



ECONOMIC OPPORTUNITIES ANALYSIS (OREGON STATEWIDE PLANNING GOAL 9)

Prepared For:
Baker City, Oregon

June 2019

Acknowledgments

Johnson Economics prepared this report for the City of Baker City. Johnson Economics and Baker City thank the many people who helped to develop this document.

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Thanks To

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This project was funded by a grant from the State of Oregon Department of Land Conservation and Development.

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APPENDIX B: BUILDABLE LANDS INVENTORY REPORT

I. INTRODUCTION

This report introduces analytical research presenting an Economic Opportunities Analysis (EOA) for Baker City, 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. This is intended to be conducted 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:** Provides an overview of national, state and local economic trends affecting Baker County and Baker City, 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 Baker City'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.

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 Baker City 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

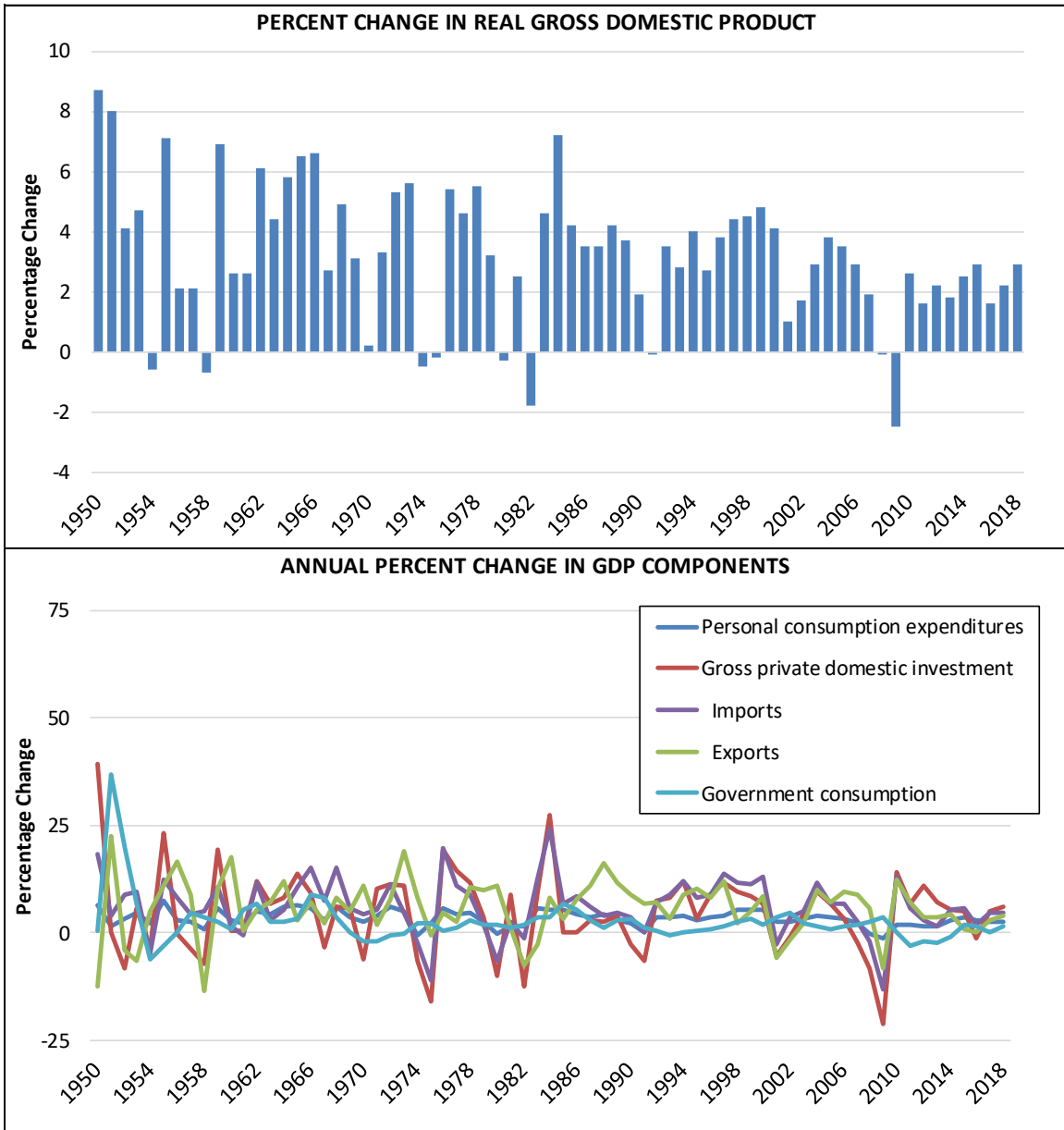
The long-term trend indicates that the United States economy has settled into a moderate growth trajectory at around 2.0% - 2.5% per year, after growing at above 4.0% per year during the 1960s and above 3.0% per year between 1970 and 2000. While the overall growth pace is moderating, there is a shift within the economy from consumption of goods to consumption of services, especially services oriented around personal wellbeing (health, private education, finance). This is reflective of increasing levels of wealth and discretionary income in the population. At the same time, growth in fixed investment (equipment and structures) and government defense spending is moderating – making manufactured goods a less important 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 partly reversed in the current decade, due to rising costs and greater awareness of cultural barriers and various 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. The 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 factors. 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 related to very 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 brought 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 has been generally 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

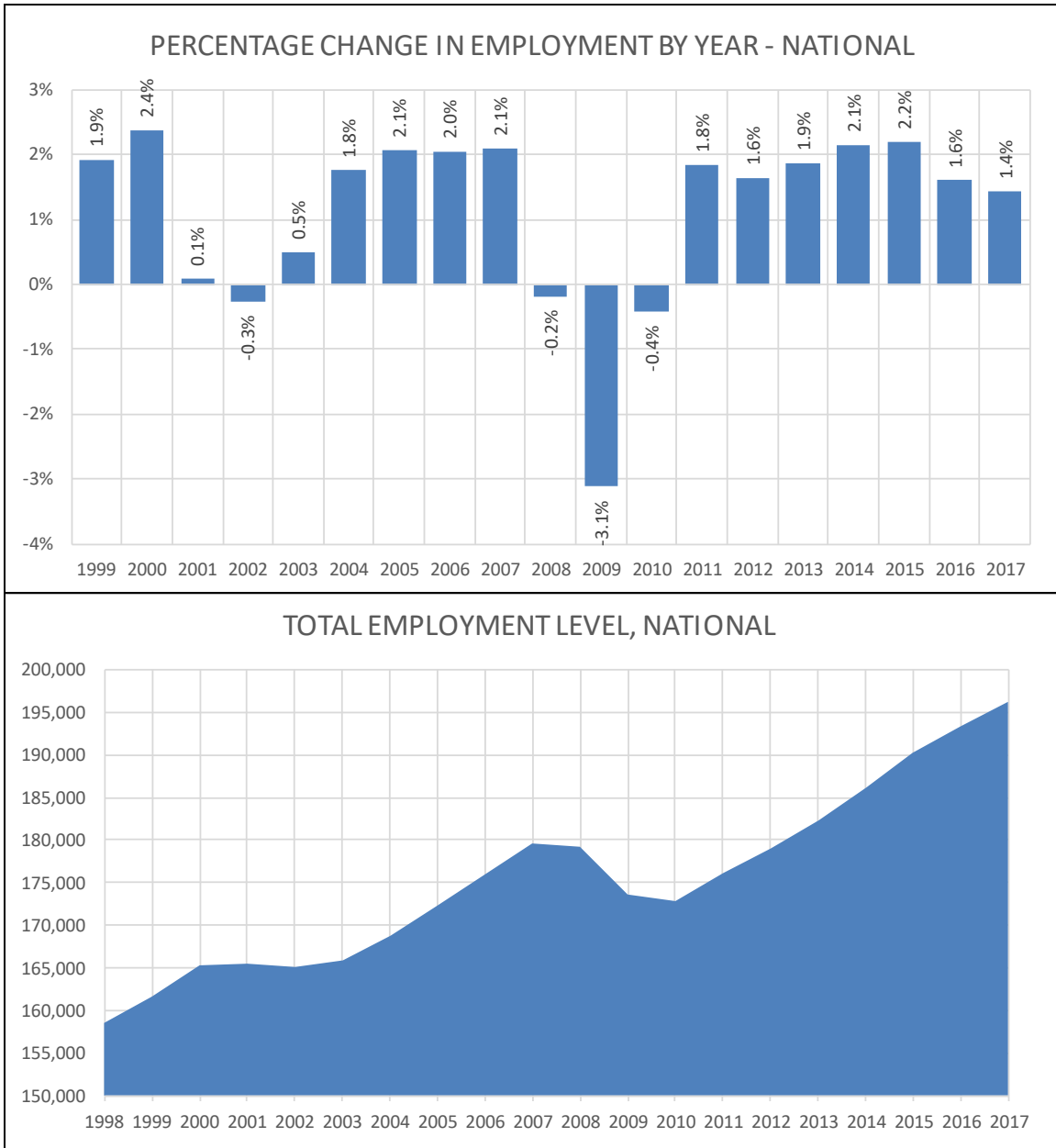


SOURCE: US Bureau of Economic Analysis

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 at 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



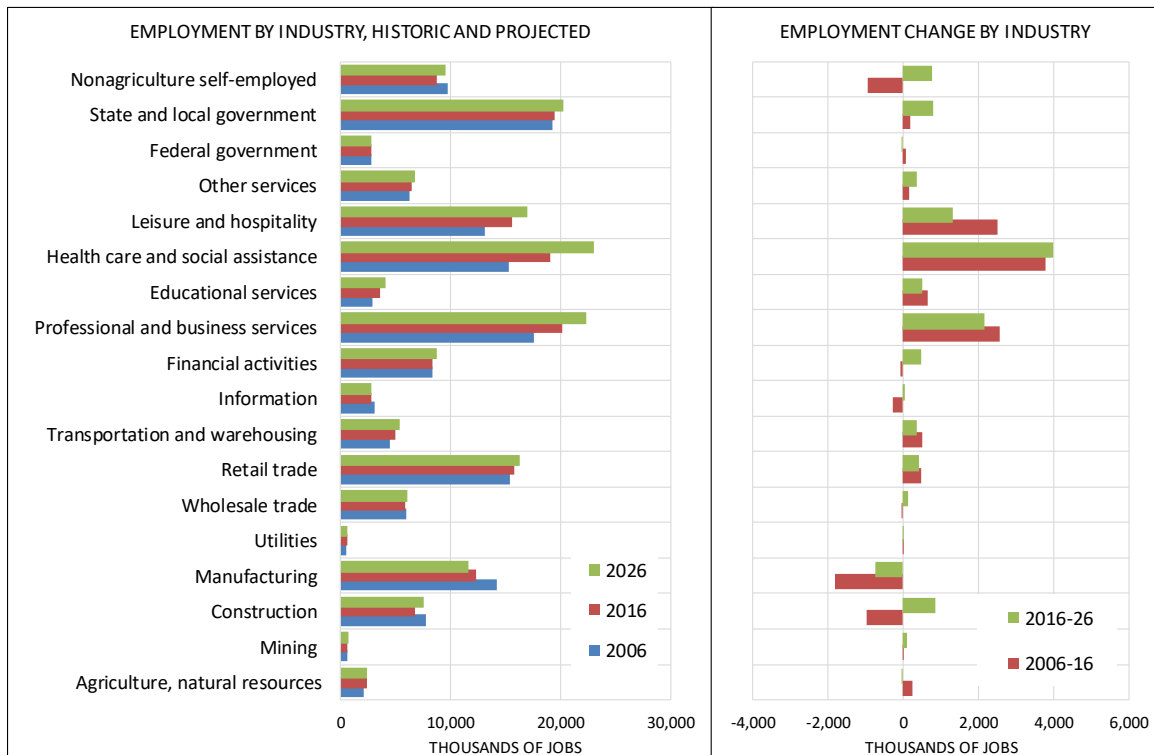
SOURCE: US Bureau of Economic Analysis

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 is causing 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 able to make 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 the limited growth in demand for domestic goods and the 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 and relative to the currencies of key trading partners, there remains significant headwinds for manufacturers that export a significant level of product. Sectors seeing significant expansion since 2006 include health care, professional and business services, and leisure and hospitality. Projections are that all major sectors with the exception of manufacturing and federal government will see positive growth through 2026.

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



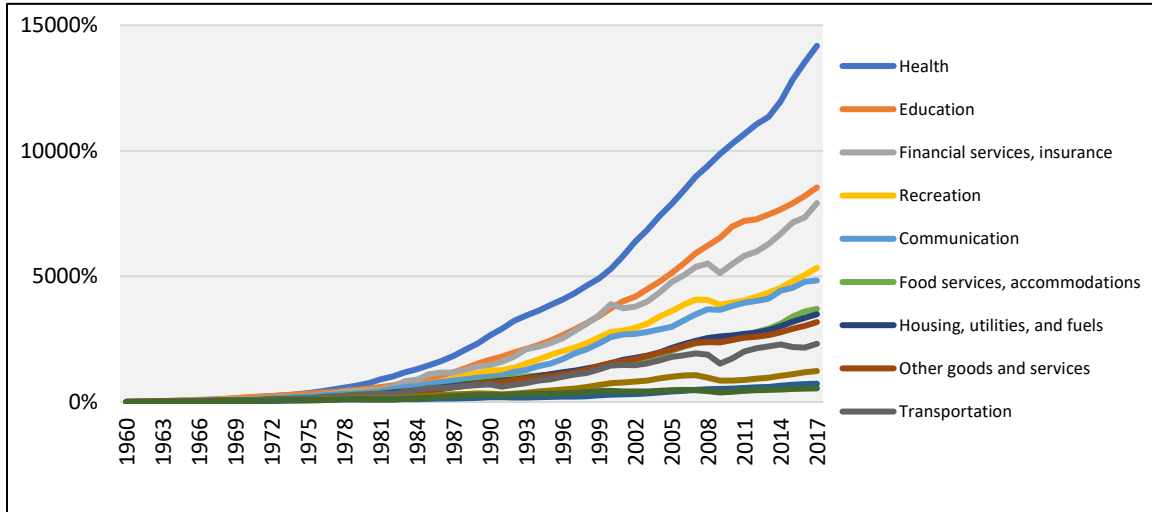
SOURCE: US Bureau of Economic Analysis

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, and changing spending patterns therefore 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 the past 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.

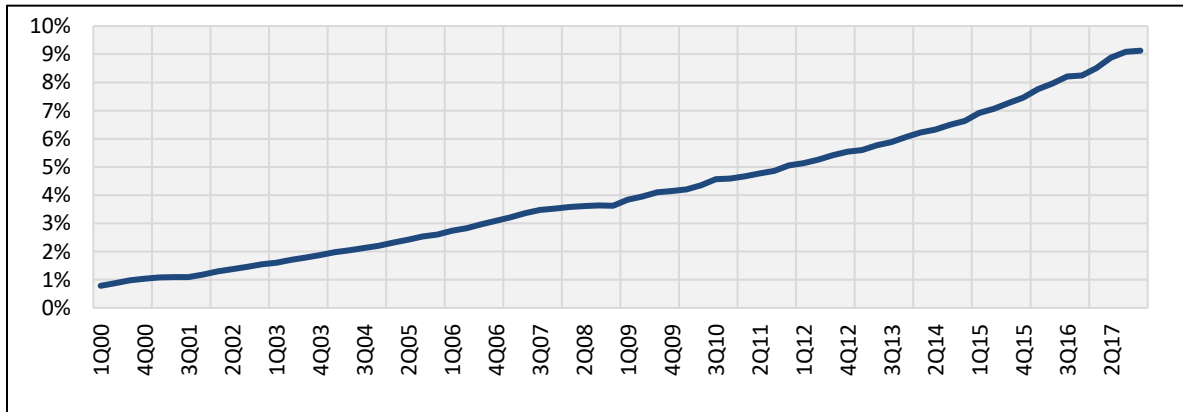
FIGURE 2.04: CONSUMER SPENDING GROWTH SINCE 1960, BY CATEGORY, UNITED STATES (1960-2017)



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 billion 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

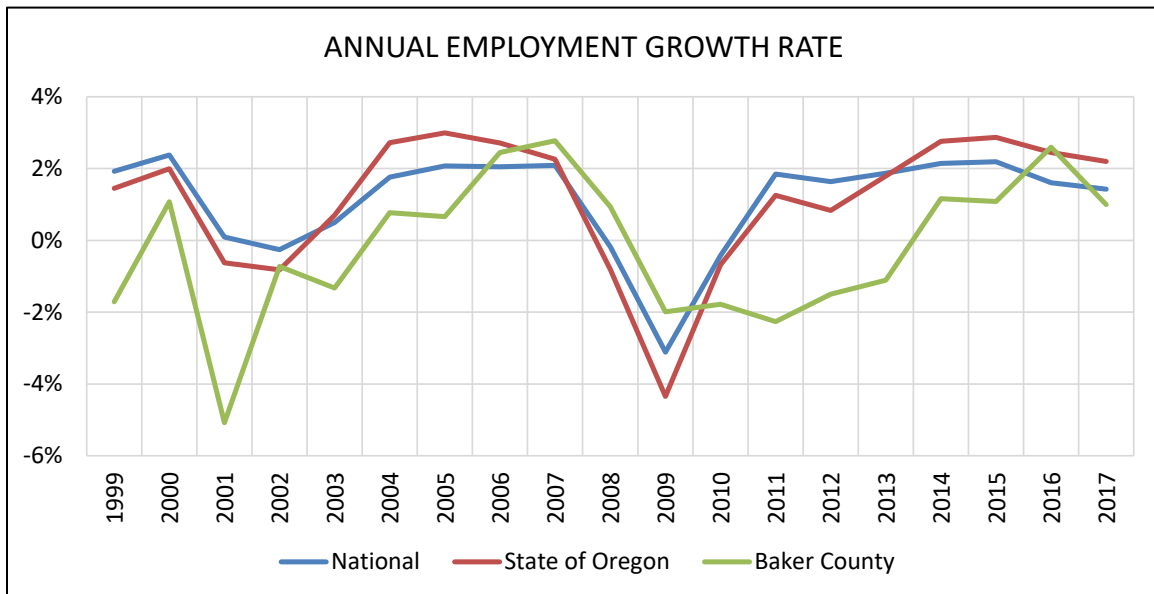
This is causing a shift in storage needs from retail stores to warehouses and distribution centers. At the same time, automation is causing a consolidation within the warehousing and distribution industry, leading to increasing reliance on larger third-party operators able to make heavy investments in 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.

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.

BAKER COUNTY ECONOMIC TRENDS

The annual rate of employment growth in Baker County lagged well behind the national and statewide rate during the early stages of the current expansion cycle. The rate of growth in the county accelerated to the national rate in 2016.

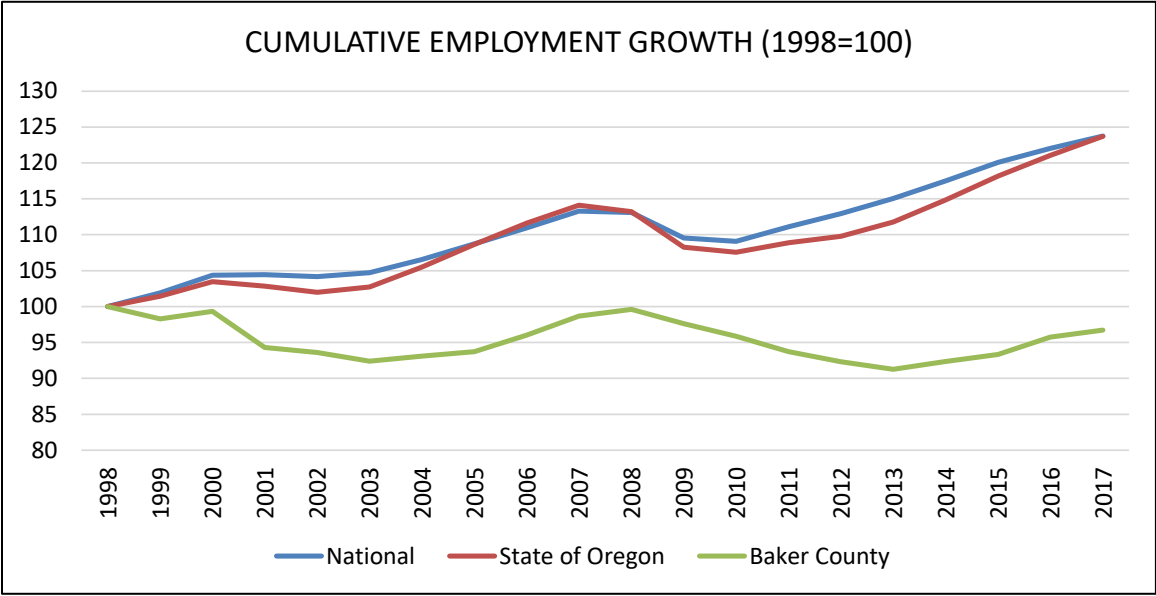
FIGURE 2.06: COMPARISON OF ANNUAL EMPLOYMENT GROWTH RATES



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

While enjoying periods of expansion over the last two decades, the cumulative growth in the area has not kept pace. The local employment base is lower now than it was twenty years ago, a period in which the national and statewide employment base expanded by just under 25%.

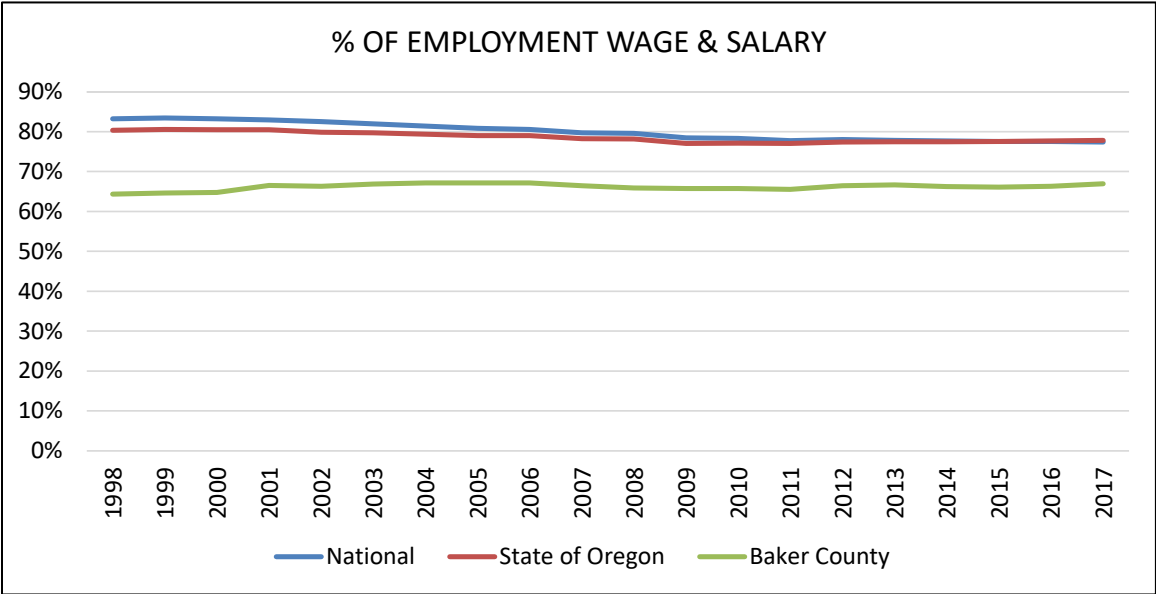
FIGURE 2.07: CUMULATIVE EMPLOYMENT GROWTH



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

The employment base in Baker County has a higher share of self-employed than the state and national averages, with wage and salary employment accounting for less than 67% of overall estimated employment in the county. This compares to rates approaching 80% statewide as well as nationally.

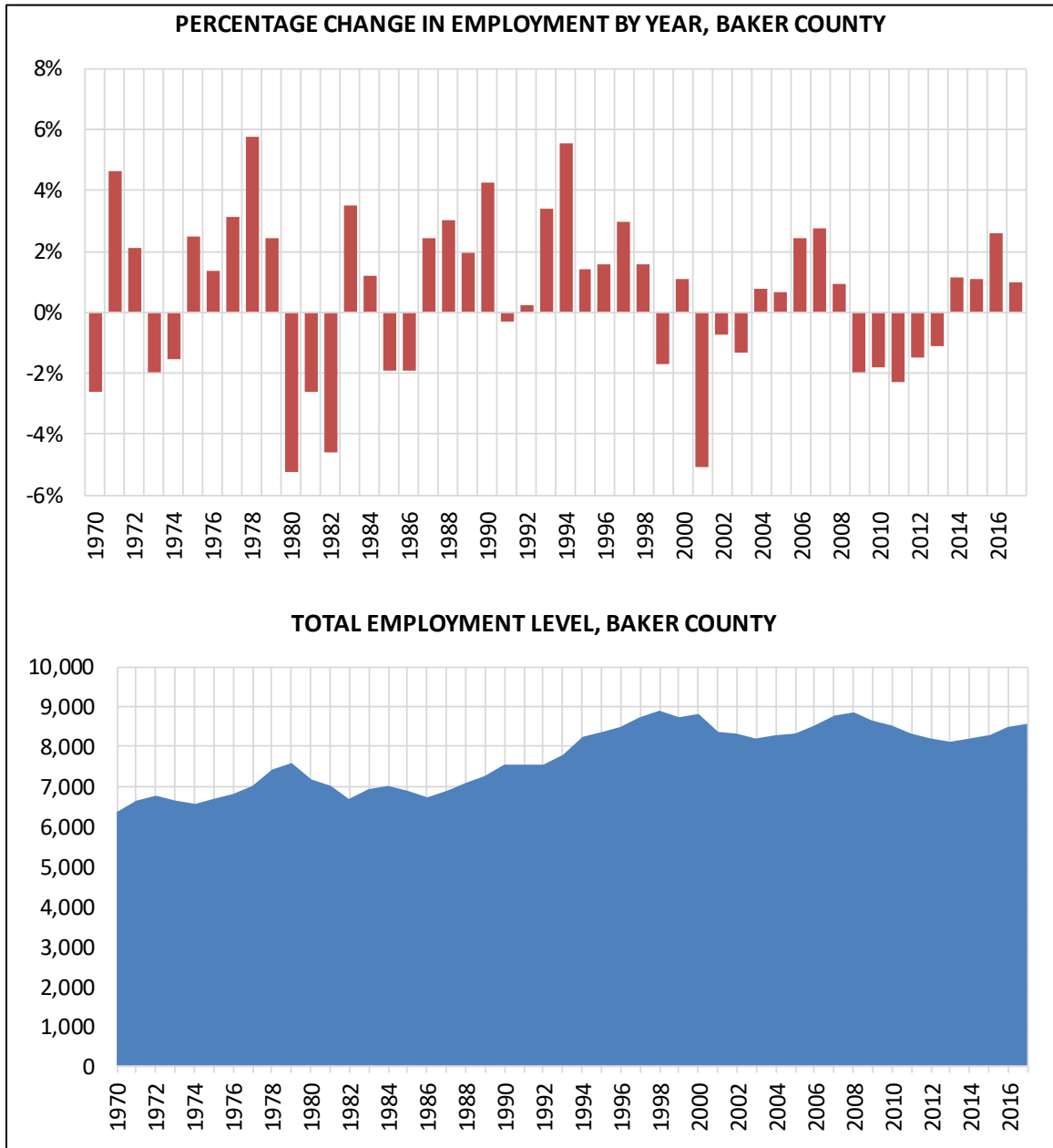
FIGURE 2.08: % OF TOTAL EMPLOYMENT REPRESENTED BY WAGE & SALARY



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

While employment growth has been modestly negative over the last twenty years, over a longer horizon Baker County experienced significant growth. The growth rate from 1987 through 1997 averaged 2.4% per year.

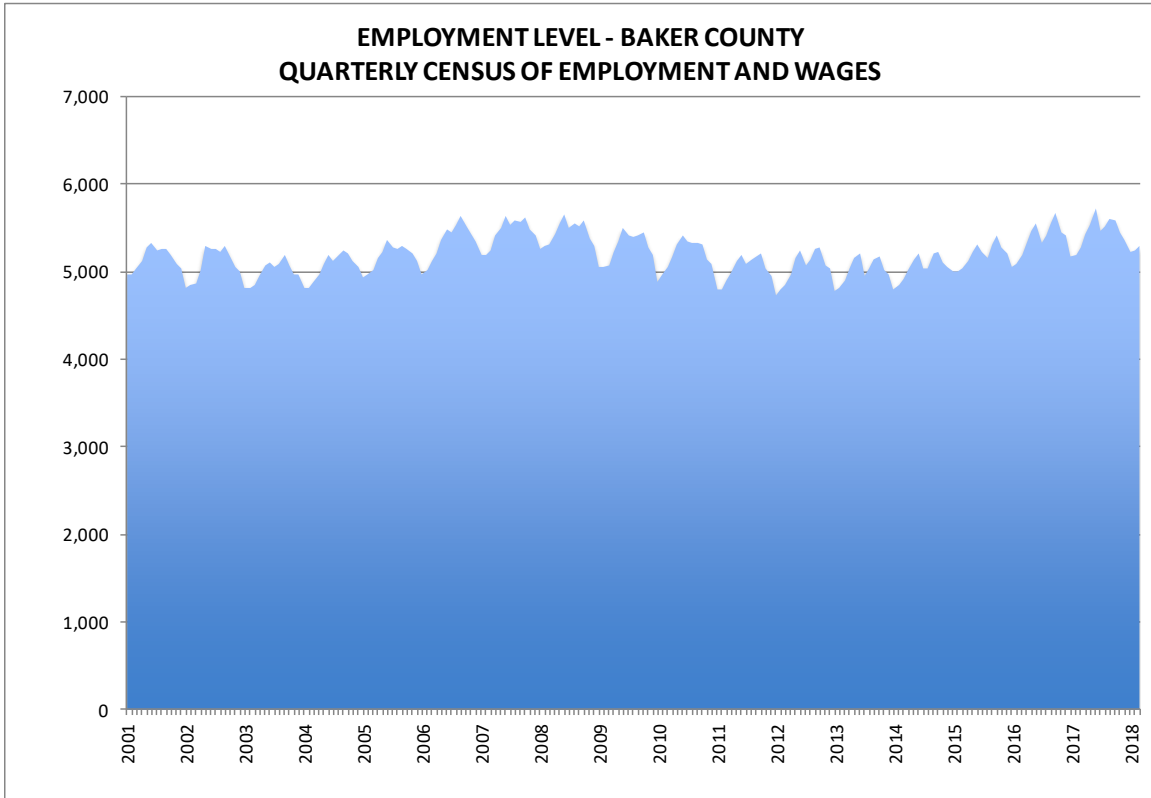
FIGURE 2.09: BAKER COUNTY EMPLOYMENT TRENDS



SOURCE: U.S. Bureau of Economic Analysis

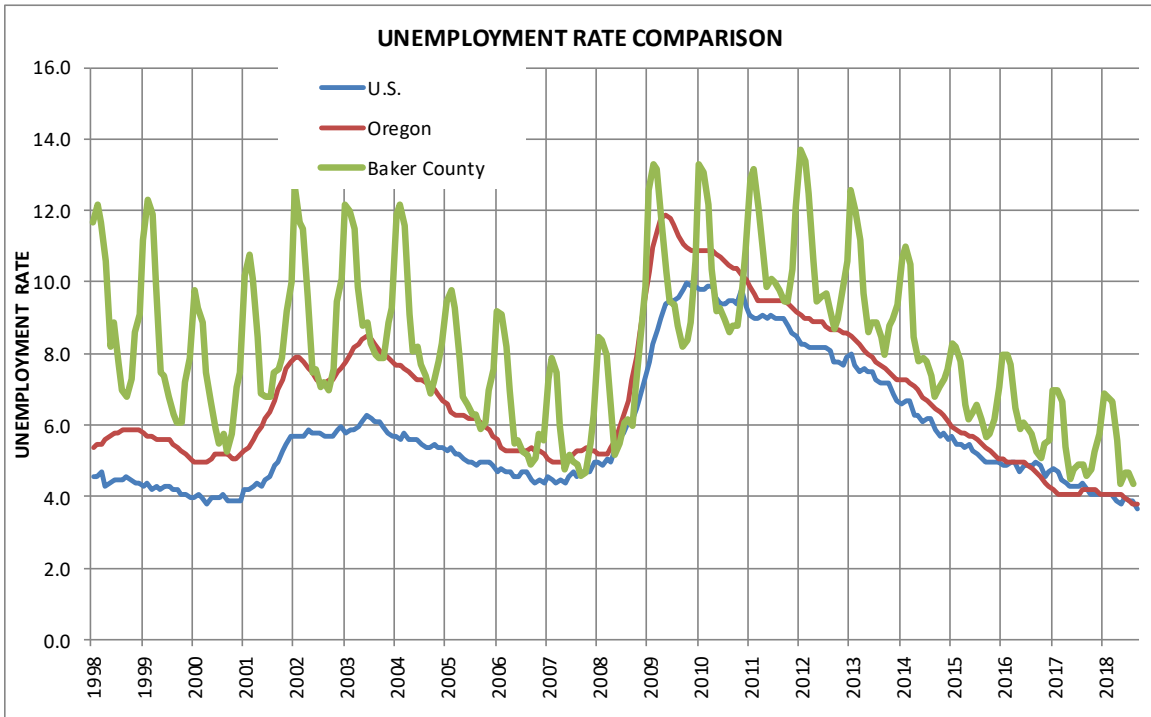
The local employment profile has a significant seasonal fluctuation, reflecting the area’s relatively high proportion of agricultural employment and tourism sector.

FIGURE 2.10: BAKER COUNTY EMPLOYMENT LEVEL BY MONTH



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

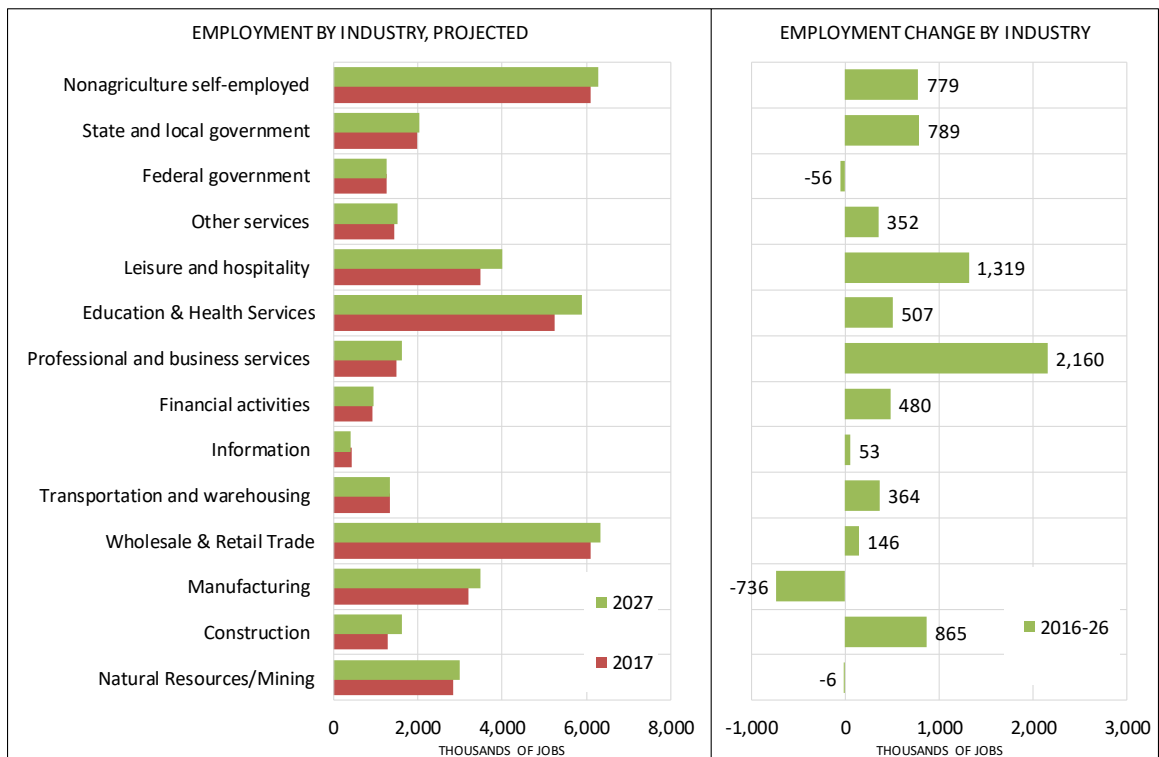
FIGURE 2.11: COMPARISON OF UNEMPLOYMENT RATE TRENDS



The economic expansion has facilitated a commensurate drop in the unemployment rate, with Baker County following the national and statewide patterns. The seasonal fluctuation in employment levels is mirrored in the unemployment statistics. Tight labor market conditions are likely to limit growth potential in the future locally as well as nationally. The local areas 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.

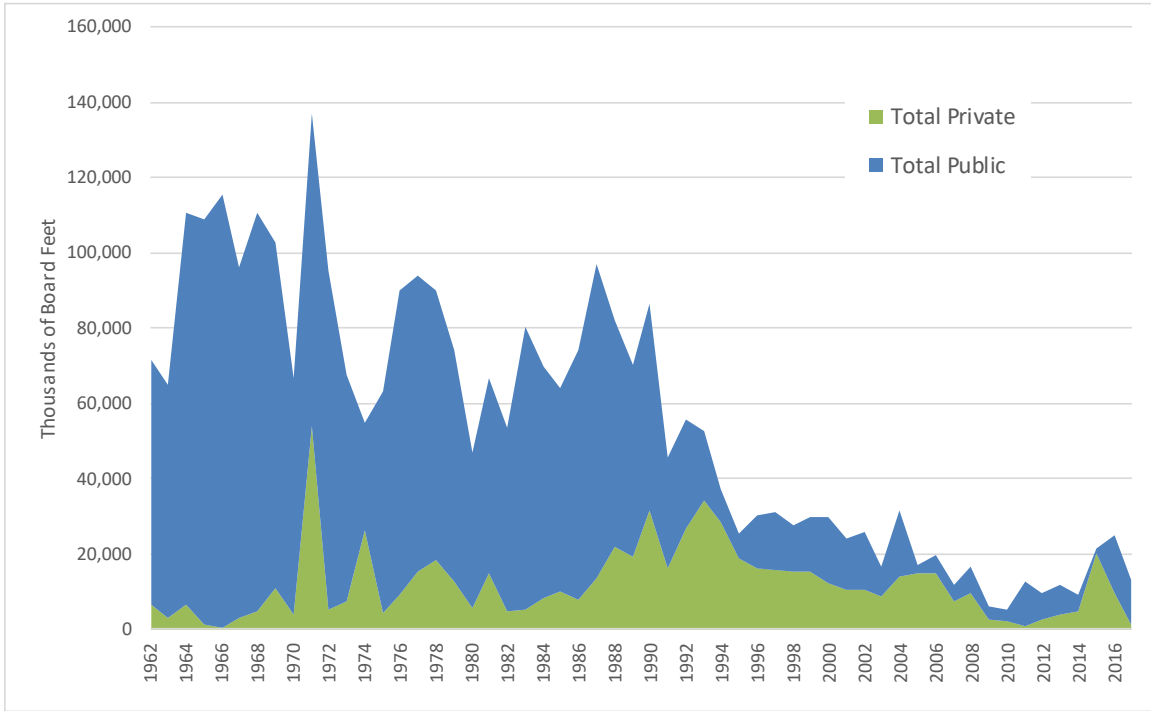
FIGURE 2.12: PROJECTED EMPLOYMENT GROWTH BY SECTOR, EASTERN OREGON



SOURCE: State of Oregon Employment Department

The forestry industry has been a significant economic driver in Baker County, with timber production at over 80 million board feet as late as 1990. The industry has seen a sharp decline in production in the County as well as in the broader region, which is largely attributable to declines in production from public lands.

FIGURE 2.13: ANNUAL TIMBER PRODUCTION IN BAKER 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.

Agricultural production represents a significant component of the local economy, but agricultural crop production is less important in Baker County than in the broader region. The area does have a significant concentration in animal stock, with an 72,000 head of cattle and calves in the county. Alfalfa and other hay production was 187,700 tons in 2016, while wheat production was 922,000 bushels in 2015.

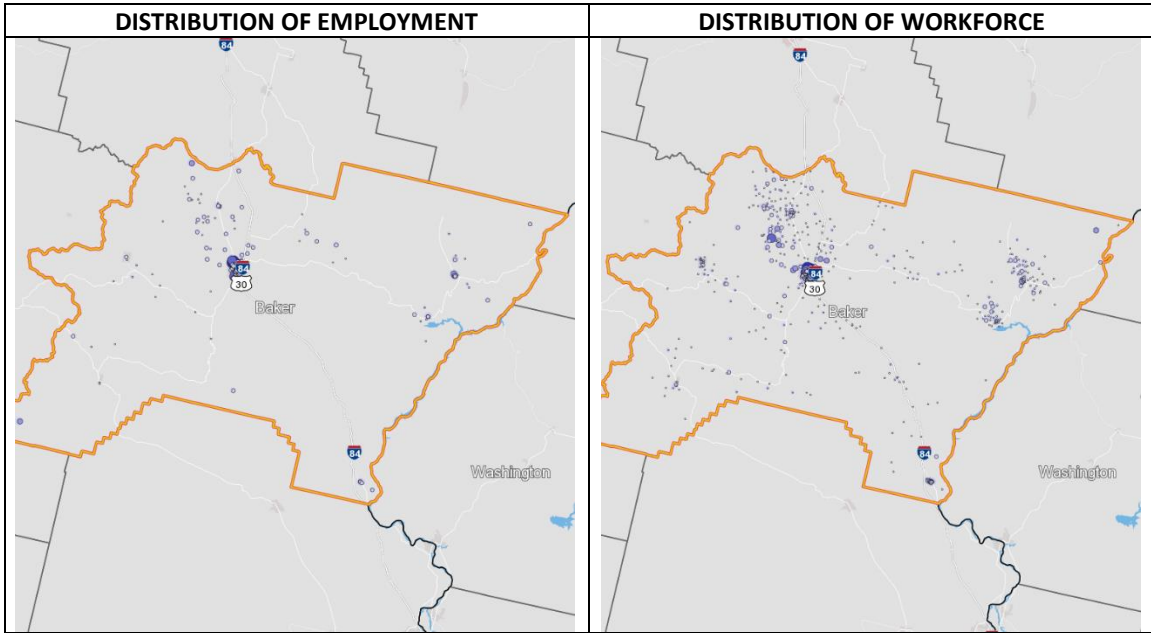
FIGURE 2.14: BAKER COUNTY AGRICULTURAL PRODUCTION

	2013	2014	2015	2016	2017
Alfalfa Hay			65,000	96,100	
Other Hay			(d)	91,500	
Beef Cows	41,000	40,000	41,000	41,000	42,500
All Cattle	70,000	70,000	72,000	72,000	72,000
Wheat			922,000	(d)	

SOURCE: 2017 Oregon Agripedia

Employment in Baker County is concentrated along the I-84 corridor, as well as along Highway 86 to the east and Highways 7 and 410 to the west. The workforce largely follows a similar pattern as employment.

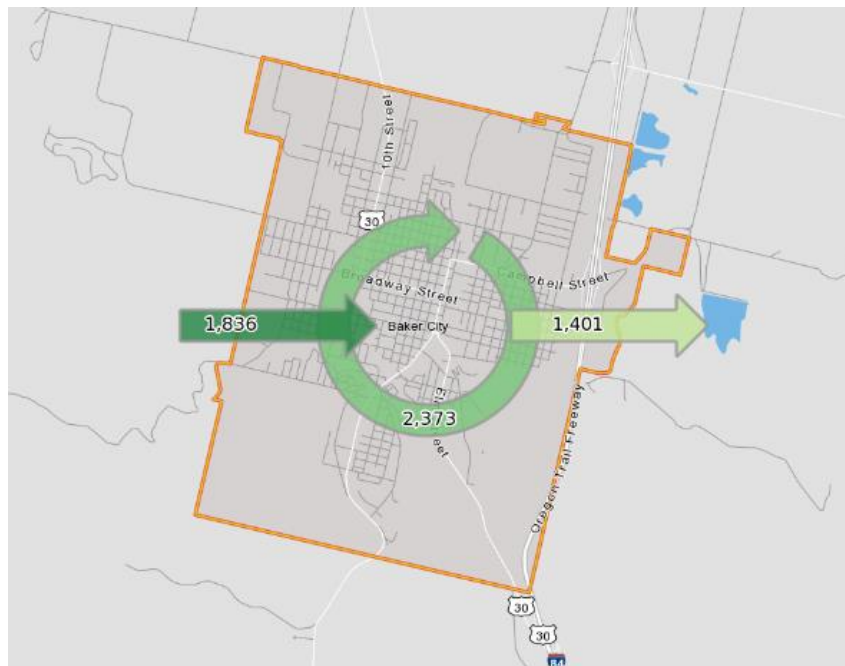
FIGURE 2.15: DISTRIBUTION OF EMPLOYMENT AND WORKFORCE, BAKER COUNTY, 2015



SOURCE: Census Bureau, LEHD Data

Baker City is the county’s largest employment and workforce concentration, with almost 2,400 persons estimated to both work and live in Baker City in 2015. An estimated 1,401 Baker City residents are estimated to work outside of the city, while an estimated 1,836 are estimated to commute into the city for employment. While each of the jurisdictions in the county have similar workforce and employment levels, residents commute broadly within Baker County.

FIGURE 2.16: NET INFLOW-OUTFLOW OF EMPLOYEES, BAKER CITY, 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. The characteristics of the workforce commuting into and out of Baker City were similar in terms of incomes and age.

FIGURE 2.17: NET INFLOW-OUTFLOW DETAIL, BAKER COUNTY AND BAKER CITY, 2015

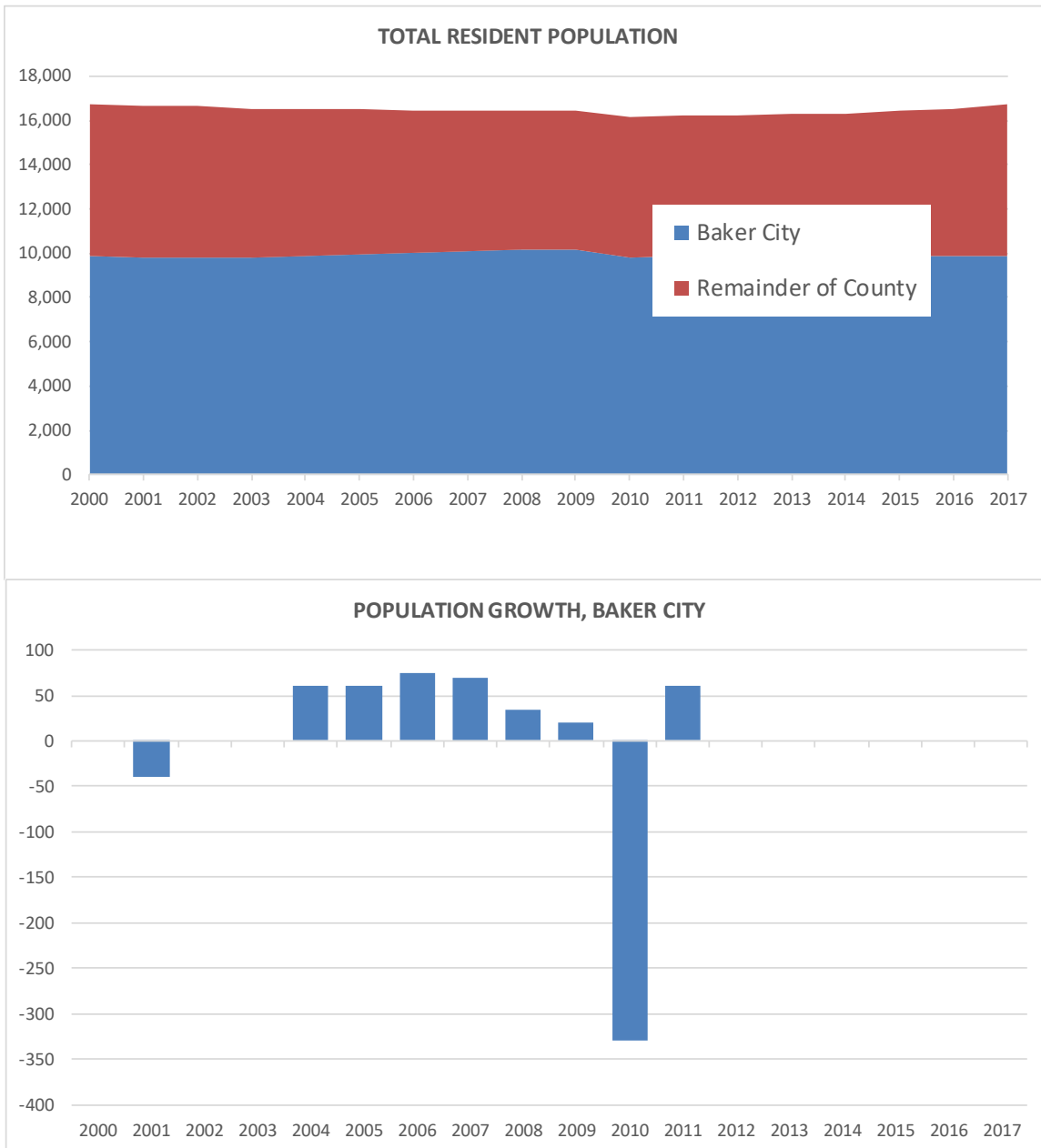
	Baker County		Baker City, OR	
	2015		2015	
	Count	Share	Count	Share
Selection Area Labor Market Size (Primary Jobs)				
Employed in the Selection Area	4,757	100.0%	3,940	100.0%
Living in the Selection Area	5,258	110.5%	3,515	89.2%
Net Job Inflow (+) or Outflow (-)	(501)	-	425	-
In-Area Labor Force Efficiency (Primary Jobs)				
Living in the Selection Area	5,258	100.0%	3,515	100.0%
Living and Employed in the Selection Area	3,583	68.1%	2,223	63.2%
Living in the Selection Area but Employed Outside	1,675	31.9%	1,292	36.8%
In-Area Employment Efficiency (Primary Jobs)				
Employed in the Selection Area	4,757	100.0%	3,940	100.0%
Employed and Living in the Selection Area	3,583	75.3%	2,223	56.4%
Employed in the Selection Area but Living Outside	1,174	24.7%	1,717	43.6%
Outflow Job Characteristics (Primary Jobs)				
External Jobs Filled by Residents	1,675	100.0%	1,292	100.0%
Workers Aged 29 or younger	375	22.4%	289	22.4%
Workers Aged 30 to 54	864	51.6%	665	51.5%
Workers Aged 55 or older	436	26.0%	338	26.2%
Workers Earning \$1,250 per month or less	363	21.7%	284	22.0%
Workers Earning \$1,251 to \$3,333 per month	650	38.8%	521	40.3%
Workers Earning More than \$3,333 per month	662	39.5%	487	37.7%
Workers in the "Goods Producing" Industry Class	339	20.2%	300	23.2%
Workers in the "Trade, Transportation, and Utilities" Industry Class	418	25.0%	303	23.5%
Workers in the "All Other Services" Industry Class	918	54.8%	689	53.3%
Inflow Job Characteristics (Primary Jobs)				
Internal Jobs Filled by Outside Workers	1,174	100.0%	1,717	100.0%
Workers Aged 29 or younger	267	22.7%	346	20.2%
Workers Aged 30 to 54	606	51.6%	886	51.6%
Workers Aged 55 or older	301	25.6%	485	28.2%
Workers Earning \$1,250 per month or less	289	24.6%	402	23.4%
Workers Earning \$1,251 to \$3,333 per month	437	37.2%	708	41.2%
Workers Earning More than \$3,333 per month	448	38.2%	607	35.4%
Workers in the "Goods Producing" Industry Class	193	16.4%	271	15.8%
Workers in the "Trade, Transportation, and Utilities" Industry Class	273	23.3%	401	23.4%
Workers in the "All Other Services" Industry Class	708	60.3%	1,045	60.9%
Interior Flow Job Characteristics (Primary Jobs)				
Internal Jobs Filled by Residents	3,583	100.0%	2,223	100.0%
Workers Aged 29 or younger	674	18.8%	463	20.8%
Workers Aged 30 to 54	1,886	52.6%	1,170	52.6%
Workers Aged 55 or older	1,023	28.6%	590	26.5%
Workers Earning \$1,250 per month or less	878	24.5%	528	23.8%
Workers Earning \$1,251 to \$3,333 per month	1,618	45.2%	1,054	47.4%
Workers Earning More than \$3,333 per month	1,087	30.3%	641	28.8%
Workers in the "Goods Producing" Industry Class	721	20.1%	422	19.0%
Workers in the "Trade, Transportation, and Utilities" Industry Class	757	21.1%	442	19.9%
Workers in the "All Other Services" Industry Class	2,105	58.7%	1,359	61.1%

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

POPULATION AND WORKFORCE

Baker County’s population base has been seen very little growth. Baker City has seen a similar lack of growth, with modest gains from 2004 through 2009 offset by adjustments based on census estimates in 2010. There has been no estimated net growth in Baker City from 2011 through the 2017 estimate by the Population Research Center at Portland State University.

FIGURE 2.16: HISTORIC POPULATION TRENDS, BAKER COUNTY AND BAKER CITY

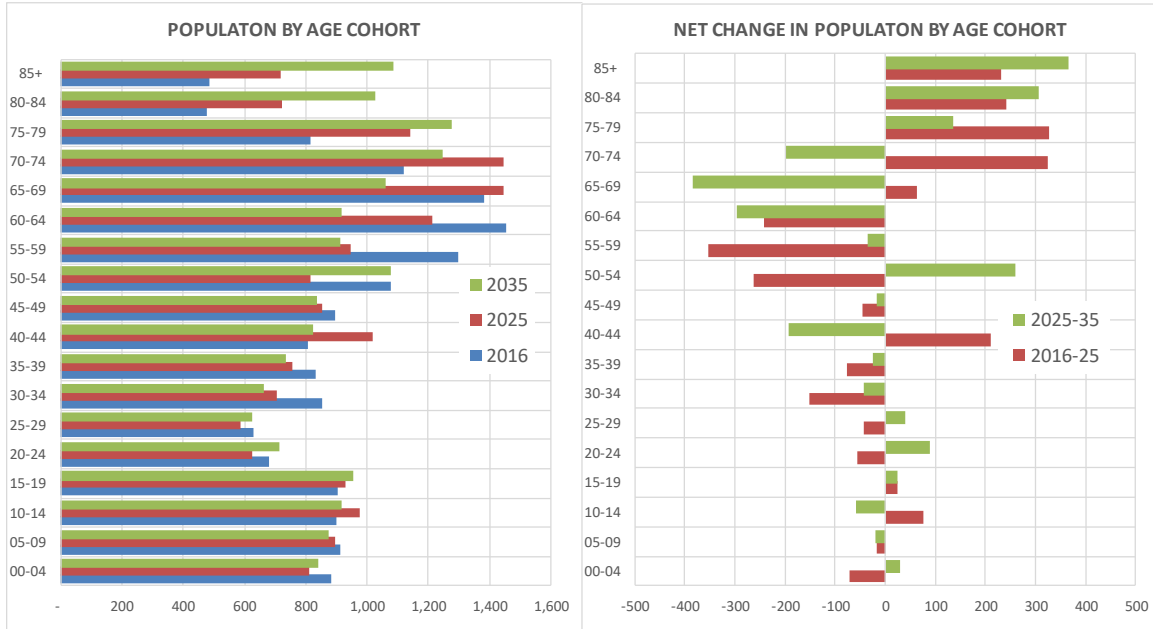


SOURCE: Population Research Center, Portland State University

While the population base has remained steady, the profile of the local population is projected to become significantly older, with the percentage of the population aged 70 years or higher increasing significantly

The long term impact of this on the local labor force will be a concern moving forward, as the number of younger residents is expected to decline in absolute numbers as well as in percentage terms.

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



SOURCE: Population Research Center, Portland State University

Race and Ethnicity: The population of Baker County is estimated to be 93% white and 7% minority or bi-racial, compared to 15% in Oregon. Since 2000, the share of Black, Asian and Pacific Islanders 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 4% of the county population, compared to 13% statewide.

FIGURE 2.18: DISTRIBUTION OF POPULATION BY RACE & ETHNICITY, BAKER COUNTY

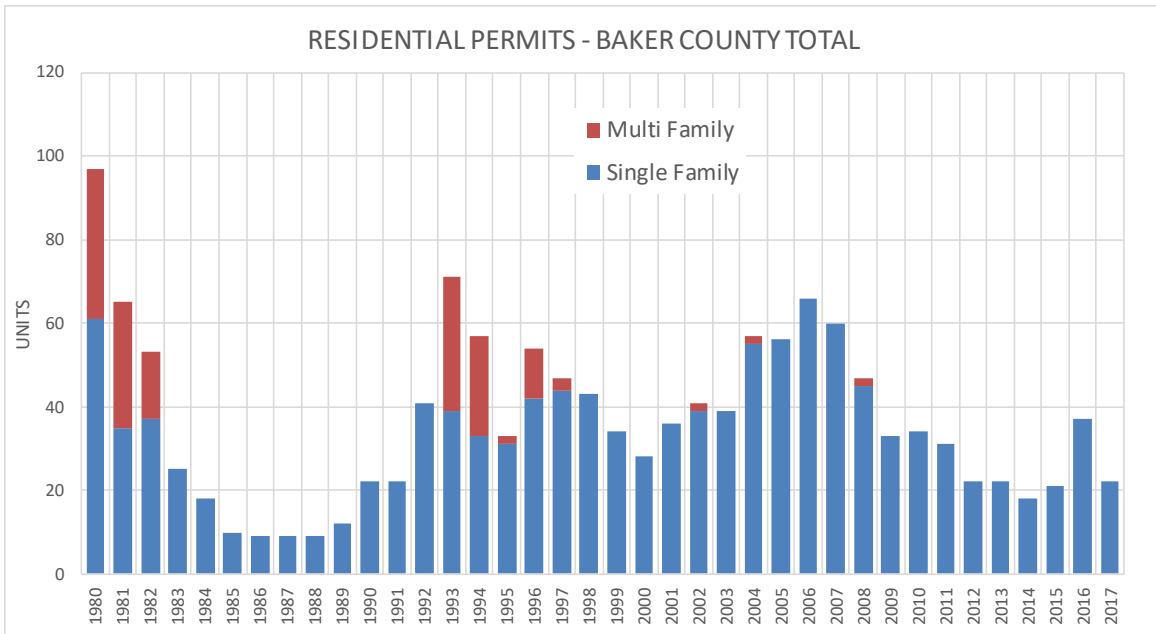
Distribution of Population	Baker County				Oregon			
	2000	2017	Change	Share	2000	2017	Change	Share
Total:	16,741	16,750	0%	100%	3,421,399	4,025,127	18%	100%
White	16,018	15,625	-2%	93%	2,961,623	3,416,776	15%	85%
Black	39	157	303%	1%	55,662	76,347	37%	2%
Native American	182	186	2%	1%	45,211	45,332	0%	1%
Asian	64	130	103%	1%	101,350	166,351	64%	4%
Hawaiian or Pac. Islander	7	62	783%	0%	7,976	15,157	90%	0%
Other Race	154	284	84%	2%	144,832	121,000	-16%	3%
Two or More Races	277	306	10%	2%	104,745	184,164	76%	5%
Latino (of any race)	392	661	69%	4%	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.

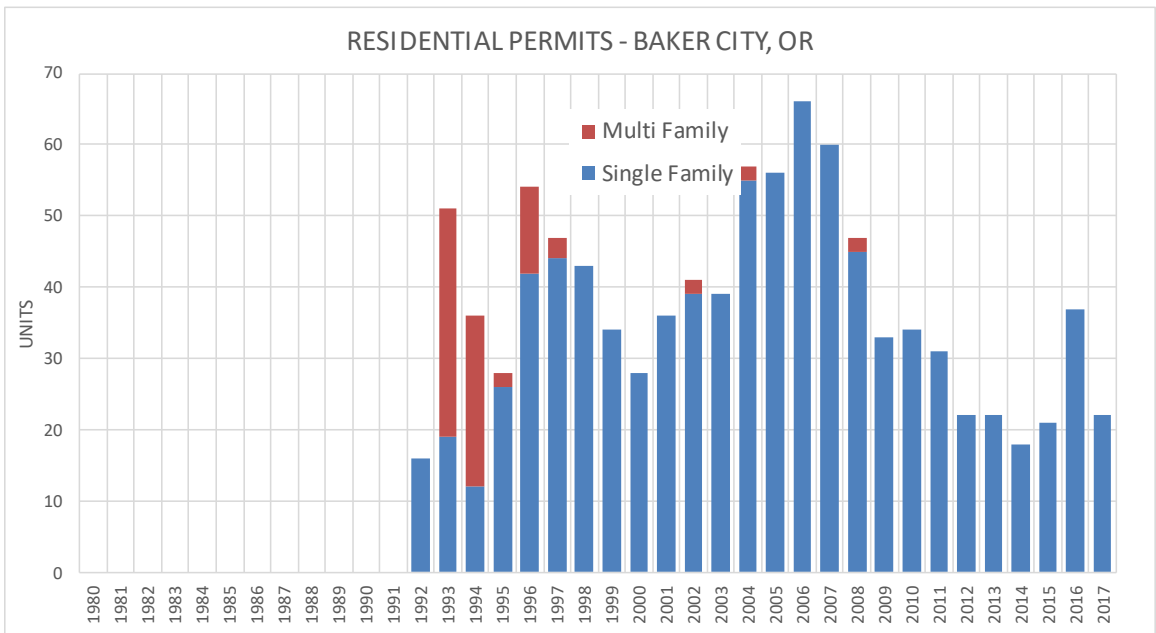
Despite a lack of population growth, Baker County as well as Baker City have seen ongoing residential permit activity.

FIGURE 2.19: HISTORIC AND PROJECTED RESIDENTIAL PERMITS, BAKER COUNTY



SOURCE: HUD

FIGURE 2.20: HISTORIC AND PROJECTED RESIDENTIAL PERMITS, BAKER CITY



SOURCE: HUD

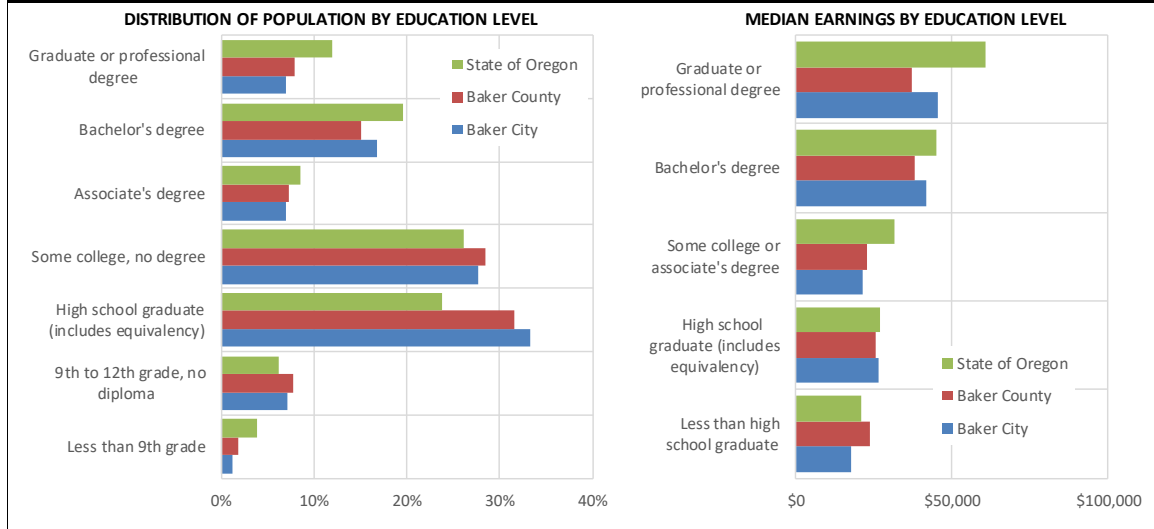
This trend would be consistent with reduced household sizes over time, as family households are increasingly replaced with empty nester, senior, and other non-family households.

The educational attainment level of residents in Baker County is modestly lower than that of the state as a whole, with Baker City largely following the county pattern. Of an estimated 6,971 persons 25 years or older in Baker City, 23.8% have a bachelor’s degree or higher. This compares to a 23.0% rate for the county and a 31.5% rate for Oregon.

Working with community colleges and other partners (see next section) on on-going education, workforce development and distance learning opportunities may be an important part of local economic development strategy to train the workforce in the skills that local industries need.

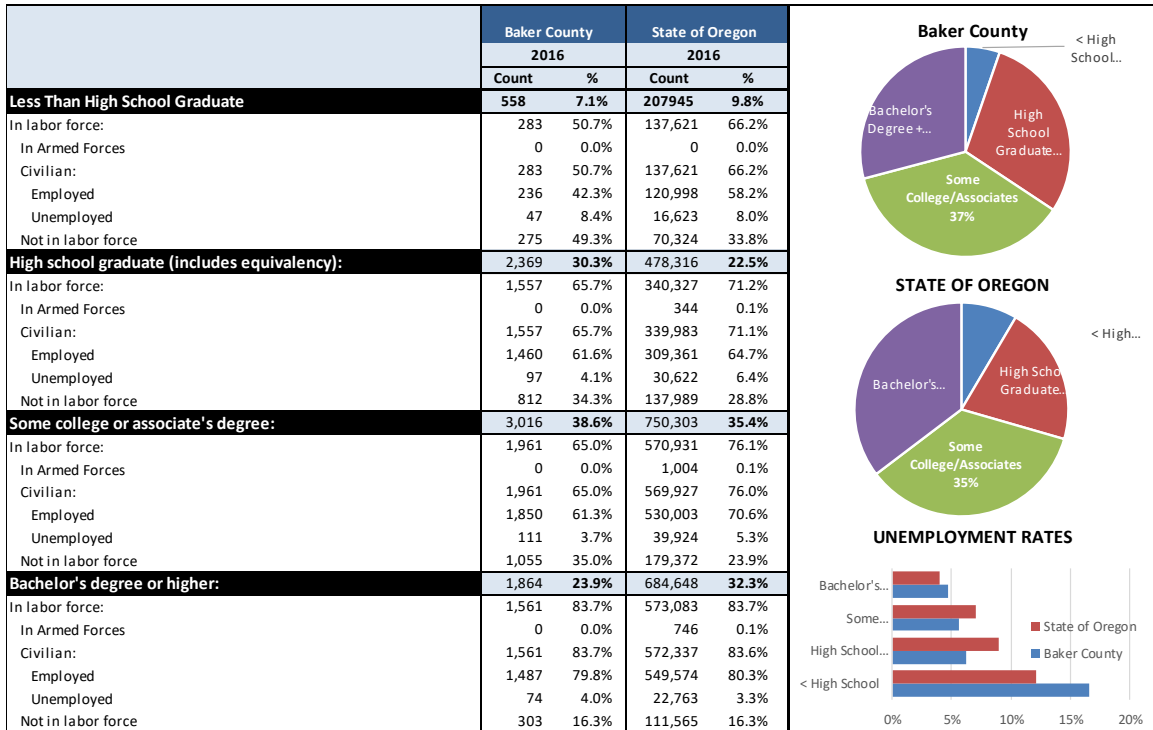
FIGURE 2.21: EDUCATIONAL ATTAINMENT PROFILE, 2016

	Baker City		Baker County		State of Oregon	
	Count	%	Count	%	Count	%
Population 25 Years and Over	6,971	100.0%	11,808	100.0%	2,755,78	100.0%
Less than 9th grade	88	1.3%	225	1.9%	106,505	3.9%
9th to 12th grade, no diploma	496	7.1%	907	7.7%	169,993	6.2%
High school graduate (includes equivalency)	2,322	33.3%	3,732	31.6%	657,520	23.9%
Some college, no degree	1,925	27.6%	3,364	28.5%	721,059	26.2%
Associate's degree	486	7.0%	865	7.3%	234,336	8.5%
Bachelor's degree	1,168	16.8%	1,774	15.0%	538,977	19.6%
Graduate or professional degree	486	7.0%	941	8.0%	327,396	11.9%
Median Earnings, 25 Years and Over	\$30,514	100.0%	\$28,813	100.0%	\$33,686	100.0%
Less than high school graduate	\$17,969	58.9%	\$23,631	82.0%	\$20,970	62.3%
High school graduate (includes equivalency)	\$26,637	87.3%	\$25,476	88.4%	\$27,139	80.6%
Some college or associate's degree	\$21,566	70.7%	\$22,890	79.4%	\$31,415	93.3%
Bachelor's degree	\$41,836	137.1%	\$38,281	132.9%	\$44,881	133.2%
Graduate or professional degree	\$45,294	148.4%	\$36,964	128.3%	\$60,958	181.0%



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

FIGURE 2.22: 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 Baker County and local jurisdictions. The objective of this process is to identify a range of industry types that can be considered targeted economic opportunities over the planning period.

A range of analytical tools to assess the local and regional economic landscape are used to determine the industry typologies the county and individual cities 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 a given 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.

A location quotient analysis was completed for Baker 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, and manufacturing. Average wage levels in the local natural resources industries are lower than the average in the county, while wages for government and manufacturing are higher than average for the county.

FIGURE 3.01: INDUSTRY SECTOR SPECIALIZATION BY MAJOR INDUSTRY, BAKER COUNTY, 2016¹

Industry	Annual Establishments	Average Employment	Total Wages	Avg. Annual Wages	Employment LQ
1011 Natural resources and mining	43	221	\$7,119,811	\$32,265	3.10
1012 Construction	66	241	\$7,811,116	\$32,445	0.92
1013 Manufacturing	28	539	\$24,603,923	\$45,676	1.15
102 Service-providing	458	3288	\$104,913,735	\$31,906	0.86
1021 Trade, transportation, and utilities	124	1044	\$34,022,363	\$32,604	1.01
1022 Information	9	46	\$1,965,754	\$42,889	0.44
1023 Financial activities	40	140	\$5,674,381	\$40,531	0.46
1024 Professional and business services	68	327	\$11,964,344	\$36,551	0.43
1025 Education and health services	51	857	\$36,070,105	\$42,113	1.02
1026 Leisure and hospitality	57	579	\$9,945,259	\$17,169	0.96
1027 Other services	108	295	\$5,249,029	\$17,808	1.76
Federal Government	15	204	\$12,753,508	\$62,594	1.92
State Government	19	259	\$13,144,899	\$50,687	1.48
Local Government	47	690	\$24,240,104	\$35,131	1.30

SOURCE: Bureau of Labor Services

¹ QCEW Data, Annual Average 2016 Data

A more detailed industry analysis shows that animal and crop production are major components of the natural resources and mining sector, with animal production indicating the highest level of concentration. Average employment levels are highest in retail and food services, followed by local government and manufacturing.

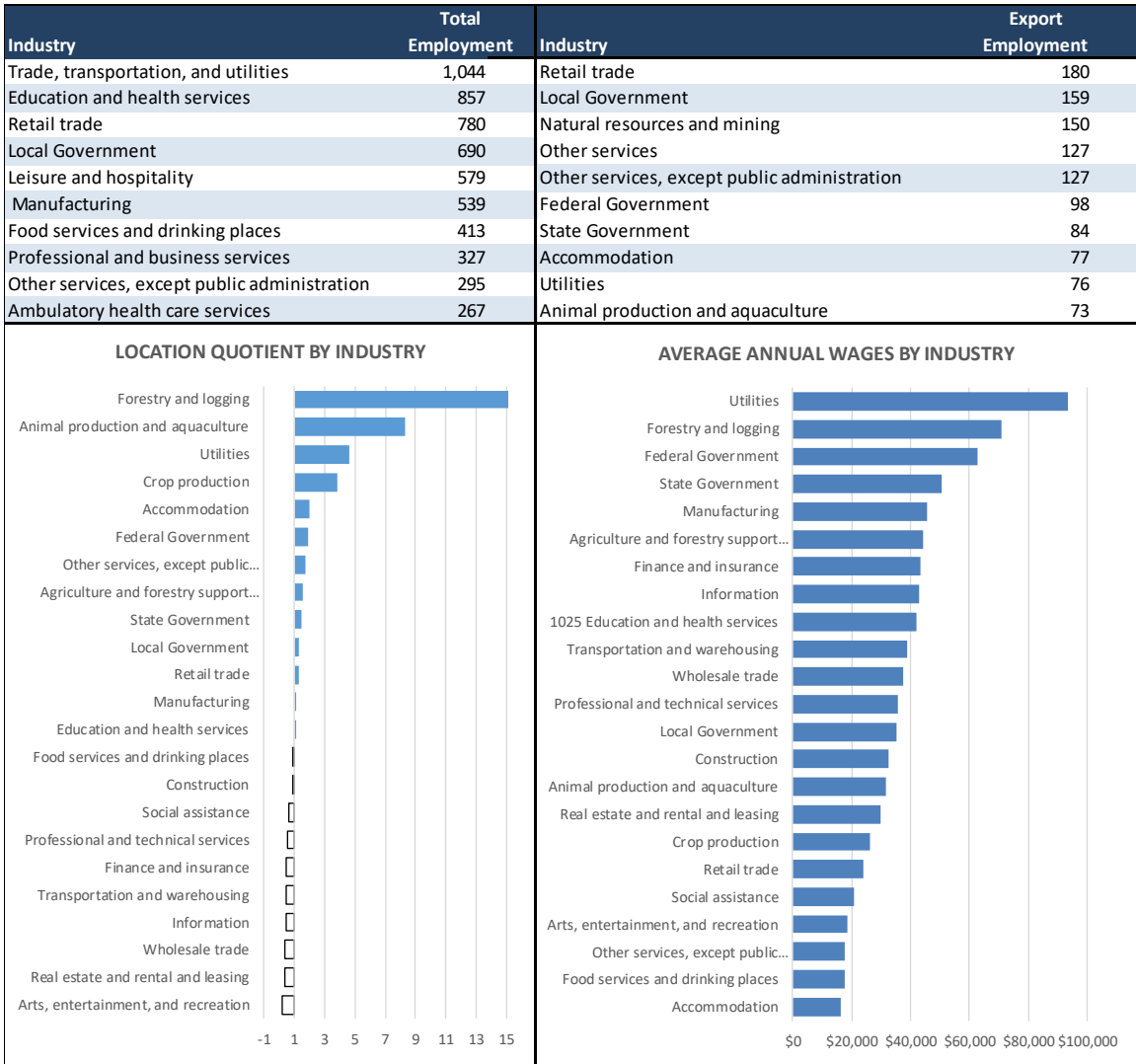
FIGURE 3.02: INDUSTRY SECTOR SPECIALIZATION BY DETAILED INDUSTRY, BAKER COUNTY, 2016²

Industry	Annual Establishments	Average Employment	Total Wages	Avg. Annual Wages	Employment LQ
NAICS 111 Crop production	15	80	\$2,074,824	\$26,071	3.81
NAICS 112 Animal production and aquaculture	15	83	\$2,627,288	\$31,654	8.35
NAICS 113 Forestry and logging	4	12	\$257,183	\$21,734	5.87
NAICS 115 Agriculture and forestry support activities	5	22	\$969,279	\$44,058	1.53
NAICS 22 Utilities	8	97	\$9,024,054	\$93,272	4.65
NAICS 23 Construction	66	241	\$7,811,116	\$32,445	0.92
NAICS 31-33 Manufacturing	5	539	\$24,603,923	\$45,676	1.15
NAICS 42 Wholesale trade	17	80	\$2,988,236	\$37,314	0.36
NAICS 44-45 Retail trade	77	780	\$18,773,355	\$24,076	1.30
NAICS 48-49 Transportation and warehousing	22	87	\$3,236,718	\$37,239	0.46
NAICS 51 Information	9	46	\$1,965,754	\$45,676	0.44
NAICS 52 Finance and insurance	28	111	\$4,799,121	\$43,398	0.50
NAICS 53 Real estate and rental and leasing	12	29	\$875,260	\$29,754	0.35
NAICS 54 Professional and technical services	46	189	\$6,776,888	\$35,841	0.56
NAICS 624 Social assistance	9	89	\$1,846,198	\$20,783	0.63
NAICS 71 Arts, entertainment, and recreation	3	14	\$252,418	\$18,358	0.16
NAICS 721 Accommodation	17	152	\$2,465,491	\$16,211	2.02
NAICS 722 Food services and drinking places	38	413	\$7,227,350	\$17,482	0.94
NAICS 81 Other services, except public administration	108	295	\$5,249,029	\$17,808	1.76
Federal Government	15	204	\$12,753,508	\$62,594	1.92
State Government	19	259	\$13,144,899	\$50,687	1.48
Local Government	47	690	\$24,240,104	\$35,131	1.30

SOURCE: Bureau of Labor Services

In terms of specialization, natural resource industries dominate followed by utilities, lodging, and government. The retail sector is identified as having a high level of export employment, or employment supported from outside of Baker County. This is likely due to I-84, which provides exposure and access to a large number of non-Baker county residents.

FIGURE 3.03: TOP TEN INDUSTRIES IN TERMS OF TOTAL AND EXPORT EMPLOYMENT



SOURCE: Bureau of Labor Services

ECONOMIC DRIVERS

The identification of the economic drivers of a local or regional economy are critical in informing the character and nature of future employment, and by extension land demand over a planning cycle. To this end, we employ a shift-share analysis of the local economy emerging out of the current expansion cycle².

A shift-share analysis is an analytical procedure that measures local effect of economic performance within a particular industry or occupation. The process considers local economic performance in the context of national economic trends—indicating the extent to which local growth can be attributed to unique regional competitiveness or simply growth in line with broader trends. For example, consider that Widget

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

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 manufactures 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 characteristics locally leading them to be particularly competitive.

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

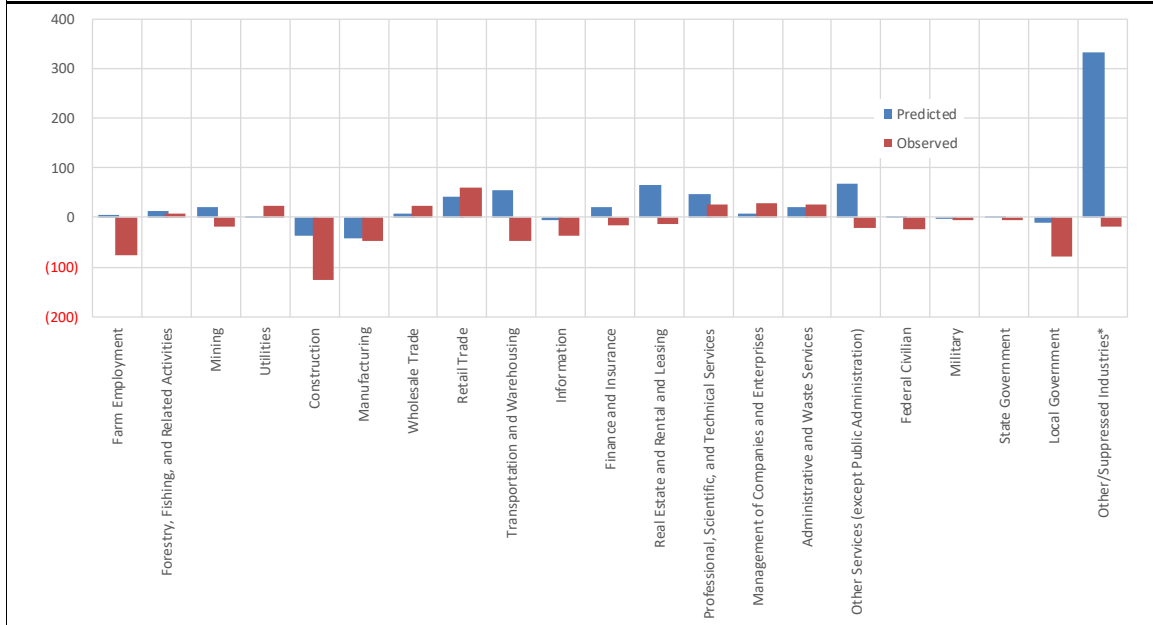
Contracting, Outperforming: Industries that are declining locally but slower than the national average. These industries have structural issues that are impacting growth industry wide. However, local firms are leveraging some local or regional factor that is making them more competitive than other firms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

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

The average annual growth rate by industry from 2008 through 2016 for Baker County was compared to the national rate. The observed local change was compared to a standardized level reflecting what would be expected if the local industry grew at a rate consistent with national rates for that industry. As shown in Figure 4.4, only a few industries showed growth in excess of national rates. These include utilities, retail trade, wholesale trade, and management of companies.

FIGURE 3.04: INDUSTRY SECTOR SHIFT SHARE ANALYSIS, BAKER COUNTY(2008 – 2016)

Industry	Average Employment		Net Change		Standardized Level - 2016 *	Regional Shift
	2008	2016	Total	AAGR		
Farm Employment	882	806	(76)	-1.1%	887	(81)
Forestry, Fishing, and Related Activities	189	197	8	0.5%	202	(5)
Mining	122	104	(18)	-2.0%	143	(39)
Utilities	86	109	23	3.0%	87	22
Construction	519	394	(125)	-3.4%	483	(89)
Manufacturing	665	618	(47)	-0.9%	623	(5)
Wholesale Trade	119	143	24	2.3%	126	17
Retail Trade	1,001	1,061	60	0.7%	1,043	18
Transportation and Warehousing	248	200	(48)	-2.7%	304	(104)
Information	103	65	(38)	-5.6%	98	(33)
Finance and Insurance	258	242	(16)	-0.8%	279	(37)
Real Estate and Rental and Leasing	399	386	(13)	-0.4%	465	(79)
Professional, Scientific, and Technical Services	353	378	25	0.9%	399	(21)
Management of Companies and Enterprises	42	70	28	6.6%	51	19
Administrative and Waste Services	198	223	25	1.5%	218	5
Other Services (except Public Administration)	563	543	(20)	-0.5%	631	(88)
Federal Civilian	239	215	(24)	-1.3%	242	(27)
Military	45	39	(6)	-1.8%	42	(3)
State Government	210	205	(5)	-0.3%	211	(6)
Local Government	771	692	(79)	-1.3%	760	(68)
Other/Suppressed Industries*	1,835	1,816	(19)	-0.1%	2,168	(352)
TOTAL	8,847	8,506	(341)	-0.5%	9,462	(956)



* 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

TARGET INDUSTRY CLUSTERS

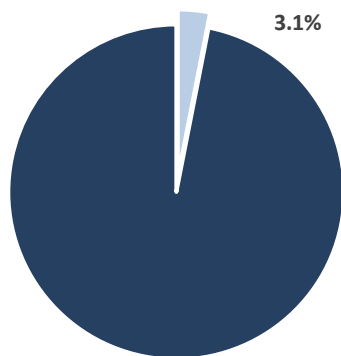
This section discusses potential target industries for Baker City based on the community’s historical strengths and advantages, as well as its established economic development goals. These are industries where Baker City might focus efforts to grow local business and attract new businesses. At the end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

AGRICULTURE SUPPORT/VALUE-ADDED FOOD PRODUCTS

Baker City serves as the commercial hub for a broader rural area with significant livestock and agricultural production. This proximity creates opportunities for value added activities within the City of Baker City.

Employment in these industries was estimated at 148 jobs in 2017, representing 3.1% of the local employment base. Projected growth over the next twenty years is 88 jobs, a number that anticipates an expanded importance of this sector in the future economic structure of Baker City. The average annual wage in 2017 in these industries was just over \$31,000.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	148.0
AVERAGE ANNUAL WAGE (2017)	\$31,231
PROJECTED GROWTH	88
% OF PROJECTED GROWTH	7.4%

MAJOR EMPLOYERS

FOREST SERVICE
ARM WARD RANCHES
NORTHWEST FOREST PRODUCTS INC
LANE PARRY FORESTRY CONSULTING INC
LANCE C ADAMS

While the supply of lumber remains limited, the area’s diverse agricultural industry offers significant opportunities to increase the level of value added that is captured locally.

The city already has an existing economic base in wood products and agricultural-related manufacturing, as well alcoholic beverages (Barley Brown, Glacier45). The nature of Baker City’s specialty products—breweries and distilleries, is supportive of leisure & tourism in the region.

Cluster Strengths

- Proximity to high-quality farmland and significant livestock and crop production.
- Has the ability to support a growing tourism industry.
- Geographic access to export markets.

Cluster Challenges

- Will need significant capital investments to support key opportunities.
- Declining food prices and rising input costs.
- Limited available labor workforce.

Potential Opportunities

- Bottling plant for Barley Brown.
- Development of a livestock processing facility that can serve the regional need.

- Increased food manufacturing.

Potential Partners

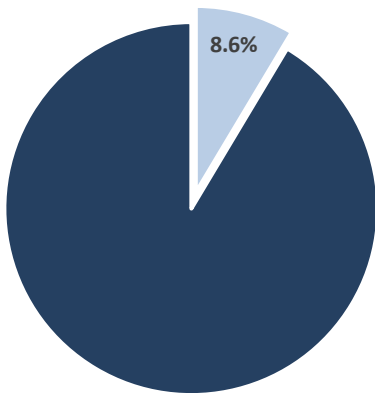
- OSU Extension Service
- Baker County Economic Development
- Chamber of Commerce
- Business Oregon
- Northeast Oregon Economic Development District (NEOEDD)
- US Forest Service
- Oregon Department of Agriculture

MANUFACTURING

The manufacturing sector is typically a highly desirable sector, which creates considerable value and often exports the bulk of its output. The city’s access to rail and Interstate 84 make it an attractive location for production.

Within Baker City the manufacturing sector has some overlap with the agricultural support sector, as Behlen Manufacturing has a product line targeting the regional agricultural economy.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	412.0
AVERAGE ANNUAL WAGE (2017)	\$45,676
PROJECTED GROWTH	244
% OF PROJECTED GROWTH	20.7%

MAJOR EMPLOYERS

- MARVIN WOOD PRODUCTS
- BEHLEN MFG CO
- NATURAL STRUCTURES INC
- ORCHARDS WOOD PRODUCTS INC
- BLUE MOUNTAIN FINE ART LLC
- CUTTERS EDGE



Cluster Strengths

- Interstate and rail access.
- Existing wood products industry with workforce expertise.
- Geographic access to export markets.
- Central location within Baker County provides for broad labor market access.
- Available and serviced land supply, in enterprise zone.

Cluster Challenges

- Awareness of Baker City opportunities is limited outside of region.
- Limited available labor workforce.

Potential Opportunities

- Bottling plant for Barley Brown.
- Prefabrication building systems.
- Increased food manufacturing.

Potential Partners

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

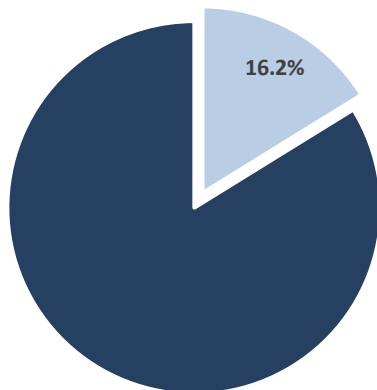
WHOLESALE AND RETAIL TRADE

Baker City serves as the commercial hub for Baker County, and as such has a retail trade sector that is 30% greater than what is supported by locally originating expenditures. The city’s access to Interstate 84 allows it to capitalize on through traffic along that corridor as well. The local warehouse/distribution sector (wholesale trade) is not as well established though.



The overall employment level in this sector was 778 in 2017, of which 90% is retail trade. This represents 16.2% of the employment base in Baker City. The sector is projected to add just under 100 jobs over the next twenty years, accounting for 8.3% of employment growth in Baker City during that period. The average annual wage is \$25,400 per year.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	778.0
AVERAGE ANNUAL WAGE (2017)	\$25,403
PROJECTED GROWTH	99
% OF PROJECTED GROWTH	8.3%

MAJOR EMPLOYERS

- SAFeway STORES, INC.
- BAKER TRUCK CORRAL
- BI-MART CORPORATION
- THATCHERS HARDWARE INC
- MAVERIK INC
- MILLER'S LUMBER & TRUSS
- DOLLAR TREE STORES INC
- LEW BROS. TIRE SERVICE, INC.

Due to the city’s strategic location along the I-84 corridor, retail services can function as a basic industry, bringing net new dollars into the community from travelers and truck traffic.

Cluster Strengths

- Interstate access.
- Commercial hub for broader region.
- Central location within Baker County provides for broad labor market access.
- Available and serviced land supply, including sites at I-84 interchange.

Cluster Challenges

- Limited available labor workforce.

Potential Opportunities

- Additional truck stop at I-84 interchange.

Potential Partners

- Baker County Economic Development
- Chamber of Commerce
- BMCC Small Business Development Center
- Business Oregon
- NEOEDD

RETIREMENT SERVICES

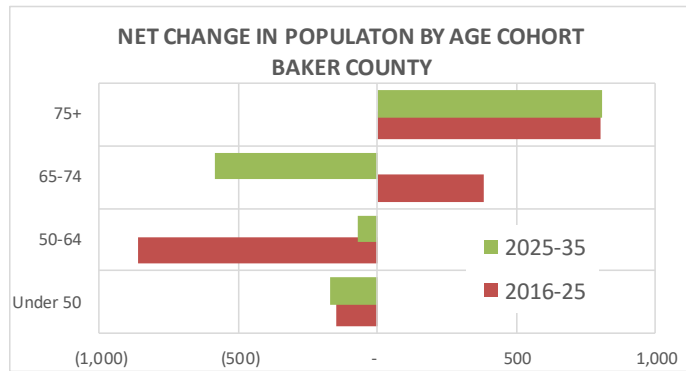
Largely the result of aging in place, the general livability of the area, and small-town community atmosphere, Baker City has a large existing retirement-aged population base. As noted in the demographic section of this report, the area has been aging and retirement services are expected to be an ongoing and growing need in the community.



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

³ Litwak, E. Longino, Jr., Charles, F. 1987, Migration patterns amount 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

In addition to direct retirement care services, roughly 45% of the City's population is aged 55 and older. These households provide broad support for leisure and financial activities in the local economy. Over the next five years, the retirement age household population is expected to continue to grow in Baker City as the large Baby Boomer generation continues to reach retirement. The city's attractive physical setting, approachable size, and relatively low cost of living will continue to make it attractive to retirees.



Cluster Strengths

- Livability and leisure activities.
- Favorable demographics.
- National growth in retirement segments, met by insufficient facilities.
- Local commercial base and amenities are attractive for retirees.

Cluster Weakness

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

Potential Partners

- Local retirement living providers
- Health care providers
- AARP
- Oregon Aging and Disability Services
- Local volunteering opportunities
- OSU Extension Service (health and on-going education programs)
- Distance learning programs

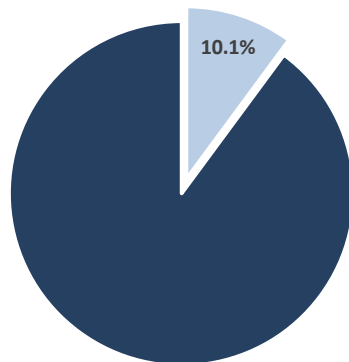
TOURISM: AMENITY RETAIL, RECREATION, AND HOSPITALITY

Baker City has physical and locational attributes that make recreation and hospitality an attractive target sector. The area is centrally located with access to recreational opportunities such as Anthony Lakes, Wallowa Mountains, and Hells Canyon. The historic core of the Baker City provides an attractive setting and historical context, with a range of amenities that can support tourist activities. The local recreation amenities are supplemented by a rich history that is shared by the many towns in Baker County.



The amenities that tourism traffic supports are largely consistent with what is desirable to local residents. Quality retail, restaurant, recreation, and hospitality tenants make a community an attractive place to live and work. Studies have shown that amenity-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 offers Baker City the opportunity to raise its amenity profile and continue to revitalize strategic target areas such as the historic downtown.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	486
AVERAGE ANNUAL WAGE (2017)	\$17,170
PROJECTED GROWTH	216
% OF PROJECTED GROWTH	18.3%

MAJOR EMPLOYERS

- SHIVAS HOTEL INC
- WINDMILL ENTERPRISES INC
- MCDONALDS
- OREGON TRAIL MOTEL & RESTAURANT
- INLAND CAFE INC
- GEISER GRAND
- EASTERN OREGON ADVENTURES INC
- PAIZANOS PIZZA INC

This sector accounted for 486 jobs in 2017, with average annual wages of \$17,170. The sector is expected to add 216 new jobs over the next twenty years, accounting for 8.3% of projected growth.

Cluster Strengths

- Recreational amenities.
- Historical context.
- Access to I-84, and central location within Baker County.
- Historic Downtown area attractive for tourists.
- Available sites along I-84 and near the interchanges.

Cluster Weakness

- A limited labor force for staffing.

Potential Partners

- Travel Oregon
- Chamber of Commerce
- Business Oregon
- NEOEDD

EDUCATION AND HEALTH SERVICES

The education and health services sectors account for almost a quarter of all employment in Baker City. 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:

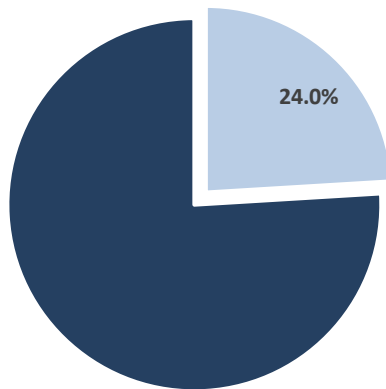
- Emphasis on leveraging cost advantages.
- Strong growth in utilization of mobile health systems, software, and access to information.

- 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.

The local hospital is Saint Alphonsus Medical Center, which is part of Trinity Health’s system. The facility offers general medical and surgical services but is limited in the resources for care available. Blue Mountain Community College has a center in Baker City that offers college credit classes, job skills workshops, college preparatory classes, and customized training for business and industry.

This sector accounted for 1,159 jobs in 2017, with average annual wages of \$41,376. The sector is expected to add 513 new jobs over the next twenty years, accounting for 43.4% of projected growth.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	1,156
AVERAGE ANNUAL WAGE (2017)	\$41,376
PROJECTED GROWTH	513
% OF PROJECTED GROWTH	43.4%

MAJOR EMPLOYERS

TRINITY SAINT ELIZABETH
 BAKER WEB ACADEMY
 ST LUKES HEALTH SYSTEM LTD
 BROOKLYN ELEM SCHOOL
 BAKER HIGH SCHOOL
 SETTLERS PARK
 SOUTH BAKER ELEMENTARY SCHOOL
 DISTRICT 13 OFFICE

Cluster Strengths

- Aging of population will support health services.
- Baker City the regional hub for the area.
- Access to I-84, and central location within Baker County.

Cluster Weakness

- A limited labor force for staffing.
- Limited growth in families with children.

Cluster Opportunities

- Development of expanded and/or new medical facilities.
- Expansion of offerings from BMCC.

Potential Partners

- Trinity Health
- Eastern Oregon University
- Blue Mountain Community College
- BTI
- WorkSource Oregon
- OSU nursing programs

SELF EMPLOYMENT

Self employment accounts for an estimated 7.3% of the total employment base in Baker City. 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.

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.
- Broadband connectivity.
- Access to I-84.

Cluster Weakness

- Accessibility to a major airport.

Potential Partners

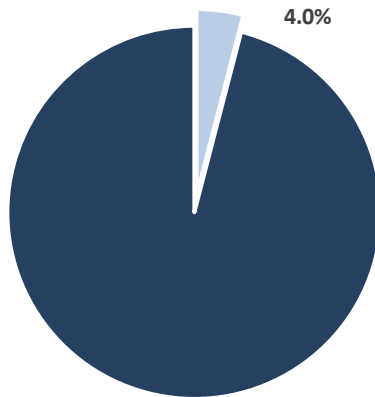
- Chamber of Commerce
- BMCC Small Business Development Center
- Launch Pad Baker
- BTI
- Business Oregon
- NEOEDD

CONSTRUCTION

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

This sector accounted for roughly 200 jobs in 2017, with average annual wages of \$32,500. The sector is expected to add an additional 100 new jobs over the next twenty years, accounting for 10% of projected growth.

SHARE OF LOCAL ECONOMY



TARGET SECTOR STATS

2017 EMPLOYMENT	194
AVERAGE ANNUAL WAGE (2017)	\$32,445
PROJECTED GROWTH	108
% OF PROJECTED GROWTH	9.7%

MAJOR EMPLOYERS

JOHNSON, SID, & CO.
GYLLENBERG CONSTRUCTION INC
DIST 13 BAKER
RAFTER M CONSTRUCTION/COVERWORKS PL
LOGSDON GRADING INC
SREC
ELKHORN BARN CO LLC

Cluster Strengths

- Central location on interstate from which to serve all of county.
- Will respond to growth in workforce and other target industries.
- Identified need for new housing construction.

Cluster Challenges

- Strength of this sector tends to be dependent on other growth.
- Currently the skilled construction labor workforce is limited.

Potential Opportunities

- Continued work force development, skills training.
- Under-capacity market creates opportunities for new local contractors.

Potential Partners

- Chamber of Commerce
- Baker County Economic Development
- Blue Mountain Community College
- BTI

COMPARISON OF TARGET INDUSTRIES

The target industries presented here offer different advantages and challenges in terms of overall job growth, average wages and competitive advantages. 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 Baker City.

- In terms of total job creation, the education and health services sector gained the most employment during this time and is forecasted to continue growing in the region. Wages in this category are lower than in manufacturing, but higher than tourism-related jobs. Given the aging of the population, it is forecasted that health care and retirement communities will continue to be a growth industry for many decades.
- The wholesale and retail trade sectors also reported employment growth since 2007 and are projected to add approximately 100 new jobs over the next twenty years.
- The other targeted industries have not yet recovered their pre-recession employment levels but are projected to add significant new employment over the next twenty years.

- Tourism-related jobs are generally relatively low-paying but provide an important base of opportunity for part-time workers, low-skilled and first-time workers. Food service and hospitality also serve local residents and businesses and can have a positive impact on livability and recruitment.
- Manufacturing of food and agricultural products offer solid middle-class wages. Employment in this category had declined over the last decade but is projected to grow over the forecast period.

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	
MANUFACTURING	501	412	(89)	244	2.4%	\$45,676
Metals	186	215	29	127	2.4%	\$45,676
Food Manufacturing	45	10	(35)	6	2.4%	\$45,676
Wood Manufacturing	270	187	(83)	111	2.4%	\$45,676
AGRICULTURAL & FORESTRY SUPPORT	205	148	(57)	88	2.4%	\$31,231
Agriculture, forestry, fishing, and hunting	160	138	(22)	82	2.4%	\$30,184
Food Manufacturing	45	10	(35)	6	2.4%	\$45,676
WHOLESALE & RETAIL TRADE	675	778	103	99	0.6%	\$25,403
Wholesale trade	68	78	10	8	0.5%	\$37,314
Retail trade - Stores	498	589	91	76	0.6%	\$24,076
Retail trade - Other	109	111	2	14	0.6%	\$24,076
TRAVEL, RECREATION, TOURISM	491	486	(5)	216	1.9%	\$17,170
Arts, Entertainment, and Recreation	16	12	(4)	5	1.9%	\$18,358
Accommodation and Food Services	475	474	(1)	210	1.9%	\$17,140
EDUCATION, HEALTH SERVICES	592	1,156	564	513	1.9%	\$41,376
Educational services	296	371	75	165	1.9%	\$33,679
Health care and social assistance	296	785	489	348	1.9%	\$45,014
CONSTRUCTION	210	194	(16)	115	2.4%	\$32,445
Construction	210	194	(16)	115	2.4%	\$32,445
Total/Weighted Average	2,674	3,174	500	1,274	1.7%	\$33,294

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. Baker County Chamber of Commerce & Visitor's Bureau

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. The Chamber works to improve the local business climate and economy while promoting the area in its best light. 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. Baker County Economic Development

Baker County Economic Development is a partnership of Baker City and the county to provide community information, professional advising and resources, and track available commercial real estate. The agency is the natural lead for many of the economic development steps that can be implemented regionally. Local communities should work closely with the economic development department to ensure that they are informed of regional efforts and that local objectives and opportunities are represented. The agency is a good first contact for any economic and workforce questions.

4. 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.

5. 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.

6. 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 broad range of economic development initiatives for businesses and communities, including guidance, education, analysis, funding, and referrals to other partners. Business Oregon is an excellent resource for economic development questions that can benefit from a statewide knowledge base.

7. Oregon Department of Development and Land Conservation (DLCD)

DLCD 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.

8. Baker Technical Institute

The Baker Technical Institute offers technical professional training and apprenticeship program for industries such as heavy equipment, welding, nursing, construction and other sectors with strong representation in the region. BTI works with regional employers and industry experts to offer relevant hands-on training and apprenticeships. As with the community college and other training programs, local partner agencies in economic development can work with BTI to understand their programs and coursework and also communicate local employment trends and changing needs.

9. 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.

10. Blue Mountain Community College

The community college covers a wide range of northeastern Oregon stretching from Grant County to Wallowa County. Blue Mountain Community College offers a range of programs through their location in Baker City, including college prep, workforce and technical training, and a transfer associates degree meant for students transferring to a four-year college.

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.

11. 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 Baker County, there is an extension service office located in Baker City at the fairgrounds.

12. 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.

13. 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

BAKER CITY EMPLOYMENT FORECASTS

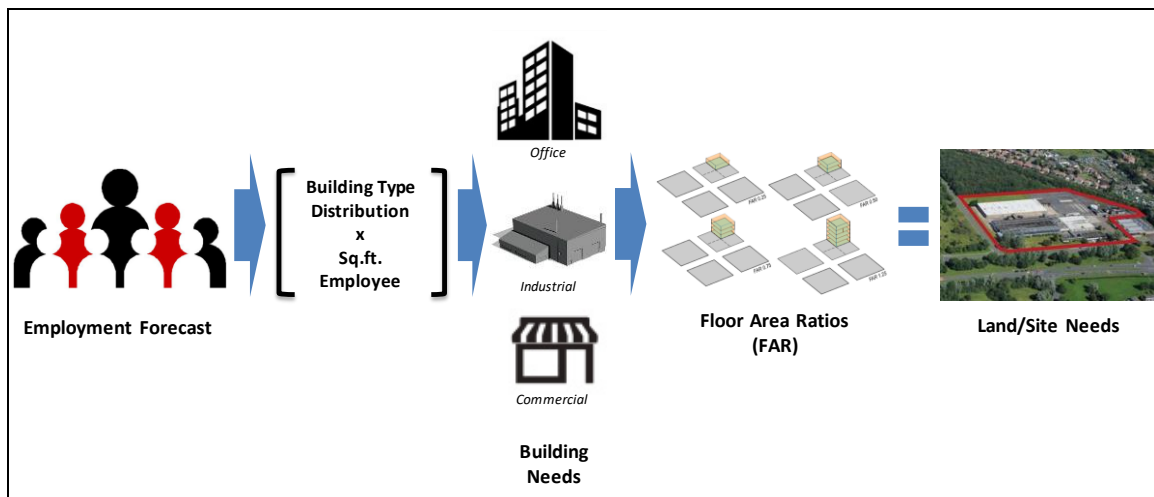
Goal 9 requires that jurisdictions plan for a 20-year supply of commercial and industrial capacity. Because employment capacity is the physical space necessary to accommodate new workers in the production of goods and services, employment need forecasts typical begin with a forecast of employment growth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



The first analytical step of the analysis is to update covered employment to the 2018 base year. Baker City’s on Quarterly Census of Employment and Wages (QCEW) data 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 Baker City is 4,667 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		
Construction	194	0.0%	194	73%	264
Manufacturing	412	2.2%	421	98%	432
Wholesale Trade	78	0.0%	78	97%	80
Retail Trade	700	1.9%	713	94%	755
T.W.U.	155	-0.5%	154	91%	169
Information	58	0.0%	58	95%	61
Finance & Insurance	108	0.0%	108	92%	118
Real Estate	29	0.0%	29	92%	32
Professional & Technical Services	196	0.0%	196	88%	222
Administration Services	119	0.0%	119	88%	135
Education	371	0.0%	371	95%	393
Health Care	785	0.0%	785	95%	831
Leisure & Hospitality	486	-3.0%	471	94%	499
Other Services	271	0.0%	271	83%	328
Government	350	0.0%	350	100%	350
TOTAL	4,312	0.2%	4,319	93%	4,667

1 AAGR from 2012-2017 for Baker County

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

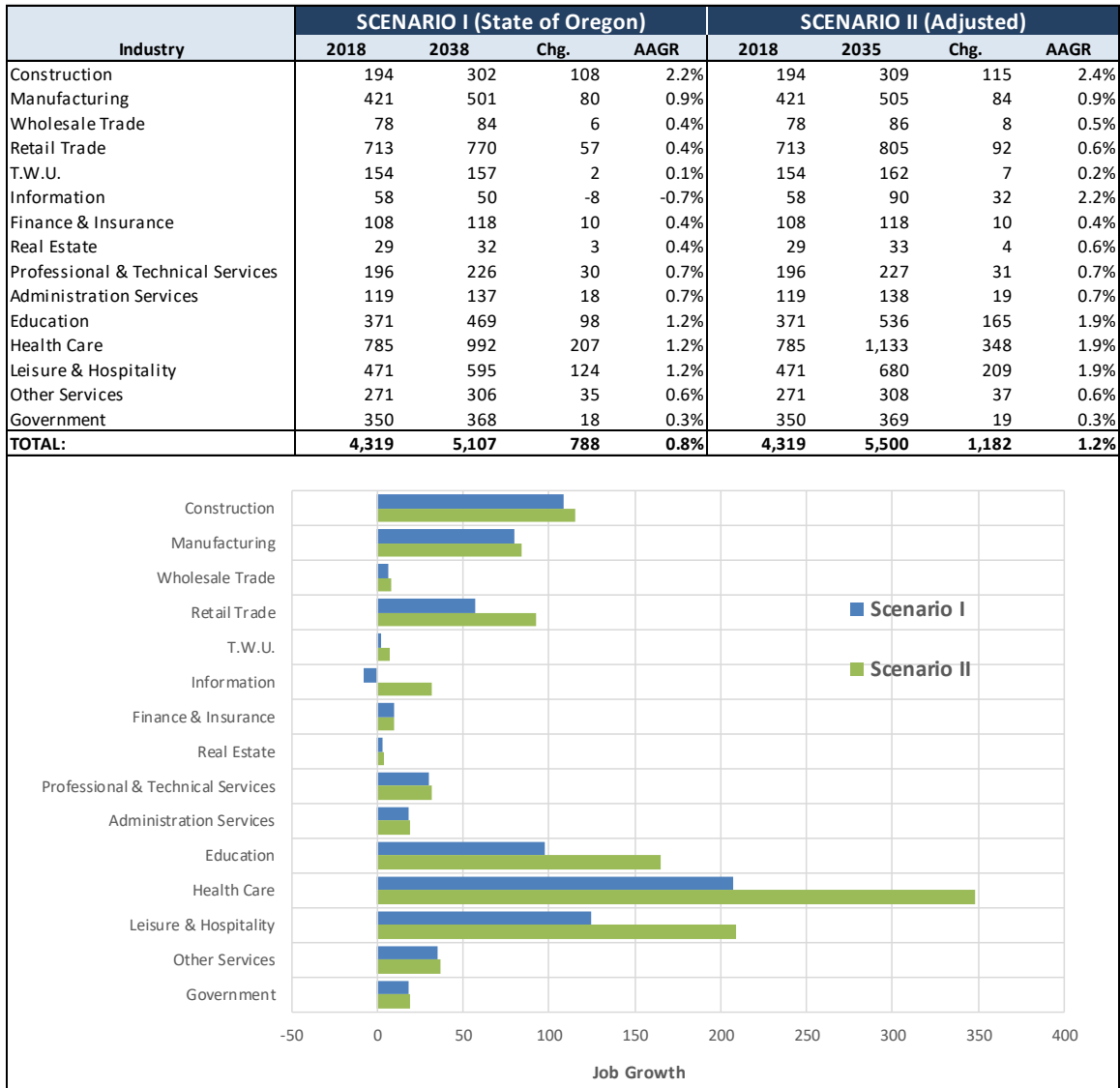
T.W.U. = Transportation, Warehousing, and Utilities

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 Baker 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 Oregon Workforce Region (Baker, Grant, Harney, Malheur, Union, and Wallowa Counties) to the 2018 Baker City base. This method results in an average annual growth rate of 0.8%, with total job growth of 788 jobs over the forecast period.

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.

FIGURE 4.03: COMPARISON OF ALTERNATIVE FORECASTS, BAKER CITY



SCENARIO 2: ALTERNATIVE EMPLOYMENT FORECAST

A second forecast scenario was prepared which 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 technical advisory committee. Further, the alternative scenario recognizes that economic development efforts and public policy can influence realized growth in targeted sectors. This scenario considers the influence of known or anticipated development over a near and medium-term horizon.

This scenario forecasts an average annual growth rate of 1.2% for the period. 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 0.8% to 1.2% average annual growth. Job growth estimates range from 788 to 1,182 jobs. The estimates in the preceding analysis are useful in creating a baseline understanding of growth prospects by industry. 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.

The forecasts were broken down into four five-year increments, assuming a consistent rate of growth over the period.

FIGURE 4.04: SUMMARY OF PROJECTION SCENARIOS, BAKER CITY

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	194	217	242	270	302	23	25	28	32	108
Manufacturing	421	440	459	480	501	19	19	20	21	80
Wholesale Trade	78	80	81	83	84	2	2	2	2	6
Retail Trade	713	727	741	756	770	14	14	14	15	57
T.W.U.	154	155	155	156	157	1	1	1	1	2
Information	58	56	54	52	50	-2	-2	-2	-2	-8
Finance & Insurance	108	110	113	115	118	2	2	2	2	10
Real Estate	29	30	30	31	32	1	1	1	1	3
Professional & Technical Services	196	203	210	218	226	7	7	8	8	30
Administration Services	119	123	128	132	137	4	4	5	5	18
Education	371	393	417	442	469	22	24	25	27	98
Health Care	785	832	882	936	992	47	50	53	56	207
Leisure & Hospitality	471	500	530	562	595	28	30	32	34	124
Other Services	271	279	288	297	306	8	9	9	9	35
Government	350	354	359	364	368	4	5	5	5	18
TOTAL:	4,319	4,499	4,690	4,893	5,107	181	191	202	214	788
SCENARIO 2 (Modified)										
Construction	194	218	245	275	309	24	27	30	34	115
Manufacturing	421	441	461	483	505	20	21	21	22	84
Wholesale Trade	78	80	82	84	86	2	2	2	2	8
Retail Trade	713	735	758	781	805	22	23	23	24	92
T.W.U.	154	156	158	160	162	2	2	2	2	7
Information	58	65	72	81	90	7	8	8	9	32
Finance & Insurance	108	110	113	115	118	2	2	3	3	10
Real Estate	29	30	31	32	33	1	1	1	1	4
Professional & Technical Services	196	203	211	219	227	7	8	8	8	31
Administration Services	119	124	128	133	138	5	5	5	5	19
Education	371	407	446	489	536	36	39	43	47	165
Health Care	785	860	943	1,034	1,133	75	83	91	99	348
Leisure & Hospitality	471	517	566	621	680	45	50	54	60	209
Other Services	271	280	289	298	308	9	9	9	10	37
Government	350	355	359	364	369	5	5	5	5	19
TOTAL:	4,319	4,580	4,863	5,169	5,500	261	283	306	332	1,182

EMPLOYMENT LAND FORECAST

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 those economic activities usually locate in. As an example, insurance agents typically locate in 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 roughly 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 floor area ratio FAR for each development form.

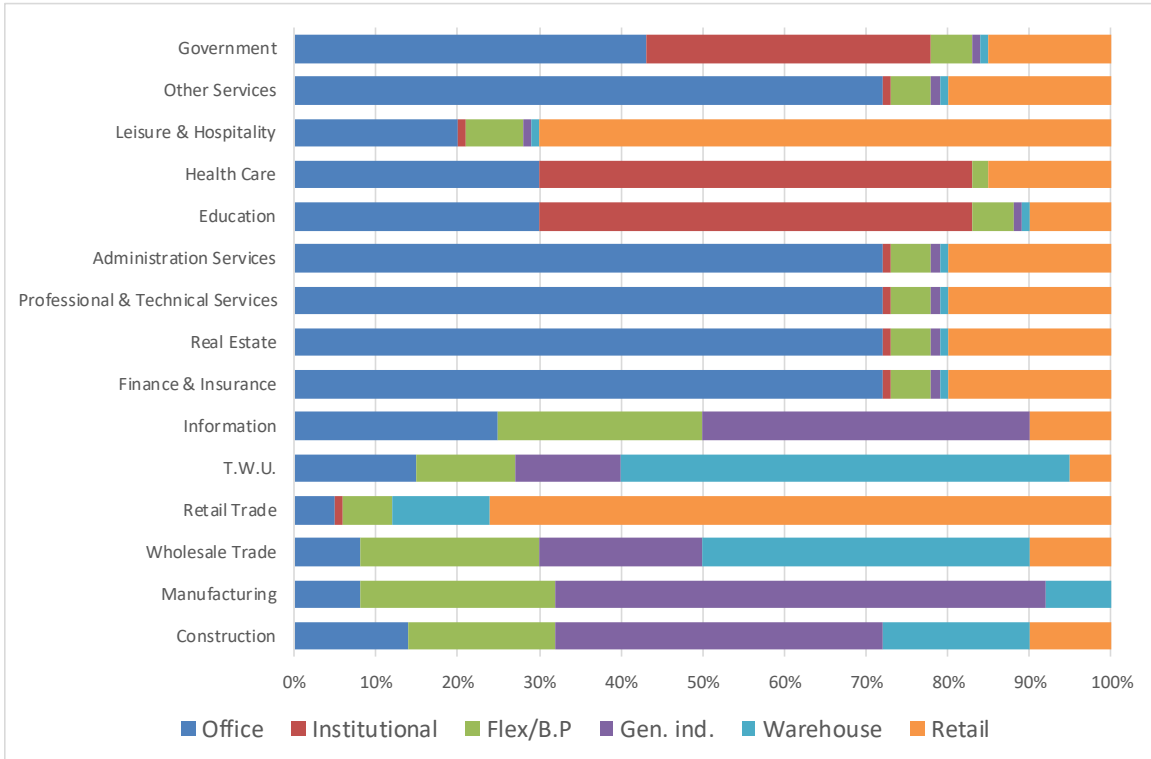
LAND DEMAND ANALYSIS – ADJUSTED FORECAST

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, BAKER CITY

Industry Sector	20-year Job Forecast		BUILDING TYPE MATRIX					
	Number	AAGR	Office	Institutional	Flex/B.P	Gen. ind.	Warehouse	Retail
Construction	115	2.4%	14%	0%	18%	40%	18%	10%
Manufacturing	84	0.9%	8%	0%	24%	60%	8%	0%
Wholesale Trade	8	0.5%	8%	0%	22%	20%	40%	10%
Retail Trade	92	0.6%	5%	1%	6%	0%	12%	76%
T.W.U.	7	0.2%	15%	0%	12%	13%	55%	5%
Information	32	2.2%	25%	0%	25%	40%	0%	10%
Finance & Insurance	10	0.4%	72%	1%	5%	1%	1%	20%
Real Estate	4	0.6%	72%	1%	5%	1%	1%	20%
Professional & Technical Services	31	0.7%	72%	1%	5%	1%	1%	20%
Administration Services	19	0.7%	72%	1%	5%	1%	1%	20%
Education	165	1.9%	30%	53%	5%	1%	1%	10%
Health Care	348	1.9%	30%	53%	2%	0%	0%	15%
Leisure & Hospitality	209	1.9%	20%	1%	7%	1%	1%	70%
Other Services	37	0.6%	72%	1%	5%	1%	1%	20%
Government	19	0.3%	43%	35%	5%	1%	1%	15%
TOTAL	1,182	1.2%	27%	24%	8%	10%	4%	27%

FIGURE 4.06: ASSUMED DISTRIBUTION OF BY SPACE TYPE AND SECTOR, BAKER CITY



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 4.07: NET CHANGE IN EMPLOYMENT ALLOCATED BY BUILDING TYPE, BAKER CITY – 2018-2038

Industry Sector	NET CHANGE IN EMPLOYMENT BY BUILDING TYPE - 2018-2038						Total
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	
Construction	16	0	21	46	21	11	115
Manufacturing	7	0	20	50	7	0	84
Wholesale Trade	1	0	2	2	3	1	8
Retail Trade	5	1	6	0	11	70	92
T.W.U.	1	0	1	1	4	0	7
Information	8	0	8	13	0	3	32
Finance & Insurance	7	0	1	0	0	2	10
Real Estate	3	0	0	0	0	1	4
Professional & Technical Services	23	0	2	0	0	6	31
Administration Services	14	0	1	0	0	4	19
Education	49	87	8	2	2	16	165
Health Care	105	185	7	0	0	52	348
Leisure & Hospitality	42	2	15	2	2	146	209
Other Services	27	0	2	0	0	7	37
Government	8	7	1	0	0	3	19
TOTAL	314	283	93	117	51	324	1,182

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 indicated of job densities, determined on a per net-developable acre basis.

FIGURE 4.08: NET ACRES REQUIRED BY BUILDING TYPOLOGY, BAKER CITY– 20 YEAR

	DEMAND BY GENERAL USE TYPOLOGY, 2018-2038						Total
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	
Employment Growth	314	283	93	117	51	324	1,182
Avg. SF Per Employee	350	600	990	600	1,850	500	591
Demand for Space (SF)	110,000	169,600	92,000	70,100	93,800	162,100	697,600
Floor Area Ratio (FAR)	0.35	0.45	0.30	0.30	0.35	0.25	0.32
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	10.0%
Implied Density (Jobs/Acre)	39.2	32.7	11.9	20.7	7.8	19.6	21.6
Net Acres Required	8.0	8.7	7.8	5.6	6.5	16.5	54.8

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 just over 21 jobs per acre, with the projected 1,182-job expansion in the local employment base through 2038 requiring an estimated 54.8 net acres of employment land.

In addition to assuring adequate capacity for employment-driven land needs over a twenty-year horizon, local jurisdictions are also required to demonstrate that they have an adequate capacity of readily available sites to meet their more immediate needs, which are defined as employment land needs over the next five years. As shown in the following table, in Baker City that need is estimated at 12.1 net acres.

FIGURE 4.09: NET ACRES REQUIRED BY BUILDING TYPOLOGY, BAKER CITY – 5 YEAR

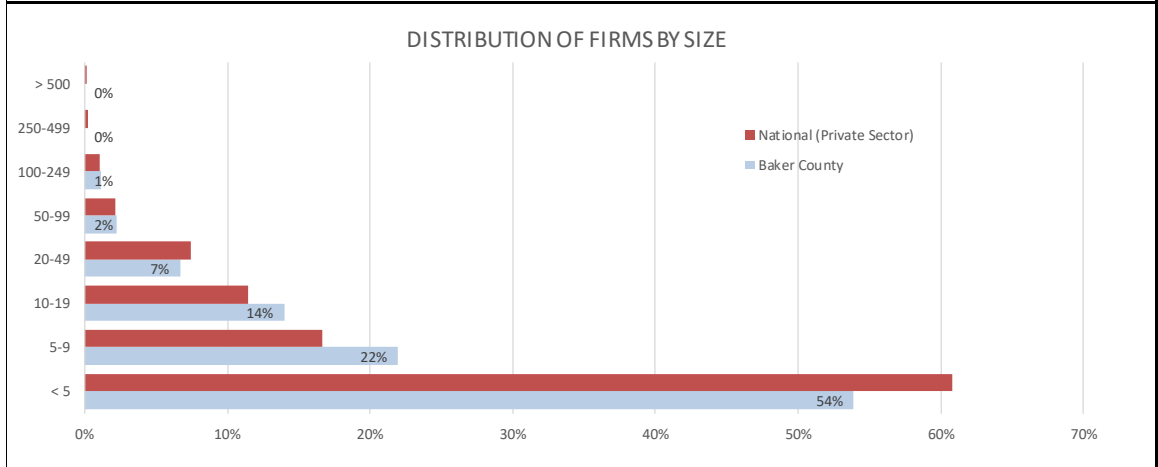
	DEMAND BY GENERAL USE TYPOLOGY, 2018-2038						Total
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	
Employment Growth	70	61	21	26	11	72	261
Avg. SF Per Employee	350	600	990	600	1,850	500	585
Demand for Space (SF)	24,500	36,900	20,400	15,500	21,100	36,100	154,500
Floor Area Ratio (FAR)	0.35	0.45	0.30	0.30	0.35	0.25	0.32
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	10.0%
Implied Density (Jobs/Acre)	39.2	32.7	11.9	20.6	7.8	19.6	21.5
Net Acres Required	1.8	1.9	1.7	1.2	1.5	3.7	12.1

There is a significant distinction between capacity and readily available site supply. The readily-available inventory must currently have appropriate entitlements and infrastructure capacity to accommodate short-term development.

The local employment base is largely dominated by relatively small firms, with the local economic base showing a higher proportion than the national average for firms with between 5 and 20 employees. Only eight firms currently have more than 100 employees and none have more than 250.

FIGURE 4.10: DISTRIBUTION OF FIRMS BY SIZE, BAKER CITY

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	13	15	8	3	0	1	0	0	40
Mining	1	0	2	1	0	0	0	0	4
Construction	46	18	9	3	0	0	0	0	76
Food Manufacturing	4	1	0	0	0	0	0	0	5
Wood Manufacturing	3	2	1	0	0	2	0	0	8
Metals Manufacturing	10	2	2	0	1	1	0	0	16
Utilities	7	2	1	2	0	0	0	0	12
Wholesale trade	9	7	2	0	0	0	0	0	18
Retail trade	19	13	18	6	2	1	0	0	59
Retail trade	17	5	2	3	0	0	0	0	27
Transportation	13	4	4	0	0	0	13	0	21
Delivery and warehousing	9	2	1	1	0	0	0	0	13
Information	6	1	3	1	0	0	0	0	11
Finance and Insurance	18	11	1	0	0	0	0	0	30
Real Estate and Rental	10	4	0	0	0	0	0	0	14
Professional, Scientific, and Technical Services	35	6	3	2	1	0	0	0	47
Management of Companies and Enterprises	0	1	1	1	0	0	0	0	3
Administrative and Waste Management	18	4	1	3	0	0	0	0	26
Educational services	6	1	2	5	4	1	0	0	19
Health care and social assistance	15	15	10	8	2	1	0	0	51
Arts, Entertainment, and Recreation	1	2	2	0	0	0	0	0	5
Accommodation and Food Services	17	13	18	6	4	0	0	0	58
Other services	100	19	3	0	1	0	0	0	123
Government	8	9	6	3	1	1	0	0	28
TOTAL	385	157	100	48	16	8	0	0	714



SOURCE: State of Oregon QCEW Data

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. A distance of 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 of these 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 many 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.

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 (BAKER CITY)

ZONE	Vacant		Redevelopable		Total	
	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage
General Commercial	47	215.4	2	19.2	49	234.6
Industrial	50	184.8	5	141.4	55	326.2
Light Industrial	1	0.2	2	0.3	3	0.5
Totals:	98	400.3	9	160.9	107	561.2

Source: Baker County, Baker City, Johnson Economics LLC

The inventory identifies over 550 acres of vacant or potentially redevelopable land in both commercial and industrial zones. Roughly 42% of this land is in the General Commercial zone, while 58% has Industrial zoning. 70% is identified as “vacant”, and 30% in potential “redevelopment” sites. Most “redevelopable” acreage is industrial.

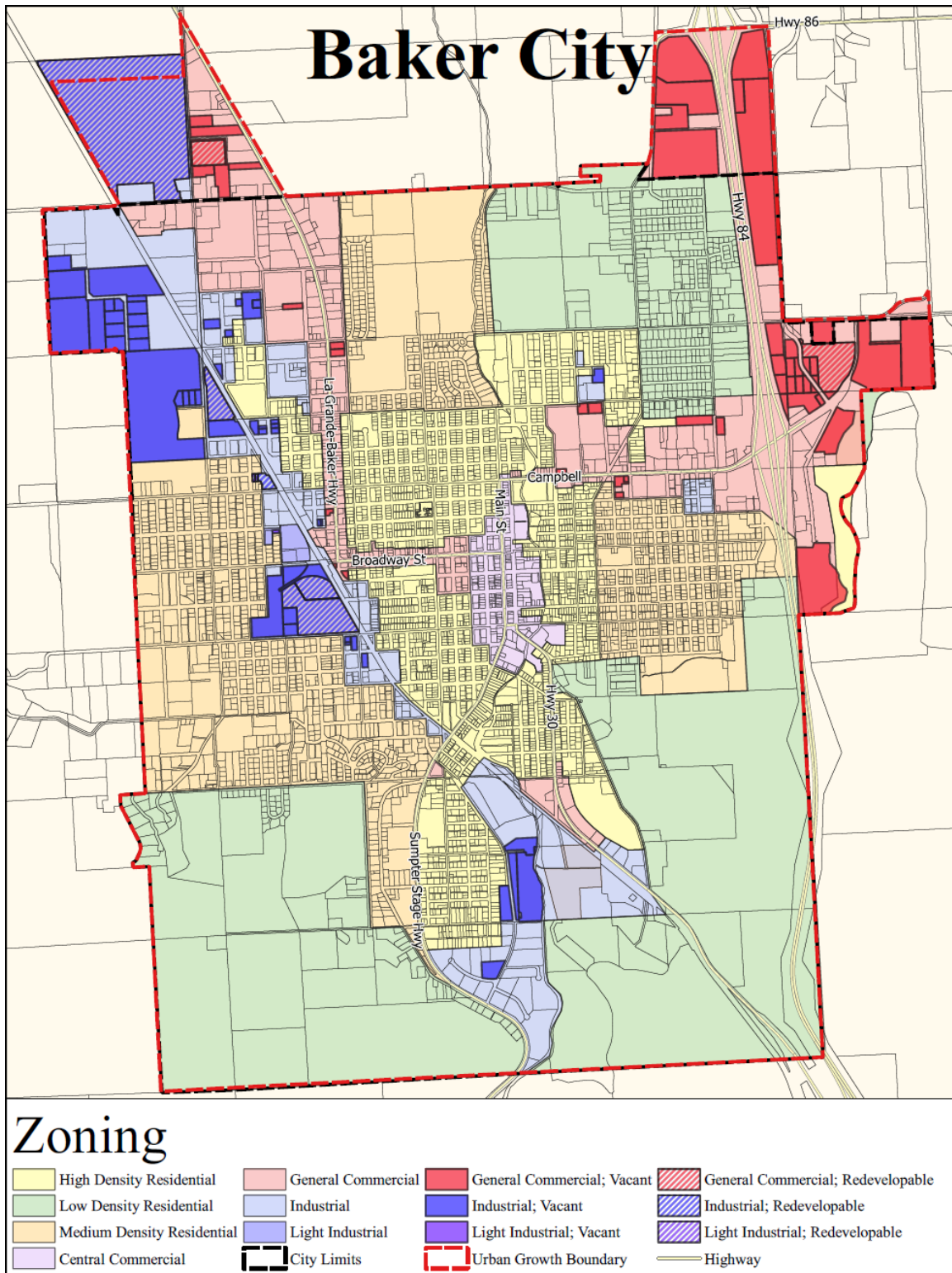
The following figure presents the inventory broken down by the size of parcels. While there is a good mixture of small-to-mid parcel sizes, there are also some potential large employment sites identified. Sites of 10 acres or larger represent over 70% of the identified acreage.

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

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
General Commercial	18	9.7	18	39.3	3	18.1	7	103.6	3	63.8
Industrial	25	11.2	21	45.1	5	34.8	4	57.3	2	178.0
Light Industrial	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Totals:	44	21.1	39	84.3	8	53.0	11	161.0	5	241.8

Source: Baker County, Baker City, Johnson Economics LLC

FIGURE 5.03: MAP OF EMPLOYMENT BUILDABLE LAND INVENTORY (BAKER CITY)



Source: Baker 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 55 net acres was identified across a range of building types.

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

	DEMAND BY GENERAL USE TYPOLOGY, 2018-2038						Total
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	
Employment Growth	314	283	93	117	51	324	1,182
Avg. SF Per Employee	350	600	990	600	1,850	500	591
Demand for Space (SF)	110,000	169,600	92,000	70,100	93,800	162,100	697,600
Floor Area Ratio (FAR)	0.35	0.45	0.30	0.30	0.35	0.25	0.32
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	10.0%
Implied Density (Jobs/Acre)	39.2	32.7	11.9	20.7	7.8	19.6	21.6
Net Acres Required	8.0	8.7	7.8	5.6	6.5	16.5	54.8

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

There is a total projected 20-year need for nearly 55 acres of buildable employment land in industrial and commercial zones. Roughly 35% 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 560 acres of buildable employment land noted in Figure 5.01.

Conclusion

There is currently sufficient buildable employment land within the urban growth boundary to accommodate the projected need for new development of these uses over the 20-year period. If the economy and industry growth outpace the projections in this analysis, there should still be a significant surplus of land to accommodate this growth. Given this surplus, the City can focus on readiness and marketing of available sites (see Section VII).

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**

Baker City is the largest population center in Baker County at nearly 10,000 residents. It is located in the center of the county on the I-84 corridor. The two closest markets of comparable size are Ontario, Oregon roughly 75 miles to the south, and La Grande, roughly 45 miles to the north.

As the largest market in this area, Baker City is a center of services, shopping, health care and employment for much of the surrounding county. Many types of businesses that may not be viable in smaller towns, or at a distance from the freeway, are viable in Baker City. The city can be expected to continue to exert this “commercial gravity” in the county.
- **Services**

Baker City is a full service city, featuring grocery, general merchandise, hardware, dining, recreation, and lodging. Baker City businesses serve the local population and much of the rest of the county that lacks these services.
- **Public Services**

Baker City offers full public services including schools, police, fire and medical services. The city is also the seat of Baker County government and services, and features Bureau of Land Management and National Forest Service offices.
- **Transportation**

Baker City is located on I-84, the main transportation spine between the largest population centers in Oregon and Idaho. The Boise area is a roughly two-hour drive east of Baker City. The freeway provides good access to freight and supply chain, though the distance from other major markets is an obstacle for businesses who rely on freight. The freeway is a strong asset for businesses that rely on travelers, such as lodging and dining, or visibility from the freeway like gas stations and convenience retail. There is a small airport for general aviation located outside of the city.
- **Labor Market**

Baker City is also the largest employment concentration in the county, offering nearly 4,700 jobs across a range of sectors. The largest shares are in the health care, retail and accommodation and food service.

- **Suppliers**

Baker County has a somewhat distant location from those categories of suppliers that are not available locally. The greater Boise area is the closest metro area that would have access to a fuller range of suppliers for businesses. Baker City has freeway access, which carries many thousands of vehicles through and to/from the city every day, but the distance to major markets will remain a challenge, increasing shipping time and expense.

- **Environmental Constraints**

Baker City industrial and commercial lands feature some potential constraints from wetlands and floodplains in the southern and central areas of the city. Some commercial lands east of the freeway features steep slopes that partially constrain them. These issues are addressed in the Buildable Lands Inventory.

- **Education and Technical Training Programs**

Blue Mountain Community College offers a range of programs through their location in Baker City, including college prep, workforce and technical training, and a transfer associates degree meant for students transferring to a four-year college. The Baker Technical Institute offers technical professional training and apprenticeship program for industries such as heavy equipment, welding, nursing and others.

- **Utilities for Employers**

Water	Sewer	Power	Data/Telecom
Good	Adequate / System improvements expected	Adequate (Not for largest users, i.e. data centers)	Good/Fiber

Identified Challenges

- Housing availability;
- Aging workforce/difficulty in retaining younger residents;
- Over-reliance on government employment, would like more private sector growth;
- Distances for shipping;
- Workforce adequacy, matching skills to available jobs;
- Some mismatch between perceived land values and actual market values.

Potential Opportunities

- Freeway access;
- Available, inexpensive commercial and industrial real estate;
- Gateway to recreation in areas;
- Natural beauty;
- Lifestyle amenities;
- Spillover growth from Idaho, retirees, remote workers;
- Recent growth in retail, dining/brewing, health care;
- Smaller manufacturers.

TARGET INDUSTRY CONCLUSIONS

As discussed in Section III of this report, Baker City 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
- Manufacturing
- Wholesale and Retail Trade
- Retirement Services
- Amenity Retail, Recreation, and Hospitality
- Education and Health Services
- 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 Baker City.

FORECASTED LAND NEED CONCLUSIONS

As discussed in Section IV of this report, there is projected growth of nearly 1,200 jobs and support for nearly 55 acres of employment land (industrial and commercial.) Roughly 35% 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 560 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 buildable employment land within the Baker City urban growth boundary to accommodate the projected need for new development of these land uses over the 20-year period. If the economy and industry growth outpace the projections in this analysis, there should still be a significant surplus of land to accommodate this growth.

VII. ECONOMIC DEVELOPMENT: POTENTIAL NEXT STEPS

The analysis presented in this EOA report points to a sufficient supply of employment land within the Urban Growth Boundary to accommodate forecasted growth for at least 20 years. This points to no affirmative need to proactively undertake any UGB actions at this time. However, there are 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. At minimum, 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) **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 northeastern Oregon is also a good resource to build from. Baker County and the cities should ensure that they actively participate in creating these five-year strategy plans as well.

- 4) **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.
- 5) **Updated Goal 10 Housing Needs Analysis:** An important challenge to economic development identified in many parts of Baker County 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 state 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) **Evaluate the opportunity for a local livestock processing facility:** Baker County has significant production of livestock and locating a processing facility locally would provide support to those activities while also supporting local employment. The facility would need to be licensed by at a minimum ODA or ideally USDA for interstate export. Hines Meat Co. in La Grande is an example of a locally-scaled meat processing facility that connects residents to local agriculture.
- 7) **Evaluate other opportunities for agri-tourism and value-added agriculture:** Baker County and its cities should continue to look for ways to add value and create local brands from agricultural and natural resources in the area. These might include farm tours and lodging, farm-to-table dining, brewing and spirits, Made in Baker County branding, hemp and cannabis, among others. In conjunction with the meat processing business, Baker County Economic Development should consider undertaking a more in-depth study of the prospects and best opportunities to grow and market these local businesses.
- 8) **Facilitate the build-out of needed infrastructure to support new development:** One challenge faced by Baker City and many other communities in the region is the cost of extending infrastructure such as streets, water and sewer to areas of new development. These costs faced by both the city and the builder can create an obstacle for otherwise developable employment and residential land from being built-out. Baker City, perhaps in conjunction with the county, should consider a study into infrastructure costs and review of best practices in helping to overcome this barrier. This process can also help identify barriers in the code.

The Regional Solutions team for Northeastern Oregon has identified provision of infrastructure to industrial lands as an area of focus. As these infrastructure issues are shared by many Oregon communities, Regional Solutions may be a good resource for finding other studies and best practices on this topic.

- 9) **Advocate and support a regional broadband internet solution:** During this process, the lack of reliable and fast internet connectivity in many parts of Baker County and surrounding counties 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 should express support and advocate for these efforts, and participate in regional planning to the extent possible. The build-out of full broadband connectivity across the region will benefit business and workforce recruitment for all local partners.

- 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) **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. Baker County Economic Development is a partnership of Baker City and the county to provide community information, professional advising and resources, and track available commercial real estate. The agency is the natural lead for many of the economic development steps that can be implemented regionally.

Local and regional economic development staff should continue to partner and meet regularly with other partners including the Chamber of Commerce, Business Oregon, Blue Mountain Community College, Baker Technical Institute, NEOEDD, 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.

- 12) **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 city 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.
- 13) **Market Opportunity Zones and New Market Tax Credits:** Baker County features one Opportunity Zone which is an "economically disadvantaged" area that is eligible for a new tax incentive for investment. The Baker County Opportunity Zone covers some of north Baker City and areas to the northwest of the city. This zone is not optimally placed because of the amount of rural and/or development constrained land it covers, and if the opportunity arises to revise or designate new zones in the future, the County may want to consider how to cover other areas.

Most of the county is eligible for New Market Tax Credit projects, but this is not true for the central core of Baker City. This is a longer-established program that also provides a tax incentive for investment in disadvantaged areas. Economic development staff and Business Oregon can help

identify projects which may be eligible and bridge developers with the Community Development Entities (CDE's) that administer the program.

14) **Continue to grow workforce development opportunities:** The city and its 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 Baker Technical Institute and Blue Mountain Community College to identify the greatest needs in skills and specialties.

15) **Provide incubator opportunities and small business services:** There are many agencies offering small business services in Oregon, including Business Oregon, the SBA, the USDA, Baker County Economic Development 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. Baker City is currently home to Launch Pad Baker, a shared workspace meant to incubate small businesses and entrepreneurs. The experience of Launch Pad and other partners can help identify gaps in the incubator/small business network that may still be addressed.

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
	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	<p>SPECIAL CONSIDERATIONS:</p> <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 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 actually 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 close 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.

Special Considerations: This section addresses unique or otherwise special requirements that should be considered for sites in each industrial category.

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

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.

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.)

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 cart 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: Holly Kerns, Planning Director
Advisory Committee (Baker City)

From: Johnson Economics

Subject: Economic Opportunities Analysis, Baker City
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 Baker 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 Baker 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).

The Buildable Lands Inventory relied on the following data sources:

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

Identification of Vacant Parcels

JOHNSON ECONOMICS used the most recent available tax account data from Baker 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 "ownership" shapefile, isolate the taxlots within the boundary of the City of Baker City and the Baker City 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 Baker City 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 (BAKER CITY)

ZONE	Vacant		Redevelopable		Total	
	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage
General Commercial	47	215.4	2	19.2	49	234.6
Industrial	50	184.8	5	141.4	55	326.2
Light Industrial	1	0.2	2	0.3	3	0.5
Totals:	98	400.3	9	160.9	107	561.2

Source: Baker County, Baker City, Johnson Economics LLC

The inventory identifies over 550 acres of vacant or potentially redevelopable land in both commercial and industrial zones. Roughly 42% of this land is in the General Commercial zone, while 58% has Industrial zoning. 71% is identified as “vacant”, and 29% in potential “redevelopment” sites. Most “redevelopable” acreage is industrial.

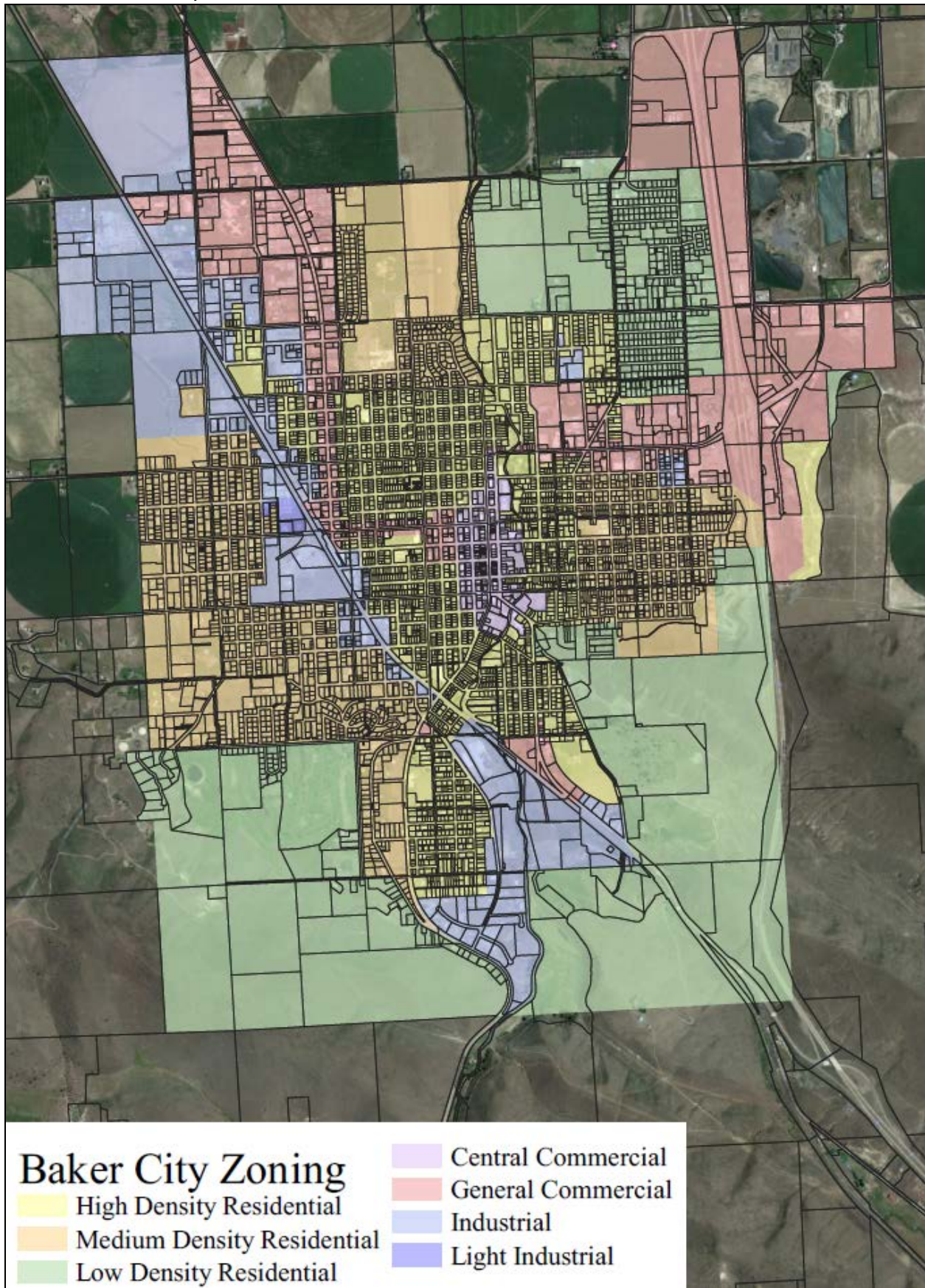
Figure 2 presents the inventory broken down by the size of parcels. While there is a good mixture of small-to-mid parcel sizes, there are also some potential large employment sites identified. Sites of 10 acres or larger represent over 70% of the identified acreage.

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

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
General Commercial	18	9.7	18	39.3	3	18.1	7	103.6	3	63.8
Industrial	25	11.2	21	45.1	5	34.8	4	57.3	2	178.0
Light Industrial	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Totals:	44	21.1	39	84.3	8	53.0	11	161.0	5	241.8

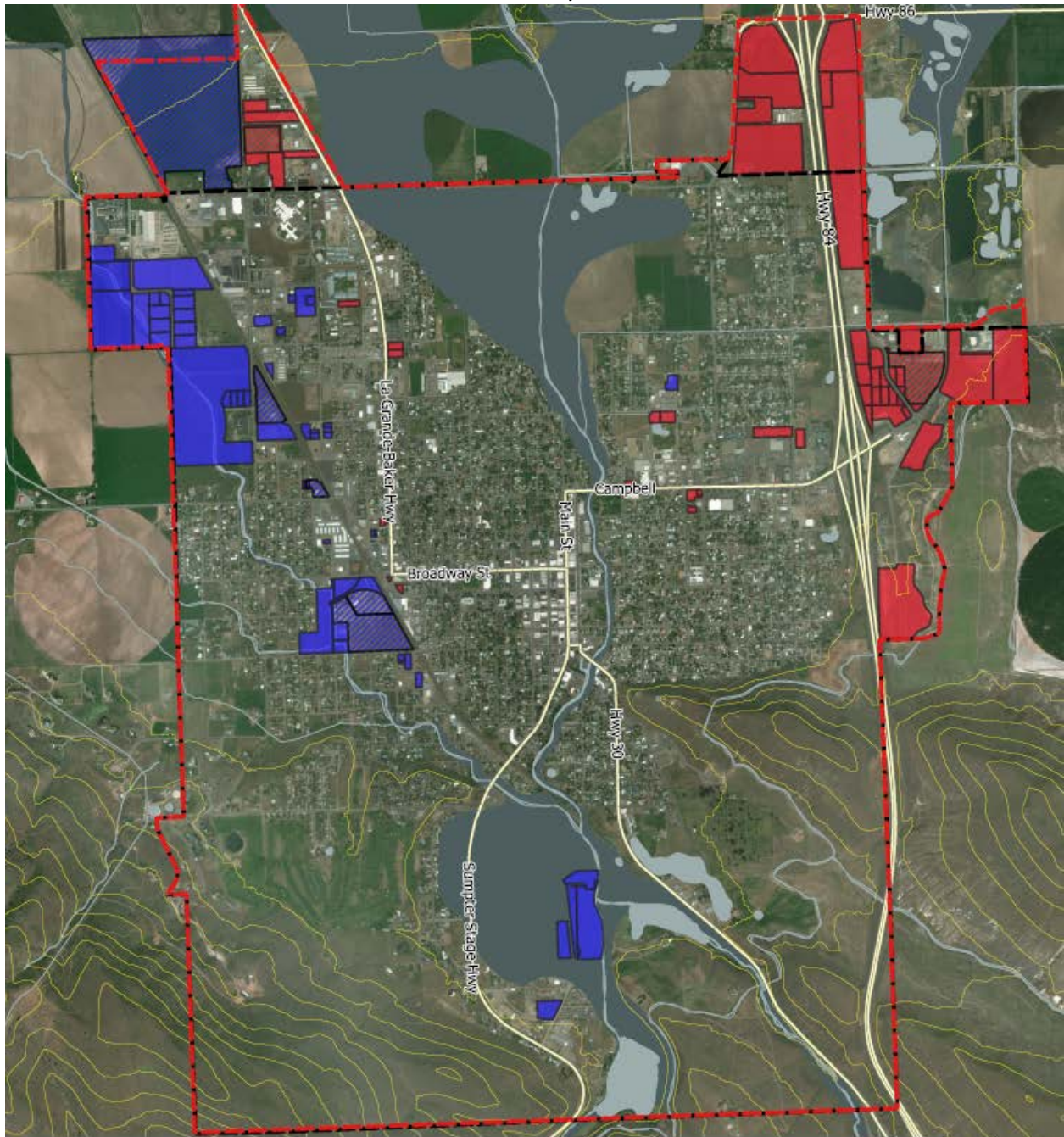
The following maps present the local zoning for reference (Figure 3), and the identified vacant and redevelopment parcels by category (Figure 4).

FIGURE 3: ZONING MAP, BAKER CITY



Source: Baker City, Baker County, DLCD, Johnson Economics LLC

FIGURE 4: BUILDABLE LAND INVENTORY – EMPLOYMENT LANDS, BAKER CITY



Vacant or Redevelopable Commercial or Industrial Land



Source: Baker City, Baker County, DLCD, 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 (BAKER CITY)

ZONE	Vacant		Redevelopable		Total	
	# of Parcels	Acreage	# of Parcels	Acreage	# of Parcels	Acreage
General Commercial	47	215.4	2	19.2	49	234.6
Industrial	50	184.8	5	141.4	55	326.2
Light Industrial	1	0.2	2	0.3	3	0.5
Totals:	98	400.3	9	160.9	107	561.2

Source: Baker County, Baker City, 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 55 net acres was identified across a range of building types.

FIGURE 5: SUMMARY OF FORECASTED 20-YEAR LAND NEED BY BUILDING TYPOLOGY (BAKER CITY)

	DEMAND BY GENERAL USE TYPOLOGY, 2018-2038						Total
	Office	Institutional	Flex/B.P	Gen. Ind.	Warehouse	Retail	
Employment Growth	314	283	93	117	51	324	1,182
Avg. SF Per Employee	350	600	990	600	1,850	500	591
Demand for Space (SF)	110,000	169,600	92,000	70,100	93,800	162,100	697,600
Floor Area Ratio (FAR)	0.35	0.45	0.30	0.30	0.35	0.25	0.32
Market Vacancy	10.0%	0.0%	10.0%	5.0%	5.0%	10.0%	10.0%
Implied Density (Jobs/Acre)	39.2	32.7	11.9	20.7	7.8	19.6	21.6
Net Acres Required	8.0	8.7	7.8	5.6	6.5	16.5	54.8

Source: Oregon Employment Department, Baker 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.