



MEMORANDUM

DATE: December 7, 2022

TO: SCHNITZER PROPERTIES
1121 SW Salmon Street
Portland, OR 97205

FROM: Brendan Buckley
Johnson Economics, LLC

SUBJECT: Analysis of Industrial Development Alternatives for the Basalt Creek Plan Area in Tualatin

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I. INTRODUCTION

JOHNSON ECONOMICS has conducted an alternative use analysis on an industrial site of roughly 82 total acres located in Tualatin, Oregon. The total acreage consists of 15 tax lots which are bisected by two public streets (SW Grahams Ferry Rd. and SW Tonquin Rd.) forming three separate contiguous sites.

The site is located within the Southwest and Basalt Creek urban renewal (UR) area and is currently zoned as Manufacturing Park (MP). The MP zone is currently under consideration to be replaced by a new Basalt Creek Employment District (BCE) zone.

The purpose of this analysis is to examine how a hypothetical potential development under the current draft of the BCE zone¹ (the “BCE Use”) compares to a flexible industrial park development

¹ This analysis is based upon the September 14, 2022 version of the draft BCE zone.



(the “Flex Use”) that includes some uses that are not currently allowed in the BCE zone. The scenarios are comprised of:

- BCE Use: a light-industrial facility of over 1 million square feet across 6 buildings, with the use mix dominated by manufacturing uses, with some accompanying office space. See Figure 4.1 for more detail.
- Flex Use: a flex industrial park of over 1 million square feet across 12 buildings, internally subdivided into a range of potential tenanted spaces for small to large-sized businesses, in a variety of sectors. Businesses include light manufacturing and office, as well as uses that are not currently permitted in the draft BCE zone, such as wholesale sales and warehousing. See Figure 3.3 for more detail.

The key metrics of comparison between the two scenarios are level of property investment, tax revenues, urban renewal impacts, and employment. The developed square footage and total estimated investment value within each scenario is the same. As detailed below, due to market demand, the prospective timing of development differs, with the Flex Use expected to develop sooner than the BCE Use.

II. EXECUTIVE SUMMARY

The following findings and conclusions are based on the analysis that follows in this report.

- The Flex Use would be home to a range of business types including light manufacturing, wholesale, and warehouse businesses. Some spaces would be suitable for creative office or flex industrial/office use. As planned, the development would be able to accommodate businesses from small to large.
- As proposed, the BCE zone would not allow some categories of uses that are generally compatible with the low-impact light industrial uses envisioned for the zone. Some of these restricted uses, including warehouse and wholesale sales, would be appropriate for the Flex Use, while also supportive of the goals of the BCE zone and Basalt Creek Plan Area in general. They can also be designed to be compatible with nearby residential uses.
- A City funded and directed economic analysis prepared in conjunction with the zoning update found that manufacturing, while an important component of on-going industrial growth, is growing more slowly than other types of industrial uses, and this is projected to continue.
- The City funded and directed economic analysis recommended allowing a broader range of land uses in the BCE zone to encourage the most rapid and robust build out of industrial areas including flex, manufacturing, wholesale, and warehouse space. Stakeholders in the



industrial planning and the real estate market likewise recommended codes with greater flexibility and allowed uses as models, while pointing to restrictive codes as what to avoid.

- When compared to the BCE Use, the Flex Use is projected to result in greater taxable value, with significantly greater revenue benefits to the Urban Renewal Area (URA).
- The Urban Renewal (UR) Plan forecasted an average annual growth of 6% in the assessed value, resulting in \$4.5M in URA revenue over the 30-year life of the district. The Flex Use is estimated to result in over \$58M in revenue over the same period, or 13 times higher than the forecast in the UR Plan.
- The BCE Use, a speculative light industrial campus introduced after an additional 10 years, would generate a cumulative TIF revenue of \$38M over three years, or roughly 65% of the forecasted revenue from the Flex Use.
- As the recruitment other major employers such as high-tech and advanced manufacturing companies to the Basalt Creek area remains speculative, the Flex Use at the subject site has the potential to provide significant UR revenue in the early years of the district to finance identified UR projects.
- The Flex Use would also provide off-site improvements with extensive public benefits to other users and the City, including improving streets, intersections, trails, water and sewer infrastructure in the immediate area.
- The Flex Use would include a roughly \$29M total investment in improved public infrastructure, which would contribute substantially to extending services to other portions of the Basalt Creek Plan Area and facilitate further development of additional employment uses in the area. This investment would be contributed to the development of the URA without requiring urban renewal funding.
- Modern flex industrial parks, such as the Flex Use, offer a high density of employment through offering a mix of spaces suitable for a broad range of light industrial, office, wholesale, warehouse, and related sectors. At the assumed density of 20 jobs per acre, the Flex Use would support an estimated 1,640 jobs.
- There is no compelling reason to predict a significant difference between the realized employment density of a development under the City's draft BCE zone as proposed (e.g. the BCE Use) vs. the employment density under revised zoning standards with an expanded list of allowable uses such as those proposed in the Flex Use.



- This mixture of business sectors included in the Flex Use feature high average wages beyond those found in manufacturing alone (the BCE Use). The mix of sectors included in the Flex Use is likely to support many family-wage, skilled, blue-collar jobs, at a comparable employment density to that expected in the limited diversity of uses in the BCE Use.
- Our analysis concludes that as compared to development allowed under the proposed BCE zone, an expanded list of allowable uses in the BCE zone would support comparable levels of employment density and wages in the area, potentially generate greater taxable value and urban renewal revenue, include significant investment in off-site public infrastructure, while remaining compatible with neighboring uses.

III. HYPOTHETICAL FLEX USE DEVELOPMENT PROGRAM

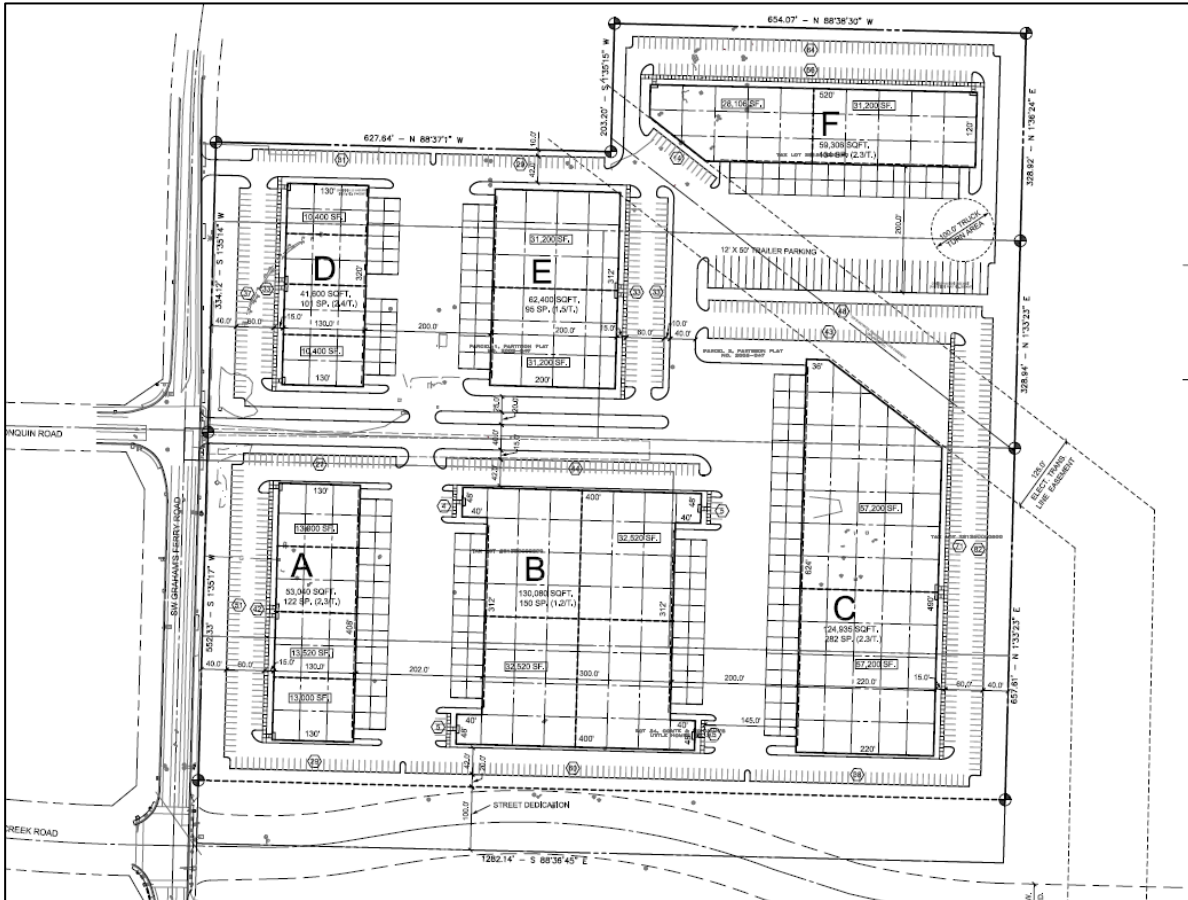
Figures 3.1 & 3.2 show a preliminary site plan² for the Flex Use that forms the basis of the assumptions in this analysis. The layouts shown below are broken into the east and west sections as divided by SW Graham's Ferry Road.

The east section is located to the east of SW Graham's Ferry Road, and north of the planned extension of Basalt Creek Drive. It consists of six buildings totaling 471k square feet.

² This site plan is potentially subject to change during the planning process, but this is representative of the eventual planned use and scale.



FIGURE 3.1: SUBJECT SITE EASTERN SECTION, PRELIMINARY SITE PLAN (SUBJECT TO CHANGE)

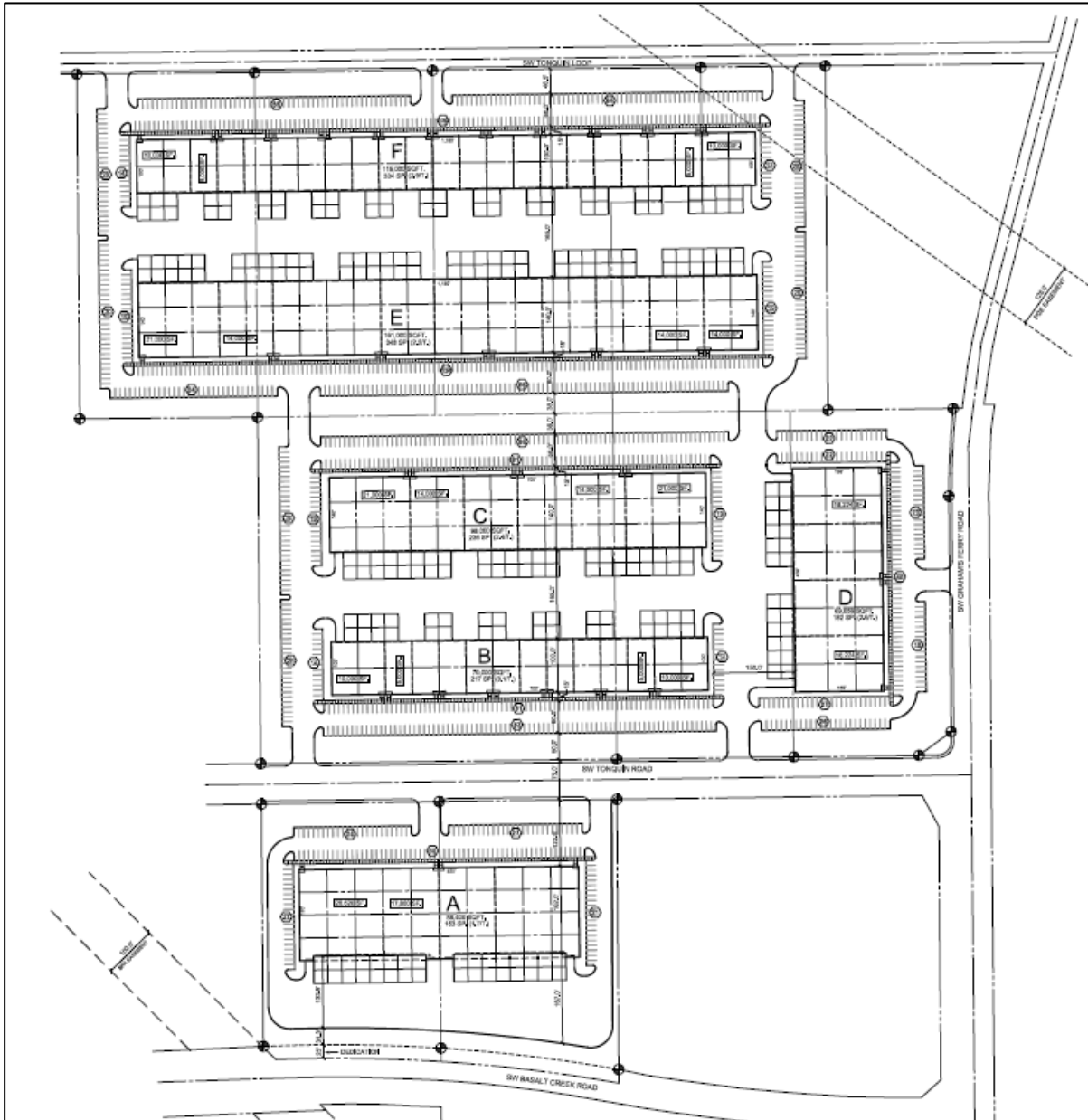


Source: VLMK Engineering and Design

The west section is located to the west of SW Graham's Ferry Road, north of Basalt Creek Drive, and bisected by SW Tonquin Rd. It consists of six buildings totaling 601k square feet.



FIGURE 3.2: SUBJECT SITE WESTERN SECTION, PRELIMINARY SITE PLAN (SUBJECT TO CHANGE)



Source: VLMK Engineering and Design

Figure 3.3 presents the preliminary Flex Use development plan and estimated value of capital improvements at the site for a flex industrial development. These estimates form the basis for projected tax revenue generation from the development, as discussed in following sections. Overall, this facility will have an estimated future value of over \$232 million in real property and equipment.



FIGURE 3.3: PRELIMINARY DEVELOPMENT PLAN AND ESTIMATED CAPITAL INVESTMENT

East Site		Estimated Capital Investment Value		
Flex Ind. Facility	Built Area (Square Feet)	Real Prop. Value/s.f.	Real Prop. Value	Total Value
Building A	53,040	\$217	\$11,510,000	\$11,510,000
Building B	130,080	\$217	\$28,227,000	\$28,227,000
Building C	124,935	\$217	\$27,111,000	\$27,111,000
Building D	41,600	\$217	\$9,027,000	\$9,027,000
Building E	62,400	\$217	\$13,541,000	\$13,541,000
Building F	59,306	\$217	\$12,869,000	\$12,869,000
TOTAL:	471,361	\$217	\$102,285,000	\$102,285,000

West Site		Estimated Capital Investment Value		
Flex Ind. Facility	Built Area (Square Feet)	Real Prop. Value/s.f.	Real Prop. Value	Total Value
Building A	88,400	\$217	\$19,183,000	\$19,183,000
Building B	70,000	\$217	\$15,190,000	\$15,190,000
Building C	98,000	\$217	\$21,266,000	\$21,266,000
Building D	69,056	\$217	\$14,985,000	\$14,985,000
Building E	161,000	\$217	\$34,937,000	\$34,937,000
Building F	115,000	\$217	\$24,955,000	\$24,955,000
TOTAL:	601,456	\$217	\$130,516,000	\$130,516,000

PROPOSED FLEX INDUSTRIAL		Estimated Capital Investment Value		
Flex Ind. Facility	Built Area (Square Feet)	Real Prop. Value/s.f.	Real Prop. Value	Total Value
TOTAL:	1,072,817	\$217	\$232,801,000	\$ 232,801,000

Source: VLMK Engineering and Design, Schnitzer Properties, CoStar, Johnson Economics

Tenants and Land Uses: The Flex Use would be home to a range of business types including light manufacturing, wholesale sales, and warehousing. Some spaces would be suitable for creative office or flex industrial/office use. As planned, the development would be able to accommodate businesses from small to large.

These assumptions are used to model the potential tax revenue and employment generation from this development, discussed more in the following sections of this report.



IV. HYPOTHETICAL BCE USE PROGRAM

To compare the impacts of the Flex Use with what might happen the proposed BCE zone in the area, we have modeled the BCE Use as a hypothetical light industrial development. The light industrial development would be largely manufacturing based, with a limited office component in keeping with the limitations of the BCE zone as currently drafted.

Proposed Basalt Creek Employment District (BCE) Zone: Purpose and Permitted Uses

Currently, the City of Tualatin is considering the replacement of the Manufacturing Park (MP) zone, that currently overlays the subject properties, with the newly defined BCE zone. The draft BCE zone is intended to meet the goals of the plan through supporting a mix of employment uses that are compatible with nearby residential uses. Preliminary *draft* code language describes the zone's potential purpose as currently conceived:

The purpose of this district is to implement the goals of the Basalt Creek Concept Plan, to provide an environment conducive to the development and protection of employment uses that contribute to the local economy and support nearby residential uses. Such permitted uses must not cause objectionable noise, smoke, odor, dust, noxious gases, vibration, glare, heat, fire hazard or other wastes emanating from the property. The emphasis of the zone is on providing a variety of light manufacturing, office, and incubator space for established and emerging businesses, typically in a low-rise, flex-space development pattern. Retail uses are allowed but limited in intensity to maintain adequate employment development opportunities.

[Tualatin Comprehensive Plan, Chapter 10 (9/14/22 draft language)]

Like the MP Zone before it, the BCE would place limitations on most land use categories, including many industrial uses. Retail, commercial services, and office uses are either limited to auxiliary or secondary uses to light industrial or limited in square footage as the primary use.

As drafted, the BCE zone does not allow some categories of uses that are generally compatible with light industrial uses and would be appropriate for a flex industrial park like the Flex Use, including some machine shops, metal fabrication, wholesale trade, most warehousing, and storage of fleet vehicles associated with on-site employers.

As discussed more below, these uses would likely be beneficial to the goals of the BCE and Basalt Creek Plan Area in general and can be compatible with the low-impact light industrial uses envisioned for the zone, and nearby residential uses.

BCE Use Development Scenario

Figure 4.1 presents a hypothetical development plan and estimated value of capital improvements at the site for a light industrial development at the site, consisting largely of manufacturing with some secondary office uses, the BCE Use. The BCE Use development is assumed to be accommodated in fewer buildings (six) in more of a campus-style design.



For the sake of comparison, the assumed FAR of 0.3 remains the same, meaning the overall square footage of space is assumed to be the same between the two scenarios, as well as the total estimated investment value (\$232M). The main difference between the two scenarios is assumed to be the prospective timing of development, as discussed in the following section.

FIGURE 4.1: HYPOTHETICAL BCE USE PLAN AND ESTIMATED CAPITAL INVESTMENT

East Site		Estimated Capital Investment Value		
Manufacturing Facility	Built Area (Square Feet)	Real Prop. Value/s.f.	Real Prop. Value	Total Value
Building A	183,120	\$217	\$39,737,000	\$39,737,000
Building B	166,535	\$217	\$36,138,000	\$36,138,000
Building C	121,706	\$217	\$26,410,000	\$26,410,000
TOTAL:	471,361	\$217	\$102,285,000	\$102,285,000

West Site		Estimated Capital Investment Value		
Manufacturing Facility	Built Area (Square Feet)	Real Prop. Value/s.f.	Real Prop. Value	Total Value
Building A	158,400	\$217	\$34,373,000	\$34,373,000
Building B	167,056	\$217	\$36,251,000	\$36,251,000
Building C	276,000	\$217	\$59,892,000	\$59,892,000
TOTAL:	601,456	\$217	\$130,516,000	\$130,516,000

ALTERNATIVE SCENARIO		Estimated Capital Investment Value		
Manufacturing Facility	Built Area (Square Feet)	Real Prop. Value/s.f.	Real Prop. Value	Total Value
TOTAL:	1,072,817	\$217	\$ 232,801,000	\$ 232,801,000

Source: CoStar, Johnson Economics

Land Use: As noted, the BCE Use is expected to be largely manufacturing based, with some accompanying office space. This alternative does not include the variety of uses envisioned in the Flex Use, because the proposed BCE zone limits are restricts many flex industrial uses.

The assumptions presented in Figure 4.1 are used to model the potential tax revenue and employment generation from this development, discussed more in the following sections of this report.

V. INDUSTRIAL MARKET TRENDS IMPACTING DEVELOPMENT



Aside the mix of businesses, the two development scenarios will differ in the prospects for actually being realized in the near term based on the current industrial real estate environment. The Flex Use is actively looking to move forward, whereas a prospective campus-style business park for one or a few large users presented in the BCE Use is more speculative.

This section reviews market conditions for new industrial development that will impact the pace of development, and therefore the timing of employment growth, benefits to the tax base, Urban Renewal Area, and off-site public infrastructure improvements.

Economic Analysis of the Zone Update Project

As part of the Basalt Creek MP Zone Update project, the City funded and directed an economic analysis that was prepared by Leland Consulting Group (Leland Analysis) to assess the “market-based development and employment opportunities”³ in the area. After examining industrial market conditions and trends in the Portland region and SW Metro submarket, ***the analysis recommended allowing a broader range of land uses in the updated zone*** (i.e. the BCE zone) in order to encourage the most rapid and robust build out of industrial areas. Some key findings from the analysis:

- In general, the analysis finds that manufacturing, while an important component of on-going industrial growth, is growing more slowly than other types of industrial uses, and this is projected to continue. “While the manufacturing sector as a whole is projected to have some recovery-driven employment growth, it also contains 11 of the 20 industries projected to have the most rapid employment declines, and annual manufacturing employment growth is just 0.15 percent. Factors contributing to the loss of manufacturing jobs include continued global competition and the adoption of productivity-enhancing technologies such as robotics.” (Pg. 7)
- On the regional level, manufacturing employment growth is expected to be somewhat more robust than nationally, but still trail other industrial growth: “...manufacturing jobs in the Portland metropolitan area are projected to grow by 0.99 percent annually through 2030. Transportation and warehousing jobs are similarly projected to grow rapidly at 1.64 percent annually, and wholesale trade jobs are projected to grow at 1.11 percent annually.” (Pg. 7)
- “For Basalt Creek, the ULI Survey suggests in the near-term developers are more likely to invest in new fulfillment and warehousing projects than manufacturing” (Pg. 6), and “[m]anufacturing (i.e. buildings exclusively used for manufacturing uses) has accounted for

³ Basalt Creek MP Zone Update Economic Analysis, Chris Zahas and Sam Brookham, Leland Consulting Group, 2022.



significantly less development in recent years, which appears a broader market trend...” (Pg. 11)

- These findings support an approach of allowing manufacturing uses while maintaining flexibility for other uses that can also offer employment density and good wages, while better taking advantage of economic cycles.

As part of the analysis, Leland Consulting met with various stakeholders in the industrial planning and real estate market who recommended potential model zones on which to base the new BCE zone.

- Five model zones in the Portland region were suggested. What the zones have in common is flexibility and a range of allowed uses. Meanwhile, stakeholders suggested that zoning codes which are overly restrictive should be avoided.
- A case study of the Tonquin Employment Area in Sherwood noted that:

“The EI zone was originally aimed at supporting high-tech manufacturing and traded sector job growth. **However, the TEA remained largely unincorporated and undeveloped for many years** following the plan’s adoption in 2010.

“Stakeholders interviewed for this project highlighted the challenges of developing in the TEA following the concept plan and UGB activity, **citing a narrowly defined set of allowed uses in the zoning code**, site constraints, and relatively restrictive development standards as reasons for the lack of initial development in the area.

“In 2014, the City of Sherwood embarked on an implementation plan that focused on infrastructure and financial tools and **refined the focus of the EI Zone on “mid-size manufacturing and flex space.” One of the main recommendations that came out of this process included expanding the allowed uses in the EI zone to attract more investment.** Stakeholders cited this added flexibility to the EI zone as instrumental in facilitating the recent wave of new investment activity in the TEA.” [Emphasis added] (Pg. 16)

The economic analysis reaches similar conclusions, recommending flexibility in allowed uses in the updated zone:

“Manufacturing buildings—the primary use currently allowed in the MP zone—have accounted for less than seven percent of all industrial development over the past 10 years in the I-5 South submarket (down from almost 19 percent historically). Meanwhile, warehouse and distribution buildings have continued to make up the largest share of new development, and multitenant and flex industrial buildings have accounted for more than one-fifth of recent investment (up two-fold from historical averages).

“Demand for multi-tenant flex industrial buildings will continue to grow in the future. These buildings tend to be smaller, speculative developments (no more than 150,000 square feet) that cater to a wide variety of tenants—including tech, manufacturers, suppliers, wholesalers, services, contractors, as well as traditional distribution and warehousing tenants house relatively job-dense tenants from a broad market spectrum, and are well suited to the I-5 submarket....



“[T]he most suitable of ‘model’ zones (per feedback from stakeholders) are generally less restrictive than the Manufacturing Park zone in Basalt Creek.” (Pg. 20-21)

Recommendations: Ultimately, the City funded and directed economic analysis recommends expanding the allowed use table in the MP zone to be more inclusive of other industrial uses and to be better aligned with market demand that includes flex, distribution, manufacturing, and warehouse space (pg. 21). This recommendation for the updated BCE zone can be accomplished while still ensuring compatibility with nearby residential uses.

Summary of Economic Conditions

The City funded and directed economic analysis prepared as part of drafting the BCE zone supports the finding that a more flexible zone with a greater variety of allowed uses is likely to encourage more rapid development, with greater public benefits to the tax base and Urban Renewal Area, without sacrificing employment density or wage levels. The following sections address these impacts.



VI. FORECAST OF TAXABLE VALUE AND TIF REVENUE POTENTIAL

Southwest and Basalt Creek Development Area (Urban Renewal Area)

The subject property is located within an urban renewal area (URA). The UR Plan (2021) identifies goals for the URA and implementing UR projects. The URA goals include to encourage “high density employment opportunities” and “encourage land development that strengthens the local tax base”. Other goals include the provision of transportation and utility infrastructure to support this vision for the build-out of the URA. The Flex Use can support these goals and help build taxable value within the UR district *without requiring expenditure of UR resources*.

The feasibility study prepared prior to adoption of the UR Plan forecasted revenue to the URA of between \$28.4 million and \$55.5 million, for the Basalt Creek area over 30 years (a separate feasibility study was prepared for the north part of the district.) The study applied a general annual inflation factor of 3% to all properties and then an additional factor of 1% to 3% annually for new development. Therefore, the total forecasted rate ranged between 4% (low) to 6% (high).

For the sake of this analysis, Johnson Economics applied these rates to the roughly 82-acre subject site. The subject site consists of 15 taxlots, with a total assessed value of \$5,371,350 in the 2021/22 tax year. This is assumed to be the “frozen base” value for the purposes of urban renewal, above which the taxable value from any appreciation and newly added value is assigned to the URA.

Applying the methodology of the feasibility analysis (a 4% to 6% annual growth rate) to this property as-is leads to a forecast of modest TIF revenue potential. Modeling the Flex Use results in high assessed value beginning in 2024 (Figure 5.1). The estimated total investment in the 12-building facility is roughly \$232.8 million, based on the preliminary development plan and assumptions outline below. (This development program is preliminary and may change over time, as will estimates of development costs. This is a best estimation at the time of this analysis and should be considered a rough or “order-of-magnitude” forecast to give an idea of the scale of the Flex Use and potential valuation.)

The hypothetical BCE Use is assumed to have the same square footage of space, over a fewer number of buildings, and the same valuation. The total estimated values are reproduced below for reference.

Timing of development: Figure 6.1 (following page) presents forecast of tax increment (TIF) revenue that goes to the URA over the 30-year period of the district. Phase I of the Flex Use is projected to happen in the near term, with the high taxable value being added to the tax roles in 2025, with two more phases being completed in two-year increments.

The development of a large industrial campus, based on manufacturing, in the BCE Use is speculative and reliant on recruitment of one or more major industrial employers to the area. The modeling here



demonstrates the impact of this BCE Use if it occurred in two phases, with the later east side of the development taking place after ten years and the west side after twenty years.

The timing of the BCE Use scenario is purely speculative, but as the economic analysis prepared for the zone change study points out, attracting large employers such as advanced manufacturers or high-tech industry to a zone with limited allowed uses can be a long-term prospect, or not happen at all. More flexible zoning is expected to have better prospects in the near term, as demonstrated by the Flex Use.

Figure 6.1 compares the taxable valuation and TIF revenue forecasts for the baseline UR Plan scenario (6% annual growth), the Flex Use and BCE Use.



FIGURE 6.1: FORECASTED TAX INCREMENT FINANCING REVENUE GROWTH, SUBJECT PROPERTY
(SCENARIOS: URA PLAN (6% AGR) / PROPOSED FLEX INDUSTRIAL / BCE USE

YEAR	Estimated RMV		New Taxable Value			Tax Rate (88.49)	Annual TIF Revenue (Net)*			Cumulative TIF Revenue (Net)					
	Frozen Base	Baseline AV (3% Growth)	Flex Use Development	BCE Use Development	UR Plan High Growth (6%)		Flex Use Development	BCE Use Development	UR Plan High Growth (6%)	Flex Use Development	BCE Use Development	UR Plan High Growth (6%)	Flex Use Development	BCE Use Development	
	2021	\$5,371,350	\$5,371,350												
2022	\$5,371,350	\$5,797,690			\$322,281			14.89							
2023	\$5,371,350	\$5,971,621			\$663,899			14.89	\$4,799						
2024	\$5,371,350	\$6,150,769			\$1,026,014			14.89	\$9,391						
2025	\$5,371,350	\$6,335,292	\$70,624,000		\$1,409,856	\$66,216,592		14.89	\$14,513	\$19,943	\$936,667	\$28,703	\$48,647	\$936,667	
2026	\$5,371,350	\$6,525,351	\$68,345,806		\$1,816,728	\$64,128,458		14.89	\$19,943	\$25,699	\$907,129	\$48,647	\$74,345	\$1,843,796	
2027	\$5,371,350	\$6,721,112	\$126,033,103		\$2,248,013	\$122,011,515		14.89	\$14,513	\$31,799	\$1,725,914	\$28,703	\$106,144	\$3,569,710	
2028	\$5,371,350	\$6,922,745	\$121,967,519		\$2,705,174	\$118,147,564		14.89	\$19,943	\$38,266	\$1,671,256	\$48,647	\$144,410	\$5,240,966	
2029	\$5,371,350	\$7,130,427	\$220,318,083		\$3,189,766	\$216,705,810		14.89	\$25,699	\$45,121	\$3,065,412	\$74,345	\$189,531	\$8,306,378	
2030	\$5,371,350	\$7,344,340	\$213,211,048		\$3,703,433	\$209,812,688		14.89	\$31,799	\$52,387	\$2,967,905	\$106,144	\$241,918	\$11,274,284	
2031	\$5,371,350	\$7,564,670	\$206,333,272		\$4,247,920	\$203,155,243		14.89	\$19,943	\$60,089	\$2,873,732	\$144,410	\$302,007	\$14,148,016	
2032	\$5,371,350	\$7,791,611	\$199,677,360		\$4,825,076	\$196,726,271		14.89	\$25,699	\$68,253	\$2,782,791	\$189,531	\$370,260	\$16,930,808	
2033	\$5,371,350	\$8,025,359	\$193,236,155		\$5,436,862	\$190,518,814		14.89	\$31,799	\$76,907	\$2,694,984	\$8,306,378	\$447,167	\$19,625,791	
2034	\$5,371,350	\$8,266,120	\$187,002,731	\$130,515,952	\$6,085,354	\$184,526,150	\$128,039,372	14.89	\$19,943	\$86,080	\$2,610,215	\$19,625,791	\$533,248	\$22,236,006	\$1,811,181
2035	\$5,371,350	\$8,514,103	\$180,970,385	\$126,305,760	\$6,772,756	\$178,741,788	\$124,077,163	14.89	\$25,699	\$95,804	\$2,528,392	\$22,236,006	\$629,052	\$24,764,398	\$3,566,314
2036	\$5,371,350	\$8,769,526	\$175,132,630	\$122,231,381	\$7,501,403	\$173,159,457	\$120,258,207	14.89	\$31,799	\$106,111	\$2,449,427	\$24,764,398	\$735,163	\$27,213,825	\$5,267,427
2037	\$5,371,350	\$9,032,612	\$169,483,191	\$118,288,433	\$8,273,768	\$167,773,103	\$116,578,345	14.89	\$19,943	\$117,037	\$2,373,234	\$27,213,825	\$852,199	\$29,587,060	\$6,916,486
2038	\$5,371,350	\$9,303,590	\$164,015,991	\$114,472,677	\$9,092,475	\$162,576,881	\$113,033,567	14.89	\$25,699	\$128,618	\$2,299,731	\$29,587,060	\$980,817	\$31,886,791	\$8,515,402
2039	\$5,371,350	\$9,582,698	\$158,725,152	\$110,780,010	\$9,960,305	\$157,565,151	\$109,620,008	14.89	\$31,799	\$140,893	\$2,228,838	\$31,886,791	\$1,598,916	\$33,115,629	\$10,066,032
2040	\$5,371,350	\$9,870,179	\$153,604,986	\$107,206,461	\$10,880,204	\$152,732,465	\$106,333,940	14.89	\$19,943	\$153,906	\$2,160,477	\$33,115,629	\$1,550,630	\$34,115,629	\$10,066,032
2041	\$5,371,350	\$10,166,285	\$148,649,987	\$103,748,188	\$11,855,297	\$148,073,571	\$103,171,773	14.89	\$25,699	\$167,699	\$2,094,575	\$34,115,629	\$1,504,147	\$36,276,106	\$11,570,179
2042	\$5,371,350	\$10,471,273	\$143,854,826	\$100,401,473	\$12,888,896	\$143,583,399	\$100,130,046	14.89	\$31,799	\$182,320	\$2,031,059	\$36,276,106	\$1,459,416	\$38,370,680	\$13,029,595
2043	\$5,371,350	\$10,785,411	\$139,214,348	\$97,162,715	\$13,984,511	\$139,257,059	\$97,205,427	14.89	\$19,943	\$197,818	\$1,969,861	\$38,370,680	\$1,416,390	\$40,401,739	\$14,445,985
2044	\$5,371,350	\$11,108,974	\$134,723,562	\$196,313,771	\$15,145,862	\$135,089,836	\$196,680,045	14.89	\$25,699	\$214,246	\$1,910,913	\$40,401,739	\$2,782,138	\$44,282,513	\$18,603,142
2045	\$5,371,350	\$11,442,243	\$130,377,641	\$189,981,069	\$16,376,895	\$131,077,184	\$190,680,612	14.89	\$31,799	\$231,659	\$1,854,152	\$44,282,513	\$2,697,273	\$46,136,666	\$21,300,414
2046	\$5,371,350	\$11,785,510	\$126,171,910	\$183,852,647	\$17,681,790	\$127,214,721	\$184,895,457	14.89	\$19,943	\$250,118	\$1,799,516	\$46,136,666	\$2,615,439	\$47,936,182	\$23,915,853
2047	\$5,371,350	\$12,139,075	\$122,101,849	\$177,921,917	\$19,064,978	\$123,498,224	\$179,318,292	14.89	\$25,699	\$269,684	\$1,746,944	\$47,936,182	\$2,536,547	\$49,683,126	\$26,452,400
2048	\$5,371,350	\$12,503,248	\$118,163,080	\$172,182,500	\$20,531,158	\$119,923,627	\$173,943,048	14.89	\$31,799	\$290,423	\$1,696,380	\$49,683,126	\$2,460,511	\$51,379,505	\$28,912,911
2049	\$5,371,350	\$12,878,345	\$114,351,367	\$166,628,226	\$22,085,308	\$116,487,012	\$168,763,871	14.89	\$19,943	\$312,408	\$1,647,767	\$51,379,505	\$2,387,249	\$53,027,272	\$31,300,161
2050	\$5,371,350	\$13,264,695	\$110,662,613	\$161,253,122	\$23,732,708	\$113,184,609	\$163,775,117	14.89	\$25,699	\$335,711	\$1,601,053	\$53,027,272	\$2,316,681	\$54,628,325	\$33,616,841
2051	\$5,371,350	\$13,662,636	\$107,092,852	\$156,051,408	\$25,478,951	\$110,012,788	\$158,971,345	14.89	\$31,799	\$360,413	\$1,556,186	\$54,628,325	\$2,248,729	\$56,184,511	\$35,865,571
2052	\$5,371,350	\$14,072,515	\$103,638,244	\$151,017,492	\$27,329,969	\$106,968,059	\$154,347,307	14.89	\$19,943	\$386,596	\$1,513,117	\$56,184,511	\$2,183,320	\$57,697,628	\$38,048,890

Source: Washington County Assessor, CoStar, Johnson Economics, VLMK Engineering and Design

* Tax loss adjustment (-5%)



Tax Revenue Generation: Findings

- Growth of the current assessed value at 6% would yield an estimated cumulative TIF revenue generation of \$4.5M over 30 years from the subject property (Figure 6.1). In comparison, the estimated taxable value of the Flex Use, introduced in the year 2025, would yield cumulative TIF revenue of \$58M over 30 years, or 13 times higher than high end of the forecast from the UR feasibility study.
- The BCE Use, a speculative light industrial campus introduced after 10 years, would generate a cumulative TIF revenue of \$38M over three years, or roughly 65% of the forecasted revenue from the Flex Use.
- This difference reflects that the timing of development is a critical factor for revenue generation in an urban renewal district. A development earlier in the district's planning period will generate much greater cumulative TIF revenue before the district's expiration than an equivalent development completed in the middle of the district's planning period.
- Clearly, the Flex Use has the potential to greatly outperform the valuation and tax revenue generation assumptions included in the original UR feasibility analysis. The forecasted revenue from the UR Plan was \$55.5 million at the high end of the forecast range, meaning the revenue from the Flex Use alone has the potential to exceed the total forecasted revenue for the entire UR district.
- As the recruitment other major employers such as high-tech and advanced manufacturing companies to the Basalt Creek area remains speculative, the Flex Use at the subject site has the potential to provide significant UR revenue in the early years of the district to finance identified UR projects.

Off-Site Improvements in the Basalt Creek Area

AKS Engineering has prepared rough order of magnitude (ROM) cost estimates for the potential off-site improvements that would accompany the Flex Use at the expense of the developer⁴. These improvements will provide extensive public benefits to other users and the City by improving streets, intersections, trails, water and sewer infrastructure in the immediate area. The following is a summary of these preliminary ROM estimates:

⁴ "Tualatin Basalt Creek Public Infrastructure ROM Cost Review", AKS Engineering, Darko Simic PE, 10/21/2022



Full and three-quarter street improvements:	\$17.8M
Pedestrian Trail Improvements:	\$150,000
Public Water Infrastructure Improvements:	\$3.6M
Public Sewer Infrastructure Improvements:	\$7.4M
TOTAL Estimated Improvements:	\$29.0M

These projects, which might total a combined \$29M in investment in improved public infrastructure would contribute substantially to extending services to other portions of the Basalt Creek Plan Area and facilitate further development of additional employment uses. This investment would be contributed to the development of the URA without requiring urban renewal funding.

VII. EMPLOYMENT DENSITY AND WAGES

Employment Density

The Basalt Creek Concept Plan forecasts the area currently zoned MP may accommodate nearly 1,900 jobs at a density of 20 jobs per acre. This is roughly 650 s.f. of built space per job at an assumed FAR of 0.3.

The Flex Use consisting of flex industrial space is forecast to provide employment at this density or better. Modern flex industrial parks offer a high density of employment through offering a mix of spaces suitable for a broad range of light industrial, office, wholesale, warehousing, and related sectors. At the assumed 20 jobs per acre of the MP zone, the Flex Use (which includes most, but not all, of the BCE zoned area) would support an estimated 1,640 jobs.

Comprehensive and reliable data on employment density across various categories of industrial users is unfortunately not available, with significant variation among different studies and reporting of individual companies. In general, employment density for office, creative, and high-tech enterprises is estimated to be the highest, while manufacturing and distribution uses are estimated to feature lower job densities.

With a mix of these users in a multi-tenant flex business park like the Flex Use development, the employment density would be expected to be equal to or higher than a manufacturing-heavy light industrial development such as the BCE Use. A multi-tenant development such as the Flex Use is also likely to feature increased employment concentration via offering smaller leasable spaces per business.



In recent years, industrywide trends have included a decrease in employment density in manufacturing businesses, and an increase in employment density in some categories that were traditionally thought of as having low employment density, including warehouse and distribution.⁵

This shift is because investment in automation in modern industries is, on the one hand, decreasing the number of employees needed in sophisticated manufacturing plants relative to growing production lines and robotics. On the other hand, investment in equipment is increasing the vertical density of operations like storage and distribution, meaning less floor area is required per employee. These two trends are increasing the parity among industrial users over time. (As noted, any real-world company is likely to feature unique operating characteristics that can vary widely from any average estimate of density.)

Nevertheless, there is not a compelling reason to predict a significant difference between the realized employment density of a development under the currently proposed BCE zone, vs. the employment density under a revised zoning standards that allows additional uses such as those proposed in the Flex Use development.

Industrial Wage Levels

The following figure shows average annual wage rates among the major industry sectors that might locate in a multi-tenant flex business park like the Flex Use. Traditionally, manufacturing like what may be developed in the BCE Use has been emphasized as an industrial employment sector that pays uniquely high wages relative to other industrial users. While this may be true in relation to some sectors such as construction or transportation, these are not anticipated to be major users at the Flex Use.

The mix of users in the Flex Use is likely to include various categories of manufacturing including advanced manufacturing and fabrication, as well as wholesale trade, warehousing, and some mix of business services or high-tech industries, such as software. As shown in Figure 7.1, this mixture of business sectors that could be included in the Flex Use features high average wages beyond those in the manufacturing alone sector alone in the BCE Use. A mix of these sectors in the Flex Use is likely to support many family-wage blue-collar jobs, at a comparable employment density to the density envisioned in the Basalt Creek Concept Plan and in the draft BCE zone.

⁵ “Brave New World,” Kim Moore, Oregon Business, November 2017.

“Growth Trends for Occupations Considered at Risk from Automation,” US Bureau of Labor Statistics, July 2022.

[Bls.gov/opub/](https://www.bls.gov/opub/)

“The Evolution of the Warehouse: Trends in Technology, Design, Development and Delivery,” NAIOP, October 2020.

https://en.wikipedia.org/wiki/Fourth_Industrial_Revolution



FIGURE 7.1: AVERAGE WAGE LEVELS IN RELEVANT SECTORS, WASHINGTON CO., 2021

Industry	Avg. Annual Wage
All Washington County Employment	\$86,181
Manufacturing	\$121,315
Wholesale trade	\$116,706
Transportation, warehousing & utilities	\$50,020
Blended Avg. of Proposed Uses:	\$96,014

Source: Oregon Employment Department, QCEW Data, Washington County 2021

VIII. CONCLUSIONS

The analysis presented in the preceding sections of this report support the following findings and conclusions:

- The Flex Use would be home to a range of business types including light manufacturing, wholesale, and warehouse businesses. Some spaces would be suitable for creative office or flex industrial/office use. As planned, the development would be able to accommodate businesses from small to large.
- As proposed, the BCE zone would not allow some categories of uses that are generally compatible with the low-impact light industrial uses envisioned for the zone. Some of these restricted uses, including warehouse and wholesale sales, would be appropriate for the Flex Use, while also supportive of the goals of the BCE zone and Basalt Creek Plan Area in general. They can also be designed to be compatible with nearby residential uses.
- A City funded and directed economic analysis prepared in conjunction with the zoning update found that manufacturing, while an important component of on-going industrial growth, is growing more slowly than other types of industrial uses, and this is projected to continue.
- The City funded and directed economic analysis recommended allowing a broader range of land uses in the BCE zone to encourage the most rapid and robust build out of industrial areas including flex, manufacturing, wholesale, and warehouse space. Stakeholders in the industrial planning and the real estate market likewise recommended codes with greater flexibility and allowed uses as models, while pointing to restrictive codes as what to avoid.



- When compared to the BCE Use, the Flex Use will result in greater taxable value, with significantly greater revenue benefits to the Urban Renewal Area (URA).
- The Urban Renewal (UR) Plan forecasted an average annual growth of 6% in the assessed value, resulting in \$4.5M in URA revenue over the 30-year life of the district. The Flex Use is estimated to result in over \$58M in revenue over the same period, or 13 times higher than the forecast in the UR Plan.
- The BCE Use, a speculative light industrial campus introduced after an additional 10 years, would generate a cumulative TIF revenue of \$38M over three years, or roughly 65% of the forecasted revenue from the Flex Use.
- As the recruitment of other major employers such as high-tech and advanced manufacturing companies to the Basalt Creek area remains speculative, the Flex Use at the subject site has the potential to provide significant UR revenue in the early years of the district to finance identified UR projects.
- The Flex Use would also provide off-site improvements with extensive public benefits to other users and the City, including improving streets, intersections, trails, water and sewer infrastructure in the immediate area.
- The Flex Use would include a roughly \$29M total investment in improved public infrastructure, which would contribute substantially to extending services to other portions of the Basalt Creek Plan Area and facilitate further development of additional employment uses in the area. This investment would be contributed to the development of the URA without requiring urban renewal funding.
- Modern flex industrial parks, such as the Flex Use, offer a high density of employment through offering a mix of spaces suitable for a broad range of light industrial, office, wholesale, warehouse, and related sectors. At the assumed density of 20 jobs per acre, the Flex Use would support an estimated 1,640 jobs.
- There is no compelling reason to predict a significant difference between the realized employment density of a development under the City's draft BCE zone as proposed (e.g. the BCE Use) vs. the employment density under revised zoning standards with an expanded list of allowable uses such as those proposed in the Flex Use.
- This mixture of business sectors included in the Flex Use feature high average wages beyond those found in manufacturing alone (the BCE Use). The mix of sectors included in the Flex Use is likely to support many family-wage, skilled, blue-collar jobs, at a comparable employment density to that expected in the limited diversity of uses in the BCE Use.



- Our analysis concludes that as compared to development allowed under the proposed BCE zone, an expanded list of allowable uses in the BCE zone would support comparable levels of employment density and wages in the area, potentially generate greater taxable value and urban renewal revenue, include significant investment in off-site public infrastructure, while remaining compatible with neighboring uses.