



ECONOMIC OPPORTUNITIES ANALYSIS (OREGON STATEWIDE PLANNING GOAL 9)

Prepared For:
The City of Joseph, Oregon

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Acknowledgments

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City Staff & Advisory Committee

Belinda Buswell, City Recorder
Teresa Sajonia, Mayor
Larry Braden, City Administrator
Levi Tickner, Public Works

Michael Junkins, General Manager
Jim Zacharias, JayZee Lumber
Diane Witherrite, Business Development Manager, Community Bank
Dan DeBoie, Resident/Developer
Brian McDowell, Regional Development Officer, Business Oregon
Lisa Dawson, Executive Director, Northeast Oregon Economic Development District
Franz Goebel, Planning Director, Wallowa County

Consultants

Jerry Johnson, Johnson Economics
Brendan Buckley, Johnson Economics

State of Oregon Staff

Kirstin Greene, Economic Development Specialist, DLCD
Phil Stenbeck, Eastern Regional Representative, DLCD

Thanks To

City of Joseph
Wallowa County

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APPENDIX B: BUILDABLE LANDS INVENTORY REPORT

I. INTRODUCTION

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

Cities are required to reconcile estimates of future employment land demand with existing inventories of vacant and redevelopable employment land within their Urban Growth Boundary (UGB). The principal purpose of the analysis is to provide an adequate land supply for economic development and employment growth. The intent is to conduct this 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 Wallowa County and Joseph, 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 Joseph'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 Joseph was adopted in 2009. This updated analysis reflects changes in employment, land supply, and macro-economic trends since that time.

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 Joseph 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

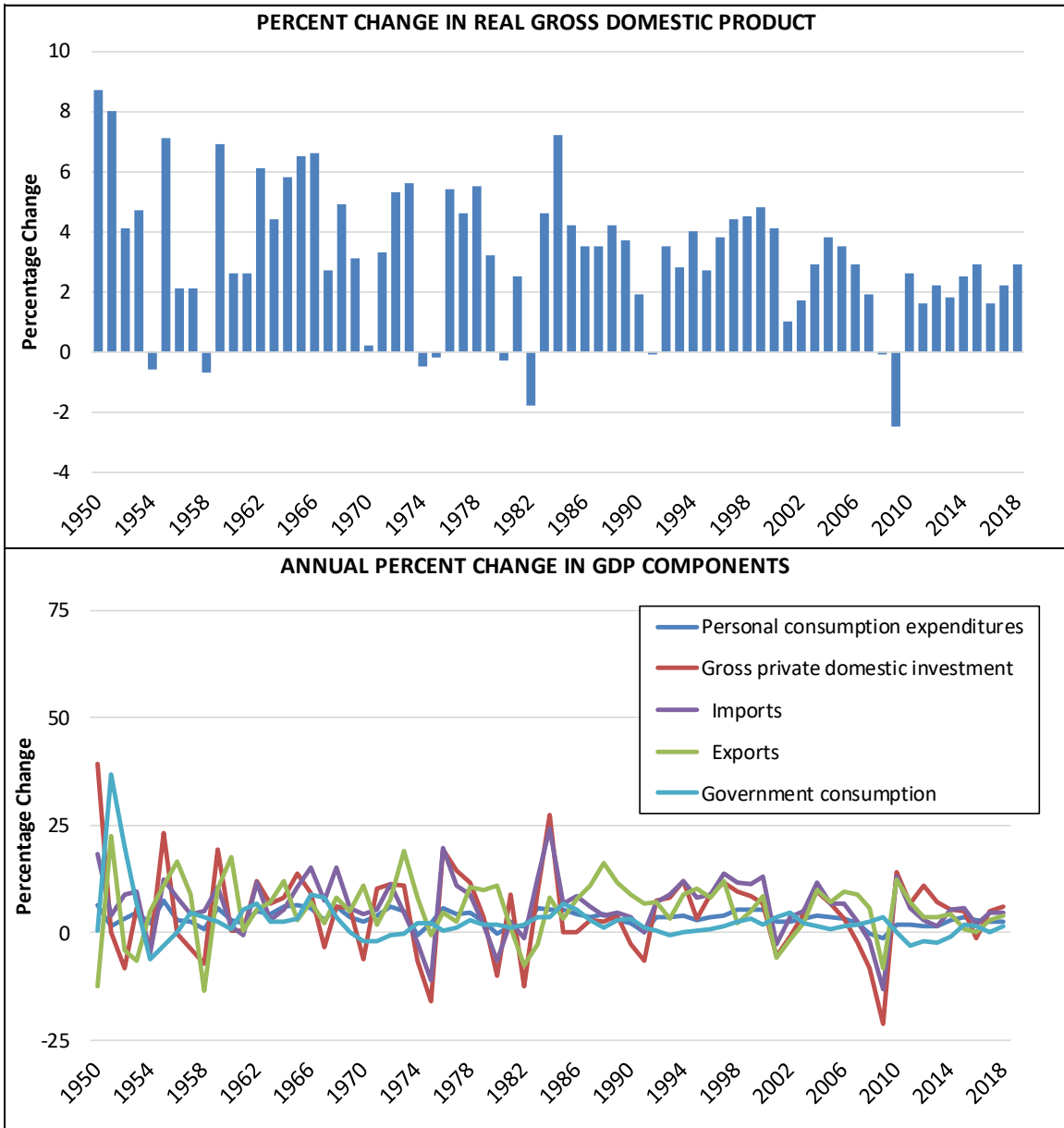
The long-term trend indicates that the United States economy has settled into a moderate growth trajectory at around 2.0% per year, after growing at above 4.0% per year during the 1960s and above 3.0% per year between 1970 and 2000. While the overall growth pace is moderating, there has been a shift within the economy from consumption of goods to consumption of services, especially services oriented around personal wellbeing (health, private education, finance). This reflects increasing levels of wealth and discretionary income in the population. Growth in fixed investment (equipment and structures) and government defense spending is also moderating – making manufactured goods a less significant part of the 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. The offshoring trend has partially reversed in the current decade, due to rising costs and greater awareness of cultural barriers and various associated risks. Greater emphasis on leaner and more agile supply chains, combined with demand for customized products and rapid delivery, has also contributed to growth in domestic production. This impact has been greatest in auto manufacturing. Despite this “reshoring” trend, imports from Asia continue to grow at a faster clip than domestic manufacturing.

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, and the increased purchasing power of the population translates into greater investment in health care, education, housing, leisure, and many other sectors. U.S. real GDP per capita remains stable. Over the last century, the average annual growth rate has been 1.8%, despite considerable shifts in economic and social conditions—a finding that suggests long-term economic growth is more closely related to broad trends, such as population growth and investment in physical and human capital, than temporary economic fluctuations, like the recent recession and government policy.

The Great Recession officially spurred six consecutive quarters of negative economic growth in 2008 and early 2009. The depth of and duration of this downturn was the most pronounced since World War II. The current expansion cycle has been sustained yet the pace of growth is modest to date. Credit markets have been more stringent, businesses are more cautious, and housing construction has yet to emerge as a driving catalyst.

FIGURE 2.01: NATIONAL GROSS DOMESTIC PRODUCT TRENDS

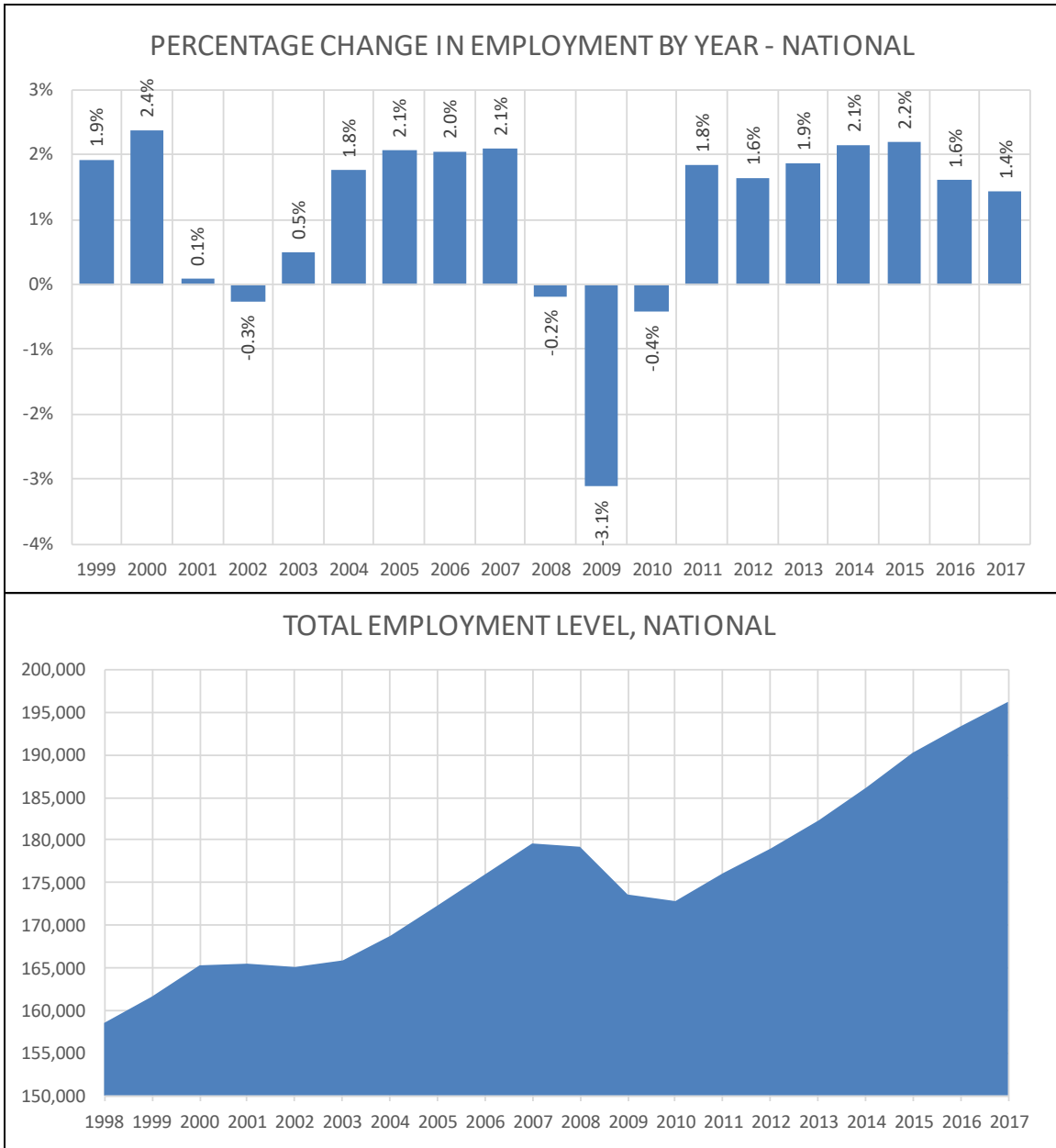


SOURCE: US Bureau of Economic Analysis

Overall, national economic output has seen a notable moderation in growth over the past two decades, with most of the current business cycle hovering around 2.0% growth per year. In comparison, the average growth rate over the 1970-1999 period was 3.2%. Economic forecasters generally expect a slight increase in growth over the very near term, followed by a cyclical moderation over the 2020-23 period, reflecting downward pressures from tight labor markets and higher interest rates. 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% per year.

The expansion in GDP is reflected in employment growth, which has ranged between 1.4% and 2.2% in the current expansion cycle. Preliminary estimates indicate an acceleration in the rate of GDP as well as employment growth in 2018. While overall trends have been positive for almost a decade, there will likely be two to three downturns at the national level over the next twenty years.

FIGURE 2.02: NATIONAL EMPLOYMENT TRENDS



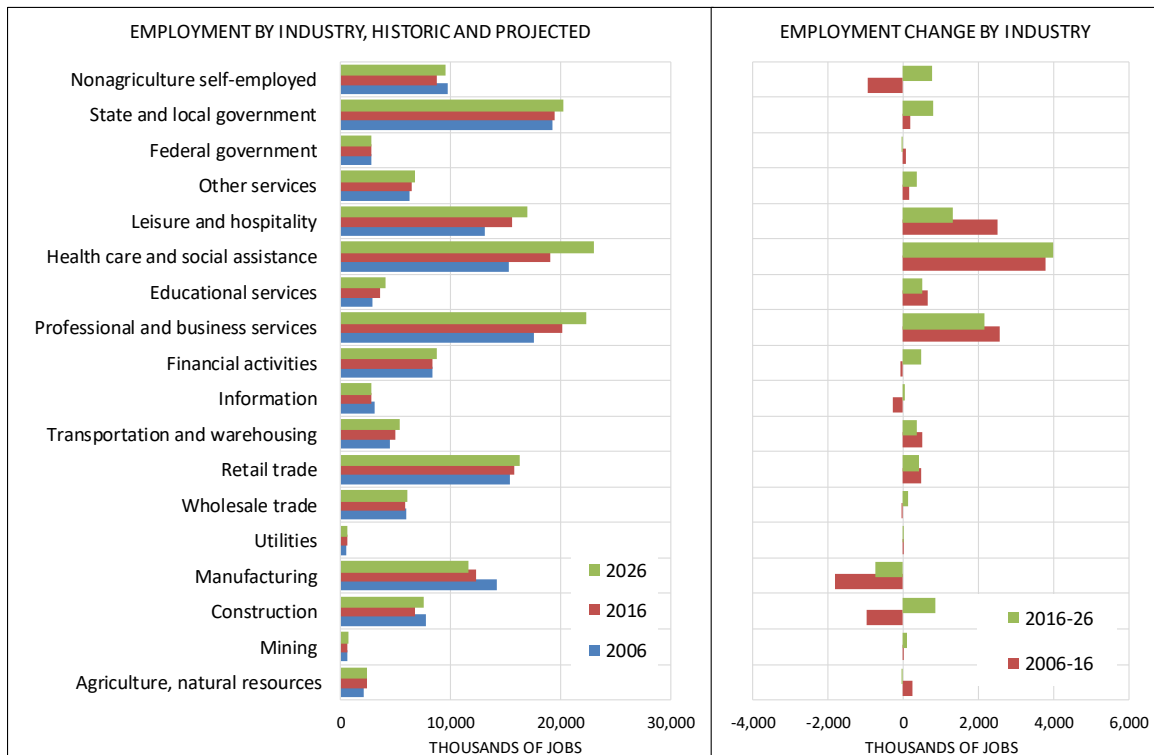
SOURCE: US Bureau of Economic Analysis

A few additional trends have significant implications for the industrial real estate market: E-commerce is rapidly taking market share from brick-and-mortar retailers, approaching 10% of all retail sales. This has caused a shift in storage needs from retail stores to warehouses and distribution centers. At the same time,

automation is causing a consolidation within the warehousing and distribution industry, leading to increasing reliance on larger third-party operators capable of making heavy investments in capital and expertise. Automation is also impacting the manufacturing industry, though to a lesser extent and primarily among larger industry leaders. Finally, changes in the use of electronic devices and growth in online services are causing a shift in the tech sector, from hardware manufacturing to software development.

Due to limited growth in demand for domestic goods and competition from low-cost markets, the U.S. manufacturing sector has lost one-third of its jobs since its peak in the late 1970s, with its share of total employment falling from 24% to 8%. With a strong dollar relative to the currencies of key trading partners, there remains significant headwinds for manufacturers that export a considerable level of product. Sectors seeing significant expansion since 2006 include health care, professional and business services, and leisure and hospitality. Projections reveal that all major sectors except for manufacturing and federal government will see growth through 2026.

FIGURE 2.03: NATIONAL EMPLOYMENT GROWTH BY SECTOR, HISTORIC AND PROJECTED



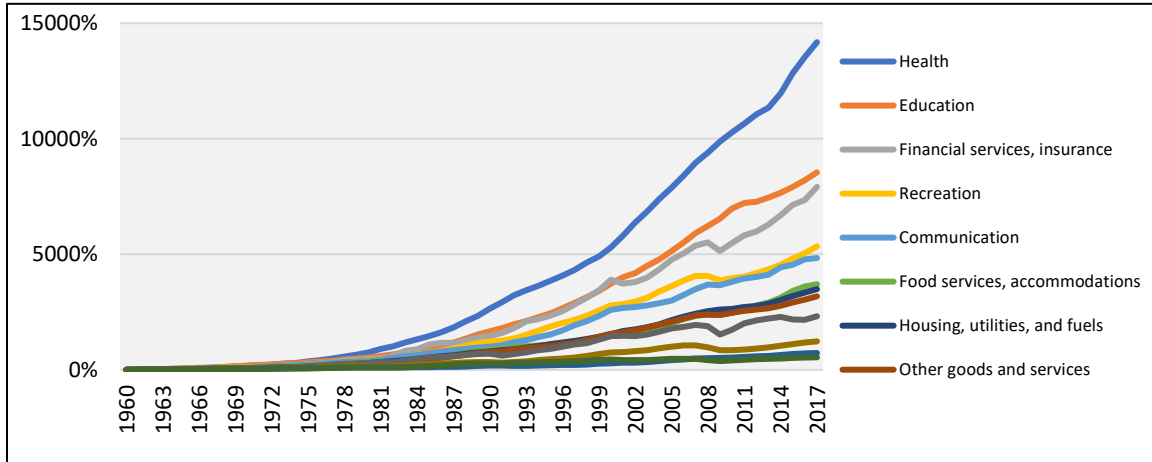
SOURCE: US Bureau of Economic Analysis

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.

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. The post-war era has been marked by increasing wealth and discretionary spending, which has shifted spending away from necessities and led households to buy goods and services that used to be produced in-house. 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 private education and financial services. Categories that represent more short-term enjoyment, like recreation, food services, and accommodations, occupy the middle segment, while necessities like groceries, clothing, transportation, and housing have seen only moderate growth. Spending on health is expected to continue to increase strongly over the coming decades as the baby boomer cohort ages.

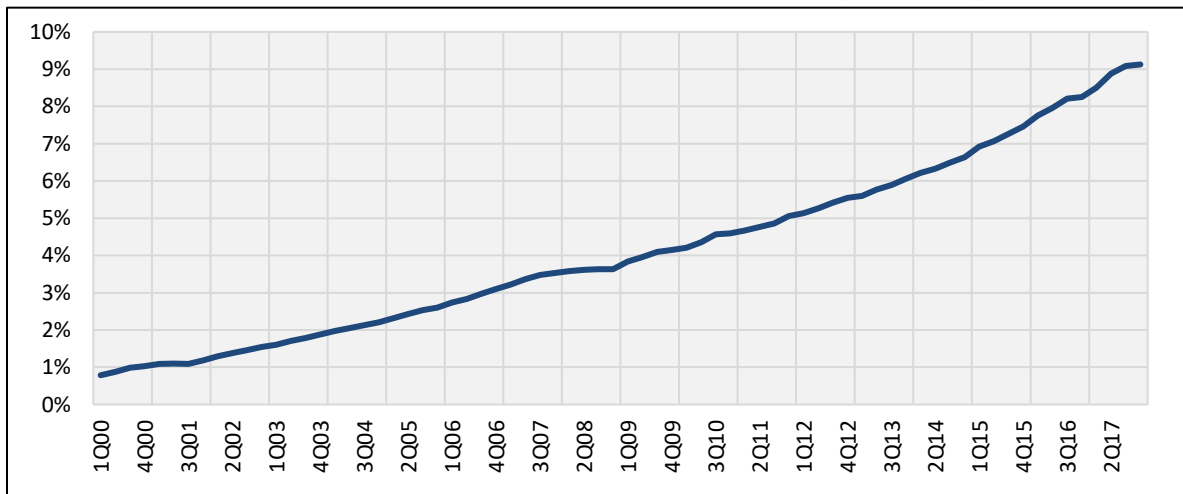
FIGURE 2.04: CONSUMER SPENDING GROWTH SINCE 1960, BY CATEGORY, UNITED STATES (1960-2017)



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

The most dramatic spending shift in the context of real estate in recent times is the growth in online shopping, which has reduced the overall need for brick-and-mortar space, especially from retailers selling physical goods. Online retailing is estimated to account for 10% of all retail spending in 2018, at around \$500 million in annual sales on a national level. Since the last recession, the segment has grown by around 15% per year, and it is currently taking market share from brick-and-mortar stores at a rate of nearly one percentage point annually.

FIGURE 2.05: ONLINE RETAIL MARKET SHARE, UNITED STATES (2000-2017)

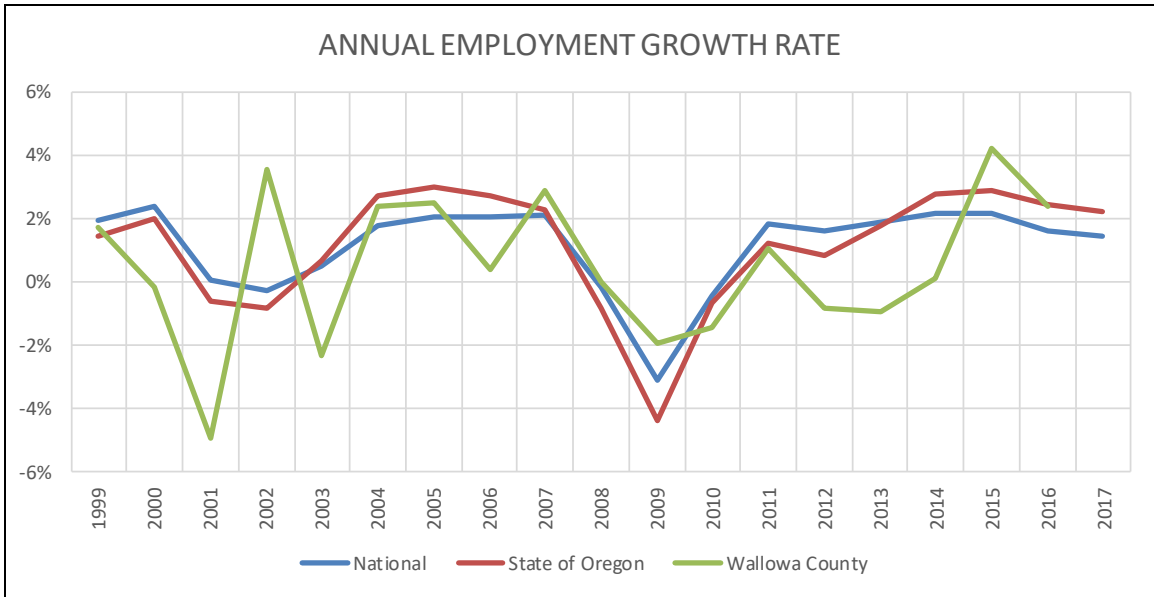


SOURCE: U.S. Bureau of Economic Analysis, JOHNSON ECONOMICS

WALLOWA COUNTY & JOSEPH ECONOMIC TRENDS

The annual rate of employment growth in Wallowa County has largely mirrored the national and statewide rate, although the county lagged the national and state rates when emerging from the recession.

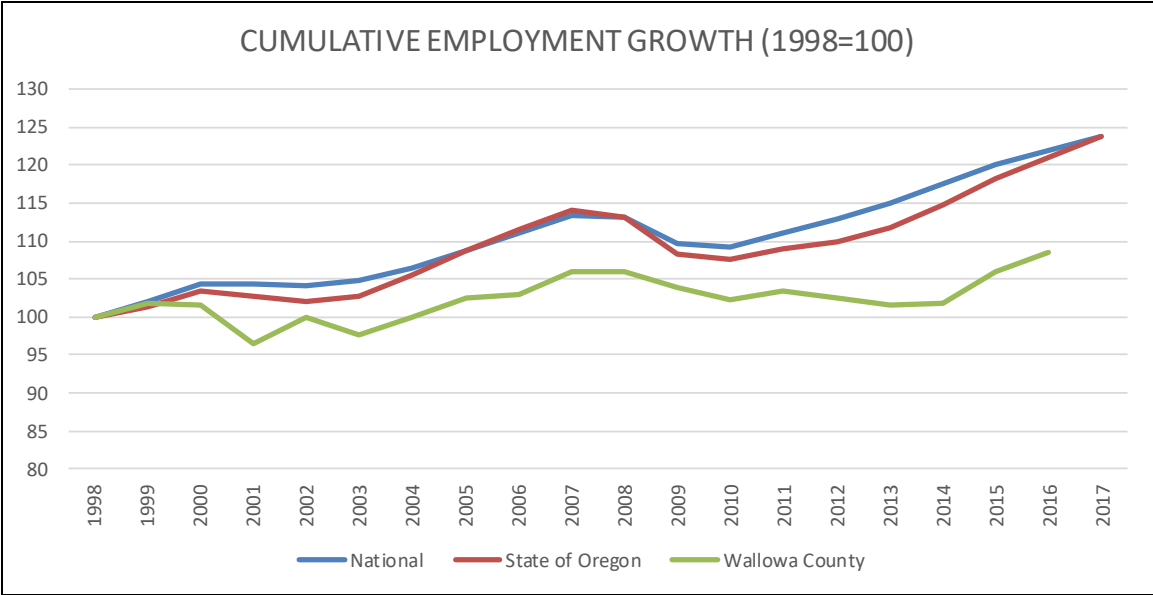
FIGURE 2.06: COMPARISON OF ANNUAL EMPLOYMENT GROWTH RATES



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

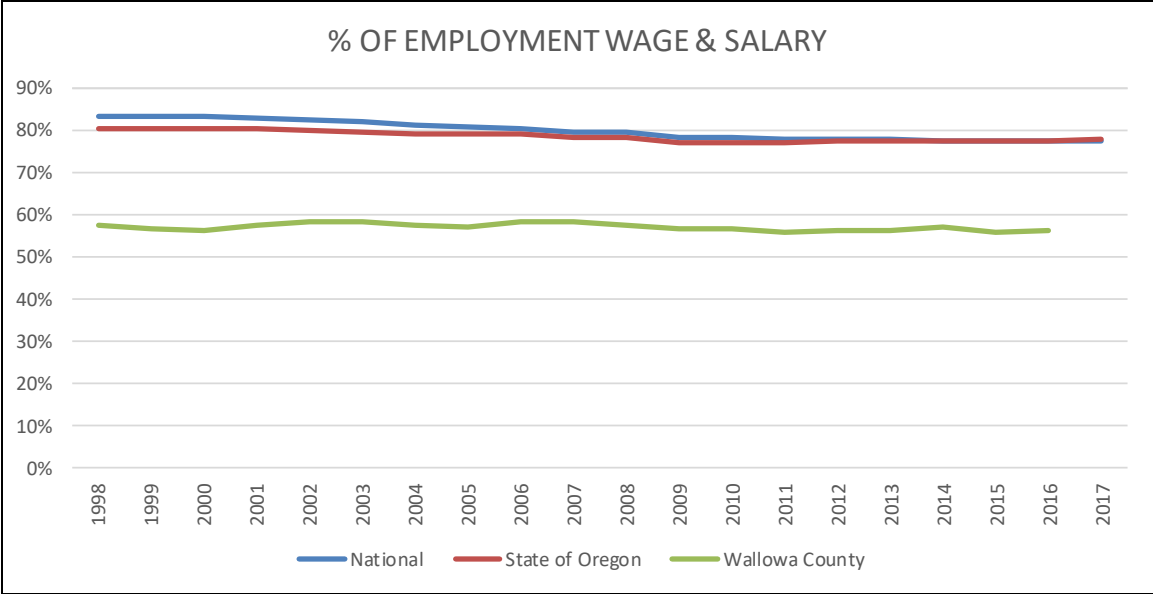
On a cumulative basis Wallowa County has fallen behind the national and statewide averages, with the employment base up less than 10% over the last twenty years.

FIGURE 2.07: CUMULATIVE EMPLOYMENT GROWTH



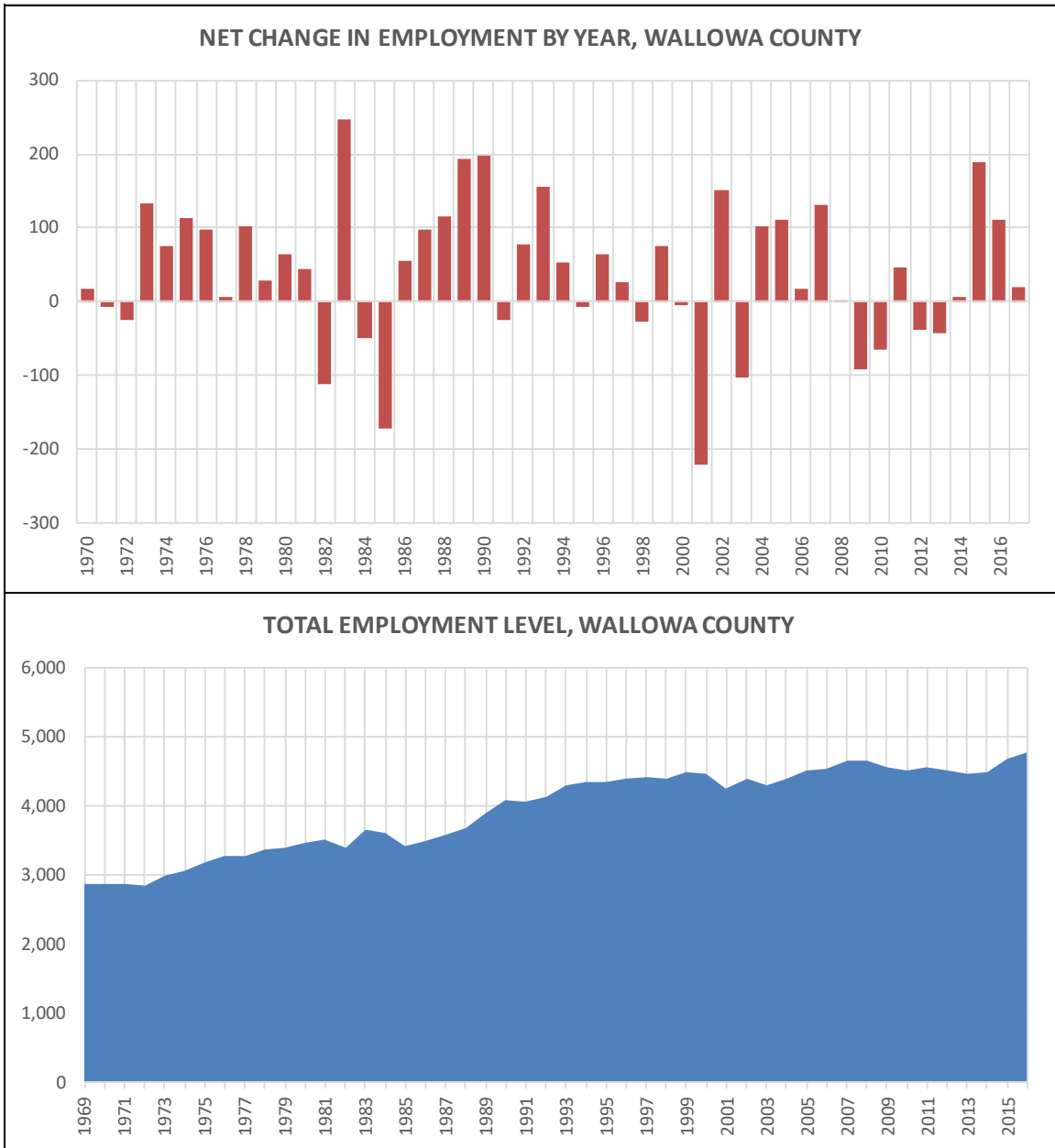
The employment base in Wallowa County has a significantly higher share of self-employed than the national and state averages, with wage and salary employment accounting for less than 60% of overall estimated employment in the county. This compares to rates approaching 80% statewide as well as nationally.

FIGURE 2.08: % OF TOTAL EMPLOYMENT REPRESENTED BY WAGE & SALARY



Wallowa County’s employment base has been relatively stable, with the economic expansion adding a notable number of new jobs in 2015 and 2016. The local employment level is at an all-time high, with average employment levels estimated at just under 4,800 in 2017.

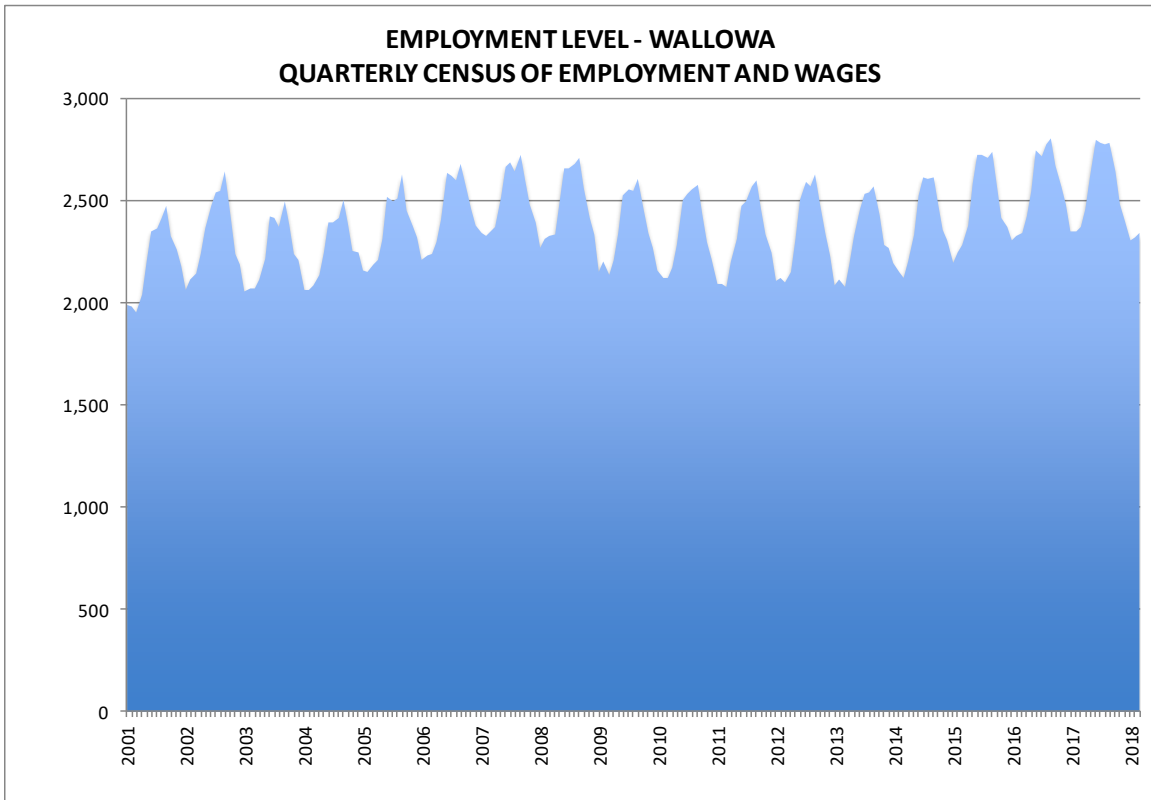
FIGURE 2.09: WALLOWA COUNTY EMPLOYMENT TRENDS



SOURCE: U.S. Bureau of Economic Analysis

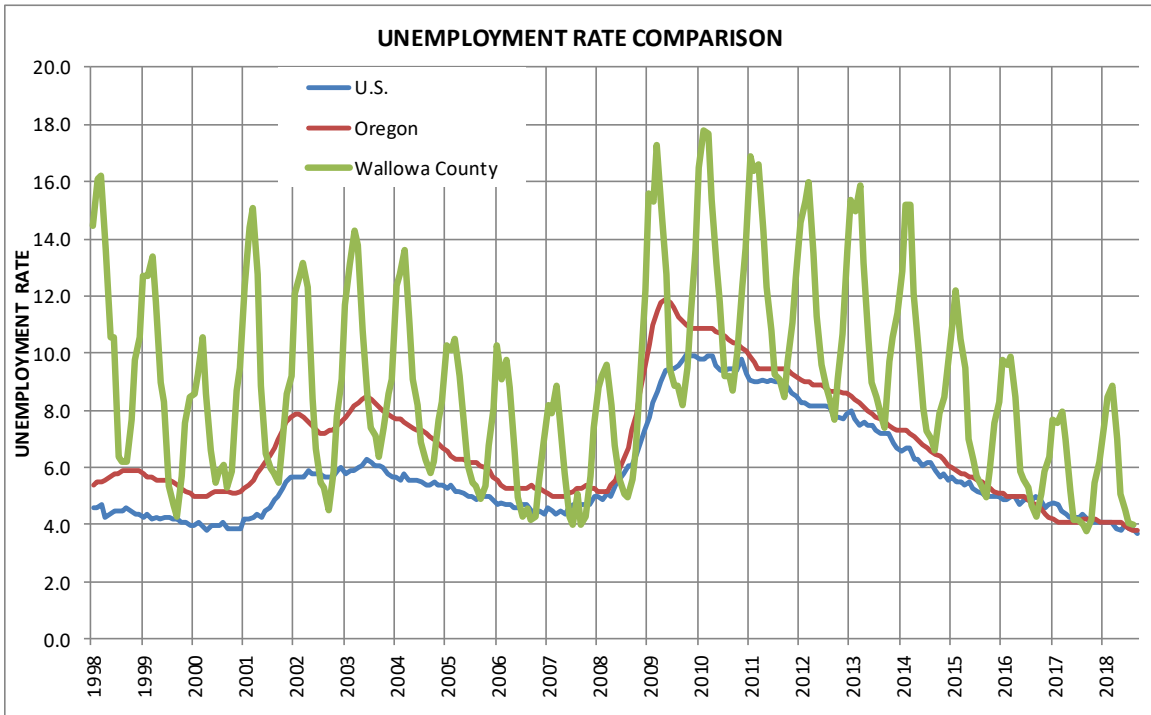
The local employment profile is highly seasonal, reflecting the area’s relatively high proportion of agricultural employment.

FIGURE 2.10: WALLOWA COUNTY EMPLOYMENT LEVEL BY MONTH



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

FIGURE 2.11: UNEMPLOYMENT RATE TRENDS

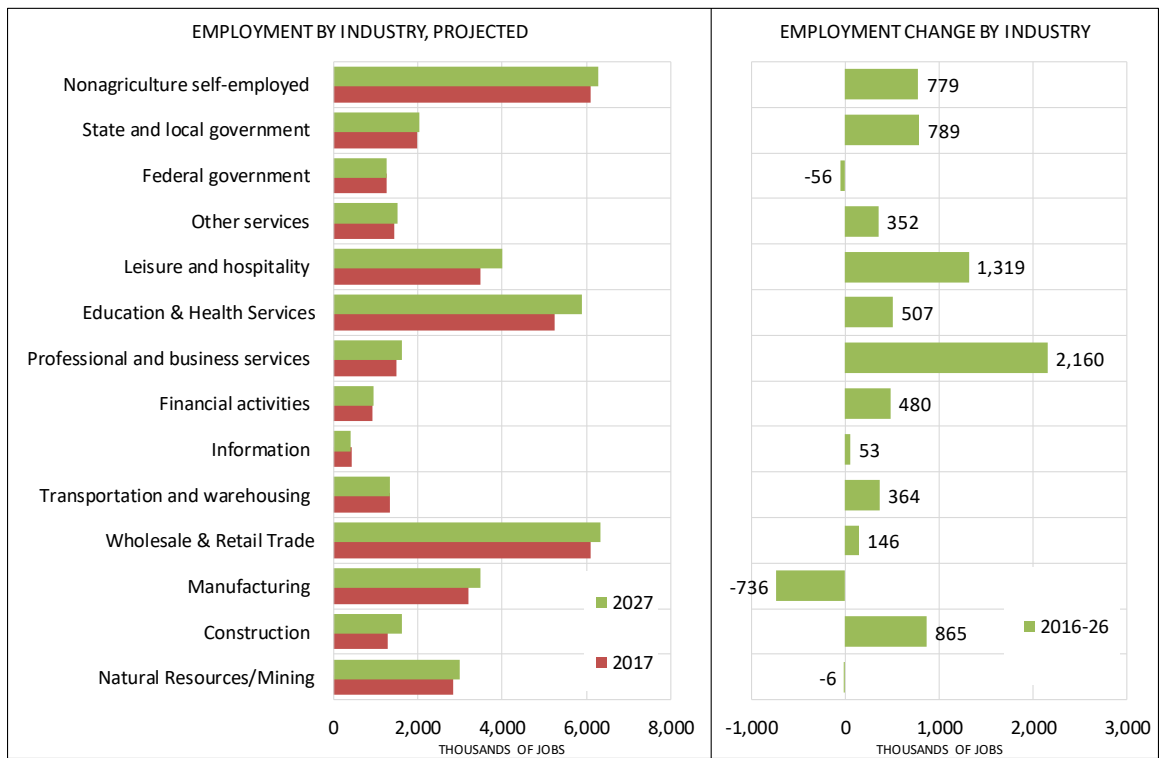


SOURCE: U.S. Bureau of Economic Analysis, JOHNSON ECONOMICS

The economic expansion has facilitated a commensurate drop in the unemployment rate, with Wallowa County following the national and statewide patterns. Tight labor market conditions are likely to 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.

Most industries are forecast to expand at a modest rate in the broader Eastern Oregon area over the next decade (Baker, Grant, Harney, Malheur, Union, and Wallowa Counties). On an absolute basis, the greatest gains are forecast in professional and business services, leisure and hospitality, and construction. On a rate of growth basis, the most rapid expansion is expected in the construction, leisure and hospitality, and education and health services sectors.

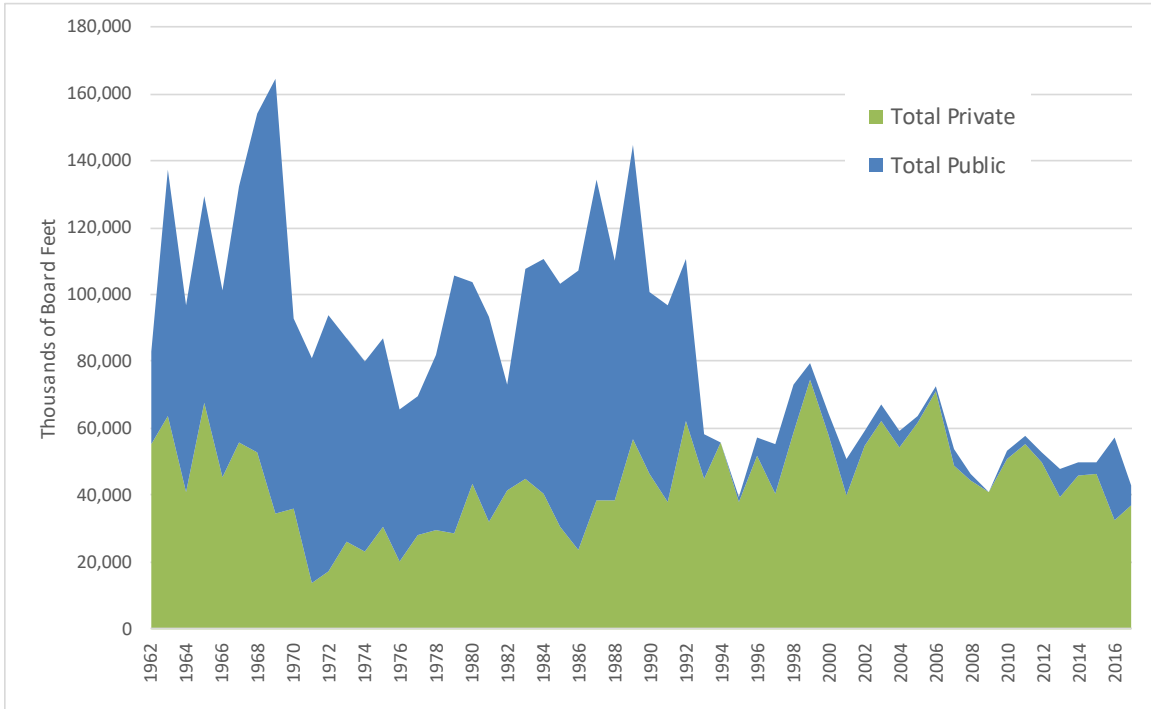
FIGURE 2.12: PROJECTED EMPLOYMENT GROWTH BY SECTOR, EASTERN OREGON



SOURCE: State of Oregon Employment Department

The forestry industry has been a significant economic driver in Wallowa County, with natural resources’ local employment levels almost six times the national average. The industry has seen a sharp decline in production, which is largely attributable to declines in production from public lands since 1993.

FIGURE 2.13: ANNUAL TIMBER PRODUCTION IN WALLOWA COUNTY (1962-2016)



SOURCE: Oregon Department of Forestry

The area has been actively pursuing new and ongoing opportunities in the industry, including small diameter timber, biomass, and engineered wood products.

Agriculture has been a historic mainstay of the regional economy that continues to be a major contributor to the regional economy. Alfalfa and other hay production were 117,000 tons in 2015, while wheat production was 800,000 bushels in 2015. The county also had an estimated 35,500 head of cattle and calves in 2017.

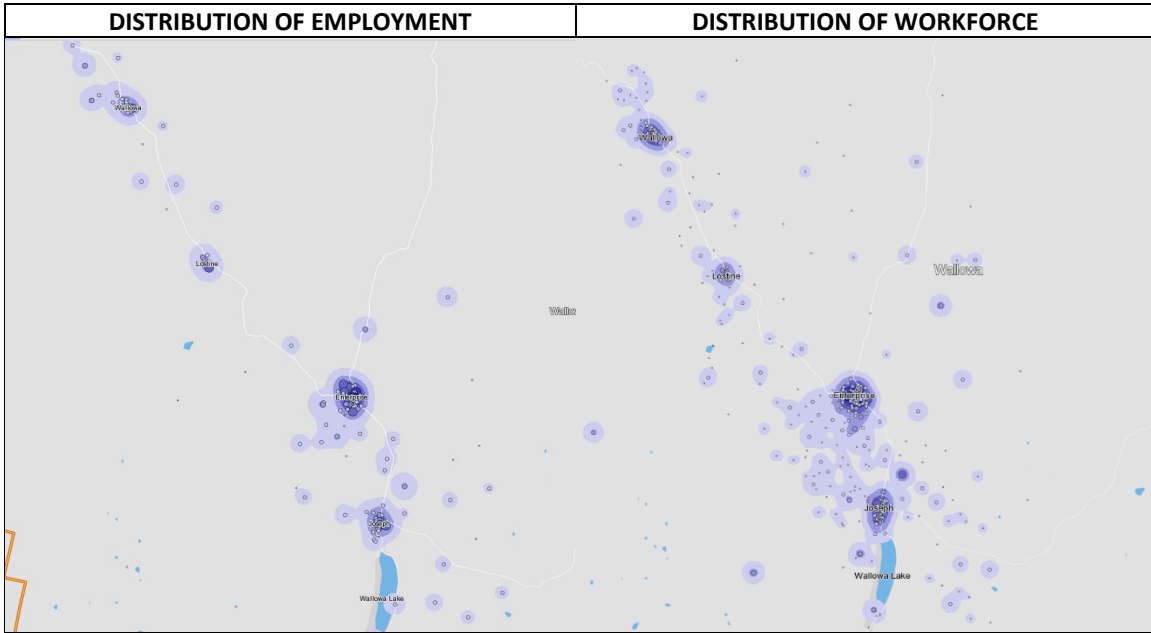
FIGURE 2.14: WALLOWA COUNTY AGRICULTURAL PRODUCTION

	2013	2014	2015	2016	2017
Alfalfa Hay			60,000	(d)	
Other Hay			57,000	72,000	
Beef Cows	21,000	20,500	21,000	21,000	22,000
All Cattle	34,500	35,000	35,000	35,000	35,500
Barley			151,000	170,000	
Wheat			801,000	631,000	

SOURCE: 2017 Oregon Agripedia

Employment in Wallowa County is concentrated along the Wallowa Lake Highway (Highway 82), with the workforce similarly distributed.

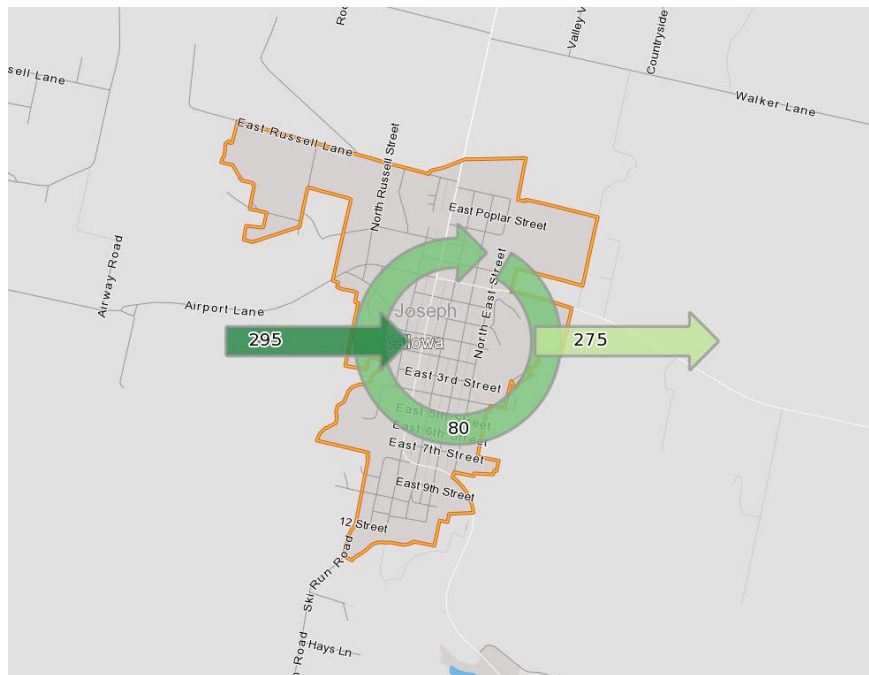
FIGURE 2.15: DISTRIBUTION OF EMPLOYMENT AND WORKFORCE, WALLOWA COUNTY, 2015



SOURCE: Census Bureau, LEHD Data

While each of the jurisdictions in the county have similar workforce and employment levels, residents commute broadly within Wallowa County. In the City of Joseph, the local workforce was estimated at 355 in 2015, of which 275 travelled outside of the city for employment while an estimated 80 lived and worked within the city limits. An estimated 295 workers commuted into the city for employment, indicating that the local employment base is consistent in scale with the local workforce.

FIGURE 2.16: NET INFLOW-OUTFLOW OF EMPLOYEES, CITY OF JOSEPH, 2015



SOURCE: Census Bureau, LEHD Data

Commuting patterns are an important element in the local economy. They are indicative of the labor shed companies can draw workers from, 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. Income and age demographics of the workforce commuting into and out of Joseph were similar.

FIGURE 2.17: NET INFLOW-OUTFLOW DETAIL, CITY OF JOSEPH, 2015

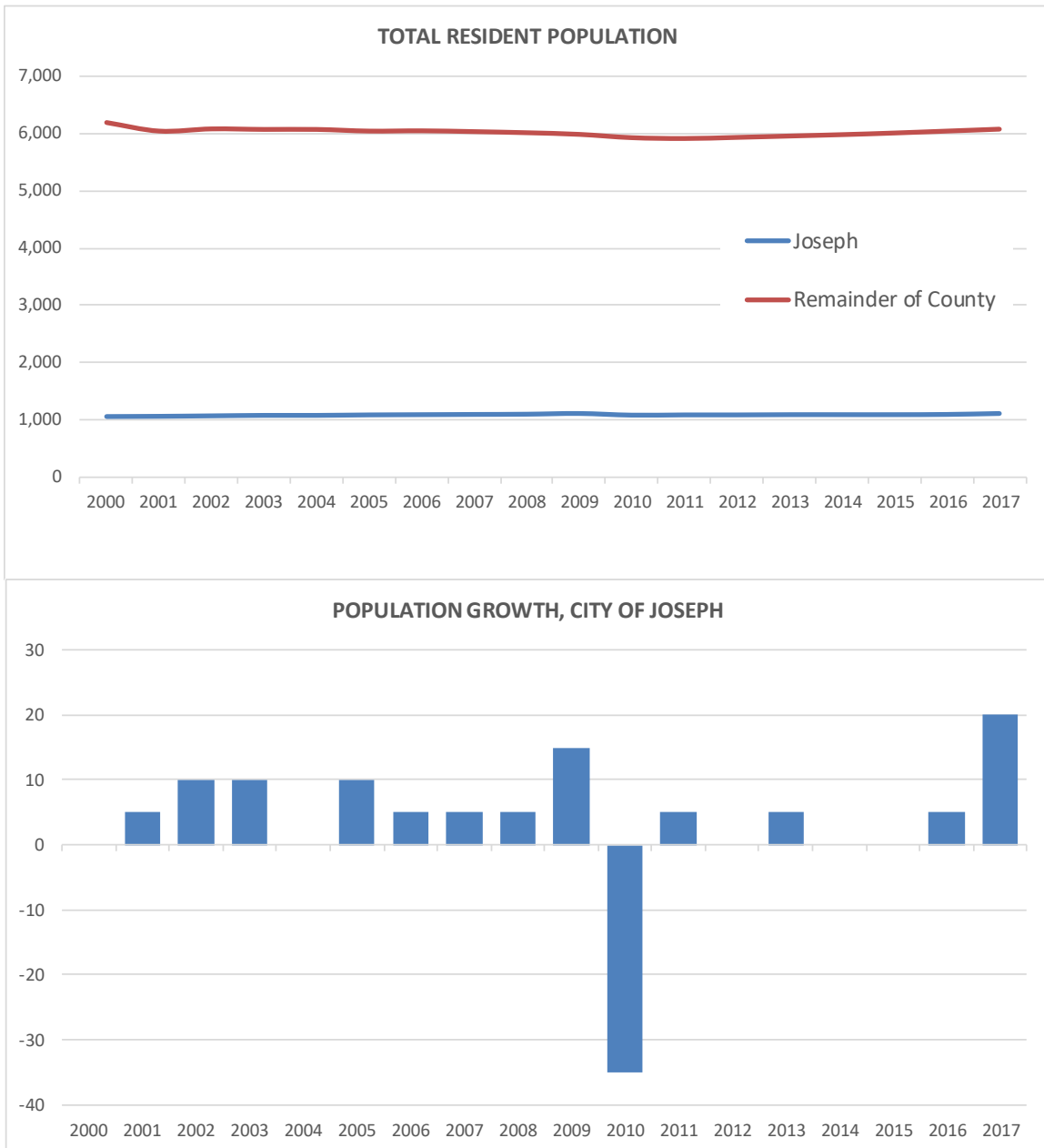
	Joseph		Wallowa County	
	2015		2015	
	Count	Share	Count	Share
Selection Area Labor Market Size (Primary Jobs)				
Employed in the Selection Area	375	100.0%	2,193	100.0%
Living in the Selection Area	355	94.7%	2,387	108.8%
Net Job Inflow (+) or Outflow (-)	20	-	(194)	-
In-Area Labor Force Efficiency (Primary Jobs)				
Living in the Selection Area	355	100.0%	2,387	100.0%
Living and Employed in the Selection Area	80	22.5%	1,672	70.0%
Living in the Selection Area but Employed Outside	275	77.5%	715	30.0%
In-Area Employment Efficiency (Primary Jobs)				
Employed in the Selection Area	375	100.0%	2,193	100.0%
Employed and Living in the Selection Area	80	21.3%	1,672	76.2%
Employed in the Selection Area but Living Outside	295	78.7%	521	23.8%
Outflow Job Characteristics (Primary Jobs)				
External Jobs Filled by Residents	275	100.0%	715	100.0%
Workers Aged 29 or younger	51	18.5%	170	23.8%
Workers Aged 30 to 54	124	45.1%	336	47.0%
Workers Aged 55 or older	100	36.4%	209	29.2%
Workers Earning \$1,250 per month or less	89	32.4%	160	22.4%
Workers Earning \$1,251 to \$3,333 per month	117	42.5%	288	40.3%
Workers Earning More than \$3,333 per month	69	25.1%	267	37.3%
Workers in the "Goods Producing" Industry Class	63	22.9%	138	19.3%
Workers in the "Trade, Transportation, and Utilities" Industry Class	59	21.5%	194	27.1%
Workers in the "All Other Services" Industry Class	153	55.6%	383	53.6%
Inflow Job Characteristics (Primary Jobs)				
Internal Jobs Filled by Outside Workers	295	100.0%	521	100.0%
Workers Aged 29 or younger	50	16.9%	107	20.5%
Workers Aged 30 to 54	134	45.4%	228	43.8%
Workers Aged 55 or older	111	37.6%	186	35.7%
Workers Earning \$1,250 per month or less	102	34.6%	117	22.5%
Workers Earning \$1,251 to \$3,333 per month	150	50.8%	234	44.9%
Workers Earning More than \$3,333 per month	43	14.6%	170	32.6%
Workers in the "Goods Producing" Industry Class	59	20.0%	92	17.7%
Workers in the "Trade, Transportation, and Utilities" Industry Class	50	16.9%	124	23.8%
Workers in the "All Other Services" Industry Class	186	63.1%	305	58.5%
Interior Flow Job Characteristics (Primary Jobs)				
Internal Jobs Filled by Residents	80	100.0%	1,672	100.0%
Workers Aged 29 or younger	10	12.5%	221	13.2%
Workers Aged 30 to 54	43	53.8%	894	53.5%
Workers Aged 55 or older	27	33.8%	557	33.3%
Workers Earning \$1,250 per month or less	37	46.3%	429	25.7%
Workers Earning \$1,251 to \$3,333 per month	29	36.3%	777	46.5%
Workers Earning More than \$3,333 per month	14	17.5%	466	27.9%
Workers in the "Goods Producing" Industry Class	16	20.0%	369	22.1%
Workers in the "Trade, Transportation, and Utilities" Industry Class	8	10.0%	279	16.7%
Workers in the "All Other Services" Industry Class	56	70.0%	1,024	61.2%

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

Population and Workforce

The population base in Wallowa County and Joseph has plateaued for the last several decades, a pattern that is projected to continue in the Population Research Center at Portland State University's most recent forecast. The City of Joseph had an estimated population of 1,120 in 2017, while Wallowa County had an estimated population of 7,195.

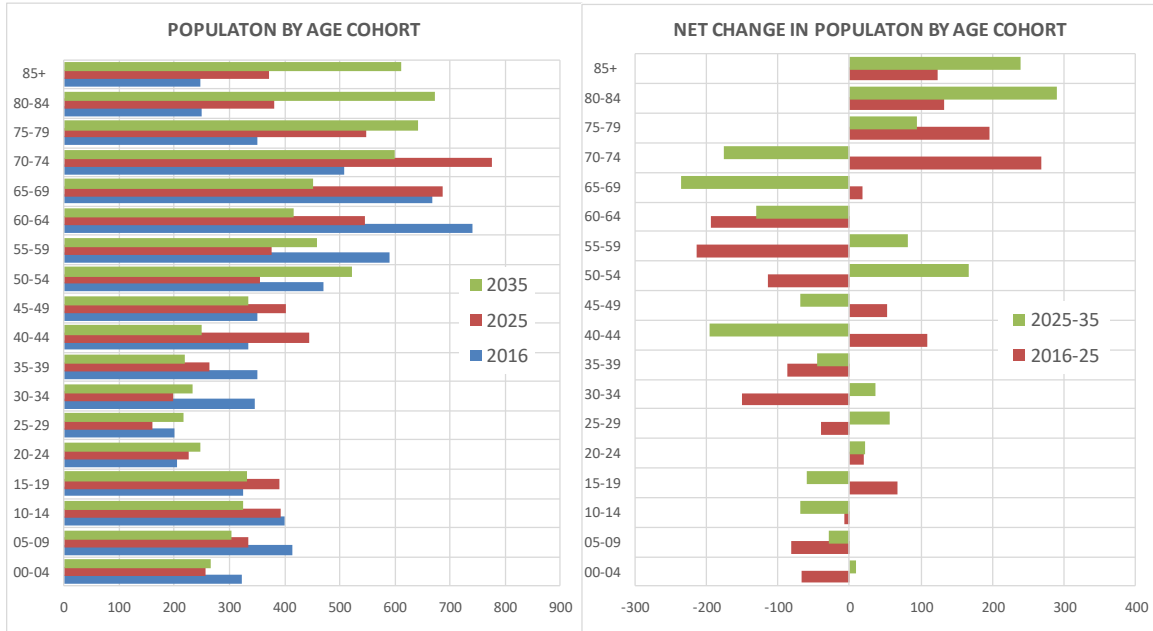
FIGURE 2.18: HISTORIC POPULATION TRENDS, WALLOWA COUNTY AND CITY OF JOSEPH



SOURCE: Population Research Center, Portland State University

While the overall population level is expected to remain constant, the composition of the population base is expected to become generally older. The trend is most pronounced for residents over 75 years of age, with modest growth anticipated in age categories that are traditionally in the workforce.

FIGURE 2.19: HISTORIC AND PROJECTED DISTRIBUTION OF POPULATION BY AGE COHORT, WALLOWA COUNTY



SOURCE: Population Research Center, Portland State University

Race and Ethnicity: The population of Wallowa County is estimated to be 96% white and 4% minority or bi-racial, compared to 15% minority in Oregon. Since 2000, the share of Black, Pacific Islanders and bi-racial residents is estimated to have grown at the fastest rate, while remaining a modest share of the overall population. Latinos are estimated to make up 3% of the county population, compared to 13% statewide.

FIGURE 2.20: DISTRIBUTION OF POPULATION BY RACE & ETHNICITY, WALLOWA COUNTY

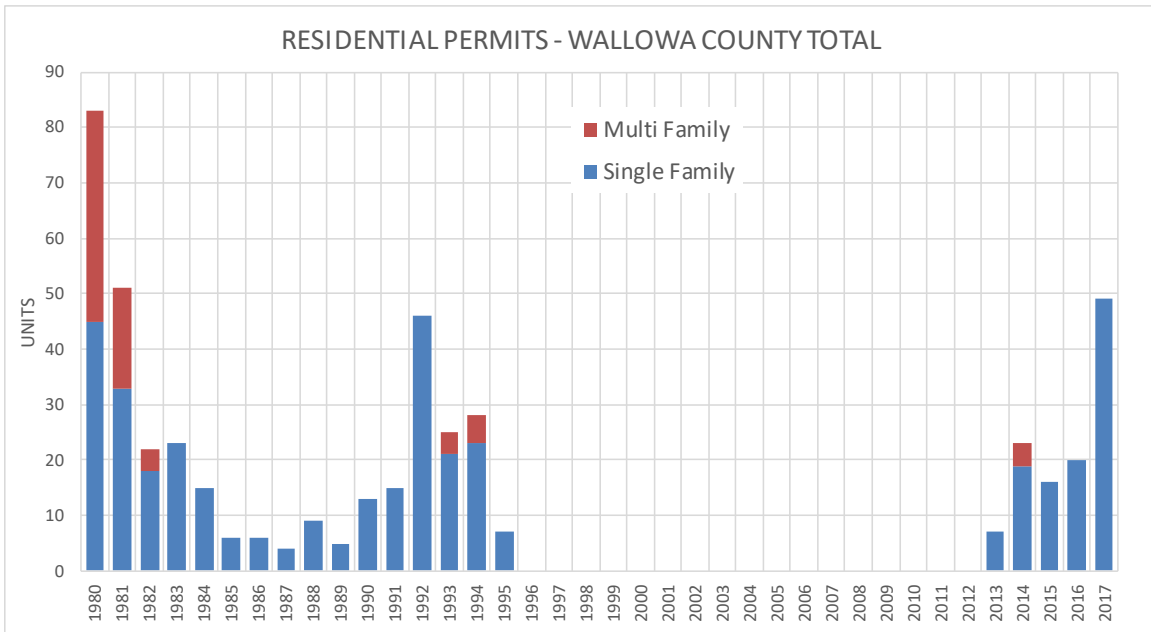
Distribution of Population	Wallowa County				Oregon			
	2000	2017	Change	Share	2000	2017	Change	Share
Total:	7,226	7,195	0%	100%	3,421,399	4,025,127	18%	100%
White	6,973	6,877	-1%	96%	2,961,623	3,416,776	15%	85%
Black	2	16	686%	0%	55,662	76,347	37%	2%
Native American	51	14	-73%	0%	45,211	45,332	0%	1%
Asian	17	20	17%	0%	101,350	166,351	64%	4%
Hawaiian or Pac. Islander	3	7	145%	0%	7,976	15,157	90%	0%
Other Race	69	29	-57%	0%	144,832	121,000	-16%	3%
Two or More Races	111	232	109%	3%	104,745	184,164	76%	5%
Latino (of any race)	125	195	56%	3%	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.

With little net change in population, residential permit levels in Wallowa County are commensurately low.

FIGURE 2.21: HISTORIC AND PROJECTED RESIDENTIAL PERMITS, WALLOWA COUNTY

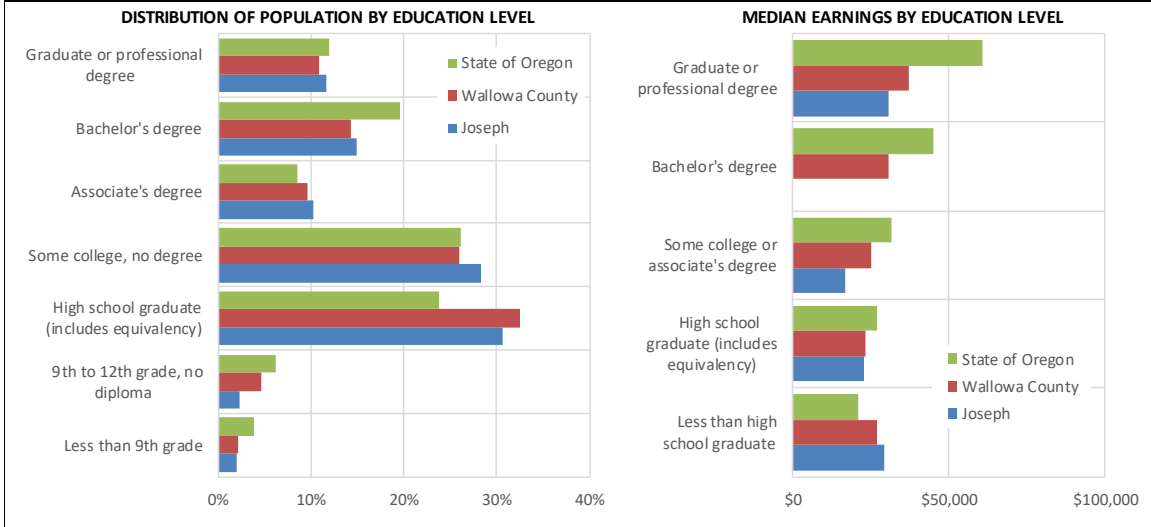


SOURCE: HUD

The educational attainment level of the local population is somewhat higher than the profile for Wallowa County. Of an estimated 765 persons 25 years or older, an estimated 26.5% have a bachelor’s degree or higher. This compares to a 25.2% rate for the county and a 31.5% rate for Oregon. Both the county as well as City of Joseph have a significantly lower rate of residents with less than a high school education.

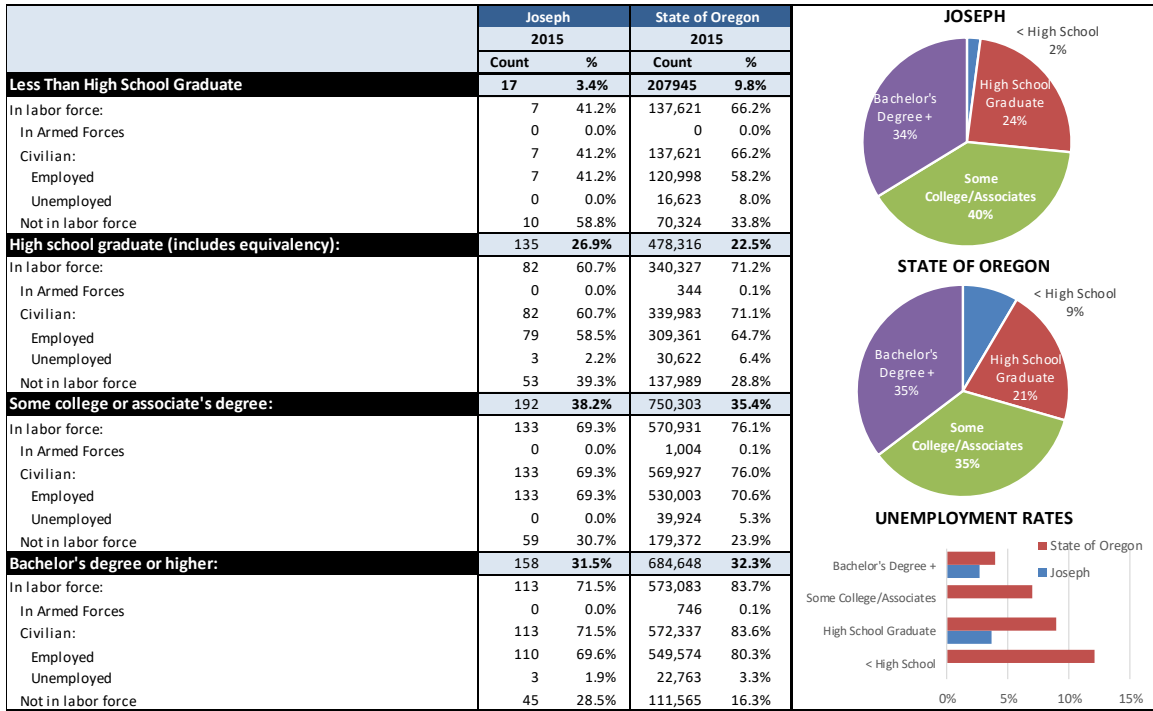
FIGURE 2.22: EDUCATIONAL ATTAINMENT PROFILE, 2016

	Joseph		Wallowa County		State of Oregon	
	Count	%	Count	%	Count	%
Population 25 Years and Over	765	100.0%	5,316	100.0%	2,755,78	100.0%
Less than 9th grade	15	2.0%	114	2.1%	106,505	3.9%
9th to 12th grade, no diploma	18	2.4%	245	4.6%	169,993	6.2%
High school graduate (includes equivalency)	234	30.6%	1,728	32.5%	657,520	23.9%
Some college, no degree	217	28.4%	1,379	25.9%	721,059	26.2%
Associate's degree	78	10.2%	513	9.7%	234,336	8.5%
Bachelor's degree	114	14.9%	759	14.3%	538,977	19.6%
Graduate or professional degree	89	11.6%	578	10.9%	327,396	11.9%
Median Earnings, 25 Years and Over	\$22,989	100.0%	\$26,690	100.0%	\$33,686	100.0%
Less than high school graduate	\$29,167		\$27,188	101.9%	\$20,970	62.3%
High school graduate (includes equivalency)	\$23,000		\$23,155	86.8%	\$27,139	80.6%
Some college or associate's degree	\$17,059	74.2%	\$25,112	94.1%	\$31,415	93.3%
Bachelor's degree	-		\$30,511	114.3%	\$44,881	133.2%
Graduate or professional degree	\$30,750	133.8%	\$37,083	138.9%	\$60,958	181.0%



SOURCE: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

FIGURE 2.23: EDUCATIONAL ATTAINMENT PROFILE EMPLOYMENT STATUS, 2016



SOURCE: U.S. Census Bureau, 2012-2016 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 Joseph and Wallowa County. The objective of this process is to identify a range of industry types that can be considered targeted economic opportunities over the 20-year planning period.

A range of analytical tools to assess the local and regional economic landscape are used to determine the industry typologies the City should consider targeting over the planning period. Where possible, we look to identify the sectors that are likely to drive growth in current and subsequent cycles.

ECONOMIC SPECIALIZATION

The most common analytical tool to evaluate economic specialization is a location quotient 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.

We completed a location quotient analysis for Wallowa County, which evaluated the distribution of local employment relative to national averages, as well as average annual wage levels by industry. The most over-represented industries were natural resources and mining, as well as government. Average wage levels in these industries are higher than average for the county.

FIGURE 3.1: INDUSTRY SECTOR SPECIALIZATION BY MAJOR INDUSTRY, WALLOWA COUNTY, 2016¹

Industry	Annual Establishments	Average Employment	Total Wages	Avg. Annual Wages	Employment LQ
1011 Natural resources and mining	48	184	\$6,993,402	\$37,990	5.47
1012 Construction	49	163	\$6,489,083	\$39,709	1.32
1013 Manufacturing	16	155	\$3,875,544	\$24,936	0.70
1021 Trade, transportation, and utilities	71	448	\$15,267,087	\$34,110	0.92
1022 Information	5	19	\$1,113,713	\$59,135	0.38
1023 Financial activities	30	115	\$4,776,510	\$41,625	0.80
1024 Professional and business services	39	125	\$4,210,540	\$33,662	0.34
1025 Education and health services	30	293	\$10,127,680	\$34,556	0.74
1026 Leisure and hospitality	50	260	\$3,909,946	\$15,019	0.92
1027 Other services	53	133	\$3,091,030	\$23,241	1.68
Federal Government	9	86	\$4,877,832	\$56,446	1.72
State Government	11	133	\$4,347,967	\$32,815	1.61
Local Government	23	454	\$20,497,641	\$45,157	1.81
Total	434	2,568	\$89,577,975	\$34,882	

SOURCE: Bureau of Labor Statistics

A more detailed industry analysis shows that forestry and logging and agricultural production are major components of the natural resources and mining sector. Health care and retail trade are the sectors with

¹ QCEW Data, Annual Average 2016 Data

the highest employment counts, while accommodation and government have the highest location quotients outside of natural resources and mining.

FIGURE 3.2: INDUSTRY SECTOR SPECIALIZATION BY DETAILED INDUSTRY, WALLOWA COUNTY, 2016²

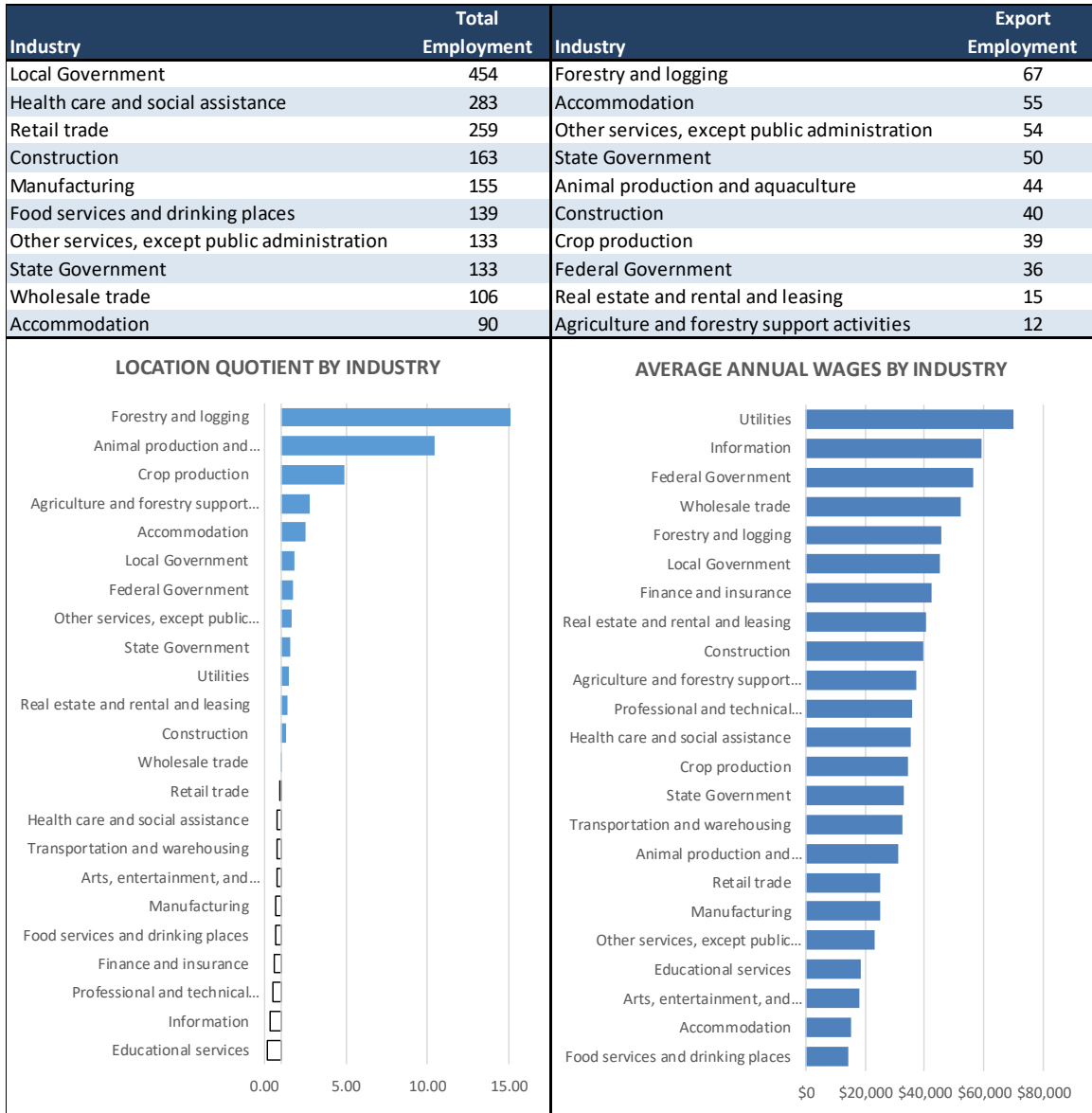
Industry	Annual Establishments	Average Employment	Total Wages	Avg. Annual Wages	Employment LQ
NAICS 111 Crop production	11	49	\$1,667,648	\$34,384	4.94
NAICS 112 Animal production and aquaculture	14	49	\$1,526,730	\$31,105	10.44
NAICS 113 Forestry and logging	14	68	\$3,111,515	\$45,814	70.46
NAICS 115 Agriculture and forestry support activities	10	19	\$687,509	\$36,996	2.79
NAICS 22 Utilities	6	15	\$1,020,103	\$69,950	1.52
NAICS 23 Construction	49	163	\$6,489,083	\$39,709	1.32
NAICS 31-33 Manufacturing	16	155	\$3,875,544	\$24,936	0.70
NAICS 42 Wholesale trade	7	106	\$5,545,740	\$52,236	1.01
NAICS 44-45 Retail trade	42	259	\$6,487,806	\$25,041	0.91
NAICS 48-49 Transportation and warehousing	17	68	\$2,213,438	\$32,671	0.77
NAICS 51 Information	5	19	\$1,113,713	\$59,135	0.38
NAICS 52 Finance and insurance	10	61	\$2,586,265	\$42,572	0.58
NAICS 53 Real estate and rental and leasing	20	54	\$2,190,245	\$40,560	1.39
NAICS 54 Professional and technical services	23	81	\$2,912,733	\$36,034	0.50
NAICS 61 Educational services	3	10	\$193,031	\$18,680	0.20
NAICS 62 Health care and social assistance	27	283	\$9,934,649	\$35,136	0.82
NAICS 71 Arts, entertainment, and recreation	11	31	\$550,517	\$18,001	0.76
NAICS 721 Accommodation	12	90	\$1,370,865	\$15,162	2.54
NAICS 722 Food services and drinking places	27	139	\$1,988,564	\$14,272	0.67
NAICS 81 Other services, except public administration	53	133	\$3,091,030	\$23,241	1.68
Federal Government	9	86	\$4,877,832	\$56,446	1.72
State Government	11	133	\$4,347,967	\$32,815	1.61
Local Government	23	454	\$20,497,641	\$45,157	1.81

SOURCE: Bureau of Labor Statistics

The top employment sectors, local government, health care and retail trade, are industries that are driven by serving a local population. The county has a significant amount of manufacturing employment, but the overall distribution is below the national average for that sector.

If we look at export or “traded sector” employment that tends to bring in dollars from outside of the area, tourism activity becomes notable in addition to natural resource and agricultural production. The highest average annual wage levels are reported by utilities, information, federal government, wholesale trade, and forestry and logging.

FIGURE 3.3: TOP TEN INDUSTRIES IN TERMS OF TOTAL AND EXPORT EMPLOYMENT



SOURCE: Bureau of Labor Statistics

ECONOMIC DRIVERS

The identification of the economic drivers of a local or regional economy is 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 cycle². A shift-share analysis is an analytical procedure that measures local effect of economic performance within an 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

² Measured from the trough of recent recession to 2016, the most recent period available for local employment data.

competitiveness or simply growth in line with broader trends. For example, consider that Widget Manufacturing is growing at a 1.5% 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 4% annually. In this context, local widget manufacturers are struggling, and some local or regional condition is stifling economic opportunities.

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 local characteristics 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.

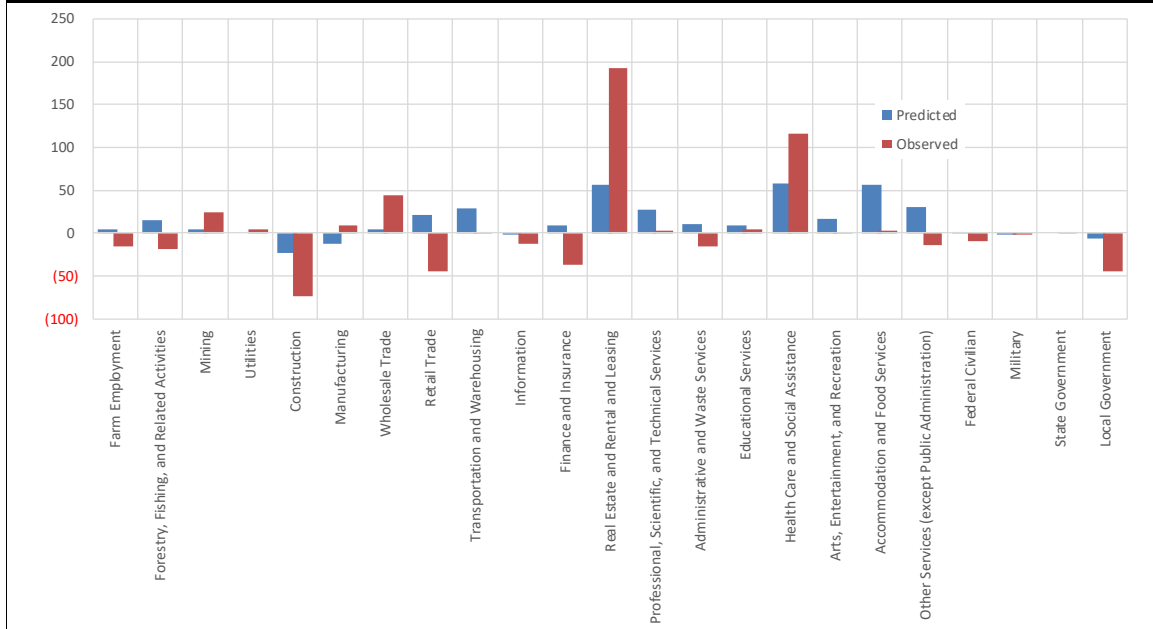
Contracting, Outperforming: Industries that are declining locally but slower than the national average. These industries have structural issues that are impacting growth industry wide. However, local firms are leveraging some local or regional factor that is making them more competitive than other firms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

We evaluated the average annual growth rate by industry from 2008 through 2016 for Wallowa County relative 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. As shown in Figure 4.4, only a few industries showed growth in excess of national rates. These include real estate rental and leasing, health care and social assistance, wholesale trade, and manufacturing and mining.

FIGURE 3.4: INDUSTRY SECTOR SHIFT SHARE ANALYSIS, WALLOWA COUNTY (2008 – 2016)

Industry	Average Employment		Net Change		Standardized Level - 2016 *	Regional Shift
	2008	2016	Total	AAGR		
Farm Employment	600	584	(16)	-0.3%	604	(20)
Forestry, Fishing, and Related Activities	218	200	(18)	-1.1%	233	(33)
Mining	26	50	24	8.5%	30	20
Utilities	20	25	5	2.8%	20	5
Construction	330	256	(74)	-3.1%	307	(51)
Manufacturing	196	205	9	0.6%	184	21
Wholesale Trade	86	130	44	5.3%	91	39
Retail Trade	495	451	(44)	-1.2%	516	(65)
Transportation and Warehousing	127	128	1	0.1%	156	(28)
Information	38	26	(12)	-4.6%	36	(10)
Finance and Insurance	111	74	(37)	-4.9%	120	(46)
Real Estate and Rental and Leasing	341	534	193	5.8%	398	136
Professional, Scientific, and Technical Services	208	211	3	0.2%	235	(24)
Administrative and Waste Services	103	87	(16)	-2.1%	114	(27)
Educational Services	39	43	4	1.2%	48	(5)
Health Care and Social Assistance	310	426	116	4.1%	368	58
Arts, Entertainment, and Recreation	123	124	1	0.1%	140	(16)
Accommodation and Food Services	331	334	3	0.1%	387	(53)
Other Services (except Public Administration)	255	241	(14)	-0.7%	286	(45)
Federal Civilian	111	102	(9)	-1.1%	112	(10)
Military	19	17	(2)	-1.4%	18	(1)
State Government	64	65	1	0.2%	64	1
Local Government	505	460	(45)	-1.2%	498	(38)
Other/Suppressed Industries*	0	0	0	0.0%	0	0
TOTAL	4,656	4,773	117	0.3%	4,965	(192)



* 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

In the 2009 EOA for Wallowa County, the City of Joseph had a locational advantage within the county due to its position at the heart of the tourism and recreation economy of the county, near the lake and mountain access. The City represents over a third of all Leisure and Hospitality employment in the county, and these jobs represent a quarter of local employment. The 2009 EOA identified the tourism industry as a target for growth, as well as niche manufacturing and value-added agricultural industry.

TARGET INDUSTRY CLUSTERS

This section discusses potential target industries for the City of Joseph based on the community’s historical strengths and advantages, as well as its established economic development goals. These are industries where the city might focus efforts to grow local business and attract new businesses. At the end of this section is a more detailed glossary of potential community partners for economic development.

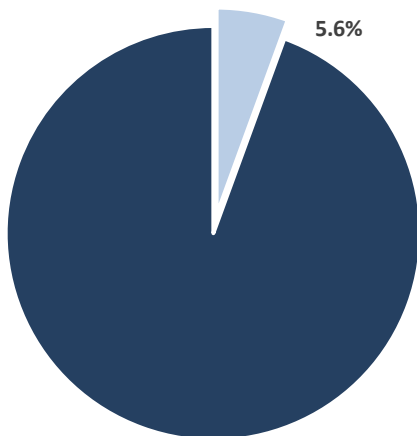
AGRICULTURE SUPPORT/VALUE-ADDED FOOD PRODUCTS

Wallowa County has a significant level of agricultural production, as well as a reduced yet still important timber supply. The proximity of this activity in the rural areas of the county creates opportunities for value-added activities within the local urbanized areas, such as food processing and packaging, wood products production and biomass fuels.



Employment in these industries was estimated at 33 jobs in 2017, representing 5.6% of the local employment base. Projected growth over the next twenty years is only 5 jobs. The average annual wage in 2017 in these industries was \$31,265. The following graphic summarizes the industry and projections, as well as major employers in Joseph as well as Wallowa County.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	33
AVERAGE ANNUAL WAGE (2017)	\$31,265
PROJECTED GROWTH	5
% OF PROJECTED GROWTH	0.7%

MAJOR EMPLOYERS

- TERMINAL GRAVITY BREWING INC
- FOREST SERVICE
- HENDERSON LOGGING INC
- ARROWHEAD CHOCOLATES
- PBAR INC
- BAR B RANCH
- MCCLARAN RANCH INC
- PRO THINNING INC
- STEIN DISTILLERY INC

The area’s ranching and farming agricultural industries offer significant opportunities to increase the level of value added that is captured locally. Timber production has fallen significantly since the 1990s, however production levels on public lands have remained stable for the past decade and even seen some modest increase. In Wallowa Integrated Biomass Resources has developed a business working with small diameter logs and woody biomass, reflecting an industry shift towards products that are consistent with available

supply.

Cluster Strengths

- Proximity to high-quality farmland and significant livestock and crop production.
- Proximity to timber production, although the nature of available timber is changing.
- Range of value-add processes that are currently done outside the area.
- Wallowa County and the City of Joseph specifically has marketing “cache” regionally.

Cluster Challenges

- Will need significant capital investments to support key opportunities.
- Limited available labor workforce, and workforce housing.

Potential Opportunities

- Increased food product manufacturing, packaging, branding.
- Manufacturers that can utilize small diameter logs and woody biomass.

Potential Partners

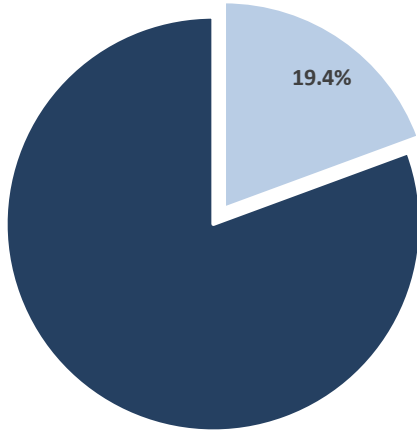
- OSU Extension Service
- Wallowa Resources
- Rural Development Initiative Inc.
- US Forest Service
- Oregon Department of Agriculture

EDUCATION AND HEALTH SERVICES

The education and health care sectors accounts for 19.4% of City of Joseph’s employment base in 2017. Demand for these services tends to follow demographic trends, and the aging of the local population base is expected to support a growing demand for health services, specifically continuing care. The following are key industry trends:

- Emphasis on 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. Zoomcare).
- Phone and video appointments.
- An estimated 5% to 8% of Boomers will age in multi-family retirement and care facilities.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	115
AVERAGE ANNUAL WAGE (2017)	\$21,971
PROJECTED GROWTH	34
% OF PROJECTED GROWTH	4.6%

MAJOR EMPLOYERS

WALLOWA COUNTY HEALTH CARE DISTRICT
WALLOWA VALLEY CENTER FOR WELLNESST
ENTERPRISE SCHOOL DISTRICT #21
WINDING WATERS MEDICAL CLINIC
ENTERPRISE HIGH SCHOOL
JOSEPH SCHOOL DISTRICT #6
JOSEPH HIGH SCHOOL
ALPINE HOUSE
JOSEPHY CENTER FOR ARTS AND CULTURE
CHIEF JOSPEH DENTAL CLINIC LLC

The Wallowa Memorial Hospital, a 25-bed critical care access hospital and level IV trauma center in Enterprise, is the area's most significant health services provider in the county.

This sector accounted for 115 jobs in 2017, with average annual wages of \$21,971. The sector is expected to add 34 new jobs over the next twenty years, accounting for 4.6% of projected growth.

Cluster Strengths

- Aging of population will support health services.
- Dedicated service area.

Cluster Weakness

- A limited labor force for staffing.
- The size of the local population base limits the level of supportable local medical services, and major medical investments are more likely to favor more centralized locations in Enterprise.

Cluster Opportunities

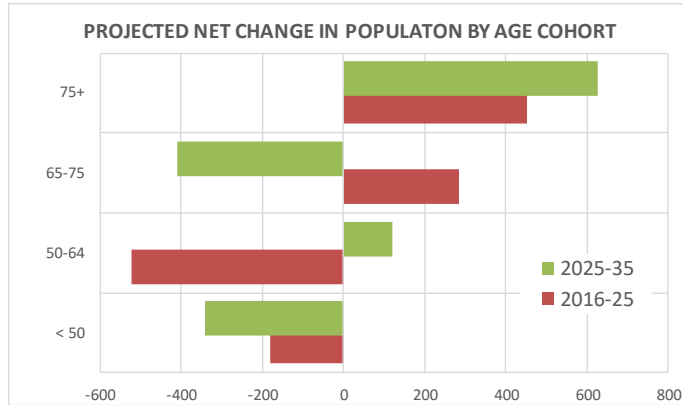
- Development of expanded and/or new medical facilities.

Potential Partners

- Wallowa Memorial Hospital
- Eastern Oregon University
- Blue Mountain Community College
- OSU nursing programs

RETIREMENT SERVICES

Largely the result of aging in place, communities in Wallowa County have a significant existing retirement-aged population base. As noted in the demographic section of this report, the area has been aging and retirement services are expected to be an ongoing and growing need in the communities. Over 50% of the current population base is 55 or over, with more than 14% at least 75 years of age. By 2035, the number over 75 years of age is expected to increase to 27% of the total population.



Senior housing demand is typically tied to existing households aging in an area, or households that move closer to their families when moving into a senior housing facility. Local households prefer to move into facilities proximate to their existing community as it allows them to maintain their social links. Households that relocate to senior housing that is not local typically do this to be closer to family support. There is a significant amount of academic research available regarding living arrangements for seniors. The research shows a clear observed preference for seniors to stay proximate to their existing locale when relocating below 76 years of age, and then the preference shifts towards proximity to children.³

In addition to direct retirement care services, households aged 55 and over provide broad support for leisure and financial activities in the local economy. Over the next few decades, the retirement age household population is expected to continue to grow in Wallowa County as the large Baby Boomer generation continues to reach retirement. Communities within the county provide attractive physical settings, an approachable size, and relatively low cost of living that will continue to make them attractive to retirees that are no longer tied locationally to employment opportunities.

Cluster Strengths

- Livability, recreation and leisure activities.
- Favorable demographics.
- Relatively low cost of living.
- National growth in retirement segments, met by insufficient facilities.

Cluster Weakness

- Locally available health care options.
- A limited labor force for staffing.

Potential Partners

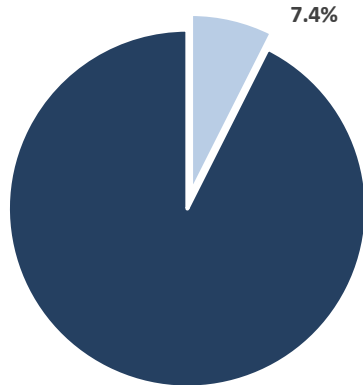
- AARP
- Wallowa Memorial Hospital
- Wallowa Resources and other volunteer opportunities
- OSU Extension Service (health and on-going education programs)
- Distance learning programs

³ Litwak, E. Longino, Jr., Charles, F. 1987, Migration patterns among the elderly: A development perspective, *The Gerontologist*, 27, 266-72
Rogers, Andrei, William H. Frey, Phillip Rees, Alden Spear, Jr. and Anthony M. Warnes, *Elderly migration and population redistribution: a comparative study*, Bellhaven Press, 1992

MANUFACTURING

The manufacturing sector is typically a highly desirable sector, which creates considerable value and often exports the bulk of its output. The manufacturing sector accounts for only 7.4% of the current employment base in the City of Joseph, with 44 jobs at an average annual wage of \$24,936 in 2017. The sector is projected to grow by 8 jobs over the next twenty years, accounting for 1.1% of the future growth in the county.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	44
AVERAGE ANNUAL WAGE (2017)	\$24,936
PROJECTED GROWTH	8
% OF PROJECTED GROWTH	1.1%

MAJOR EMPLOYERS

TERMINAL GRAVITY BREWING INC
 VALLEY BRONZE OF OREGON, INC.
 INTEGRATED BIOMASS RESOURCES LLC
 ARROWHEAD CHOCOLATES
 STEIN DISTILLERY INC
 BEECROWBEE LLC

Cluster Strengths

- Existing wood products industry with workforce expertise.
- Terminal Gravity has increased the local brewing expertise.
- Available and serviced land supply.
- Ability to attract executive level employees with livability.

Cluster Challenges

- Limited available labor workforce, and workforce housing.
- Geographic distance to outside markets.

Potential Opportunities

- Specialty manufacturing for recreation equipment.
- Increased food product and processing manufacturing.
- Additional brewer and/or expansion for brewers such as Terminal Gravity.

Potential Partners

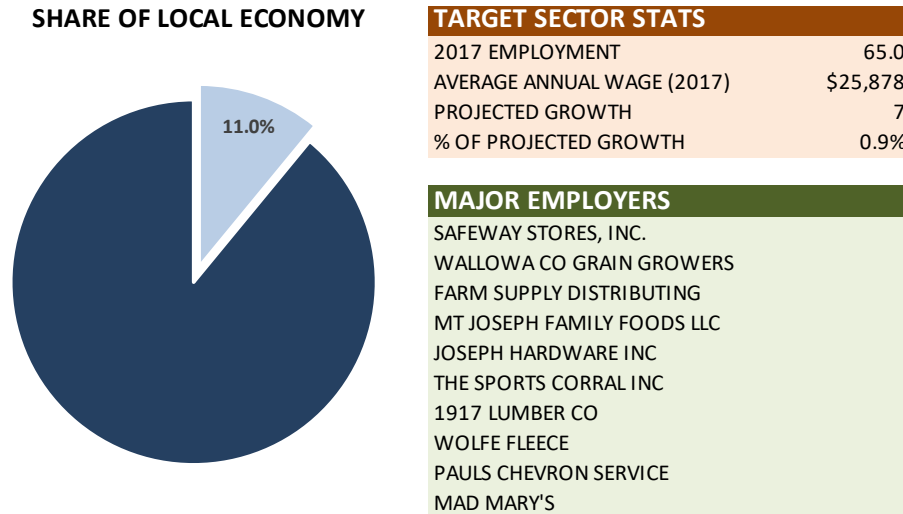
- Oregon Manufacturing Innovation Center (OMIC)
- Blue Mountain Community College
- Rural Development Initiatives, Inc.
- NEOEDD

RETAIL TRADE

While retail trade is typically viewed as a function of growth in local population and buying power, developing a strong retail trade base in an area helps limit leakage out of the market, retaining dollars in the local economy for a greater duration.

The overall employment level in this sector was 65 in 2017. This represents 11.0% of the employment base in the City of Joseph. The sector is projected to add 7 jobs over the next twenty years, accounting for 0.9%

of projected employment growth in the city during that period. The average annual wage was \$25,878 per year in 2017.



Cluster Strengths

- Seasonal tourism traffic.

Cluster Challenges

- Limited available labor workforce.
- Limited spending power of local households.
- Retail clusters in Enterprise is more centrally located vis-à-vis the population base in the county.

Potential Partners

- Chamber of Commerce
- BMCC Small Business Development Center
- NEOEDD

SELF-EMPLOYMENT

Self-employment accounts for an estimated 8% of the total employment base in Wallowa County. Technological advances have reduced the geographic requirements in many industries, allowing workers to interact collaboratively and effectively through multiple mediums from a remote location. This has allowed workers to become more footloose when choosing a location to live and work. A key requirement in this sector is the availability of broadband access.

While self-employed persons may be professionals working for firms remotely, others bring their expertise and capital to start new local ventures. This influx of capital and expertise can be supportive of a broad range of industries. Attracting and retaining these individuals involves several linked industries that makes the city and region competitive, including commercial amenities, recreational opportunities, education systems, and health care.

Cluster Strengths

- Relatively affordable cost of living.
- Access to recreational opportunities.

Cluster Weakness

- Accessibility to a major airport, larger markets.
- Broadband & telecom connectivity for online businesses and/or remote working.

Potential Partners

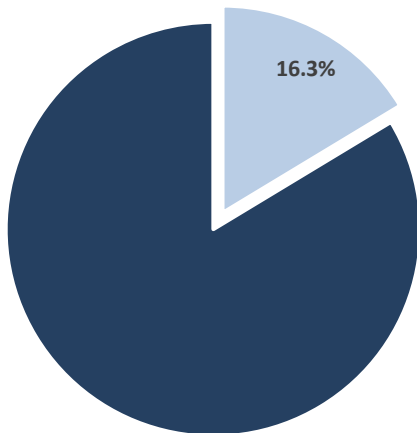
- Business Oregon
- Chamber of Commerce
- BMCC Small Business Development Center
- NEOEDD

TOURISM: AMENITY RETAIL, RECREATION, AND HOSPITALITY

The tourism sector has been a major contributor to local economic growth in the City of Joseph. The area’s scenic beauty and proximity to recreational opportunities has made it a tourist destination despite its relative isolation. Wallowa Lake, the Eagle Cap Wilderness, and Hells Canyon are destinations with a regional as well as international draw. The local area offers outstanding hiking, fishing, hunting, riding, rafting, and camping opportunities. In addition, the local communities provide support services such as restaurants and retail.

This sector accounted for 97 jobs in 2017, with average annual wages of \$15,040. The sector is expected to add 36 new jobs over the next twenty years, accounting for 4.8% of projected growth in the City. While a vital and growing sector, tourism-related employment tends to be seasonal as well as relatively low paying. The City of Joseph recognizes the importance of this industry to the local economy and supports expansion, but future economic development emphasis will be placed on industries that have year-round employment.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS	
2017 EMPLOYMENT	97
AVERAGE ANNUAL WAGE (2017)	\$15,040
PROJECTED GROWTH	36
% OF PROJECTED GROWTH	4.8%

MAJOR EMPLOYERS	
WALLOWA LAKE LODGE LLC	
EAGLES VIEW INN / EAGLE CAP CHALETs	
EMBERS BREWHOUSE	
WALLOWA LAKE	
FLYING ARROW RESORT	
WINDING WATERS RIVER EXPEDITIONS IN THE HYDRANT	
LA LAGUNA FAMILY MEXICAN RESTAURANT	
R & R DRIVE - IN INC	
STUBBORN MULE SALOON & STEAK	

The amenities that tourism traffic supports are also largely consistent with what is desirable to local residents. Quality retail, restaurant, recreation, and hospitality businesses make a community an attractive place to live and work. Studies have shown that tourism-related supportive uses have a positive impact on housing values and attract residents and businesses alike. This is a growing phenomenon in the context of emerging consumer preferences observed across Millennial and Boomer generations. Attraction of these types of businesses would offer Wallowa County the opportunity to raise its' amenity profile and continue to revitalize strategic target areas.



Cluster Strengths

- Recreational amenities.
- Historical context throughout the county.
- Natural areas and access to Eagle Cap and Hells Canyon wilderness areas.

Cluster Weakness

- A limited labor force for staffing, and workforce housing.
- Seasonal nature of employment opportunities.
- Remoteness of location relative to major sources of potential demand.

Potential Partners

- Travel Oregon
- Chamber of Commerce
- Blue Mountain Community College
- Rural Development Initiative Inc.

COMPARISON OF TARGET INDUSTRIES

The target industries outlined did not perform well from 2007 through 2017, with declines in metals manufacturing offsetting gains during that period. The following table shows the relative performance of these industry categories between 2007 and 2017 based on Quarterly Census of Employment and Wages (QCEW) data for the City of Joseph.

- In Joseph, food manufacturing has reporting the greatest gains, as well as tourism related lodging and food services.
- The tourism and education/health services sectors are projected to be major sources of new growth over the next twenty years.
- Wage levels in the targeted industries are relatively modest, and matching housing opportunities to workforce buying power will be a critical issue moving forward.

FIGURE 3.05: RECENT AND PROJECTED PERFORMANCE OF TARGET INDUSTRY SECTORS

TARGET INDUSTRY Component	Employment			Projected Growth		Average Wage
	2007	2017	Net Change	Adjusted	AAGR	
AGRICULTURAL & FORESTRY SUPPORT	32	33	1	5	0.8%	\$31,265
Agriculture, forestry, fishing, and hunting	32	16	(16)	2	0.6%	\$37,990
Food Manufacturing	0	17	17	3	0.9%	\$24,936
TRAVEL, RECREATION, TOURISM	96	97	1	36	1.6%	\$15,040
Arts, Entertainment, and Recreation	17	12	(5)	5	1.6%	\$18,001
Accommodation and Food Services	79	85	6	32	1.6%	\$14,622
EDUCATION, HEALTH SERVICES	114	115	1	34	1.3%	\$21,971
Educational services	90	92	2	26	1.2%	\$18,680
Health care and social assistance	24	23	(1)	9	1.6%	\$35,136
WHOLESALE & RETAIL TRADE	74	65	(9)	7	0.5%	\$25,878
Wholesale trade	1	2	1	0	0.1%	\$52,236
Retail trade - Stores	53	43	(10)	5	0.5%	\$25,041
Retail trade - Other	20	20	0	2	0.5%	\$25,041
MANUFACTURING	71	44	(27)	8	0.9%	\$24,936
Metals	71	25	(46)	5	0.9%	\$24,936
Food Manufacturing	0	17	17	3	0.9%	\$24,936
Wood Manufacturing	0	2	2	0	0.1%	\$24,936
Total/Weighted Average	387	354	(33)	92	1.2%	\$22,024

Source: Oregon Employment Department, Johnson Economics

PARTNERS IN ECONOMIC DEVELOPMENT

Effective economic development entails a partnership of communities, businesses, public and non-profit agencies, and residents. The following is a partial list of major stakeholders in regional economic development who can partner in growing existing businesses and attracting new ones along with the appropriate workforce.

Local and regional economic development staff should continue to partner and meet regularly with other regional partners to participate in and help direct regional efforts. Coordination ensures that agencies are leveraging others' efforts and not duplicating services or investments. It also means that they are aware of the services and strengths of each agency in order to direct outside contacts to the right place.

1. Wallowa County Chamber of Commerce

The Chamber serves as one of the strongest economic development advocates in the county, marketing the county to visitors, businesses, and residents. The Chamber provides information on local businesses and attractions to all of these groups. Recent goals of Chamber include expanding marketing efforts, and providing specific outreach promoting youth programs and amenities available in the county to encourage more business and family relocation. As the representative of local businesses from within the target industries and other sectors, the Chamber should be involved in all regional economic development and marketing efforts.

2. Key Industry Employers

In addition to the Chamber, large or small employers in target industries are key resources in understanding what opportunities and challenges those industries face in the region. The businesses can help inform economic development partners of their industry needs in terms of workforce, infrastructure, and regulatory barriers. Businesses feedback often proves to be the most valuable source of ground-testing the effectiveness of planned initiatives.

3. Northeast Regional Solutions Team

Regional Solutions Centers are located across Oregon and are designed to recognize the unique challenges of each region and help implement the Governor's economic development approach.

The Regional Solutions Team helps coordinate the efforts of multiple State departments and other partners to ensure that efforts are cohesive. Some recent areas of focus in the Northeast region are support for existing and new business, natural resource utilization, workforce availability and housing, water management, and infrastructure for industrial lands.

4. Business Oregon

Business Oregon is the state economic development agency, looking to support and grow Oregon industries and workforce, and recruit new economic activity. Business Oregon is part of the Regional Solutions team and serves similar regions across the state. The Northeast district covers Baker, Union and Wallowa Counties. The agency offers a very broad range of economic development initiatives for businesses and communities, including guidance, education, analysis, funding, and referrals to other partners. Business Oregon is often the best first resource for economic development questions.

5. Northeast Oregon Economic Development District (NEOEDD)

Economic Development Districts are designated by the US Economic Development Agency, and as such help administer certain federal programs and funding sources. The NEOEDD offers economic development resources such as workshops, technical assistance, and funding to businesses, entrepreneurs, non-profits and public officials. NEOEDD can also offer community contacts, business advising and resources, marketing and promotion, and tracks available commercial real estate.

The economic district periodically completes a Comprehensive Economic Development Strategy (CEDS) for the northeast region that lays out detailed goals and objectives. The CEDS is one of the most comprehensive economic development strategies in the region and a good resource to local communities to review and select their own highest priorities. Local communities should also coordinate in the writing of the CEDS every five years, in order to ensure that local priorities are reflected.

6. Oregon Department of Development and Land Conservation (DLCDC)

DLCDC can provide guidance and sometimes funding for some economic development planning efforts for local jurisdictions. The agency can assist with the technical aspects of updating the economic aspects of the Comprehensive Plan and development codes related to commercial and industrial land. A key aspect of local economic development (and the focus of this project) is ensuring the availability of the right types of sites with the proper zoning to accommodate projected economic growth. An updated set of Comp Plan policies, as well as an up-to-date Comp Plan map, sets the table for growth to occur. In addition, the planning process helps ensure that members of the public, businesses and other stakeholders have participated in development economic development goals and plans.

7. Training and Employment Consortium (TEC)

TEC is a consortium of governments across six Eastern Oregon counties that is dedicated to providing skills training, on-going education, youth programs, and services for displaced workers. The program is aimed particularly towards workers who are displaced by industry trends or facing long-term unemployment. TEC also administers the JOBS program for low-income workers. TEC is a good partner for workforce development issues.

8. Blue Mountain Community College

The community college covers a wide range of northeastern Oregon stretching from Grant County to Wallowa County. BMCC has seven locations but a limited presence in Wallowa County. Community colleges remain the most vital providers of on-going education and workforce training

in most Oregon communities. It is important that communities and economic development agencies coordinate with the local community college to ensure that the college curriculum reflects trends in local industries, emerging businesses, and evolving skill requirements. Developing a workforce with the proper skills is key to growing or attracting target industries. BMCC also operates a Small Business Development Center based in Pendleton offering free business advisement and workshops, led by current or former business owners.

9. Wallowa Resources

Formed after the downturn in the timber industry in the mid-1990's, Wallowa Resources is dedicated to the responsible utilization and stewardship of natural resources in the area. The organization seeks to combine economic development with environmental benefits by advocating for new and sustainable forest and agricultural products, clean energy, and land management. Wallow Resources offers business development resources, education, youth programs, and stewardship.

10. Oregon State University Extension Service

OSU offers a range of programs through its extension service that are rooted in the University's traditional role in agriculture and land management across the state. The extension offers programs in 4-H, farm and forestry land management, and many related specialties such as naturalist, gardener, bee keeping, environmentalism, and many healthy and nutrition programs. OSU Extension Services also administers an Open Campus program to bring distance learning opportunities across the state. In Wallow County, there is an extension service office located in Enterprise.

11. Rural Development Initiative Inc.

RDI is a nonprofit organization formed after the downturn in the timber industry in the early 1990's, with a mission of supporting rural communities impacted by this permanent blow to the economy. RDI is a resource to consult on a range of interconnected challenges rural Oregon counties face, with programs and referrals for public agencies and businesses. RDI focuses on leadership training for local public servants, economic development, business retention and entrepreneurial advice.

12. Office of Small Business Assistance

The Office of Small Business Assistance serves as an advocate for small businesses and their interests from the Office of the Secretary of State. The office is meant to serve as an advocate outside of the executive and legislative branches, providing information on starting, growing or closing a business. The office also can support small businesses who believe they may be facing unfair or excessive state regulatory actions helping to find resolutions.

IV. FORECAST OF EMPLOYMENT AND LAND NEED

CITY OF JOSEPH EMPLOYMENT FORECASTS

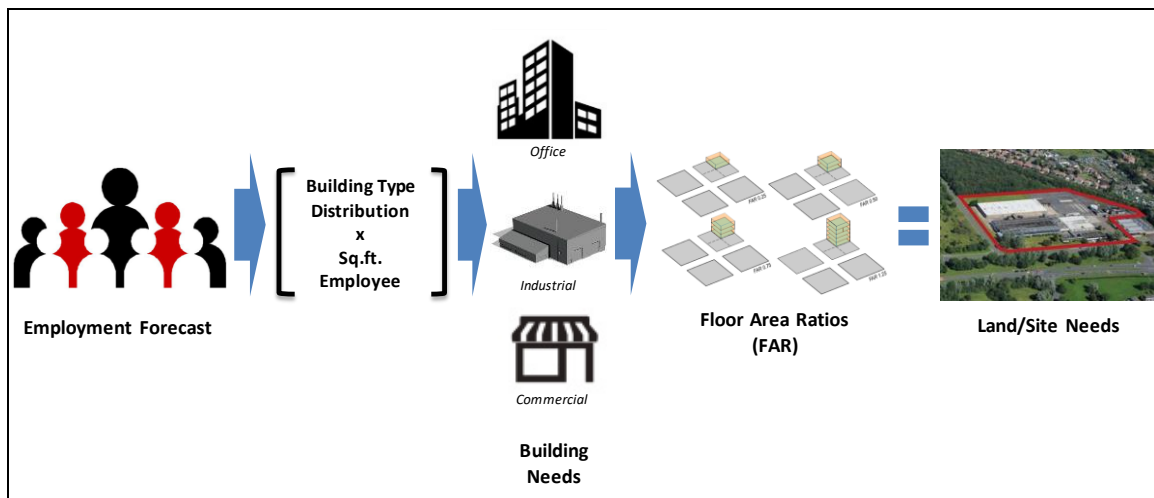
Goal 9 requires that jurisdictions plan for a 20-year supply of commercial and industrial capacity. Because employment capacity is the physical space necessary to accommodate new workers in the production of goods and services, employment needs forecasts typically begin with a forecast of employment 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 2018, 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

Our 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: UPDATE TO 2018 BASELINE AND CONVERSION OF COVERED TO TOTAL EMPLOYMENT



Source: Johnson Economics

The first analytical step of the analysis is to update covered employment to the 2018 base year. Our City of Joseph Quarterly Census of Employment and Wages (QCEW) dataset provides covered employment by industry through 2017. To update these estimates, we use observed industry specific growth rates for the region between 2017 and 2018.

The second step in the analysis is to convert “covered”⁴ 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 commissioned 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, and administrative services. The adjusted 2018 total employment base for the City of Joseph is 496 jobs.

FIGURE 4.02: UPDATE TO 2018 BASELINE AND CONVERSION OF COVERED TO TOTAL EMPLOYMENT

Major Industry Sector	QCEW Employment			Total Emp. Conversion ²	2018 Estimate
	2017 Employment	'17-'18 County Δ ¹	2018 Estimate		
Ag/Forestry/Fishing	16	-11.8%	14	30.8%	46
Construction	16	5.7%	17	73.5%	23
Manufacturing	44	0.9%	44	97.6%	46
Wholesale Trade	2	9.2%	2	97.3%	2
Retail Trade	63	2.3%	64	94.4%	68
T.W.U.	6	-0.7%	6	91.3%	7
Information	0	4.6%	0	94.7%	0
Finance & Insurance	12	-2.5%	12	91.6%	13
Real Estate	12	5.5%	13	91.6%	14
Professional & Technical Services	3	2.5%	3	88.5%	3
Administration Services	11	13.5%	12	88.5%	14
Education	92	2.3%	94	94.5%	100
Health Care	23	1.2%	23	94.5%	25
Leisure & Hospitality	97	3.0%	100	94.4%	106
Other Services	19	5.3%	20	82.7%	24
Government	6	-1.0%	6	100.0%	6
TOTAL	422	2.2%	431	87.0%	496

1 AAGR from 2012-2017 for Wallowa County

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

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

Source: Johnson Economics, Oregon Employment Department, BEA

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 most applicable for Wallowa County jurisdictions is 660-024-0040(9)(a)(A), which recommends reliance on the most recent regional forecast published by the Oregon Employment Department. This method applies industry specific growth rates for the Eastern

⁴ 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.

Oregon Workforce Region (Baker, Grant, Harney, Malheur, Union, and Wallowa Counties) to the 2018 Wallowa County base. This method results in an average annual growth rate of 1.0%, with total job growth of 88 jobs over the forecast period when applied to the employment profile in Joseph.

Scenario 2: Alternative Employment Forecast

A second prepared forecast scenario was influenced by 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 advisory committee. Further, the alternative 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 that are expected to influence growth informed the forecast

Location - Wallowa County and Joseph's location within the region will influence the mix of employment uses it can attract. For example, the area's proximity to the Eagle Cap Wilderness area and Wallowa Lake make it an attractive destination for tourism, while a lack of access to the interstate system limits its attractiveness for uses with intensive distribution functions.

Household Growth - Growth in many sectors, including retail, hospitality, banking, and real estate, is a direct function of population and households in a community. In Wallowa County and Joseph, tourism and second home ownership are additional factors influencing the demand for commercial space.

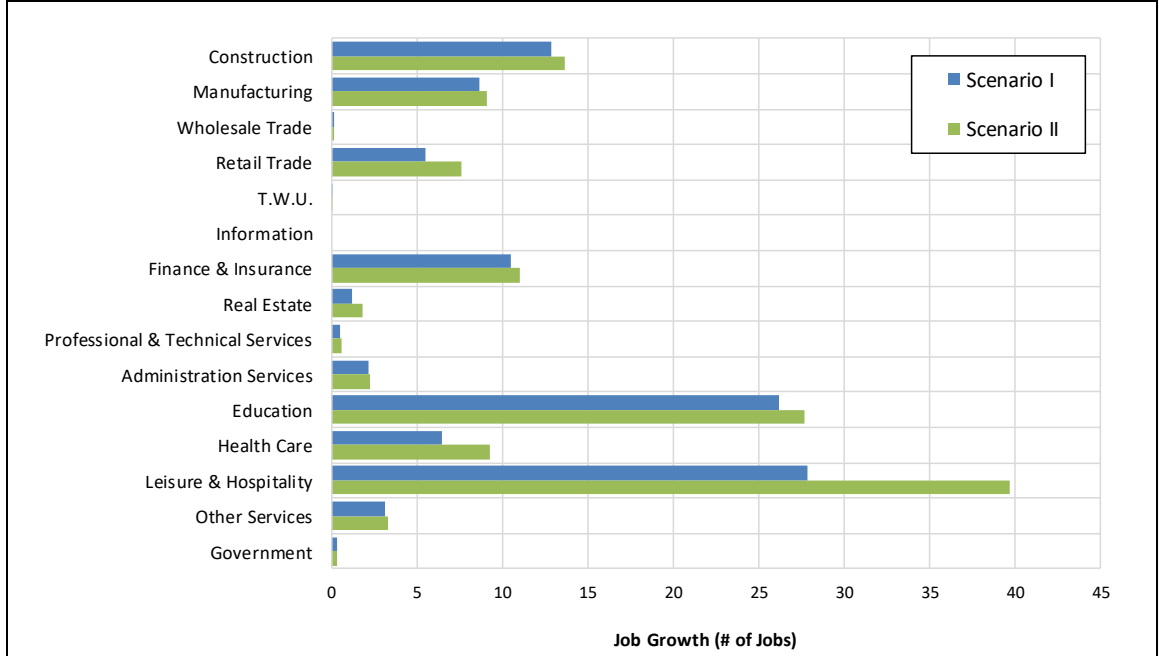
Taken together, the 20-year forecast in this scenario enumerates 1.1% average annual growth. Our outlook for real estate, health care, and leisure & hospitality is more optimistic than macroeconomic forecasts indicate—reflecting the area's recent strength in these sectors.

Summary of Employment Forecast Scenarios

The two forecast scenarios in this analysis range from 1.0% to 1.2% average annual growth. Job growth estimates range from 96 to 117 jobs. The estimates in the preceding analysis are useful in creating a baseline understanding of macroeconomic growth prospects. These are common and broadly accepted approaches when looking at large geographic regions. Forecasts grounded in broad based economic variables do not account for the realities of local businesses and trends among evolving industries. Any long-term forecast is inherently uncertain and should be updated on a regular basis to reflect more current information.

FIGURE 4.03: COMPARISON OF ALTERNATIVE FORECASTS, CITY OF JOSEPH

Industry	SCENARIO I (State of Oregon)				SCENARIO II (Adjusted)			
	2018	2038	Chg.	AAGR	2018	2035	Chg.	AAGR
Construction	23	36	13	2.2%	23	37	14	2.4%
Manufacturing	46	54	9	0.9%	46	55	9	0.9%
Wholesale Trade	2	2	0	0.4%	2	2	0	0.4%
Retail Trade	68	74	5	0.4%	68	76	8	0.5%
T.W.U.	7	7	0	0.1%	7	7	0	0.1%
Information	0	0	0	0.0%	0	0	0	0.0%
Finance & Insurance	118	129	11	0.4%	118	129	11	0.4%
Real Estate	14	15	1	0.4%	14	16	2	0.6%
Professional & Technical Services	3	4	1	0.7%	3	4	1	0.7%
Administration Services	14	16	2	0.7%	14	16	2	0.7%
Education	100	126	26	1.2%	100	127	28	1.2%
Health Care	25	31	6	1.2%	25	34	9	1.6%
Leisure & Hospitality	106	134	28	1.2%	106	146	40	1.6%
Other Services	24	27	3	0.6%	24	28	3	0.6%
Government	6	6	0	0.3%	6	6	0	0.3%
TOTAL:	555	661	106	0.9%	555	682	127	1.0%



Source: Johnson Economics, Oregon Employment Department, BEA

FIGURE 4.04: SUMMARY OF PROJECTION SCENARIOS, CITY OF JOSEPH

Industry	Overall Employment					Net Change by Period				Total 18-38
	2018	2023	2028	2033	2038	18-23	23-28	28-33	33-38	
SCENARIO 1 (State of Oregon)										
Construction	23	26	29	32	36	3	3	3	4	13
Manufacturing	46	48	50	52	54	2	2	2	2	9
Wholesale Trade	2	2	2	2	2	0	0	0	0	0
Retail Trade	68	70	71	72	74	1	1	1	1	5
T.W.U.	7	7	7	7	7	0	0	0	0	0
Information	0	0	0	0	0	0	0	0	0	0
Finance & Insurance	118	121	123	126	129	3	3	3	3	11
Real Estate	14	14	14	15	15	0	0	0	0	1
Professional & Technical Services	3	4	4	4	4	0	0	0	0	1
Administration Services	14	15	15	16	16	1	1	1	1	2
Education	100	106	112	119	126	6	6	7	7	26
Health Care	25	26	28	29	31	1	2	2	2	6
Leisure & Hospitality	106	112	119	126	134	6	7	7	8	28
Other Services	24	25	26	27	27	1	1	1	1	3
Government	6	6	6	6	6	0	0	0	0	0
TOTAL:	555	580	605	632	661	24	26	27	29	106
SCENARIO 2 (Modified)										
Construction	23	26	29	33	37	3	3	4	4	14
Manufacturing	46	48	50	52	55	2	2	2	2	9
Wholesale Trade	2	2	2	2	2	0	0	0	0	0
Retail Trade	68	70	72	74	76	2	2	2	2	8
T.W.U.	7	7	7	7	7	0	0	0	0	0
Information	0	0	0	0	0	0	0	0	0	0
Finance & Insurance	118	121	124	126	129	3	3	3	3	11
Real Estate	14	14	15	15	16	0	0	0	0	2
Professional & Technical Services	3	4	4	4	4	0	0	0	0	1
Administration Services	14	15	15	16	16	1	1	1	1	2
Education	100	106	113	120	127	6	7	7	8	28
Health Care	25	27	29	31	34	2	2	2	3	9
Leisure & Hospitality	106	115	124	134	146	9	10	10	11	40
Other Services	24	25	26	27	28	1	1	1	1	3
Government	6	6	6	6	6	0	0	0	0	0
TOTAL:	555	584	615	647	682	29	31	33	35	127

Source: Johnson Economics, Oregon Employment Department, BEA

EMPLOYMENT LAND FORECAST – CITY OF JOSEPH

The next analytical step in our analysis is to convert projections of employment into forecasts of land demand over the planning period. The generally accepted methodology for this conversion begins by allocating employment by sector into a distribution of building typologies that typically house those economic activities. 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.

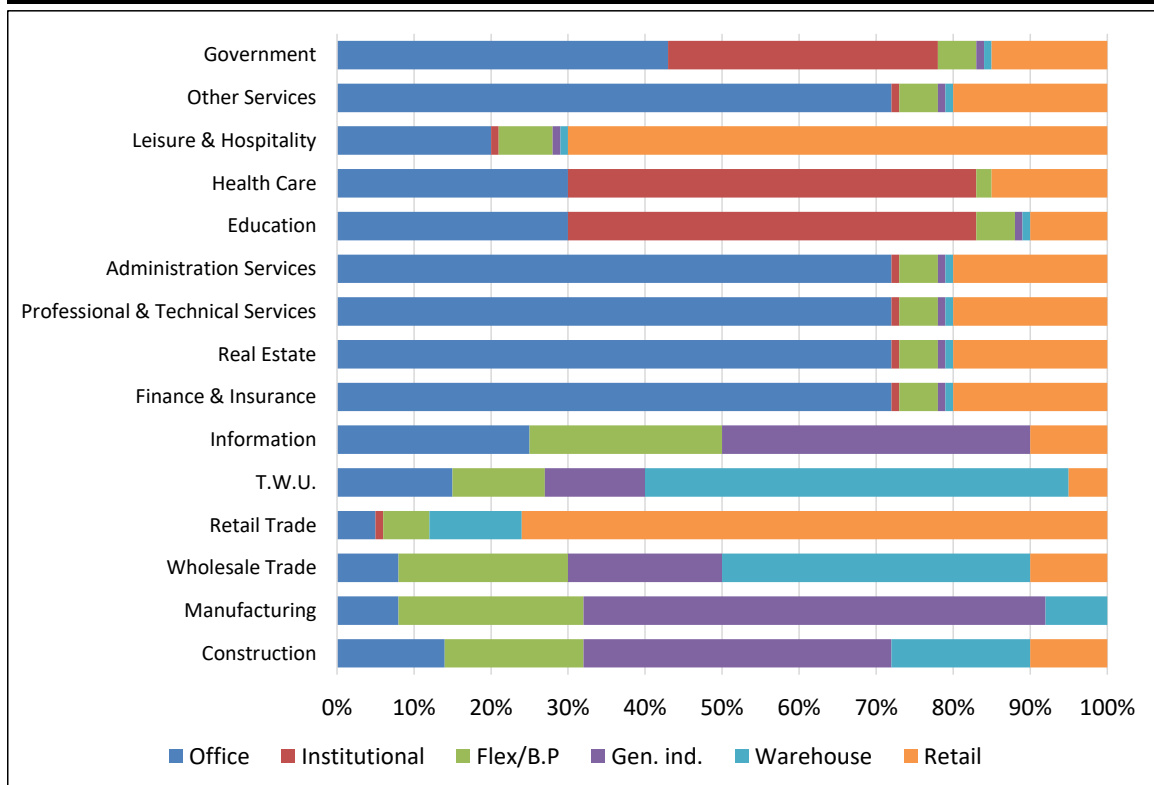
The next step converts employment into space using estimates of the typical square footage exhibited within each typology. Adjusting for market clearing vacancy we arrive at an estimate of total space demand for each building type. Finally, we can consider the physical characteristics of individual building 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.

Baseline Land Demand Analysis

To demonstrate the methodological process used, this report will develop land need estimates in a step-by-step process, clearly presenting underlying assumptions. In this analytical step we allocate employment growth into standard building typologies. The building typology matrix represents the share of sectoral employment that locates across various building types.

FIGURE 4.05: DISTRIBUTION OF EMPLOYMENT BY SPACE TYPE, CITY OF JOSEPH

Industry Sector	20-year Job Forecast		BUILDING TYPE MATRIX					
	Number	AAGR	Office	Institutional	Flex/B.P	Gen. ind.	Warehouse	Retail
Construction	13	2.2%	14%	0%	18%	40%	18%	10%
Manufacturing	9	0.9%	8%	0%	24%	60%	8%	0%
Wholesale Trade	0	0.4%	8%	0%	22%	20%	40%	10%
Retail Trade	5	0.4%	5%	1%	6%	0%	12%	76%
T.W.U.	0	0.1%	15%	0%	12%	13%	55%	5%
Information	0	0.0%	25%	0%	25%	40%	0%	10%
Finance & Insurance	1	0.4%	72%	1%	5%	1%	1%	20%
Real Estate	1	0.4%	72%	1%	5%	1%	1%	20%
Professional & Technical Services	1	0.7%	72%	1%	5%	1%	1%	20%
Administration Services	2	0.7%	72%	1%	5%	1%	1%	20%
Education	26	1.2%	30%	53%	5%	1%	1%	10%
Health Care	6	1.2%	30%	53%	2%	0%	0%	15%
Leisure & Hospitality	28	1.2%	20%	1%	7%	1%	1%	70%
Other Services	3	0.6%	72%	1%	5%	1%	1%	20%
Government	0	0.3%	43%	35%	5%	1%	1%	15%
TOTAL	96	1.0%	25%	19%	9%	11%	5%	31%



Source: Johnson Economics, Oregon Employment Department

Under the employment forecast scenario, employment housed in office, institutional, and retail space accounts for the greatest share of growth, followed by employment housed in general industrial, flex/business park, and warehouse/distribution space.

FIGURE 4.06: NET CHANGE IN EMPLOYMENT ALLOCATED BY BUILDING TYPE, CITY OF JOSEPH – 2018-2038

Industry Sector	NET CHANGE IN EMPLOYMENT BY BUILDING TYPE - 2018-2038						Total
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	
Construction	2	0	2	5	2	1	14
Manufacturing	1	0	2	5	1	0	9
Wholesale Trade	0	0	0	0	0	0	0
Retail Trade	0	0	0	0	1	6	8
T.W.U.	0	0	0	0	0	0	0
Information	0	0	0	0	0	0	0
Finance & Insurance	8	0	1	0	0	2	11
Real Estate	1	0	0	0	0	0	2
Professional & Technical Services	0	0	0	0	0	0	1
Administration Services	2	0	0	0	0	0	2
Education	8	15	1	0	0	3	28
Health Care	3	5	0	0	0	1	9
Leisure & Hospitality	8	0	3	0	0	28	40
Other Services	2	0	0	0	0	1	3
Government	0	0	0	0	0	0	0
TOTAL	36	20	10	12	5	43	127

Source: Johnson Economics, Oregon Employment Department

Employment growth estimates by building type are then converted to demand for physical space. This conversion assumes the typical space needed per employee on average. This step also assumes a market clearing vacancy rate, acknowledging that equilibrium in real estate markets is not 0% vacancy. We assume a 10% vacancy rate for office, retail, and flex uses, as these forms have high rates of speculative multi-tenant usage. A 5% rate is used for general industrial and warehouse—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

ADJUSTED SCENARIO	DEMAND BY GENERAL USE TYPOLOGY, 2018-2038						Total
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	
Employment Growth	36	20	10	12	5	43	127
Avg. SF Per Employee	350	600	990	600	1,850	500	569
Demand for Space (SF)	12,600	12,200	10,400	7,100	9,400	21,500	73,200
Floor Area Ratio (FAR)	0.35	0.45	0.30	0.30	0.35	0.25	0.31
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	10.0%
Implied Density (Jobs/Acre)	39.1	32.7	11.8	20.7	7.8	19.6	21.2
Net Acres Required	0.9	0.6	0.9	0.6	0.6	2.2	6.0

Source: Johnson Economics, Oregon Employment Department

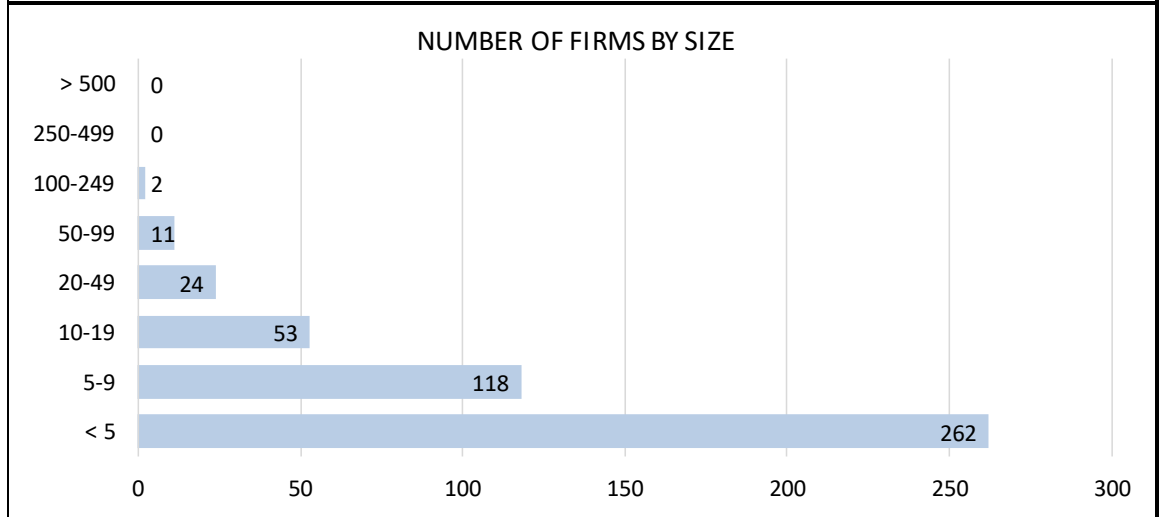
Commercial office and retail densities are 39 and 20 jobs per acre, respectively. Industrial uses range from 21 for general industrial to 8 jobs per acre for warehouse/distribution. The overall weighted employment

density is 21 jobs per acre, with the projected 127 job expansion in the local employment base requiring an estimated 6.0 net acres of employment land.

The local employment base is largely dominated by small firms of 10 or fewer employees, with only two firms currently accounting for more than 100 employees and none accounting for more than 250.

FIGURE 4.08: DISTRIBUTION OF FIRMS BY SIZE, JOSEPH OREGON

Industry	Size of Firm/Employees							Total	
	< 5	5-9	10-19	20-49	50-99	100-249	250-499		> 500
Agriculture, forestry, fishing, and hunting	23	20	6	2	0	0	0	0	51
Mining	0	0	0	0	0	0	0	0	0
Construction	37	12	5	2	0	0	0	0	56
Food Manufacturing	2	1	2	0	1	0	0	0	6
Wood Manufacturing	3	1	0	1	0	0	0	0	5
Metals Manufacturing	3	1	1	1	0	0	0	0	6
Utilities	4	3	0	0	0	0	0	0	7
Wholesale trade	8	1	0	1	1	0	0	0	11
Retail trade	10	13	7	0	1	0	0	0	31
Retail trade	5	7	1	0	0	0	0	0	13
Transportation	11	2	0	2	0	0	0	0	15
Delivery and warehousing	2	4	0	0	0	0	0	0	6
Information	3	2	0	0	0	0	0	0	5
Finance and Insurance	5	5	1	1	1	0	0	0	13
Real Estate and Rental	15	4	2	0	0	1	0	0	22
Professional, Scientific, and Technical Services	19	4	3	0	0	0	0	0	26
Management of Companies and Enterprises	0	0	0	0	0	0	0	0	0
Administrative and Waste Management	12	2	2	0	0	0	0	0	16
Educational services	5	1	1	3	4	0	0	0	14
Health care and social assistance	13	10	3	3	2	1	0	0	32
Arts, Entertainment, and Recreation	8	1	2	2	0	0	0	0	13
Accommodation and Food Services	15	12	13	4	0	0	0	0	44
Other services	53	8	1	1	0	0	0	0	63
Government	6	4	3	1	1	0	0	0	15
TOTAL	262	118	53	24	11	2	0	0	470



SOURCE: State of Oregon QCEW Data

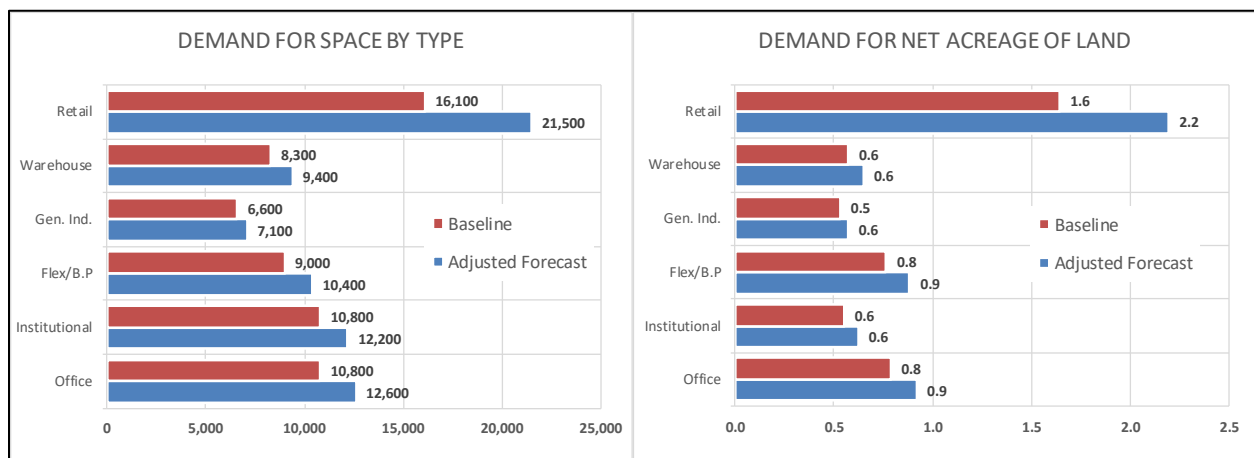
The relatively small size of local employers indicates a need for speculative employment space, typically developed for multiple tenants and held by an investor. This type of construction requires lease rates adequate to support new construction and yield an acceptable return.

Additional Considerations in Land Demand

Beyond a consideration of gross acreage, there is a significantly broader range of site characteristics that industries would 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 5% slope is the maximum for development sites. Office and commercial uses are generally smaller and more vertical, allowing for slopes up to 15%.
- Most industries require some direct access to a major transportation route, particularly manufacturing and distribution industries that move goods throughout the region and beyond. 10 to 20 miles to a major interstate is generally acceptable for most manufacturing activities, but distribution activities require 5 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.
- 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.
- 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 & development, and most professional service industries will prefer or require strong fiber access in the coming business cycles.

FIGURE 4.09: SUMMARY OF PROJECTED SPACE AND LAND DEMAND, CITY OF JOSEPH, 2018-2038



V. FORECASTED EMPLOYMENT LAND NEED VS. CURRENT SUPPLY

BUILDABLE LAND INVENTORY

The inventory of employment land provides a snapshot of the currently local capacity to accommodate more business and jobs. This current available land will be compared to the forecasted need for new land over the 20-year planning period.

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. This inventory includes vacant parcels with the proper zoning, as well as “redevelopable” parcels. (The methodology used in this analysis is described in detail below.)

Methodology

The Buildable Lands Inventory (BLI) used in this analysis is based on tax account data from the County, supplemented with data from the State of Oregon. The data was provided in Geographic Information Systems (GIS) compatible format, providing information on land use, parcel size and other relevant data categories on the taxlot level. Zoning information was also provided by the state.

The tax account data was used to identify vacant and redevelopable parcels in the city and its UGB. The identified candidate parcels were then further screened and refined by Johnson Economics.

In keeping with State requirements, the BLI includes an assessment of vacant buildable lands and redevelopable parcels. This analysis applied the “safe harbor” assumptions allowed under state rules to determine the infill potential of developed parcels (OAR 660-024-0050):

SUMMARY OF EMPLOYMENT BUILDABLE LAND INVENTORY METHODOLOGY



Appendix B provides an in-depth summary of the Buildable Lands Inventory, including methodology and mapping of the identified parcels of employment land. The results are summarized below.

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

ZONE	Vacant		Redevelopable		Total	
	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage
Commercial	6	2.1	0	0.0	6	2.1
Industrial	5	53.5	0	0.0	5	53.5
Totals:	11	55.6	0	0.0	11	55.6

Source: Wallowa County, Joseph, Johnson Economics LLC

The inventory identifies over 55 acres of vacant or potentially redevelopable land in both commercial and industrial zones. A small share is in the Commercial zone, while the large majority has Industrial zoning. 100% of the sites are identified as “vacant”, and 0% are potential “redevelopment” sites.

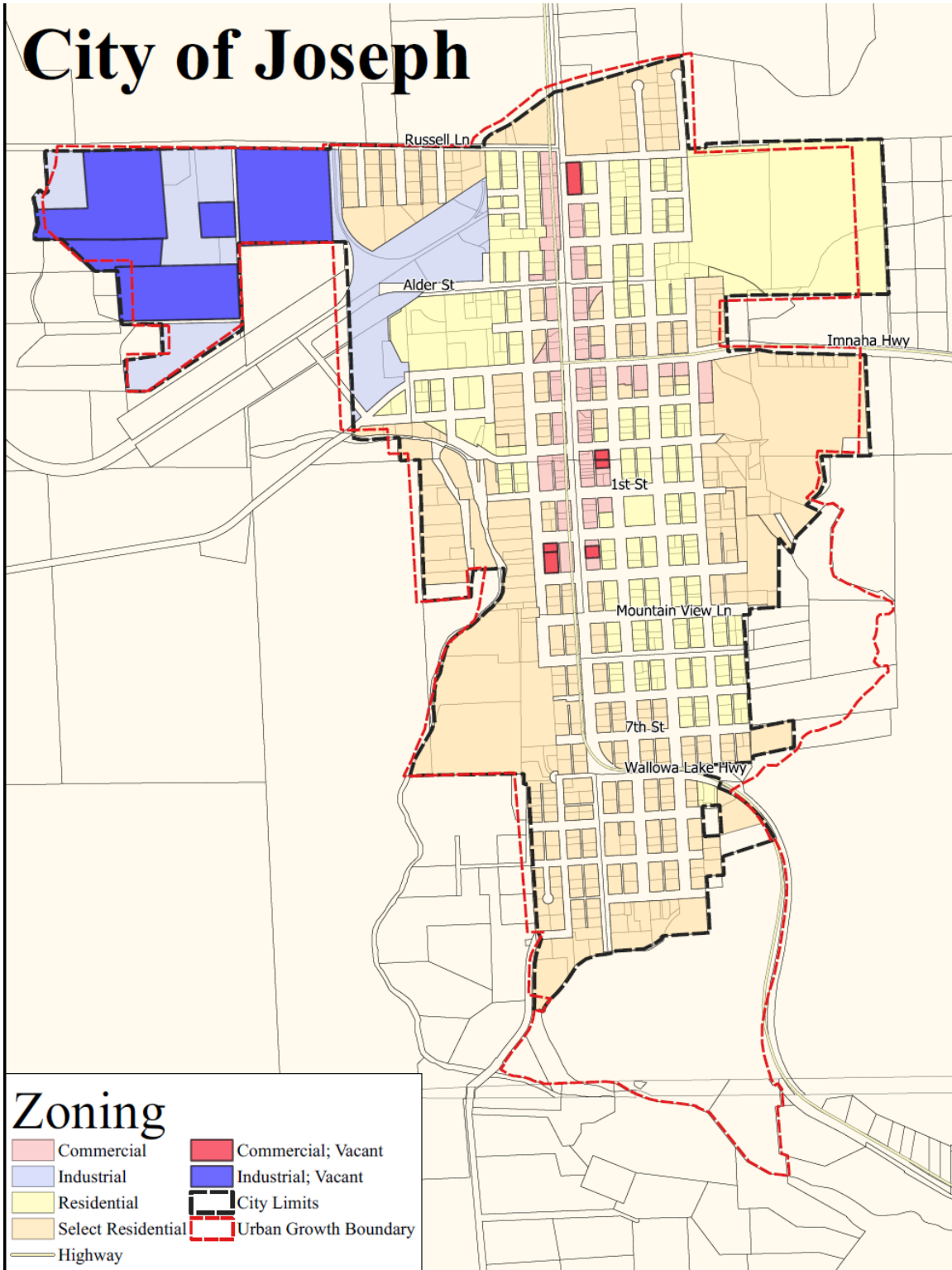
The following figure presents the inventory broken down by the size of parcels. While there is a good mixture of smaller and larger industrial parcels parcel sizes, while the identified commercial parcels are all small in size.

FIGURE 5.02: SUMMARY OF EMPLOYMENT BUILDABLE LAND INVENTORY, BY PARCEL SIZE (JOSEPH)

ZONE	0 to .99 acres		1 to 4.99 acres		5 to 9.99 acres		10 to 19.99 acres		20+ acres	
	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage
Commercial	6	2.1	0	0.0	0	0.0	0	0.0	0	0.0
Industrial	0	0.0	2	6.0	0	0.0	2	23.1	1	24.3
Totals:	6	2.1	2	6.0	0	0.0	2	23.1	1	24.3

Source: Wallowa County, Joseph, Johnson Economics LLC

FIGURE 5.03: MAP OF EMPLOYMENT BUILDABLE LAND INVENTORY (JOSEPH)



Source: Wallowa County, State of Oregon, Johnson Economics LLC

FORECASTED LAND NEED VS. BUILDABLE LAND INVENTORY

The inventory of employment land provides a snapshot of the currently local capacity to accommodate more business and jobs. This current available land will be compared to the forecasted need for new land over the 20-year planning period.

This inventory is compared to the 20-year forecast of employment land need, generated in a previous step of this project (Section IV). The estimate of future land need is presented below. A total need for 6 net acres was identified across a range of building types.

FIGURE 5.04: SUMMARY OF FORECASTED 20-YEAR LAND NEED BY BUILDING TYPOLOGY (JOSEPH)

ADJUSTED SCENARIO	DEMAND BY GENERAL USE TYPOLOGY, 2018-2038						Total
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	
Employment Growth	36	20	10	12	5	43	127
Avg. SF Per Employee	350	600	990	600	1,850	500	569
Demand for Space (SF)	12,600	12,200	10,400	7,100	9,400	21,500	73,200
Floor Area Ratio (FAR)	0.35	0.45	0.30	0.30	0.35	0.25	0.31
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	10.0%
Implied Density (Jobs/Acre)	39.1	32.7	11.8	20.7	7.8	19.6	21.2
Net Acres Required	0.9	0.6	0.9	0.6	0.6	2.2	6.0

Source: Oregon Employment Department, Wallowa County, Johnson Economics LLC

There is a total projected 20-year need for 6 acres of buildable employment land in industrial and commercial zones. Roughly 38% of this projected need is for uses most appropriate to industrial zones (Flex, General Industrial, and Warehouse), while the remainder is for uses most appropriate for commercial zones (Office, Retail, Institutional). This identified need is well less than the 24 acres of buildable employment land noted in Figure 5.01.

However, the amount of demand for commercial land (3.7 acres) does exceed the estimated remaining supply of commercial land (2.1 acres). Furthermore, there are constraints on many of the large parcels of industrial land identified because they have been used for residential purposes, or are being land-banked indefinitely be adjacent residential uses.

Conclusion

There is currently sufficient overall buildable employment land compared to total demand. However, there will likely be an insufficient supply of buildable commercial/retail land over the 20-year period. There are additional reasons, mostly related to ownership, to believe that some of the industrial supply will not be available for development.

Commercial: The city's limited central commercial zone has relatively few remaining buildable parcels that in fact amount to less than the projected 20-year need for commercial lands. Therefore, a discussion of how the city may want to accommodate more commercially zoned land may be warranted. Potential approaches might be rezoning of other land (i.e. residential), city annexation and/or UGB expansion. Currently, there are some non-commercial parcels already under consideration

for rezoning, including one at the north end of Main Street, and the former school site that has been most recently occupied by the Forest Service. Discussion of further rezoning may not be immediately pressing but may become necessary as remaining parcels are developed over the coming decade or so.

Industrial: There is sufficient industrial acreage in theory to hold the forecasted 20-year need and more. However, some of the large industrial parcels identified at the northwestern corner of the city have some ownership constraints that may prevent them being used for this purpose. Some of this land has been developed as multi-acreage residential land and is unlikely to be used as industrial land in the near future. The city may discuss a number of remedies to this situation, including rezoning these parcels to residential and swapping residential land elsewhere for industrial use. The city might also discuss prohibiting the development of residences in industrial zones in the future to avoid this conflict. While a few additional industrial parcels remain, sufficient to hold the projected 20-year need, some solution to the residential uses on industrial lands may be desirable to aid future planning.

VI. ECONOMIC DEVELOPMENT POTENTIAL

COMMUNITY ECONOMIC PROFILE

Based on the analysis presented in previous sections, discussions with the local advisory committee, staff, the public, and other stakeholders, a profile of the city's and region's economic development potential was developed. This includes an assessment of both the opportunities and challenges for new employment growth in the area.

The following is a summary of this assessment on a range of metrics.

Market Area

Joseph is a city of roughly 1,150 located just north of Wallowa Lake in the bowl of the Wallowa Mountains. The city is a tourist destination in its own right, along with the natural amenities surrounding it. The commercial market area is the local and surrounding residents in the area south of Enterprise, as well as the large amount of tourist traffic during the tourism season.

Services

Joseph is a full-service city offering small grocer, gas, dining, lodging, hardware, general merchandise, banking and other services.

Public Services

Joseph public services include K-12 schools, library, and parks. Public safety services are contracted.

Transportation

Joseph is located at the end of Highway 82 which loops from I-84 to the west and runs through many of Wallowa County's towns before reaching Joseph. The town and the nearby lack sit in a natural cul-de-sac framed by the mountains, and therefore Joseph is an end destination rather than being located on an active transportation route for freight and the like. There is a public use airport for smaller planes located outside of the city, which can handle executive planes, life flight, and charter flights.

Labor Market

Joseph is home to an estimated 550 jobs, many of which are in the tourism-related sectors of retail, dining and accommodation. Education, professional services, and health care also make up significant shares. There is a sense of a mismatch between locally available jobs and the skills and needs of local residents. There is a desire for non-seasonal, non-tourism related jobs to provide more stability and twelve-month employment.

Suppliers

Access to business suppliers in Wallowa County is limited due to geographical isolation. Most products are materials are imported from outside the area. Wallowa County is isolated from main transportation routes.

Environmental Constraints

Environmental constraints are not a major obstacle to development on Joseph's remaining employment land.

Educational and Technical Training Programs

There are limited educational and training programs available in the county. Blue Mountain Community College offers some community enrichment programs in the county, but not in Joseph. There is a Career Technical Education program co-located with the high school.

Utilities

Water – Adequate

Sewer – Adequate

Power – Adequate, but not for the largest power users

Data – Poor/Unreliable

Identified Challenges

Housing availability; There is a mismatch between workforce and available jobs and available housing; Tourism is strong but seasonal, not year-round; Town is at end of the road; Distance to main transportation routes; Poor telecom and broadband service; not a lot of buildable commercial parcels on Main Street; Industrial lands are tied up, misused for residential.

Potential Opportunities

Natural beauty; Lifestyle amenities; Recreation opportunities; Art community; Growth from retirees, others with spending power; Seclusion, but with critical mass of services and amenities

TARGET INDUSTRY CONCLUSIONS

As discussed in Section III of this report, Joseph may be a good candidate for a number of target industries for future employment growth, based on past trends, current industries and locational advantages. The potential target industries discussed are:

- Agricultural Support / Value-Added Food Products
- Tourism: Amenity Retail, Recreation, and Hospitality
- Education and Health Services
- Retirement Services
- Manufacturing
- Retail Trade
- Self-Employment

The potential for these industries has been applied to the potential 20-year employment forecast. See Section III for discussion on each of these industries and their relative impact in Joseph.

FORECASTED LAND NEED CONCLUSIONS

As discussed in Section IV of this report, there is projected growth of nearly 130 jobs and support for roughly 6 acres of employment land (industrial and commercial.) Roughly 38% of this projected need is for uses most appropriate to industrial zones (Flex, General Industrial, and Warehouse), while the remainder is for uses most appropriate for commercial zones (Office, Retail, Institutional). This identified need is less than the 24 acres of buildable employment land found in the Buildable Lands Inventory.

EMPLOYMENT LAND INVENTORY CONCLUSIONS

As discussed in Section V of this report, there is currently sufficient overall buildable employment land compared to total demand. However, there will likely be an insufficient supply of buildable commercial/retail land over the 20-year period. There are additional reasons, mostly related to ownership, to believe that some of the industrial supply will not be available for development. These are discussed in further detail in the following section.

VII. ECONOMIC DEVELOPMENT: POTENTIAL NEXT STEPS

The analysis presented in this EOA report points to some potential next steps considering the supply of industrial and commercial land in the city, and potential approaches which may or may not implicate the Urban Growth Boundary. There are also a number of other strategies and steps to consider related to economic development going forward.

This section discusses a range of strategies and/or action items that the city may consider coming out of this report. (Adoption of this report does not imply official commitment to any of these steps.)

- 1) **Identify local economic development point person:** Each city should select a point person to ensure that the agreed upon next steps stemming from this EOA study are implemented. This person should be responsible for ensuring that the EOA report is introduced to the Planning Commission and City Council for consideration. This local point person may coordinate with regional partners to facilitate broader economic development efforts (see below).
- 2) **Adoption of the EOA report and findings:** The City Council should consider formally recognizing this EOA report and its findings. This establishes the analysis as the underpinning of the Economic Chapter of the local Comprehensive Plan. Typically, at the time of adoption, the contents of the Economic Chapter will also be updated with an overview of findings from this analysis, and also revised goals and policies (if any) stemming from the findings. Adopting the EOA helps establish a factual basis for other grants and planning efforts moving forward.
- 3) **Consider implications for employment land stemming from these findings:** The EOA finds that *in total* there is a greater amount of available employment land (industrial and commercial) in comparison to the 20-year forecast of land need. However, when commercial and industrial lands are considered separately, issues arise in both categories.

Commercial: The city's limited central commercial zone has relatively few remaining buildable parcels that in fact amount to less than the projected 20-year need for commercial lands. Therefore a discussion of how the city may want to accommodate more commercially zoned land may be warranted. Potential approaches might be rezoning of other land (i.e. residential), city annexation and/or UGB expansion. Currently, there are some non-commercial parcels already under consideration for rezoning, including one at the north end of Main Street, and the former school site that has been most recently occupied by the Forest Service. Discussion of further rezoning may not be immediately pressing but may become necessary as remaining parcels are developed over the coming decade or so.

Industrial: There is sufficient industrial acreage in theory to hold the forecasted 20-year need and more. However, some of the large industrial parcels identified at the northwestern corner of the city have some ownership constraints that may prevent them being used for this purpose. Some of this land has been developed as multi-acreage residential land and is unlikely to be used as industrial land in the near future. The city may discuss a number of remedies to this situation,

including rezoning these parcels to residential and swapping residential land elsewhere for industrial use. The city might also discuss prohibiting the development of residences in industrial zones in the future to avoid this conflict. While a few additional industrial parcels remain, sufficient to hold the projected 20-year need, some solution to the residential uses on industrial lands may be desirable to aid future planning.

UGB Land Swap: The city's UGB includes a parcel of land in the southwest that is owned by the State Parks Department and not eligible for development. This acreage may be eligible for a land swap with other land adjacent to the UGB without that limitation. This land may or may not be employment land that is directly relevant to this study, but the public process involved in a UGB land swap could be discussed in conjunction with undertaking zoning changes as discussed above.

These issues and other Commercial and Industrial zoning standards and zoning map might be considered by the zoning ordinance task force that is currently reviewing city codes.

- 4) **Undertake annual goal-setting for the city:** The city should consider adopting a simple list of one to three economic development actions that it can undertake over the coming year. These action items are meant to be practical, so they may be simple and relatively easy to achieve. The purpose is to keep forward momentum by taking small steps, on a set timeline, and tracking the progress. For instance, the City of Joseph has set the goal to add 10 – 20 full-time, non-seasonal jobs in the community. This is the type of benchmark that can be easily set and tracked, and periodically updated with a new goal.
- 5) **Updated Goal 10 Housing Needs Analysis:** An important challenge to economic development identified in Joseph is the availability of appropriate housing, at affordable price points to the workforce that the area would like to attract. In some cases, employment may be available, but the potential workforce finds it difficult to find attractive housing options. This situation leads to difficulty in recruiting and maintaining staffing levels, and tends to encourage longer-distance commuting. The city should review the status of their latest Goal 10 Housing Needs Analysis (HNA), which forecasts 20-year housing needs and inventories residential land. An updated HNA and Housing Chapter to the Comp Plan can help identify and provide strategies to help remedy gaps in the local housing inventory. Further partnering with Oregon Housing and Community Services can help increase access to state or federal subsidy for some types of development.
- 6) **Continue regional economic development coordination:** Economic development efforts, including promotion and marketing campaigns, can be coordinated at the county or even multi-county level to take some burden off of scarce local resources. The Northeastern Oregon Economic Development Department (NEOEDD) provides community contacts, business advising and resources, marketing and promotion, and tracks available commercial real estate. The agency is potential lead for many of the economic development steps that can be implemented regionally. Smaller cities should engage actively with NEOEDD to coordinate programs and activities where local resources may be limited.

Many of the target industries can benefit from regional approach to marketing and recruitment, but growing the tourism industry in particular would benefit from promoting the area as a whole

as visitors generally would like to see multiple attractions and destinations on a trip through the county. Developing recommended one-day and multi-day itineraries for visitors is one good approach.

Local and regional economic development staff should continue to partner and meet regularly with other partners including the Chamber of Commerce, Business Oregon, NEOEDD, Training and Employment Consortium (WorkSource Oregon), Blue Mountain Small Business Development Center, and others. Coordination ensures that agencies are leveraging others' efforts and not duplicating services or investments. It also means that they are aware of the services and strengths of each agency in order to direct outside contacts to the right place.

- 7) **Update or develop a new Economic Development Strategic Plan:** The EOA contains data and findings related to economic development, but has a primary focus on land need and supply. The city should consider whether an updated and more in-depth strategy document may be helpful to codify goals, policies and action items for the next five to ten years, and focus efforts and investments. The figures and conclusions in this EOA can provide a good foundation for developing a strategic plan.

The NEOEDD Comprehensive Economic Development Strategy (CEDS) for central eastern Oregon is also a good resource to build off of. Joseph and Wallowa County should ensure that they actively participate in creating these five-year strategy plans as well. The CEDS contains a detailed list of goals and objectives for economic development from which a city can identify local priorities.

- 8) **Identify short-term and long-term areas of focus to align with capital improvements:** In conjunction with strategic planning for economic development, the city may want to identify priorities for the next 1-year, 3-year, or 5-year periods for specific subareas of the city. This can focus and align economic development goals with capital improvement plans and funding. This exercise can help focus other economic development efforts and investments rather than spreading limited resources too thinly.
- 9) **Advocate and support a regional broadband internet solution:** During this process, the lack of reliable and fast internet connectivity in much of Wallowa County has arisen as a significant challenge to business and workforce recruitment and productivity of existing industry. Upgrading internet infrastructure can be cost prohibitive to providers, even on a countywide basis. With broader regional coordination among public agencies, businesses and consumers across northeastern Oregon, it may be more cost effective to expand services, and larger-scale efforts may be more successful in attracting federal funding to build the infrastructure. These efforts would likely be launched under the auspices of NEOEDD or Business Oregon. Local communities like Joseph should express support and advocate for these efforts, and participate in regional planning to the extent possible.
- 10) **Prioritize childcare as a workforce readiness issue:** Childcare is a commonly identified need for working households if all adults are working, or working unusual hours, etc. This topic is increasingly raised as an important part of attracting and maintaining an available workforce. This topic has been placed on the list of priorities for some Regional Solutions areas and should be

emphasized in the Eastern Oregon region as well. Home-based childcare businesses are also usually a category of self-employment and entrepreneurship which is identified as a target industry.

- 11) **Ensure that available employment lands are listed on Oregon Prospector:** Business Oregon provides the Oregon Prospector tool which provides open, free data on available employment lands across the state, including both industrial and commercial properties. Buildings and development sites can be listed with extensive detail and pricing for prospective businesses. Economic development staff should ensure that key sites and buildings in the county and cities are included, and use the tool to track land transactions in their area. It also helps keep Business Oregon informed of available local properties, to guide prospective businesses.
- 12) **Continue to grow workforce development opportunities:** The city, the county, and partners should look for opportunities to grow workforce development, particularly in the trades, and around the target industries identified in this report. Local economic development partners can work with businesses and with the Training and Employment Consortium (TEC), WorkSource Oregon, Blue Mountain Community College, and OSU extension service to identify the greatest needs in skills and specialties.
- 13) **Provide incubator opportunities and small business services:** There are many agencies offering small business services in Oregon, including Business Oregon, the SBA, the USDA, NEOEDD and others. On-going coordination and communication can ensure that agencies are leveraging each other's resources and not duplicating services. Business Oregon tracks many examples of business incubator and accelerator programs across the state that can serve as a model for local efforts. There are examples in Baker City and Bend that can serve as models for incubator or subsidized shared work space.

APPENDIX A: SITE REQUIREMENTS

The following series of tables summarize key site requirements for a range of prospective tenant types.⁵

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	
CRITERIA												
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 - 15+	20 - 100+	10 - 25	5 - 20	10 - 25+	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									

⁵ Business Oregon, Mackenzie.

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	
CRITERIA												
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 _s	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 _s	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:	<p>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.</p>	<p>1: Research & Development @ 80 ADTs per acre on the low end, estimated 200 ADTs per acre for general office on the high end.</p> <p>Location specific.</p>	<p>2: Range represents FAR 0.25 - 0.5 of office uses</p> <p>Location to other cluster industries.</p>	<p>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.</p>	<p>Adequate distance from sensitive land uses (residential, parks) necessary. Moderate demand for water and sewer. Higher demand for electricity, gas, and telecom.</p>	<p>High diversity of facilities within business parks. R&D facilities benefit from close proximity to higher education facilities. Moderate demand on all infrastructure systems.</p>	<p>3: General warehousing rates</p>	<p>4: Based on discount warehouse @ 0.25 FAR</p> <p>5: Dependent on use, i.e., brewery vs. restaurant</p> <p>Location to cluster industries.</p>	<p>Larger sites may be needed. The 25 acre site requirement represents the more typical site. 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.</p>	<p>Often established by municipalities and have symbiotic relationships with colleges and/or universities.</p>

Terms:

<p>More Critical</p> <p>↑</p> <p>Less Critical</p>	<p>'Required' factors are seen as mandatory in a vast majority of cases and have become industry standards.</p>
	<p>'Competitive' significantly increases marketability and is <i>highly recommended by Business Oregon</i>. May also be linked to financing in order to enhance the potential reuse of the asset in case of default.</p>
	<p>'Preferred' increases the feasibility of the subject property and its future reuse. Other factors may, however, prove more critical.</p>
	<p>'Not Required' does not apply for this industry and/or criteria.</p>
	<p>'Avoid' factors act as deterrents to businesses in these industries because of negative impacts.</p>
<p>*Total Site: Building footprint, including buffers, setbacks, parking, mitigation, and expansion space.</p>	
<p>**Competitive Acreage: Acreage that would meet the site selection requirements of the majority of industries in this sector.</p>	
<p>† 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).</p>	
<p>‡ 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.</p>	

The 13 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 that 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 13 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 & 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 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 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.⁶
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 lines 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 that 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.
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.

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 13 "site needs" which will assist in evaluating selected sites using the criteria of a given industry type.

⁶ We have defined "frequent bus line" as one with service occurring in no longer than 15 minute intervals.

The industry categories have been established based primarily on OECD 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.) at this

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; and
- (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:

- Ajinomoto (Portland)
- Beaverton Foods Inc. (Hillsboro)
- Cabroso (Medford)
- Rogue Creamery
- 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)
- Full Sail Brewing (Hood River)
- Hood River Juice Company (Hood River)

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: Retail

- b) *Description:*
 This industry contains businesses that sell merchandise, largely without any transformation of the good, with services largely being ancillary to the sale of said merchandise. The businesses usually receive goods from wholesalers, and typically do not transform the good before its final sale to the user or customer. There are sixty-nine subsectors of retail trade, some of which are reflected in the bulleted list below.
- c) *Representative Industry Types:*
- Specialty food/grocery
 - Coffee shops/cafes
 - Theater/recreation/entertainment
 - Brew pub/wine or bottle shops
 - Full service local restaurants
 - Food car pods
 - Bookstores and boutiques
 - Wellness and spa services
 - Hotel & hospitality
 - Niche manufacturing (bike, bakery, outdoor, etc.)
- d) *Representative Companies:*

- New Seasons
- Dutch Bros. Coffee
- McMenamins Cornelius Pass Roadhouse
- P.F. Chang’s
- Barnes & Noble
- Align Wellness Center
- Embassy Suites
- Orenco Station Cyclery

E: Incubator

a) Description:

This industry type is often established by local municipalities and has a symbiotic relationship with colleges and universities within the vicinity. Diogenensis defines business incubators as a “unique and highly flexible combination of business development processes, infrastructure and people designed to nurture new and small businesses by helping them to survive and grow through the difficult and vulnerable early stages of development.”

b) Representative Industry Types:

- Not applicable for this industry type, as the incubators serve as cultivating space for a number of 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)



MEMORANDUM

To: City of Joseph Advisory Committee
Belinda Buswell, City Recorder

From: Johnson Economics

Subject: Economic Opportunities Analysis, City of Joseph
Task 3: Inventory of Employment Lands

INTRODUCTION

This memo summarizes an interim step (Task 3) in the Economic Opportunities Analysis Project. The inventory of employment land provides a snapshot of the currently local capacity to accommodate more business and jobs. This current available land will be compared to the forecasted need for new land over the 20-year planning period.

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. This inventory includes vacant parcels with the proper zoning, as well as “redevelopable” parcels. (The methodology used in this analysis is described in detail below.)

For planning purposes, this type of inventory is often called a Buildable Lands Inventory (BLI).

METHODOLOGY

The Buildable Lands Inventory (BLI) used in this analysis is based on tax account data from Wallowa County. The data was provided in Geographic Information Systems (GIS) compatible format, providing information on land use, parcel size and other relevant data categories on the taxlot level. Zoning information was also provided by the state.

The tax account data was used to identify vacant and redevelopable parcels in Joseph and its UGB. The identified candidate parcels were then further screened and refined by JOHNSON ECONOMICS.

In keeping with State requirements, the BLI includes an assessment of vacant buildable lands and redevelopable parcels. This analysis applied the “safe harbor” assumptions allowed under state rules to determine the infill potential of developed parcels (OAR 660-024-0050).

The Buildable Lands Inventory relied on the following data sources:

- Wallowa County Geographic Information System (GIS) data
- DLCD GIS data
- Google Earth
- Assessment of environmental constraints
- *City staff input (tbd)*
- *Advisory Committee input (tbd)*
- *Site visits (tbd)*

Identification of Vacant Parcels

JOHNSON ECONOMICS used the most recent available tax account data from Wallowa County to identify which parcels were developed or undeveloped, and identify those existing uses. The County supplied taxlot data in GIS format. Johnson Economics applied the following steps to further refine the Buildable Lands Inventory:

- 1) From the County's taxlot shapefile, isolate the taxlots within the boundary of the City of Joseph and the Joseph UGB. The Accounts shapefile contains data on the individual property tax accounts associated with each taxlot in the county.
- 2) Using zoning layers provided by DLCD, isolate those taxlots that are located in appropriate employment zones, including industrial and commercial areas.
- 3) Through a combination of parsing individual taxlot data and aerial map surveying, develop preliminary list of qualified vacant parcels. For this preliminary analysis, all vacant lots were included regardless of size.
- 4) Using staff and advisory committee feedback, additional GIS data and surveying, and site visits, the vacant inventory will be further refined to remove anomalies or misidentified parcels. Determinations will be made on smaller parcels.

Identification of Redevelopable Parcels

In order to identify those developed parcels which might accommodate additional development, JOHNSON ECONOMICS applied the so-called "safe harbor" provisions of the Oregon Administrative Rules, which provide cities a systematic means to estimate the development capacity of larger parcels with a limited amount of existing development:

OAR 660-024-0050

Land Inventory and Response to Deficiency

...

(3) As safe harbors when inventorying land to accommodate industrial and other employment needs, a local government may assume that a lot of parcel is vacant if it is:

- (a) Equal to or larger than one-half acre, if the lot or parcel does not contain a permanent building;
or
- (b) Equal to or larger than five acres, if less than one-half acre of the lot or parcel is occupied by a permanent building.

Source: Oregon Administrative Rules, 660-024

Using GIS data, the above criteria were applied to the developed parcels in Joseph and the UGB in order to identify those developed parcels which are prospective candidates for infill development or redevelopment.

The Buildable Lands Inventory of Employment Lands was prepared following the preceding steps by JOHNSON ECONOMICS LLC. The findings are presented below with additional discussion.

BUILDABLE LANDS INVENTORY – EMPLOYMENT LANDS

The methodology as described above finds an existing buildable employment lands inventory as follows:

FIGURE 1: SUMMARY OF EMPLOYMENT BUILDABLE LAND INVENTORY (JOSEPH)

ZONE	Vacant		Redevelopable		Total	
	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage
Commercial	6	2.1	0	0.0	6	2.1
Industrial	5	53.5	0	0.0	5	53.5
Totals:	11	55.6	0	0.0	11	55.6

Source: Wallowa County, Joseph, Johnson Economics LLC

The inventory identifies over 55 acres of vacant or potentially redevelopable land in both commercial and industrial zones. A small share is in the Commercial zone, while the large majority has Industrial zoning. 100% of the sites are identified as “vacant”, and 0% are potential “redevelopment” sites.

Figure 2 presents the inventory broken down by the size of parcels. While there is a good mixture of smaller and larger industrial parcels parcel sizes, while the identified commercial parcels are all small in size.

FIGURE 2: SUMMARY OF EMPLOYMENT BUILDABLE LAND INVENTORY, BY PARCEL SIZE (JOSEPH)

ZONE	0 to .99 acres		1 to 4.99 acres		5 to 9.99 acres		10 to 19.99 acres		20+ acres	
	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage
Commercial	6	2.1	0	0.0	0	0.0	0	0.0	0	0.0
Industrial	0	0.0	2	6.0	0	0.0	2	23.1	1	24.3
Totals:	6	2.1	2	6.0	0	0.0	2	23.1	1	24.3

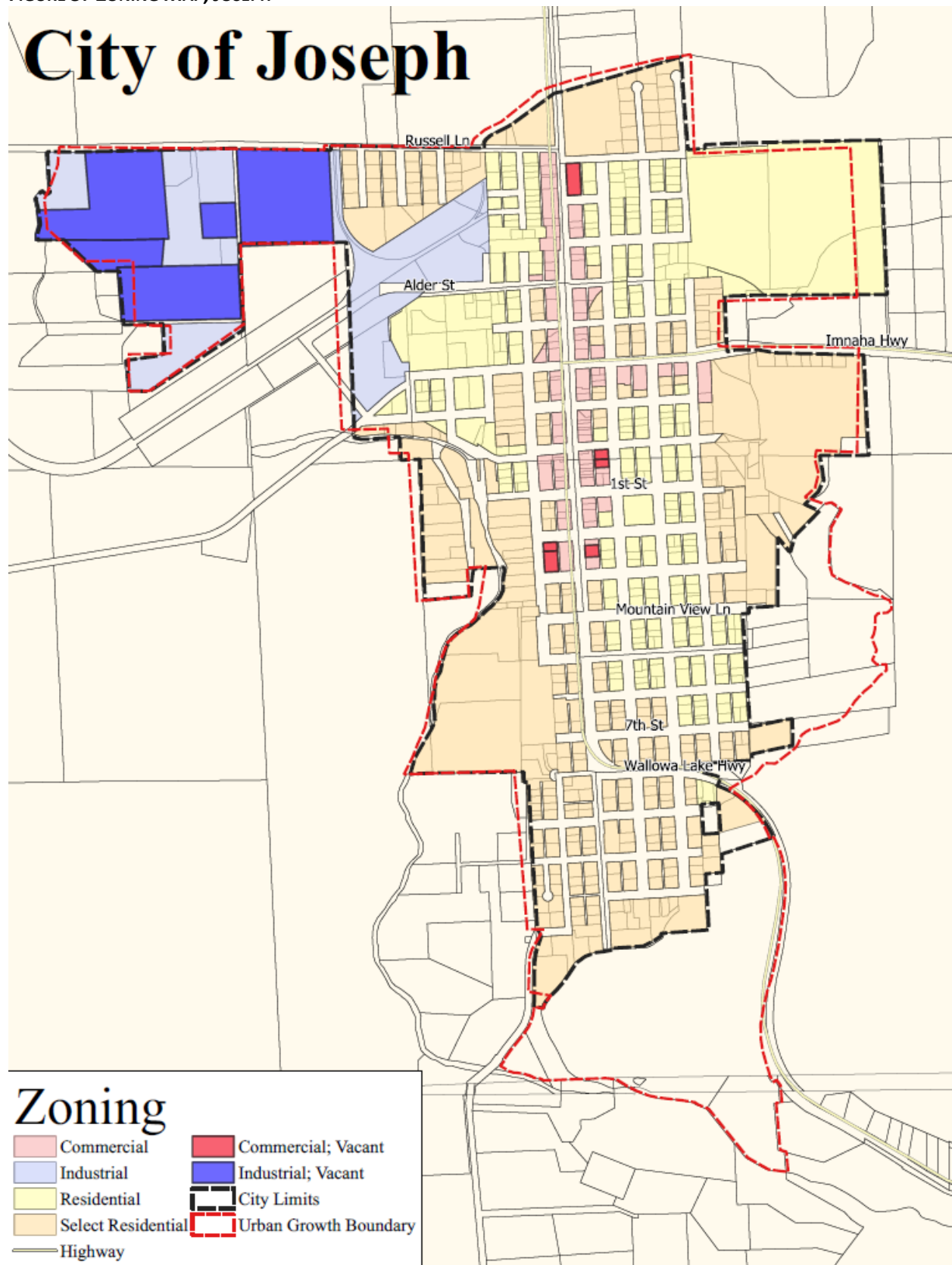
Source: Wallowa County, Joseph, Johnson Economics LLC

PARCELS IN THE FLOOD PLAIN:

For the most part, all of the vacant lands identified in Joseph are located outside of the 100-year floodplain and/or constrained by wetlands. A small portion of the largest industrial parcel in northwest Joseph is located within the floodplain. This portion may or may not be excluded from the buildable land inventory at the community’s discretion.

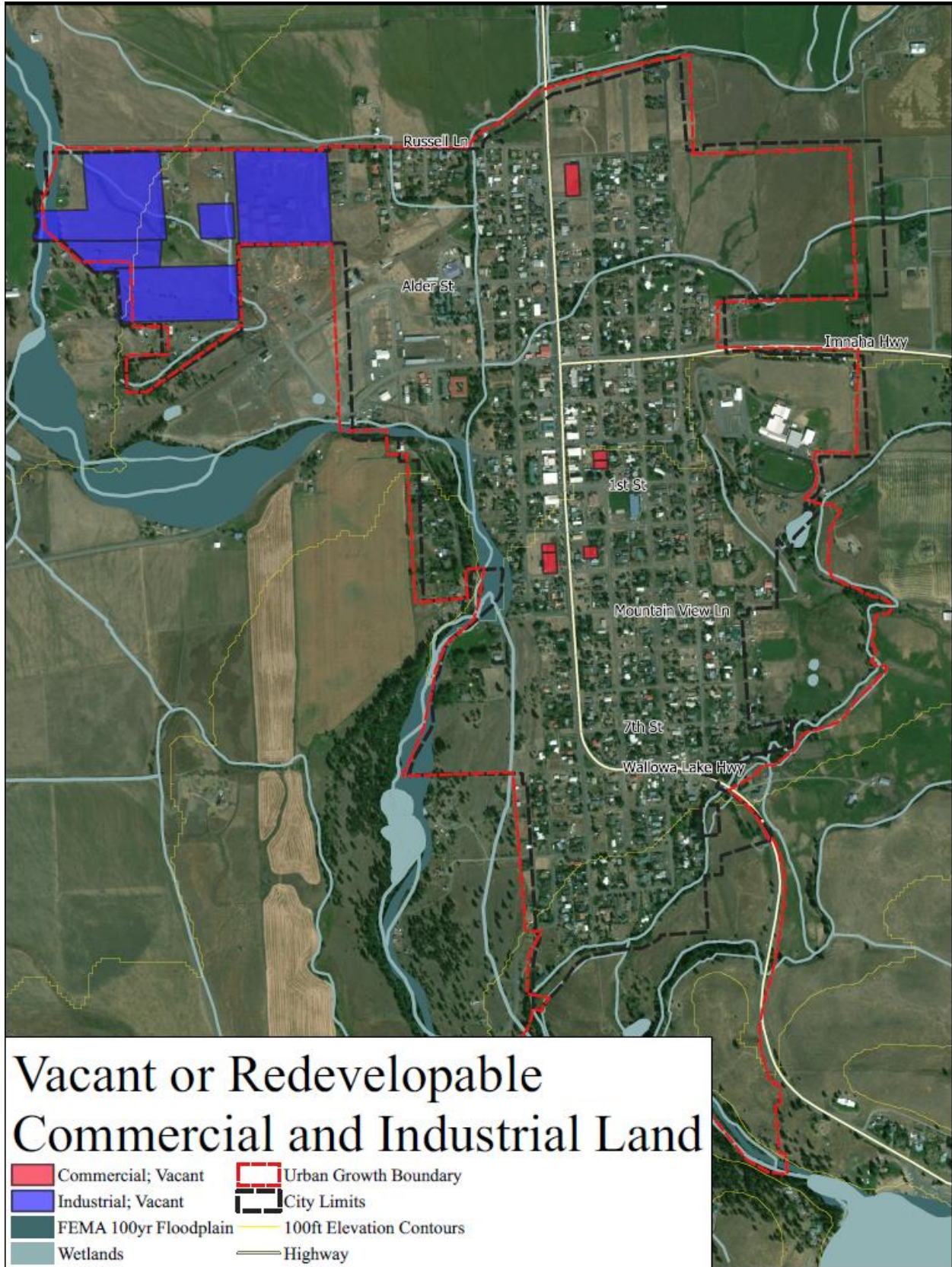
The following maps present the local zoning for reference (Figure 3), and the identified vacant and redevelopment parcels by category (Figure 4). An aerial map is also included for reference (Figure 5).

FIGURE 3: ZONING MAP, JOSEPH



Source: Joseph, Wallowa County, DLCD, Johnson Economics LLC

FIGURE 4: BUILDABLE LAND INVENTORY – EMPLOYMENT LANDS, JOSEPH



Source: Joseph, Wallowa County, DLCD, Johnson Economics LLC

FIGURE 5: AERIAL IMAGE, JOSEPH



The City of Joseph

Source: Google Earth, Johnson Economics LLC

BUILDABLE LANDS INVENTORY VS. FORECASTED LAND DEMAND

Figure 1 summarizing the inventory is reproduced below for reference.

FIGURE 1: SUMMARY OF EMPLOYMENT BUILDABLE LAND INVENTORY (JOSEPH)

ZONE	Vacant		Redevelopable		Total	
	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage
Commercial	6	2.1	0	0.0	6	2.1
Industrial	5	53.5	0	0.0	5	53.5
Totals:	11	55.6	0	0.0	11	55.6

Source: Wallowa County, Joseph, Johnson Economics LLC

This inventory will be compared to the 20-year forecast of employment land need, generated in a previous step of this project. The preliminary estimate of future land need is presented below. A total need for 6.0 net acres was identified across a range of building types.

FIGURE 6: SUMMARY OF FORECASTED 20-YEAR LAND NEED BY BUILDING TYPOLOGY (JOSEPH)

ADJUSTED SCENARIO	DEMAND BY GENERAL USE TYPOLOGY, 2018-2038						Total
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	
Employment Growth	36	20	10	12	5	43	127
Avg. SF Per Employee	350	600	990	600	1,850	500	569
Demand for Space (SF)	12,600	12,200	10,400	7,100	9,400	21,500	73,200
Floor Area Ratio (FAR)	0.35	0.45	0.30	0.30	0.35	0.25	0.31
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	10.0%
Implied Density (Jobs/Acre)	39.1	32.7	11.8	20.7	7.8	19.6	21.2
Net Acres Required	0.9	0.6	0.9	0.6	0.6	2.2	6.0

Source: Oregon Employment Department, Wallowa County, Johnson Economics LLC

While these forecasts may change through this process as target industries and other priorities are identified, the general findings indicate that the preliminary land inventory finds acreage well in excess of the identified need over the planning period.

The inventory is also subject to change as the disposition of the identified land is discussed and further vetted with the staff and advisory committee.