JOHNSON
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PUBLIC NEEDS ANALYSIS FOR A PROPOSED ZONE CHANGE IN KELSO, WASHINGTON

PREPARED FOR
TRAMMELL CROW COMPANY
FEBRUARY 2022

JOHNSON ECONOMICS, LLC
621 SW Alder St, Suite 506
Portland, Oregon 97205

JOHNSON ECONOMICS

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I. INTRODUCTION

TRAMMELL CROW COMPANY (TCC) retained JOHNSON ECONOMICS to evaluate the need for commercial and industrial land in Kelso and assess the public need and benefit of commercial and industrial zoning at the subject site.

The main components of the study are:

- Site assessment for commercial and industrial development and alternative land needs;
- Review of the City's Comprehensive Plan and relevant planning documents;
- Analysis of current vacant buildable commercial and industrial land;
- Projection of commercial and industrial land needs;
- Reconciliation of projected land needs with available capacity;
- Analysis of economic and fiscal impacts of commercial and industrial development at the site; and
- Assessment of the impact and advisability of changing the zoning.

II. EXECUTIVE SUMMARY

This analysis evaluated the need for a commercially zoned site at the southwest quadrant of the intersection of I-5 and SR-432 in Kelso, Washington. The analysis also evaluated the impacts of rezoning the site for industrial use.

Kelso and Cowlitz County have seen moderate employment and population growth over the last few decades. Kelso's manufacturing base is on a slightly declining trend, while other industrial sectors in the city are growing at a modest pace. Retail and restaurant sectors have been losing employment in recent years, partly reflecting very limited population growth in the city. Moderate employment and population growth is expected over the next two decades.

The most significant trend currently affecting demand for commercial and industrial space is the shift from brick-and-mortar retail to online shopping. Pre-COVID, the online segment was taking market share at a rate of one percentage point per year. During COVID, the online market share jumped to 15%, and the market share is projected to reach 27% in 20 years. This trend is expected to reduce the need for physical retail space both nationally as well as locally.

Based on the current pattern of retail spending in Kelso, and the anticipated population growth in the city and surrounding region, we estimate a decline in brick-and-mortar retail demand equivalent to 74,000 square feet of retail space and 6.8 acres of retail land over the coming 20 years in Kelso. On the county level, the decline is estimated to 380,000 square feet of built space or 35 acres of land.

The overall demand for industrial land in this region is projected to grow by 97 net acres over the next 20 years. The City is short on industrial land appropriate for the type of demand anticipated over the coming decades, including large sites with good freeway access that can accommodate efficient, large-scale e-commerce operations.

Rezoning the subject site for industrial use would address the shortfall of marketable industrial sites. Given the negative demand growth expected in the commercial segment, and the limited demand for similar commercial land observed over the past two decades directly north of the subject site, rezoning is not anticipated to have any negative impact on retail development in the city. On the other hand, eliminating commercial land in the periphery of the city may contribute to a denser and more active commercial environment in central parts of Kelso. The city has a large

number of vacant commercial sites with the appropriate scale and exposure to meet demand in the few retail segments anticipated to see demand growth in coming years, most notably restaurants and service providers.

Given the stronger demand anticipated for industrial than commercial space at the subject site, industrial development is projected to have greater economic and fiscal impacts. Considering indirect and induced impacts of both construction and operations, industrial development is projected to generate employment equivalent to 1,741 full time equivalent positions county-wide over 20 years, while retail development is projected to generate 335 full time equivalent positions. In terms of revenue impacts for the City of Kelso over the same period, industrial development is projected to generate sales and property tax equivalent to $6.5 million in 2022 dollars, while retail is projected to generate $3.6 million. Tax receipts from industrial development are also projected to be realized significantly earlier and with a higher level of certainty than receipts from retail development.

III. SITE ASSESSMENT

THE SUBJECT SITE

The subject site is comprised of four parcels with a combined size of 128 acres, located southwest of the intersection of Interstate 5 and State Route 432, south in Kelso, Washington. An active rail line runs along the western side of the site. Current zoning on the site is Regional Commercial (RC). The entire site is identified as wetlands and regarded as critical area by the City. Roughly 82 acres are considered buildable.

Most of the land around the site is undeveloped. The exception is an RV dealership on commercially zoned land east of the site across the freeway (built late 1990s) and a commercial-industrial development on commercially zoned land to the north, characterized by "heavy retail" and industrial users. Currents users include a car dealership, a farm equipment store, a plumbing supply wholesaler, and a heavy equipment contractor. The four structures were built between the late 1990s and 2017, while several lots remain vacant. Industrial uses dominate areas further north and west of the site. Current zoning around the site is shown on a map on the next page.

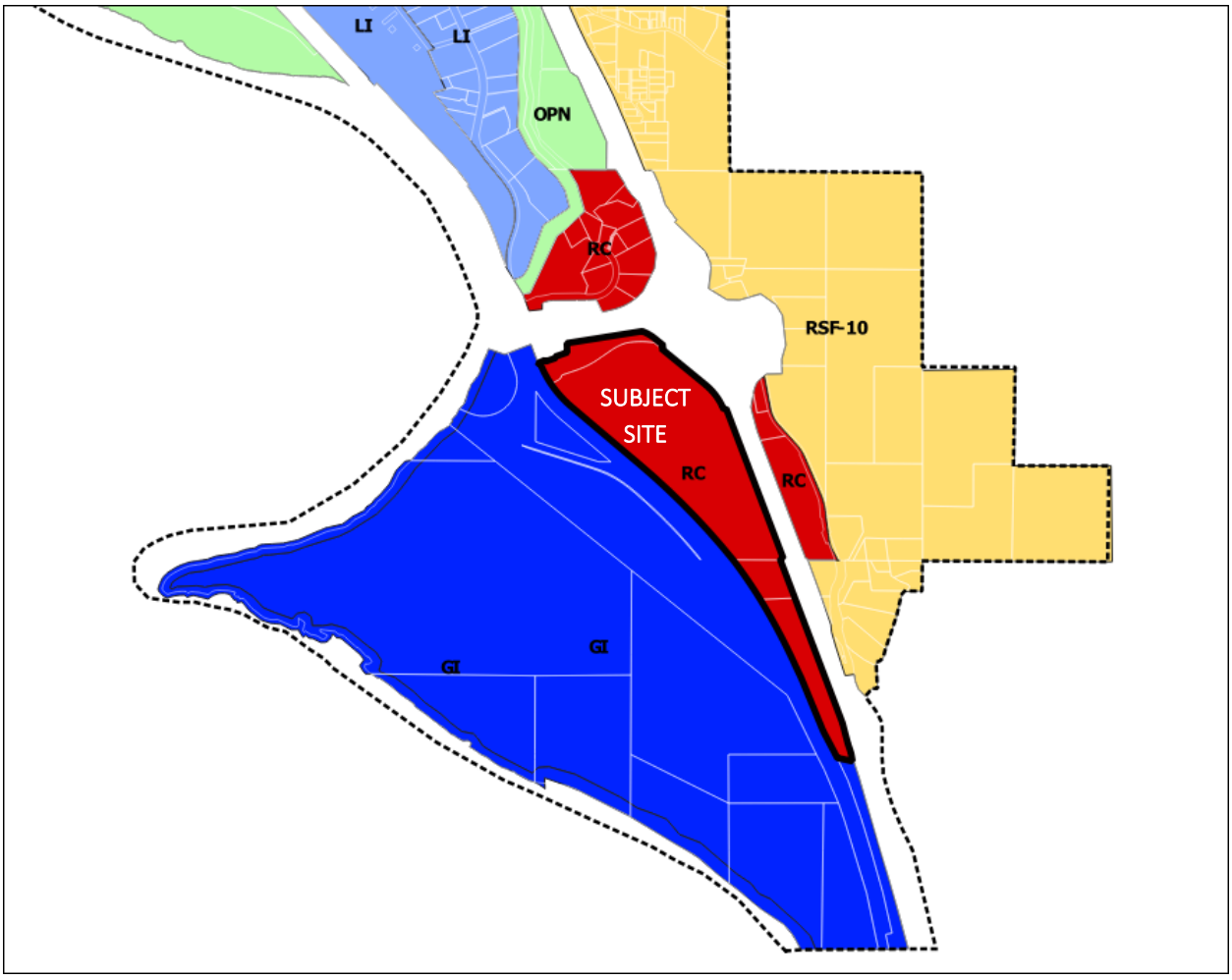
FIGURE 3.1: SUBJECT SITE

SOURCE: Cowlitz County, City of Kelso, Google Earth, TCC

CURRENT ZONING

The following displays current zoning around the subject site. The existing RV dealership to the east of the site and the commercial-industrial development to the north are along with the site zoned Regional Commercial (RC). Land further north is zoned Light Industrial (LI), while land to the west of the site is zoned General Industrial (GI). The undeveloped hillside to the east is zoned Single-Family Residential (RSF-10).

FIGURE 3.2: CURRENT ZONING AROUND THE SUBJECT SITE



SOURCE: Cowlitz County, City of Kelso, TCC

COMMERCIAL VIABILITY

With its location near a full interstate interchange but isolated from residential areas and central portions of Kelso, the subject's potential as a commercial site is largely limited to regional users relying on infrequent, high-dollar shopping, as reflected in the existing retailers around the site. This has been a struggling market segment in recent years due to increased online shopping, with particular impact on regional malls located outside urban areas. Southwest Washington has the additional disadvantage of competition from tax free retail centers across the Oregon border. The only regional mall in Kelso, Three Rivers Mall, has held up relatively well due to its central location. Still, it has been troubled by high vacancy in recent years and currently has 71,000 square feet of vacant space (14%). The best performing retail segments in recent years have been grocery stores and locally oriented retail centers with small

spaces suitable for eating/drinking places and service providers. These are dependent on proximity and daily exposure to the local population and are thus not feasible at the subject site.

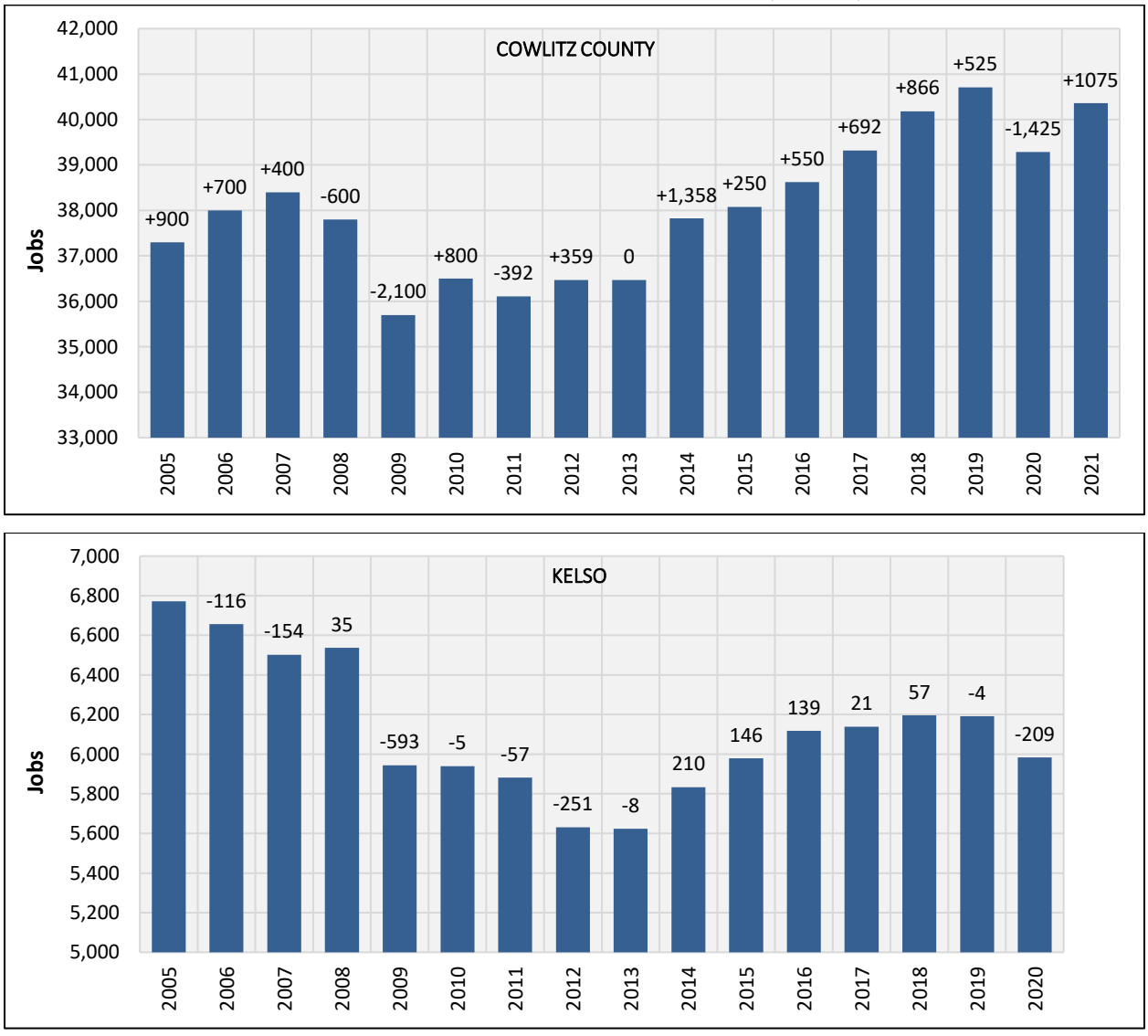
The buildout of the commercial-industrial development to the north of the subject site illustrates the limited market demand for peripheral commercial sites. The development includes two retailers, which together absorbed around nine acres of land since 1999, for an average of 0.4 acres per year (2,000 SF/year). If we add the two industrial users in the development, the absorption has averaged 0.6 acres per year (3,000 SF/year). The ongoing shift to online shopping would indicate weaker demand going forward (see following).

IV. Socio-Economic Context

Employment

Cowlitz County currently employs 40,900 as of December 2021, after having recovered the jobs lost during COVID. The county saw steady but moderate growth over the past decade, averaging 500 new jobs per year. Data on the city level is only available through 2020, when Kelso averaged employment of 6,000 – reduced by COVID. Between 2013 and 2019, the city averaged growth of roughly 100 jobs per year. The following charts display average annual employment as well as annual growth.

Figure 4.1: Employment, Cowlitz County and Kelso (2005-21)

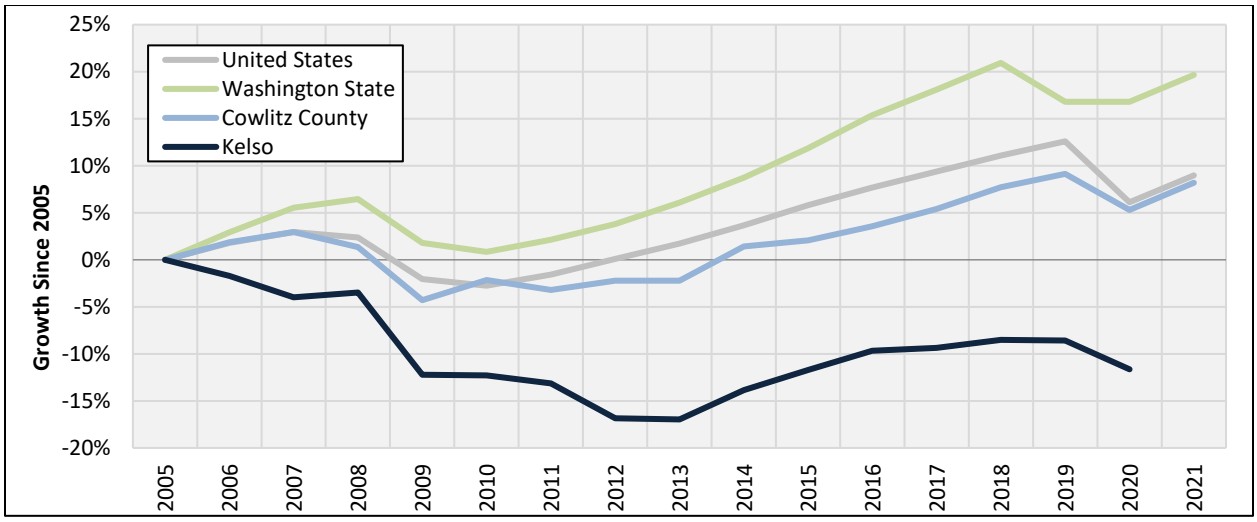


SOURCE: WA Employment Security Department, Johnson Economics

The employment growth in Cowlitz County has been weaker than in the remainder of Washington State and the nation over the past 20 years. The underperformance was most pronounced in the early 2000s and early 2010s. Since 2013,

the growth has been slightly stronger than national growth, averaging 1.3% per year. Kelso has underperformed the remainder of the county, especially during the 2000s, but nearly kept up with the county over the 2013-20 period.

FIGURE 4.2: EMPLOYMENT GROWTH SINCE 2005 (%), GEOGRAPHIC COMPARISON

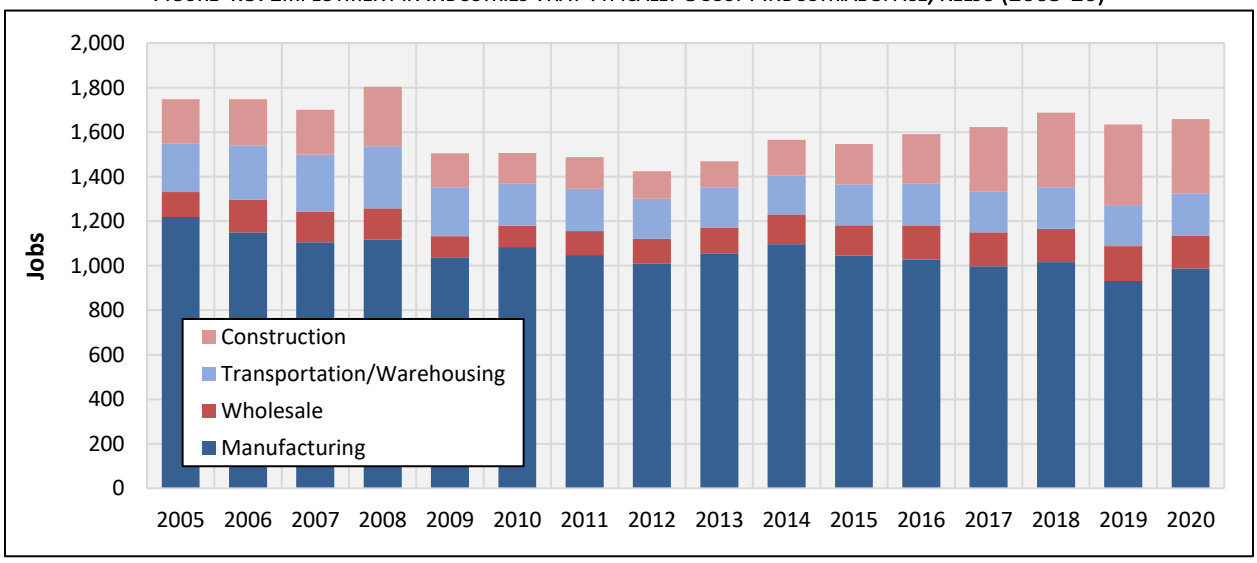


SOURCE: WA Employment Security Department, JOHNSON ECONOMICS

EMPLOYMENT BY INDUSTRY

Sectors that occupy industrial and retail space are of particular importance in this analysis. In aggregate, the four main sectors that dominate the industrial market has fared better than retail sectors in recent years, helped by an expanding construction industry. Manufacturing has been in decline, while wholesale and transportation/ warehousing has exhibited moderate growth.

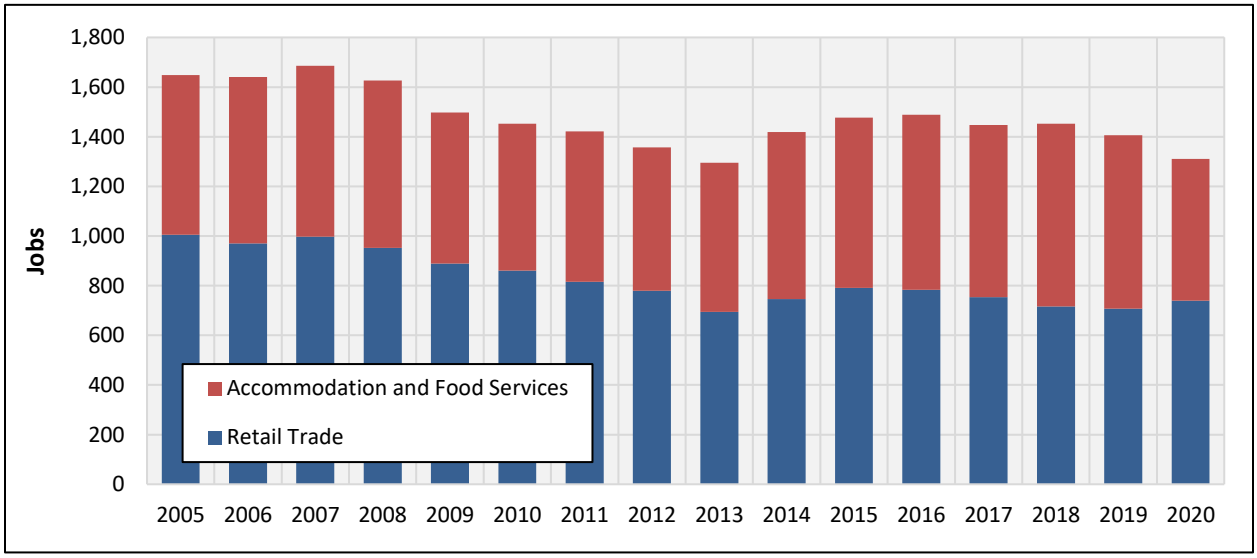
FIGURE 4.3: EMPLOYMENT IN INDUSTRIES THAT TYPICALLY OCCUPY INDUSTRIAL SPACE, KELSO (2005-20)



SOURCE: WA Employment Security Department, JOHNSON ECONOMICS

The two major industries that occupy retail space, retail trade and accommodation/food services, have both been on a downward trend in terms of employment in Kelso since the middle of the last decade, exacerbated by COVID in 2020.

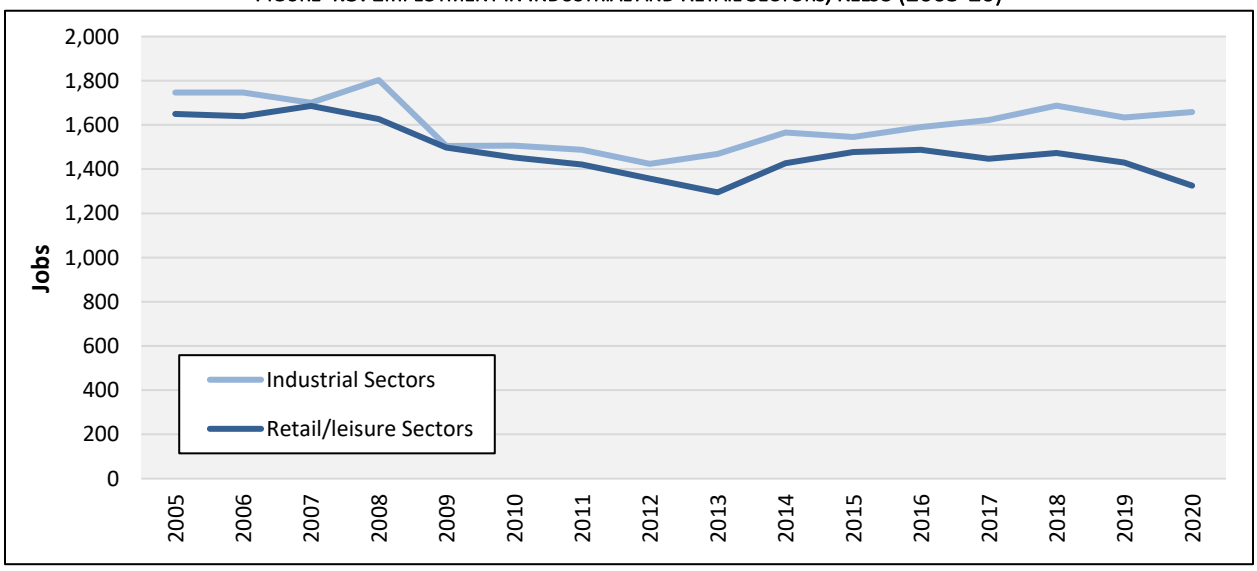
FIGURE 4.4: EMPLOYMENT IN INDUSTRIES THAT TYPICALLY OCCUPY RETAIL SPACE, KELSO (2005-20)



SOURCE: WA Employment Security Department, JOHNSON ECONOMICS

The next chart compares aggregate employment in the industrial and retail sectors presented above. After having identical employment in 2009, the two segments have diverged in recent years as industrial sectors have expanded and retail sectors have declined. The industrial sectors currently 330 workers more than the retail sectors.

FIGURE 4.5: EMPLOYMENT IN INDUSTRIAL AND RETAIL SECTORS, KELSO (2005-20)



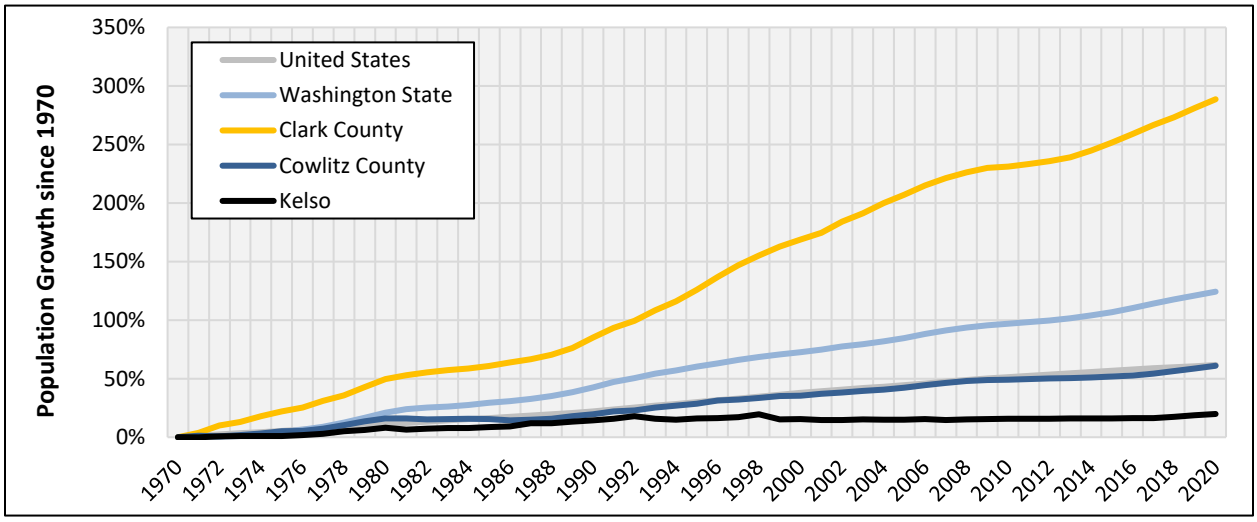
SOURCE: WA Employment Security Department, JOHNSON ECONOMICS

POPULATION

HISTORICAL POPULATION GROWTH

Population growth in Cowlitz County has been relatively weak over the past four decades. This reflects the county's reliance on the manufacturing sector, which has been in decline nationwide since the late 1970s. Since peak manufacturing employment was reached nationally in 1979, the Cowlitz County population has grown by 42%, while Clark County has increased 172%, Washington State 92%, and the United States 47%. Kelso has seen even weaker growth than the county, increasing its population by only 11% since 1979. As of 2020, the city's population was estimated to 12,340 by the Washington Office of Financial Management (OFM).

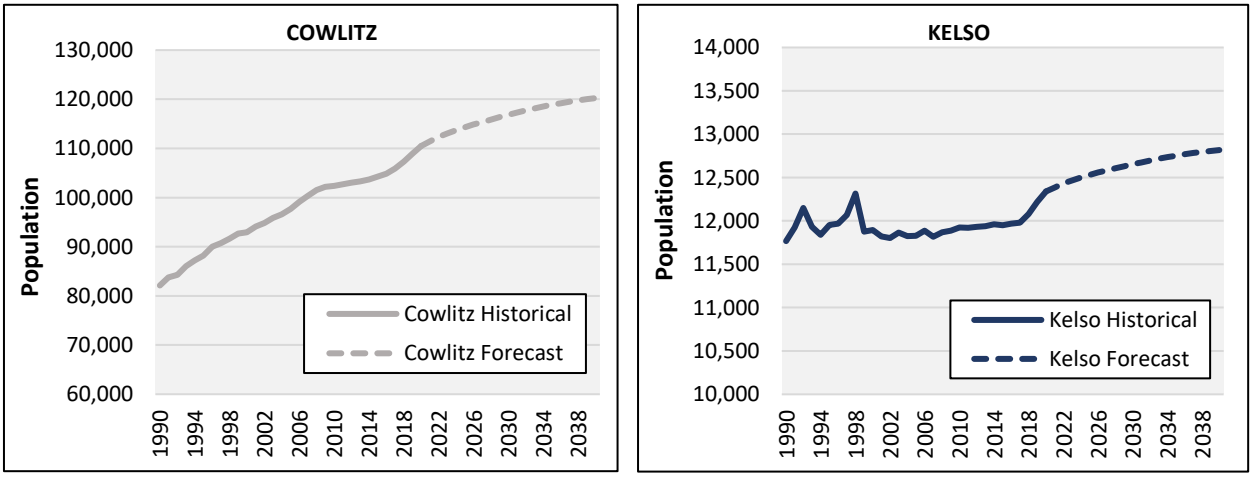
FIGURE 4.6: POPULATION GROWTH SINCE 1970, GEOGRAPHIC COMPARISON



SOURCE: U.S. Census Bureau, WA Office of Financial Management, JOHNSON ECONOMICS

Over the 2020-40 period, the OFM projects that the Cowlitz County population will increase by 8,300 residents, or 8.8%. The OFM does not produce city estimates, but if we assume the same differential in growth rates between the county and the city as over the past 20 years, and extrapolate the estimates through 2042, Kelso's population should increase by 3.2% over the next 20 years, gaining 400 residents.

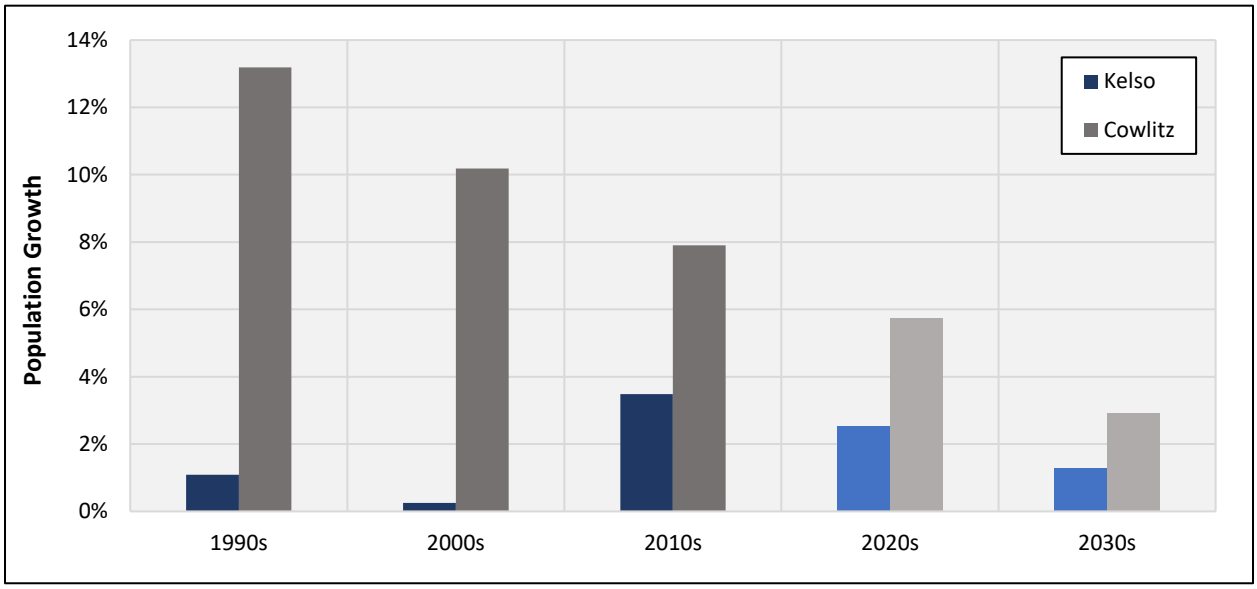
FIGURE 4.7: HISTORICAL AND PROJECTED POPULATION GROWTH, COWLITZ COUNTY AND KELSO (1990-2020)



SOURCE: WA Office of Financial Management, JOHNSON ECONOMICS

The OFM forecasts assume a slowdown in growth on the county level over the next two decades, partly reflecting national demographic trends. In Kelso's case, our forecast represents an increase relative to the 1990s and 2000s, but a decrease compared to the 2010s.

FIGURE 4.8: HISTORICAL AND PROJECTED POPULATION GROWTH BY DECADE, COWLITZ COUNTY AND KELSO



SOURCE: WA Office of Financial Management, JOHNSON ECONOMICS

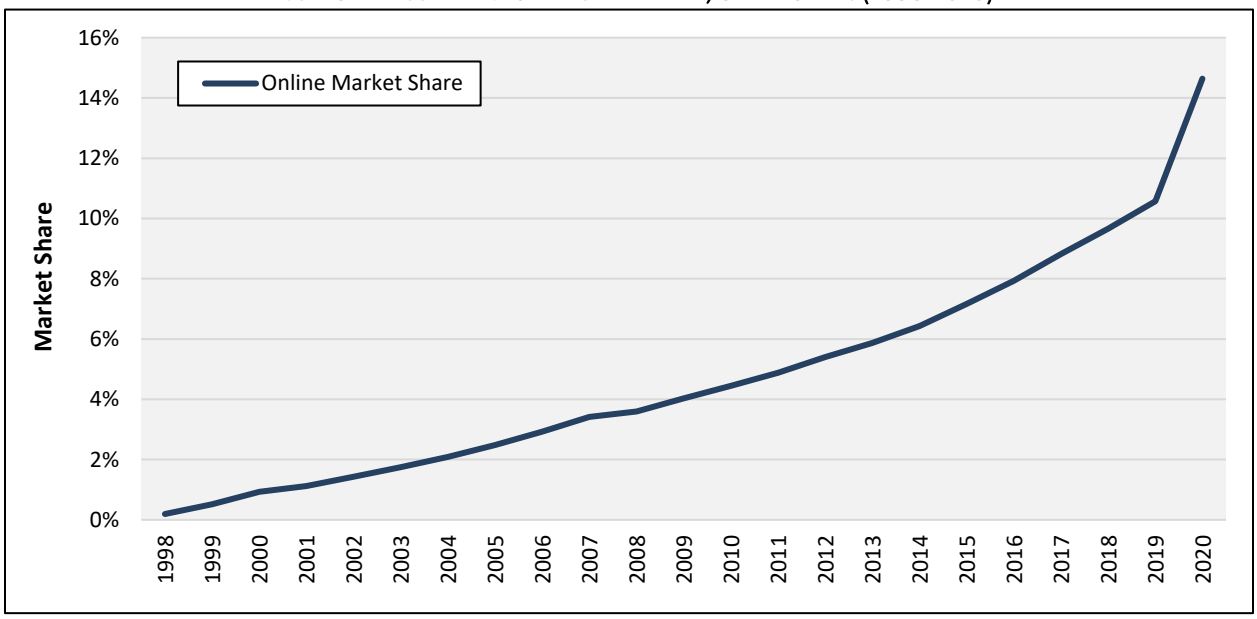
V. COMMERCIAL & INDUSTRIAL DEMAND

COMMERCIAL DEMAND

NATIONAL RETAIL TRENDS

The commercial real estate market has undergone dramatic changes over the past decade, most of which are a function of the shift to online shopping. This has reduced the overall need for brick-and-mortar space, especially from retailers selling physical goods. Pre-COVID, online retailing accounted for around 10% of all retail spending – after gaining roughly one percentage point per year over the last few years. During COVID, the online market share jumped to 15%.

FIGURE 5.1: E-COMMERCE SHARE OF ALL RETAIL, UNITED STATES (1998-2020)



SOURCE: U.S. Dept. of Commerce, JOHNSON ECONOMICS

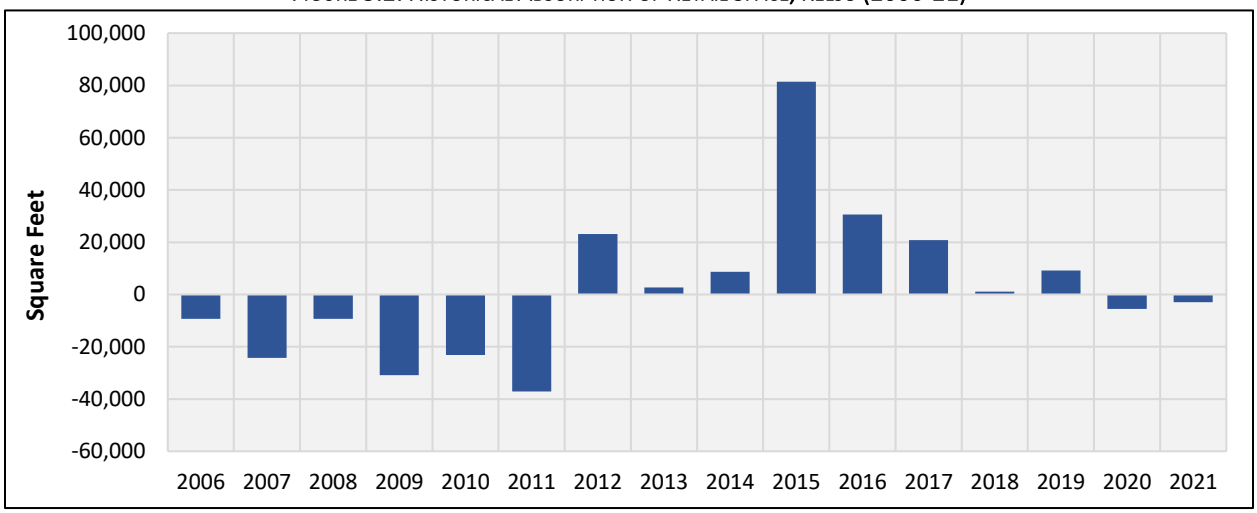
An older trend, which continues to change the retail market, is the shift from goods to services. This trend goes back to the middle of the last century. Since then, the share of personal spending on physical goods has declined from over 60% to around 30%. Commercial tenants that benefit from this shift include restaurants, coffee shops, healthcare providers, personal trainers, and financial advisors. This has led to increased demand for smaller spaces in neighborhood/community centers and along arterial corridors. At the same time, demand for larger buildings and mall space has declined due to online competition. Over the past decade, only one-fifth of the net absorption of retail space has been driven by physical goods retailers, as service providers and eating/drinking places have dominated.

Among brick-and-mortar retailers, the best performers over the past two decades have been those that benefit from the expanding service demand and those that are well protected against online competition. These include service provides and stores that sell perishables or other goods that meet everyday needs (grocery, convenience, health, personal care). Restaurants have benefitted from the general increase in eating out as well as their protection from online competition. The worst performers during the current millennium are those that sell items that are purchased more occasionally, especially goods at higher price points and profit margins (e.g., clothing, electronics, books, furniture, games).

Historical Retail Space Demand, Kelso

The broad weakness in the retail market over the past two decades has been evident in Kelso as well. Between 2006 and 2011, 135,000 square feet of retail space was vacated on a net basis. Economic recovery in the middle of the 2010s led to strong but temporary positive absorption of a similar amount of space between 2015 and 2017. Since then, the occupancy has remained flat, with total net absorption of only 2,000 square feet over four years.

Figure 5.2: Historical Absorption of Retail Space, Kelso (2006-21)



SOURCE: CoStar

Current Retail Supply and Demand, Kelso

Due to its location along the I-5, Kelso's retail market currently supports a significant amount of shopping from households residing outside the city. The following table compares estimates of retail sales (including food/drinking places) in Kelso to demand from households residing within the city, provided by Environics. The demand estimates are based on local demographics and the Census Bureau's Consumer Expenditures Survey. Sales estimates are derived from the Census Bureau's Retail Sales Survey. The table indicates that current sales are 78% higher than the demand generated by Kelso households. Put another way, 44% of current sales is from demand generated outside the city.

Figure 5.3: Retail Supply and Demand, Kelso (2022)

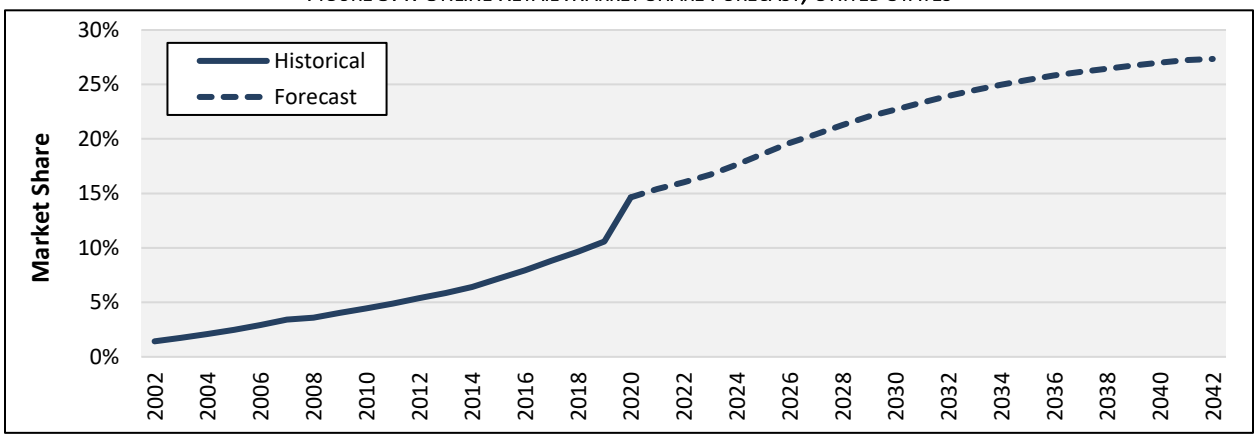
RETAIL SUPPLY-DEMAND, KELSO 2022	2022 Demand	2022 Supply	Demand Gain/Leakage	
Retail Category (NAICS)	(Consumer Spending)	(Retail Sales)	(Total $)	(%)
Motor Vehicle and Parts Dealers-441	$40,271,305	$96,187,990	$55,916,685	139%
Furniture and Home Furnishings Stores-442	$3,244,594	$1,417,058	($1,827,536)	-56%
Electronics and Appliance Stores-443	$2,367,611	$2,734,749	$367,138	16%
Building Material, Garden Equip Stores -444	$12,755,614	$19,617,721	$6,862,107	54%
Food and Beverage Stores-445	$28,356,769	$37,054,928	$8,698,159	31%
Health and Personal Care Stores-446	$11,037,432	$14,141,917	$3,104,485	28%
Gasoline Stations-447	$15,952,496	$31,758,977	$15,806,481	99%
Clothing and Clothing Accessories Stores-448	$6,723,893	$2,240,056	($4,483,837)	-67%
Sporting Goods, Hobby, Book, Music Stores-451	$2,570,196	$5,305,808	$2,735,612	106%
General Merchandise Stores-452	$23,896,442	$61,003,996	$37,107,554	155%
Miscellaneous Store Retailers-453	$3,899,692	$7,935,391	$4,035,699	103%
Foodservice and Drinking Places-722	$20,482,017	$25,851,673	$5,369,656	26%
Total Including Food/Drinking Places	***$171,558,061***	***$305,250,264***	***$133,692,203***	***78%***

SOURCE: Environics/Claritas, Johnson Economics

Retail Demand Forecast, Kelso

Johnson Economics models future retail demand via population forecasts, considering the anticipated continued shift to online shopping. Current demand from Kelso residents is escalated assuming the population forecast presented in the previous section. Demand from outside the city is escalated using projected Cowlitz County growth rates. Loss in demand to online retail is estimated using a nationwide forecast of market share by FTI Consulting, extrapolated through 2042. The forecast for all retail, including vehicles and gasoline, is displayed below. The forecast indicates an online market share of 27% by 2042. Food and drinking places are not included.

Figure 5.4: Online Retail Market Share Forecast, United States



SOURCE: FTI Consulting, Johnson Economics

When modeling future retail space demand in Kelso, we combine estimates for food/drinking places and true retailers, with online retail subtracted from the latter. Given the assumed moderate population growth, the shift to online retail is expected to cause a decline in physical retail sales in Kelso over the 2022-42 period, partly offset by a sales increase at food/drinking places. Total sales are estimated to fall by $24 million (2022 dollars), which at a typical $325 per square foot (annual average, according to CoStar) represents a loss in retail space demand of 74,000 square feet, or 6.8 acres at a standard 0.25 FAR. County-wide, the loss in demand is estimated to represent 34.8 acres of land.

Figure 5.5: Retail Demand Forecast, Kelso (2022-42, 2022 Dollars)

CHANGE IN RETAIL LAND NEED, 2022-42		KELSO NEED			COWLITZ NEED
		Kelso Households	Other Households	Total Kelso Sales	Cowlitz Cty. Sales
2022	Retail, Physical Stores (84.0% MS)	$151,076,044	$128,322,547	$279,398,591	$1,905,805,692
	Retail, Online Stores (16.0% MS)	$28,816,352	$24,476,334	$53,292,685	$363,514,729
	Food/Drinking Places	$20,482,017	$5,369,656	$25,851,673	$167,269,208
2022-42	Demand Growth (= Population Growth)	3.2%	7.4%		
2042	Retail, Physical Stores (72.7% MS)	$134,945,297	$119,189,694	$254,134,991	$1,770,167,458
	Retail, Online Stores (27.3% MS)	$50,780,420	$44,851,528	$95,631,948	$666,120,636
	Food/Drinking Places	$21,146,182	$5,764,734	$26,910,916	$179,576,219
2022-42 Change	Retail, Physical Stores	-$16,130,747	-$9,132,853	-$25,263,600	-$135,638,234
	Food/Drinking Places	$664,165	$395,078	$1,059,243	$12,307,011
	Change in Sales ($)			-$24,204,357	-$123,331,224
	Change in Occupied Space (at $325/SF)			-74,475 sqft.	-379,481 sqft.
	Change in Land Need (at 0.25 FAR)			**-6.8 Ac.**	**-34.8 Ac.**

SOURCE: Johnson Economics

INDUSTRIAL DEMAND

NATIONAL INDUSTRIAL TRENDS

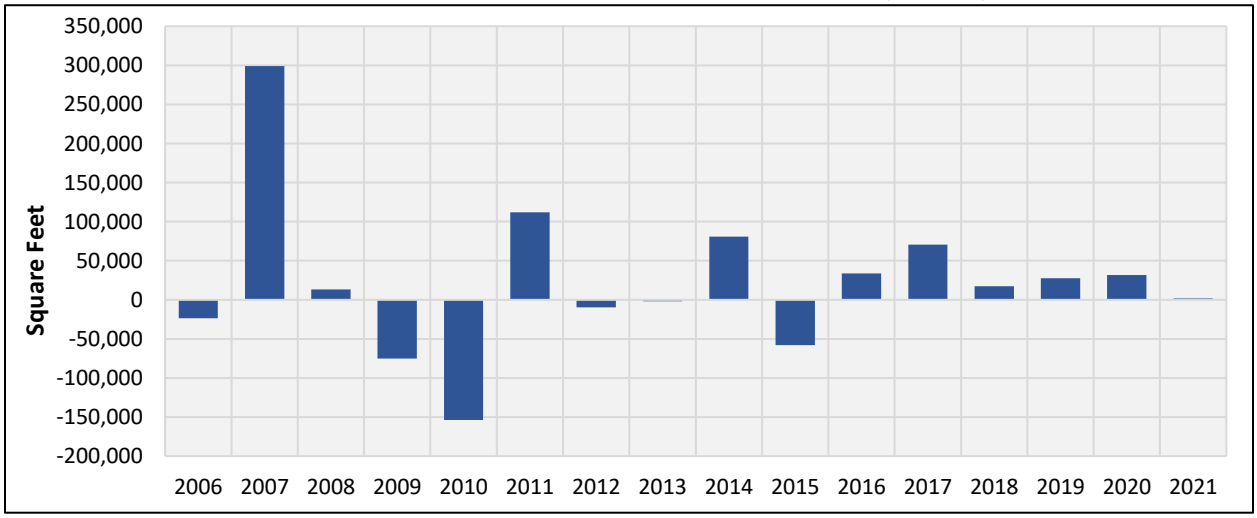
The market for industrial space has also undergone major changes in recent years, reflecting technological advances and shifts in the economy. Demand for warehouse and distribution space has been boosted by e-commerce, which has moved storage needs from retail stores to warehouses. At the same time, the growth of high-tech supply chain management systems that require investments and expertise have caused a consolidation within the warehousing and distribution industry, with increasing reliance on larger third-party operators. Newer and larger buildings that can more efficiently accommodate modern operations have therefore been in high demand. In the most recent years, increasing e-commerce competition has led to a growing emphasis on rapid delivery, which has increased the demand for modern space close to population centers. With distribution rather than manufacturing driving much of the new demand, there has been a particular need for sites with good freeway access.

The I-5 corridor has several recent examples of new large-scale distribution centers capitalizing on freeway access. Two 1.2 million square-foot buildings are in development in Winlock and Centralia, which will be occupied by Lowe's and UNFI. The latter already operates a 770,000-square-foot center in Ridgefield, where Dollar Tree also has a large center with 665,000 square feet.

HISTORICAL INDUSTRIAL SPACE DEMAND, KELSO

Kelso has seen moderate positive absorption over the past decade. In total, roughly 200,000 square feet were absorbed over the past 10 years, according to CoStar. A tight supply of vacant space has likely limited the absorption over this period. The market has only had 35,000 square feet of vacant space over the past two years.

FIGURE 5.6: HISTORICAL ABSORPTION OF INDUSTRIAL SPACE, KELSO (2006-21)



SOURCE: CoStar

FUTURE INDUSTRIAL DEMAND, KELSO

Demand for industrial space in Kelso over the coming 20 years will be generated by increased e-commerce as well as growth in traditional industrial use by manufacturers, wholesalers, and contractors. As e-commerce has grown in recent years, and operations have gained scale, the trend has been to build more fulfillment centers closer to the local population. Given Kelso's location along the I-5, we expect there to be demand for fulfillment centers in Kelso serving the Kelso-Longview region in coming years. In the following, we will model both fulfillment center demand and traditional industrial demand over the next 20 years.

Demand for traditional industrial space is modeled via projections for employment growth in Kelso within sectors that typically occupy industrial space. The employment growth is converted into space demand based on typical rates of space utilization per employee, and in turn converted into land need.

The forecast begins with base employment in December 2021. Because city-level employment data is only available through 2020 (annual average), we use county-wide growth from 2020 to December 2021 to adjust Kelso employment to current levels. Future employment growth is projected by applying annual growth rates, reconciling recent growth trends and state forecasts by the OFM for the Southwest Washington region. Base year employment and growth assumptions are presented in the following table.

FIGURE 5.7: INDUSTRIAL EMPLOYMENT GROWTH ASSUMPTIONS, KELSO (2020-2042)

EMPLOYMENT ASSUMPTIONS		BASE EMPLOYMENT			GROWTH ASSUMPTIONS		
		Kelso	County	Kelso	Pre-COVID Historical AAGR		Forecast AAGR
Industry	NAICS	2020 Avg	Change	Dec 2021	2009-19	2014-19	2022-42
Construction	23	334	13.0%	378	9.1%	17.9%	4.1%
Manufacturing	31-33	988	5.7%	1,044	-1.1%	-3.2%	-0.2%
Wholesale Trade	42	147	0.8%	148	5.0%	3.2%	3.9%
Transp., Wareh., Util.	22,48-49	214	0.8%	216	-1.8%	0.9%	3.8%
Admin., Support, Waste Mgmt.	56	60	2.6%	62	-6.8%	3.6%	2.4%
Other Services	81	148	2.6%	152	-1.2%	-2.8%	0.8%

SOURCE: WA Employment Security Department, JOHNSON ECONOMICS

By applying typical ratios of employment in industrial buildings and square footage per employee, we estimate the total square footage demanded over the 20-year period. The model indicates a total demand of nearly 700,000 square feet, or roughly 35,000 square feet per year. This is close to the average annual absorption of industrial space in Kelso over the 2016-20 period (36,000 SF). At an FAR of 0.3, the space demand translates into land demand of 53 acres over the 20-year period. When combined with modeled e-commerce land need, this indicates a need for 97 acres of industrial land over the 20 years, including the 24 acres of existing unmet demand for e-commerce land.

FIGURE 5.8: TRADITIONAL INDUSTRIAL SPACE DEMAND FORECAST, KELSO (2022-42)

DEMAND GROWTH, TRADITIONAL IND.		20-YEAR JOB GROWTH			INDUSTRIAL SHARE		SPACE DEMAND *	
Industry	NAICS	Dec '21	Dec '41	Growth	Share**	Growth	SF/Emp**	Growth (SF)
Construction	23	378	843	466	23%	109	900	109,412
Manufacturing	31-33	1,044	1,013	-31	91%	-28	600	-18,854
Wholesale Trade	42	148	319	170	87%	148	900	148,188
Transp., Warehousing, Utilities	22,48-49	216	455	239	91%	218	1,850	447,287
Admin., Support & Waste Mgmt	56	62	99	37	13%	5	600	3,238
Other Services	81	152	178	26	18%	5	600	3,148
Total		**3,168**	**4,076**	**908**	**50%**	**456**	**1,365**	**692,420**
Acres Needed, at 0.3 FAR								**53.0**

* Assumes a market-clearing vacancy rate of 10%.

** Oregon Metro, 2014 Urban Growth Report, Technical Panel, trend adjusted.

SOURCE: Metro, JOHNSON ECONOMICS

Our estimates of future fulfillment center demand are derived from the same model that was used for commercial demand, which included estimates for online shopping. Households who currently shop in Kelso represent an estimated $53 million in e-commerce sales as of 2022, while Cowlitz County represents $364 million.

Fulfillment center demand is estimated assuming $1,000 in online sales per square foot of industrial space. This rate is based on an analysis of sales and industrial space occupancy among e-commerce retailers in the United States. As an example, Amazon has been selling roughly $1,200 per occupied square foot of distribution and fulfillment center space, but runs a more efficient operation than most other online retailers because of its scale. The rate does not take into account demand for space in the upstream production and distribution of goods prior to reaching the retailer, which is modeled as part of traditional industrial demand later in this section.

With this assumption, households who shop in Kelso currently represent a need for 53,000 square feet of fulfillment center space, which translates into 3.5 acres of land at a 0.35 FAR. On the county level, the need is estimated to 364,000 square feet, or 24 acres of land. This need is currently met by fulfillment centers located outside the county.

Growth over the coming 20 years is expected to nearly double the need for fulfillment center space. Another 3 acres of land is projected to be needed to serve households currently shopping in Kelso, while demand growth on the county level is estimated to require 20 acres of additional land. In other words, 44 acres of e-commerce land is estimated to be needed to serve the county population by 2042.

FIGURE 5.9: E-COMMERCE FULFILLMENT DEMAND FORECAST, KELSO (2022-42, 2022 DOLLARS)

CHANGE IN E-COMMERCE LAND NEED, 2022-42		KELSO NEED			COWLITZ NEED
		Kelso Households	Other Households	Total Kelso Sales	Cowlitz Cty. Sales
2022	Retail, Physical Stores (84.0% MS)	$151,076,044	$128,322,547	$279,398,591	$1,905,805,692
	Food/Drinking Places	$20,482,017	$5,369,656	$25,851,673	$167,269,208
	Retail, Online Stores (16.0% MS)	$28,816,352	$24,476,334	$53,292,685	$363,514,729
	E-Commerce Space Need (at $1000/SF)			53,293 sqft.	363,515 sqft.
	E-Commerce Land Need (at 0.35 FAR)			**3.5 Ac.**	**23.8 Ac.**
2022-42	Demand Growth (= Population Growth)	3.2%	7.4%		
2042	Retail, Physical Stores (72.7% MS)	$134,945,297	$119,189,694	$254,134,991	$1,770,167,458
	Food/Drinking Places	$21,146,182	$5,764,734	$26,910,916	$179,576,219
	Retail, Online Stores (27.3% MS)	$50,780,420	$44,851,528	$95,631,948	$666,120,636
	E-Commerce Space Need (at $1000/SF)			95,632 sqft.	666,121 sqft.
	E-Commerce Land Need (at 0.35 FAR)			**6.3 Ac.**	**43.7 Ac.**
2022-42 Change	Retail, Online Stores	$21,964,068	$20,375,194	$42,339,262	$302,605,908
	Change in Occupied Space (at $1000/SF)			42,339 sqft.	302,606 sqft.
	Change in Land Need (at 0.35 FAR)			**2.8 Ac.**	**19.8 Ac.**

SOURCE: JOHNSON ECONOMICS

VI. COMMERCIAL & INDUSTRIAL CAPACITY

In this section we survey the commercial and industrial land capacity in Kelso. We present data from the 2015 Comprehensive Plan as well as estimates of the current land inventory, using 2017 zoning and land use designations.

2015 COMPREHENSIVE PLAN

In the following table we have summarized the commercial and industrial land inventory in Kelso as presented in the 2015 Comprehensive Plan. The plan includes parcel counts and total acreage for vacant land and vacant land identified as critical areas. There were roughly 2.5 times as much vacant industrial land as vacant commercial land. However, virtually all the vacant industrial land were identified as critical areas, whether using current zoning or future land use designations. In contrast, there were 42 acres of commercially zoned vacant land and 33 acres designated for future commercial land use not identified as critical areas. Given the difficulty or higher development costs associated with critical areas, this suggests a relative lack of readily developable industrial land in Kelso.

FIGURE 6.1: COMMERCIAL AND INDUSTRIAL LAND INVENTORY, 2015 COMPREHENSIVE PLAN

2015 COMP PLAN	ALL PARCELS		VACANT		VACANT CRITICAL		VACANT NOT CRITICAL	
	Parcels	Acres	Parcels	Acres	Parcels	Acres	Parcels	Acres
Commercial								
CNH (Com)	19	5	4	2	4	2	0	0
CWK (Com)	158	31	46	7	46	7	0	0
CTC (Com)	119	21	18	2	18	2	0	0
CMR (Com)	51	292	29	210	20	168	9	42
CSR (Com)	203	120	72	59	70	59	2	0
Commercial Zone	550	469	169	280	158	238	11	42
Commercial Land Use	1142	580	249	285	232	252	17	33
Industrial								
ILM (Ind)	147	373	48	101	48	101	0	0
ILG (Ind)	16	750	11	585	11	585	0	0
Industrial Zone	163	1123	59	686	59	686	0	0
Industrial Land Use	222	1205	96	743	86	743	10	0

SOURCE: City of Kelso, JOHNSON ECONOMICS

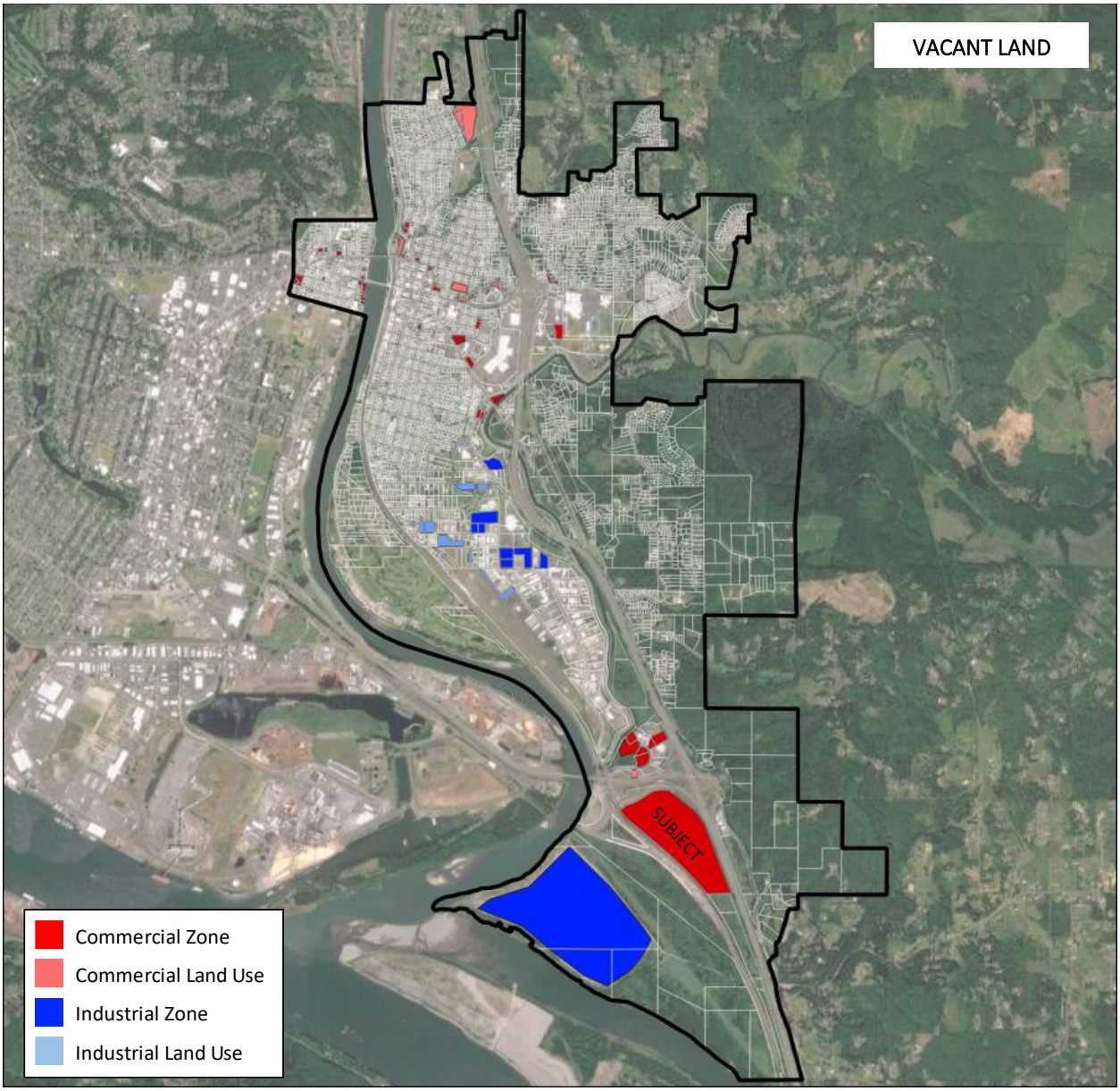
CURRENT LAND INVENTORY

Through a GIS analysis of recent satellite imagery, we have sought to identify current vacant commercial and industrial land in Kelso, using 2017 updated zoning and land use (GIS files provided by the City). Parcels used as parking lots or outdoor storage for businesses with structures on adjacent lots were not considered vacant. Certain vacant parcels were excluded when landlocked or deemed undevelopable due to configuration (e.g., narrow parcels). We also adjusted the land area for some parcels that extend into very wet areas that do not appear buildable. Conversely, we included parts of built sites that have a significant buildable portion. Critical areas were not identified in the analysis.

The analysis indicates 275 acres of vacant land with industrial zoning and 289 acres with industrial land use, compared to 686 and 743 acres identified in the 2015 Comprehensive Plan, respectively. The results are presented in the table on the next page, along with a map that shows current vacant commercial and industrial parcels.

FIGURE 6.2: CURRENT COMMERCIAL AND INDUSTRIAL LAND INVENTORY AND VACANT LAND MAP

CURRENT CAPACITY, KELSO UGA	ALL PARCELS		VACANT BUILDABLE PARCELS	
	Parcels	Acres	Parcels	Acres
Commercial				
Commercial Zone	545	348	48	121
Commercial Land Use	634	376	44	132
Commercial Land Use WKSP	420	84	18	4
Industrial				
Industrial Zone	118	1027	10	307
Industrial Land Use	181	1065	17	322



SOURCE: City of Kelso, JOHNSON ECONOMICS

Reconciliation of Land Supply and Demand

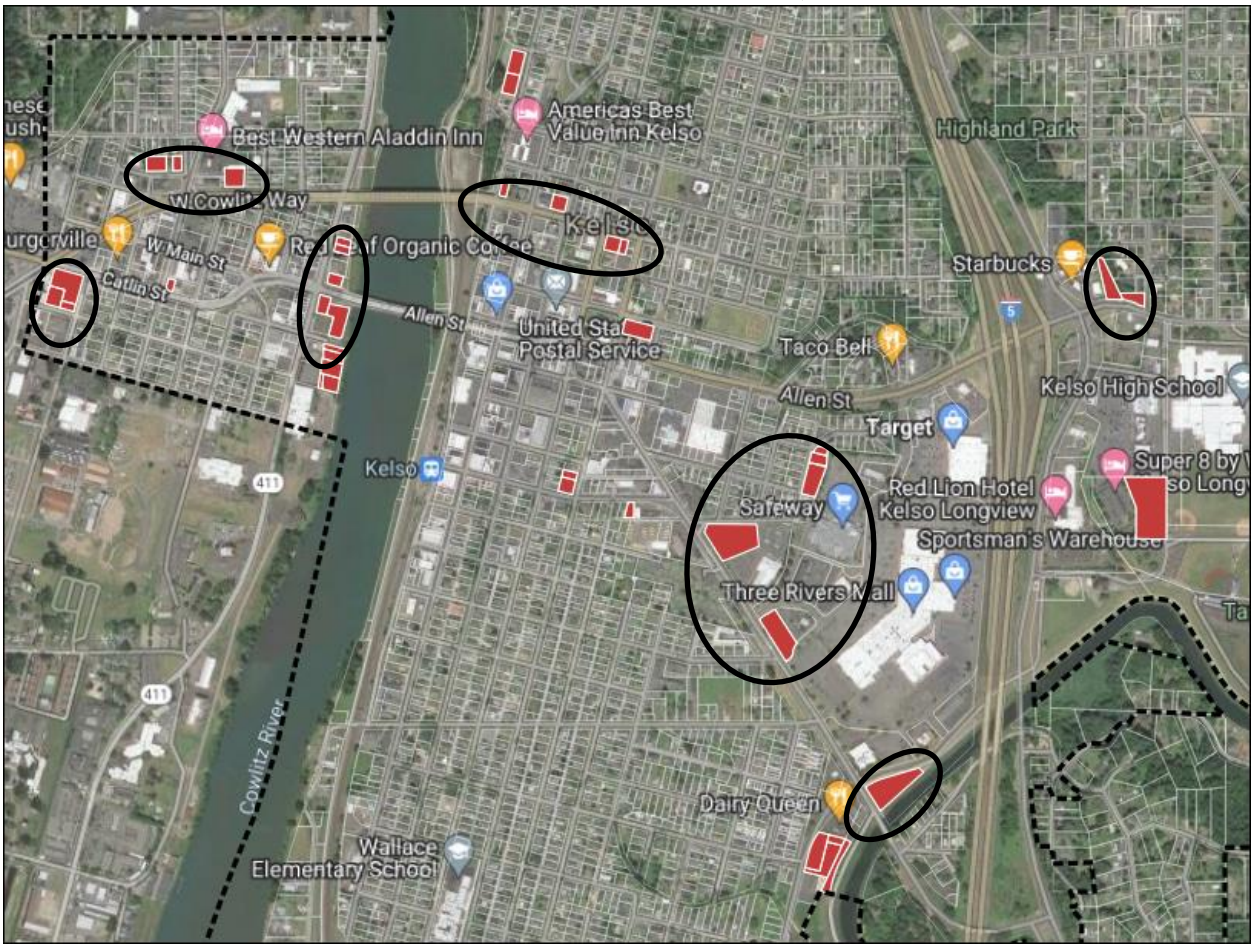
Commercial Land Supply and Demand

Given the negative demand growth expected in the commercial sector over the coming 20 years, Kelso currently has adequate supply of vacant commercial land, even if subject site is rezoned for industrial use. If we subtract the parcel considered as the buildable portion of the subject site (93 acres in the assessor data), the city currently has 28 acres of vacant land with commercial zoning, and 39 acres of vacant land with commercial land use designation. For reference, net absorption of commercial space over the past five years represented 2 acres of land (22,700 SF).

Alternative Commercial Sites

Even with a net decline in demand over the next two decades, there will likely be some demand for new space or for formats that are not represented in the existing building inventory. Small, modern spaces for restaurants and service providers are the most likely formats needed. There are a number of vacant sites that are better suited to meet this demand than the subject site. The following map shows current vacant and developable sites with commercial zoning in central parts of Kelso. These have relatively good access and exposure to the local population. We regard the circled sites to be best positioned, located along high-traffic roads like Cowlitz Way and Allen Street, or with exposure to shopping traffic to Safeway and Three Rivers Mall. Some of the sites also offer river views attractive to restaurants. The circled sites total 8.5 acres, which at a typical 0.25 FAR can accommodate 93,000 square feet of retail space.

Figure 6.3: Vacant Sites with Commercial Zoning, Central Kelso



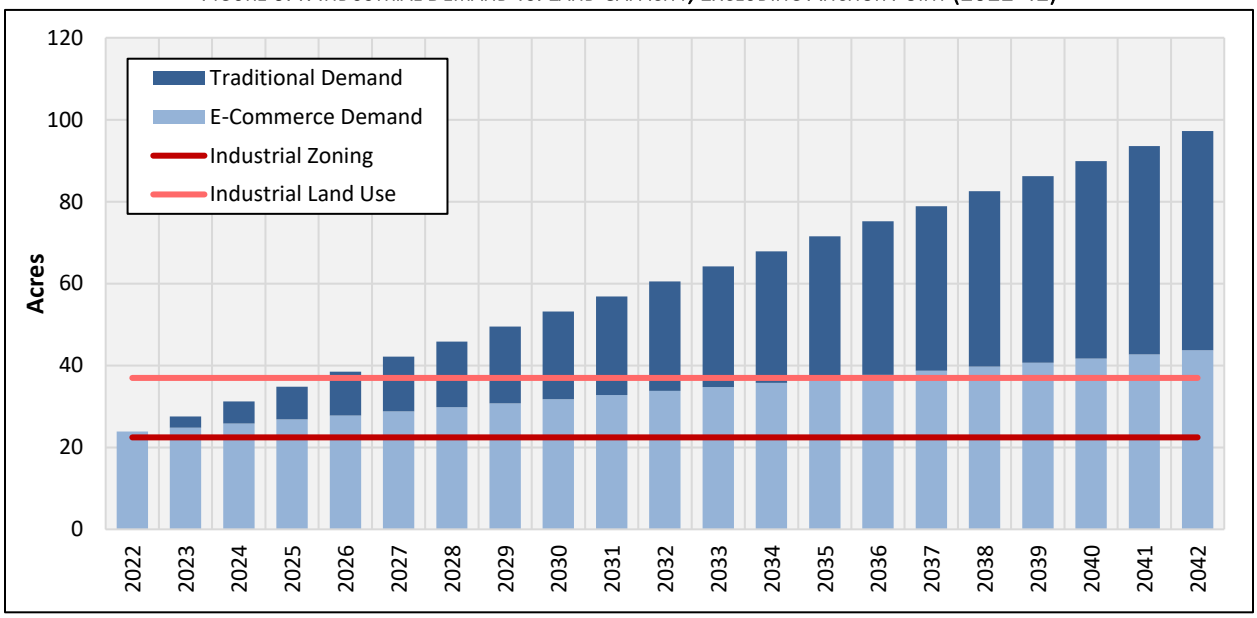
SOURCE: Cowlitz County, City of Kelso, Johnson Economics

INDUSTRIAL LAND SUPPLY AND DEMAND

The estimates of current vacant land supply indicate adequate industrial land capacity in Kelso, with more than 300 acres of vacant land, compared to a total 20-year need of roughly 100 acres (including 24 acres of existing unmet e-commerce land need). However, 285 acres of this land supply is the Anchor Point site to the west of the subject site. This site offers good rail and water access but lacks good access to the I-5 freeway and has significant development challenges. As such, it is best suited for heavy industrial use, competing with similar large sites in Longview, Kalama, and other West Coast locations. A user at this site will likely serve a national or international market, as opposed to the locally generated demand modeled in our industrial demand forecast.

Excluding the Anchor Point site, Kelso has 22 acres of vacant industrially zoned land and 37 acres of vacant land with industrial land use designation. This is well short of modeled demand over the next 20 years. The 22 acres represent six years of demand growth, while the 37 acres represent 10 years. If we include the existing unmet demand for e-commerce land (24 acres), the 37 acres is enough for less than four years of demand growth.

FIGURE 6.4: INDUSTRIAL DEMAND VS. LAND CAPACITY, EXCLUDING ANCHOR POINT (2022-42)



SOURCE: City of Kelso, JOHNSON ECONOMICS

ALTERNATIVE COMMERCIAL SITES

As discussed, most new industrial development in the current market are large distribution and fulfillment centers, reflecting that this is the fastest growing segment of the market and that efficient distribution and fulfillment operations require specific building features not found in older structures. Traditional manufacturers, wholesalers, and contractors can more easily function in older buildings.

Apart from Anchor Point, Kelso has no vacant industrial sites large enough to accommodate new buildings of a large distribution or fulfillment format. The largest parcel is located along 13th Avenue, north of Hazel Street (see map next page). It measures 5.5 acres and may accommodate a building up to 75,000 square feet in size, taking into account wetlands. If combined with two adjacent vacant sites to the south, the site may accommodate a building with around 100,000 square feet. However, this may be difficult in practice, as the parcels have different owners. One block further south, two parcels with one owner at the northeast corner of 13th Avenue and Colorado Street together total 4.8

acres, which may accommodate a building up to 75,000 square feet. In other words, Kelso is without sites that can accommodate the type of users that have located in Ridgefield, Winlock, and Centralia in recent years. Moreover, the sites in Kelso are roughly two acres from freeway interchanges, requiring heavy traffic through the city. The subject site is better located in this regard, adjacent a freeway interchange in the city's periphery, while also offering a scale that can accommodate large users.

FIGURE 6.5: LARGE VACANT INDUSTRIAL SITES IN KELSO

SOURCE: City of Kelso, JOHNSON ECONOMICS

VII. Subject Absorption Potential

Commercial Space

In light of the negative commercial absorption projected on the city and county level over the next 20 years, and the availability of commercial sites with superior exposure to the local population in central parts of Kelso, very limited absorption can be expected at the subject site. The most likely commercial formats are regional establishments selling high-dollar products, similar to the existing establishments to the north of the site.

For the purposes of modeling economic and fiscal impacts of commercial development at the site, we will assume the same absorption rate as achieved in the commercial-industrial development to the north, which has averaged 0.6 acres of annual absorption, at a low FAR (0.12). Assuming a 0.15 FAR for future development, this represents 4,000 square feet of built space per year. In the impact modeling, we will assume that 16,000 square feet is built every four years, beginning in 2025.

Industrial Space

Given the subject's scale and freeway access, and the lack of other similar sites, we would expect the subject to capture a large share of the potential demand for industrial land in the Kelso-Longview area. For a conservative estimate, we will assume that the site can capture 250,000 of the 364,000 square feet (roughly two-thirds) of existing demand on the county level, or 16.4 acres of land at 0.35 FAR. This is based on the expectation that users looking for locations near the Kelso-Longview population are likely to prefer sites along the I-5 on the south side of the Kelso-Longview area, due to inbound shipments from facilities in the Portland Metro Area.

In addition to the potential for immediate absorption of existing demand, we will also assume that the site can capture around 20,000 square feet (1.3 acres) of annual demand growth. As with retail absorption, we will in the impact modeling assume that structures are built in phases every four years, beginning in 2025.

VIII. Economic and Fiscal Impact

In this section we compare modeled economic and fiscal impacts of commercial and industrial development at the subject site over a 20-year period, based on the absorption assumptions presented in the previous section. To model these impacts, Johnson Economics utilized IMPLAN (IMPact for PLANning)[1] input/output multiplier model methodology. IMPLAN is an economic impact model designed for analyzing the effects of economic activity (employment, income, or business revenues) upon all other industries in an economic area (see Appendix).

Economic Impacts

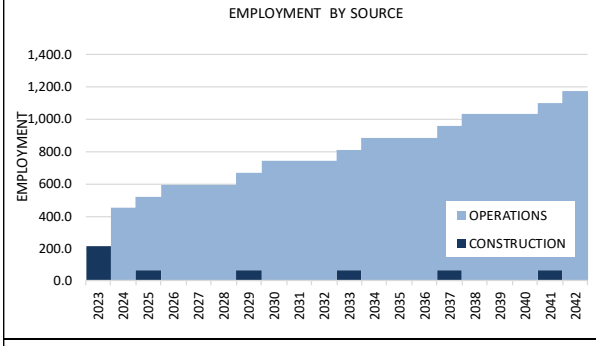
Impacts on employment (man-years), incomes, economic value are estimated on the county level separately for construction and operations at the site. We measure the direct effects, as well as indirect effects on services provided by non-construction sectors in the county and induced effects due to household spending derived from labor income. Measured in county-wide employment over the 20-year period, industrial construction and operations are projected to generate a total of 1,741 man-years, while retail is projected to generate 335 man-years.

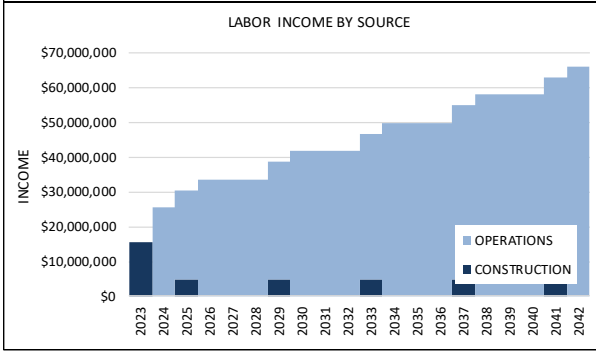
Figure 8.1: Economic Impacts on Cowlitz County, Subject Site Development (2023-42)

INDUSTRIAL	PROJECTED IMPACTS, 2022-42, COWLITZ COUNTY (2022 $s)			
	Employment	Labor Income	Value Added	Output
CONSTRUCTION				
Direct Effect	392	$32,336,893	$40,426,674	$74,750,000
Indirect Effect	47	$2,665,739	$4,598,615	$8,726,742
Induced Effect	128	$5,456,890	$10,892,378	$18,845,072
Total Effect	567	$40,459,522	$55,917,667	$102,321,814
OPERATIONS				
Direct Effect	813	$49,097,302	$60,879,245	$133,820,763
Indirect Effect	153	$8,038,563	$14,620,201	$26,167,958
Induced Effect	209	$8,875,986	$17,707,411	$30,643,591
Total Effect	1,174	$66,011,850	$93,206,857	$190,632,312

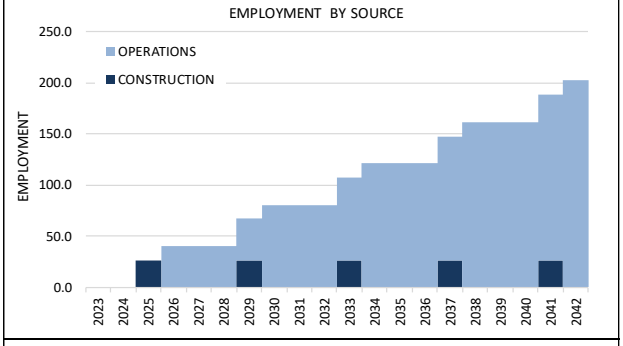
RETAIL	PROJECTED IMPACTS, 2022-42, COWLITZ COUNTY (2022 $s)			
	Employment	Labor Income	Value Added	Output
CONSTRUCTION				
Direct Effect	92	$7,613,770	$9,518,521	$17,600,000
Indirect Effect	11	$627,652	$1,082,751	$2,054,725
Induced Effect	30	$1,284,833	$2,564,627	$4,437,101
Total Effect	133	$9,526,255	$13,165,899	$24,091,825
OPERATIONS				
Direct Effect	178	$3,478,089	$4,501,722	$6,770,481
Indirect Effect	10	$469,126	$944,049	$1,687,579
Induced Effect	14	$615,339	$1,228,255	$2,125,031
Total Effect	202	$4,562,553	$6,674,026	$10,583,090

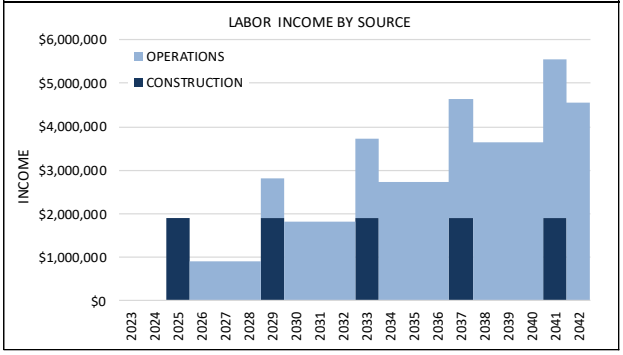
YEAR-BY-YEAR IMPACTS





YEAR-BY-YEAR IMPACTS





SOURCE: Minnesota IMPLAN Group, Johnson Economics

1 Minnesota IMPLAN Group (MIG), Stillwater, Minnesota

Fiscal Impacts

In addition to economic impacts, the proposed retail center will also have significant fiscal implications on the city, county, state, and federal level, as well as for other local taxing districts. In this section, we estimate the impacts of sales and property tax, with focus on the revenue impact for the City of Kelso.

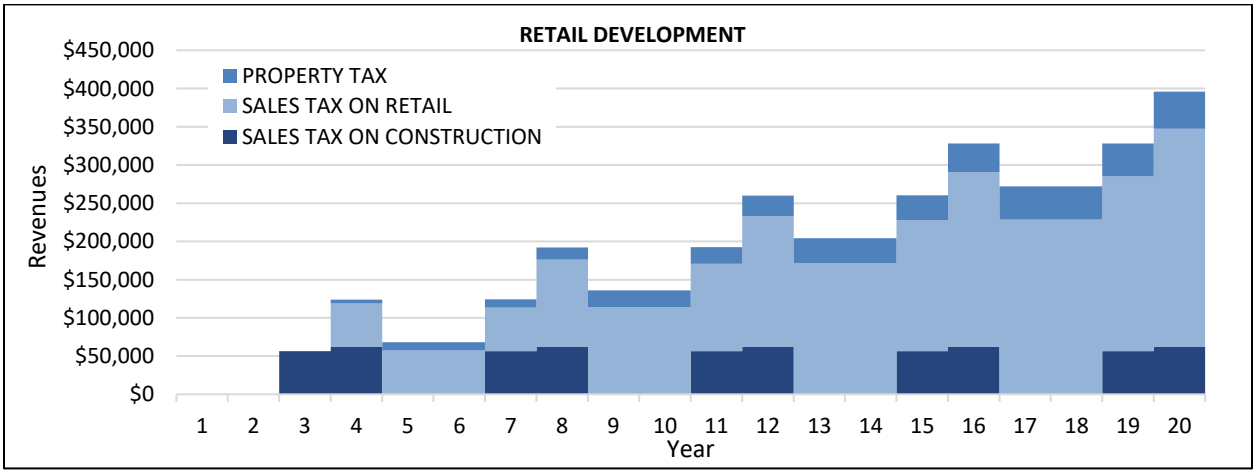
Sales tax will be assessed on construction as well as on ongoing retail at the retail center. Additionally, the indirect and induced impacts of the initial construction and the ongoing operation of the center will generate additional construction and sales, a portion of which will take place in Kelso, and thus generate additional sales tax to the City.

Property tax will be assessed on an ongoing basis upon completion of structures within the retail center. In addition, there will be indirect and induced effects within the city, as additional commercial and residential construction is catalyzed by the project, reflecting business-to-business activity, spending by workers, and new worker housing.

Measured in 2022 dollars, total cumulative impacts on City revenues over the 20 years are estimated to $3.6 million with retail development ($3.0 million direct) and $6.5 million with industrial development ($2.6 million direct).

FIGURE 8.2: TOTAL FISCAL IMPACTS ON CITY OF KELSO REVENUES (2022 DOLLARS) – RETAIL DEVELOPMENT

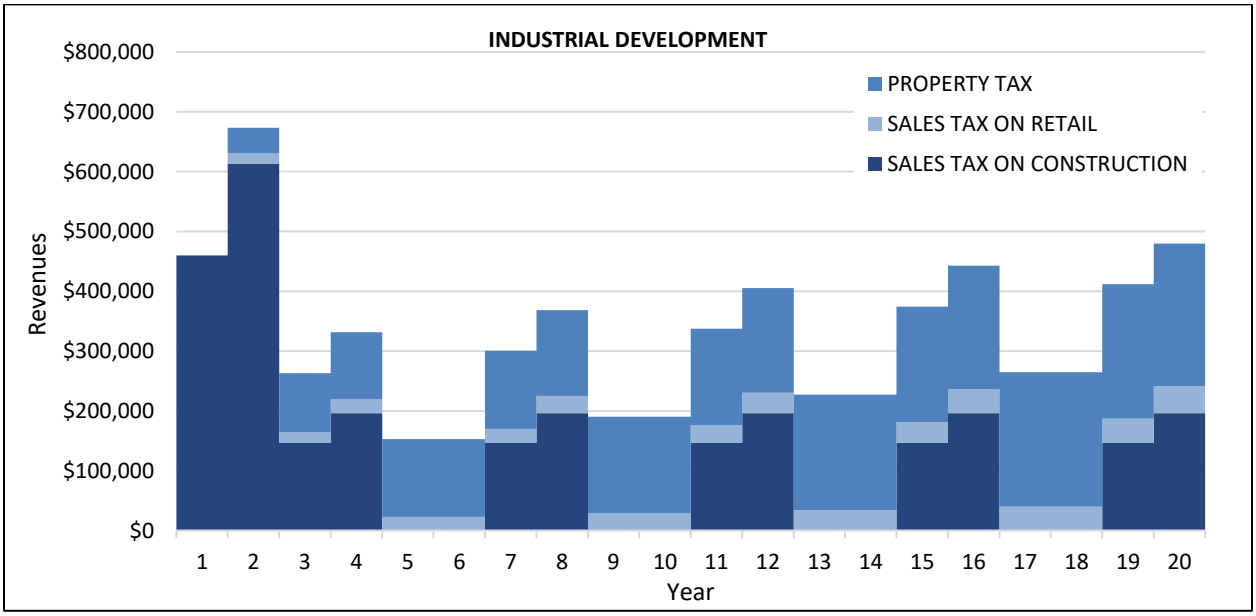
FISCAL IMPACTS - RETAIL City of Kelso	2023 Year 1	2024 Year 2	2025 Year 3	2026 Year 4	2027 Year 5	2028 Year 6	2029 Year 7	2030 Year 8	2031 Year 9	2032 Year 10	2042 Year 20
SALES TAX ON CONSTRUCTION											
Direct Impacts	0	0	56,320	0	0	0	56,320	0	0	0	0
Indirect/Induced Impacts	0	0	0	61,696	0	0	0	61,696	0	0	61,696
Total Impacts	0	0	56,320	61,696	0	0	56,320	61,696	0	0	61,696
SALES TAX ON RETAIL											
Direct Impacts	0	0	0	55,467	55,467	55,467	55,467	110,933	110,933	110,933	277,333
Indirect/Induced Impacts	0	0	0	1,705	1,705	1,705	1,705	3,409	3,409	3,409	8,523
Total Impacts	0	0	0	57,171	57,171	57,171	57,171	114,342	114,342	114,342	285,856
PROPERTY TAX											
Direct Impacts	0	0	0	5,169	5,169	5,169	5,169	10,337	10,337	10,337	25,843
Indirect/Induced Impacts	0	0	0	0	5,662	5,662	5,662	5,662	11,324	11,324	22,647
Total Impacts	0	0	0	5,169	10,830	10,830	10,830	15,999	21,661	21,661	48,490
TOTAL TAX											
Direct Impacts	0	0	56,320	60,635	60,635	60,635	116,955	121,270	121,270	121,270	303,176
Indirect/Induced Impacts	0	0	0	63,400	7,366	7,366	7,366	70,767	14,733	14,733	92,866
Total Impacts	0	0	56,320	124,035	68,002	68,002	124,322	192,037	136,003	136,003	396,042
Cumulative	**0**	**0**	**56,320**	**180,355**	**248,357**	**316,359**	**440,680**	**632,717**	**768,720**	**904,723**	**3,621,840**



SOURCE: JOHNSON ECONOMICS

FIGURE 8.3: TOTAL FISCAL IMPACTS ON CITY OF KELSO REVENUES (2022 DOLLARS) – INDUSTRIAL DEVELOPMENT

FISCAL IMPACTS - INDUSTRIAL	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2042
City of Kelso	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 20
SALES TAX ON CONSTRUCTION											
Direct Impacts	460,000	0	147,200	0	0	0	147,200	0	0	0	0
Indirect/Induced Impacts	0	613,550	0	196,336	0	0	0	196,336	0	0	196,336
Total Impacts	460,000	613,550	147,200	196,336	0	0	147,200	196,336	0	0	196,336
SALES TAX ON RETAIL											
Direct Impacts	0	0	0	0	0	0	0	0	0	0	0
Indirect/Induced Impacts	0	17,454	17,454	23,039	23,039	23,039	23,039	28,625	28,625	28,625	45,381
Total Impacts	0	17,454	17,454	23,039	23,039	23,039	23,039	28,625	28,625	28,625	45,381
PROPERTY TAX											
Direct Impacts	0	42,215	42,215	55,723	55,723	55,723	55,723	69,232	69,232	69,232	109,758
Indirect/Induced Impacts	0	0	56,306	56,306	74,324	74,324	74,324	74,324	92,342	92,342	128,378
Total Impacts	0	42,215	98,521	112,029	130,047	130,047	130,047	143,556	161,574	161,574	238,135
TOTAL TAX											
Direct Impacts	460,000	42,215	189,415	55,723	55,723	55,723	202,923	69,232	69,232	69,232	109,758
Indirect/Induced Impacts	0	631,004	73,760	275,681	97,363	97,363	97,363	299,285	120,967	120,967	370,094
Total Impacts	460,000	673,219	263,175	331,405	153,087	153,087	300,287	368,517	190,198	190,198	479,852
Cumulative	**460,000**	**1,133,219**	**1,396,393**	**1,727,798**	**1,880,885**	**2,033,971**	**2,334,258**	**2,702,774**	**2,892,973**	**3,083,171**	**6,518,388**



SOURCE: *JOHNSON ECONOMICS*

APPENDIX: IMPLAN MODELING SYSTEM

SOCIAL ACCOUNTING MATRICES

Regional Social Accounting Matrices, or SAMs, represent an IMPLAN extension for regional economic modeling. SAMs provide information on non-market financial flows. IMPLAN type inter-industry models provide information on market transactions between firms and consumers, and they capture payments of taxes by individuals and businesses, transfers of government funds to people and businesses, and transfer of funds from people to people.

IMPLAN MULTIPLIERS

Social Accounting Matrices can be constructed to show the effects of a given change on the economy of interest. These are called Multiplier Models. Multiplier Models study the impacts of a user—specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific Social Accounting Matrices, they will reflect the region's unique structure and trade situation.

Multiplier Models are the framework for building impact analysis questions. Derived mathematically, these models estimate the magnitude and distribution of economic impacts, and measure three types of effects that are displayed in the final report. These are the direct, indirect, and induced changes within the economy. The following is a brief definition of the three impact types:

> ***Direct Impacts***: The actual change in activity affecting a local economy. For example, if a new institutional building is constructed, direct economic impacts represent the value-added output for that firm/user, as well as the jobs required by that business and the labor income paid.
>
> ***Indirect Impacts***: Indirect impacts reflect the response of all other local businesses within the geographic area to the direct impact. Continuing the previous example, indirect impacts of a new institutional user would comprise revenues for related venders, i.e., real estate services, vendors, etc., and the jobs and labor income thereby generated.
>
> ***Induced Impacts***: These reflect the response of households within the geographic area affected by direct and indirect impacts. In the given example, induced impacts would be the increase in all categories of spending by households in the geography directly or indirectly employed by the businesses' activities.

Our analysis will evaluate the Jobs, Labor Income, and Value-Added Output of our estimated direct industry change and commodity change activities.

GLOSSARY OF TERMS[2]

> ***Value Added Output***: The difference between an industry's or an establishment's total output and the cost of its intermediate inputs. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported). Value added consists of compensation of employees, taxes on production and imports less subsidies (formerly

2 From the United States Bureau of Economic Analysis (BEA)

indirect business taxes and nontax payments), and gross operating surplus (formerly “other value added”).

Labor Income: All forms of employment income, including Employee Compensation (wages and benefits) and Proprietor Income.

Industry: A group of establishments engaged in the same or similar types of economic activity.