August 10, 2020

APG

CITY OF ALBANY OREGON

JOHNSON ECONOMICS

Acknowledgments

Johnson Economics prepared this report for the City of Albany with support from Angelo Planning Group. Johnson Economics and the City of Albany thank the many people who helped to develop this document.

City Staff
Jeff Blaine, Public Works Engineering and Community Development Director
Anne Catlin, Senior Planner
Laura LaRoque, Senior Planner
David Martineau, Planning Manager
Seth Sherry, Economic Development Manager

Project Consultants
Brendan Buckley, Johnson Economics
Jerry Johnson, Johnson Economics
Matt Hastie, Angelo Planning Group
Andrew Parrish, Angelo Planning Group
Kate Rogers, Angelo Planning Group

Thanks to Advisors and Stakeholders on this Project
Chris Hanson, Commercial Real Estate Broker, Keller Williams
Kevin Kreitman, City Manager, City of Millersburg
Jim Merryman, CEO, Oregon Freeze Dry
Melissa Murphy, Regional Development Officer, Business Oregon
John Pascone, President, Albany-Millersburg Economic Development Corp.
Janet Steele, President, Albany Area Chamber of Commerce
Participants in Public Events

City of Albany
333 Broadalbin Street SW
Albany, OR 97321
(541) 917-7500

Johnson Economics
621 SW Alder Street, Suite 605
Portland, OR 97205
(503) 295-7832

Table of Contents

I. INTRODUCTION

This report introduces analytical research presenting an Economic Opportunities Analysis (EOA) for the City of Albany, Oregon.

Cities are required to periodically reconcile estimates of future employment land demand with existing inventories of vacant and redevelopable employment land within their Urban Growth Boundary (UGB) and identify future site needs over the 20-year planning period.

While, the principal purpose of the analysis is to provide a factual basis for evaluating economic development policies and strategies to help the city capitalize on its economic opportunities and to ensure the City has an adequate land supply for economic development and employment growth to 2040. The intent is to conduct the analysis through a linkage of planning for an adequate land supply to infrastructure planning, community involvement and coordination among local governments and the state.

To this end, this report is organized into six primary sections:

- **Economic Trends:** Overview of national, state and local economic trends affecting Linn and Benton Counties and the City of Albany, including population projections, employment growth and a demographic profile.
- **Target Industries:** Analysis of key industry typologies the City should consider targeting as economic opportunities over the planning period.
- **Employment Land Needs:** Examines projected demand for industrial and commercial land based on anticipated employment growth rates by sector.
- **Capacity:** Summarizes the City's inventory of vacant and redevelopable industrial and commercial land (employment land) within the City of Albany's UGB.
- **Reconciliation:** Compares short- and long-term demand for employment land to the existing land inventory to determine the adequacy and appropriateness of capacity over a five and twenty-year horizon.
- **Economic Development Potential and Conclusions:** Summary of findings and policy implications.

The prior Economic Opportunities Analysis for the City of Albany was adopted in 2007. This updated analysis reflects changes in employment, land supply, and macro-economic trends since that time.

Oregon Statewide Planning Goal 9: Economic Development

In addition to providing an analysis of the City's economic opportunities and needs, this report is intended to meet the requirements of Oregon Statewide Planning Goal 9 and the requirements for an EOA as specified in the administrative rules that implement Goal 9 (OAR 660-009).

II. ECONOMIC TRENDS

This report section summarizes long and intermediate-term trends at the national, state, and local level that will influence economic conditions in Albany over the 20-year planning period. This section is intended to provide an economic context for growth projections and establish a socioeconomic profile of the community. This report's national evaluation has a focus on potential changes in structural socioeconomic conditions both nationally and globally. Our localized analysis considers local growth trends, demographics, and economic performance.

NATIONAL TRENDS

This section provides an overview of national economic trends that impact regional and local economies.

- **New Normal of Moderate GDP Growth:** The United States economy has matured into a moderate growth trajectory of around 2.0 percent per year, after growing at a faster average rate for much of the 20th Century. The most commonly used measure of economic prosperity is real gross domestic product (GDP) per capita. Real GDP per capita is essentially a measure of national wealth considered on an individual basis. The increased purchasing power of the population translates into greater investment in health care, education, housing, leisure, and many other sectors. Potential GDP growth, which measures the GDP growth that can be sustained at a constant rate of inflation, indicates future long-term growth will remain around 2.0 percent per year.

- **Shifts in Imports/Exports:** The US economy has fully transitioned from being a net-exporting economy to a net-importing economy. Increasing international trade led to strong growth in imports during the 1990s and 2000s, partly due to U.S. firms offshoring operations to lower-cost markets. Exports also grew over the period, but at a slower pace. Imports from Asia continue to grow at a faster clip than domestic manufacturing, while the outsourcing of some knowledge-based industries has also picked up pace over the last decade.

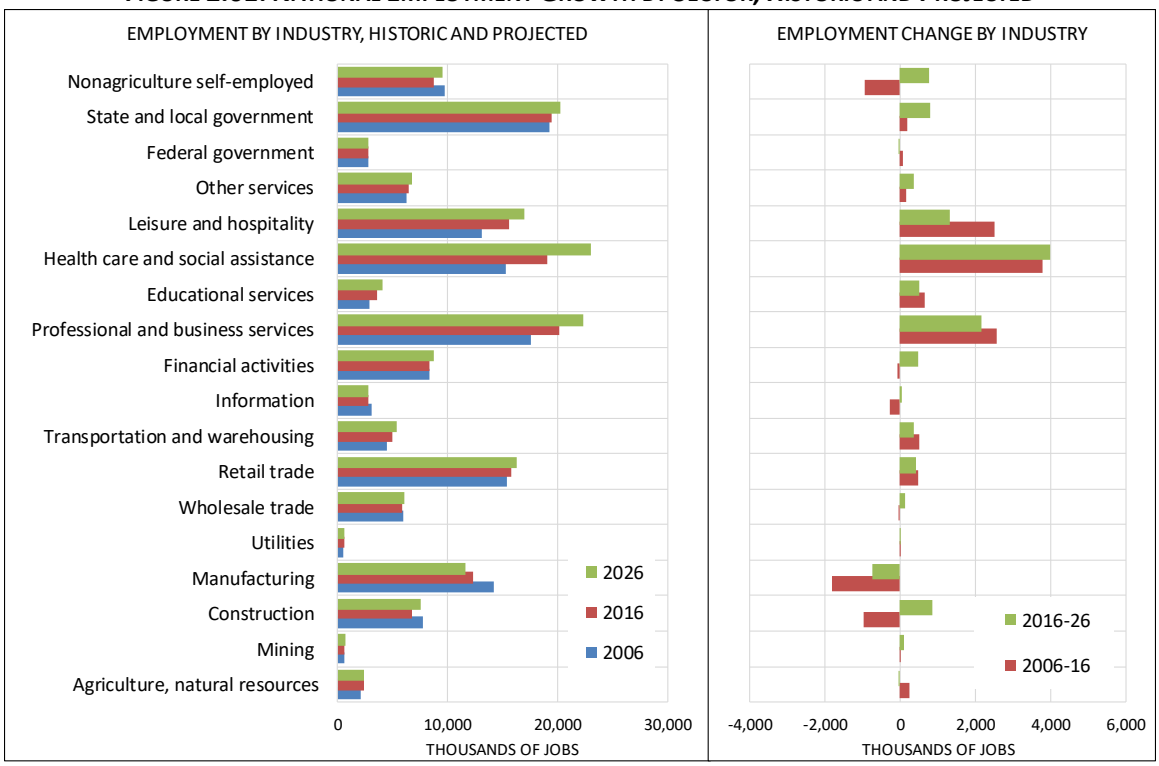
- **A Decade of Economic Expansion:** The "Great Recession" officially spurred six consecutive quarters of negative economic growth in 2008 and early 2009. The depth and duration of this downturn was the most pronounced since World War II. Likewise, the following expansion cycle has been one of the longest on record. The expansion has lasted more than a decade, with on-going monthly job growth and unemployment remaining near record lows.

  While overall trends have been positive for some time, history indicates there is likely to be two to three downturns at the national level over the next twenty years. In the near-term, some economic uncertainty exists due to global trade and currency conflicts among the US and many of its largest traditional trading partners. On-going trade issues and new tariff regimes have the potential to hasten the end of the nation's long expansion.

- **Employment Growth:** The economic expansion in GDP has been reflected in employment growth, which has ranged between 1.4 percent and 2.2 percent in the current expansion cycle. For the past five years, the economy has added an average of over 275,000 jobs per month. The national unemployment rate been lower than four percent since early 2018.

  Recent trends and current forecasts reflect a shift from a goods economy, featuring manufacturing and natural resources, towards a service economy, which emphasizes technological innovation, research, and design (Figure 2.01).

FIGURE 2.01: NATIONAL EMPLOYMENT GROWTH BY SECTOR, HISTORIC AND PROJECTED

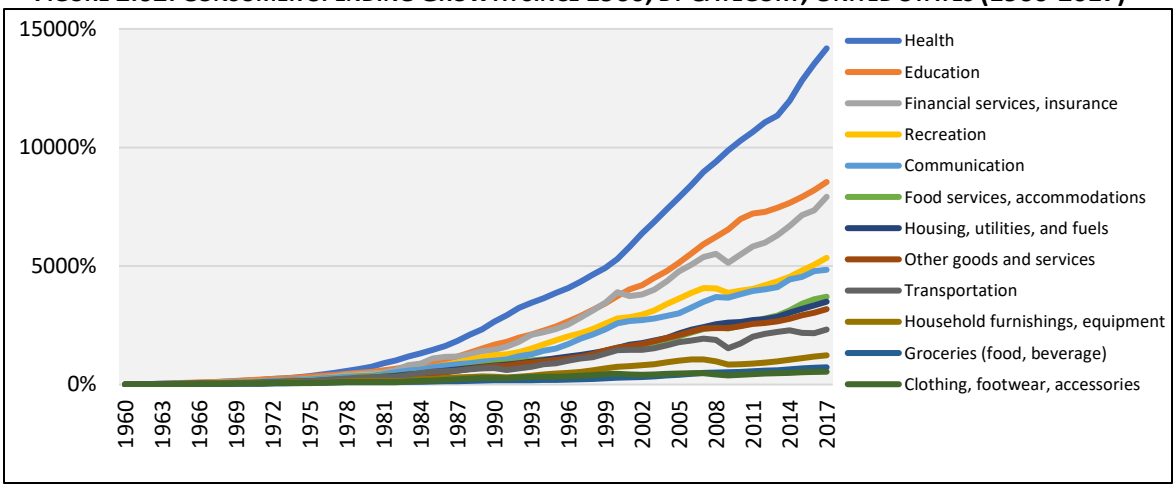


SOURCE: US Bureau of Economic Analysis

- **Shifts in Consumer Spending:** Consumer spending accounts for more than two-thirds of the U.S. economy, therefore changing spending patterns dictate much of the shifts in the economy. There has been a shift within the economy from consumption of goods to consumption of services. The strongest spending growth over recent decades has come in categories that represent investments in personal wellbeing, with healthcare/health products at the top of the list, followed by education and financial services. This reflects increasing levels of wealth and discretionary income in the population. Spending on health is expected to continue to increase strongly over the coming decades as the baby boomer cohort ages.

  Categories that represent more short-term enjoyment, like recreation, food services, and accommodations, have experienced the second fastest growth, while necessities like groceries, clothing, transportation, and housing have seen only moderate growth (Figure 2.02).

FIGURE 2.02: CONSUMER SPENDING GROWTH SINCE 1960, BY CATEGORY, UNITED STATES (1960-2017)

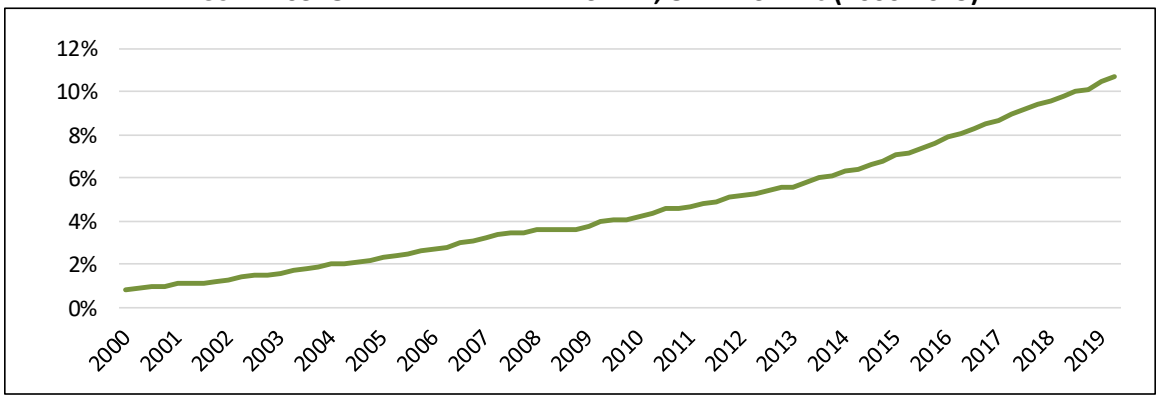


SOURCE: U.S. Bureau of Economic Analysis, JOHNSON ECONOMICS

- **On-Line Spending:** The most dramatic spending shift in the context of commercial real estate in recent times is the growth in online shopping, which has reduced the overall need for brick-and-mortar retail space. This has caused a shift in storage needs from retail stores to warehouses and distribution centers.

  Online retailers accounted for an estimated 10 percent of all retail spending in 2018, at over $525 million in annual sales on a national level. Since the last recession, the segment has grown by around 15 percent per year (Figure 2.03).

FIGURE 2.03: ONLINE RETAIL MARKET SHARE, UNITED STATES (2000-2019)



SOURCE: U.S. Bureau of Economic Analysis, JOHNSON ECONOMICS

OREGON ECONOMIC TRENDS

In this section, we examine trends in Oregon that may impact economic development in Albany. This section draws explicitly from the Oregon Office of Economic Analysis' most recent economic forecast.[1]

- **Strong Recovery, Strong Growth:** Oregon as a state fared somewhat better than many regions of the country in the 2007-2009 recession. While the depths of the recession, including declines in home value and new construction were acutely felt in Oregon, they were milder than the experience of many other regions of the country. Many of the largest players in the high technology industry remained resilient during the downturn and continued to expand their presence in Oregon over the last ten years, particularly in the Portland Metro area. At the same time, the state remained an attractive place to move and retire. These trends helped the state recover sooner, and at a faster pace, than much of the country.

  Since 2012, the state has added an average of 60,000 jobs per year, or 5,000 per month. In 2017 and 2018 the state added an estimated 72,000 and 60,000 jobs respectively. The rate of job growth during the recovery was comparable to that observed in the 1990s, during a statewide population boom. There are now an estimated 2,582,000 total jobs, compared to the state's 1,572,000 households.

  Wages have also grown more quickly in Oregon during the recovery than nationally. Unemployment is estimated at four percent statewide, and the share of the labor force that is underemployed (working less than they would like to) is down to the pre-Recession level.

  The strong in-migration experienced since the recession is expected to continue going forward. The state has added an average of 45,000 people per year since 2010. While the greatest growth occurs in urban areas, most rural areas are experiencing growth as well. Growth is driven by the combination of a healthy economy, an increasingly mobile and "remote" workforce, lower cost of living than other West Coast metro areas, outdoor and recreation amenities, and an attractive tax structure for retirees.

- **Housing:** Oregon is projected to maintain its competitive advantage in housing and cost of living in relation to other west coast markets such as San Francisco and Seattle. While new housing construction and sales activity remained muted for years following the housing "bust" in 2008/9, new apartment construction emerged first to provide rental homes to newcomers, younger residents, and those displaced from the ownership market.

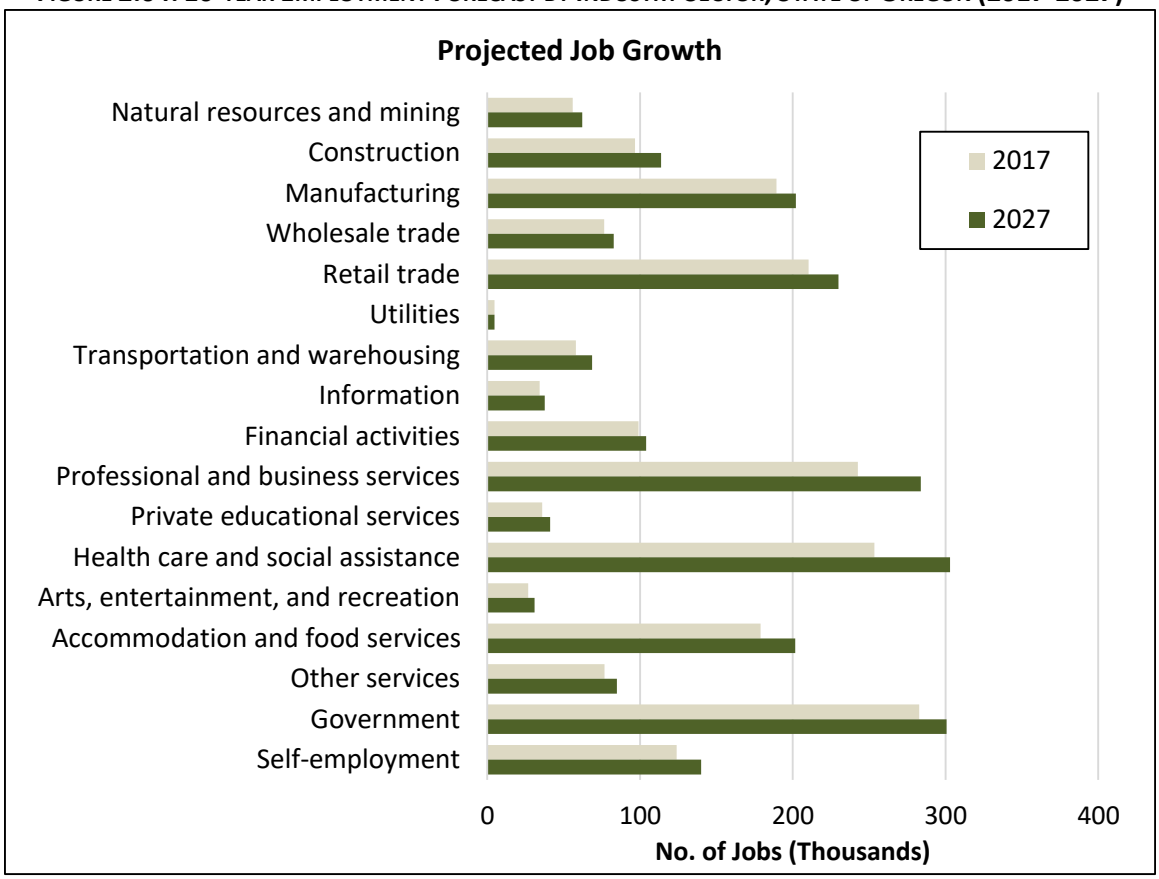
  The sales of existing homes and new construction activity have since returned to pre-recession levels, while foreclosures and other distressed properties have largely worked their way through the system. Even as the housing market recovers, new supply entering the market has not kept up with demand and housing affordability remains a risk to the outlook in most parts of the state. Expectations are that new construction will continue to accelerate to match the increase in demand, alleviating the squeeze on supply and returning prices to the affordable range. Until that gap is bridged, it is expected rent and home prices will continue to increase, hopefully without outstripping the rate of growth for household income. In recent years, price and rent growth has started to level off in many submarkets, but the trend is still upward.

- **Shifting Industrial Composition:** Oregon has experienced a decades-long shift away from natural resource-based industries toward more value-added manufacturing activities such as technology, machinery, equipment, and fabricated metals. This trend is expected to continue. Moreover, Oregon should continue to follow the national trend of growth in service-oriented industries (health care, professional services) outpacing goods production.

---

1 Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecasts

FIGURE 2.04: 10-YEAR EMPLOYMENT FORECAST BY INDUSTRY SECTOR, STATE OF OREGON (2017-2027)

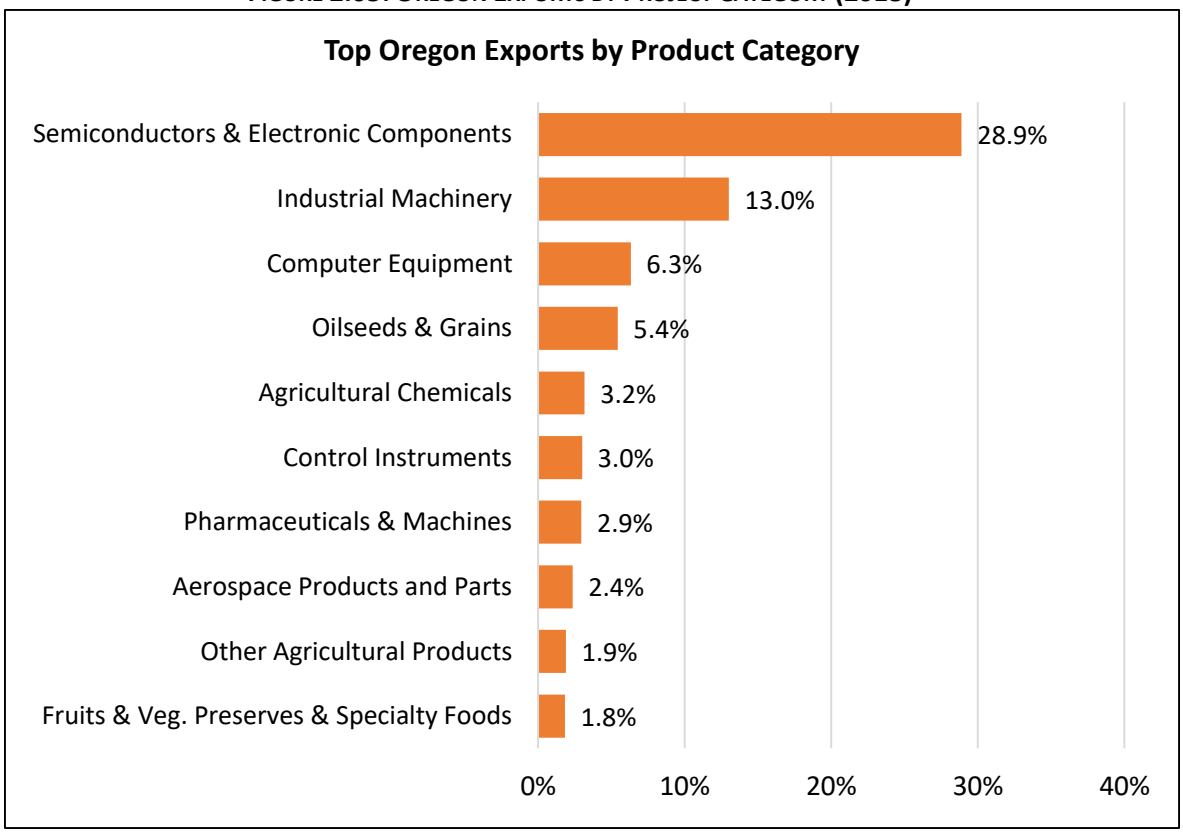


SOURCE: Oregon Employment Department

- **Oregon Export Economy:** Oregon's Economic health is largely connected to growth in the export market. Export, or "traded sector," businesses are critical to growing the local economy by bringing in profits from external markets. This makes the overall state economy larger, as opposed to businesses that largely redistribute revenue within the state economy. In 2018, Oregon's total export value reached over $21.9 billion, growing 19 percent over the prior five years.

  Nearly 29 percent of state exports (by value) is in semiconductors and electronic components, an industry in which Washington County leads the state (Figure 2.05). Other technical products as well as agricultural products are also prominent components of state exports.

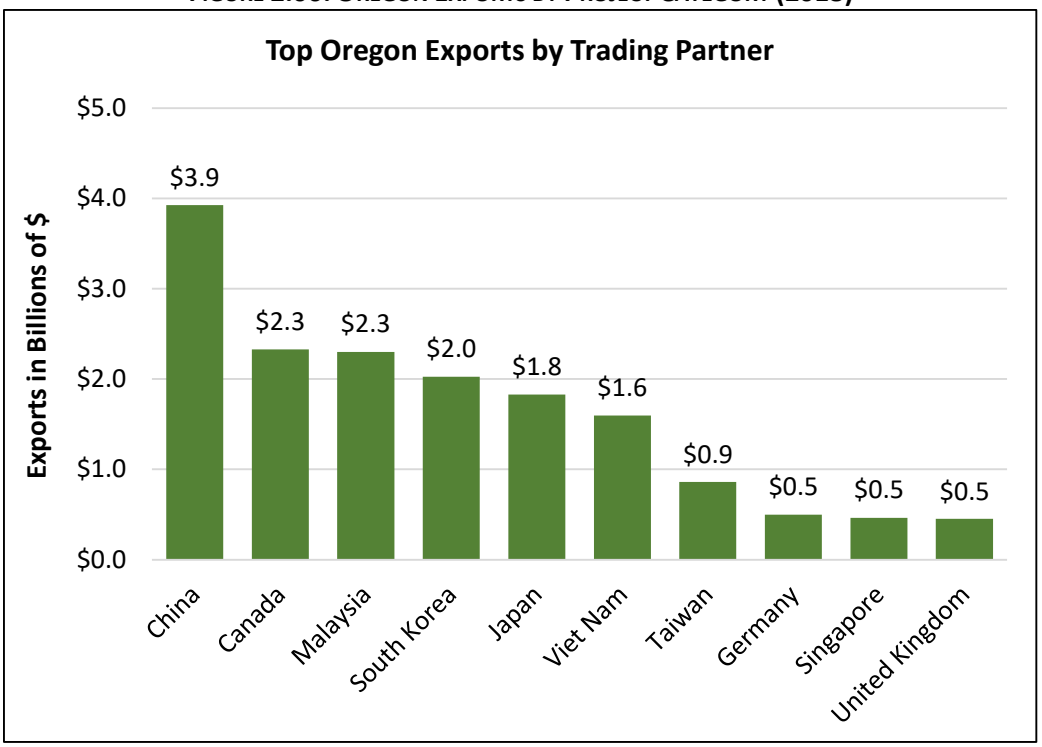
FIGURE 2.05: OREGON EXPORTS BY PROJECT CATEGORY (2018)



Source: US Department of Commerce

China receives the most Oregon exports by value ($3.9 billion) followed by Canada, and a number of Asian countries. Over the last decade export growth has been most robust with China (+175 percent), Malaysia (+114 percent), and Vietnam (+1,500 percent).

FIGURE 2.06: OREGON EXPORTS BY PROJECT CATEGORY (2018)



Source: US Department of Commerce

Economic development leaders in the region are confident there is more room for growth. Increasing exports has become a central component of regional economic development strategies. The connection of export growth to job creation is clear; the Oregon Office of Economic Analysis estimates 90,000 jobs are directly supported by Oregon exports.

- **Green Technology:** Among the strategic opportunities Oregon faces is leading growth in green energy and technology. The initiative to increase energy efficiency, reduce carbon emissions, and develop alternative means of energy have resulted in increased investment across a range of industries. Oregon has a competitive advantage in many of these arenas, including cross-laminated lumber, biofuels, wind and wave energy, and solar energy. The extent to which these industries can achieve stabilized competitiveness through scale and/or technological advance will influence local opportunities.
- **Other Long-Term Advantages:** Oregon holds many other long-term competitive advantages on both a national and global scale, including but not limited to its relatively low electricity costs; strategic economic location on the Pacific Rim; and proximity to California, Washington, British Columbia, and Asia. Relative to these markets, communities in Oregon boast clean water supplies, cost of living advantages, and lower space rents. The last decade has also seen an increase in awareness nationwide of Oregon as an attractive place to visit and live. While this brings some growing pains, it also drives continued economic growth to house and serve new population and businesses.

Economic Risks

The economic outlook for Oregon is not without risks, particularly over the long-term planning period. Those risks recently identified by the 2019 OEA forecast include:

Nationwide Economic Cycle—As of the time of this analysis, the state continues to share in the benefits of one of the longest economic expansions in history, with continued growth in GDP and jobs, and record low unemployment. Like all expansions, the current one will end at some point, and Oregon

will experience the contraction along with other regions. The timing of the next downturn or the sectors most impacted are yet to be seen.

Housing Affordability—The supply of housing in many parts of the state continues to lag demand from both homebuyers and investors, making housing affordability an increasing problem especially in areas that have experienced good job growth. If increasing rents and home prices continue to outpace income growth, housing affordability will become a brake on future growth as the workforce struggles to find appropriate housing. While the pace of rent and price increases has moderated somewhat in recent years in many Oregon markets, they continue to grow.

Export Challenges—While many structural conditions are in place to facilitate strong export expansion, prospects for growth are not without risks. Most notably, reoccurring labor disputes at the Port of Portland have undermined certainty for exporting firms in the Oregon market. A long-term resolution and return of shipping business will be necessary for the region to meet its export goals.

The current US political climate has grown more hostile to trade agreements and more favorable to measures such as tariffs which have the potential to trigger reprisals from other countries and significantly impact world trade. This political climate has created significant uncertainty over where these measures will be put in effect, and how long they might remain in place. Changes in the strength of the U.S. dollar also impact exports positively or negatively.

Commodity Prices—While always fluctuating, commodity prices remain high and any demand driven commodity price inflation can threaten regional or global expansion. It is normal for inflation to occur during expansions, as greater economic activity drives up the cost of oil, timber, metals, and other inputs. Rising commodity prices reduce resources available for other purchases, and ultimately drive up prices as the costs are passed on to consumers.

Federal Timber Policy—The long-term status of federal payments to timber counties remains uncertain, though recently reinstated. The loss of this revenue would have a significant fiscal impact on many rural Oregon counties with the fallout likely to be felt statewide in the increased need to fund the gap.

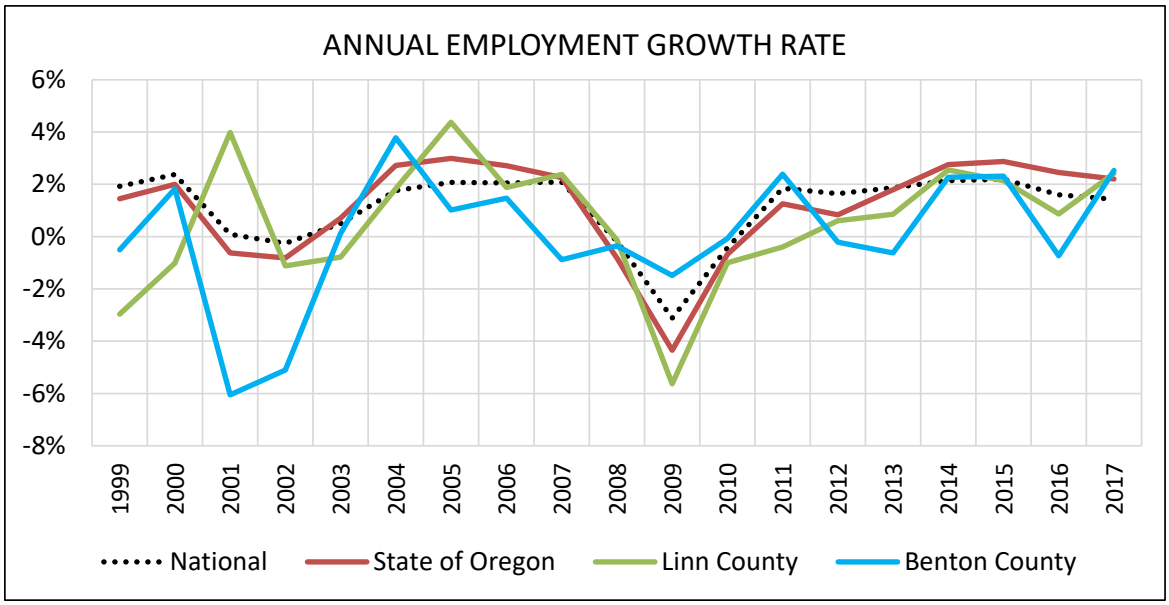
LINN AND BENTON COUNTIES, CITY OF ALBANY ECONOMIC TRENDS

Most of the City of Albany and urban growth boundary is located in Linn County (11,350 acres, or 82 percent), including most of the employment lands. Two thousand five hundred fifty (2,550) acres of the city is located in Benton County. Given Albany's location on the boundary, economic trends in both counties impact the city. However, being the largest city and employment center in Linn County, the trends in Linn will most closely reflect local Albany trends. Benton County data greatly reflect the Corvallis economy which is the largest population and employment center in that county.

In 2019, Albany had approximately 27,750 local jobs, while Linn County had roughly 61,000 jobs, and Benton County had 52,000 jobs. Over 95 percent of Albany's employment is located in Linn County, while a little over 1,000 jobs are located in North Albany in Benton County. Therefore, Albany represents roughly 47 percent of Linn County Employment, and only about two percent of Benton County employment.

The annual rate of employment growth in Linn County has closely mirrored the broad national and statewide trends (Figure 2.07). The Benton County growth rates have been more irregular, reflecting the more erratic influence of the university-based economy and staffing decisions of Hewlett Packard as a major employer.

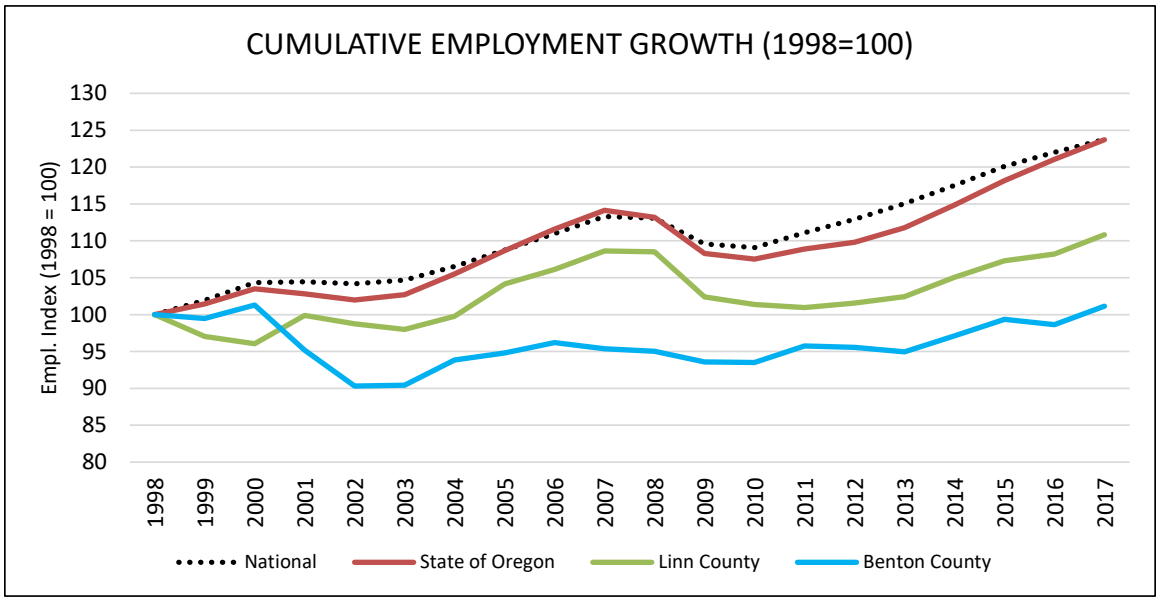
FIGURE 2.07: COMPARISON OF ANNUAL EMPLOYMENT GROWTH RATES



SOURCE: U.S. Bureau of Economic Analysis, JOHNSON ECONOMICS

On a cumulative basis Linn County has fallen behind the national and statewide growth, with the employment base up 11 percent over the last twenty years compared to 24 percent statewide and nationally. Benton County by contrast has experienced very flat employment over the past 20 years, after decreasing notably early in the new century (Figure 2.08).

FIGURE 2.08: CUMULATIVE EMPLOYMENT GROWTH

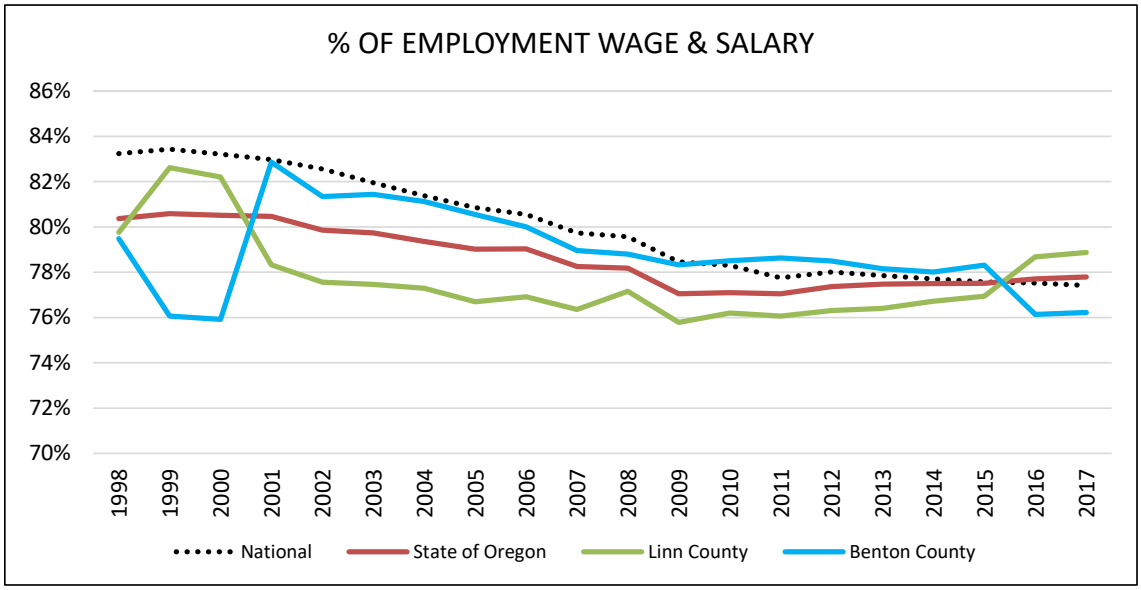


SOURCE: U.S. Bureau of Economic Analysis, JOHNSON ECONOMICS

Linn County's employment base has grown by roughly 8,000 jobs since 2000. After the prior peak in 2007, employment fell by an estimated 4,200 jobs, or seven percent in the recession. Employment has since recouped these losses and is two percent higher than the prior peak. Benton County experienced its greatest employment declines in the early 2000s and less so in the more recent recession.

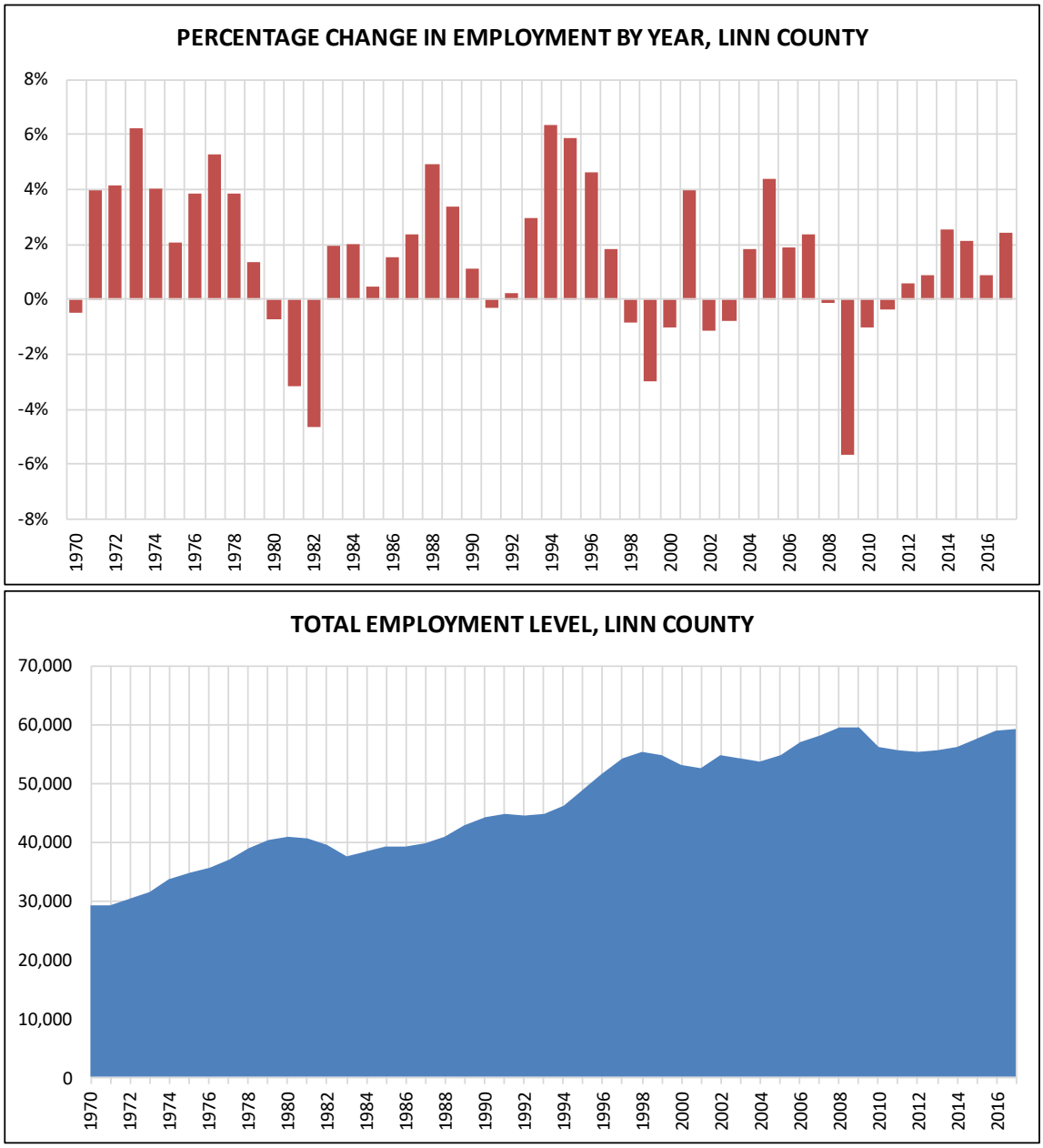
The employment base in Linn County has a similar estimated share of self-employed (21 percent) as the national and state averages, with wage and salary employment accounting for roughly 79 percent of overall estimated employment in the county. This compares to a rate of 78 percent statewide and nationally (Figure 2.09).

FIGURE 2.09: PERCENT OF TOTAL EMPLOYMENT REPRESENTED BY WAGE AND SALARY



SOURCE: U.S. Bureau of Economic Analysis, JOHNSON ECONOMICS

FIGURE 2.10: LINN COUNTY EMPLOYMENT TRENDS



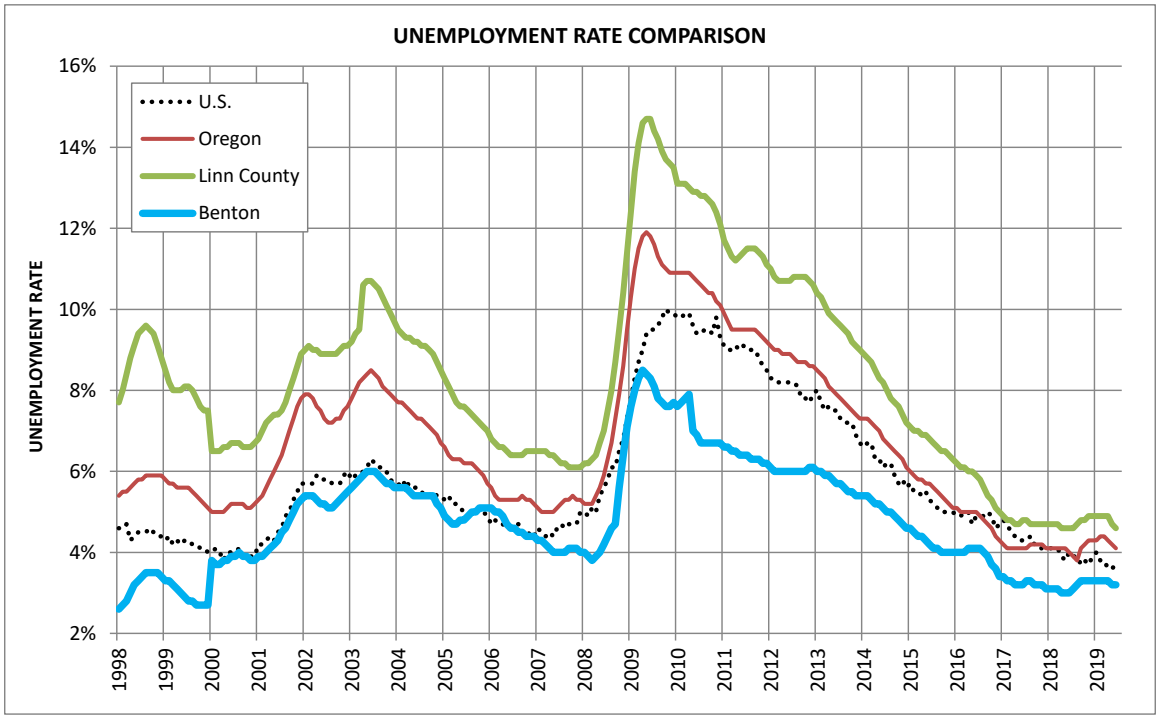
SOURCE: U.S. Bureau of Economic Analysis

Figure 2.10 shows annual growth or loss of employment since 1970, as well as the growth in cumulative employment. After losing employment in the recession, growth once again turned positive in 2012. Local employment tends to experience minor seasonal fluctuations, being lowest in the winter, after the holiday season and growing in the spring and summer into the following holiday season.

Figure 2.11 shows the unemployment rate in Linn and Benton Counties, compared to the state and national rates. The economic expansion has facilitated a commensurate drop in the unemployment rate since 2009. Over the last 20 years, the Linn Country unemployment rate has exceeded the national rate, while the Benton County rate has tended to be lower. This is attributable to Benton County's reliance on the university, other government and health care sectors, which tend to be more stable in recessions. Linn

County will be more susceptible to general economic swings that impact the lumber and home building markets, and purchases from the manufacturing sector.

FIGURE 2.11: UNEMPLOYMENT RATE TRENDS



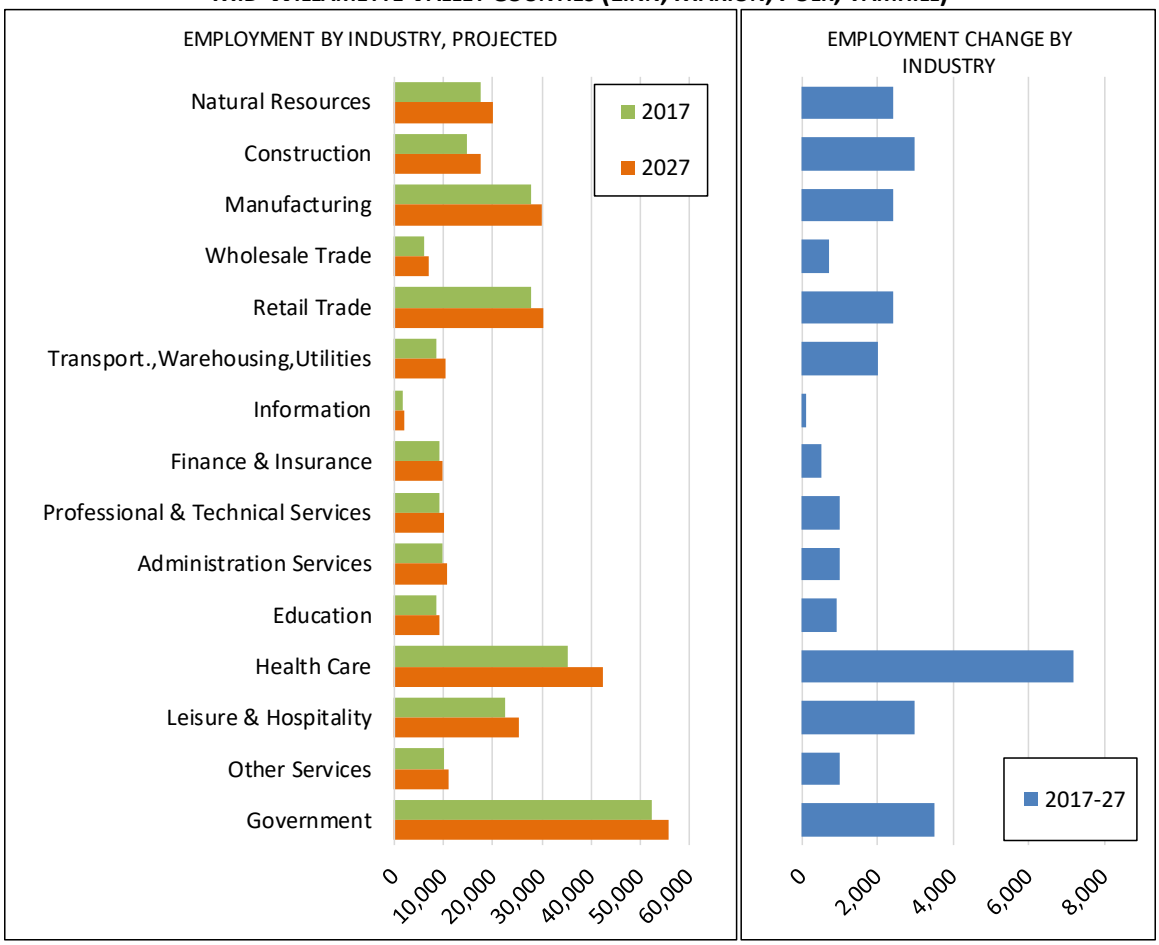
SOURCE: U.S. Bureau of Economic Analysis, JOHNSON ECONOMICS

As we reach full employment, tight labor market conditions may limit growth potential in the future both locally and nationally. The local area's ability to attract and retain workforce will be critical to sustaining economic growth going forward. In mid-2019, the unemployment rate had fallen to a healthy 4.6 percent in Linn County, and three percent in Benton County. The statewide rate is four percent, while the national rate is roughly 3.5 percent.

Economic Forecast – According to the Oregon Employment Department, most industries are forecast to expand at a modest rate over the next decade in the broader mid-valley submarket (Linn, Marion, Polk, and Yamhill counties)[2]. On an absolute basis, the greatest gains are forecast in natural resource industries, education and healthcare, manufacturing, and government (Figure 2.12). On a percentage growth basis, the most rapid expansion is expected in the natural resources and construction sectors.

[2] OED includes Benton County in another economic region with mostly central and north coastal counties. The trends in that submarket are less likely to be relevant to Albany.

FIGURE 2.12: PROJECTED EMPLOYMENT GROWTH BY SECTOR
MID-WILLAMETTE VALLEY COUNTIES (LINN, MARION, POLK, YAMHILL)

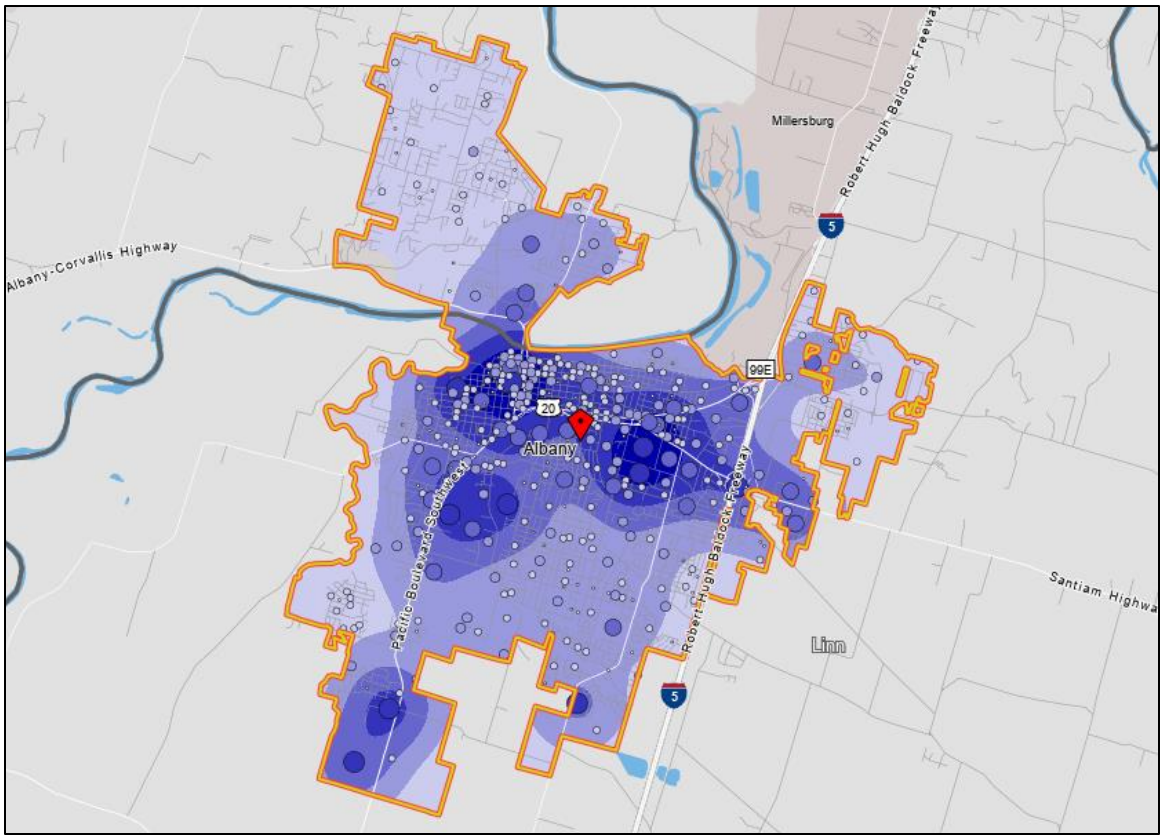


SOURCE: State of Oregon Employment Department

Albany Jobs/Household Ratio – Albany features a healthy jobs-to-households ratio. There are an estimated 27,750 jobs in the City of Albany (including covered and non-covered), and an estimated 21,750 households in Albany. This represents 1.35 jobs per household.

Employment in the City of Albany is concentrated in a few key areas, including the downtown, Heritage Mall area, and central and southern industrial areas (Figure 2.13).

FIGURE 2.13: DISTRIBUTION OF EMPLOYMENT, CITY OF ALBANY, 2017



SOURCE: Census Bureau, LEHD Data

Commute Patterns – Commuting patterns are an important element in the local economy. They are indicative of the labor shed from which companies can draw workers; the extent to which job creation translates into increased demand for housing, goods, and services; and the overall balance of population and employment in the community.

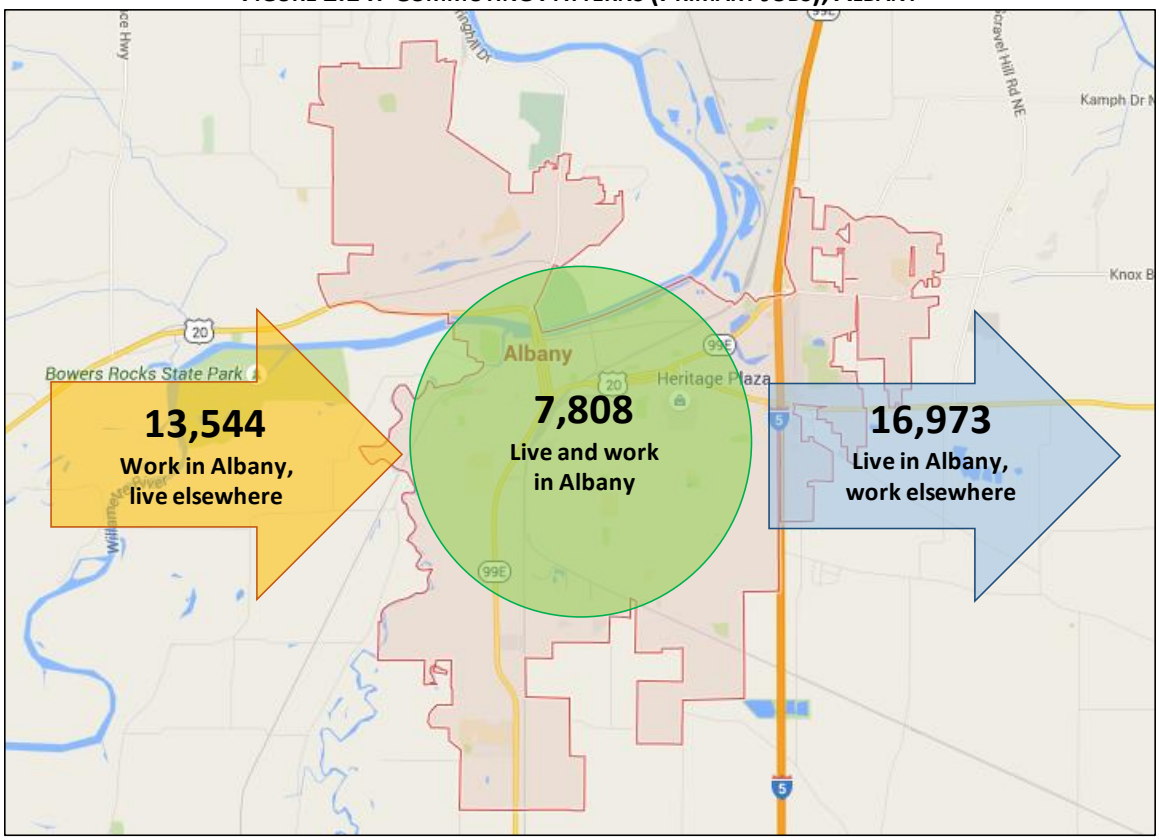
The following figure (Figure 2.14) shows the inflow and outflow of commuters to Albany according to the Census Employment Dynamics Database. (The figures discussed here are best understood as indicators of the general pattern of commuting and not exact figures.

As of 2017, the most recent year available, the Census estimated there were 21,350 covered employment[3] jobs located in Albany. Of these, 7,800 or 37 percent, are held by local residents, while over 13,500 employees commute into the city from elsewhere. This pattern is fairly common among most communities. The most common homes of local workers commuting into the city are Corvallis, Lebanon, and Salem.

Of the estimated 24,800 employed Albany residents, 68 percent of them commute elsewhere to employment. The most common destinations for Albany commuters are Corvallis, Salem, and Eugene. Smaller shares work in the Portland metro or across the mid-Willamette Valley.

[3] Covered employment refers to those jobs where the employee is covered by federal unemployment insurance. This category does not include many contract employees and self-proprietors and therefore is not a complete picture of local employment.

FIGURE 2.14: COMMUTING PATTERNS (PRIMARY JOBS), ALBANY



Source: US Census Longitudinal Employer-Household Dynamics

The following figure presents the demographics of the covered employment workforce commuting into and out of Albany and Linn County (Figure 2.15).

FIGURE 2.15: NET INFLOW-OUTFLOW DETAIL, CITY OF ALBANY, 2017

	Albany 2017		Linn County 2017	
	Count	Share	Count	Share
Selection Area Labor Market Size (Covered Jobs)				
Employed in the Selection Area	21,352	100.0%	45,171	100.0%
Living in the Selection Area	24,781	116.1%	53,321	118.0%
Net Job Inflow (+) or Outflow (-)	(3,429)	-	(8,150)	-
In-Area Labor Force Efficiency (Covered Jobs)				
Living in the Selection Area	24,781	100.0%	53,321	100.0%
Living and Employed in the Selection Area	7,808	31.5%	24,163	45.3%
Living in the Selection Area but Employed Outside	16,973	68.5%	29,158	54.7%
In-Area Employment Efficiency (Covered Jobs)				
Employed in the Selection Area	21,352	100.0%	45,171	100.0%
Employed and Living in the Selection Area	7,808	36.6%	24,163	53.5%
Employed in the Selection Area but Living Outside	13,544	63.4%	21,008	46.5%
Outflow Job Characteristics (Covered Jobs)				
External Jobs Filled by Residents	16,973	100.0%	29,158	100.0%
Workers Aged 29 or younger	4,029	23.7%	7,086	24.3%
Workers Aged 30 to 54	9,181	54.1%	15,375	52.7%
Workers Aged 55 or older	3,763	22.2%	6,697	23.0%
Workers Earning $1,250 per month or less	3,471	20.5%	6,377	21.9%
Workers Earning $1,251 to $3,333 per month	6,064	35.7%	10,991	37.7%
Workers Earning More than $3,333 per month	7,438	43.8%	11,790	40.4%
Workers in the "Goods Producing" Industry Class	3,752	22.1%	5,065	17.4%
Workers in the "Trade, Transportation, and Utilities" Industry Class	3,452	20.3%	6,150	21.1%
Workers in the "All Other Services" Industry Class	9,769	57.6%	17,943	61.5%
Inflow Job Characteristics (Covered Jobs)				
Internal Jobs Filled by Outside Workers	13,544	100.0%	21,008	100.0%
Workers Aged 29 or younger	3,481	25.7%	5,085	24.2%
Workers Aged 30 to 54	6,953	51.3%	10,669	50.8%
Workers Aged 55 or older	3,110	23.0%	5,254	25.0%
Workers Earning $1,250 per month or less	3,670	27.1%	4,894	23.3%
Workers Earning $1,251 to $3,333 per month	4,906	36.2%	7,409	35.3%
Workers Earning More than $3,333 per month	4,968	36.7%	8,705	41.4%
Workers in the "Goods Producing" Industry Class	1,870	13.8%	5,681	27.0%
Workers in the "Trade, Transportation, and Utilities" Industry Class	2,939	21.7%	5,202	24.8%
Workers in the "All Other Services" Industry Class	8,735	64.5%	10,125	48.2%
Interior Flow Job Characteristics (Covered Jobs)				
Internal Jobs Filled by Residents	7,808	100.0%	24,163	100.0%
Workers Aged 29 or younger	1,911	24.5%	5,414	22.4%
Workers Aged 30 to 54	4,041	51.8%	12,624	52.2%
Workers Aged 55 or older	1,856	23.8%	6,125	25.3%
Workers Earning $1,250 per month or less	2,055	26.3%	5,546	23.0%
Workers Earning $1,251 to $3,333 per month	3,118	39.9%	9,325	38.6%
Workers Earning More than $3,333 per month	2,635	33.7%	9,292	38.5%
Workers in the "Goods Producing" Industry Class	1,317	16.9%	7,380	30.5%
Workers in the "Trade, Transportation, and Utilities" Industry Class	1,024	13.1%	4,016	16.6%
Workers in the "All Other Services" Industry Class	5,467	70.0%	12,767	52.8%

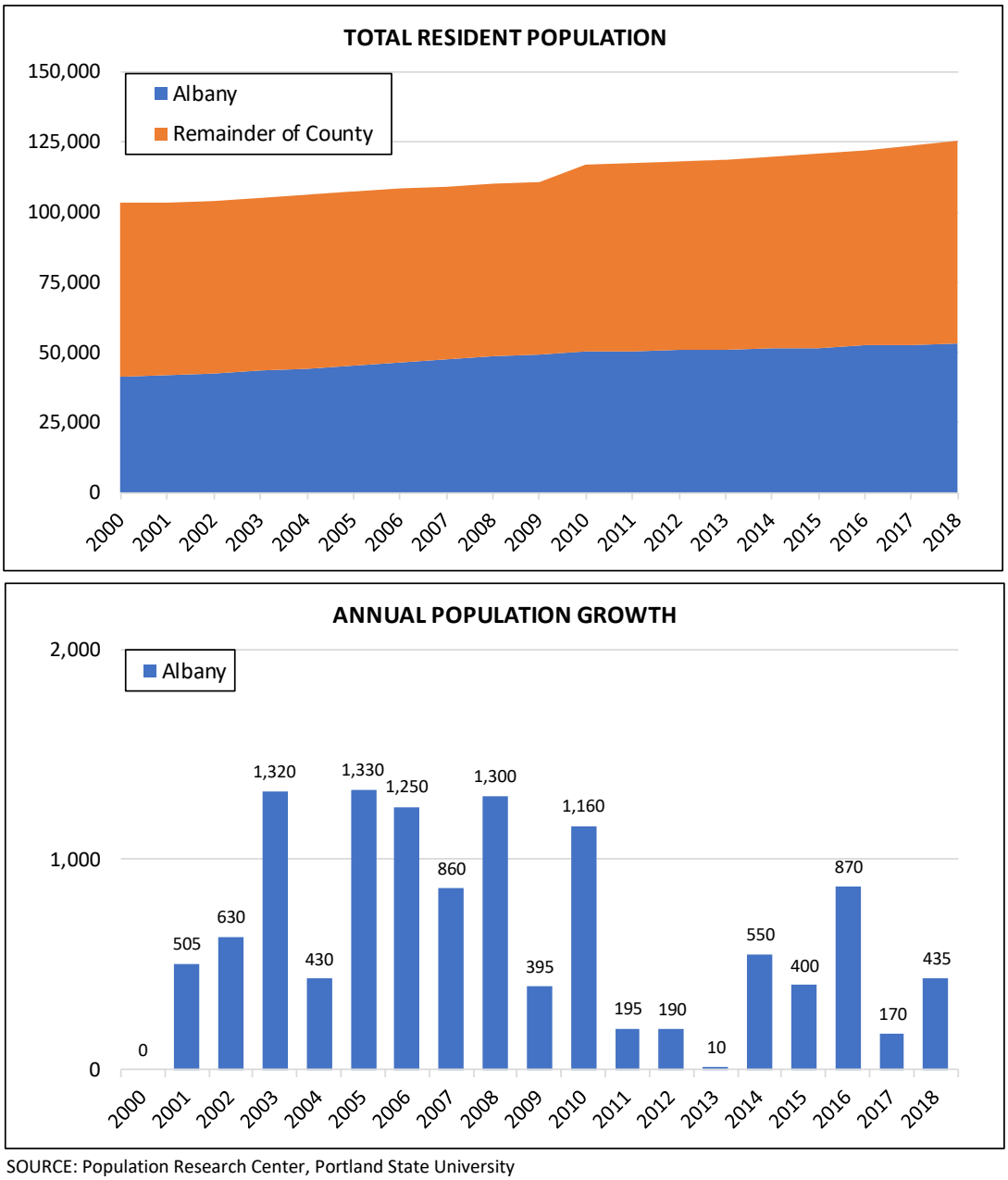
SOURCE: US Census Burea, LEHD Origin-Destination Employment Statistics

Population and Workforce - The population base in both Albany and in Linn County have grown at a rate of slightly under one percent since 2010, according to the Population Research Center at Portland State

University. The growth rate is estimated to have increased more in recent years and is projected to accelerate over the coming 20-year period.

The City of Albany had an estimated population of 53,000 in 2018. Nearly 8,000 people (15 percent) live in North Albany (Benton County), while 45,000 people (85 percent) live on the Linn County side. North Albany has developed the most recently, and therefore has grown by 56 percent in population since 2000, while the Linn County portion of Albany grew 26 percent in that time. In total, the city grew by over 12,000 or 30 percent since 2000.

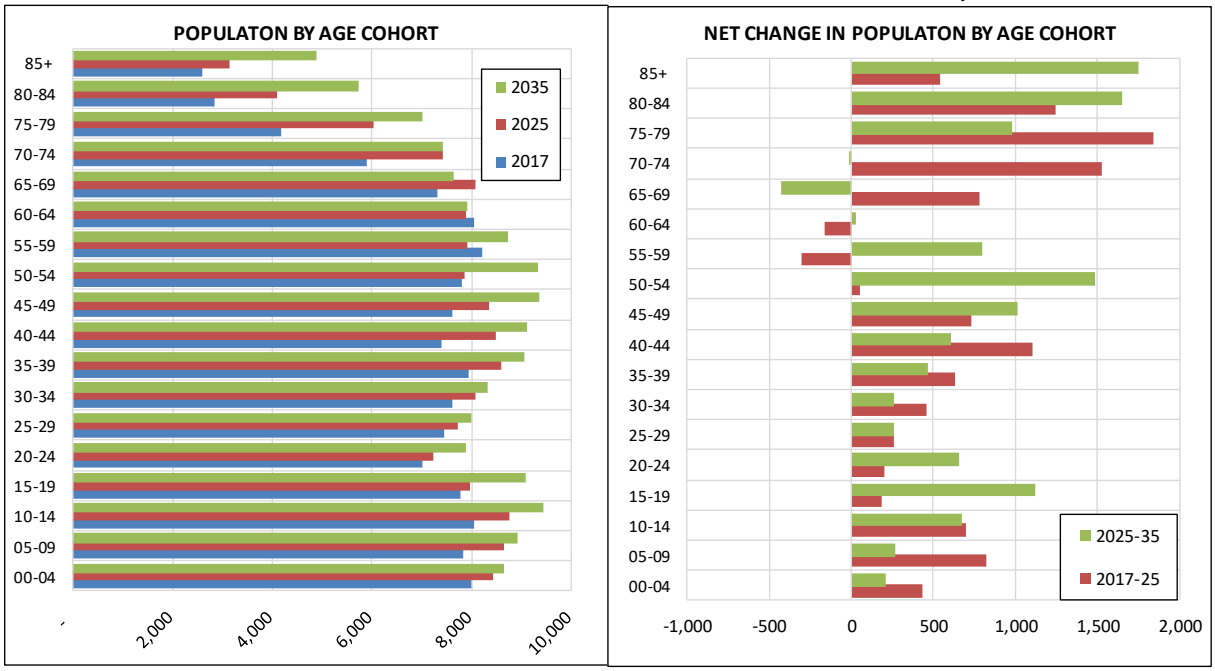
FIGURE 2.16: HISTORIC POPULATION TRENDS, LINN COUNTY AND CITY OF ALBANY (TOTAL)



SOURCE: Population Research Center, Portland State University

The composition of the population base is expected to become generally older. The trend is most pronounced for residents over 65 years of age, but growth is also anticipated in age categories that traditionally form the base of the workforce.

FIGURE 2.17: HISTORIC AND PROJECTED DISTRIBUTION OF POPULATION BY AGE COHORT, LINN COUNTY



SOURCE: Population Research Center, Portland State University

Race and Ethnicity: The population of Albany was estimated to be 90 percent white and 10 percent minority or bi-racial, a somewhat smaller minority share than statewide. The city is estimated to have a lower share of minorities in most categories. In 2017, Latinos were estimated to make up 12 percent of the county population, similar to the 13 percent statewide.

FIGURE 2.18: DISTRIBUTION OF POPULATION BY RACE AND ETHNICITY, CITY OF ALBANY

	City of Albany				Oregon			
Distribution of Population	**2000**	**2017**	**Change**	**Share**	**2000**	**2017**	**Change**	**Share**
Total:	40,852	52,007	27%	100%	3,421,399	4,025,127	18%	100%
White	37,453	46,704	25%	90%	2,961,623	3,416,776	15%	85%
Black	217	363	67%	1%	55,662	76,347	37%	2%
Native American	500	426	-15%	1%	45,211	45,332	0%	1%
Asian	465	1,128	143%	2%	101,350	166,351	64%	4%
Hawaiian or Pac. Islander	86	47	-45%	0%	7,976	15,157	90%	0%
Other Race	1,084	1,435	32%	3%	144,832	121,000	-16%	3%
Two or More Races	1,047	1,904	82%	4%	104,745	184,164	76%	5%
Latino (of any race)	2,489	6,296	153%	12%	275,314	509,507	85%	13%

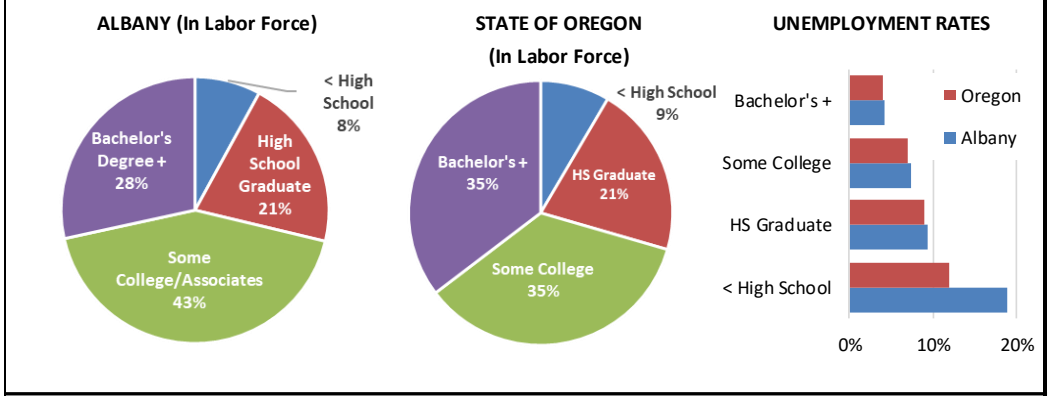
SOURCE: Census (Tables QT-P3, B02001, B03002) Population Research Center, Portland State University
* 2017 Total county population is based on PSU 2017 estimate, applying the distribution of race and ethnicity from 2017 ACS.

The educational attainment level of the local workforce is higher than the county and similar to the statewide profile. Residents of working age in Albany are as likely to have at least some college education,

but a lower share have completed a college degree (28 percent vs. 35 percent). The fact that the population includes many current students who have not yet graduated likely contributes to this finding.

FIGURE 2.19: EDUCATIONAL ATTAINMENT PROFILE BY EMPLOYMENT STATUS, 2017

	City of Albany 2017		Linn County 2017		State of Oregon 2017	
	Count	%	Count	%	Count	%
Less Than High School Graduate	**2,298**	**8.6%**	**5,567**	**9.0%**	**207,945**	**9.8%**
In labor force:	1,636	71.2%	3,498	62.8%	137,621	66.2%
In Armed Forces	0	0.0%	0	0.0%	0	0.0%
Civilian:	1,636	71.2%	3,498	62.8%	137,621	66.2%
Employed	1,325	57.7%	3,024	54.3%	120,998	58.2%
Unemployed	311	13.5%	474	8.5%	16,623	8.0%
Not in labor force	662	28.8%	2,069	37.2%	70,324	33.8%
High school graduate (or equivalency):	5,950	**22.2%**	17,890	**28.8%**	478,316	**22.5%**
In labor force:	4,281	71.9%	12,506	69.9%	340,327	71.2%
In Armed Forces	0	0.0%	8	0.0%	344	0.1%
Civilian:	4,281	71.9%	12,498	69.9%	339,983	71.1%
Employed	3,882	65.2%	11,344	63.4%	309,361	64.7%
Unemployed	399	6.7%	1,154	6.5%	30,622	6.4%
Not in labor force	1,669	28.1%	5,384	30.1%	137,989	28.8%
Some college or associate's degree:	11,309	**42.2%**	26,670	**43.0%**	750,303	**35.4%**
In labor force:	8,813	77.9%	19,845	74.4%	570,931	76.1%
In Armed Forces	10	0.1%	10	0.0%	1,004	0.1%
Civilian:	8,803	77.8%	19,835	74.4%	569,927	76.0%
Employed	8,146	72.0%	18,392	69.0%	530,003	70.6%
Unemployed	657	5.8%	1,443	5.4%	39,924	5.3%
Not in labor force	2,496	22.1%	6,825	25.6%	179,372	23.9%
Bachelor's degree or higher:	7,228	**27.0%**	11,918	**19.2%**	684,648	**32.3%**
In labor force:	5,851	80.9%	9,567	80.3%	573,083	83.7%
In Armed Forces	16	0.2%	16	0.1%	746	0.1%
Civilian:	5,835	80.7%	9,551	80.1%	572,337	83.6%
Employed	5,591	77.4%	9,016	75.7%	549,574	80.3%
Unemployed	244	3.4%	535	4.5%	22,763	3.3%
Not in labor force	1,377	19.1%	2,351	19.7%	111,565	16.3%



SOURCE: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

III. TARGET INDUSTRY ANALYSIS

This element of the Economic Opportunities Analysis utilizes analytical tools to assess the economic landscape in Albany, Linn County, and the region. The objective of this process is to identify a range of industry types that can be considered targeted economic opportunities over the planning period.

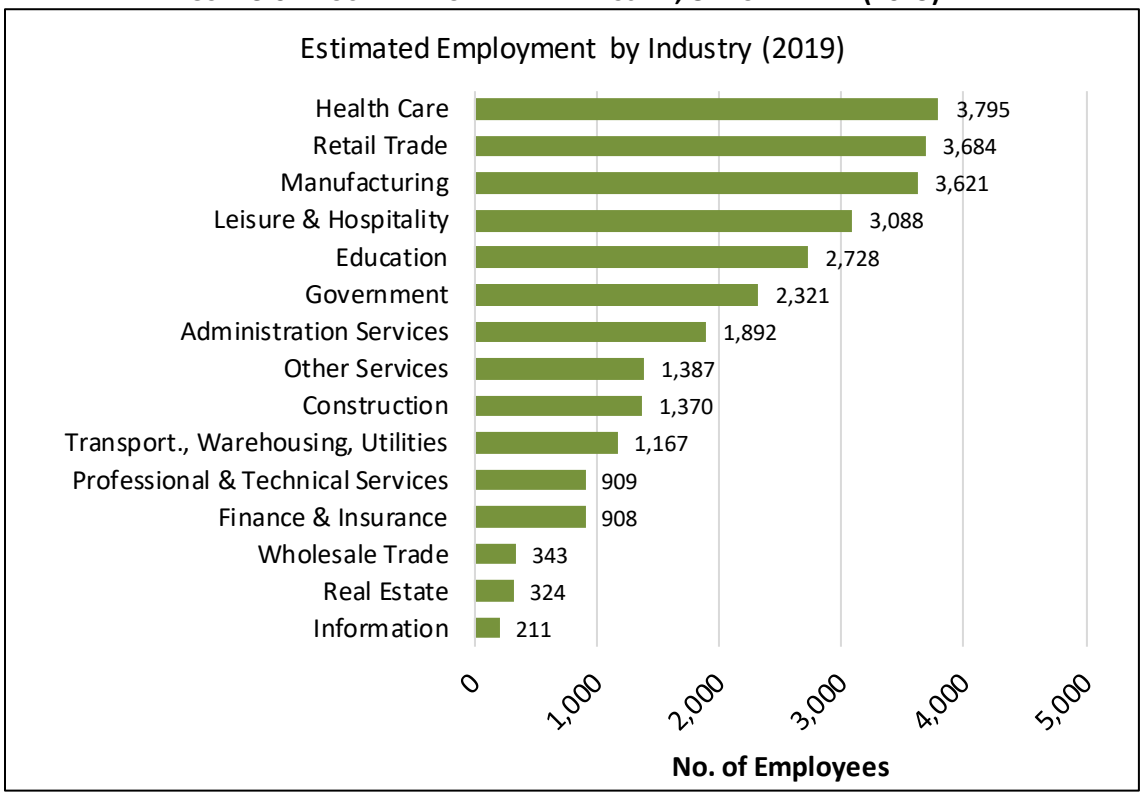
A range of analytical tools to assess the local and regional economic landscape are used to determine the industry typologies that currently outperform in the city in comparison to state or national metrics. Where possible, we look to identify the sectors likely to drive growth in current and subsequent cycles.

LOCAL EMPLOYMENT SNAPSHOT

As discussed in more detail in the following section, Albany features an estimated 27,750 jobs within its UGB as of 2019. The profile of current industries provides the best indicator of which sectors may be local areas of strength and competitive advantage.

The following table presents the major industry sectors ranked by estimated number of employees. The largest sectors are health care, retail, and manufacturing.

FIGURE 3.01: LOCAL EMPLOYMENT BY INDUSTRY, CITY OF ALBANY (2019)



Source: Johnson Economics, Oregon Employment Department, BEA

Figure 3.02 presents the largest employers in Albany.

FIGURE 3.02: LARGEST PRIVATE AND PUBLIC EMPLOYERS, ALBANY (2017)

RANK	COMPANY	PRODUCT	# OF EMP*
1	Greater Albany Public Schools	Primary & Secondary Education	1,400
2	ATI	Metals	1,250
3	Linn Benton Community College	Vocational & Higher Education	1,100
4	Samaritan Health Services	Acute Care & Health Center	1,050
5	Linn County	County Government	750
6	Target Distribution Center	Retail Distribution Center	650
7	City of Albany	City Government	450
8	OFD Foods	Freeze Dried Foods	400
9	CMH Manufacturing West	Manufactured Housing	400
10	Mennonite Village	Senior Housing	375
11	Walmart	Retail	300
12	National Frozen Foods	Frozen Fruits & Vegetables	275
13	Fred Meyer	Retail	275
14	Costco	Retail	275
15	Linn Benton Lincoln Educ. Dist.	Education	230

* Employment totals are approximate

Source: Oregon Employment Department, QCEW 2017; Albany Area Chamber of Commerce

ECONOMIC SPECIALIZATION

The most common analytical tool to evaluate economic specialization is a location quotient (L.Q.) analysis. This metric compares the concentration of employment in an industry at the local level to a larger geography. All industry categories are assumed to have a quotient of 1.0 on the national level, and a locality's quotient indicates if the local share of employment in each industry is greater or less than the share seen nationwide. For instance, a quotient of 2.0 indicates that locally, that industry represents twice the share of total employment as seen nationwide. A quotient of 0.5 indicates that the local industry has half the expected employment.

Linn County: A location quotient analysis was completed for Linn County, which evaluated the distribution of local employment relative to national averages, as well as average annual wage levels by industry (Figure 3.03). The industries that are most highly represented relative to national averages were forestry and logging, metal, and wood product manufacturing. Crop production is also well represented in the county, but this is less relevant to Albany proper.

FIGURE 3.03: INDUSTRY SECTOR SPECIALIZATION BY MAJOR INDUSTRY, LINN COUNTY, 2018[4]

Rank	NAICS	Description	Employment	Emp. L.Q.	Average Wage	Total Wages L.Q.
1	113	Forestry and logging	417	23.9	$53,161	36.0
2	331	Primary metal manufacturing	2,289	18.6	$85,154	29.2
3	321	Wood product manufacturing	1,901	14.5	$54,066	22.3
4	111	Crop production	1,511	8.5	$38,202	12.4
5	814	Private households	424	4.5	$18,439	4.1
6	493	Warehousing and storage	1,575	4.3	$40,184	5.2
7	115	Agriculture and forestry support activities	381	3.0	$51,070	6.0
8	813	Membership associations and organizations	878	2.0	$21,466	1.2
9	485	Transit and ground passenger transportation	272	1.8	$27,123	1.8
10	484	Truck transportation	776	1.6	$57,684	2.3
11	562	Waste management and remediation services	224	1.6	$50,192	1.7
12	311	Food manufacturing	807	1.6	$46,979	2.0
13	452	General merchandise stores	1,561	1.6	$27,176	2.2
14	623	Nursing and residential care facilities	1,672	1.5	$30,786	1.9
15	333	Machinery manufacturing	517	1.4	$55,376	1.5
16	326	Plastics and rubber products manufacturing	339	1.4	$67,653	2.3
17	424	Merchant wholesalers, nondurable goods	973	1.4	$55,902	1.4
18	238	Specialty trade contractors	2,021	1.4	$55,194	1.7
19	624	Social assistance	1,698	1.4	$20,148	1.5
20	444	Building material and garden supply stores	538	1.3	$28,632	1.4

SOURCE: Bureau of Labor Services

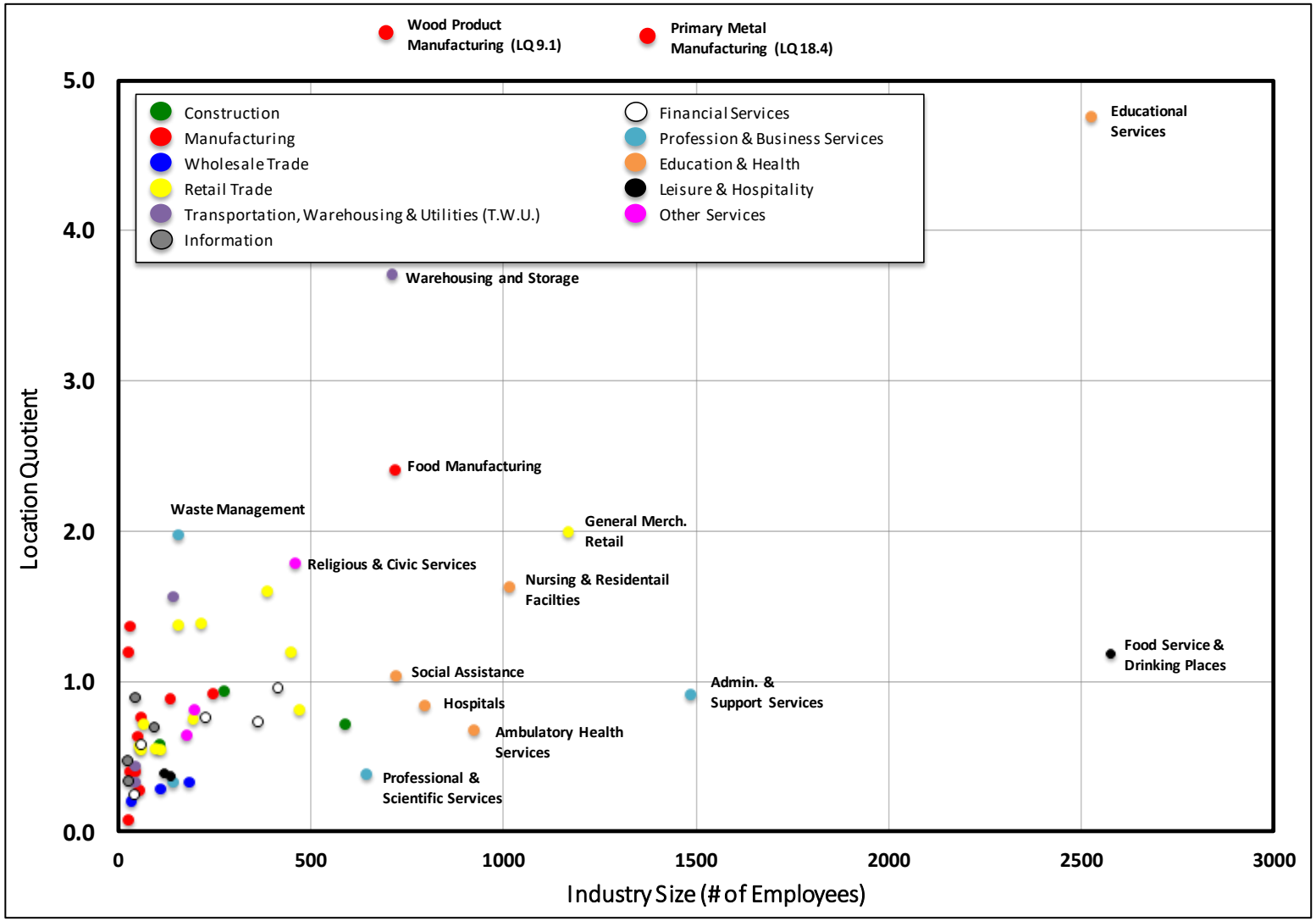
NAICS: North American Industry Classification System; visit census.gov/eos/www/naics/ to learn more about the specific industry types included in each code.

Albany: A similar analysis for industries located within the City of Albany itself, is presented below. Figure 3.04 shows the local subsectors graphed by L.Q. and the overall number of employees in those subsectors.

Those industries with the highest L.Q. in Albany are metal manufacturing and wood product manufacturing. Other industry sectors with high representation are employment in "private households" (i.e., household employees such as nannies and housekeepers), education (including the school district), garden center retailers, warehousing, and food manufacturing.

4 QCEW Data, Annual Average 2018 Data

FIGURE 3.04: INDUSTRY SUBSECTOR SPECIALIZATION, LOCATION QUOTIENT VS. NUMBER OF EMPLOYEES, CITY OF ALBANY, 2017



Source: QCEW Data, Annual Average 2017 Data

Figure 3.05 shows the 20 subsectors with the highest location quotient (L.Q.) of 1.0 or more in the city. These are not necessarily the subsectors with the highest overall employment levels. However, they are the subsectors with the highest representation relative to national levels, which indicates the local economy may have competitive advantages in these industries and the ability to grow on them.

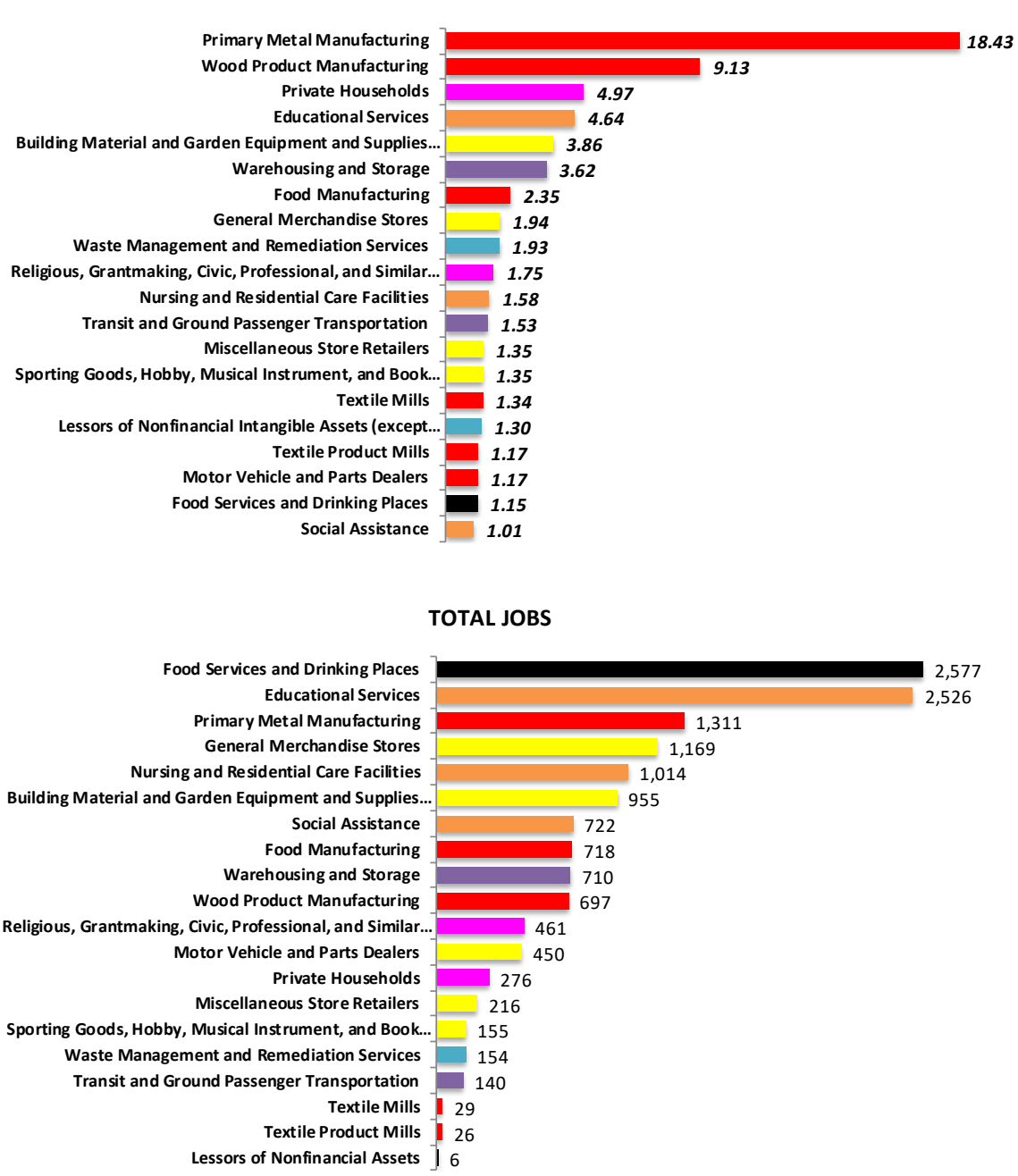
FIGURE 3.05: SUBSECTORS WITH HIGHEST LOCATION QUOTIENT, CITY OF ALBANY, 2017

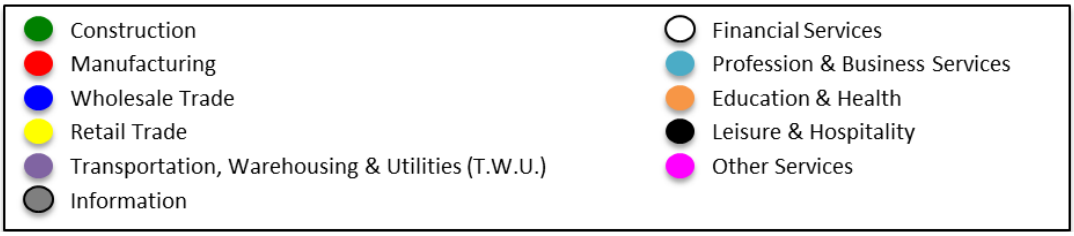
Rank	NAICS	Description	Employment	Emp. L.Q.	Average Wage*
1	331	Primary Metal Manufacturing	1,311	18.4	$85,141
2	321	Wood Product Manufacturing	697	9.1	$54,057
3	814	Private Households	276	5.0	$18,457
4	611	Educational Services	2,526	4.6	$40,547
5	444	Building Material and Garden Equipment Dealers	955	3.9	$28,645
6	493	Warehousing and Storage	710	3.6	$40,176
7	311	Food Manufacturing	718	2.3	$46,979
8	452	General Merchandise Stores	1,169	1.9	$27,184
9	562	Waste Management and Remediation Services	154	1.9	$50,080
10	813	Religious, Grantmaking, Civic, Prof., and Similar Orgs	461	1.7	$21,454
11	623	Nursing and Residential Care Facilities	1,014	1.6	$30,780
12	485	Transit and Ground Passenger Transportation	140	1.5	$27,165
13	453	Miscellaneous Store Retailers	216	1.4	$25,130
14	451	Sporting Goods, Hobby, Music, and Book Stores	155	1.3	$17,449
15	313	Textile Mills	29	1.3	$36,157
16	533	Lessors of Nonfinancial Intangible Assets	6	1.3	$32,364
17	314	Textile Product Mills	26	1.2	$36,157
18	441	Motor Vehicle and Parts Dealers	450	1.2	$42,051
19	722	Food Services and Drinking Places	2,577	1.2	$17,198
20	624	Social Assistance	722	1.0	$20,147

SOURCE: Oregon Employment Department, Bureau of Labor Services; census.gov/eos/www/naics/.
* Average wage by industry is based on wage levels in Linn County due to data limitations.

The following figure presents the same information in chart form.

FIGURE 3.06: SUBSECTORS WITH HIGHEST LOCATION QUOTIENT, CITY OF ALBANY, 2017





Source: QCEW Data, Annual Average 2017 Data

ECONOMIC DRIVERS

The identification of the economic drivers of a local or regional economy are critical in informing the character and nature of future employment, and by extension, land demand over a planning cycle. To this end, we employ a shift-share analysis of the local economy emerging out of the current expansion cycle[5].

A shift-share analysis is an analytical procedure that measures local effect of economic performance within a particular industry or occupation. The process considers local economic performance in the context of national economic trends – indicating the extent to which local growth can be attributed to unique regional competitiveness or simply growth in line with broader trends. For example, consider that Widget Manufacturing is growing at a 1.5 percent rate locally, about the same rate as the local economy. On the surface we would consider the Widget Manufacturing industry to be healthy and contributing soundly to local economic expansion. However, consider also that Widget Manufacturing is booming across the country, growing at a robust four percent annually. In this context, local widget manufacturing is not keeping pace with the broader growth in the industry.

We can generally classify industries, groups of industries, or clusters into four groups:

Growing, Outperforming: Industries that are growing locally at a rate faster than the national average. These industries have characteristics locally leading them to be particularly competitive.

Growing, Underperforming: Industries that are growing locally but slower than the national average. These industries generally have a sound foundation, but some local factor is limiting growth.

Contracting, Outperforming: Industries that are declining locally but slower than the national average. These industries have structural issues that are impacting growth industry wide. However, local firms are leveraging some local or regional factor that is making them more competitive than other firms on average.

Contracting, Underperforming: Industries that are declining locally at a rate faster than the national average. These industries have structural issues that are impacting growth industry wide. However, some local or regional factor is making it increasingly tough on local firms.

The average annual growth rate by industry from 2010 through 2018 (the most recent year available) for Linn County was compared to the national rate. The observed local change was compared to a standardized level reflecting what would be expected if the local industry grew at a rate consistent with national rates for that industry.

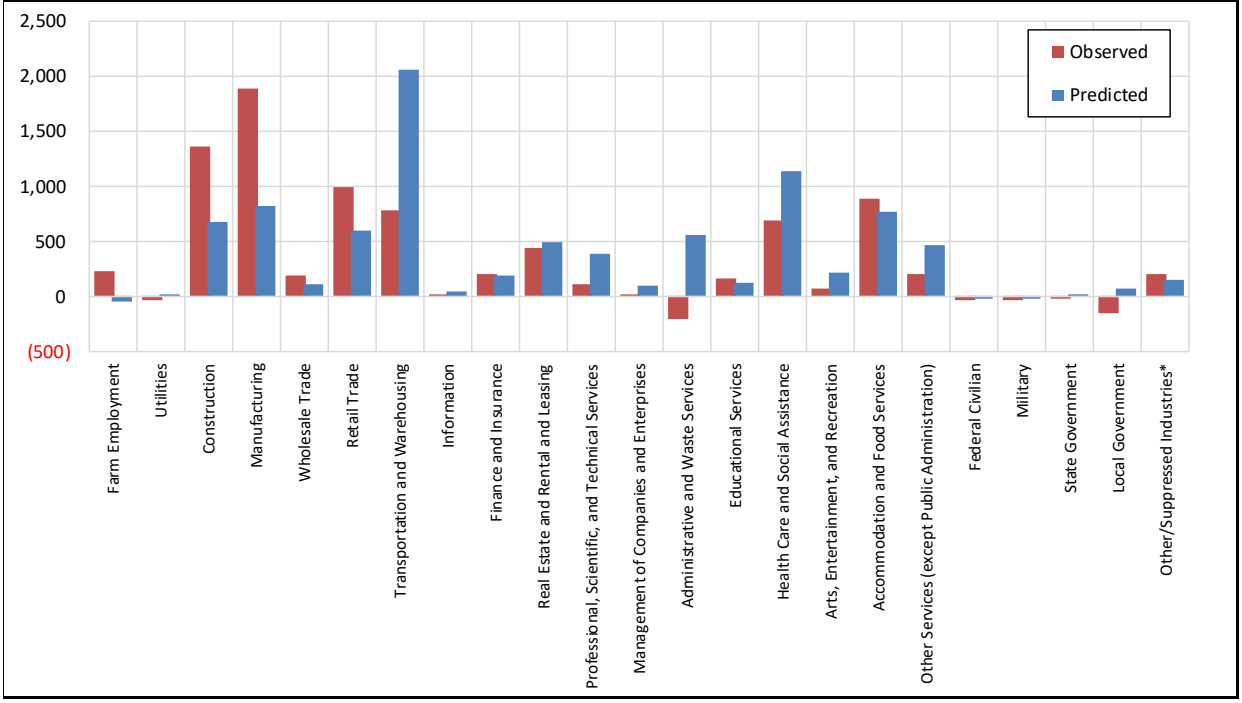
---

5 Measured from the trough of recent recession to 2018, the most recent period available for local employment data.

As shown in Figure 3.07 and 3.08, some key industries showed growth in excess of national rates. These include manufacturing, construction, retail and wholesale trade, and educational services. These industries, particularly manufacturing, are areas of local strength. Other sectors also experienced positive growth, but less than predicted if they had grown at the national rate.

FIGURE 3.07: INDUSTRY SECTOR SHIFT SHARE ANALYSIS, LINN COUNTY (2010 – 2018)

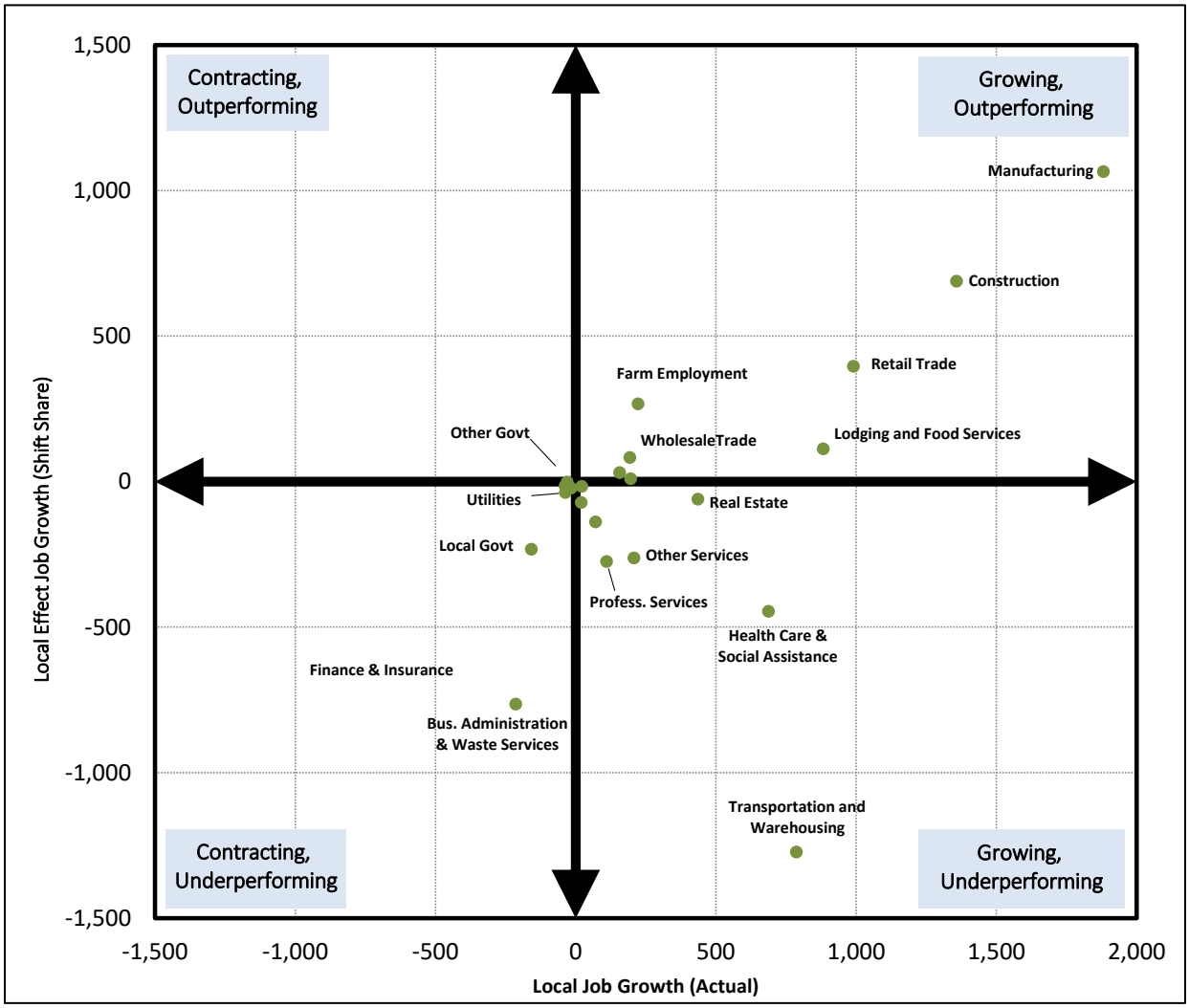
Industry	Average Employment 2010	Average Employment 2017	Net Change Total	Net Change AAGR	Standardized Level - 2017 *	Regional Shift
Farm Employment	3,606	3,829	223	0.9%	3,562	267
Utilities	177	141	(36)	-3.2%	179	(38)
Construction	2,669	4,027	1,358	6.1%	3,339	688
Manufacturing	7,014	8,896	1,882	3.5%	7,831	1,065
Wholesale Trade	1,654	1,847	193	1.6%	1,765	82
Retail Trade	6,019	7,010	991	2.2%	6,614	396
Transportation and Warehousing	2,888	3,675	787	3.5%	4,948	(1,273)
Information	526	548	22	0.6%	565	(17)
Finance and Insurance	1,433	1,629	196	1.8%	1,619	10
Real Estate and Rental and Leasing	2,106	2,542	436	2.7%	2,603	(61)
Professional, Scientific, and Technical Services	1,849	1,959	110	0.8%	2,234	(275)
Management of Companies and Enterprises	285	305	20	1.0%	377	(72)
Administrative and Waste Services	2,767	2,554	(213)	-1.1%	3,319	(765)
Educational Services	764	921	157	2.7%	890	31
Health Care and Social Assistance	6,114	6,802	688	1.5%	7,248	(446)
Arts, Entertainment, and Recreation	887	958	71	1.1%	1,097	(139)
Accommodation and Food Services	2,978	3,861	883	3.8%	3,749	112
Other Services (except Public Administration)	3,037	3,245	208	1.0%	3,508	(263)
Federal Civilian	346	309	(37)	-1.6%	325	(16)
Military	331	301	(30)	-1.3%	303	(2)
State Government	623	607	(16)	-0.4%	630	(23)
Local Government	5,990	5,832	(158)	-0.4%	6,065	(233)
Other/Suppressed Industries*	1,499	1,695	196	1.8%	1,642	53
TOTAL	55,562	63,493	7,931	1.9%	64,412	(919)



* Employment level in each industry had it grown at the same rate as its counterparts at the national level over the same period.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis

FIGURE 3.08: INDUSTRY SECTOR SHIFT SHARE ANALYSIS, LINN COUNTY (2010 – 2018)



SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis

TARGET INDUSTRY CLUSTERS

This section discusses potential target industries for Albany based on the community's historical strengths and advantages, as well as its established economic development goals. These are industries where Albany can focus efforts to grow local business and attract new businesses.

Feedback from Economic Development Stakeholders

During this process, stakeholders in local economic development were engaged to provide insight on Albany's employment and industry goals, strengths, and challenges. This local expertise informs this analysis on what industries the community may target with available resources. The following is a summary of key points made during these discussions:

- Albany should focus on continued light industrial and manufacturing growth going forward. This has long been a strength in the community and part of its employment identity.
- Albany has and can continue to draw companies that are being developed out of the universities in Corvallis and Eugene, and the local National Energy Technical Laboratory.

- Albany's labor shed is quite large, drawing from across the central Willamette Valley. It can draw labor for other communities in every direction.
- Healthy population growth and residential development is supportive and positive for recent and future economic growth.
- Albany should be a manufacturing community, rather than a bedroom community.
- The City should encourage and facilitate job growth and development-ready sites.
- Since the recession, fabrication industries (metals, and to a lesser extent, food and wood) have seen expansion and growth. There should be a focus on new businesses and different types of manufacturing – diversification.
- New and expanding primary enterprises leads to growth of support industries.
- Commercial uses will follow industrial job growth, and there is ample commercial space and land available in central Albany.

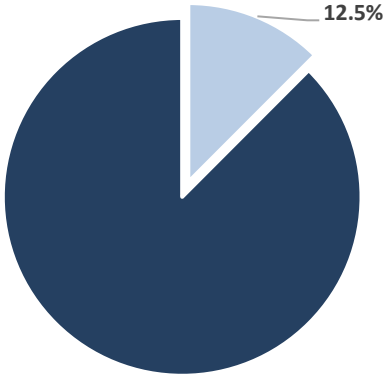
Manufacturing

The manufacturing sector is already an outperforming sector in Albany, representing over 12.5 percent of local employment. It is typically a highly desirable sector for growth, which creates considerable value, pays high wages, and often exports the bulk of its output. The city's central location, with direct access to Interstate 5 and rail make it an attractive location for production.

Albany is an established home to metal, food, wood and wood product manufacturers, and skilled production is a key part of the city's economic identity. Going forward, these will remain good opportunities for growth taking advantage of available industrial lands, infrastructure, and skilled workforce. These export industries also benefit from the ample transportation connections and shipping options in the area.

FIGURE 3.06: MANUFACTURING SECTOR, ALBANY

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS	
2017 EMPLOYMENT	3,476
AVERAGE ANNUAL WAGE (2017)	$68,264
PROJECTED GROWTH	1,091
% OF PROJECTED GROWTH	12.2%

MAJOR EMPLOYERS
PACIFIC CAST TECHNOLOGIES INC
ATI CAST PRODUCTS
OREGON FREEZE DRY, INC
CMH MANUFACTURING WEST INC
NATIONAL FROZEN FOODS CORPORATION
VIPER NORTHWEST INC

Current Employment	2017 Employment	Projected Growth Adjusted	Projected Growth % of Total	Average Wage
Metals	1,770	367	4.1%	$85,141
Food Manufacturing	796	165	1.8%	$46,979
Wood Manufacturing	910	559	6.2%	$54,057
Total	3,476	1,091	12.2%	$68,264

SOURCE: Oregon Employment Department, Bureau of Labor Services, Johnson Economics

Advanced manufacturing is also expected to be an increasing opportunity. In general, this refers to modern manufacturers who use advanced technologies such as robots and software to increase productivity and make traditional methods more efficient. Despite the automation, these industries typically require a sizable trained workforce to run the advanced processes.

Manufacturing firms can be a full range of sizes with differing land needs from small sites to very large. Small manufacturing firms often occupy small spaces in multi-tenant buildings, while large manufacturers may require dedicated sites of hundreds of acres.

The overall employment level in this sector was 3,500 in 2017, representing an estimated 12.5 percent of the total employment base in Albany. The sector is projected to add nearly 1,100 jobs over the next twenty years, accounting for 12 percent of employment growth in Albany during that period. The average annual wage is over $68,500 per year, led by the metals manufacturing industry.

Cluster Strengths

- Proximity to existing transportation, power, water, and fiber infrastructure
- Existing cluster of manufacturing industries in the area, with shared suppliers and expertise
- Skilled workforce, with strong education and training assets in the region
- Strong wages

Cluster Challenges

- Limited supply of larger shovel-ready development sites, for largest manufacturers
- Labor supply is currently constrained

Potential Manufacturing Opportunities

- Expansion of existing and recruitment of new businesses in strength areas: metals and wood products
- Additional food and beverage products/value-added specialty foods
- Growth in burgeoning advanced robotics industry
- Potential to commercialize technologies developing out of OSU, UO, and NETL R&D

Education and Health Services

The education and health services sectors account for over a fifth of all employment in Albany. Demand for these services tends to follow demographic trends, and the aging of the population base is expected to support a growing demand for health services, specifically continuing care. The following are key industry trends:

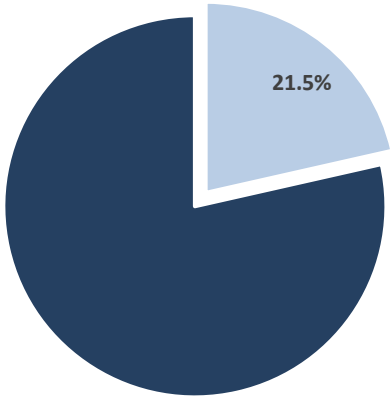
- Emphasis on consolidation, leveraging cost advantages
- Strong growth in utilization of mobile health systems, software, and access to information

- Emerging care models including smaller, distributed clinics (i.e., urgent care)
- Phone and video appointments
- An estimated five percent to eight percent of Boomers will age in multi-family retirement and care facilities

Samaritan Health Services offers a full range of in-patient and out-patient health services in Albany across multiple locations including the Albany General Hospital and dispersed clinics. Linn Benton Community College, based in Albany, offers college credit classes, job skills workshops, college preparatory classes, and customized training for business and industry.

FIGURE 3.07: EDUCATION, HEALTH, AND SOCIAL SERVICES SECTORS, ALBANY

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	5,982
AVERAGE ANNUAL WAGE (2017)	$44,637
PROJECTED GROWTH	2,855
% OF PROJECTED GROWTH	31.9%

MAJOR EMPLOYERS

GREATER ALBANY PUBLIC SCHOOLS
LINN BENTON COMMUNITY COLLEGE
SAMARITAN HEALTH SERVICES
THE MENNONITE VILLAGE
COMMUNITY SERVICES CONSORTIUM
ALBANY BOYS & GIRLS CLUB

Current Employment	2017 Employment	Projected Growth Adjusted	Projected Growth % of Total	Average Wage
Educational services	2,526	748	8.3%	$40,547
Health care and social assistance	3,456	2,107	23.5%	$47,626
Total	5,982	2,855	31.9%	$44,637

SOURCE: Oregon Employment Department, Bureau of Labor Services, Johnson Economics

These sectors accounted for nearly 6,000 jobs in 2017, with average annual wages of $44,376. Health care provides a wide range of wage levels due to the range of education and skills level for different roles across the industry. The sector is expected to add over 2,800 new jobs over the next twenty years, accounting for nearly a third of projected growth.

Healthcare Cluster Strengths

- Aging of population will support health services
- Albany (in conjunction with the Corvallis Samaritan campus) is the regional hub
- Access to I-5 and central location
- Combination of LBCC and nearby OSU offer a good education cluster and supply of young, skilled workforce

Cluster Weakness

- Constrained supply of skilled labor relative to pace of industry growth

Cluster Opportunities

- Development of expanded and/or new medical facilities
- Continued coordination between local industry and LBCC training programs

SECONDARY OPPORTUNITY INDUSTRIES

The wholesale trade, retail, and construction sectors have a sizable representation within the local economy or employment base but are not anticipated to be major targets of specific economic development activity.

The local wholesale trade sector is well represented in comparison to the national average of employment in this sector. The city's access to Interstate 5, and central location within the Willamette Valley are assets. The 2017 average wage was $52,730.

The strength of the construction sector typically trails growth in population and employment, as new households and businesses drive new real estate development. The Construction sector provides both lower-skilled and high-skilled positions and supports solid wages. Having construction capacity also allows the local economy to respond quickly and competently to new demand, while keeping costs down relative to importing construction workers and expertise from outside the area.

This sector accounted for nearly 1,000 jobs in 2017, with average annual wages of $43,700. Though the industry represents just 3.5 percent of current employment, it is forecasted to grow at one of the quickest rates over the next twenty years, adding over 750 new jobs and accounting for eight percent of new job growth.

IV. FORECAST OF EMPLOYMENT

CITY OF ALBANY EMPLOYMENT FORECAST

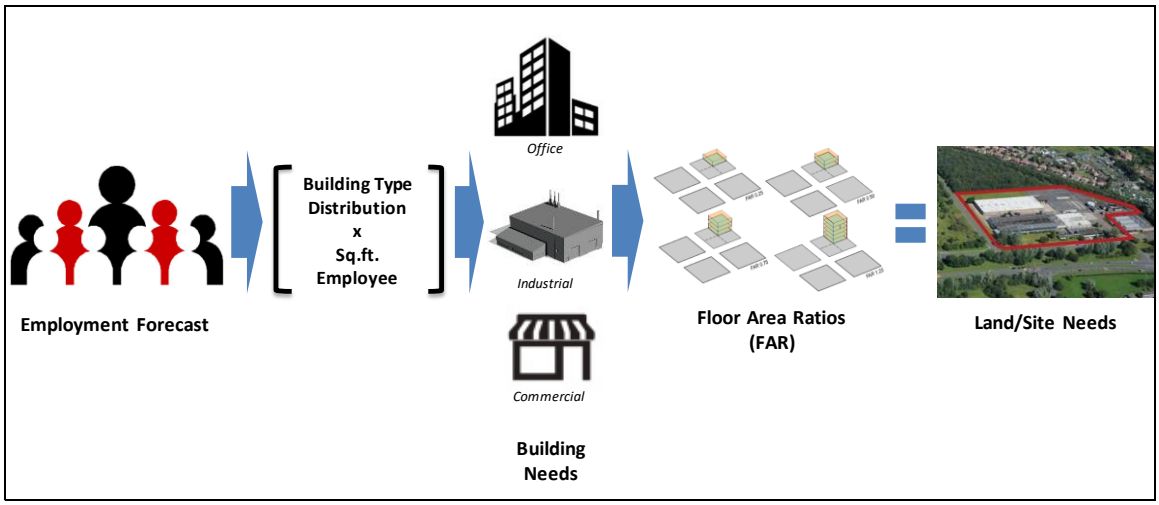
Goal 9 requires that jurisdictions plan for a 20-year supply of commercial and industrial capacity. Because employment capacity is the physical space necessary to accommodate new workers in the production of goods and services, employment needs forecasts typically begin with a forecast of employment growth in the community. The previous analysis of economic trends and targeted industries set the context for these estimates. This analysis translates those influences into estimates of employment growth by broad industry. Forecasts are produced at the sector or subsector level (depending on available information) and are subsequently aggregated to two-digit NAICS sectors. Estimates in this analysis are intended for long-range land planning purposes and are not designed to predict or respond to business cycle fluctuation.

The projections in this analysis are built on an estimate of employment in 2019, the commencement year for the planning period. Employment growth will come as the result of net-expansion of businesses in the community, new business formation, or the relocation/recruitment of new firms. Forecast scenarios consider a range of factors influencing growth. Long-range forecasts typically rely on a macroeconomic context for growth. Inflections in business cycles or the impact of a major shift in employment (i.e., a major unknown recruitment) are not considered.

Overview of Employment Forecast Methodology

The methodology starts with employment forecasts by major commercial and industrial sector. Forecasted employment is allocated to building type, and a space demand is a function of the assumed square footage per employee ratio multiplied by projected change. The need for space is then converted into land and site needs based on assumed development densities using floor area ratios (FARs).

FIGURE 4.01: CONVERSION OF EMPLOYMENT FORECAST TO LAND NEED FORECAST - METHODOLOGY



Source: Johnson Economics

The first step of the analysis is to update covered employment to the 2019 base year. Our City of Albany Quarterly Census of Employment and Wages (QCEW) dataset provides covered employment by industry through 2017. To update these estimates, observed industry specific growth rates for the region between 2017 and 2019 were used.

The second step in the analysis is to convert "covered"[6] employment to "total" employment. Covered employment only accounts for a share of overall employment in the economy. Specifically, it does not consider sole proprietors or some contracted workers. Covered employment was converted to total employment based on observed ratios at the national level derived from the Bureau of Economic Analysis from 2010 through 2017.

The differential is the most significant in construction, professional, administrative, and other services. The adjusted 2019 total non-farm employment base for the City of Albany is an estimated 27,750 jobs.

FIGURE 4.02: UPDATE TO 2019 BASELINE AND CONVERSION OF COVERED TO TOTAL EMPLOYMENT, ALBANY

	QCEW Employment				
Major Industry Sector	2017 Employment	'17-'19 County Δ[1]	2019 Estimate	Total Emp. Conversion[2]	2019 Estimate
Construction	970	1.9%	1,007	73.5%	1,370
Manufacturing	3,476	0.8%	3,534	97.6%	3,621
Wholesale Trade	327	1.1%	334	97.3%	343
Retail Trade	3,422	0.8%	3,479	94.4%	3,684
T.W.U.	1,022	2.1%	1,066	91.3%	1,167
Information	213	0.5%	200	94.7%	211
Finance & Insurance	823	0.5%	832	91.6%	908
Real Estate	294	0.5%	297	91.6%	324
Professional & Technical Services	788	1.0%	804	88.5%	909
Administration Services	1,641	1.0%	1,673	88.5%	1,892
Education	2,526	1.0%	2,578	94.5%	2,728
Health Care	3,456	1.9%	3,587	94.5%	3,795
Leisure & Hospitality	2,842	1.3%	2,914	94.4%	3,088
Other Services	1,126	0.9%	1,147	82.7%	1,387
Government	2,291	0.7%	2,321	100.0%	2,321
TOTAL	**25,217**	**1.1%**	**25,774**	**92.9%**	**27,751**

1 Forecasted AAGR from 2017-2027 for Mid-Willamette Valley submarket. Oregon Employment Department

2 Bureau of Economic Analysis. Calculated as an eight-year average between 2010 and 2017

T.W.U. = Transportation, Warehousing, and Utilities

*Information sector: Employment in 2019 is estimated from local sources

Source: Johnson Economics, Oregon Employment Department, BEA

Employment by Industry: The industries with the highest total employment are health care, retail, and manufacturing.

Retail and hospitality related industries tend to offer fairly low average wages. However, the other high employment industries, including manufacturing, health care, education, and government tend to offer higher average wages (Figure 3.01).

Scenario 1: Safe Harbor Forecast

The Goal 9 statute does not have a required method for employment forecasting. However, OAR 660-024-0040(9)(a) outlines several safe harbor methods, which are intended to provide jurisdictions a methodological approach that will not be challenged. The methods allow for either applying the most

6 The Department of Labor's Quarterly Census of Employment and Wages (QCEW) tracks employment data through state employment departments. Employment in the QCEW survey is limited to firms with employees that are "covered" by unemployment insurance.

recent industrial growth projections for the Mid-Valley area from the Oregon Employment Department, or the most recently adopted population growth rate as determined by the Portland State University Population Research Center.

In the case of the City of Albany, both projected annual growth rates are similar (1.15 percent vs 1.3 percent). However, over a 20-year forecast period a small variation will compound. For this analysis, we have adopted the higher population growth rate as the baseline forecasted growth rate. The projected rate is applied to the 2019 base, essentially reflecting that employment growth is expected to keep track with population growth. Within individual industries, the projected overall growth rate is still scaled to the Oregon Employment Department forecast, to reflect that not all sectors will grow at a uniform rate.

This method results in an average annual growth rate of 1.3 percent, with total job growth of 8,828 jobs over the forecast period when applied to the employment profile in Albany.

Scenario 2: Adjusted Growth Forecast

The Goal 9 process allows for an adjusted employment forecast based on the research and analysis conducted during this process. A second forecast scenario was prepared reflecting some of the research and analysis conducted in the EOA.

This scenario formulates an employment growth trajectory based on identified trends, the growth outlook for targeted industries, and input from the project technical advisors and stakeholders. Further, the adjusted growth scenario recognizes that the city's policy direction has influence over realized growth in targeted sectors. This scenario considers the influence of known or anticipated development over a near- and medium-term horizon. The following identified factors are expected to influence growth in the forecast.

Target Industries – The key industries the community has identified for targeted growth and focused economic development efforts. Known real-world business interest and location scouting from industries have also been considered. The most significant changes were to reflect targeted growth in the manufacturing and health care sectors.

Cluster Advantages – Albany has an established skilled workforce and concentration of competitors and suppliers that have proven attractive to industrial users.

Location – Albany's central location within the mid-valley region will influence the mix of employment uses it can attract. Transportation, labor shed, recreation, and livability are some key locational factors.

Household Growth – Growth in many sectors, including retail, hospitality, banking, and real estate, is a direct function of population and households in a community.

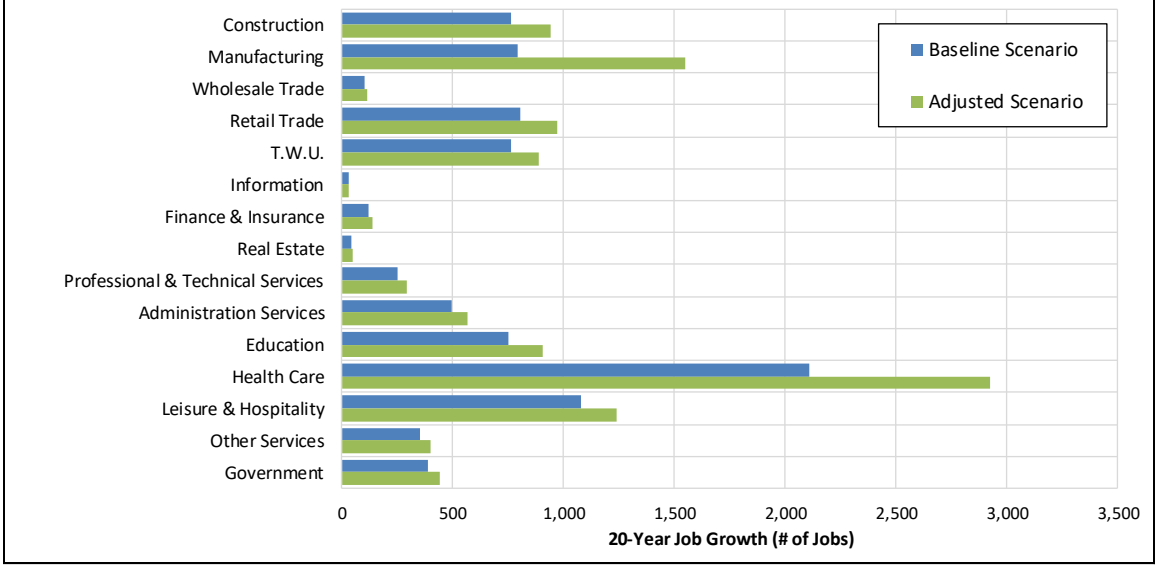
Taken together, the 20-year forecast in this scenario projects 1.7 percent average annual growth, with total job growth of 11,455 jobs over the forecast period when applied to the employment profile in Albany.

Summary of Employment Forecast Scenarios

The two forecast scenarios in this analysis range from 1.3 percent to 1.7 percent average annual growth. Job growth estimates range from roughly 8,825 to 11,500 jobs. Figure 4.03 presents a comparison of the two growth scenarios broken down by industry sector.

FIGURE 4.03: COMPARISON OF ALTERNATIVE FORECASTS, CITY OF ALBANY

Industry	SCENARIO I (PSU Pop. Growth)				SCENARIO II (Adjusted)			
	2019	2040	Chg.	AAGR	2019	2040	Chg.	AAGR
Construction	1,370	2,131	761	2.1%	1,370	2,311	941	2.5%
Manufacturing	3,621	4,414	792	0.9%	3,621	5,170	1,549	1.7%
Wholesale Trade	343	443	100	1.2%	343	458	114	1.4%
Retail Trade	3,684	4,487	803	0.9%	3,684	4,653	969	1.1%
T.W.U.	1,167	1,930	762	2.4%	1,167	2,057	890	2.7%
Information	211	240	29	0.6%	211	244	33	0.7%
Finance & Insurance	908	1,030	122	0.6%	908	1,047	139	0.7%
Real Estate	324	368	44	0.6%	324	374	50	0.7%
Professional & Technical Services	909	1,163	253	1.2%	909	1,200	290	1.3%
Administration Services	1,892	2,384	492	1.1%	1,892	2,456	564	1.3%
Education	2,728	3,476	748	1.2%	2,728	3,634	907	1.4%
Health Care	3,795	5,903	2,107	2.1%	3,795	6,722	2,927	2.8%
Leisure & Hospitality	3,088	4,165	1,077	1.4%	3,088	4,327	1,239	1.6%
Other Services	1,387	1,737	350	1.1%	1,387	1,788	400	1.2%
Government	2,321	2,709	388	0.7%	2,321	2,763	442	0.8%
TOTAL:	**27,751**	**36,579**	**8,828**	**1.3%**	**27,751**	**39,206**	**11,455**	**1.7%**



Source: Johnson Economics, Oregon Employment Department, BEA

The first scenario is useful in creating a baseline understanding of macroeconomic growth prospects. These are common and broadly accepted approaches when looking at large geographic regions. However, forecasts grounded in broad-based economic variables do not account for the realities of local businesses and trends among evolving industries. The second scenario is meant to reflect these unique circumstances along with local economic development goals. Any long-term forecast is inherently uncertain and should be updated on a regular basis to reflect more current information.

Figure 4.04 presents the forecasts in five-year increments to the year 2040, for the two growth scenarios. This gives an indicator of potential short- and mid-term employment gains.

FIGURE 4.04: SUMMARY OF PROJECTION SCENARIOS, CITY OF ALBANY (5-YEAR INCREMENTS)

Industry	Overall Employment					Net Change by Period				Total
	2019	2025	2030	2035	2040	19-25	25-30	30-35	35-40	19-40
SCENARIO I (PSU Pop. Growth)										
Construction	1,370	1,554	1,727	1,919	2,131	184	172	192	213	761
Manufacturing	3,621	3,832	4,017	4,211	4,414	211	185	194	203	792
Wholesale Trade	343	369	392	417	443	26	23	25	26	100
Retail Trade	3,684	3,898	4,085	4,282	4,487	213	187	196	206	803
T.W.U.	1,167	1,348	1,519	1,712	1,930	180	171	193	218	762
Information	211	219	226	233	240	8	7	7	7	29
Finance & Insurance	908	942	970	1,000	1,030	33	29	30	30	122
Real Estate	324	336	347	357	368	12	10	11	11	44
Professional & Technical Services	909	976	1,034	1,097	1,163	66	59	62	66	253
Administration Services	1,892	2,021	2,135	2,256	2,384	129	114	121	128	492
Education	2,728	2,923	3,097	3,281	3,476	196	174	184	195	748
Health Care	3,795	4,306	4,783	5,313	5,903	510	477	530	589	2,107
Leisure & Hospitality	3,088	3,363	3,612	3,878	4,165	276	248	267	286	1,077
Other Services	1,387	1,479	1,561	1,646	1,737	92	81	86	91	350
Government	2,321	2,426	2,517	2,611	2,709	105	91	94	98	388
TOTAL:	**27,751**	**29,992**	**32,022**	**34,213**	**36,579**	**2,241**	**2,030**	**2,191**	**2,367**	**8,828**
SCENARIO 2 (Adjusted)										
Construction	1,370	1,591	1,802	2,041	2,311	221	211	239	271	941
Manufacturing	3,621	4,009	4,364	4,750	5,170	388	355	386	420	1,549
Wholesale Trade	343	373	399	427	458	29	26	28	30	114
Retail Trade	3,684	3,939	4,164	4,402	4,653	254	225	238	252	969
T.W.U.	1,167	1,372	1,571	1,798	2,057	205	198	227	260	890
Information	211	220	228	236	244	9	8	8	8	33
Finance & Insurance	908	946	979	1,012	1,047	38	33	34	35	139
Real Estate	324	338	350	362	374	13	12	12	12	50
Professional & Technical Services	909	984	1,052	1,123	1,200	75	67	72	77	290
Administration Services	1,892	2,038	2,169	2,308	2,456	146	131	139	148	564
Education	2,728	2,961	3,170	3,394	3,634	233	209	224	240	907
Health Care	3,795	4,469	5,120	5,867	6,722	673	652	747	855	2,927
Leisure & Hospitality	3,088	3,400	3,685	3,993	4,327	313	284	308	334	1,239
Other Services	1,387	1,492	1,584	1,683	1,788	104	93	99	105	400
Government	2,321	2,440	2,543	2,651	2,763	119	103	108	112	442
TOTAL:	**27,751**	**30,572**	**33,178**	**36,046**	**39,206**	**2,821**	**2,607**	**2,868**	**3,159**	**11,455**

Source: Johnson Economics, Oregon Employment Department, BEA

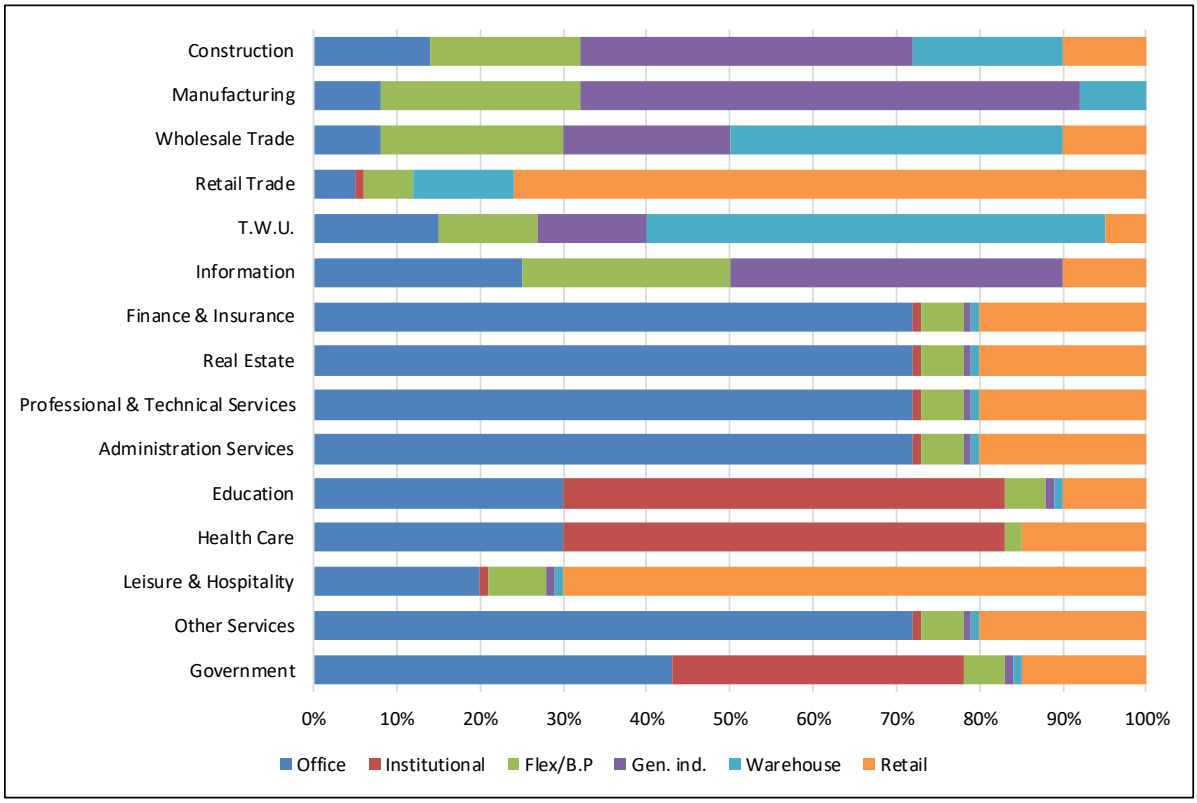
EMPLOYMENT LAND NEED FORECAST – CITY OF ALBANY

The next step in our analysis is to convert projections of employment into forecasts of land demand over the planning period. This conversion begins by allocating employment by sector into a distribution of building typologies that typically house those economic activities (Figure 4.05). As an example, insurance agents commonly locate in a traditional office space, usually along commercial corridors. However, a percentage of these firms locate in commercial retail space adjacent to retail anchors. Cross tabulating this distribution provides an estimate of employment in each typology.

The next step converts employment into space using estimates of the typical square footage exhibited within each typology. Adjusting for market clearing vacancy, we arrive at an estimate of total space demand for each building type. Finally, we can consider the physical characteristics of individual building types and the amount of land they typically require for development. The site utilization metric commonly used is referred to as a "floor area ratio" or FAR. For example, assume a 25,000-square foot general industrial building requires approximately two acres to accommodate its structure, setbacks, parking, and necessary yard/storage space. This building would have an FAR of roughly 0.29. Demand for space is then converted to net acres using a standard FAR for each development form.

The building typology matrix represents the share of sectoral employment that locates across various building types (Figure 4.05).

FIGURE 4.05: AVERAGE DISTRIBUTION OF EMPLOYMENT BY SPACE TYPE



Source: Johnson Economics, Oregon Employment Department

Land Demand Analysis

Employment growth for both growth scenarios was allocated into standard building typologies per Figure 4.05. Figure 4.06 shows the forecasted employment growth for Albany for both growth scenarios (PSU and adjusted) distributed by projected building type. Employment housed in office, retail, and institutional space (health care) accounts for the most total jobs in both scenarios. However, on average, industrial jobs tend to use more real estate space per employee (Figure 4.07).

FIGURE 4.06: NET CHANGE IN EMPLOYMENT ALLOCATED BY BUILDING TYPE, CITY OF ALBANY – 2019-2040

4.06 A: SCENARIO 1 (PSU FORECAST, 1.3 PERCENT)

Industry Sector	20-year Job Forecast		NET CHANGE IN EMPLOYMENT BY BUILDING TYPE - 2019-2039						
	Number	AAGR	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	Total
Construction	761	2.1%	107	0	137	305	137	76	761
Manufacturing	792	0.9%	63	0	190	475	63	0	792
Wholesale Trade	100	1.2%	8	0	22	20	40	10	100
Retail Trade	803	0.9%	40	8	48	0	96	610	803
T.W.U.	762	2.4%	114	0	91	99	419	38	762
Information	29	0.6%	7	0	7	12	0	3	29
Finance & Insurance	122	0.6%	88	1	6	1	1	24	122
Real Estate	44	0.6%	31	0	2	0	0	9	44
Professional & Technical Services	253	1.2%	182	3	13	3	3	51	253
Administration Services	492	1.1%	354	5	25	5	5	98	492
Education	748	1.2%	224	396	37	7	7	75	748
Health Care	2,107	2.1%	632	1,117	42	0	0	316	2,107
Leisure & Hospitality	1,077	1.4%	215	11	75	11	11	754	1,077
Other Services	350	1.1%	252	3	17	3	3	70	350
Government	388	0.7%	167	136	19	4	4	58	388
TOTAL	8,828	1.3%	2,486	1,680	733	945	791	2,192	8,828

4.06 B: SCENARIO 2 (ADJUSTED FORECAST, 1.7 PERCENT)

Industry Sector	20-year Job Forecast		NET CHANGE IN EMPLOYMENT BY BUILDING TYPE - 2019-2039						
	Number	AAGR	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	Total
Construction	941	2.5%	132	0	169	376	169	94	941
Manufacturing	1,549	1.7%	124	0	372	929	124	0	1,549
Wholesale Trade	114	1.4%	9	0	25	23	46	11	114
Retail Trade	969	1.1%	48	10	58	0	116	737	969
T.W.U.	890	2.7%	133	0	107	116	489	44	890
Information	33	0.7%	8	0	8	13	0	3	33
Finance & Insurance	139	0.7%	100	1	7	1	1	28	139
Real Estate	50	0.7%	36	0	2	0	0	10	50
Professional & Technical Services	290	1.3%	209	3	15	3	3	58	290
Administration Services	564	1.3%	406	6	28	6	6	113	564
Education	907	1.4%	272	480	45	9	9	91	907
Health Care	2,927	2.8%	878	1,551	59	0	0	439	2,927
Leisure & Hospitality	1,239	1.6%	248	12	87	12	12	868	1,239
Other Services	400	1.2%	288	4	20	4	4	80	400
Government	442	0.8%	190	155	22	4	4	66	442
TOTAL	**11,455**	**1.7%**	**3,082**	**2,223**	**1,024**	**1,498**	**985**	**2,642**	**11,455**

Source: Johnson Economics, Oregon Employment Department

Employment growth estimates by building type are then converted into demand for physical space. This conversion assumes the typical space needed per employee on average. This step also assumes an average market vacancy rate, acknowledging that equilibrium in real estate markets is not 0 percent vacancy. We assume a 10 percent vacancy rate for office, retail, and flex uses, as these forms have high rates of speculative multi-tenant usage. A five percent rate is used for general industrial and warehousing; these uses have higher rates of owner occupancy that lead to lower overall vacancy. Institutional uses are assumed to have no vacancy.

The demand for space is converted into an associated demand for acreage using an assumed Floor Area Ratio (FAR). The combined space and FAR assumptions further provide estimates indicative of job densities, determined on a per net-developable acre basis.

FIGURE 4.07: NET ACRES REQUIRED BY BUILDING TYPOLOGY, CITY OF ALBANY

4.07 A: SCENARIO 1 (PSU FORECAST, 1.3 PERCENT)

PSU SCENARIO	DEMAND BY GENERAL USE TYPOLOGY, 2019-2039						
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	Total
Employment Growth	2,486	1,680	733	945	791	2,192	8,828
Avg. SF Per Employee	350	600	990	600	1,850	500	649
Demand for Space (SF)	870,200	1,008,300	726,000	567,100	1,462,700	1,096,200	5,730,500
Floor Area Ratio (FAR)	0.35	0.35	0.30	0.30	0.35	0.25	0.31
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	6.9%
Implied Density (Jobs/Acre)	39.2	25.4	11.9	20.7	7.8	19.6	19.6
Net Acres Required	63.4	66.1	61.7	45.7	101.0	111.8	449.8
Gross Acres Required	79.3	82.7	77.2	57.1	126.2	139.8	562.2

4.07 B: SCENARIO 2 (ADJUSTED FORECAST, 1.7 PERCENT)

ADJUSTED SCENARIO	DEMAND BY GENERAL USE TYPOLOGY, 2019-2039						
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	Total
Employment Growth	3,082	2,223	1,024	1,498	985	2,642	11,455
Avg. SF Per Employee	350	600	990	600	1,850	500	652
Demand for Space (SF)	1,078,800	1,333,800	1,014,100	898,600	1,822,400	1,321,100	7,468,800
Floor Area Ratio (FAR)	0.35	0.35	0.30	0.30	0.35	0.25	0.31
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	100.0%
Implied Density (Jobs/Acre)	39.2	25.4	11.9	20.7	7.8	19.6	19.6
Net Acres Required	**78.6**	**87.5**	**86.2**	**72.4**	**125.8**	**134.8**	**585.3**
Gross Acres Required	**98.3**	**109.4**	**107.8**	**90.5**	**157.3**	**168.5**	**731.7**

Source: Johnson Economics, Oregon Employment Department

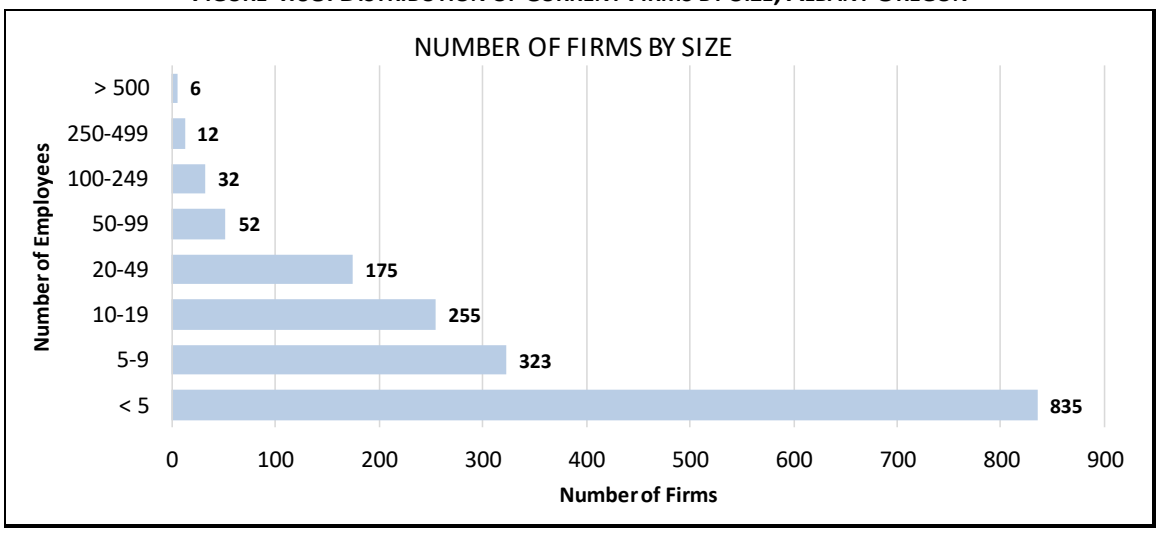
Commercial office and retail densities are 39 and 20 jobs per acre, respectively. Industrial uses range from 21 jobs per acre for general industrial to as few as eight jobs per acre for warehouse.

- As shown in Figure 4.07, the projected 8,800 job expansion in the local employment base using the PSU forecast in Scenario 1 would require an estimated 562 gross acres of employment land, compared to 732 gross acres of employment land to house 11,500 new jobs in Scenario 2, the higher forecast.
- The distribution of demand between Commercial and Industrial land is fairly evenly distributed in both growth scenarios.
- There is an estimated need for between 301 and 376 acres of land for commercial uses (office, institutional, retail); however, many institutional uses are not permitted in commercial zones but are permitted in residential, mixed use, and some industrial zones.
- There is an estimated need for between 260 and 355 acres of land for industrial uses (industrial, warehouse, business park).

EMPLOYMENT LAND NEED FORECAST – NEEDED SITE SIZES

The local employment base is largely dominated by small employers of 10 or fewer employees, which is a common pattern across most markets (Figure 4.08). There are six employers of 500 or more employees, and 12 with 250 to 500 employees. Some of these may have employees spread over multiple locations.

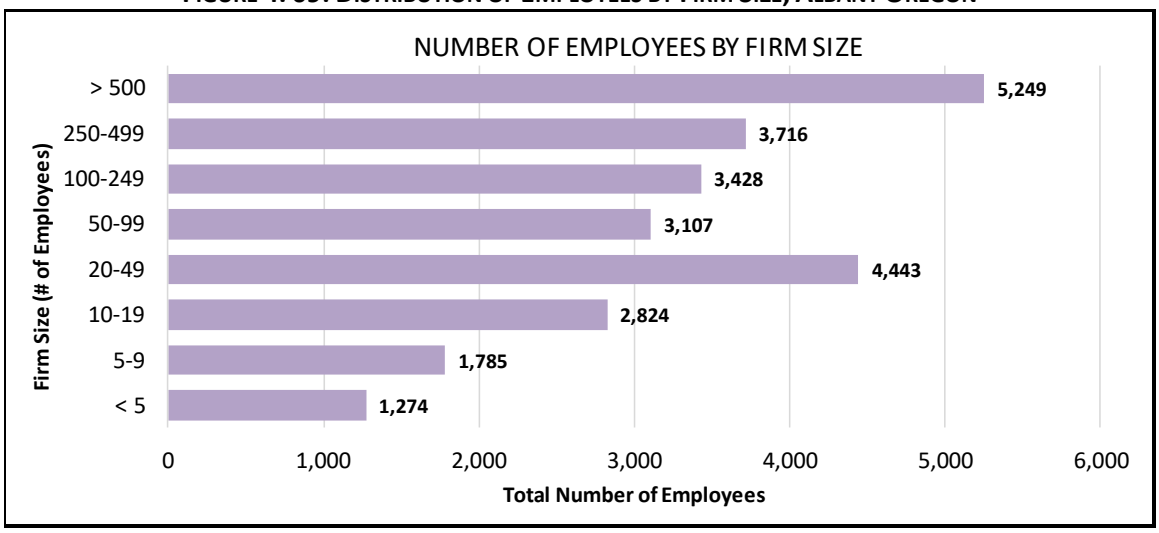
FIGURE 4.08: DISTRIBUTION OF CURRENT FIRMS BY SIZE, ALBANY OREGON



Source: Johnson Economics, Oregon Employment Department

Figure 4.09 presents the estimated number of employees in firms of the different sizes. While there are relatively few of the largest employers, in total they employ the most people due to their large size.

FIGURE 4. 09: DISTRIBUTION OF EMPLOYEES BY FIRM SIZE, ALBANY OREGON



Source: Johnson Economics, Oregon Employment Department

Local and regional employment trends in Albany support the likely ability to continue to recruit and grow large manufacturers going forward. At the same time, there will be a continued demand for real estate space and sites of all size to accommodate the full range of employers across sectors.

Figure 4.10 presents the projected need for new commercial and industrial sites by size based on the industry growth projections presented above for both growth scenarios. These site needs are an estimate of future needs to aid comparison to available land supply (see following Section.)

FIGURE 4.10: ESTIMATED NUMBER OF SITES NEEDED BY SIZE (ACRES), ALBANY OREGON

4.10 A: SCENARIO 1 (PSU FORECAST, 1.3 PERCENT)

LAND USE	0 TO .9 acres	1 to 4.9 acres	5 to 9.9 acres	10 to 19.9 acres	20 to 29.9 acres	30 to 49.9 acres	50 to 99.9 acres	100+ acres	TOTAL (sites)	TOTAL (acres)
Office	116	7	1	1	0	0	0	0	125	79
Institutional	33	12	1	1	0	0	0	0	47	83
Retail	80	23	1	1	0	0	0	0	105	140
Commercial Total:	**229**	**42**	**3**	**3**	**0**	**0**	**0**	**0**	**277**	**302**
Flex/B.P	26	6	0	1	0	1	0	0	34	77
Gen. Ind.	39	7	2	1	0	1	1	1	52	57
Warehouse	21	16	1	1	1	1	1	0	42	126
Industrial Total:	**86**	**29**	**3**	**3**	**1**	**3**	**2**	**1**	**128**	**260**
TOTAL:	***315***	***71***	***6***	***6***	***1***	***3***	***2***	***1***	***405***	***562***

4.10 B: SCENARIO 2 (ADJUSTED FORECAST, 1.7 PERCENT)

LAND USE	0 TO .9 acres	1 to 4.9 acres	5 to 9.9 acres	10 to 19.9 acres	20 to 29.9 acres	30 to 49.9 acres	50 to 99.9 acres	100+ acres	TOTAL (sites)	TOTAL (acres)
Office	139	8	1	1	0	0	0	0	149	98
Institutional	46	15	1	2	0	0	0	0	64	109
Retail	96	27	2	1	1	0	0	0	127	168
Commercial Total:	**281**	**50**	**4**	**4**	**1**	**0**	**0**	**0**	340	**376**
Flex/B.P	33	8	1	1	0	1	0	0	44	108
Gen. Ind.	39	11	2	1	0	1	1	1	56	90
Warehouse	25	19	1	1	1	1	1	0	49	157
Industrial Total:	**97**	**38**	**4**	**3**	**1**	**3**	**2**	**1**	149	**356**
TOTAL:	***378***	***88***	***8***	***7***	***2***	***3***	***2***	***1***	***489***	***732***

Source: Johnson Economics, Oregon Employment Department

The Scenario 1 forecast indicates Albany will need 315 properties less than one acre and another 71 properties between one and acres to 2040. Most of the smaller sites needed are projected for commercial uses, while most of the larger sites needed are for industrial uses under both growth scenarios.

The estimates presented in Figures 4.10 A and B are based on the average firm sizes of businesses in the different industry subsectors in Albany. *However, economic development and job growth are dynamic, and this estimate of site needs is unlikely to match actual future needs exactly. Communities should maintain flexibility and ensure a supply of a variety of site types with short-term availability, as allowed through the Goal 9 EOA process*.

ADDITIONAL CONSIDERATIONS IN LAND/SITE DEMAND

General Considerations

Beyond a consideration of gross acreage, there is a significantly broader range of site characteristics that industries typically require to accommodate future growth. We summarize some key findings here:

- Industrial buildings are generally more susceptible to slope constraints due to larger building footprints. For a site to be competitive for most industrial uses, a five percent slope is the maximum for development sites. Office and commercial uses are generally smaller and more vertical, allowing for slopes up to 15 percent. *Slope is less of a constraint in the Albany market than wetlands and floodways are.*

- Most industries require some ready access to a major transportation route, particularly manufacturing and distribution industries that move goods throughout the region and beyond. A distance of 10 to 20 miles to a major interstate is generally acceptable for most manufacturing activities, but distribution activities require five miles or less and generally prefer a direct interstate linkage. Visibility and access are highly important to most *commercial* activities and site location with both attributes from a major commercial arterial is commonly required. *While Albany's industrial sites are within a few miles of Interstate 5, several sites require access and infrastructure improvements.*
- Access and capacity for water, power, gas, and sewer infrastructure is more important to industrial than commercial operations. Water/sewer lines of up to 10" are commonly required for large manufacturers. Appendix A details utility infrastructure requirements by typology. *Most of Albany's buildable employment sites within the City limits are served with appropriately sized city utilities.*
- Fiber telecommunications networks are likely to be increasingly required in site selection criteria for most commercial office, and manufacturing industries. Medical, high-tech, creative office, research and development, and most professional service industries will prefer or require strong fiber access in the coming business cycles. *Most of Albany's buildable employment sites within the City limits are served with or adjacent to high-speed internet service.*

Feedback from Local Industry and Real Estate Stakeholders

During this process, local realtors and technical experts were engaged to provide feedback on employment land needs, strengths, and deficiencies in the Albany community. This local expertise informs this analysis on how well local available employment lands really serve existing and prospective businesses in Albany. The following is a summary of key takeaways from these discussions:

- Most currently available industrial lands have constraints that make them difficult or infeasible sites, particularly the largest sites. Local stakeholders feel that there is limited ready supply for new industrial businesses of any size, but particularly mid- to large-sized firms.
- Wetland and transportation issues are particularly difficult on many of the City's remaining industrial lands. Wetlands render much of some sites unusable, or expensive to mitigate, while leaving the useful portions isolated in the wrong part of the parcel.
- Multiple large employment sites in South Albany and near the Highway 20/I-5 interchange look available but must wait on costly new off-site street infrastructure to provide access to them.
- Due to these challenges, many vacant sites are not currently ready to go for prospective employers and not truly part of the "short term" supply.
- Business Oregon confirms that site selectors are looking in the area. Many of the available sites are deemed too small or have transportation and wetland issues.
- The average potential business recruitment is looking for at least 40 acres, with an average of 60 acres. A mix of available sites is needed, including small, medium, and large sites.
- Smaller start-ups need smaller pre-built spaces. These may be one to five acres and include multi-tenanted buildings.
- Land needs to be in good industrial areas, with proper access and visibility (if necessary).

- Given limited resources, the City cannot serve all employment areas with new infrastructure at once. Any public efforts to help prepare employment lands must be prioritized and phased.
- Some high-tech businesses want to be centrally located in Albany due to the town center's amenities. These businesses may not want an isolated industrial location or to be in a larger market. Central "flex space" or refurbished warehouse space may be appropriate for these users.

Section VI and Appendix A of this report discuss specific key sites, and industry-specific site requirements in greater detail.

V. EMPLOYMENT LAND INVENTORY (SUPPLY)

This section summarizes the results of the Buildable Lands Inventory (BLI) of employment land. Employment land includes land zoned for industrial, retail or other commercial use (i.e., office), and may also include mixed-use zoning that allows for employment uses.

The BLI and its methodology is presented in detail in an accompanying memo to this report but are summarized here. Data for this BLI was provided by the City of Albany and Linn County.

The land inventory is conducted in several steps, as follows.

Step 1. Constraints. Constraints include floodplains, wetlands, steep slopes, and other features that may reduce the developability of land in Albany. Several scenarios of constraints were evaluated in the BLI.

Step 2. Classification of Land. Every taxlot within the Albany UGB was classified as either residential, employment, mixed use, or "committed" based on comprehensive plan and/or zoning designation, assessor's data, and staff input.

Step 3. Assign Development Status. Each taxlot within the Albany UGB was given a "development status" of either developed, vacant, partially vacant, or committed, based on assessor's data, aerial photography, and staff input.

Step 4. Determine Developable Acreage. Taxlots with a vacant or partially vacant status were given an amount of developable acreage based on their size, existing uses, and any development constraints on the property.

Step 5. Determine Development Capacity. For Employment land, capacity is reported in terms of acres.

The BLI analysis produced four scenarios, which differed in how they counted the constraints caused by the 100-year floodplain and and non-significant wetlands. The scenarios ranged from an assumption that these factors cause significant limitations to future development, to lower limitations.

The analysis presented here relies on the most conservative estimate of land development capacity from the multiple scenarios considered in the BLI memo. The scenario used here (Scenario 1B) assumes lands within the Special Flood Hazard Area, significant wetlands and riparian corridors, steep slopes, etc., to be 100 percent constrained, while 50 percent of non-significant wetlands are constrained due to their impact on the cost of development. *All figures discussed below refer to this BLI scenario.*

The following table (Figure 5.01) presents the estimated developable acreage of the buildable employment lands identified in the City of Albany and within the UGB. The table breaks down the City's zoning into broad categories of commercial, industrial, and mixed-use zones that allow some employment uses.

FIGURE 5.01: SUMMARY OF EMPLOYMENT BUILDABLE LAND INVENTORY (ALBANY)

Zoning Category	Developable Acres
COMMERCIAL ZONES	
In City Limits	
CC -- Community Commercial	47.6
NC -- Neighborhood Commercial	10.3
OP -- Office Professional	14.8
PB -- Pacific Boulevard	3.0
RC -- Regional Commercial	52.7
	128.3
Outside City Limits	
Commercial	22.9
TOTAL:	***151.2***
INDUSTRIAL ZONES	
In City Limits	
HI -- Heavy Industrial	70.0
IP -- Industrial Park	303.1
LI -- Light Industrial	139.7
	512.8
Outside City Limits	
Industrial	72.0
TOTAL:	***584.9***
MIXED USE ZONES	
In City Limits	
Mixed Use Zones*	46.0
Outside City Limits	
County -- Village Center	28.0
TOTAL:	***74.0***
TOTAL ALL ZONES	
Total Commercial	151.2
Total Industrial	584.9
Total Mixed Use	74.0
TOTAL:	***810.1***

Source: Angelo Planning Group, City of Albany

* Mixed use zones: CB, DMU, ES, HD, LE, MS, MUC, WF

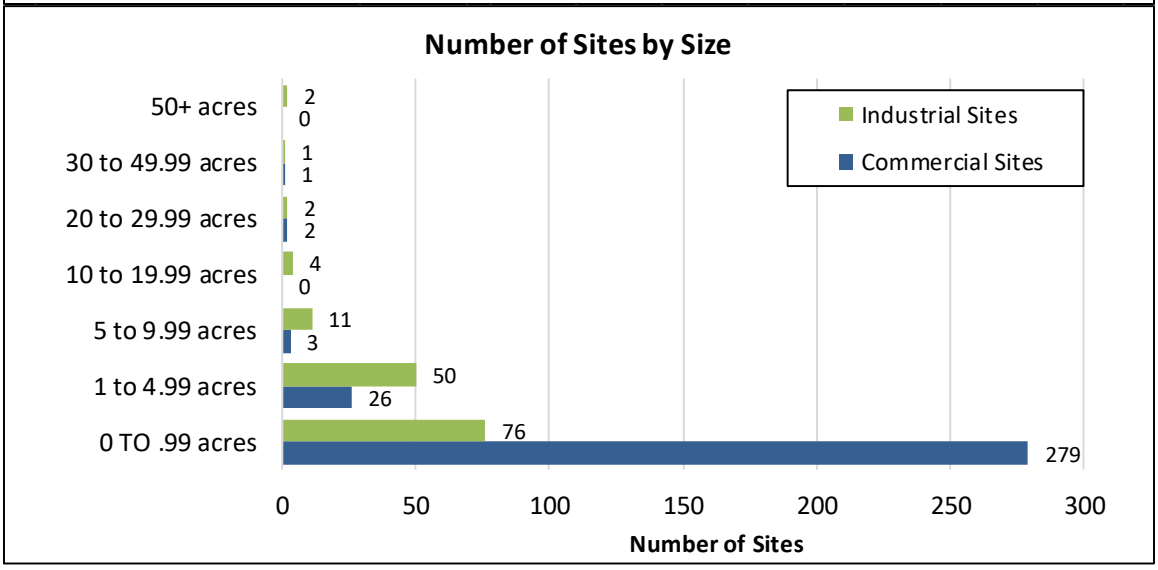
The inventory identifies over 736 acres of vacant or potentially redevelopable land in both commercial and industrial zones, plus 74 acres in mixed use zones. A smaller share of the acreage (19 percent) was identified in the commercial zones, while the majority (72 percent) has industrial zoning. The mixed-use zoning (nine

percent) is mostly amenable to general commercial and retail uses, because industrial uses are generally less compatible with residential uses.

Figure 5.02 presents the inventory broken down by the size of parcels. This chart represents the estimated *developable* portion of the site, as determined by the BLI methodology. Therefore, some of these sites may officially be larger taxlots but are counted here as the size of their buildable portion.

FIGURE 5.02: BUILDABLE EMPLOYMENT SITE INVENTORY, BY PARCEL SIZE (ALBANY)

	Total Emp. Dev. Sites	0 TO .99 acres	1 to 4.99 acres	5 to 9.99 acres	10 to 19.99 acres	20 to 29.99 acres	30 to 49.99 acres	50+ acres
Employment Total	**457**	**355**	**76**	**14**	**4**	**4**	**2**	**2**
NC -- Neighborhood Commercial	19	18	1	0	0	0	0	0
CC -- Community Commercial	131	124	7	0	0	0	0	0
RC -- Regional Commercial	35	27	7	0	0	0	1	0
OP -- Office Professional	17	14	2	1	0	0	0	0
PB -- Pacific Boulevard	10	10	0	0	0	0	0	0
Mixed Use	89	84	2	1	0	2	0	0
Commercial (UGB)	10	2	7	1	0	0	0	0
Commercial Total:	***311***	***279***	***26***	***3***	***0***	***2***	***1***	***0***
LI -- Light Industrial	99	61	33	4	0	1	0	0
HI -- Heavy Industrial	18	5	7	4	2	0	0	0
IP -- Industrial Park	18	9	4	2	0	0	1	2
Industrial (UGB)	11	1	6	1	2	1	0	0
Industrial Total:	***146***	***76***	***50***	***11***	***4***	***2***	***1***	***2***



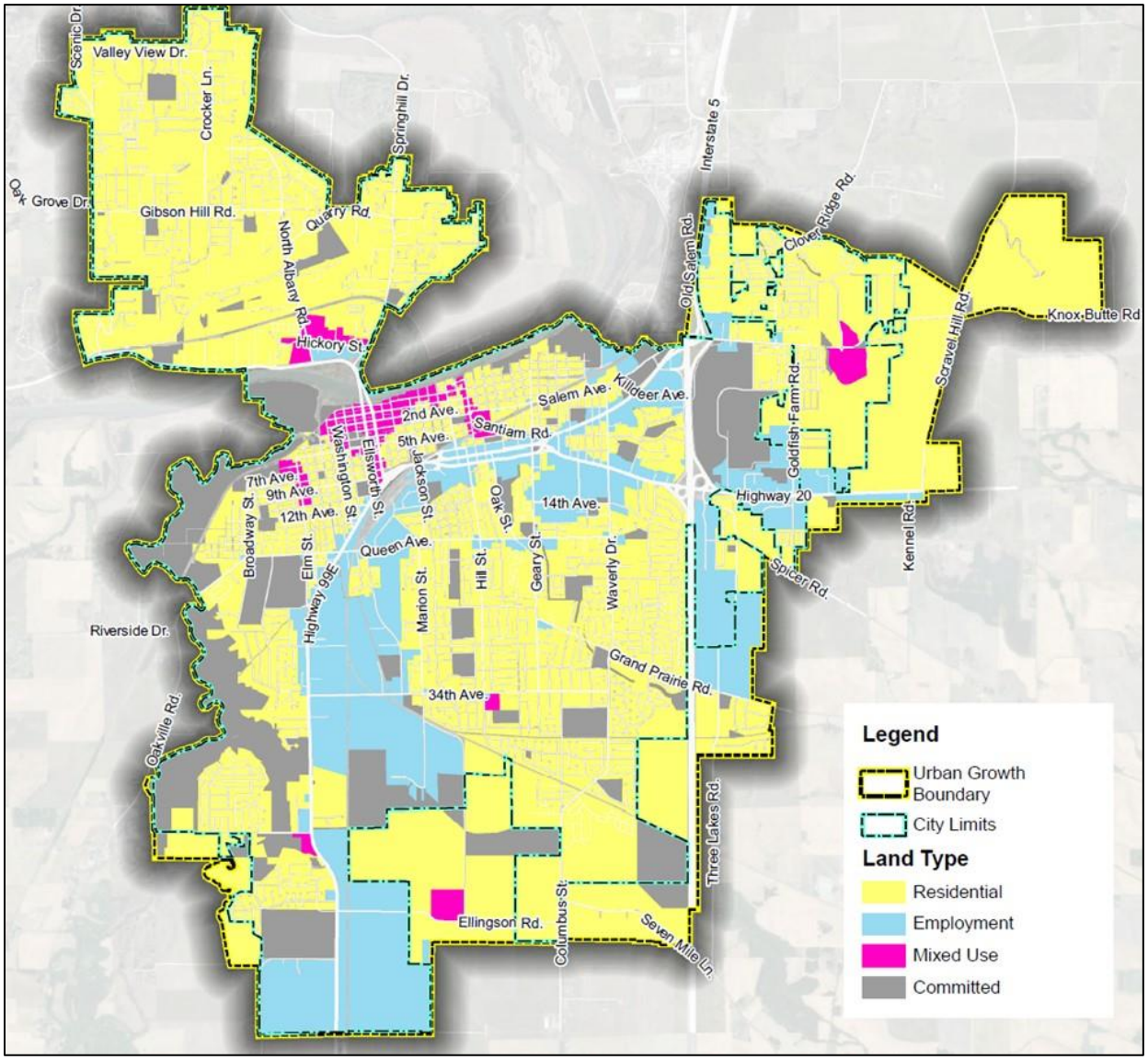
Source: Angelo Planning Group, City of Albany

- Most of the buildable unconstrained parcels identified are smaller than 10 acres.
- The largest share of commercial parcels are smaller than one acre in size, and only three identified parcels are greater than 10 acres in size.

- Most industrial parcels (86 percent) are less than five acres in size. There are only a handful of large industrial parcels remaining, many of which feature some constraints that limit developability.

Figures 5.03 to 5.05 present a series of maps of the Buildable Land Inventory for commercial, industrial, and mixed-use parcels. Figure 5.03 shows the land within the Albany UGB categorized by general zoning classes (residential, employment, and mixed use).

FIGURE 5.03: CLASSIFICATION OF LAND USES, CITY OF ALBANY UGB

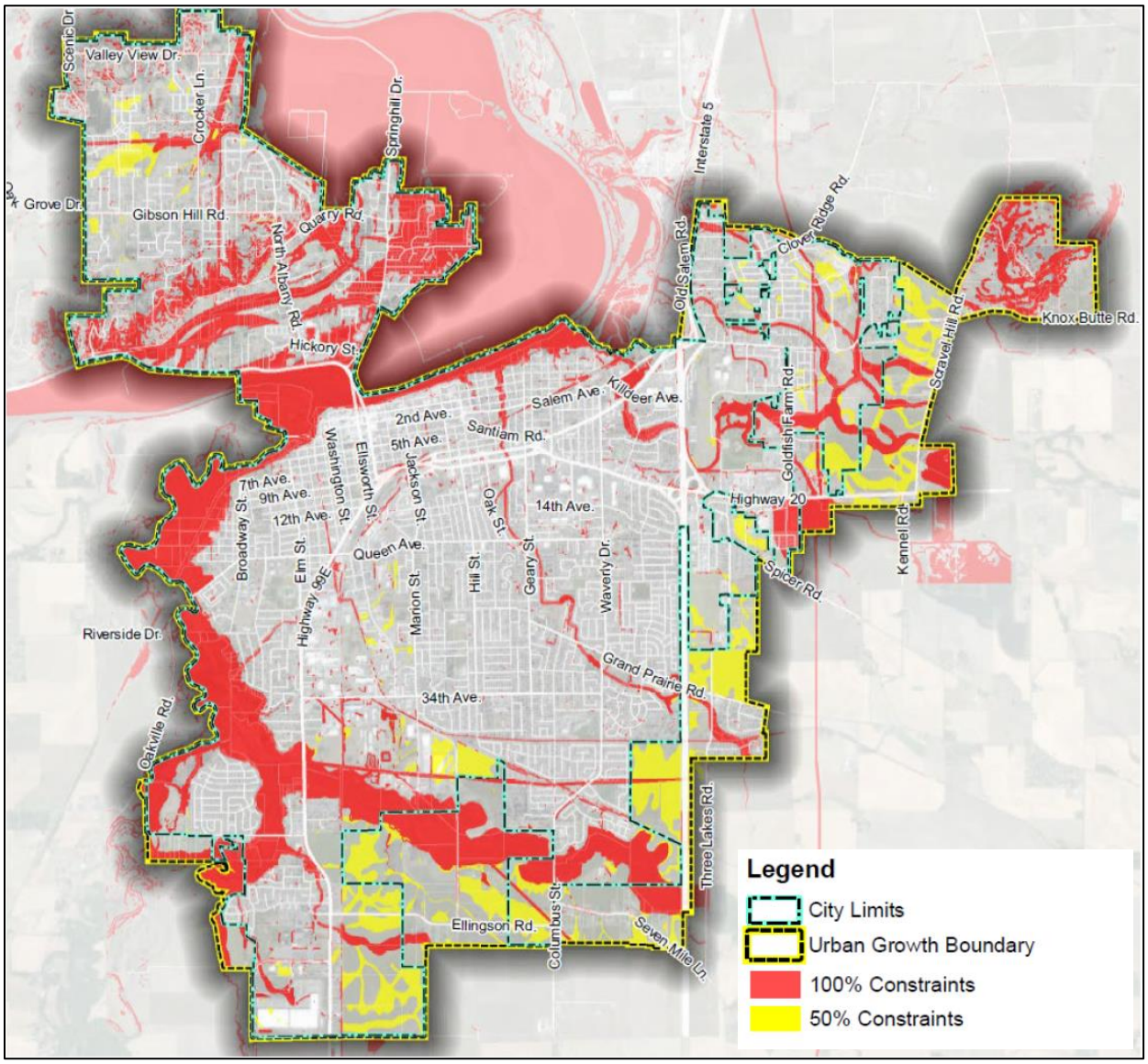


Source: Angelo Planning Group, City of Albany

Figure 5.04 shows the environmental constraints identified in the Albany UGB, including steep slopes, waterways and flood zones that may prevent or limit development in the impacted areas. These constraints are accounted for and in some cases deducted from the final inventory of buildable employment land.

BLI Scenario 1B used in this analysis assumes 100 percent deduction for the following constraints: the entire Special Flood Hazard Area (SFHA, also known as the 100-Year Floodplain), Lakes and Water Bodies, Significant Wetlands, Riparian Corridor and Habitat areas, areas with slopes 25 percent or greater, and land within the BPA and KM easements. Additionally, a 50 percent deduction for non-significant wetlands is applied due to the costs of wetland mitigation and availability of mitigation bank credits for purchase.

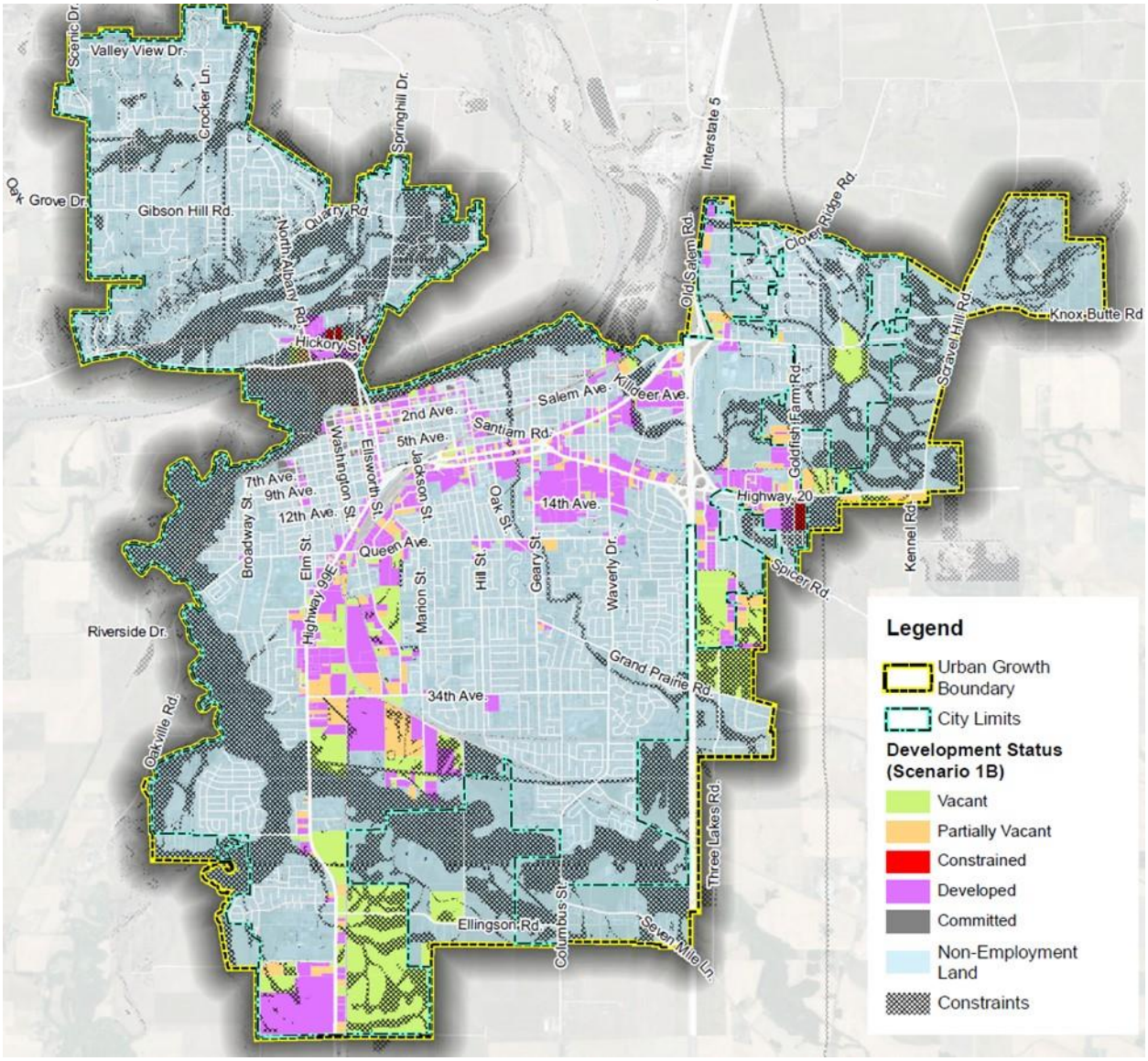
FIGURE 5.04: ENVIRONMENTAL CONSTRAINTS, CITY OF ALBANY UGB



Source: Angelo Planning Group, City of Albany

Figure 5.05 presents employment parcels categorized by their development status. Wetland constraints are highlighted to show how they hamper some of nominally vacant land supply. Where wetlands constrain a parcel, these parcels may be partially or wholly discounted from the inventory.

FIGURE 5.05: BUILDABLE EMPLOYMENT LAND INVENTORY MAP, CITY OF ALBANY UGB



Source: Angelo Planning Group, City of Albany

VI. RECONCILIATION OF FUTURE NEED (2040) AND LAND SUPPLY

The inventory of employment land provides a snapshot of the current local capacity to accommodate more business and jobs. This current available land is compared to the forecasted need for new land over the 20-year planning period, generated in a previous step (Section IV).

LAND SUPPLY VS. LAND DEMAND (ACRES)

The estimate of future land need is re-presented below for both growth scenarios. A total need for 562 gross acres in the PSU Scenario and 732 gross acres in the Adjusted Scenario was identified across a range of building types.

FIGURE 6.01: SUMMARY OF FORECASTED 20-YEAR LAND NEED BY BUILDING TYPOLOGY (ALBANY)

6.01 A: SCENARIO 1 (PSU FORECAST, 1.3 PERCENT)

PSU SCENARIO	DEMAND BY GENERAL USE TYPOLOGY, 2019-2039						
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	Total
Employment Growth	2,486	1,680	733	945	791	2,192	8,828
Avg. SF Per Employee	350	600	990	600	1,850	500	649
Demand for Space (SF)	870,200	1,008,300	726,000	567,100	1,462,700	1,096,200	5,730,500
Floor Area Ratio (FAR)	0.35	0.35	0.30	0.30	0.35	0.25	0.31
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	6.9%
Implied Density (Jobs/Acre)	39.2	25.4	11.9	20.7	7.8	19.6	19.6
Net Acres Required	**63.4**	**66.1**	**61.7**	**45.7**	**101.0**	**111.8**	**449.8**
Gross Acres Required	**79.3**	**82.7**	**77.2**	**57.1**	**126.2**	**139.8**	**562.2**

6.01 B: SCENARIO 2 (ADJUSTED FORECAST, 1.75)

ADJUSTED SCENARIO	DEMAND BY GENERAL USE TYPOLOGY, 2019-2039						
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	Total
Employment Growth	3,082	2,223	1,024	1,498	985	2,642	11,455
Avg. SF Per Employee	350	600	990	600	1,850	500	652
Demand for Space (SF)	1,078,800	1,333,800	1,014,100	898,600	1,822,400	1,321,100	7,468,800
Floor Area Ratio (FAR)	0.35	0.35	0.30	0.30	0.35	0.25	0.31
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	100.0%
Implied Density (Jobs/Acre)	39.2	25.4	11.9	20.7	7.8	19.6	19.6
Net Acres Required	**78.6**	**87.5**	**86.2**	**72.4**	**125.8**	**134.8**	**585.3**
Gross Acres Required	**98.3**	**109.4**	**107.8**	**90.5**	**157.3**	**168.5**	**731.7**

Source: Oregon Employment Department, Albany, Johnson Economics LLC

Roughly half of the projected acres needed is for uses most appropriate to industrial zones (business park, general industrial, warehouse), and a little more than half the acres needed are for uses most appropriate for commercial zones (office, retail, institutional).

The assignment of demand by building type to specific zones is fungible. For this analysis, demand has been mapped generally to appropriate zones, but in practice the varying zones tend to allow for more than one of the building types. Therefore, this analysis necessarily involves many assumptions of what zones the needed employment building types might locate in. The results may best be viewed as an "order of magnitude" of supply vs. demand.

The following tables in Figure 6.02 A and 6.02 B show a reconciliation of forecasted need for employment land vs. supply for Scenarios 1 and 2. The estimated 20-year demand is compared only to the land supply inside the city. Employment lands located outside the city boundary, but within the UGB should be considered "long-term" supply.

- While the total forecasted land need is less than the total buildable employment land inventory (815 gross acres), the breakdown of zoning and site size does not align as well as demonstrated in Figure 6.03.
- Because most of the buildable land is in industrial zones, there is an estimated shortage of commercial acreage in the city limits compared to the forecasted need in both scenarios. At the same time, there is an estimated surplus of industrial land compared to the forecasted need.
- The commercial land forecast includes land needs of institutional uses such as hospitals and schools; these uses are not permitted in many commercial zones but are permitted in many residential zones and in some industrial zones.

It is important to remember that the different categories of employment land are not (necessarily) substitutable. For instance, a shortage of 10 acres of commercial land, and a surplus of 10 acres of industrial land do not cancel each other.

Also, this does not address the more specific site needs from specific categories of employment land users. **Some of the forecasted growth includes employers who may have specific site needs and preferences that are not reflected in the available buildable inventory**, even though *in total* the available parcels sum to a significant amount.

In particular, there is forecasted demand for more suitable large-lot industrial sites while relatively few of these sites were found in the inventory that are unconstrained. This is discussed in greater detail following the tables in Figures 6.02 A and B.

FIGURE 6.02 A: SCENARIO 1 (PSU, 1.3 PERCENT) COMPARISON OF EMPLOYMENT LAND SUPPLY (BLI) TO LAND DEMAND (2040), BY ZONE AND BUILDING TYPE

WITHIN CITY LIMITS	SUPPLY		DEMAND		RECONCILIATION
Zoning Category	Buildable Capacity (Acres)	Development Type	Buildable Capacity (Acres)	Development Type	Capacity (Acres) Surplus or (Deficit)
COMMERCIAL ZONES		**COMMERCIAL**		**COMMERCIAL***	
CC -- Community Commercial	47.6	Office	79.3	Office	(54.4)
NC -- Neighborhood Commercial	10.3	Institutional	82.7	Institutional	(62.5)
OP -- Office Professional	14.8	Retail	139.8	Retail	(5.5)
PB -- Pacific Boulevard	3.0	***Commercial Total:***	***301.8***	***Commercial Total:***	***(122.4)***
RC -- Regional Commercial	52.7				
Mixed Use Zones (all)	51.0				
Commercial Total:	***179.3***				
INDUSTRIAL ZONES		**INDUSTRIAL**		**INDUSTRIAL**	
HI -- Heavy Industrial	70.0	Gen. Ind.	57.1	Gen. Ind.	12.9
IP -- Industrial Park	303.1	Flex/Biz. Park	77.2	Flex/Biz. Park	226.0
LI -- Light Industrial	139.7	Warehouse	126.2	Warehouse	13.5
Industrial Total:	***512.8***	***Industrial Total:***	***260.5***	***Industrial Total:***	***252.3***

OUTSIDE CITY,WITHIN UGB	LONG-TERM SUPPLY
Zoning Category	Buildable Capacity (Acres)
Commercial (UGB)	22.9
Mixed Use (Village Center)	28.0
Industrial (UGB)	72.0
	123.0

*Mapping of zones to development types: "Office": OP-50 percent, MU-25 percent, CC-10 percent. "Institutional": OP-50 percent, MU-25 percent; "Retail": MU-50 percent, CC-90 percent, NC, PB, RC. "General Industrial": HI. "Flex/Biz.Park": IP. "Warehouse": LI.
Source: Angelo Planning Group, Johnson Economics LLC

FIGURE 6.02 B: SCENARIO 2 (ADJUSTED, 1.7 PERCENT) COMPARISON OF EMPLOYMENT LAND SUPPLY (BLI) TO LAND DEMAND (2040), BY ZONE AND BUILDING TYPE

WITHIN CITY LIMITS	SUPPLY
Zoning Category	Buildable Capacity (Acres)
COMMERCIAL ZONES	
CC -- Community Commercial	47.6
NC -- Neighborhood Commercial	10.3
OP -- Office Professional	14.8
PB -- Pacific Boulevard	3.0
RC -- Regional Commercial	52.7
Mixed Use Zones (all)	51.0
Commercial Total:	***179.3***
INDUSTRIAL ZONES	
HI -- Heavy Industrial	70.0
IP -- Industrial Park	303.1
LI -- Light Industrial	139.7
Industrial Total:	***512.8***

	DEMAND
Development Type	Buildable Capacity (Acres)
COMMERCIAL	
Office	98.3
Institutional	109.4
Retail	168.5
Commercial Total:	***376.2***
INDUSTRIAL	
Gen. Ind.	57.1
Flex/Biz. Park	77.2
Warehouse	126.2
Industrial Total:	***260.5***

	RECONCILIATION
Development Type	Capacity (Acres) Surplus or (Deficit)
COMMERCIAL	
Office	(73.4)
Institutional	(89.3)
Retail	(34.2)
Commercial Total:	***(196.9)***
INDUSTRIAL	
Gen. Ind.	12.9
Flex/Biz. Park	226.0
Warehouse	13.5
Industrial Total:	***252.3***

OUTSIDE CITY,WITHIN UGB	LONG-TERM SUPPLY
Zoning Category	Buildable Capacity (Acres)
Commercial (UGB)	22.9
Mixed Use (Village Center)	28.0
Industrial (UGB)	72.0
	123.0

*Mapping of zones to development types: "Office": OP-50 percent, MU-25 percent, CC-10 percent. "Institutional": OP-50 percent, MU-25 percent; "Retail": MU-50 percent, CC-90 percent, NC, PB, RC. "General Industrial": HI. "Flex/Biz.Park": IP. "Warehouse": LI.
Source: Angelo Planning Group, Johnson Economics LLC

SITE SUPPLY VS. SITE DEMAND (NUMBER AND SIZE OF SITES)

This section compares the more specific site requirements of projected future commercial and industrial users with the specific inventory of prospective employment sites identified within the UGB. Oregon Administrative Rules requires a determination of 20-year employment land need, as well as a determination of need for suitable, readily serviceable land to meet short-term demand.

The following definitions from OAR 660-009-005 are relevant to this discussion:

> (2) "Development Constraints" means factors that temporarily or permanently limit or prevent the use of land for economic development. Development constraints include, but are not limited to, wetlands, environmentally sensitive areas such as habitat, environmental contamination, slope, topography, cultural and archeological resources, infrastructure deficiencies, parcel fragmentation, or natural hazard areas.
>
> (10) "Short-term Supply of Land" means suitable land that is ready for construction within one year of an application for a building permit or request for service extension. Engineering feasibility is sufficient to qualify land for the short-term supply of land. Funding availability is not required. "Competitive Short-term Supply" means the short-term supply of land provides a range of site sizes and locations to accommodate the market needs of a variety of industrial and other employment uses.
>
> (11) "Site Characteristics" means the attributes of a site necessary for a particular industrial or other employment use to operate. Site characteristics include, but are not limited to, a minimum acreage or site configuration including shape and topography, visibility, specific types or levels of public facilities, services or energy infrastructure, or proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes.
>
> (12) "Suitable" means serviceable land designated for industrial or other employment use that provides, or can be expected to provide, the appropriate site characteristics for the proposed

As noted in Section V, the Buildable Land Inventory was screened for major constraints, including current development, floodways, wetlands, steep slopes, and federal ownership. The remaining parcels in the inventory may be buildable but may not meet the specific site requirements of certain users. Others may be part of the long-term supply, but not be well-suited for the short-term supply.

Estimated 20-Year Site Needs vs. Current Supply

The following figures represent the findings of estimated 20-year need (Section IV) and current supply (Section V) of sites by size and land use. Note the estimate of future needs is approximate, as economic growth is dynamic and difficult to predict. Communities should maintain flexibility and ensure a supply of a variety of site types with short-term availability, as allowed through the Goal 9 EOA process.

FIGURE 6.03: ALBANY SITE SUPPLY VS. FORECASTED 20-YEAR NEED

Estimated 20-Year Site SUPPLY (BLI) by Zone and Site Size (acres)

LAND USE	0 TO .9 acres	1 to 4.9 acres	5 to 9.9 acres	10 to 19.9 acres	20 to 29.9 acres	30 to 49.9 acres	50 to 99.9 acres	100+ acres	TOTAL
NC -- Neighborhood Commercial	18	1	0	0	0	0	0	0	19
CC -- Community Commercial	124	7	0	0	0	0	0	0	131
RC -- Regional Commercial	27	7	0	0	0	1	0	0	35
OP -- Office Professional	14	2	1	0	0	0	0	0	17
PB -- Pacific Boulevard	10	0	0	0	0	0	0	0	10
Mixed Use	84	2	1	0	2	0	0	0	89
Commercial (UGB)	2	7	1	0	0	0	0	0	10
Commercial Total:	**279**	**26**	**3**	**0**	**2**	**1**	**0**	**0**	**311**
LI -- Light Industrial	61	33	4	0	1	0	0	0	99
HI -- Heavy Industrial	5	7	4	2	0	0	0	0	18
IP -- Industrial Park	9	4	2	0	0	1	1	1	18
Industrial (UGB)	1	6	1	2	1	0	0	0	11
Industrial Total:	**76**	**50**	**11**	**4**	**2**	**1**	**1**	**1**	**146**
TOTAL:	***355***	***76***	***14***	***4***	***4***	***2***	***1***	***1***	***457***

PSU Scenario (1.3%): Estimated 20-Year Site NEED by Land Use and Size (acres)

LAND USE	0 TO .9 acres	1 to 4.9 acres	5 to 9.9 acres	10 to 19.9 acres	20 to 29.9 acres	30 to 49.9 acres	50 to 99.9 acres	100+ acres	TOTAL (sites)
Office	116	7	1	1	0	0	0	0	125
Institutional	33	12	1	1	0	0	0	0	47
Retail	80	23	1	1	0	0	0	0	105
Commercial Total:	**229**	**42**	**3**	**3**	**0**	**0**	**0**	**0**	**277**
Flex/B.P	26	6	0	1	0	1	0	0	34
Gen. Ind.	39	7	2	1	0	1	1	1	52
Warehouse	21	16	1	1	1	1	1	0	42
Industrial Total:	**86**	**29**	**3**	**3**	**1**	**3**	**2**	**1**	**128**
TOTAL:	***315***	***71***	***6***	***6***	***1***	***3***	***2***	***1***	***405***

ADJUSTED Scenario (1.7%): Estimated 20-Year Site NEED by Land Use and Size (acres)

LAND USE	0 TO .9 acres	1 to 4.9 acres	5 to 9.9 acres	10 to 19.9 acres	20 to 29.9 acres	30 to 49.9 acres	50 to 99.9 acres	100+ acres	TOTAL (sites)
Office	139	8	1	1	0	0	0	0	149
Institutional	46	15	1	2	0	0	0	0	64
Retail	96	27	2	1	1	0	0	0	127
Commercial Total:	**281**	**50**	**4**	**4**	**1**	**0**	**0**	**0**	**340**
Flex/B.P	33	8	1	1	0	1	0	0	44
Gen. Ind.	39	11	2	1	0	1	1	1	56
Warehouse	25	19	1	1	1	1	1	0	49
Industrial Total:	**97**	**38**	**4**	**3**	**1**	**3**	**2**	**1**	**149**
TOTAL:	***378***	***88***	***8***	***7***	***2***	***3***	***2***	***1***	***489***

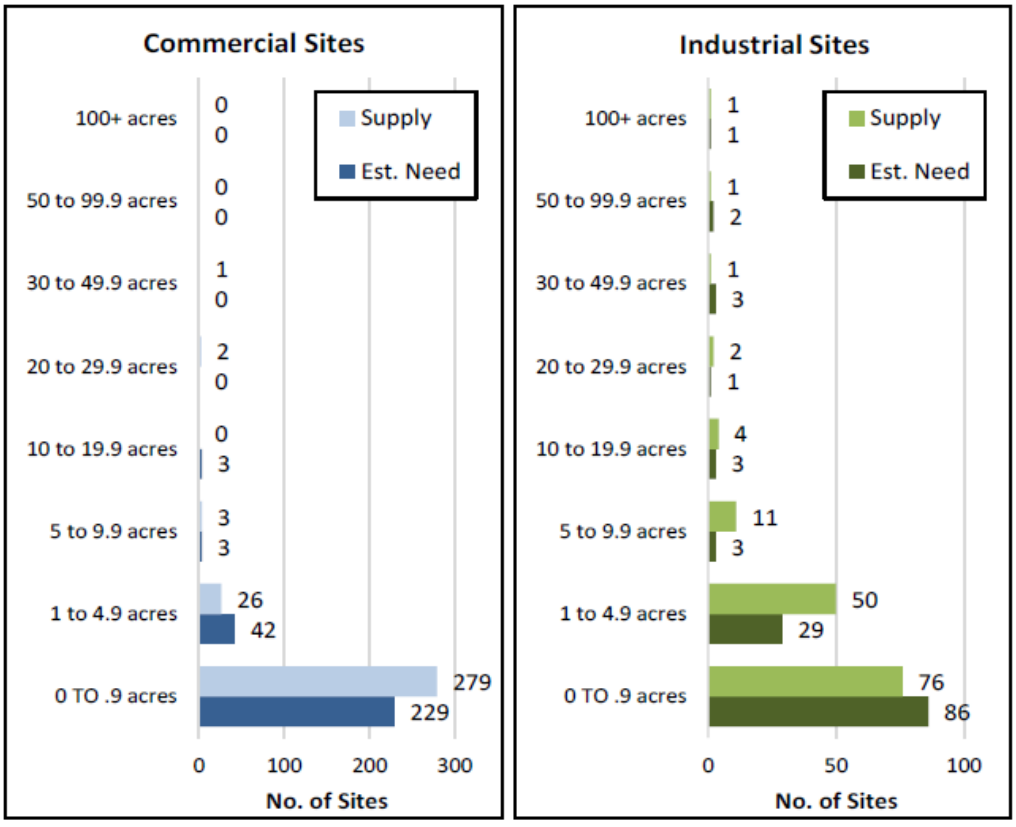
Source: Angelo Planning Group, Johnson Economics LLC

As Figure 6.03 presents, the forecasted need for sites of different sizes does not match exactly with the current supply. The demand for commercial sites (retail/office/institutional) matches well with the supply under the PSU forecast, but demand exceeds the current supply under the adjusted forecast. There is a deficit of commercial sites between one to five acres and 10 to 20 acres; however larger sites could be used to meet these needs.

For industrial users, the total number of sites needed matches very well; however, there is a discrepancy between the size of sites needed and those available. Most notably there is a deficit of suitable large industrial sites and a deficit of small industrial sites. Industrial sites between one and 10 acres can be used to address the projected deficit of smaller industrial sites.

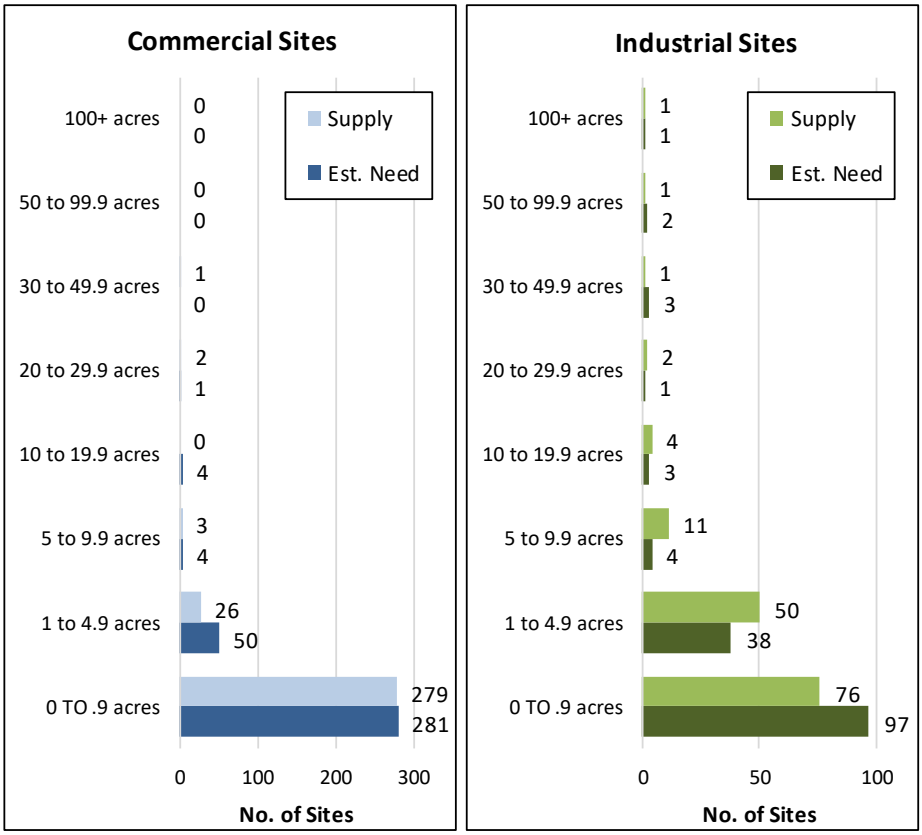
Figure 6.04 presents the same data in chart form to provide a side-by-side comparison of forecasted need and supply by site size for the two growth scenarios .

FIGURE 6.04 A: SCENARIO 1 (PSU, 1.3 PERCENT)
FORECASTED 20-YEAR SITE NEED VS. SITE SUPPLY BY LAND USE AND SITE SIZE (ACRES)



Source: Oregon Employment Department, Albany, Johnson Economics LLC

FIGURE 6.04 B: SCENARIO 2 (ADJUSTED FORECAST, 1.7 PERCENT)
FORECASTED 20-YEAR SITE NEED VS. SITE SUPPLY BY LAND USE AND SITE SIZE (ACRES)



Source: Oregon Employment Department, Albany, Johnson Economics LLC

- As noted, the analysis finds the estimated need for commercial sites between one and five acres outnumbers the estimated supply. There is an unmet need for commercial sites between 10 and 20 acres.
- There is an estimated need for the smallest industrial sites, to accommodate small businesses and start-ups.
- There is also an estimated need for larger industrial sites in the 30-acre to 100-acre range.
- Most of Albany's larger industrial sites are constrained by infrastructure needs and access in the short term (see Further Discussion of Key Sites that follows).

FURTHER DISCUSSION OF KEY SITES

The findings of aggregate land supply from the Buildable Land Inventory belie the fact that many of the larger parcels (mostly industrial) that have been identified as "available" face major hurdles towards development in the short- or even long-term. Discussion with local experts and stakeholders provided further context on the feasibility of developing these sites.

The examination of the key sites found there is significant (industrial) acreage likely to be unavailable without significant further public investment in streets and other infrastructure that is unlikely to happen in the near term. These findings should be considered in assessing if Albany truly has the usable employment land supply the BLI suggests and how much of it is truly short-term, shovel-ready land.

Figure 6.05 shows the findings that of the seven key sites examined, five industrial sites have major hurdles to development. The constraints on these burdened sites amount to a total of 315 acres of industrial land which includes 50 percent of non-significant wetlands. This is more than 54 percent of the total "buildable" industrial land identified in the BLI.

FIGURE 6.05: SUMMARY OF SHORT-TERM INDUSTRIAL LAND SUPPLY

INDUSTRIAL	Buildable Capacity (BLI	Key Sites Constrained		Net Acres Remaining
	Acres	Acres	% Total	
In City Limits	512.8	276	54%	236.8
Outside City Limits	72	38	53%	34
Total	*584.8*	*314*		*270.8*

Source: Stakeholders, City of Albany, Angelo Planning, Johnson Economics LLC

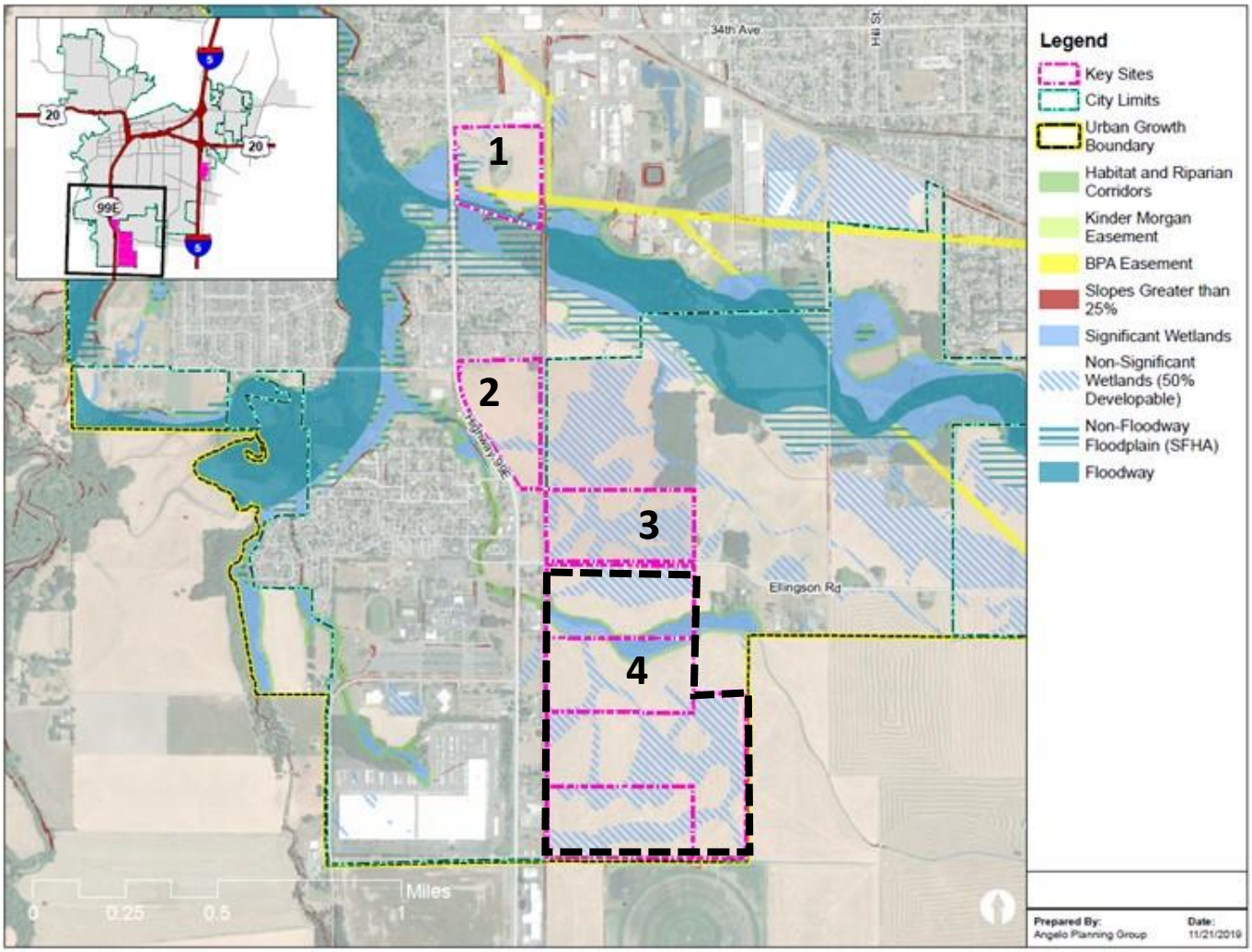
The key sites discussed here are found mostly in the South Albany area near Pacific Boulevard (Figure 6.06), and in East Albany, south of the interchange between Highway 20 and Interstate 5 (Figure 6.07). The sites are shown on the maps that follow. A summary of each site is contained in Appendix A.

SOUTH ALBANY AREA

There are three large industrial sites near Highway 99 E in South Albany and one commercial site (#2). The short-term supply includes the Epping/Springer Light Industrial site (#1), which has approximately 25 developable acres and is served with utilities and streets, and the Epping Regional Commercial Site (#2). The commercial site is 36 acres with limited wetlands, but the TSP describes a future extension of 53rd Avenue and a railroad crossing.

Site #4 is Albany's largest industrial site, consisting of four taxlots totaling 243 acres, of which about 178 acres is developable. Access to this site and Site 3 will require street improvements.

FIGURE 6.06: SOUTH ALBANY INDUSTRY AREA (KEY SITES)



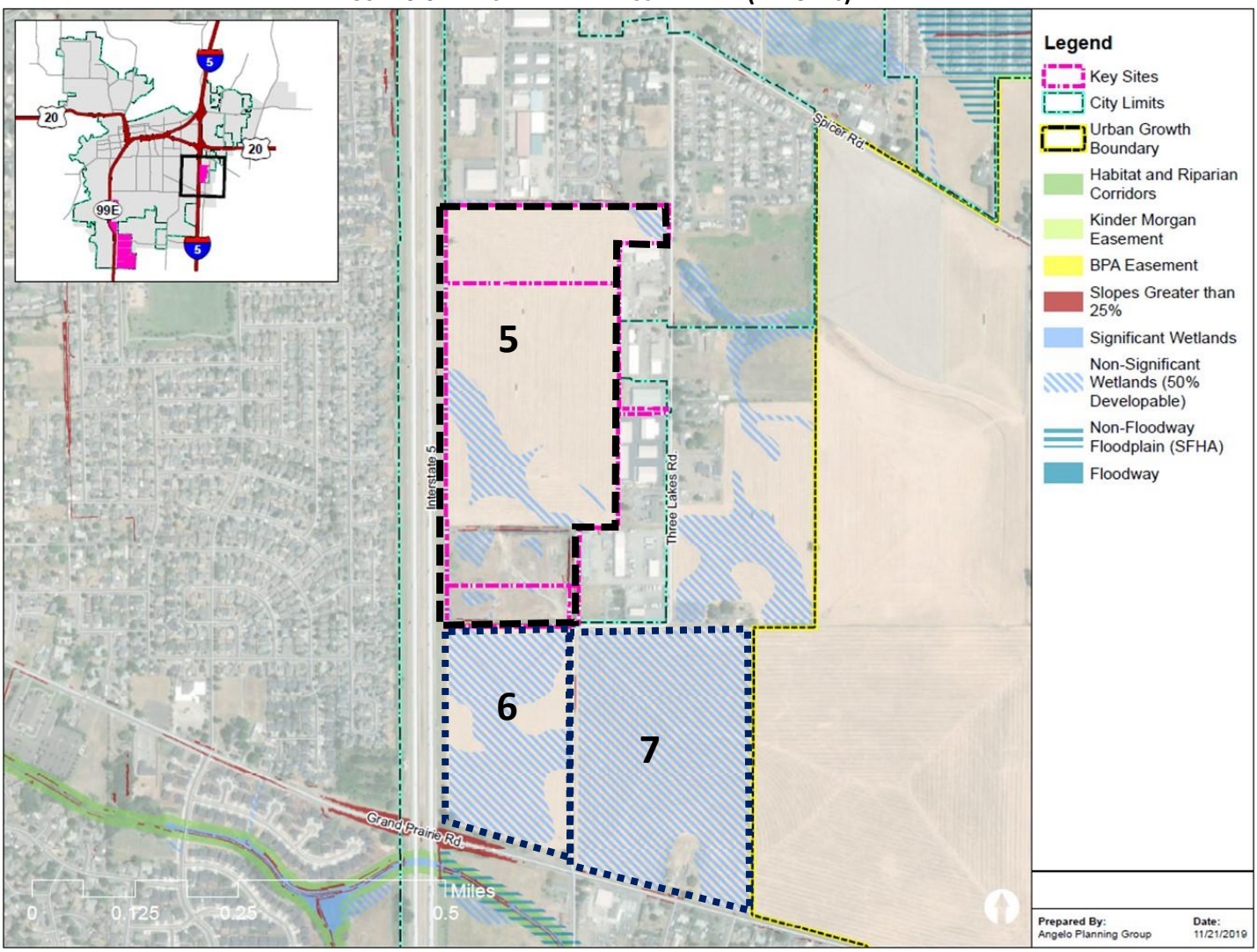
Source: Oregon Employment Department, Albany, Johnson Economics LLC

EAST ALBANY INDUSTRIAL AREAS

The Kempf Industrial Park (#5) is a 66-acre property east of I-5 and south of Highway 20 with high visibility and very few wetlands. Utilities are at the site, but development of the site is expected to exceed the amount of traffic that ODOT will permit to access highway 20 near the I-5 interchange. The site's reliance on broader transportation improvements throughout the area is likely to make it a poor short-term development candidate.

Two additional industrial sites (6 and 7) are located outside of the city boundary, but within the UGB. Both sites represent theoretical long-term land supply. They both are currently farmed and feature very extensive coverage by non-significant wetlands. These sites may be potential candidates for a land swap to more beneficial locations adjacent to more feasible industrial areas.

FIGURE 6.07: EAST ALBANY INDUSTRY AREA (KEY SITES)



Source: Oregon Employment Department, Albany, Johnson Economics LLC

VII. CONCLUSIONS AND RECOMMENDATIONS

SUMMARY OF FINDINGS

The EOA report points to several key conclusions regarding economic development goals and target industries in Albany over the next 20 years. It also quantifies projected employment growth and land need within the UGB and the adequacy of the current supply of employment land to meet that need.

Through this planning process, a few major economic development themes were identified:

- Manufacturing and skilled light industrial employment has long been a strength in the community and is part of the local employment identity. These traded sector industries are a key target for current and future economic development.
- Albany has and can continue to draw companies being commercialized out of the universities in Corvallis and Eugene and the local National Energy Technical Laboratory (NETL).
- There is a lack of short-term, shovel-ready industrial sites for most sizes of industrial firms. The lack of readily usable sites is an obstacle to business recruitment and expansion.
- Industrial job growth drives growth in commercial services and retail. There is currently enough commercial and mixed-use land available in central Albany, both in vacant, redevelopable, and reusable space downtown, and along the Highway 99 and Highway 20 corridors.
- Policies must continue to support healthy population growth and development of a range of housing types appropriate for the local workforce. The community seeks to be a community where most workers live locally and most residents are employed locally.

Employment Growth

Albany is home to an estimated 27,750 jobs as of 2018. The largest sectors by number of jobs are health care, retail, and manufacturing. Based on a forecasted annual growth rate of 1.3 percent, the city is expected to add roughly 8,800 jobs by 2040. The greatest growth in number of jobs is projected to be in the health care, manufacturing, tourism-related (lodging and dining), and retail sectors.

Broken down into broad categories of employment that tend to use commercial/retail space or that tend to use industrial space, the analysis forecasts a fairly balanced demand for land in both categories of zoning.

Expanding and Target Industries

The city has significant strength and potential for growth in several key industries. Analysis of the representation of industries in Albany relative to the representation in the U.S. shows Albany is strong in multiple subsectors of manufacturing including metals, wood products, and food products. Other industry sectors with high representation are education (including the school district), some categories of retail, and warehousing. Health care is also the largest segment of local employment and is forecasted to add the most jobs over the next 20 years.

Manufacturing was identified as the major priority for future economic development. Healthcare plays an important role in the local economy.

- **Manufacturing:** This sector was identified as a key area of focus for continued job growth and economic development. Albany currently has strength in metal manufacturing, wood

products, and food processing. All of these areas are good candidates to expand and continue to attract suppliers and other related firms that grow along with the industry cluster. A key future candidate for growth is high-tech and advanced manufacturing, which includes robotics, drones, and automation tools used by other industries.

There are currently over 3,600 manufacturing jobs in Albany, or 13 percent of the total, with about 800 to 1,500 new jobs forecasted over 20 years, depending on the growth rate. On average, these jobs pay excellent wages, well above the local median wage.

- **Health Care:** This sector is the largest in Albany in terms of total employment and is forecasted to see the most overall growth over the next 20 years. This sector accounted for nearly 3,800 jobs in 2019, with above-average annual wages. Health care provides a wide range of wage levels due to the range of education and skills level for different roles across the industry. The sector is expected to add over 2,100 new jobs over the next twenty years, accounting for almost one quarter of projected job growth.

  The forecasted strength in health care in the coming decades is based on growth of the Samaritan Health Services and related providers in the community, the long-term shift in the national economy from goods consumption to service consumption, and the aging of the population.

The retail and construction sectors are secondary growth sectors due to their share of employment and forecasted growth. However, the growth in these sectors will follow naturally from growth in the traded sector economy.

Employment Land Need

The EOA analysis finds that the forecasted 20-year job growth by industry, will translate to a need for between 562 to 730 total acres of land zoned for employment uses. The distribution of land demand between commercial uses (office, institutional, retail) and industrial uses (industrial, warehouse, business park) is fairly evenly distributed.

A range of site sizes will be needed ranging from the small to the very large to accommodate the projected business expansion. Different commercial and industrial users have different site requirements driven by the specific nature of their business operations, firm size, location, infrastructure requirements, and other factors.

Adequacy of Employment Land Supply

The Buildable Land Inventory (BLI) of employment lands completed in conjunction with the EOA found a total of 810 buildable acres in commercial, industrial, and mixed-use zones. While this total supply exceeds the total forecasted need, the zoning categories, site sizes, and site characteristics of the available supply do not fully meet the forecasted demand.

The following is a summary of findings on the adequacy of available employment sites compared to the forecasted need:

- For commercial users, the forecasted need for sites of different sizes under both growth scenarios does not match exactly with the current supply. In the PSU growth scenario, the demand for commercial sites (retail, office, institutional) can be met with the current supply but not under the adjusted scenario (1.7 percent). There is a deficit of commercial sites between one and five acres and10 to 20 acres under both scenarios, and a deficit of sites less than one acre under the adjusted scenario.

- For industrial users, the total number of acres available matches the demand under both scenarios; however, there is a discrepancy between the size of sites needed and those available. Most notably there is a deficit of suitable large industrial sites (>30 acre) and a deficit of small (<1 acre) industrial sites.
- Most currently buildable industrial lands have constraints that make them difficult or infeasible sites for short-term development, particularly the largest sites. Local stakeholders demonstrated there is a limited ready supply of land for new industrial businesses of any size, but particularly mid- to large-sized firms.
- Wetland and transportation issues are particularly challenging on many of the city's remaining industrial lands. Wetlands render much of some sites unusable, or expensive to mitigate, while leaving the useful portions isolated in the wrong part of the parcel.
- Multiple large employment sites in South Albany and near the Highway 20/I-5 interchange look available but must wait on costly new off-site street infrastructure to provide access to them.
- Business Oregon states the average potential business recruitment in the region is looking for at least 40 acres with an average of 60 acres. A mix of available sites is needed, including small, medium, and large sites.
- Stakeholders indicated smaller start-ups need smaller pre-built spaces. These may be one to five acres and include multi-tenanted buildings.
- Some high-tech businesses want to be centrally located in Albany due to the town center's amenities. These businesses may not want an isolated industrial location or to be in a larger market. Central "flex space" or refurbished warehouse space may be appropriate for these users.
- Given limited resources, the City cannot serve all employment areas with new infrastructure at once. Any public efforts to help prepare employment lands must be prioritized and phased.

Key Industrial Sites Analysis

The findings of aggregate land supply in the BLI belie the fact that many of the larger industrial parcels that have been identified as "available" face major hurdles to development in the short- or even long-term.

Of the seven key sites examined, five industrial sites have major hurdles to development that add up to more than 54 percent of the total "buildable" industrial land identified in the BLI.

- The greatest barrier is found on large industrial sites in South Albany. These show up as a majority share of "available" buildable industrial land within the City boundary. However, these 214 acres face major hurdles, including the need to plan and build a future street in order to provide access. Current access to these sites is via inadequate, under-improved roads, with an at-grade rail crossing that will prohibit a significant increase in traffic. A significant development on any of these sites will require right-of-way dedication and expensive new road improvements across parcels of land under differing ownership.
- These sites in South Albany are also constrained by a web of wetlands across all of the acreage that will require significant mitigation on-site or off.
- A key site in East Albany (the Kempf site) included in the "available" inventory, similarly will require expensive new future road improvements off-site across parcels of land the site owner does not control. This makes the timing and feasibility of development of this site uncertain and removes it from the "short term" supply.

- With these large sites removed from the "short-term" supply, Albany is left with a shortage of short-term supply of employment land, particularly among the largest prospective employers.

EOA Implementation Recommendations

This section provides recommended implementation measures to help address the opportunities and challenges identified through the EOA planning process. The City undertakes many of these measures to support economic development.

PROVIDE AN ADEQUATE SUPPLY OF EMPLOYMENT LAND and SITES		
CORE INITIATIVE		
	Actions	**Notes**
MEET INDUSTRIAL AND COMMERCIAL LAND NEEDS		
1	Establish and maintain a competitive short-term supply of employment land, in readily developable sites.	Large amounts of Albany's identified "available" inventory consists of industrial land that is not readily developable. In particular, the city's large-lot industrial supply will only be available in the long-term if at all. The City must prioritize quickly serving this land with new infrastructure or consider alternative areas that can be served and developed in a shorter timeframe. Options: rezoning of other land categories to industrial; UGB swap or expansion; public effort to serve some or all of these large industrial areas (see below).
2	Prioritize serving key industrial subareas and sites in the TSP and Capital Improvement Plan	Given limited public resources, ensure that all planning efforts reflect the prioritization and sequencing of infrastructure projects to serve key sites and areas.
3	Evaluate options for financing the build-out of infrastructure in the South Albany and East Albany industrial areas.	Potential options include an employment-focused tax increment financing (TIF) district, or local improvement district. If feasible, a TIF is more likely to provide the scale of funding needed to build out infrastructure.
	Actions	**Notes**
4	Encourage infill, redevelopment, and/or adaptive reuse of obsolete or underused properties in central employment zones.	Existing commercial and retail space in the downtown area and along commercial corridors might be more intensively used, accommodating more job growth in existing employment areas. More intensive development and mixed-use construction often encounter a feasibility gap between costs and end value. Common approaches to bridging this gap include TIF funding, tax credit programs, tax incentives, and public/private partnerships.
5	Inventory properties that might be good opportunity sites for potential public/private catalyst projects.	Public control of a property by the City, TIF agency, or other public agency provides the public with a valuable incentive with which to forge a public/private deal that provides public benefits that a private development might not. Examples include incentivizing the developer to build at greater density, mixed uses, design elements, transit-oriented or other design elements, and other public goods.
6	Continue to improve and streamline development regulations and review processes where possible, to reduce cost and time, and provide predictability.	The community and city work to be development and employer friendly.

7	Evaluate assisting in wetland mitigation to increase developable land inventory, including creating or partnering in a wetland mitigation bank	Significant and non-significant wetlands constrain a high percentage of Albany's "available" employment land. Costs of mitigating can be prohibitive for industrial users while on-site mitigation reduces usable site area and can be difficult for a business operator to maintain over time. Mitigation banks allow for off-site mitigation. Credits at existing banks can be difficult or expensive to obtain. A local bank would provide more certainty for mitigation; however, an extensive interagency process is involved.
8	Facilitate clean up and utilization of identified brownfield sites	Work with the appropriate agencies to identify requirements, as well as potential funding sources, to bring environmentally contaminated sites to productive use. Possible incentives include local and state tax abatement programs, and surcharge-based clean up funds.

TARGET INDUSTRIES AND BUSINESS DEVELOPMENT		
CORE INITIATIVE		
	Actions	**Notes**
SUPPORT AND EXPAND EMPLOYMENT IN TARGETED INDUSTRIES		
9	Adopt and regularly update target industry profiles.	Industry patterns can change significantly over time, and target industries should be assessed regularly for progress on metrics like job creation and new firms.
10	Maintain and enhance business outreach and communication.	Coordinate business cluster and employment district networking opportunities.
11	Develop a marketing plan to attract businesses within the identified target industry business sectors.	Assemble and distribute materials of specific interest to targeted industries and identify key industry groups.
	Actions	**Notes**
12	Support and engage regional and statewide partners.	Regularly meet and coordinate with groups such as AMEDC, the Chamber and Business Oregon. Promote available employment space and land.
13	Regularly update Oregon Prospector to promote available employment space and land to site selectors.	Ensure all key sites are listed and information is accurate and up to date.
14	Promote Albany Enterprise Zone and Opportunity Zone.	In all site listings and marketing materials, ensure the benefits of the existing zones are mentioned where applicable.
SUPPORT SMALL BUSINESS DEVELOPMENT		
15	Develop and/or market programs to assist emerging and under-capitalized firms	Technical assistance, micro loans, storefront improvement programs, master leases, and credit enhancement.
16	Evaluate development of incubator space.	A shared work or incubator space, often affiliated with a college, economic development agency, or other agency, to provide space for small but promising companies to work and collaborate in a subsidized environment while they grow.

17	Evaluate development of shared fabrication space and/or "makers" collective.	Similar to (former) ADX in Portland, look for opportunities to repurpose existing space to support multi-tenant maker spaces. These provide small spaces for craftsmen and artisans to work and share tools and knowledge, to incubate new businesses. A good fit for a local economy with diverse manufacturing base and workforce.
18	Connect small business opportunities with property owners.	The City can serve as a clearinghouse or matchmaker, matching business needs with local property owners. This could include food carts, which can serve as an incubator for future food service tenants.
WORKFORCE INITIATIVES		
19	Support connections between local industry, K-12, LBCC, and OSU education and training courses.	Help match training programs to employers, potentially coordinating internships or regular interaction with local businesses. Ensure these programs address target industries in particular and stay up to speed on rapidly evolving industry norms and technology.
20	Promote workforce training resources.	Increase knowledge of existing resources for job seekers.
21	Ensure the housing policies allow for an appropriate mix of housing for the local workforce.	The community should strive to provide the full range of housing types and price points to meet the needs to the full workforce and encourage residents to both live and work in Albany.
22	Support local affordable housing developers	Low-wage positions are a key component of any local economy, and most industries rely on this workforce either primarily, or through their supporting firms. Subsidized affordable housing is one key segment of the workforce housing puzzle.

APPENDIX A: LARGE INDUSTRIAL SITE SUMMARIES

This section provides additional detail on Albany's key employment land sites discussed in Section VI of this report. These sites make up a sizable part of the acreage found in the Buildable Lands Inventory, but many have challenges to development as noted in the profiles below.

1) Epping/Springer Industrial Site

Address:	3943 Pacific Boulevard
Tax Lot(s):	11S03W1900414
Zoning:	Light Industrial
Acreage:	36.2 acres
Constraints:	Several constraints in southern and western portion of property, including floodplain, wetlands, and BPA easement. The southern portion of the site is designated open space within the Oak Creek waterway, which may limit some industrial uses or require a buffer on the south end of the site. The BPA easement can be used for parking, storage, or stormwater mitigation, but not development.
Estimated Usable Acreage:	23-27 acres
Access:	Good access from Pacific Boulevard, a high-volume principal arterial and state highway. Roughly 900 feet of frontage. The site is roughly four miles from access to the I-5 freeway via the center of the city, or six miles via the less congested route to the south. Good visibility for businesses that require it. Rail access potential.
Notes:	Listed on Oregon Prospector (28 usable acres). Enterprise Zone.
Development Feasibility:	This site is not being actively marketed for sale by the owner but is listed on Oregon Prospector. The usable acreage is feasible industrial land, with read access and utilities. It can be considered short-term land supply.

2) Epping Regional Commercial Parcel (Piano Property)

Address:	East of Highway 99E, at 53rd Avenue SW
Tax Lot(s):	11S03W1900500
Zoning:	Regional Commercial
Acreage:	36 acres total
Constraints:	There are some non-significant wetlands that split the southern third of the site east to west. The Transportation Systems Plan (TSP) describes a future street that would extend from the intersection of 53 Avenue and Pacific Boulevard eastward across the northernmost boundary of the property. This future street will likely entail some loss of acreage on this parcel to public right-of-way.
Estimated Usable Acreage:	33.7

Access:	Good access and retail visibility from Pacific Boulevard. Roughly 2,000 linear feet of frontage. However, the designation of Pacific Boulevard as a state highway may complicate the location of access points to this parcel. Access may also require signals and other off-site transportation improvements that will raise the cost of development.
Notes:	Not listed on Oregon Prospector. Enterprise Zone.
Development Feasibility:	The site is a good size for a regional commercial shopping center, with access and utility at the property line. The timing of build-out may be contingent on the continued build-out of residential neighborhoods in the area, to provide a critical density of customers to support a large retail center. Alternatively, one or more destination retailers (i.e., big box) that draw customers from a broader range may be viable. It can be considered short-term commercial land supply.

3) Wilt Industrial Property

Address:	East of Highway 99E, North of Ellingson Road
Tax Lot(s):	11S03W3000200
Zoning:	Industrial Park
Acreage:	50 acres
Constraints:	Site is covered by a web of non-significant wetlands.
Estimated Usable Acreage:	36 acres
Access:	This site has access problems under current conditions and with a planned future street through the area. Currently, the site is accessible from S Ellingson Road which borders the property to the south. This section of Ellingson Road is currently a two-lane road, designated as a minor collector. The site does not have direct access to Pacific Boulevard, being separated by the heavy rail line to the west. Those traveling to and from the site must cross an at-grade rail crossing on Ellingson Road, which may serve as a barrier to some types of industrial users that require high truck traffic. Any new land user would have to make costly upgrades to this street to have adequate access; however, under the current TSP, *Ellingson is planned for obsolescence when a new future street is constructed from the north.* Therefore, it is very unlikely that any developer will want to use this site until it is made accessible via the future street. The site is roughly five miles from the I-5 freeway via Highways 99E and Highway 34 to the south. It does *not* have rail access potential.
Notes:	Listed on Oregon Prospector (52 usable acres). Enterprise Zone.
Development Feasibility:	This site has multiple development challenges that will make it difficult to develop in the short term. Ellingson Road is an inadequate facility for many businesses, but the cost of access improvements would likely be prohibitive even if the street could be used indefinitely. However, the TSP calls for a future street to provide access from the north, with Ellingson likely to lose its access to Pacific Boulevard. With this plan

	in place, it is very unlikely any land user will make the short-term improvements necessary to Ellingson Road. Therefore, this site is unlikely to see development in the short-term and development will likely be contingent on a larger transportation planning effort of the broader South Albany industrial area. The site also faces significant wetland constraints that will add cost to mitigate.

4) SVC/PepsiCo Industrial Site

Address:	East of Highway 99E, South of Ellingson Road
Tax Lot(s):	11S03W3000311; 11S03W3000500; 11S03W3000700; 11S03W3001100
Zoning:	Industrial Park
Acreage:	243 acres
Constraints:	Significant wetlands and riparian area split the northern quarter of the site from east to west. The remainder of the site is covered by a web of non-significant wetlands. There is currently a separate 165-acre property designated to mitigate wetlands from this site.
Estimated Usable Acreage:	178 acres (divisible)
Access:	Access to this large site is complicated by the boundary of the heavy rail line to the west of the property. Currently access will have to be from Ellingson Road to the north and Beta Drive SW that borders the property to the south. Both of these sites are two-lane minor roads, with at-grade rail crossings between the site and Highway 99E, which may serve as a barrier to some types of industrial users that require high truck traffic. Access from the northernmost quarter of this property to the southern ¾ of the property is likely to be complicated by the bisecting creek and significant wetlands. As noted with Site #3, any new land user would have to make costly upgrades to these unimproved streets to have adequate access; however, under the current TSP, *Ellingson is planned for obsolescence when a new future street is constructed from the north.* Therefore, it is very unlikely that any developer will want to use this site until it is made accessible via the future street. The site is roughly five miles from the I-5 freeway via Highways 99E and Highway 34 to the south. It does *not* have rail access potential.
Notes:	Listed on Oregon Prospector (247 usable acres). Enterprise Zone. Current asking price of this parcel is likely prohibitive for many potential industrial users.
Development Feasibility:	This site faces the same development challenges as those noted for Site #3 regarding the inadequacy of Ellingson Road for access, but the impracticality of improving this road when it is planned for obsolescence and a future street will provide access form the north and east.

	With this plan in place, it is very unlikely any land user will make the short-term improvements necessary to Ellingson. Therefore, this site is unlikely to see development in the short-term and development will likely be contingent on a larger transportation planning effort of the broader South Albany industrial area. The site also faces significant wetland constraints that will add cost to mitigate.

5) Kempf Industrial Park

Address:	Three Lakes Road SE, South of Highway 20, East of I-5
Tax Lot(s):	11S03W1600704; 11S03W1600700; 11S03W1600601; 11S03W1600602
Zoning:	Industrial Park
Acreage:	66 acres
Constraints:	There are some non-significant wetlands on the southwest portion of the site.
Estimated Usable Acreage:	61.6 acres (divisible)
Access:	The site has multiple direct access points, including Fescue Street SE to the north, and Three Lakes Road to the east. Highway 20 and freeway access lay 0.5 miles to the north. No rail access. However, the development of this site, along with the existing industrial development directly to the north is expected to exceed the amount of traffic that ODOT will permit to access Highway 20 near the I-5 interchange. The TSP outlines a future transportation circulation serving this area that includes new access from the northeast of the site. The TSP also shows an extension of Fescue Street bisecting this site vertically. The build-out of this site will be dependent on, and likely delayed by, solving these larger transportation problems through the area. Good visibility from the freeway for businesses that can benefit from it.
Notes:	Listed on Oregon Prospector (67 usable acres). Enterprise Zone.
Development Feasibility:	This site features some advantages including freeway access and visibility. However, the site's reliance on broader transportation improvements throughout the area is likely to make it a poor short-term development candidate.

Industrial sites within UGB

Two additional industrial sites are located outside of the city boundary, but within the UGB. Both of these sites represent theoretical long-term land supply. They both are currently farmed and feature very extensive coverage by non-significant wetlands. These sites may be potential candidates for a land swap to more beneficial locations adjacent to more feasible industrial areas.

6) Heyerly Industrial Property

Grand Prairie Road SE and I-5 (no freeway access)
11S03W1601500
Zoning: Light Industrial (outside Albany city limits)
Total Acres: 24.4
Developable Acres: 15.2 (non-significant wetlands on site)

7) Linn County Industrial Property

Grand Prairie Road SE and Three Lakes Road SE
11S03W1602300
Zoning: Light Industrial (outside Albany city limits)
Total Acres: 43.7
Developable Acres: 23.3 (non-significant wetlands on site)

APPENDIX B: INDUSTRY SITE REQUIREMENTS

This section presents a series of tables that summarize key site requirements for a range of prospective tenant types.[7] This is followed by further discussion of needs for some industry sectors relevant to the local market.

The 14 site requirements listed on the matrix provide a basis for establishing a profile of the physical and other site needs of the identified industry. The site requirements are intended to address the typical needs of each of the industry categories, and it is recognized there will likely be unique or non-typical needs of a specific user that will need to be evaluated by on a case-by-case basis.

The following describes a few general requirements that apply to *all* industry type categories under consideration and then an overview of the 14 site requirements listed on the matrix.

General Requirements:

- The underlying zoning on the site must allow the use outright within the identified category. For example, no zone change, conditional use, and/or similar land use review is necessary. Many jurisdictions typically require a design or development review which is acceptable, since the timeframe for obtaining such design-related approvals will be addressed in the state's rating system.
- The site under consideration must be located geographically within a UGB.
- The site is not located within a 100-year floodplain as mapped by FEMA, although sites with approved FEMA map amendments (e.g., LOMA and LOMR) are acceptable.
- The net contiguous developable area (NCDA) of the site does not include hazardous contaminants as verified by a Level 1 Environmental Report or a Level 2 Report that has received a No Further Action approval from DEQ, or existing wetlands or other natural features which are regulated at the state, federal or local level; or federally endangered species.
- The NCDA does not contain any cultural or historical resources that have been identified for protection at the state, federal or local level.
- The NCDA does not have mitigation plans that can be implemented in 180 days or less.

Site Requirements:

1. **Total Site Size:** The site size is taken to mean the size of the building footprint and includes buffers, setbacks, parking, mitigation, and expansion space.
2. **Competitive Slope:** Most industrial uses require relatively large building footprints that do not accommodate steps in floor slabs, and sloping topography will require extensive excavation and retaining systems that increase development cost over flat sites. The figures given are the preferred maximum average slope across the developable portion of the site, recognizing that sites with additional area outside the building or developments

[7] Business Oregon, Mackenzie.

with multiple building pads generally will have lower slope earthwork costs than sites with limited space outside the building footprint.

3. **Trip Generation:** Sites are frequently limited by a jurisdiction to a specified total number of vehicle trips entering and exiting the site. This site requirement is an estimate of the minimum number of average daily trips per acre (based on the range of building coverage) that should be available for each of the industrial categories based on the Institute of Traffic Engineers (ITE) Manual-Ninth Edition. The following table lists the ITE codes used to estimate average trips for the industry profiles represented in the matrix.

4. **Miles to Interstate or Freight Route:** With few exceptions, access to major freeways or freight routes is critical for the movement of goods. This site requirement indicates the typical maximum range of distance, in miles, from the site to the freeway or highway access. The roadways/intersections between the site and freeway/highway must generally operate at a level of service 'D' or better in accordance with the Highway Capacity Manual methodologies and general engineering standards.

5. **Miles to Frequent Transit Service:** Businesses located within walking distance (within one-quarter of a mile) to a bus stop that is serviced by a frequent bus line enjoy a competitive advantage over others that are more limited in transportation access options.[8]

6. **Railroad Access:** The need for access to railroad for the movement of goods within each industrial category is dependent upon individual users, so the site requirements are identified as either "Preferred," "Not Required," or "Avoid" in some cases where the presence of rail may be considered a deterrent to business.

7. **Proximity to Marine Port:** The need for access to a marine port for the movement of goods within each industrial category is dependent upon individual users.

8. **Proximity to International/Regional Airport:** The need for access to a regional airport for the movement of goods or business travel within each industrial category is dependent upon individual users.

9. **Availability of Water:** This requirement indicates the minimum sizes of domestic water and fire lines immediately available to the site. In certain rural cases, a comparable supply from an on-site water system (i.e., well or reservoir with available water rights) may be acceptable. In addition to line sizes, preference for high-pressure water capabilities and average flow demand in gallons per day is specified for each industry type.

10. **Availability of Sanitary Sewer:** This requirement indicates the minimum size of public sanitary sewer service line immediately available to the site. In certain rural cases, an on-site subsurface system providing a comparable level of service may be acceptable. Sewer flow requirements were determined by calculating a percentage of the water flow for each industry type.

11. **Natural Gas:** This requirement indicates the minimum size natural gas line that is immediately available to the site. It is assumed the pressure demand for all industry categories is 40-60 psi.

12. **Electricity:** This requirement indicates the minimum electrical demand readily available to each industry and where proximity to a substation and redundancy dependency rank on the continuum of less critical to more critical. Estimated demand is based on review of existing usage from local utility providers, referencing industrial NAICS codes for the various profiles.

---

8 We have defined "frequent bus line" as one with service occurring in no longer than 15 minute intervals.

13. **Telecommunications:** This requirement indicates whether the availability of telecommunication systems are readily available, and where major commercial capacity, route diversity and fiber optic lines rank on the continuum of less critical to more critical. All sites are assumed to have a T-1 line readily available.

14. **Special Considerations: 1** Notes on industry-specific factors.

	CRITERIA / PROFILE		A	B	C	D	E	F	G	H	I	J
			Computer & Electronic Manufacturing (High-Tech R&D)	Software & Media	Multi-Tenant Office	Food Processing	Other Manufacturing	Life/Bioscience R&D Campus	Wholesaling	Retail	Data Center	Incubator
	GENERAL REQUIREMENTS		Use is permitted outright, located in UGB or equivalent and outside flood plain; and site (NCDA) does not contain contaminants, wetlands, protected species, or cultural resources or has mitigation plan(s) that can be implemented in 180 days or less.									
	PHYSICAL SITE											
1	TOTAL SITE SIZE*	Competitive Acreage**	5 - 100+	5 - 15	5 - 20	5 - 25+	5 - 50+	20 - 100+	10 - 100+	5 - 20	10 - 100+	5 - 25+
2	COMPETITIVE SLOPE:	Maximum Slope	0 - 5%	0 - 7%	0 - 7%	0 - 5%	0 - 5%	0 - 7%	0 - 3%	0 - 7%	0 - 7%	0 - 5%
	TRANSPORTATION											
3	TRIP GENERATION:	Average Daily Trips per Acre	40 - 60	80 - 200[1]	120 - 240[2]	50 - 60	40 - 50	60 - 150	50 - 60[3]	400 - 500[4]	20 - 30	40 - 50
4	MILES TO INTERSTATE OR FREIGHT ROUTE:	Miles	w/in 10	w/in 5	w/in 5	w/in 30	w/in 20	w/in 5	w/in 5	w/in 5	w/in 30	N/A
5	MILES TO FREQUENT TRANSIT SERVICE (15 MIN OR LESS)	Miles	0.6	0.5	0.8	< 0.1	0.2	0.1	0.3	< 0.1	0.1	< 0.1
6	RAILROAD ACCESS:	Dependency	Preferred	Not Required	Not Required	Preferred	Preferred	Preferred	Preferred	Avoid	Avoid	N/A
7	PROXIMITY TO MARINE PORT:	Dependency	Preferred	Not Required	Not Required	Preferred	Preferred	Preferred	Preferred	Not Required	Not Required	N/A
8	PROXIMITY TO INTERNATIONAL/ REGIONAL AIRPORT:	Dependency	Competitive	Required	Preferred	Preferred	Preferred	Required	Not Required	Not Required	Competitive	N/A
		Distance (Miles)	This criteria cannot be met in Eastern Oregon									

			PROFILE	A	B	C	D	E	F	G	H	I	J
			CRITERIA	Computer & Electronic Manufacturing (High-Tech R&D)	Software & Media	Multi-Tenant Office	Food Processing	Other Manufacturing	Life/Bioscience R&D Campus	Wholesaling	Retail	Data Center	Incubator
	UTILITIES												
9	WATER:	Min. Line Size (Inches/Dmtr)		12" - 16"	6" - 8"	8" - 10"	12" - 16"	6" - 10"	8" - 12"	6" - 10"	8" - 12"	16"	4" - 8"
		Min. Fire Line Size (Inches/Dmtr)		12" - 18"	8" - 10"	8" - 12"	10" - 12"	8" - 10"	8" - 12"	8" - 10"	8" - 12"	10"-12"	6" (or alternate source)
		High Pressure Water Dependency		Required	Not Required	Not Required	Required	Not Required	Preferred	Not Required	Not Required	Required	Not Required
		Flow (Gallons per Day per Acre)		5,200	1,200	1,500	3,150	1,850	2,450	1,200	1,800[5]	50 - 200†	1,200
10	SEWER:	Min. Service Line Size (Inches/Dmtr)		12" - 18"	6" - 8"	8" - 10"	10" - 12"	6" - 8"	10" - 12"	6" - 8"	6" - 10"	8"- 10"	4" - 6" (or on-site source)
		Flow (Gallons per Day per Acre)		4,700	1,000	2,000	2,600	1,700	2,000	1,000	1,500[5]	1,000‡	1,000
11	NATURAL GAS:	Preferred Min. Service Line Size (Inches/Dmtr)		6"	4"	4"	4"	4"	6"	4"	4" - 6"	4"	N/A
		On Site		Competitive	Preferred	Competitive	Preferred	Competitive	Competitive	Preferred	Competitive	Preferred	Preferred
12	ELECTRICITY:	Minimum Service Demand		4 - 6 MW	1 - 2 MW	0.5 - 1 MW	2 - 6 MW	0.5 MW	2 - 6 MW	0.5 MW	0.5 - 1 MW	5 - 25 MW	1 MW
		Close Proximity to Substation		Competitive	Competitive	Preferred	Not Required	Preferred	Competitive	Not Required	Preferred	Required, could be on site	Not Required
		Redundancy Dependency		Preferred	Preferred	Preferred	Not Required	Not Required	Competitive	Not Required	Preferred	Required	Not Required
13	TELECOMMUNICATIONS:	Major Communications Dependency		Required	Required	Required	Preferred	Required	Required	Preferred	Required	Required	Preferred
		Route Diversity Dependency		Required	Required	Required	Not Required	Not Required	Required	Preferred	Preferred	Required	Not Required
		Fiber Optic Dependency		Required	Required	Required	Preferred	Preferred	Required	Competitive	Preferred	Required	Not Required

	PROFILE	A	B	C	D	E	F	G	H	I	J
	CRITERIA	Computer & Electronic Manufacturing (High-Tech R&D)	Software & Media	Multi-Tenant Office	Food Processing	Other Manufacturing	Life/Bioscience R&D Campus	Wholesaling	Retail	Data Center	Incubator
14	**SPECIAL CONSIDERATIONS:**	Acreage allotment includes expansion space (often an exercisable option). Very high utility demands in one or more areas common. Sensitive to vibration from nearby uses.	[1]: Research & Development @ 80 ADTs per acre on the low end, estimated 200 ADTs per acre for general office on the high end. Location specific.	[2]: Range represents FAR 0.25 - 0.5 of office uses. Location to other cluster industries.	May require high volume/supply of water and sanitary sewer treatment. Often needs substantial storage/yard space for input storage. Onsite water pre-treatment needed in many instances.	Adequate distance from sensitive land uses (residential, parks) necessary. Moderate demand for water and sewer. Higher demand for electricity, gas, and telecom.	High diversity of facilities within business parks. R&D facilities benefit from close proximity to higher education facilities. Moderate demand on all infrastructure systems.	[3]: General warehousing rates	[4]: Based on discount warehouse @ 0.25 FAR. [5]: Dependent on use, i.e., brewery vs. restaurant. Location to cluster industries.	Site size differs due to land cost and availability. Urban-area centers may require 10-20 acres, while E. Oregon centers will typically use larger sites. Also the trend is towards increasing site size as cloud storage needs continue to increase. Power delivery, water supply, and security are critical. Surrounding environment (vibration, air quality, etc.) is crucial. May require high volume/supply of water and sanitary sewer treatment.	Often established by municipalities and have symbiotic relationships with colleges and/or universities.

Terms:

More Critical ↑ Less Critical	**'Required'** factors are seen as mandatory in a vast majority of cases and have become industry standards.
	'Competitive' significantly increases marketability and is *highly recommended by Business Oregon*. May also be linked to financing in order to enhance the potential reuse of the asset in case of default.
	'Preferred' increases the feasibility of the subject property and its future reuse. Other factors may, however, prove more critical.
	'Not Required' does not apply for this industry and/or criteria.
	'Avoid' factors act as deterrents to businesses in these industries because of negative impacts.

*Total Site: Building footprint, including buffers, setbacks, parking, mitigation, and expansion space.

**Competitive Acreage: Acreage that would meet the site selection requirements of the majority of industries in this sector.

† Data Center Water Requirements: Water requirement is reported as gallons per MWh to more closely align with the Data Center industry standard reporting of Water Usage Effectiveness (WUE).

‡ Data Center Sewer Requirements: Sewer requirement is reported as 200% of the domestic usage at the Data Center facility. Water and sewer requirements for Data Centers are highly variable based on new technologies and should be reviewed on a case-by-case basis for specific development requirements.

Industry profiles

The following provides supplemental information for the attached Industrial Development Profile Matrix. The preceding matrix identifies 10 industry type categories (labeled A-J on the matrix) and 14 "site needs" which will assist in evaluating selected sites using the criteria of a given industry type.

The industry categories have been established based primarily on Business Oregon information (including input from various state agencies). Due to the wide range and constantly evolving characteristics of uses, borderline and/or non-typical applications will likely arise and will be evaluated on a case-by-case basis. It should be noted that certain industry types might have unique requirements, such as proximity to an international airport, which may require an additional category. It should also be noted that the industry types represent the primary use of the industry and exclude secondary/accessory uses (e.g., training facilities, etc.).

A: Food Processing

a) Description:

Generally, this category includes industries that manufacture or process foods and beverages for human or animal consumption. Although this category has similar siting characteristics as Other Manufacturing, the unique needs associated with food processing, such as high-volume water and/or pressure demand, warrant this separate category. Broadly, there are two types of food processing categories:

(1) raw materials
(2) assembling

Additionally, there is a packaging and warehousing component to these facilities.

b) Representative Industry Types:

- Production foods/goods (e.g., bakeries)
- Fruits and vegetables
- Breweries and wineries
- Dairy
- Bottling/beverages

c) Representative Companies:

- Oregon Freeze Dry (Albany)
- Ochoas Queseria (Albany)
- Beaverton Foods, Inc. (Hillsboro)
- Hermiston Foods (Hermiston)
- Nancy's Yogurt (Eugene)
- Reser's Foods (Beaverton)
- Norpac (Salem and Stayton)
- Tillamook Dairy (Tillamook)
- Coca Cola bottling (statewide)
- Pepsi bottling (statewide)
- Deschutes Brewery (Bend)

B: Other Manufacturing

a) Description:

This category is intended to include industries that utilize relatively less intensive manufacturing processes, more assembly activities, and direct transfer to wholesale and domestic consumers. Typically, these facilities are freestanding, devoted to a single use, and emphasize manufacturing space over office space. Generally, these non-high-tech industries may be located on individual sites or in business/industrial parks and have less effect on surrounding uses. This category also includes some industrial service uses that are engaged in serving other businesses, such as an industrial laundry facility.

b) Representative Industry Types:

- Electronic assembly support

- Wood products
- Automobile products
- Steel/metals
- Building materials fabrication and processing

c) Representative Companies:

- Warn Industries (Clackamas)
- JV Northwest (Canby)
- Hartung Glass (Wilsonville)
- Oregon Iron Works (Clackamas)
- Daimler Trucks North America (Portland)
- Maxim Integrated (Beaverton and Hillsboro)
- Oregon Steel Mills (Portland)

C: Wholesaling

a) Description:

The wholesale industry comprises companies involved in wholesaling merchandise and other goods such as mining, agriculture, manufacturing, and certain information industries. This industry typically represents an intermediate step in the production and distribution of goods and merchandise, as wholesalers generally sell goods intended for resale by a retailer. In some cases, users and customers may purchase these goods directly from a wholesaler with a retailer.

b) Representative Industry Types:

- Automobile and Other Motor Vehicle Merchant Wholesalers
- Furniture Merchant Wholesalers
- Office Equipment Merchant Wholesalers
- Hardware Merchant Wholesalers
- Farm and Garden Machinery and Equipment Merchant Wholesalers
- Sporting and Recreational Goods and Supplies Merchant Wholesalers

c) Representative Companies:

- Cascade Wholesale Hardware
- Costco Wholesale
- Pearlier Auto Wholesale

D: Incubator

a) Description:

This industry type is often established by local municipalities and has a symbiotic relationship with colleges and universities within the vicinity. Business incubators are designed to help new and small businesses in the start-up and early growth phases of development through providing a flexible combination of business development tools, facilities and resources, and personal contacts.

b) Representative Industry Types:

- Not applicable for this industry type, as the incubators serve as cultivating space for several uses to grow in their nascent business stages.

c) Representative Examples:

- Launch Pad Baker City
- Microenterprise Investors Program of Oregon (Portland)
- BESThq (Beaverton)

- Forge Portland
- WeWork (Portland)
- Hacienda CDC (Portland)
- Fertilab Thinkubator (Eugene)

E: Data Center

a) Description:

Data centers are classified under NAICS 5182: Data Processing, Hosting, and Related Services. We consider them separately from other "information and software" activites because the land and utility needs are far different. Over the just the last five years, unprecedented growth in demand for data hosting has developed an entirely new segment of the industrial landscape in Oregon attracted to a generally temperate climate, low overall disaster risk, low utility rates from renewable sources, and abundant water.

The growth outlook for data center siting is strong, as high growth rates for streaming, software as a service (SaaS), and cloud data and processing across the industry creates an accelerating need for hosting services. Global data center demand is expected to grow threefold over just the next five years.[9] Key areas like the Columbia Basin, Central Oregon, and Hillsboro compete for these industrial users.

b) Representative Companies:

- Vadata
- Google
- Apple
- Facebook
- ViaWest
- Adobe

[9] Cisco Global Cloud Index (2015).