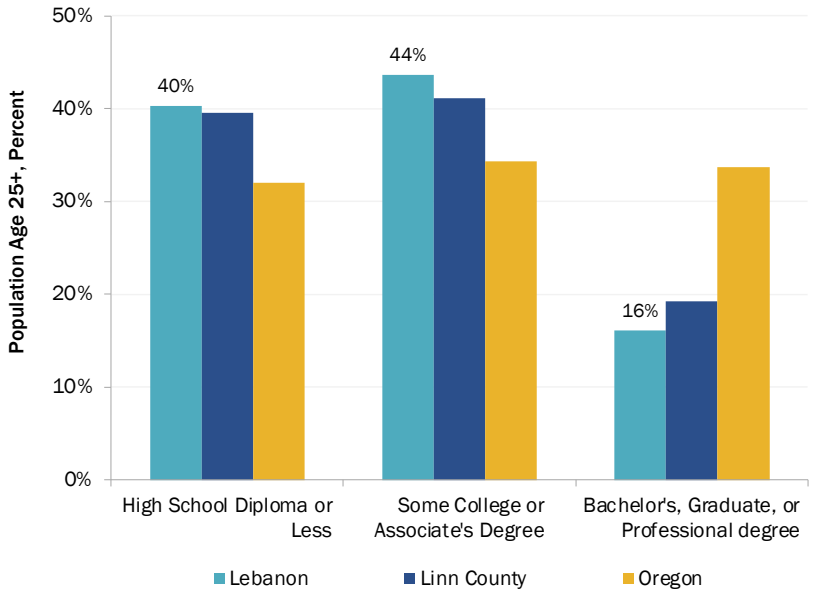


Educational Attainment

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

A larger share of Lebanon residents has some college education or an associate degree than Linn County and the state. Conversely, the proportion of Lebanon residents who have a bachelor's degree or a professional degree falls below both the state and Linn County.

Exhibit 33. Educational Attainment for the Population 25 Years and Over, Lebanon, Linn County, and Oregon, 2015–2019
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B15003.



Labor Force Participation and Unemployment

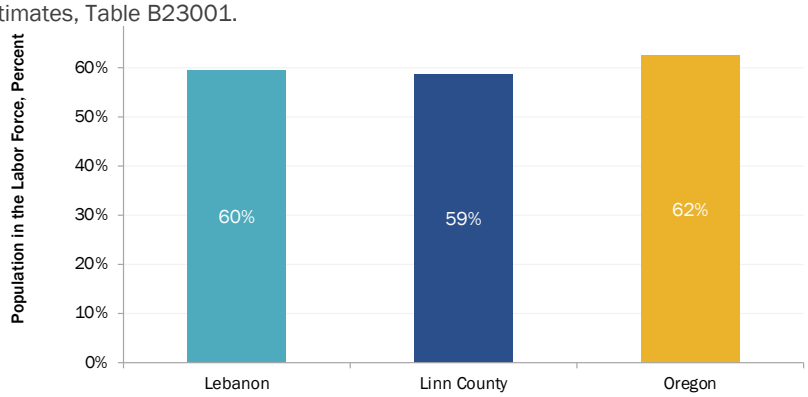
The current labor force participation rate is an important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. Children, retirees, students, and people who are not actively seeking work are not considered part of the labor force. According to the 2015–2019 American Community Survey, Linn County had 125,048 people in its labor force during that period and Lebanon had 16,870 people in its labor force. In winter 2022, the Oregon Employment Department reported that 71% of job vacancies were difficult to fill. The most common reason included a lack of applications (48% of employers' difficulties), lack of qualified candidates (14%), low wages (6%), unfavorable working conditions (5%), and a lack of work experience (5.2%).[112]

[112] Anna Johnson. "Winter 2022 Difficult-to-Fill Job Vacancies." Oregon Employment Department, April 25, 2022. https://www.qualityinfo.org/-/winter-2022-difficult-to-fill-job-vacancies

Lebanon has a similar labor force participation rate relative to Linn County and a slightly lower rate relative to Oregon.

Exhibit 34. Labor Force Participation Rate, Lebanon, Linn County, and Oregon, 2015–2019

Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B23001.

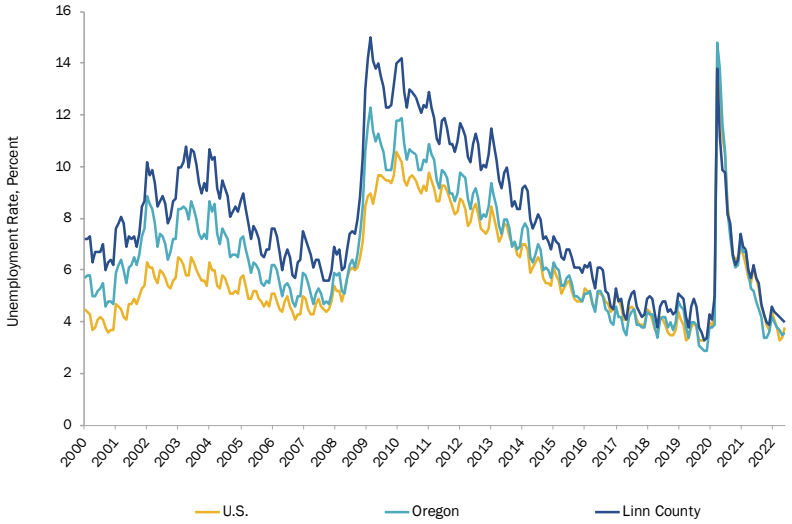


The unemployment rates in Lebanon, Linn County, Oregon, and the nation have declined since the Great Recession. However, following the pandemic, unemployment rates for the month of May 2020 exceeded the peak rate experienced during the Great Recession.

The unemployment rate in June 2022 in Linn County (4.0%) was higher than that of the state (3.6%) and nation (3.8%).

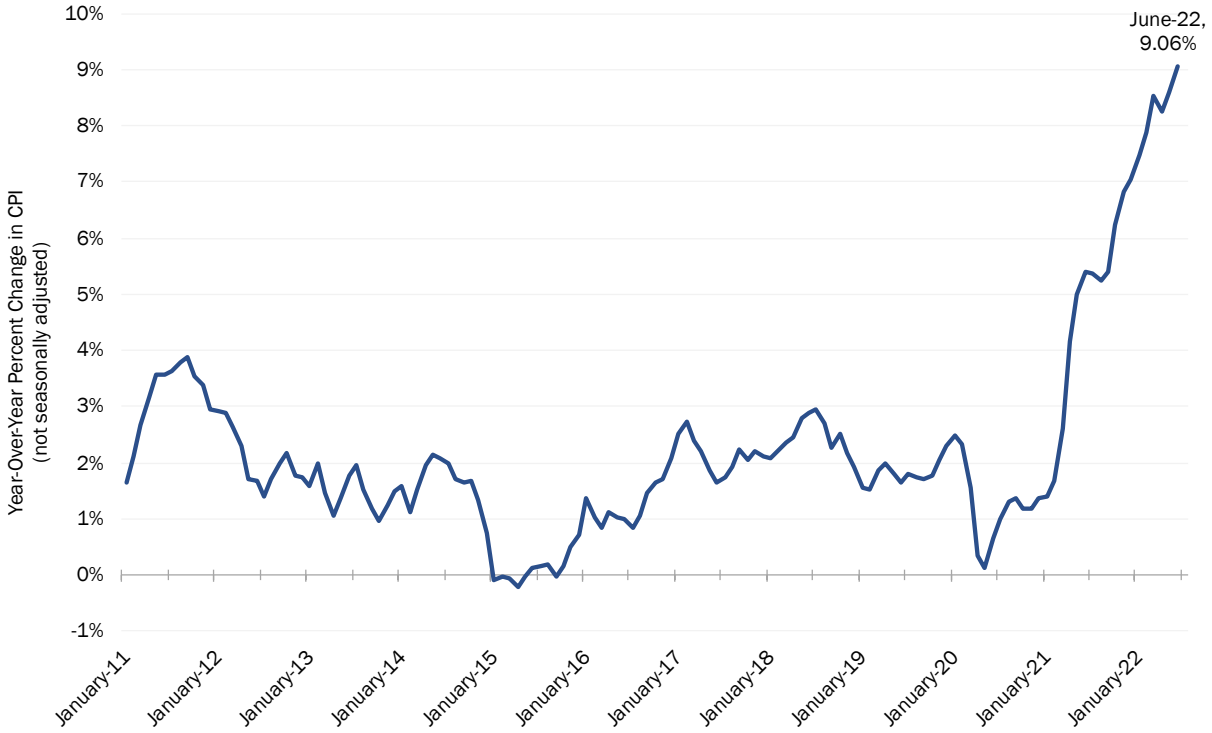
Exhibit 35. Unemployment Rate, Linn County, Oregon, and the U.S., 2000–June 2022

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics and Labor Force Statistics. Not seasonally adjusted.



The annual inflation rate in the U.S. declined steadily following the Great Recession until 2015. From 2016-2018, inflation increased steadily to nearly 2.5% before declining in 2019 and 2020. In 2021, inflation increased by 4.7%.

Exhibit 36. Change in CPI by Month, January 2010 to June 2022
Source: Bureau of Labor Statistics, Consumer Price Index. Not seasonally adjusted.



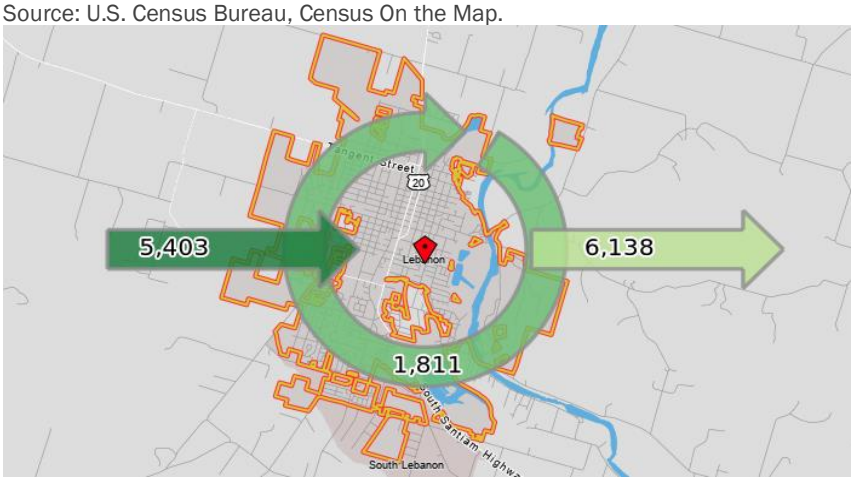
Commuting Patterns

Commuting plays an important role in Lebanon's economy, because employers in the area are able to access workers from cities across Linn County and Willamette Valley region. Exhibit 38 shows that 13% of people who live in Lebanon commute to Albany while 23% remain in Lebanon. The remaining workers commute from other cities located across the region.

Lebanon is part of an interconnected regional economy.

Fewer people both live and work in Lebanon than commute into or out of the city for work. This is similar to the commuting patterns of Linn County workers, in that most Lebanon residents commute outside of the county for work.

Exhibit 37. Commuting Flows, Lebanon, 2019
Source: U.S. Census Bureau, Census On the Map.



About 25% of all employees at Lebanon businesses also live in Lebanon.

About 10% of all Lebanon workers commuted from Albany.

Exhibit 38. Places Where Lebanon Workers Lived,[113] 2019
Source: U.S. Census Bureau, Census On the Map.

25%	10%	5%	3%
Lebanon	Albany	Sweet Home	Corvallis

About 23% of all working residents living in Lebanon also work in Lebanon.

About 10% of all Lebanon workers commuted to Albany.

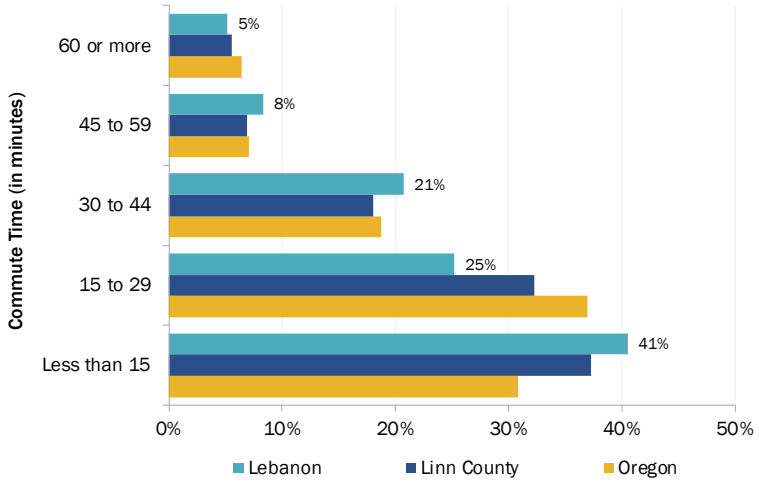
Exhibit 39. Places Where Lebanon Residents Were Employed,[114] 2019
Source: U.S. Census Bureau, Census On the Map.

23%	13%	10%	7%
Lebanon	Albany	Corvallis	Salem

During the 2015–2019 period, about 41% of Lebanon residents had a commute of less than 15 minutes, compared to 37% of Linn County's residents and 31% of Oregon residents.

The majority of Lebanon residents (59%) have a commute time over 15 minutes. This is consistent with Linn County, where 63% of residents have a commute time of this length.

Exhibit 40. Commute Time by Place of Residence, Lebanon, Linn County, and Oregon, 2015–2019
Source: U.S. Census Bureau, American Community Survey 2015–2019 5-Year Estimates, Table B08303.



[113] In 2019, 7,214 people worked at businesses in Lebanon, with 25% (1,811) of those workers both living and working in Lebanon.

[114] In 2019, 7,949 residents in Lebanon worked, with 23% of Lebanon residents (1,811) both living and working in Lebanon.

Tourism in Willamette Valley and Linn County

Longwoods International is a market research consultancy generating travel and tourism data and regional statistics. The following information is from Longwoods International's 2017 Regional Visitor Report for the Willamette Valley region, which is comprised of Benton, Clackamas (South), Lane (East), Linn, Marion, and Polk Counties.[115] Broadly, travelers to the Willamette Valley accounted for:[116]

- About 5.5 million overnight trips in 2017, or 16% of all Oregon overnight travel in 2017.
- The primary market areas for travelers over 2016 and 2017 were Oregon, Washington, and California: 48% of Willamette Valley visitors came from Oregon, 19%+ came from California, and 14% came from Washington.
- About 75% of visitors stayed 2 or fewer nights over 2016 and 2017 in the Willamette Valley, 20% stayed 3–6 nights, and 5% stayed 7 or more nights. The average nights spent in the Willamette Valley region was 2.3.
- The average per-person expenditures on overnight trips in 2017 ranged from $13 on transportation at destination to $41 per night on lodging.
- About 75% of visits to the Willamette Valley region over 2016 and 2017 were via personally owned automobiles, 18% were by rental car, and 13% were via an online taxi service (e.g., Lyft or Uber).
- Over 2016 and 2017, visitors tended to be middle-aged adults, with the average age being about 48.7. The majority of overnight visitors were 65 and older (23%), followed by those between the ages of 55 and 64 (19%) and individuals between the ages of 35 and 44 (19%). About 56% of visitors graduated college or completed a postgraduate education. Additionally, 44% of visitor earned less than $50,000 in household income, 37% earned between $50,000 and $99,999, and 19% earned more than $100,000. The average household income for the Willamette Valley region visitors was about $64,560.

[115] Travel Oregon. "Oregon 2017 Regional Visitor Report Willamette Valley Region," Longwoods International, October 2018. Retrieved from: https://industry.traveloregon.com/resources/research/willamette-valley-oregon-overnight-travel-study-2017-longwoods-international/.

[116] Longwoods International issues caution in interpreting these tourism estimates in Central Oregon, as the sample size for this region is low.

Direct travel spending in Linn County increased 54% from 2010 to 2021.

The Willamette Valley region's direct travel spending increased by 29% over the same period.

Exhibit 41. Direct Travel Spending ($ millions), 2010, 2019, 2020, and 2021
Source: Dean Runyan Associates, The Economic Impact of Travel in Oregon, 2000-2020, and Dean Runyan Associates, Oregon Travel Impacts, 2000-2020.

2010	$1,479.9 Willamette Valley Region	$112.9 Linn County
2019	$2,058.3 Willamette Valley Region	$157.2 Linn County
2020	$1,042.7 Willamette Valley Region	$81.8 Linn County
2021	$2,074.8 Willamette Valley Region	$174.2 Linn County

The areas of largest visitor spending for purchased commodities in 2019 and 2021 in Linn County was food service, retail sales, and accommodations.

Exhibit 42. Largest Visitor Spending Categories ($ millions), Linn County, 2019 and 2021
Source: Dean Runyan Associates, Oregon Travel Impacts.

2019	$44.8 Food Service	$21.8 Retail Sales	$21.3 Accommodations
2021	$45.9 Food Service	$34.1 Accommodations	$24.0 Retail Sales

The industry with the most employment in generated by travel spending in 2019 and 2021 in Linn County was in the accommodations and food services industry.

Exhibit 43. Largest Industry Employment Generated by Travel Spending, Linn County, 2019 and 2021
Source: Dean Runyan Associates, Oregon Travel Impacts.

2019	1,215 jobs Accommodations & Food Services	396 jobs Arts, Entertainment, and Recreation	239 jobs Retail
2021	1,084 jobs Accommodations & Food Services	470 jobs Arts, Entertainment, and Recreation	267 jobs Retail

Appendix B. Buildable Lands Inventory

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

This appendix presents methods and definitions used to develop the commercial and industrial buildable lands inventory for the Lebanon UGB. The results (shown in Chapter 4) are based on analyses of City of Lebanon, Linn County, and State of Oregon GIS data by ECONorthwest and reviewed by City staff. The remainder of this appendix summarizes key findings of the buildable lands inventory.

Methods and Definitions

The BLI for Lebanon includes all land that allows commercial and industrial uses within the UGB. From a practical perspective, land was included in the BLI if it met all of the following criteria: (1) it is inside the Lebanon UGB, (2) it is inside a tax lot (as defined by Linn County), and (3) if its current zoning/comprehensive plan designation allows employment uses. Note that tax lots do not generally include road or railroad rights-of-way or water. The inventory then builds from the tax lot–level database to estimate buildable land by plan designation.

Inventory Steps

The steps in the BLI are:

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

Step 1: Generate UGB "Land Base"

The commercial and industrial inventory used all of the tax lots in the Lebanon UGB with the appropriate comprehensive plan designations: commercial, industrial, and mixed use. Exhibit 46 shows a map of the specific designations that were used in the BLI.

Step 2: Classify Lands

In this step, ECONorthwest classified each tax lot with an employment plan designation (based on definition above) into one of five mutually exclusive categories based on buildable area status:

- Vacant land
- Partially Vacant land
- Developed land
- Public land
- Undevelopable land

ECONorthwest identified buildable land and classified development status using a rule-based methodology. The rules are described below in Exhibit 44.

Exhibit 44. Rules for Buildable Area Status Classification

Development Status	Definition	Statutory Authority
Vacant Land	A tax lot: (a) Equal to or larger than one-half acre not currently containing permanent buildings or improvements; or (b) Equal to or larger than five acres where less than one-half acre is occupied by permanent buildings or improvements. For the purpose of criteria (a) above, lands with improvement values of $0 are considered vacant.	OAR 660-009-005(14)
Partially Vacant Land	Partially vacant tax lots are those between one and five acres occupied by a use that could still be further developed based on the zoning. This determination was based on a visual assessment and City staff verification.	No statutory definition
Developed Land	OAR 660-009-005(1) defines developed land as "Non-vacant land that is likely to be redeveloped during the planning period." Lands not classified as vacant, partially vacant, undevelopable, or public or exempt are considered developed.	OAR 660-009-005(1)

Development Status	Definition	Statutory Authority
Public Land	Lands in public or semipublic ownership are considered unavailable for commercial or industrial development. This includes lands in Federal, State, County, or City ownership as well as lands owned by churches and other semipublic organizations. Public lands will be identified using the Linn County Assessment property tax exemption codes.	No statutory definition
Undevelopable	Vacant tax lots less than one-half acre in size are considered undevelopable.	No statutory definition

Step 3: Identify Constraints

As shown in Exhibit 45, the BLI included development constraints consistent with guidance in OAR 660-009-0005(2).

Exhibit 45. Constraints to Be Included in BLI

Constraint	Statutory Authority	Threshold	Source
Goal 5 Natural Resource Constraints			
Wetlands	OAR 660-009-0005(2)	Identified by City staff	City of Lebanon
Natural Hazard Constraints			
Regulatory Floodway	OAR 660-009-0005(2)	Lands within FEMA FIRM identified floodway	FEMA via National Map
100-Year Floodplain	OAR 660-009-0005(2)	Lands within FEMA FIRM 100-year floodplain	FEMA via National Map
Steep Slopes	OAR 660-009-0005(2)	Slopes greater than 15%	Oregon Department of Geology and Mining Industries
Landslide Susceptibility	OAR 660-009-0005(2)	High or Very High Landslide Susceptibility	Oregon Department of Geology and Mining Industries

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

Step 4: Verify Inventory Results

ECONorthwest used a multistep verification process. The first verification step involved a "visual assessment" of land classifications using GIS and recent aerial photos. The visual assessment involves reviewing classifications overlaid on recent aerial photographs to verify uses on the ground. ECONorthwest reviewed all tax lots included in the inventory using the visual assessment methodology. The second round of verification involved City staff verifying the visual assessment output. ECONorthwest amended the BLI based on City staff review and a

discussion of staff's comments. The final verification is reviewed by stakeholders, including by members of the Project Advisory Committee.

Step 5: Tabulate and Map Results

The results of the commercial BLI are presented in tabular and map format in the remainder of this appendix. This includes a zoning/comprehensive plan map, the land base by classification, vacant and partially vacant lands by plan designation, and vacant and partially vacant lands by plan designation with constraints showing.

Exhibit 46. Comprehensive Plan Designations Included in the Commercial and Industrial BLI, Lebanon UGB, 2022

Source: ECONorthwest analysis of data from City of Lebanon and Linn County

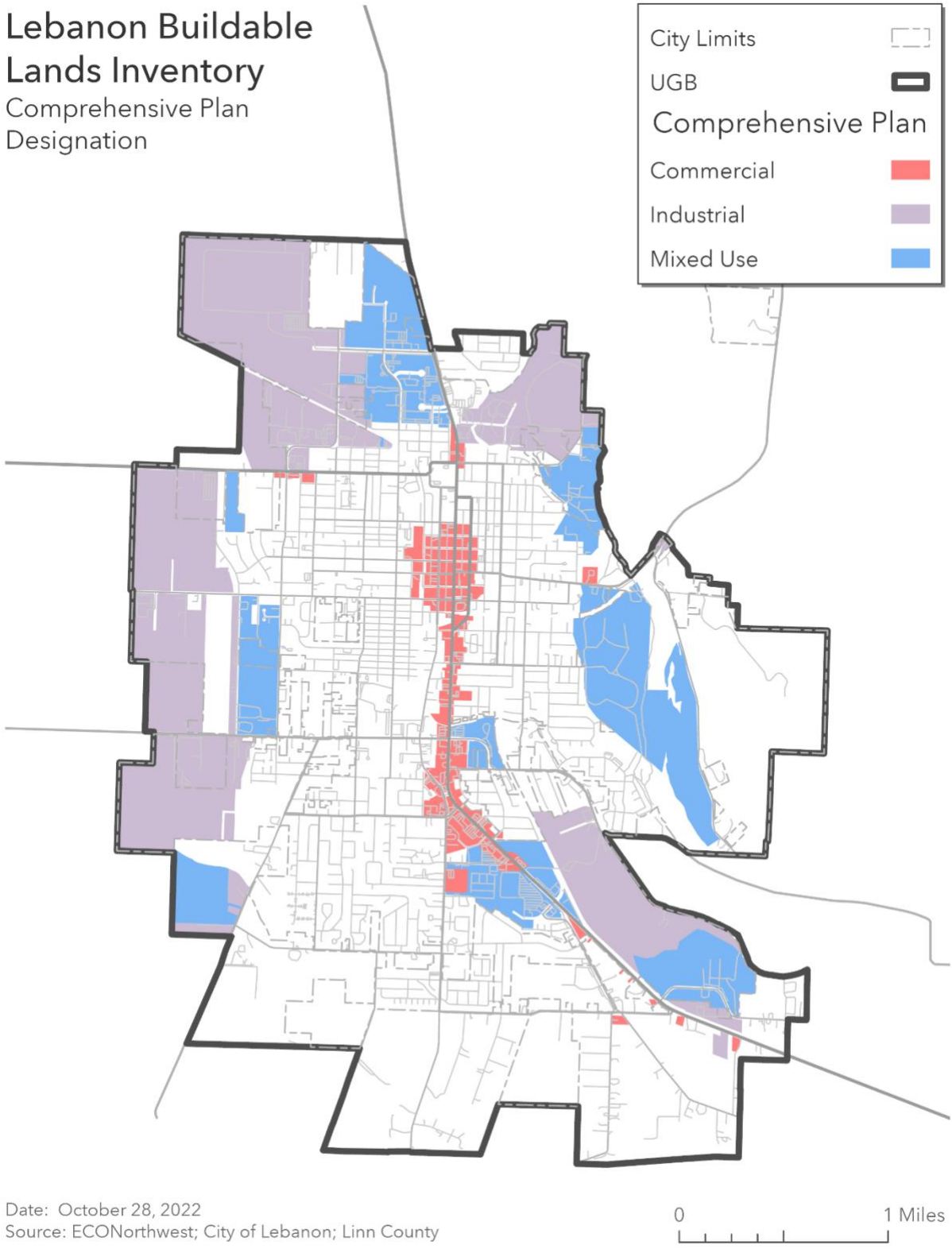


Exhibit 47. Employment Land Development Constraints by Constraint Type, Lebanon UGB, 2022
Source: ECONorthwest analysis of data from City of Lebanon and Linn County

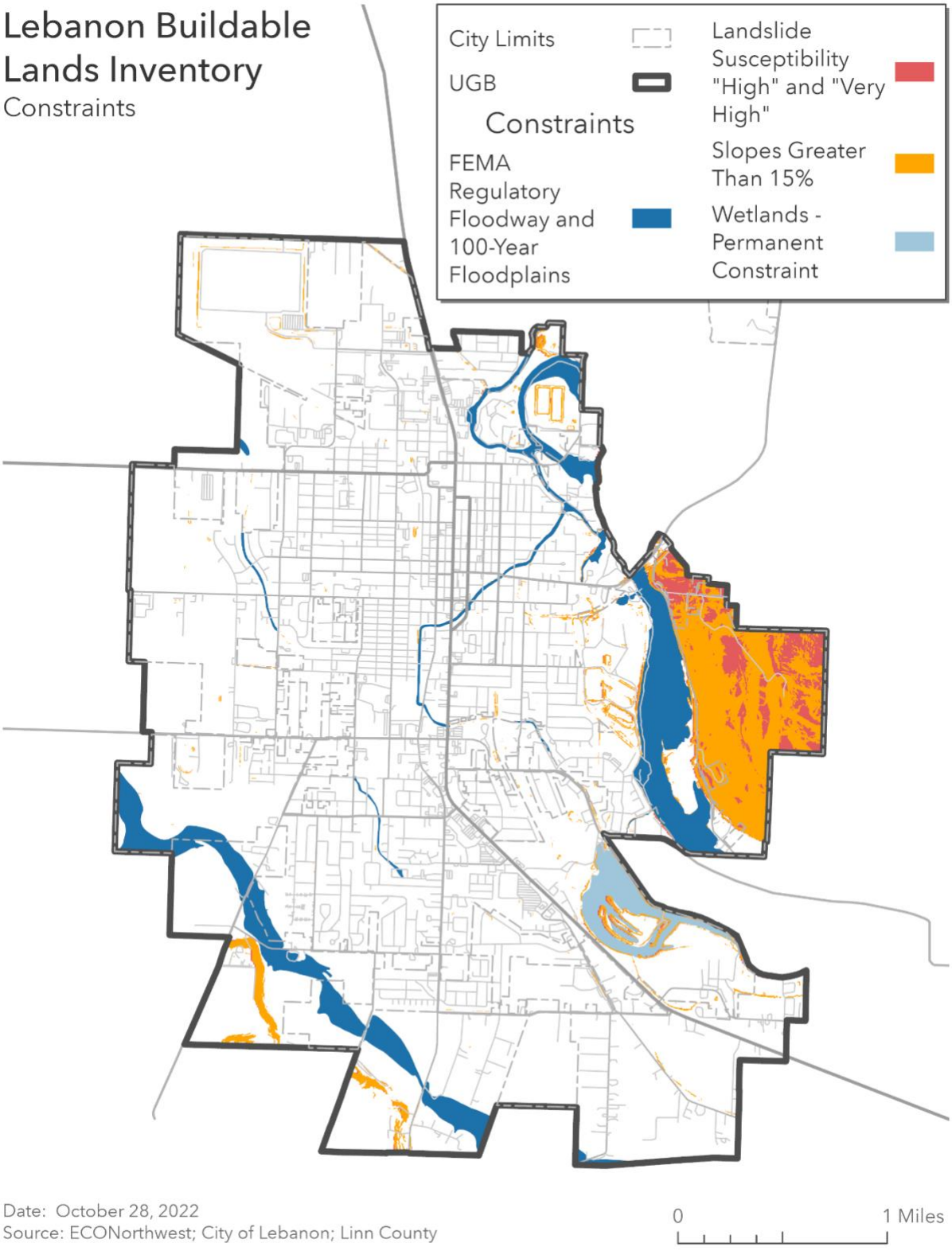
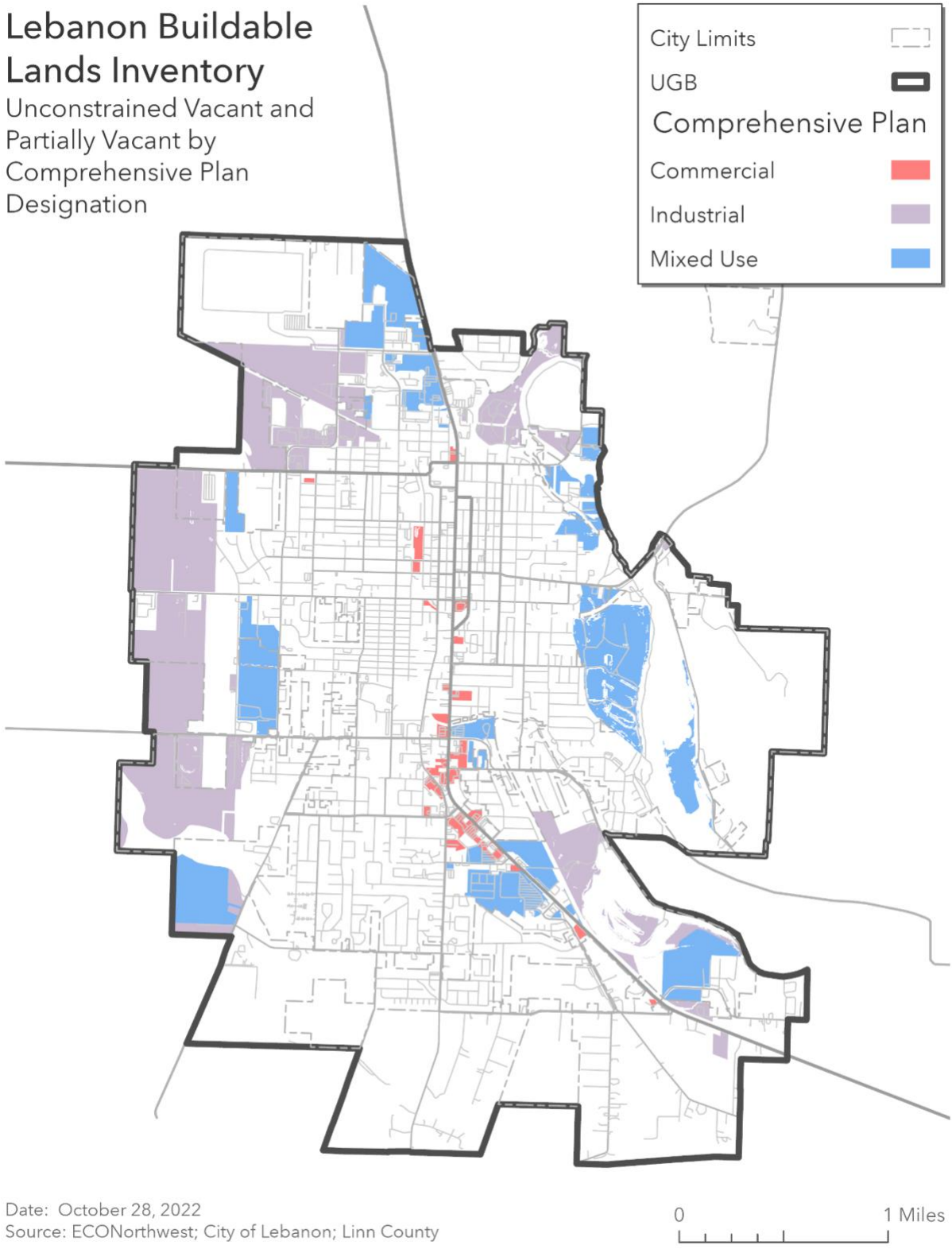


Exhibit 48. Buildable Employment Land by Plan Designation with Development Constraints, Lebanon UGB, 2022

Source: ECONorthwest analysis of data from City of Lebanon and Linn County



ECONorthwest
ECONOMICS · FINANCE · PLANNING

DATE: 3/2/2023
TO: Lebanon EOA Committee
CC: Kelly Hart and Alysia Rodgers
FROM: Beth Goodman
SUBJECT: Lebanon Economic Development Recommendations

The City of Lebanon contracted ECONorthwest to develop an economic opportunities analysis (EOA). The EOA will determine that the City has enough land to accommodate 20 years of employment growth. The EOA will provide the basis for an update to the City's Comprehensive Plan Economic Element, including the goals and policies for economic development.

This memorandum presents a draft of recommendations for economic development goals, policies, and actions based on the results of the EOA, discussions with city staff, and discussions with knowledgeable stakeholders. These recommendations align with the Cascades West Economic Development District's 2020-2025 *Comprehensive Economic Development Strategy*.

The goals and policies in this document are intended to be adopted into the City's Comprehensive Plan Economic Element, replacing existing goals and policies. The recommended actions are intended to provide city staff with actions to implement over the next five years to implement the goals and policies.

This memorandum is organized into the following categories of economic development issues: land and infrastructure, business growth and retention, business development, and workforce development. It has been updated based on discussions with the Lebanon EOA Committee at the February 1, 2023 meeting.

Broad Economic Development Goal

Lebanon's overarching economic development goals are:

> **Goal 1.** Ensure that there are opportunities for people to live and work in Lebanon.
>
> **Goal 2.** Encourage a diversified economic base, which includes a mixture of business types.

Land and Infrastructure

> **Goal 3:** Ensure to the greatest extent possible that Lebanon has sufficient land and infrastructure for a variety of employment opportunities consistent with the findings of the most recent Economic Opportunities Analysis and update master plans for infrastructure extension so that land can be serviced in a reasonable time period.

Policies to implement the goal of land and infrastructure sufficiency

> **Policy 1.** Ensure that Lebanon has enough land zoned to provide industrial and commercial opportunities, periodically monitoring land development and updating the

land use map to ensure that there is enough land in each designation to accommodate expected growth.

Policy 2. Ensure that Lebanon has sufficient land in industrial zoning on sites with a variety of characteristics and sizes, with needed access to transportation and utility facilities, avoiding conflicts with incompatible adjacent uses.

Policy 3. Preserve and protect industrial lands where there are fewer wetlands and development is more feasible, encouraging that this land is more likely to be used for traded-sector industrial uses, avoiding conflicts with incompatible adjacent uses.

Policy 4. Coordinate on wetland planning, mitigation, and development with regional, state, and federal agencies, such as the Oregon Department of Environmental Quality, Oregon Department of State Lands, Army Corps of Engineers, and Oregon Cascades West Regional Consortium, with the purpose of development of industrial land where possible.

Policy 5. Connect commercial corridors with nearby multifamily development and residential neighborhoods, to provide opportunities for access to services.

Policy 6. Plan for and provide adequate infrastructure and transit efficiently and fairly to support employment growth.

Recommended Actions

1. Monitor development in commercial and industrial areas. As development or rezoning occurs, evaluate whether the city continues to have enough commercial and industrial land to support employment growth.
2. Develop an economic opportunities analysis every seven to ten years or when monitoring suggests that the City may not have enough commercial or industrial land to support employment growth.
3. For industrial land that is less impacted by wetlands and development is more feasible, work with landowners to get this type of land certified as Shovel Ready by Business Oregon.
4. Evaluate opportunities to rezone land to allow for more and smaller scale commercial uses around Airport Road and Grant Street.
5. Initiate a project to increase activity and encourage private investments (through implementation of incentives to support development) along Highway 20 south of downtown. This City could apply for a Transportation Growth Management grant to support this planning effort.
6. Participate in a feasibility study conducted by the Oregon Cascades West Council of Governments about development of high-speed broadband internet.
7. Evaluate implementation of recommendations from the broadband internet study to extend access to high-speed internet access throughout Lebanon, especially for small businesses, lower-income households, minority populations, and students.

8. Coordinate capital improvement planning to ensure infrastructure availability on employment land and continue to pursue funding for needed infrastructure to support economic development activities, consistent with the priority of infrastructure resilience in the Cascades West Economic Development District's 2020-2025 *Comprehensive Economic Development Strategy*.
9. Maintain an inventory of the City's brownfield sites, remediation needs, and opportunities for redevelopment. Help property owners navigate resources for remediating brownfield sites.
10. Develop a strategy for the redevelopment of the old mill sites.

Business Growth and Retention

Goal 4. Support growth and retention of businesses in Lebanon.

Policies to implement the goal of business growth and retention

Policy 7. Support growth and retention of existing businesses, including those who are owned or operated by people with a primary language other than English.

Policy 8. Support development of a vibrant downtown and commercial corridor along Highway 20 with a mixture of uses, encouraging infill and redevelopment where appropriate.

Policy 9. Support existing businesses by sharing technical resources, maintaining open communications with local business people, and providing available staff support for economic development projects initiated by the business community.

Recommended Actions

1. Pursue gaining access to the business registration information collected by the Secretary of State's office for better tracking of data and better communication with businesses.
2. Develop a work plan for business outreach to understand unmet workforce needs and identify opportunities for workforce development to meet those needs. The outreach plan should focus either on a location for outreach each year (e.g., downtown) or is sector focused (e.g., manufacturing or downtown commercial). Set a goal of number of businesses to reach out to each year and topics to discuss.
3. Develop materials (in multiple languages) about the ways that the City can help businesses, focusing on the value the City can provide to support businesses in Lebanon. These materials could be used on the City's webpage and in presentations to businesses about economic development.
4. Continue supporting the City's partnership with the Downtown Association to support pedestrian activity in downtown and street beautification and improvements to keep downtown a welcoming place.

5. Partner with the Lebanon Chamber of Commerce, Downtown Association, and other partners to provide support to entrepreneurship and business retention and expansion efforts by serving as a clearing house for regional data and resources.
6. Partner with the Lebanon Chamber of Commerce, Downtown Association, and other partners to conduct an inventory of economic development assets in Lebanon to support entrepreneurship, such as lenders to support financing, workforce training, community college programs, with the purpose of identifying gaps for supporting entrepreneurship.
7. Working with the Lebanon Chamber of Commerce and the interested parties, identify potential actions to proactively support growth in tourism, such as tourism-focused businesses, opportunities to attract visitors like community events, and other opportunities to support tourism.
8. Partner with Albany Eastern Railroad to capitalize on the Santiam Excursion train by coordinating events around the excursion train to support business growth and that information is available on the train (or at the station) about restaurants and experiences in Lebanon.
9. Work with the Small Business Development Center (SBDC) at Linn Benton Community College to support businesses and entrepreneurs, including Latino business owners and business owners who do not speak English.
10. Administer the Downtown Building Restoration Program awarding grants to business or building owners who wish to update the façade of the building and revitalize the downtown corridor, and consider expansion of the program beyond downtown if funding is available.

Business Recruitment

Goal 5: Support attraction and recruitment of businesses to Lebanon to diversify Lebanon's economic base and grow traded-sector businesses.

Policies to implement the goal of business attraction

Policy 10. Work with economic development partners to attract traded-sector businesses to Lebanon, such as manufacturing.

Policy 11. Build strong connections with local Small Business Administration and the Small Business Development Center (SBDC) at Linn Benton Community College to understand the services they provide to help attract businesses and connect businesses with these organizations.

Policy 12. Support attraction of businesses with higher than average wages to Lebanon, connected with workforce development.

Recommended Actions

1. Continue to partner with the Rural Economic Alliance (REAL) and provide resources and support to help REAL build capacity to have a greater focus on business attraction and regional coordination for economic development.
2. Support REAL's development of a strategic plan, with a focus of better understanding Lebanon's potential role in the goals and actions in REAL's strategic plan.
3. Align Lebanon's business attraction initiatives and marketing with REAL's goals and activities, focusing on attracting traded-sector businesses regionally.
4. Work closely with the regional development officer at Business Oregon to ensure that Business Oregon knows what assets that Lebanon has to offer for business attraction.
5. Work with Albany Eastern Railroad to market Lebanon's industrial sites with rail access.
6. Work with the Oregon Cascades West Council of Governments (OCWCOG) and other partners to coordinate regional efforts around recruitment and strategies surrounding economic incentives. This action supports the Cascades West Economic Development District's 2020-2025 *Comprehensive Economic Development Strategy* priority of regional collaboration.

Workforce Development

Goal 6: Support workforce development and entrepreneurial training opportunities to meet the employment growth opportunities for Lebanon's businesses.

Policies to implement the goal of workforce development

Policy 13. Continue to coordinate and partner with organizations that provide workforce development.

Recommended Actions

1. Understand the workforce training opportunities available at partner organizations such as Linn Benton Community College, Willamette Workforce Partnership, the Oregon Employment Department's WorkSource program, and the Western University of Health Services. The Cascades West Economic Development District may provide assistance in this area, as workforce support is a priority in the 2020-2025 *Comprehensive Economic Development Strategy.*
2. Coordinate with Linn Benton Community College, Oregon Cascades West Council of Government, and other regional partners to discuss potential solutions for making childcare more accessible and affordable for businesses and their employees.
3. Connect with existing programs that connect businesses with unmet workforce needs with people at local high schools and the workforce training partners.
4. Understand the growth potential for Western University of Health Services and Samaritan Community Hospital, identify barriers to that growth, and collaborate on ways to lower or remove those barriers.