PLANNING COMMISSION

WEDNESDAY, MARCH 12, 2025

WORK SESSION

2. Wilsonville Industrial Land Readiness (Basalt Creek) (Luxhoj)(90 Minutes)

PLANNING COMMISSION MEETING
STAFF REPORT

Meeting Date: March 12, 2025	**Subject: Wilsonville Industrial Land Readiness – Basalt Creek** **Staff Member:** Cindy Luxhoj AICP, Associate Planner, and Dan Pauly AICP, Planning Manager **Department:** Community Development
Action Required	**Advisory Board/Commission Recommendation**
☐ Motion ☐ Public Hearing Date: ☐ Ordinance 1st Reading Date: ☐ Ordinance 2nd Reading Date: ☐ Resolution ☒ Information or Direction ☐ Information Only ☐ Council Direction ☐ Consent Agenda	☐ Approval ☐ Denial ☐ None Forwarded ☒ Not Applicable **Comments:** N/A
Staff Recommendation: Staff recommends Planning Commission provide the requested feedback.	
Recommended Language for Motion: N/A	
Project / Issue Relates To: Basalt Creek Concept Plan area	

☒Council Goals/Priorities: Attract high-quality industry and support economic opportunity for all in Wilsonville	☒Adopted Master Plan(s): Basalt Creek Concept Plan	☐Not Applicable

ISSUE BEFORE COMMISSION

Staff is seeking input from the Planning Commission on industrial land use types in Basalt Creek based on the information provided, as well as prior work session discussions.

EXECUTIVE SUMMARY:
A number of the key reports and studies have been completed for Phase 1 of the WILR project, which focused on the Basalt Creek Planning Area (BCPA). At past work sessions, Planning Commission has provided input on the Economic Inventory and Land Use Analysis, Buildable Lands Inventory, Site Suitability Analysis, Analysis of Future Development of Contractor Establishments, Transportation System Plan Evaluation and Local Street Concept Map, Natural Resource Inventory, and Infrastructure Summary. All these documents will inform the remaining components of the Basalt Creek focused portion of the Wilsonville Industrial Land Readiness (WILR) project, including drafting of a Basalt Creek Master Plan and subsequent implementing Development Code.

At the work session on February 12, the Planning Commission indicated a desire for additional information to help inform the mix of planned uses in Basalt Creek. As follow-up, staff is providing background about the regulatory context that brought the BCPA into the Urban Growth Boundary (UGB) and how it relates to industrial land (Attachment 1), as well as a refocus on information about industrial land demand, current market conditions, and vacancy rates previously presented to the Commission (Attachment 2). Following the review and discussion of this information, staff requests continued input on two of the land use types envisioned in the BCCP, High-Tech Employment and Light Industrial, and how best to achieve the intended vision for these areas. Discussion of the third land use type, craft industrial, will be the focus of a future work session.

Discussion Questions

During the work session input is requested from the Planning Commission in response to the questions below:

- What input does Planning Commission have in response to the information attached pertaining to the regulatory context, industrial demand, and current market conditions?
    - In particular, considering the scale between market driven and aspirational land use choices, does Planning Commission lean to one end or the other and how far, or land in the middle?
- Regarding the High-Tech Employment and Light Industrial land use types:
    - Are there uses that should be avoided or discouraged in the areas designated for these land use types because they are counter to the intended industrial use?
    - Do the boundaries of these land use types continue to be appropriate, or should they potentially be adjusted?
    - Specifically related to the property shown on Attachment 3, which is all under one ownership, should it continue to be split between these two land use types, or wholly designated as one and, if so, which one?

EXPECTED RESULTS:
Feedback from Planning Commission will guide next steps in planning for the BCPA, including drafting of a Master Plan and package of proposed Code amendments, developing economic development strategies, and preparing an infrastructure funding plan.

TIMELINE:
Additional work sessions with the Planning Commission and City Council are anticipated throughout 2025. Public hearings on related Development Code amendments are expected in late 2025, with concurrent work on the infrastructure funding plan and Phase 2 analyses occurring throughout the year.

CURRENT YEAR BUDGET IMPACTS:
Funding for the first phase of the WILR project is allocated in the FY2024-25 Planning Division budget and, for the second phase, will be allocated in the FY2025-26 budget. The first phase was primarily funded by a $100,000 grant from Business Oregon, which concluded at the end of 2024, with additional funding from a $290,000 Metro grant, which also is funding the second, citywide, project phase.

COMMUNITY INVOLVEMENT PROCESS:
The Basalt Creek Concept Plan review process included comprehensive community involvement to gather input. For the first phase of the WILR project, ECOnorthwest focused on gathering input from Business Oregon, Greater Portland Inc., property owners, and developers, to understand demand for industrial land in Wilsonville as well as property owners' current and future plans for their property. This informed the market, site suitability, and contractor establishment analyses and will be considered in determining appropriate zoning standards to apply and preparing needed Code amendments.

POTENTIAL IMPACTS OR BENEFIT TO THE COMMUNITY:
Preparing a Basalt Creek Master Plan, adopting appropriate zoning standards, creating an infrastructure funding plan, and identifying and pursuing economic development strategies will remove barriers to development and enable implementation of the Basalt Creek Concept Plan and Master Plan. When developed, Basalt Creek will host hundreds of jobs, thus contributing to the income and property tax base, and support economic mobility for residents through family-wage employment in a highly livable, full-service City. The critical analysis and planning work completed as part of the WILR project will enable this industrial area to reach its full economic potential, resulting in positive impacts on the greater Wilsonville community and the region.

ALTERNATIVES:
As the Master Plan, zoning Code amendments, economic development strategies, and an infrastructure funding plan are developed, a number of alternatives will be explored and developed with the Planning Commission and City Council.

ATTACHMENTS:

1. Metro Ordinance No. 04-1040B
2. ECOnorthwest Recommendations Report
3. Location of Grahams Ferry Assemblage Property in the BCPA

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE METRO URBAN GROWTH BOUNDARY, THE REGIONAL FRAMEWORK PLAN AND THE METRO CODE TO INCREASE THE CAPACITY OF THE BOUNDARY TO ACCOMMODATE GROWTH IN INDUSTRIAL EMPLOYMENT	)))))))	ORDINANCE NO. 04-1040B Introduced by the Metro Council

WHEREAS, by Ordinance No. 02-969B (For The Purpose Of Amending The Urban Growth Boundary, The Regional Framework Plan And The Metro Code In Order To Increase The Capacity Of The Boundary To Accommodate Population Growth To The Year 2022), the Council amended Title 4 (Industrial and Other Employment Areas) of the Urban Growth Management Functional Plan to increase the capacity of industrial land to accommodate industrial jobs; and

WHEREAS, the Metro Council adopted an Employment and Industrial Areas Map as part of Title 4 (Retail in Employment and Industrial Areas) in Ordinance No. 96-647C (For the Purpose of Adopting a Functional Plan for Early Implementation of the 2040 Growth Concept) on November 21, 1996; and

WHEREAS, the Council amended the Regional Framework Plan ("RFP") by Exhibit D to Ordinance No. 02-969B (For the Purpose of Amending the Metro Urban Growth Boundary, the Regional Framework Plan and the Metro Code in Order to Increase the Capacity of the Boundary to Accommodate Population Growth to the Year 2022), adopted on December 5, 2002, to establish a new 2040 Growth Concept design type entitled "Regionally Significant Industrial Area" ("RSIA") and to add Policies 1.4.1 and 1.4.2 to protect such areas by limiting conflicting uses; and

WHEREAS, by Exhibit F to Ordinance No. 02-969B the Council amended Title 4 (Industrial and Other Employment Areas) of the Urban Growth Management Functional Plan ("UGMFP") to implement Policies 1.4.1 and 1.4.2 of the RFP; and

WHEREAS, by Exhibit E of Ordinance No. 02-969B the Council adopted a "Generalized Map of Regionally Significant Industrial Areas" depicting certain Industrial Areas that lay within the UGB prior to its expansion as part of Task 2 of periodic review as RSIAs; and

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WHEREAS, Title 4 calls upon the Council to delineate specific boundaries for RSIAs derived from the "Generalized Map of Regionally Significant Industrial Areas" after consultation with cities and counties; and

WHEREAS, by Ordinance No. 02-969B, the Council added capacity to the UGB but did not add sufficient capacity to accommodate the full need for land for industrial use; and

WHEREAS, the Metro Council submitted Ordinance No. 969B, in combination with other ordinances that increased the capacity of the UGB, to the Land Conservation and Development Commission (LCDC) as part of Metro's periodic review of the capacity of its UGB; and

WHEREAS, on July 7, 2003, LCDC issued its "Partial Approval and Remand Order 03-WKTASK-001524" that approved most of the Council's decisions, but returned the matter to the Council for completion or revision of three tasks: (1) provide complete data on the number, density and mix of housing types and determine the need for housing types over the next 20 years; (2) add capacity to the UGB for the unmet portion of the need for land for industrial use; and (3) either remove tax lots 1300, 1400 and 1500 in Study Area 62 from the UGB or justify their inclusion; and

WHEREAS, the Council completed its analysis of the number, density and mix of housing types and the need for housing over the planning period 2002-2022 and incorporated its conclusions in a revision to its Housing Needs Analysis; and

WHEREAS, the Council increased the capacity of the UGB both by adding land to the UGB and by revising the Regional Framework Plan and Title 4 of the UGMFP to meet the previously unmet portion of the need for land for industrial use; and

WHEREAS, a change in design type designation of a portion of Study Area 12 added to the UGB on December 5, 2002, by Ordinance No. 02-969B from residential to industrial will help the region accommodate the need for industrial use without reducing the region's residential capacity below the region's residential need; and

WHEREAS, the Council decided to remove tax lots 1300, 1400 and 1500 in Study Area 62 from the UGB; and

WHEREAS, the Council consulted its Metropolitan Policy Advisory Committee and the 24 cities and three counties of the metropolitan region and considered comments and suggestions prior to making this decision; and

WHEREAS, prior to making this decision, the Council sent individual mailed notification to more than 100,000 households in the region and held public hearings on Title 4 and the efficient use of industrial land on December 4 and 11, 2003, public workshops at six locations around the region in March, 2004, on possible amendments to the UGB, and public hearings on the entire matter on April 22 and 29, May 6, May 27, and June 10 and 24, 2004; now, therefore

THE METRO COUNCIL HEREBY ORDAINS AS FOLLOWS:

1. Policy 1.12 of the Regional Framework Plan is hereby amended, as indicated in Exhibit A, attached and incorporated into this ordinance, to guide the choice of farmland for addition to the UGB when no higher priority land is available or suitable.

2. Title 4 (Industrial and Other Employment Areas) of the Urban Growth Management Functional Plan is hereby amended, as indicated in Exhibit B, attached and incorporated into this ordinance, to improve implementation of Title 4 by cities and counties in the region.

3. The Employment and Industrial Areas Map is hereby amended, as shown in Exhibit C, attached and incorporated into this ordinance, to depict the boundaries of Regionally Significant Industrial Areas pursuant to Policy 1.4.1 of the Regional Framework Plan in order to ensure more efficient use of the areas for industries reliant upon the movement of freight and to protect the function and capacity of freight routes and connectors in the region.

4. The Revised Housing Needs Analysis, January 24, 2003, is hereby further revised, as indicated in Exhibit D, Addendum to Housing Needs Analysis, April 5, 2004, attached and incorporated into this ordinance, to comply with the first item in LCDC's "Partial Approval and Remand Order 03-WKTASK-001524."

5. The Metro UGB is hereby amended to include all or portions of the Study Areas shown on Exhibit E with the designated 2040 Growth Concept design type, ~~and more precisely identified in the Industrial Land Alternative Analysis Study, February, 2004, Item (c) in Appendix A,~~ subject to the conditions set forth in Exhibit F, and to exclude tax lots 1300, 1400 and 1500 in Study Area 62 ~~and the southeast portion of Study Area 9 from the UGB~~, also shown on Exhibit E and more precisely identified in the Staff Report, "In Consideration of Ordinance No. 04-1040, For the Purpose of Amending the Metro Urban Growth Boundary, the Regional Framework Plan and the Metro Code to increase the capacity of the Boundary to Accommodate Growth in Industrial Employment", Item (a) in Appendix A. Exhibits E and F are attached and incorporated into this ordinance to comply with the second and third items in LCDC's "Partial Approval and Remand Order 03-WKTASK-001524."

6. Ordinance No. 02-969B is hereby amended to change the 2040 Growth Concept design type designation for that 90-acre portion of Study Area 12 that projects from the rest of the study area to the southeast along Highway 26 from "Inner Neighborhood" to "Regionally Significant Industrial Area."

~~6~~7. The Appendix, attached and incorporated into this ordinance, is hereby adopted in support of the amendments to the UGB, the Regional Framework Plan and the Metro Code in sections 1 through 3 of this ordinance. The following documents comprise the Appendix:

a. Staff Report, "In Consideration of Ordinance No. 04-1040, For the Purpose of Amending the Metro Urban Growth Boundary, the Regional Framework Plan and the Metro Code to increase the capacity of the Boundary to Accommodate Growth in Industrial Employment", April 5, 2004.

b. 2002-2022 Urban Growth Report: An Employment Land Need Analysis, June 24, 2004 Supplement.

c. Industrial Land Alternative Analysis Study, February, 2004.

d. Measure 26-29 Technical Report: Assessment of the Impacts of the June, 2004, UGB Expansion on Property Owners.

e. Industrial Land Expansion Public Comment Report, March, 2004.

f. "An Assessment of Potential Regionally Significant Industrial Areas", memorandum from Mary Weber to Dick Benner, October 21, 2003.

g. "Recommended Factors for Identifying RSIAs", memorandum from Mary Weber to MTAC, June 30, 2003.

h. "Slopes Constraints on Industrial Development", memorandum from Lydia Neill to David Bragdon, November 25, 2003.

i. "Limited Choices: The Protection of Agricultural Lands and the Expansion of the Metro Area Urban Growth Boundary for Industrial Use", prepared by the Metro Agricultural Lands Technical Workgroup, April, 2004.

j. "Technical Assessment of Reducing Lands within Alternatives Analysis Study Areas", memorandum from Lydia Neill to David Bragdon, October 30, 2003.

k. Agriculture at the Edge: A Symposium, October 31, 2003, Summary by Kimi Iboshi Sloop, December, 2003.

m. "Industrial Land Aggregation Methodology, Test and Results", memorandum from Lydia Neill to David Bragdon, September 24, 2003.

n. "Industrial Areas Requested by Local Jurisdictions", memorandum from Tim O'Brien to Lydia Neill, July 29, 2003.

o. 'Industrial Land Locational and Siting Factors', memorandum from Lydia Neill to David Bragdon, June 9, 2003.

p. "A Review of Information Pertaining to Regional Industrial Lands', memorandum from Dick Benner to David Bragdon, January 26, 2004.

q. Map of Freight Network and Freight Facilities, Metro, November, 2003.

r. 'Evaluating the Industrial Land Supply with Projected Demand', memorandum from Lydia Neill to David Bragdon, May 14, 2003.

s. 'Identifying 2003 Industrial Land Alternatives Analysis Study Areas', memorandum from Tim O'Brien to Lydia Neill, July 9, 2003.

t. 'For the Purpose of Reducing the Land Under Consideration in the 2002 and 2003 Alternatives Analysis for Meet the Remaining Need for Industrial Land through Urban Growth Boundary Expansion', Staff Report, November 18, 2003.

u. 'Formation of Industrial Neighborhoods', memorandum from Lydia Neill to David Bragdon, October 24, 2003.

v. 'Developed Lots 5 Acres and Smaller Outside the UGB', memorandum from Amy Rose to Lydia Neill, November 18, 2003.

w. 'Employment Land Included in the 2002 Urban Growth Boundary Expansion', memorandum from Andy Cotugno to David Bragdon, March 10, 2003.

x. 'Identifying Additional Land for Industrial Purposes," memorandum from Tim O'Brien to Lydia Neill, March 7, 2003.

y. Staff Report, 'In Consideration of Ordinance No. 04-1040B, For the Purpose of Amending the Metro Urban Growth Boundary, the Regional Framework Plan and the Metro Code to increase the Capacity of the Boundary to Accommodate Growth in Industrial Employment', June 21, 2004.

~~7~~8. The Findings of Fact and Conclusions of Law in Exhibit G, attached and incorporated into this ordinance, explain how this ordinance complies with state law, the Regional Framework Plan and the Metro Code.

ADOPTED by the Metro Council this 24th day of June, 2004.

David Bragdon, Council President

ATTEST: Approved as to Form:

Christina Billington, Recording Secretary Daniel B. Cooper, Metro Attorney

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Exhibit A to Ordinance No. 04-1040B

REGIONAL FRAMEWORK PLAN POLICY 1.12
Protection of Agriculture and Forest Resource Land

~~1.12~~1.12.1 Agricultural and forest land outside the UGB shall be protected from urbanization, and accounted for in regional economic and development plans, consistent with this Plan. However, Metro recognizes that all the statewide goals, including Statewide Goal 10, and Goal 14, Urbanization, are of equal importance to Goals 3 and 4, which protect agriculture and forest resource lands. These goals represent competing and, some times, conflicting policy interests which need to be balanced.

~~**1.12.1 Rural Resource Lands**~~

~~Rural resource lands outside the UGB that have significant resource value should actively be protected from urbanization. However, not all land zoned for exclusive farm use is of equal agricultural value.~~

1.12.2 When the Council must choose among agricultural lands of the same soil classification for addition to the UGB, the Council shall choose agricultural land deemed less important to the continuation of commercial agriculture in the region.

~~**1.12.2 Urban Expansion**~~

~~Expansion of the UGB shall occur in urban reserves, established consistent with the urban rural transition objective. All urban reserves should be planned for future urbanization even if they contain resource lands.~~

1.12.3 Metro shall enter into agreements with neighboring cities and counties to carry out Council policy on protection of agricultural and forest resource policy through the designation of Rural Reserves and other measures.

~~**1.12.3 Farm and Forest Practices**~~

~~Protect and support the ability for farm and forest practices to continue. The designation and management of rural reserves by the Metro Council may help establish this support, consistent with the Growth Concept. Agriculture and forestry require long term certainty of protection from adverse impacts of urbanization in order to promote needed investments.~~

1.12.4 Metro shall work with neighboring counties to provide a high degree of certainty for investment in agriculture in agriculture and forestry and to reduce conflicts between urbanization and agricultural and forest practices.

Exhibit B to Ordinance No. 04-1040B

TITLE 4: INDUSTRIAL AND OTHER EMPLOYMENT AREAS

3.07.410 Purpose and Intent

A. The Regional Framework Plan calls for a strong economic climate. To improve the region's economic climate, **[the plan] Title 4** seeks to **provide and** protect **[the] a** supply of sites for employment by limiting **[incompatible uses within] the types and scale of non-industrial uses in Regionally Significant Industrial Areas (RSIAs),** Industrial Areas and Employment Areas. **Title 4 also seeks to provide the benefits of "clustering" to those industries that operate more productively and efficiently in proximity to one another than in dispersed locations. Title 4 further seeks [T]t**o protect the capacity and efficiency of the region's transportation system for **the** movement of goods and services, and to **[promote the creation of jobs within designated Centers and discourages certain kinds of commercial retail development outside Centers] encourage the location of other types of employment in Centers, Employment Areas, Corridors, Main Streets and Station Communities**. **[It is the purpose of Title 4 to achieve these policies.] The** Metro **Council** will **[consider amendments to this title in order to make the title consistent with new policies on economic development adopted] evaluate the effectiveness of Title 4 in achieving these purposes** as part of **its** periodic **[review] analysis of the capacity of the urban growth boundary**.

3.07.420 Protection of Regionally Significant Industrial Areas

A. Regionally Significant Industrial Areas (RSIA) are those areas **[that offer the best opportunities for family-wage industrial jobs] near the region's most significant transportation facilities for the movement of freight and other areas most suitable for movement and storage of goods**. Each city and county with land use planning authority over **[areas] RSIAs** shown on the **[Generalized Map of Regionally Significant Industrial Areas adopted in Ordinance No. 02-969] Employment and Industrial Areas Map** shall derive specific plan designation and zoning district boundaries of **[the areas] RSIAs within its jurisdiction** from the Map, taking into account the location of existing uses that would not conform to the limitations on non-industrial uses in **[subsection C, D and E]** this section, and **[its] the** need **[of individual cities and counties]** to achieve a mix of **[types of]** employment uses.

B. **[Each city and county with land use planning authority over an area designated by Metro on the 2040 Growth Concept Map, as amended by Ordinance No. 02-969, as a Regionally Significant Industrial Area shall, as part of compliance with section 3.07.1120 of the Urban Growth Management Functional Plan, derive plan designation and zoning district boundaries of the areas from the Growth Concept Map] Cities and counties shall review their land use regulations and revise them, if necessary, to include measures to limit the size and location of new buildings for retail commercial uses - such as stores and restaurants - and retail and professional services that cater to daily customers – such as financial, insurance, real estate, legal, medical and dental offices - to ensure that they serve primarily the needs of workers in the area. One such measure shall be that new buildings for stores, branches, agencies or other outlets for these retail uses and services shall not occupy more than 3,000 square feet of sales or service area in a single outlet, or multiple outlets that occupy more than 20,000 square feet of sales or service area in a single building or in multiple buildings that are part of the same development project, with the following exceptions:**

1. Within the boundaries of a public use airport subject to a facilities master plan, customary airport uses, uses that are accessory to the travel-related and freight movement activities of airports, hospitality uses, and retail uses appropriate to serve the needs of the traveling public; and

2. Training facilities whose primary purpose is to provide training to meet industrial needs.

C. **[After determining boundaries of Regionally Significant Industrial Areas pursuant to subsections A and B, the city or county]** **Cities and counties** shall **[adopt implementing ordinances that limit development in the areas to industrial uses, uses accessory to industrial uses, offices for industrial research and development and large corporate headquarters in compliance with subsection E of this section, utilities, and those non-industrial uses necessary to serve the needs of businesses and employees of the areas]** **review their land use regulations and revise them, if necessary, to include measures to limit the siting and location of new buildings for the uses described in subsection B and for non-industrial uses that do not cater to daily customers - such as bank or insurance processing centers - to ensure that such uses do not reduce off-peak performance on Main Roadway Routes and Roadway Connectors shown on Metro's Freight Network Map, November, 2003, below standards set in the 2004 Regional Transportation Plan or require added road capacity to prevent falling below the standards**.

D. **[Notwithstanding subsection C, a city or county shall not approve:**

1. A commercial retail use with more that 20,000 square feet of retail sales area in a single building or in multiple buildings that are part of the same development project;
or

2. Commercial retail uses that would occupy more than five percent of the net developable portion of all contiguous Regionally Significant Industrial Areas] **No city or county shall amend its land use regulations that apply to lands shown as RSIA on the Employment and Industrial Areas Map to authorize uses described in subsection B that were not authorized prior to July 1, 2004.**

E. **[As provided in subsection C of this section, a city or county may approve an office for industrial research and development or a large corporate headquarters if:**

1. The office is served by public or private transit; and

2. If the office is for a corporate headquarters, it will accommodate for the initial occupant at least 1,000 employees]

[F. A city or county] **Cities and counties** may allow division of lots or parcels into smaller lots or parcels as follows:

1. Lots or parcels **[less]** **smaller** than 50 acres may be divided into any number of smaller lots or parcels**[;].**

2. Lots or parcels **[50 acres or]** larger **than 50 acres** may be divided into smaller lots and parcels **pursuant to a master plan approved by the city or county** so long as the resulting division yields **[the maximum number of lots or parcels of]** at least **[50 acres]** **one lot or parcel of at least 50 acres in size[;].**

3. **Lots or parcels 50 acres or larger, including those created pursuant to paragraph (2) of this subsection, may be divided into any number of smaller lots or parcels pursuant to a master plan approved by the city or county so long as at least 40 percent of the area of the lot or parcel has**

been developed with industrial uses or uses accessory to industrial use, and no portion has been developed, or is proposed to be developed, with uses described in subsection B of this section.

4. Notwithstanding paragraphs 2**[,]** **and** 3 **[and]** of this subsection, any lot or parcel may be divided into smaller lots or parcels or made subject to rights-of-way for the following purposes:

a. To provide public facilities and services;

b. To separate a portion of a lot or parcel in order to protect a natural resource, to provide a public amenity, or to implement a remediation plan for a site identified by the Oregon Department of Environmental Quality pursuant to ORS 465.225;

c. To separate a portion of a lot or parcel containing a nonconforming use from the remainder of the lot or parcel in order to render the remainder more practical for a permitted use; **or**

d. **[To reconfigure the pattern of lots and parcels pursuant to subsection G or this section]**

[e.] To allow the creation of a lot for financing purposes when the created lot is part of a master planned development.

[G. A city or county may allow reconfiguration of lots or parcels less than 50 acres in area if the reconfiguration would be more conducive to a permitted use and would result in no net increase in the total number of lots and parcels. Lots or parcels 50 acres or greater in area may also be reconfigured so long as the resulting area of any such lot or parcel would not be less than 50 acres.]

[H] F. Notwithstanding subsections **[C and D] B** of this section, a city or county may allow the lawful use of any building, structure or land existing at the time of adoption of its ordinance to implement this section to continue and to expand to add up to 20 percent more floor area and 10 percent more land area. Notwithstanding subsection E of this section, a city or county may allow division of lots or parcels pursuant to a master plan approved by the city or county prior to **[December 31, 2003] July 1, 2004**.

3.07.430 Protection of Industrial Areas

A. **[In Industrial Areas mapped pursuant to Metro Code section 3.07.130 that are not Regionally Significant Industrial Areas, c] C**ities and counties shall **[limit new and expanded retail commercial uses to those appropriate in type and size to serve the needs of businesses, employees and residents of the Industrial Areas] review their land use regulations and revise them, if necessary, to include measures to limit new buildings for retail commercial uses - such as stores and restaurants - and retail and professional services that cater to daily customers – such as financial, insurance, real estate, legal, medical and dental offices - in order to ensure that they serve primarily the needs of workers in the area. One such measure shall be that new buildings for stores, branches, agencies or other outlets for these retail uses and services shall not occupy more than 5,000 square feet of sales or service area in a single outlet, or multiple outlets that occupy more than 20,000 square feet of sales or service area in a single building or in multiple buildings that are part of the same development project, with the following exceptions:**

1. Within the boundaries of a public use airport subject to a facilities master plan, customary airport uses, uses that are accessory to the travel-related and freight movement activities of airports, hospitality uses, and retail uses appropriate to serve the needs of the traveling public; and

2. Training facilities whose primary purpose is to provide training to meet industrial needs.

B. **[In an Industrial Area, a city or county shall not approve:**

1. A commercial retail use with more than 20,000 square feet of retail sales area in a single building or in multiple buildings that are part of the same development project; or

2. Commercial retail uses that would occupy more than ten percent of the net developable portion of the area or any adjacent Industrial Area] Cities and counties shall review their land use regulations and revise them, if necessary, to include measures to limit new buildings for the uses described in subsection A to ensure that they do not interfere with the efficient movement of freight along Main Roadway Routes and Roadway Connectors shown on Metro's Freight Network Map, November, 2003. Such measures may include, but are not limited to restrictions on access to freight routes and connectors, siting limitations and traffic thresholds. This subsection does not require cities and counties to include such measures to limit new other buildings or uses.

C. **No city or county shall amend its land use regulations that apply to lands shown as Industrial Area on the Employment and Industrial Areas Map to authorize uses described in subsection A of this section that were not authorized prior to July 1, 2004.**

D. Cities and counties may allow division of lots or parcels into smaller lots or parcels as follows:

1. Lots or parcels smaller than 50 acres may be divided into any number of smaller lots or parcels.

2. Lots or parcels larger that 50 acres may be divided into smaller lots and parcels pursuant to a master plan approved by the city or county so long as the resulting division yields at least one lot or parcel of at least 50 acres in size.

3. Lots or parcels 50 acres or larger, including those created pursuant to paragraph (2) of this subsection, may be divided into any number of smaller lots or parcels pursuant to a master plan approved by the city or county so long as at least 40 percent of the area of the lot or parcel has been developed with industrial uses or uses accessory to industrial use, and no portion has been developed, or is proposed to be developed with uses described in subsection A of this section.

4. Notwithstanding paragraphs 2 and 3 of this subsection, any lot or parcel may be divided into smaller lots or parcels or made subject to rights-of-way for the following purposes:

a. To provide public facilities and services;

b. To separate a portion of a lot or parcel in order to protect a natural resource, to provide a public amenity, or to implement a remediation plan for a site identified by the Oregon Department of Environmental Quality pursuant to ORS 465.225;

c. To separate a portion of a lot or parcel containing a nonconforming use from the remainder of the lot or parcel in order to render the remainder more practical for a permitted use; or

d. To allow the creation of a lot for financing purposes when the created lot is part of a master planned development.

E. Notwithstanding **[subsection B]** **subsection A** of this section, a city or county may allow the lawful use of any building, structure or land **existing** at the time of **[enactment of an]** **adoption of its** ordinance **[adopted pursuant to this section]** **to implement this section** to continue and to expand to add up to 20 percent more **[floorspace]** **floor area** and 10 percent more land area. **Notwithstanding subsection D of this section, a city or county may allow division of lots or parcels pursuant to a master plan approved by the city or county prior to July 1, 2004.**

3.07.440 Employment Areas

A. Except as provided in subsections C, D and E, in Employment Areas mapped pursuant to Metro Code Section 3.07.130, cities and counties shall limit new and expanded retail commercial uses to those appropriate in type and size to serve the needs of businesses, employees and residents of the Employment Areas.

B. Except as provided in subsections C, D and E, a city or county shall not approve a commercial retail use in an Employment Areas with more than 60,000 square feet of gross leasable area in a single building, or retail commercial uses with a total of more than 60,000 square feet of retail sales area on a single lot or parcel, or on contiguous lots or parcels, including those separated only by transportation right-of-way.

C. A city or county whose zoning ordinance applies to an Employment Area and is listed on Table 3.07-4 may continue to authorize retail commercial uses with more than 60,000 square feet of gross leasable area in that zone if the ordinance authorized those uses on January 1, 2003.

D. A city or county whose zoning ordinance applies to an Employment Area and is not listed on Table 3.07-4 may continue to authorize retail commercial uses with more than 60,000 square feet of gross leasable area in that zone if:

1. The ordinance authorized those uses on January 1, 2003;

2. Transportation facilities adequate to serve the retail commercial uses will be in place at the time the uses begin operation; and

3. The comprehensive plan provides for transportation facilities adequate to serve other uses planned for the Employment Area over the planning period.

E. A city or county may authorize new retail commercial uses with more than 60,000 square feet of gross leasable area in Employment Areas if the uses:

1. Generate no more than a 25 percent increase in site-generated vehicle trips above permitted non-industrial uses; and

2. Meet the Maximum Permitted Parking – Zone A requirements set forth in Table 3.07-2 of Title 2 of the Urban Growth Management Functional Plan.

R L I S
REGIONAL LAND INFORMATION SYSTEM

Title 4 Industrial and Employment Areas

Ordinance No. 04-1040B

Exhibit C

June 24, 2004

Employment Land

Industrial Land

Regionally Significant Industrial Areas

WARNING: some maps combine data layers of differing map accuracies, e.g. flood plains can be laid on tax lots. When this occurs, the map is not reliable to correctly show data at the tax lot level.

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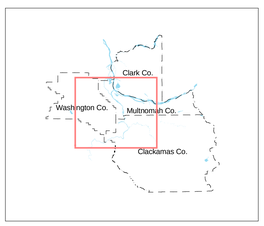

Location Map

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Project Date: Oct 3, 2003 Plot time: Jun 16, 2004 J:\hal\proj\04106\rsia_04_1040a.mxd

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Exhibit D to Ordinance No. 04-1040B
Addendum to Housing Needs Analysis
April 5, 2004

I. INTRODUCTION

The attached three Tables satisfy the requirements of ORS 197.298(5)(a)(E) to provide at least 3 years of data on the number, density and average mix of housing for vacant, partially vacant, redevelopment and infill (refill) and mixed use designated land. Table 5(a)(E) – 1 provides number, density and mix data on refill land for the period 1997 through 2001. Table 5(a)(E) – 2 provides the same data for development on vacant and partially vacant land for the period 1998 through 2001. Table 5(a)(E) – 3 displays the number, density and mix data for development on mixed use land for the period 1998 – 2001.

As noted in the original Housing Needs Analysis submission, the data in the attached Tables are subsets of more aggregated data contained in the original Housing Needs Analysis Report. While interesting and informative, the data in the attached Tables do not contradict the conclusions and actions taken in conjunction with the Urban Growth Report and periodic review. Nor do the data affect the determinations of the overall average density and overall mix of housing types at which residential development must occur in order to meet housing needs through 2022, as depicted in the original Housing Needs Analysis, pages 2 through 7 and Figures 3.1, 3.2, 3.3, 5.1 and 5.3.

The remainder of the report consists of an explanation of methodology and data sources and a synopsis of the data content of each of the tables.

II. METHODOLOGY AND DATA SOURCES

A. Data Sources

In order to retrospectively meet the requirements of State Statute we made maximum use of Metro's RLIS archived data that extend back in some degree to 1995. These data consist of the following elements:

1. Land use data at the tax lot level designating land by vacant, developed and zoning category.

2. County assessor tax lot data showing use, value, sales data, etc.

3. Geo-coded building permit data by building type.

4. Air photos for each year taken approximately in July of each year with a trend of improving resolution level over time.

B. Sampling Approach

We elected to measure the data using a 20% sampling approach so that we could manually audit each of the selected data points to insure accuracy. Machine processing of the data is not possible due to the following sources of measurement error.

1. Building permit geo-coding variability as approximately 70% of building permits actually geo-code exactly to the correct tax lot.

2. Building permit data error due to incomplete reporting, undetected duplicates and inaccurate descriptions of building type, work done and location.

3. Slight registration discrepancies between tax lot maps, air photos and archived land use coverages.

4. Variability between the time a building permit is issued, building takes place and the tax lot is created and enumerated in the County Assessor's tax lot coverage. The practical consequence of this is often that a row house constructed on a 2,500 sq. ft. lot appears to be on a 100,000 sq. ft. plus lot because the subdivision plat is not yet available in the data base.

For multi-family units we modified the 20% sample to include 100% of all building permits for 20 or more units and applied the 20% rate to permits of under 20 units. This avoided the potential sampling errors associated with having a few permits for multi-family of over 100 or more units.

C. Expansion Back to the Population Totals

Because we elected a 100% count of multi-family the sample was not self-weighting. As a consequence after the analysis was complete we used a two phase approach to estimate the building permit population. First, we expanded our sample by building type back to the totals reported in our building permit data base. Secondly, since our building permit data base is incomplete relative to the totals reported to the State and Federal Government, we expanded our building permit data base to match the County totals by building type.

D. Definition of Entities Being Measure

State Statute requires we report on the number and densities by building type of development on "refill", "vacant", "partly vacant" and "mixed use" land. These entities we define and discuss in the context of our RLIS data base and measurement protocols as follows:

1. Refill: Housing units developed on land that Metro already considers developed in its data base. Refill is further divided into redevelopment and infill. Redevelopment occurs after an existing building has been removed. Infill is additional building without removal of existing buildings.

   a. ***Method of Measurement***: We measure refill by counting the number of permits that locate on land Metro considers developed in the next fiscal year. For instance for the year "1998" we would compare the RLIS developed and vacant lands inventory for the year ending June 30, 1998 with all building permits issued beginning July 1, 1998 and ending June 30, 1999. Building permits located on land Metro classed vacant as of June 30, 1998 would be classed as development on vacant land and permits landing on land Metro classed as developed as of June 30, 1998 would be classed as refill.

   b. ***Measurement Protocols***: As noted earlier we select a 20% sample of all permits for new residential construction from the RLIS data base for the relevant years (with the exception of the 100% of multi-family permits equal to or exceeding 20 units). Each permit is scrutinized manually by a

trained intern using the RLIS data base and air photos to insure it is properly located and that the permit is for valid construction that did occur as the permit indicated. The analyst then determines whether the permit constitutes refill or vacant land development. Beginning with this study the analyst further classifies the permit to "legal – Urban Growth Report" refill and "economic – MetroScope" refill. This distinction results from the fact that RLIS analysts classify some individual lots in developing green field areas as developed prior to actual development occurring and also classify land cleared for urban renewal areas as vacant. In the former case the economic interpretation is development on new and in the latter case the economic interpretation is refill development. However, to be consistent with the RLIS land accounting system on which the Urban Growth Report is based we classify development the way RLIS accounts for it. On the other hand, the MetroScope land use model used for forecasting and policy evaluation counts green field development as vacant land consumption and urban renewal as refill (redevelopment). Consequently, we report refill data for both classifications.

2. Vacant and partially vacant: In RLIS tax lots that are "completely vacant" (90% vacant) are classed as totally vacant. If the unoccupied portion of a tax lot with development exceeds ½ acre, the unoccupied portion is classed a partially vacant. Green field sites under development may transition from vacant to partially vacant, back to totally vacant to developed and back again to totally vacant depending on the patterns of tax lot subdivision activity and zone changes. This also is true for urban renewal redevelopment sites. There are also a limited number of partially vacant sites in established residential areas where present zoning would allow further subdivision and development.

   a. ***Method of Measurement***: Using the audited building permit sample we machine processed the permits classed as legally vacant to fully vacant and partially vacant. Due to map registration discrepancies the RLIS developed lands coverage for 1997 could not be used so we dropped 600 observations for that year. In addition, another 1400 observations failed the machine screening in that they could not be conclusively classed as either vacant or partially vacant without manual auditing. The 2000 observations excluded from the vacant and partially vacant analysis resulting in the number of units developed on some type of vacant land dropping from 39,000 to 25,000. Though not relevant to the refill study or overall results, discussions with RLIS analysts indicated that the machine filtering process was more likely to exclude partially vacant than vacant tax lots. The bias, resulting from this procedure was minimized, by restating our inventory totals of vacant and partially vacant land using the same screening procedures.

   b. ***Measurement Protocols***: Once the refill data base was reclassed between vacant and partially vacant, we tabulated all the development on vacant land by the type of vacant land it fell on by building type (multi-family and single family) and by lot size.

3. Mixed use development: In our RLIS data base mixed use development is classed as MUC1, MUC2 and MUC3. From the original audited refill data base we selected all the records of building permits that fell on land classed as MUC1, MUC2 or MUC3 regardless of whether it was refill, vacant or partially vacant. Again matching the RLIS land use inventory for 1997 proved problematic for machine selection procedures and this year was excluded. The resulting selection process produced 402 observations representing over 4,600 units constructed from 1998 through 2001.

E. Years of Data Included in the Retrospective Analysis

We included building permit data from 12/97 through 6/2002 that could be reliably recovered and geo-coded from our existing RLIS data base. This time period allows us to evaluate 5 years of recent history in regard to "refill" and 4 years of history for "vacant", "partly vacant" and "mixed use" land.

III. SYNOPSIS OF RESULTS

A. Data Table 5E1: Refill Numbers by Type and Density 1997 – 2001

The data displayed on Table 5E1 show the amount of residential development of vacant and refill land that occurred during the period 1997 through 2001. During that period nearly 54,000 dwelling units located within the Metro region.[1] Of the 54,000 dwelling units, 26.5% occurred as refill according to the legal – Urban Growth Report definition. Using the economic-MetroScope definition 30.4% were refill reflecting the increasing importance of redevelopment in urban renewal areas and centers. Nearly 20,000 of the units constructed were multi-family with a legal refill rate of 31.5% and an economic rate of 40.2%. 34,000 units constructed were single family with a legal refill rate of 23.6% and an economic rate of 24.7%. Average lot sizes are also reported for every category.[2] For multi-family average lot sizes range from 1,800 to 2,000 sq. ft. depending on category. For single family average lot sizes range from 6,600 to 8,400 sq. ft. with refill development generally in the 6,500 – 7,000 sq. ft. range.

B. Table 5E1(a): Median Lot Size Data

This table provides additional and somewhat more meaningful weighted median lot size data. When we compare the average lot sizes in Table 5E1, we observe substantive differences in most cases. In general the median lot sizes are 30% less for vacant single family, 25% more for vacant multi-family, 25% less for refill single family and 30% less for refill multi-family. For all types combined the weighted median is 27% less for vacant and 26% less for refill. Assuming that the present median is a superior measure of long run average lot size, the combined weighted median of 4,417 sq. ft. should be used to determine vacant land consumption. This figure combined with the 39,619 units located on legally vacant land over the 5 year period implies a land consumption of slightly over 4,000 net buildable acres. Using a plausible range of gross to net conversion factors of .55 - .7 yields a gross buildable acre consumption of 1,150 to 1,450 acres per year, within the range estimated in the original Housing Needs Analysis.[3]

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[1] **Real Estate Report for Metropolitan Portland, Oregon**, Spring 2003. Numbers are based on building permits summarized at the County level and only approximate the UGB. This procedure slightly overstates UGB land consumption.

[2] Average as contrasted to median inflates land consumption as the measure is substantially influenced by a few large lot single family permits on urban land still zoned RRFU that will subsequently be subdivided. RLIS procedure of assuming ½ acre of land consumption for permits on non-subdivided land also inflates average lot size.

[3] While appearing precise, attempting to estimate long run densities and land consumption from individual lot sizes involves substantial uncertainties. The most serious of these is the gross to net conversion factor as we only observe

C. Table 5E2: Housing on Fully Vacant and Partially Vacant Land

The accompanying table presents the required data on development on a subcategory of vacant land – fully vacant land and land partially vacant. As noted in the methods section, fully or partially vacant is classified relative to the tax lot existing at the time of the RLIS vacant and developed lands inventory. As also noted in the methods section, due to procedures and quirks of the land development and reporting process land may be fully vacant, partially vacant or developed refill land several times during the development process. In addition as a result of attempting to categorize and measure "partially vacant" we discover that the acreage totals are extremely volatile and sensitive to whatever criteria we use in the machine query process to differ partial from full. Very minor discrepancies between vacant land coverages and assessor's tax lot coverages can dramatically change the inventories of fully and partially vacant. In the methods section we note that we use the same selection criteria for both the inventory totals and the classification of the refill sample into fully and partially vacant.

Of the over 39,000 legal vacant units located in the Metro Region for the period 1997 – 2001 we were able to reliably classify 25,000 units covering the period 1998 – 2001. Of these 15,500 (62.6%) were on fully vacant land and 9,300 (37.4%) were on partially vacant land. Looking at *Table 5E2(a) Fully Vacant and Partially Vacant Land Inventory 1998 – 2001* (replacing Table 4.1AB in the original Housing Needs Analysis) that on average partially vacant comprised 34.3% of the vacant land inventory. In sum development on partially vacant land overall has been occurring at roughly the same rate as development on fully vacant land and appears to not be materially different.

At the same time we recognize that there are a number of instances where partially vacant land shares a tax lot with a high valued single family home. In order to better understand the likelihood of further development under these circumstances, we used our single family sales price study to estimate the "optimum lot size" by neighborhood and house size. We define optimum lot size as the lot size at which at the loss of value to a homeowner by selling off part of his lot just equals the amount he gains by selling the land. If the homeowner sells more land, the value of his house declines more than he gains by the sale. Conversely, if he sells less land, the land unsold contributes less to the value of his home than the amount he would receive were he to sell it. Making that calculation for Dunthorpe we found that a $1,000,000 home on 5 acres would have a positive incentive to sell off land down to about 1 – 1.5 acres. By comparison, a $600,000 home on 1 acre would have an incentive to sell off no more than ½ acre. Significantly, in 2000 the average Dunthorpe selling price was $590,000 for a 3,100 sq. ft. house on a 22,000 sq. ft. lot, almost exactly the optimum lot size determined from our estimates. On average then we would expect Dunthorpe to have no additional capacity other than that resulting from subdivision of lots at least 1 acre to sizes no smaller than ½ acre. Optimum lot size calculations vary dramatically by neighborhood. For instance, the average house in the Powellhurst-Gilbert neighborhood has a positive incentive to sell off land down to and sometimes below a 5,000 sq. ft. lot minimum. This is more often the case within the Metro region notwithstanding the exceptionally high value areas such as Dunthorpe.

D. Table 5E3: Housing on Mixed Use Designated Land

As required by statute the accompanying table shows development for the period 1998 – 2001 that occurred on land Metro considered at the time of development to be MUC1, MUC2 and MUC3. As pointed out in the methods section, the mixed use inventory includes refill, vacant and partially vacant

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net buildable land consumption and cannot measure land lost to streets, parks, schools, freeways, etc. The second drawback is that average lot size measures are always exaggerated by a few large lot placements (often of manufactured homes) done by private individuals that will undoubtedly be further subdivided sometime in the future.

lands. Over the 4 year period we noted 4,600 housing units developed of which 3,000 were multi-family and 1,600 were single family. Average lot size for multi-family was 1,400 sq. ft. and single family lot size was 2,300 sq. ft. Table 5E3(a) depicts the 2040 Plan mixed use capacity as of 8/98. Total mixed use capacity at that time was roughly 23,000 units. Mixed use development constituted about 11% of residential development for the 4 year period 98 – 2001. As of 1998, mixed use capacity of 23,000 units constituted 12% of the capacity 193,000 dwelling unit capacity estimated at the time. As was the case with vacant and partially vacant, this sub-classification of land type seems to produce housing at a rate commensurate with its proportion of the land inventory.

Exhibit 5E1_: Housing on Vacant and Refill Land - Number, Type and Density 1997 Through 2001

Vacant/Refill Status	Year 1997	1998	1999	2000	2001	Grand Total
Legal - Urban Growth Report Basis						
Vacant Legal						
Multi Family	4,412	3,761	2,407	1,824	1,274	13,678
Average Lot Size	2,208	2,021	813	1,244	2,502	1,810
Single Family	4,594	5,670	4,814	5,425	5,439	25,941
Average Lot Size	8,516	8,611	10,104	6,292	8,161	8,292
Total All Types	9,005	9,431	7,221	7,249	6,713	39,619
Average Lot Size	5,425	5,983	7,007	5,022	7,087	6,054
Refill Legal						
Multi Family	2,228	1,567	918	503	1,059	6,275
Average Lot Size	2,729	2,042	1,178	1,353	1,499	2,013
Single Family	2,446	1,451	1,994	958	1,170	8,020
Average Lot Size	6,017	7,505	5,787	7,521	9,260	6,882
Total All Types	4,675	3,018	2,912	1,461	2,229	14,295
Average Lot Size	4,450	4,669	4,334	5,397	5,573	4,744
Percent of Development Refill	34.2%	24.2%	28.7%	16.8%	24.9%	26.5%
Economic - MetroScope Basis						
Vacant Economic						
Multi Family	4,300	3,103	1,983	1,484	1,068	11,938
Average Lot Size	2,260	2,124	955	1,245	2,304	1,885
Single Family	5,196	4,962	5,466	4,503	5,455	25,582
Average Lot Size	8,352	9,035	9,614	6,463	8,178	8,384
Total All Types	9,496	8,065	7,449	5,986	6,523	37,520
Average Lot Size	5,593	6,376	7,309	5,169	7,216	6,317
Refill Economic						
Multi Family	2,340	2,225	1,342	843	1,265	8,015
Average Lot Size	2,608	1,894	852	1,309	1,830	1,856
Single Family	1,844	2,159	1,342	1,880	1,154	8,379
Average Lot Size	5,664	6,891	5,686	6,510	9,196	6,660
Total All Types	4,184	4,384	2,684	2,724	2,419	16,394
Average Lot Size	3,955	4,355	3,269	4,899	5,344	4,311
Percent of Development Refill	30.6%	35.2%	26.5%	31.3%	27.0%	30.4%

Exhibit 5E1(a)_: Housing on Vacant and Refill Land - Median Lot Size 1997 - 2001

Year	1997	1998	1999	2000	2001 Totals	
Legal - Urban Growth Report Basis						
Single Family						
Median Lot Size Vacant	5,936	5,887	6,021	5,268	5,001	5,605
Median Lot Size Refill	5,406	5,628	4,001	5,301	5,047	5,032
Multi Family						
Median Lot Size Vacant	3,550	2,348	352	825	2,377	2,242
Median Lot Size Refill	1,630	2,318	953	408	534	1,384
Total All Types						
Median Lot Size Vacant	4,684	4,480	4,159	4,105	4,562	4,417
Median Lot Size Refill	3,930	3,902	3,003	3,851	2,724	3,506
Economic - MetroScope Basis						
Single Family						
Median Lot Size Vacant	5,955	5,897	6,000	5,277	5,026	5,636
Median Lot Size Refill	5,196	5,569	3,177	5,267	5,001	4,958
Multi Family						
Median Lot Size Vacant	3,562	2,367	385	933	2,377	2,420
Median Lot Size Refill	1,100	2,007	485	404	1,172	1,131
Total All Types						
Median Lot Size Vacant	4,835	4,555	4,628	4,515	4,688	4,660
Median Lot Size Refill	3,031	3,739	1,731	3,218	2,816	2,997

Exhibit 5E3_: Housing on Mixed Use Designated Land by Number, Type and Density 1998 Through 2001

	Year				
Land Use Class	**1998**	**1999**	**2000**	**2001**	**Grand Total**
Mixed Use One					
Multi Family	1,116	367	262	321	2,066
Average Lot Size	1,834	1,427	1,437	2,313	1,786
Single Family	226	100	304	737	1,367
Average Lot Size	3,127	4,386	2,482	1,946	2,439
Mixed Use Two					
Multi Family	41	153	132	-	326
Average Lot Size	2,277	252	1,090	-	846
Single Family	40	87	55	25	207
Average Lot Size	1,919	2,159	1,265	1,574	1,803
Mixed Use Three					
Multi Family	133	203	146	107	590
Average Lot Size	1,605	345	250	100	561
Single Family	37	23	21	-	80
Average Lot Size	2,108	1,841	2,144	-	2,043
Total Mixed Use					
Multi Family	1,290	723	541	428	2,982
Average Lot Size	1,824	874	1,032	1,758	1,441
Single Family	303	210	380	763	1,655
Average Lot Size	2,845	3,187	2,287	1,934	2,340
Total All Types	1,593	933	920	1,190	4,637
Average Lot Size	2,018	1,394	1,549	1,870	1,762

Exhibit 5E3(a)_: Mixed Use 2040 Plan Designated Land Capacity 8/98
(Includes Capacity of Vacant, Infill and Redevelopment Land & Areas)

Plan Category	DU Capacity
MUC 1	10,320
MUC 2	7,250
MUC 3	4,650
Total Capacity	22,220

Source: Compiled from Urban Growth Report Addendum, August 1998, page 40.
MUC 1 includes MUEA capacity.

Exhibit 5E2_: Housing on Fully Vacant and Partially Vacant Land - Number, Type and Density 1998 Through 2001

Land Vacancy Class	Year 1998	1999	2000	2001	Grand Total
Fully Vacant					
Multi Family	1,012	1,910	714	801	4,438
Average Lot Size	2,383	871	1,720	2,784	1,698
Single Family	2,554	2,894	2,808	2,951	11,206
Average Lot Size	6,517	6,743	5,684	5,327	6,054
Total	3,566	4,804	3,522	3,752	15,644
Average Lot Size	5,344	4,408	4,880	4,784	4,818
Partly Vacant					
Multi Family	2,496	319	271	126	3,213
Average Lot Size	1,847	638	778	1,339	1,617
Single Family	2,219	1,159	1,501	1,244	6,122
Average Lot Size	5,984	7,764	5,624	4,622	5,956
Total	4,715	1,478	1,772	1,370	9,335
Average Lot Size	3,794	6,227	4,882	4,320	4,463
Combined					
Multi Family	3,508	2,229	986	927	7,651
Average Lot Size	2,002	837	1,460	2,588	1,664
Single Family	4,773	4,053	4,309	4,194	17,329
Average Lot Size	6,269	7,035	5,663	5,118	6,019
Total	8,281	6,282	5,295	5,122	24,979
Average Lot Size	4,461	4,836	4,881	4,660	4,685
Percent Units on Fully Vacant:					62.6%
Percent Units on Partly Vacant:					37.4%

Exhibit 5E2(a)_: Housing on Fully Vacant and Partially Vacant Land - Inventory of Fully Vacant and Partially Vacant All Land Classes

	Year					
Land Vacancy Class	**1998**	**1999**	**2000**	**2001**	**4 Year Average**	**Percent**
Fully Vacant	33,422	30,820	28,789	26,631	29,916	65.7%
Partly Vacant	16,678	15,776	15,401	14,738	15,648	34.3%
Total	50,100	46,596	44,190	41,369	45,564	100.0%

Filter Criteria: Full - 90% of year 1 tax lot is vacant
Maybe - Vacant area is <90% of year 1 taxlot and >=5,000 sq. ft. and <1/2 acre
Part - Vacant area is <90% of year 1 taxlot and >= 1/2 acre
Sliver - vacant area is <90% of year 1 taxlot and < 5,000 sq. ft.

R L I S
REGIONAL LAND INFORMATION SYSTEM

2004 UGB Expansion

Ordinance 04-1040B

Exhibit E

June 24, 2004

2040 Design Type

Industrial Land

Urban Growth Boundary

Beavercreek Area

BEAVERCREEK RD

HENRICI RD

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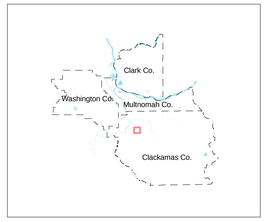
0 0.05 0.1 0.2 Miles



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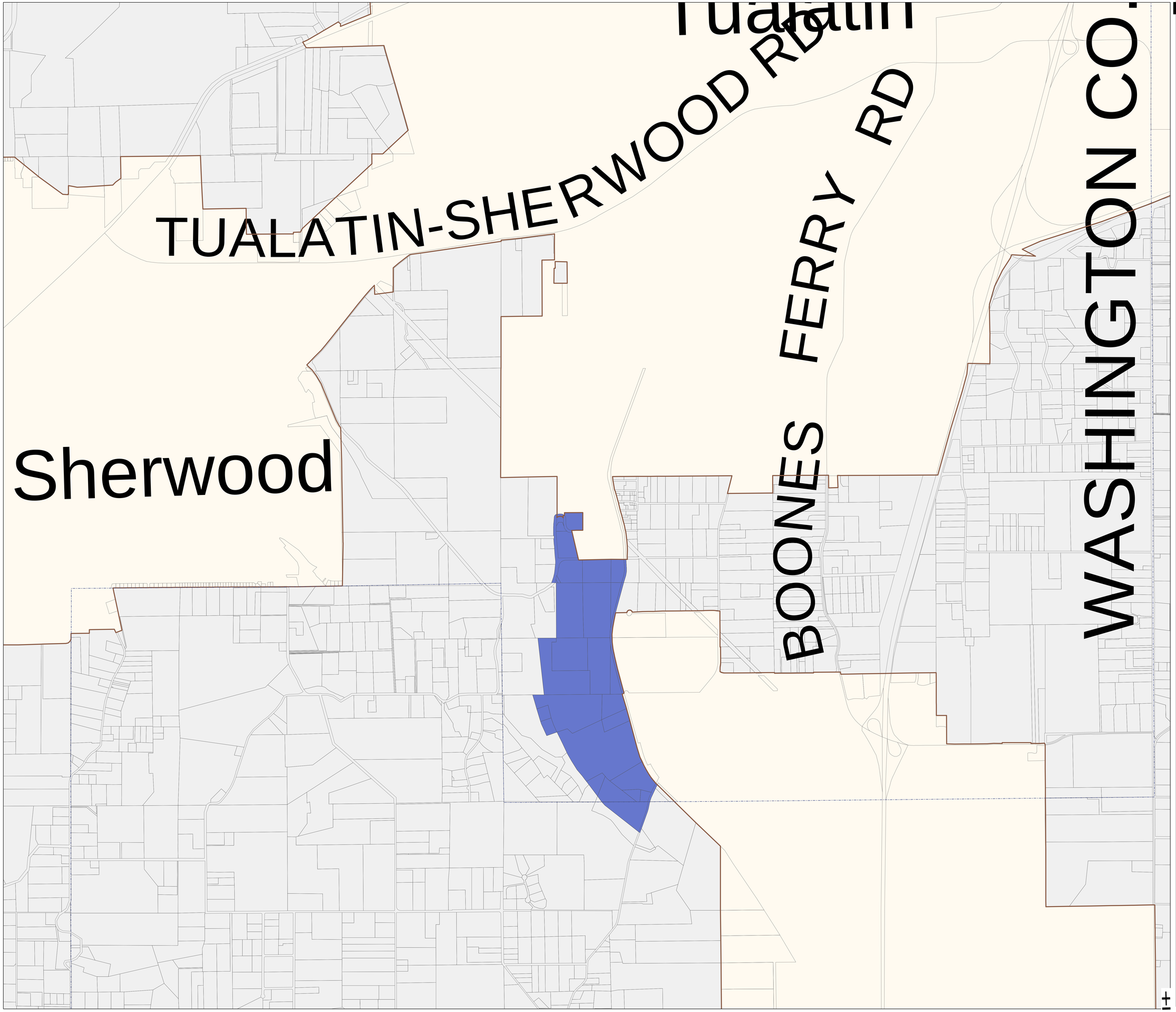

R L I S
REGIONAL LAND INFORMATION SYSTEM

2004 UGB Expansion

Ordinance 04-1040B

Exhibit E

June 24, 2004

2040 Design Type

Industrial Land

Urban Growth Boundary

Coffee Creek Area

WARNING: some maps combine data layers of differing map accuracies, e.g. flood plains can be laid on tax lots. When this occurs, the map is not reliable to correctly show data at the tax lot level.

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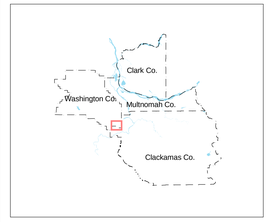

Location Map

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Verboort

Forest Grove

HWY 8

Cornelius

Tualatin River

HWY 1

R L I S
REGIONAL LAND INFORMATION SYSTEM

2004 UGB Expansion

Ordinance 04-1040B

Exhibit E

June 24, 2004

2040 Design Type

RSIA

Urban Growth Boundary

Cornelius Area

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Location Map

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R L I S
REGIONAL LAND INFORMATION SYSTEM

2004 UGB Expansion

Ordinance 04-1040B

Exhibit E

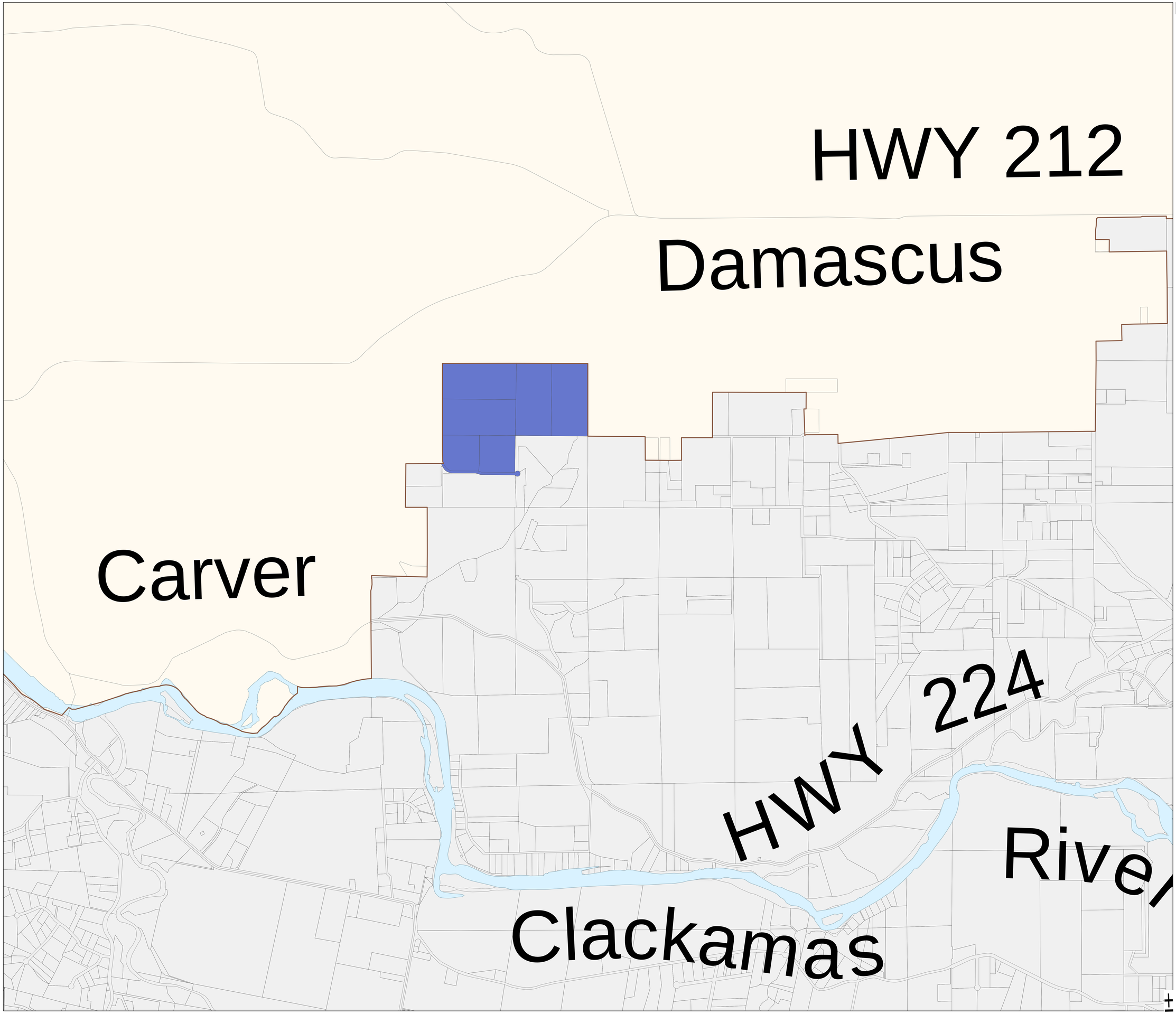
June 24, 2004

2040 Design Type

Industrial Land

Urban Growth Boundary

Damascus West Area



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1 inch equals 0.1 miles

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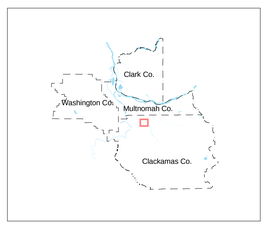

Location Map

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Exhibit E

June 24, 2004

2040 Design Type

RSIA Land

Urban Growth Boundary

Helvetia
Area

Helvetia

SUNSET HWY

West Union

RD

PASS

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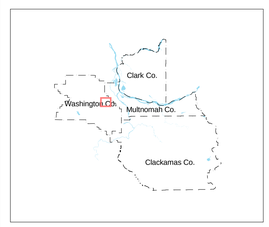

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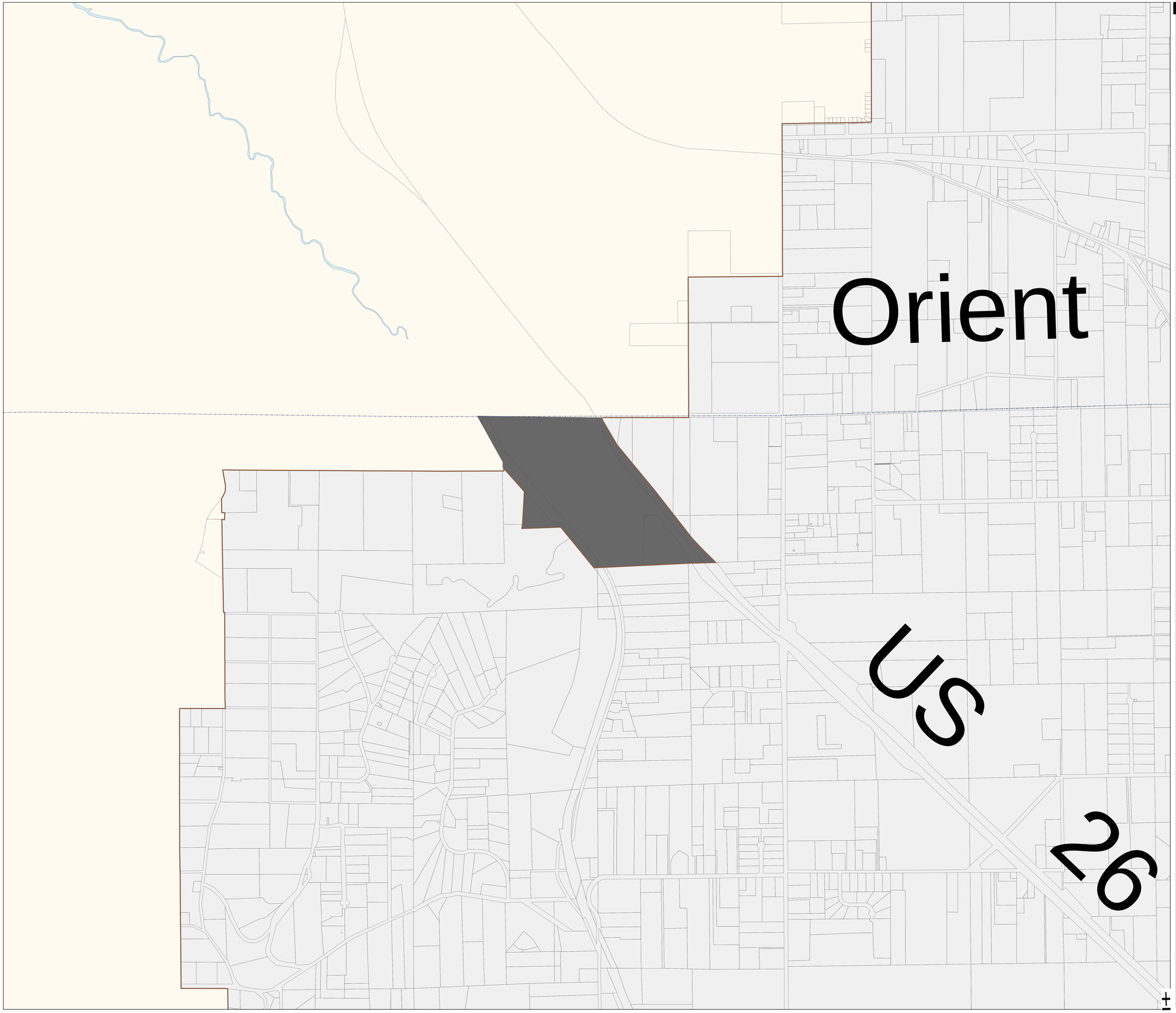

2040 Design Type

RSIA

Urban Growth Boundary

Orient
Area

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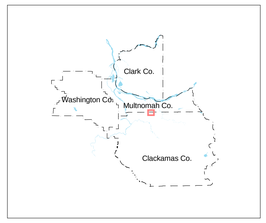

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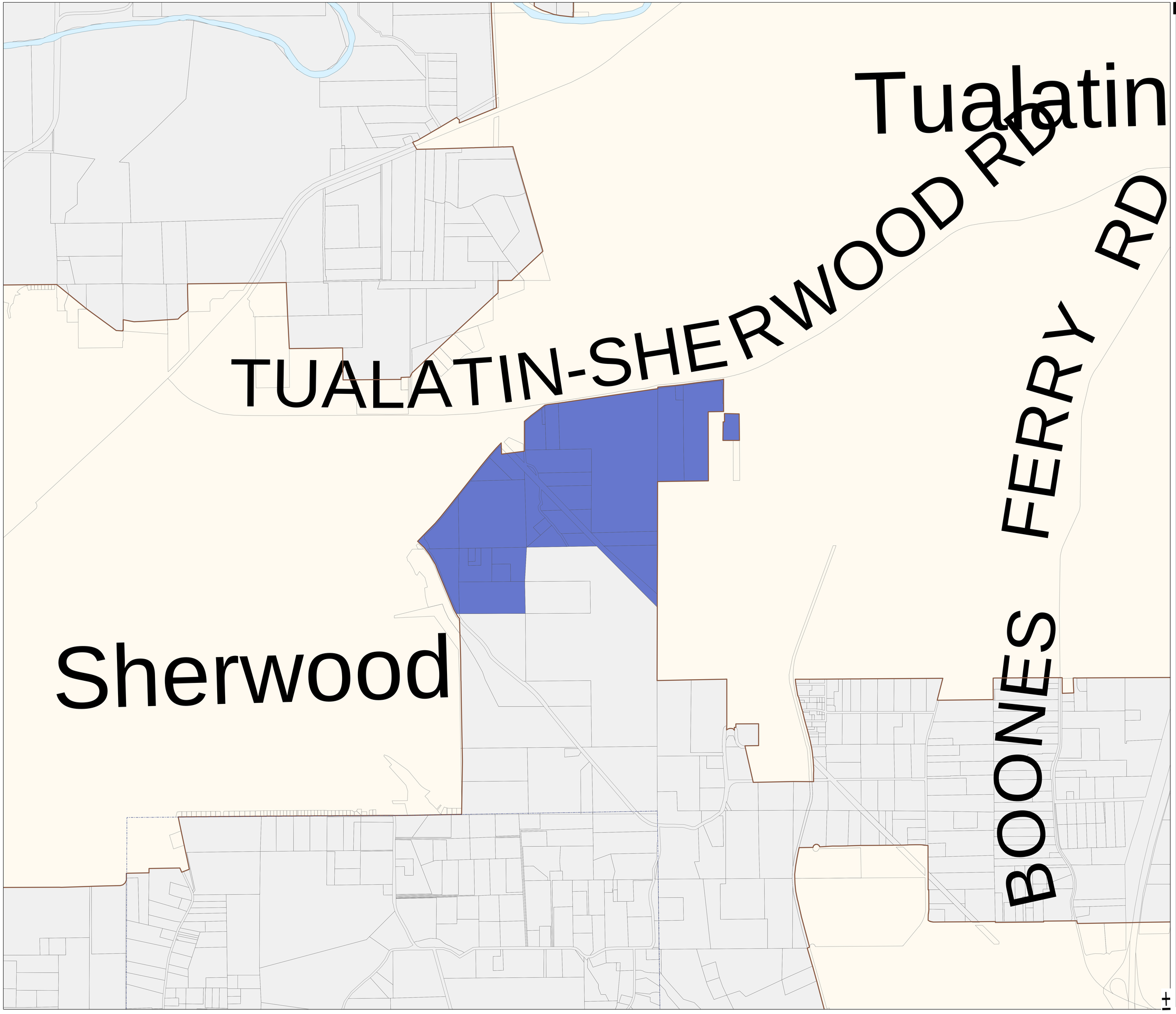

R L I S
REGIONAL LAND INFORMATION SYSTEM

2004 UGB Expansion

Ordinance 04-1040B

Exhibit E

June 24, 2004

2040 Design Type

Industrial Land

Urban Growth Boundary

Quarry Area

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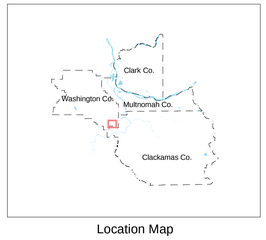

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Tualatin

Rivergrove

Tualatin River

TUALATIN-SHERWOOD RD

FERRY RD

BOONES

WASHINGTON CO.

CLACKAMAS CO.

STAFFORD

RD

BORLAI

Petes Mtn

Sherwood

Wilsonville

I-5

Willamette River

I-

R L I S
REGIONAL LAND INFORMATION SYSTEM

2004 UGB Expansion

Ordinance 04-1040B

Exhibit E

June 24, 2004

2040 Design Type

Industrial Land

Urban Growth Boundary

Tualatin
Area

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Exhibit F to Ordinance No. 04-1040B
Conditions on Addition of Land to the UGB

I. GENERAL CONDITIONS APPLICABLE TO ALL LANDS ADDED TO THE UGB

A. The city or county with land use planning responsibility for a study area included in the UGB shall complete the planning required by Metro Code Title 11, Urban Growth Management Functional Plan ("UGMFP"), section 3.07.1120 ("Title 11 planning") for the area. Unless otherwise stated in specific conditions below, the city or county shall complete Title 11 planning within two years after the effective date of this ordinance. Specific conditions below identify the city or county responsible for each study area.

B. The city or county with land use planning responsibility for a study area included in the UGB, as specified below, shall apply the 2040 Growth Concept design types shown on Exhibit E of this ordinance to the planning required by Title 11 for the study area.

C. The city or county with land use planning responsibility for a study area included in the UGB shall apply interim protection standards in Metro Code Title 11, UGMFP, section 3.07.1110, to the study area until the effective date of the comprehensive plan provisions and land use regulations adopted to implement Title 11.

D. In Title 11 planning, each city or county with land use planning responsibility for a study area included in the UGB shall recommend appropriate long-range boundaries for consideration by the Council in future expansions of the UGB or designation of urban reserves pursuant to 660 Oregon Administrative Rules Division 21.

E. Each city or county with land use planning responsibility for an area included in the UGB by this ordinance shall adopt provisions – such as setbacks, buffers and designated lanes for movement of slow-moving farm machinery – in its land use regulations to enhance compatibility between urban uses in the UGB and agricultural practices on adjacent land outside the UGB zoned for farm or forest use.

F. Each city or county with land use planning responsibility for a study area included in the UGB shall apply Title 4 of the UGMFP to those portions of the study area designated Regionally Significant Industrial Area ("RSIA"), Industrial Area or Employment Area on the 2040 Growth Concept Map (Exhibit C). If the Council places a specific condition on a RSIA below, the city or county shall apply the more restrictive condition.

G. In the application of statewide planning Goal 5 (Natural Resources, Scenic and Historic Areas, and Open Spaces) to Title 11 planning, each city and county with land use responsibility for a study area included in the UGB shall comply with those provisions of Title 3 of the UGMFP acknowledged by the Land Conservation and Development Commission ("LCDC") to comply with Goal 5. If LCDC has not acknowledged those provisions of Title 3 intended to comply with Goal 5 by the deadline for completion of Title 11 planning, the city or county shall consider, in the city or county's application of Goal 5 to its Title 11 planning, any inventory of regionally significant Goal 5 resources and any preliminary decisions to allow, limit or prohibit conflicting uses of those resources that is adopted by resolution of the Metro Council.

H. Each city and county shall apply the Transportation Planning Rule (OAR 660 Div 012) in the planning required by subsections F (transportation plan) and J (urban growth diagram) of Title 11.

II. SPECIFIC CONDITIONS FOR PARTICULAR AREAS

A. Damascus Area

1. Clackamas County and Metro shall complete Title 11 planning requirements through the incorporation of this area into the greater Damascus/Boring Concept Plan planning effort currently underway. This planning shall be completed within the same time frame as specified in Ordinance No. 02-969B.

2. In the planning required by Title 11, subsections (A) and (F) of section 3.07.1120, Clackamas County or any future governing body responsible for the area shall provide for annexation of those portions of the area whose planned capacity is sufficient to support transit to the Tri-met District.

3. In the planning required by Title 11, subsections (A) and (F) of section 3.07.1120, Clackamas County or any future governing body responsible for the area shall provide for annexation of those portions of the area whose planned capacity is sufficient to support transit to the Tri-met District.

B. Beavercreek Area

1. Clackamas County or, upon annexation to Oregon City, the city and county, with Metro, shall complete Title 11 planning for the area.

2. This area shall be planned in conjunction with the adjoining tax lot added to the UGB in 2002, under Ordinance No. 02-969B.

~~C. Borland Area – North of I-205~~

~~1. Clackamas County or, upon annexation to the City of Tualatin, the city and county, in coordination with the Cities of Lake Oswego, Tualatin, and West Linn and Metro, shall complete Title 11 planning within four years following the effective date of Ordinance No. 04-1040. The county and city, in conjunction with Lake Oswego and West Linn and Metro shall recommend long-range boundaries in the Stafford Basin and general use designations for consideration by the Council in future expansions of the UGB.~~

~~2. Until the effective date of new regulations adopted pursuant to Title 11, the city or county with land use planning responsibility for the area shall not allow the division of a lot or parcel that is 50 acres or larger into lots or parcels smaller than 50 acres.~~

~~D~~C. Tualatin Area

1. Washington County or, upon annexation to the Cities of Tualatin or Wilsonville, the cities, in conjunction with Metro, shall complete Title 11 planning within ~~four~~ two years following the selection of the right-of-way alignment for the I-5/99W Connector, or within seven years of the effective date of Ordinance No. 04-1040, whichever occurs earlier.

2. Title 11 planning shall incorporate the general location of the projected right of way ~~location~~ alignment for the I-5/99W connector and the Tonquin Trail as shown on the 2004 Regional Transportation Plan. If the selected right-of-way for the connector follows the approximate course of the "South Alignment," as shown on the Region 2040 Growth Concept Map, as amended by Ordinance No. 03-1014, October 15, 2003, the portion of the Tualatin Area that lies north of the right-of-way shall be designated "~~Inner~~Outer Neighborhood" on the Growth Concept Map; the portion that lies south shall be designated "Industrial."

3. The governments responsible for Title 11 planning shall consider using the I-5/99W connector as a boundary between the city limits of the City of Tualatin and the City of Wilsonville in this area.

~~E~~D. Quarry Area

1. Washington County or, upon annexation to the cities of Tualatin or Sherwood, the cities**,** and Metro shall complete Title 11 planning for the area.

2. Title 11 planning shall, if possible, be coordinated with the adjoining area that was included in the UGB in 2002 under Ordinance No. 02-969B.

3. Until the effective date of new regulations adopted pursuant to Title 11, the city or county with land use planning responsibility for the area shall not allow the division of a lot or parcel that is 50 acres or larger into lots or parcels smaller than 50 acres.

4. Title 11 planning shall incorporate the general location of the projected right-of-way for the Tonquin Trail as shown on the 2004 Regional Transportation Plan.

~~F~~E. Coffee Creek Area

1. Washington and Clackamas Counties or, upon annexation of the area to the ~~City~~ cities of Tualatin or Wilsonville**,** the city, ~~and~~ in conjunction with Metro, shall complete the Title 11 planning for the area within ~~four~~ two years following the selection of the right-of-way alignment for the I-5/99W Connector, or within seven years of the effective date of Ordinance No. 04-1040B, whichever occurs earlier.

2. ~~The concept~~ Title 11 planning shall incorporate the general location of the projected right of way location for the I-5/99W connector and the Tonquin Trail as shown on the 2004 Regional Transportation Plan.

~~G. Wilsonville East Area~~

~~1. Clackamas County or, upon annexation of the area to the City of Wilsonville, the city, and Metro shall complete the Title 11 planning for the area within two years of the effective date of Ordinance No. 04-1040.~~

~~2. In the planning required by Title 11 a buffer shall be incorporated to mitigate any adverse effects of locating industrial uses adjacent to residential uses located southwest of the area.~~

~~3. Until the effective date of new regulations adopted pursuant to Title 11, the city or county with land use planning responsibility for the area shall not allow the division of a lot or parcel that is 50 acres or larger into lots or parcels smaller than 50 acres.~~

~~H~~F. Cornelius Area

1. Washington County, or, upon annexation of the area to the City of Cornelius, the city and Metro shall complete the Title 11 planning for the area.

~~I~~G. Helvetia Area

1. Washington County, or upon annexation of the area to the City of Hillsboro, the city, and Metro shall complete the Title 11 planning for the area.

2. Until the effective date of new regulations adopted pursuant to Title 11, the city or county with land use planning responsibility for the area shall not allow the division of a lot or parcel that is 50 acres or larger into lots or parcels smaller than 50 acres.

Exhibit G to Ordinance No. 04-1040B
Findings of Facts, Conclusions of Law

Introduction

The Metro Council adopted Ordinance 04-1040B in response to LCDC Partial Approval and Remand Order 03-WKTASK-001524, entered July 7, 2003. LCDC's order followed its review of seven ordinances (Nos. 02-969B, 02-983B, 02-984A, 02-985A, 02-986A, 02-987A and 02-990A) adopted by the Metro Council as part of Periodic Review Work Task 2. The findings of fact and conclusions of law that explained how those ordinances complied with state planning laws, together with the supplemental findings and conclusions set forth in this exhibit, are part of the explanation how Ordinance No. 04-1040B complies with those laws. These findings also explain how Ordinance No. 04-1040B complies with the three requirements of the remand order.

REQUIREMENT NO. 1:

REMAND ORDER ON SUBTASK 17: COMPLETE THE ACCOMMODATION OF THE NEED FOR THE INDUSTRIAL LAND NEED COMPONENT OF EMPLOYMENT LAND THAT REMAINS APPROVAL OF WORK TASK 2.

I. GENERAL FINDINGS FOR TASK 2 REMAND DECISION ON UGB

A. Coordination with Local Governments

Metro worked closely with the local governments and special districts that comprise the metropolitan region. The Metro Charter provides for a Metropolitan Policy Advisory Committee ("MPAC") composed generally of representatives of local governments, special districts and school districts in the region. MPAC reviewed all elements of this periodic review decision. MPAC made recommendations to the Metro Council on most portions of the decision. All recommendations were forwarded formally to the Council and the Council responded. Metro Councilors and staff held many meetings with local elected officials in the year since LCDC's remand (July 7, 2003).

The record of this decision includes correspondence between local governments and Metro, including Metro's responses to concerns and requests from local governments and local districts related to industrial land.

Metro accommodated the requests and concerns of local governments as much as it could, consistent with state planning laws and its own Regional Framework Plan (Policy 1.11) and Regional Transportation Plan (Policy 2.0).

B. Citizen Involvement

These findings address Goal 1 and Regional Framework Plan Policy 1.13.

To gather public input on this Task 2 remand decision, Metro conducted an extensive citizen involvement effort. The findings for Ordinance No. 02-969B set forth Metro's effort leading to adoption of that ordinance on December 5, 2002. Those findings are incorporated here. Since that time, the Metro notified by mail nearly 75,000 people of the pending decision to expand the UGB for industrial land. Metro also provided individual mailed notice to nearly 5,000 landowners of possible revisions to Title 4 (Industrial and Other Employment Areas) of the Urban Growth Management Functional Plan ("UGMFP"). In March, 2004, Metro held six workshops on industrial land throughout the region, attended by some 1,200 people. Finally, the Council held public hearings on the UGB expansion and Title 4 on December 4 and December 11 of 2003 and April 22 and 29, May 6 and 27, and June 10 and 24 of 2004.

These efforts bring Metro into compliance with Goal 1 and Metro's Regional Framework Plan. More important, this work to involve Metro area citizens has contributed greatly to their understanding of the importance of this set of decisions for the region and have brought Metro invaluable comment on options available to it.

C. Need for Land

These findings address ORS 197.296; ORS 197.732(1)(c)(A); Goal 2, Exceptions, Criterion (c)(1); Oregon Administrative Rules 660-004-0010(1)(c)(B)(i) and 660-004-0020(2)(a); Goal 9 (local plan policies); Goal 10; Goal 14, Factors 1 and 2; Metro Regional Framework Plan ("RFP") Policies 1.2, 1.4, 1.4.1 and 1.4.2; and Metro Code 3.01.020(b)(1) and (2).

The findings for Ordinance No. 02-969B set forth Metro's analysis of the need for land for new jobs through the year 2022. The Urban Growth Report-Employment ("UGR-E") provides the details of that analysis. The analysis indicates that the region will need approximately 14,240 acres to accommodate an additional 355,000 jobs (all employment, commercial and industrial). Based upon new information that came to the Council during hearings on Title 4 revisions and UGB expansion, Metro completed a supplement (Ordinance No. 04-1040B, Appendix A, Item b) to the UGR-E that describes emerging trends in industrial use.

Leading to adoption of the ordinances that expanded the UGB in December, 2002, Metro analyzed the capacity of the existing UGB to accommodate this employment growth. The analysis determined that the UGB contained a surplus of land (759.6 acres) for commercial employment and a deficit of land (5,684.9 acres) for industrial development. The UGR-E provides the details of this analysis.

Following adoption of the December, 2002, ordinances, Metro analyzed the capacity of the expanded UGB. Those ordinances left Metro with a deficit of 1,968 acres of industrial land and a surplus of 393 acres of commercial land. From this analysis, the Council concluded that the UGB, as expanded by ordinances in December, 2002, did not have sufficient capacity to accommodate the remaining unmet need for industrial land. This deficit was one reason for LCDC's July 7, 2003, remand order directing Metro to complete the accommodation of this need for industrial land.

Based upon interviews with industrial developers, brokers and consultants, the Regional Industrial Land Survey ("RILS") and Metro's UGR-E, Metro refined the need for industrial land. Not just any land will satisfy the need for industrial use. Metro defined the need as 1,968 acres of land composed generally of less than 10 percent slope that lies either within two miles of a freeway interchange or within one mile of an existing industrial area. RILS and the UGR-E also calculate the need for parcels of varying sizes by sectors of the industrial economy. Table 13 of the UGR-E shows a need for 14 parcels 50 acres or larger for the warehouse and distribution and tech/flex sectors (page 25).

D. Alternatives: Increase Capacity of the UGB

These findings address ORS 197.732(c)(B); Goal 14, Factors 3 and 4; Goal 2, Exceptions, Criterion 2; OAR 660-004-0010(1)(B)(ii) and 660-004-0020(2)(b); Metro Code 3.01.020(b)(1)(E); and RFP Policies 1.2, 1.3, 1.4, 1.6, 1.7, 1.8 and 1.9.

To address the shortfall in employment capacity, Metro considered measures to increase the efficiency of land use within the UGB designated for employment. Metro's UGMFP Title 4, first adopted in 1996, limited non-employment uses in areas designated Industrial and Employment. Analysis of results of local implementation of Title 4 indicates that commercial uses and other non-industrial uses are converting land designated for industrial use to non-industrial use.

In response to this information, the Metro Council amended the RFP in Ordinance No. 02-969B in December, 2002, to improve the protection of the existing industrial land base. The Council created a new 2040 Growth Concept design type – "Regionally Significant Industrial Land" ("RSIA") – and revised Title 4 to establish new limitations on commercial office and commercial retail uses in RSIAs. Metro estimated that these new measures would reduce the shortfall in industrial land by 1,400 acres by reducing encroachment by commercial uses. The Council counted this "savings" of industrial land in its determination that the deficit of industrial land following the December, 2002, expansion of the UGB was 1,968 net acres.

Following adoption of the December ordinances, the Council began implementation of the new policy and code, including the mapping of RSIAs. The process of developing the map with cities and counties in the region uncovered implementation difficulties with the provisions of the new Title 4 that limited commercial retail and office uses. With Ordinance No. 04-1040B, the Council once again revised Title 4 with two objectives: greater flexibility for traded-sector companies and retention of the 1,400-acre "savings" estimated from the December, 2002, revisions. Based upon the analysis of Title 4 revisions in the supplement to the UGR-E (Ordinance No. 04-1040B, Appendix A, Item b), the Council estimates that the revisions, in combination with conditions placed upon areas added to the UGB for industrial use, will continue to "save" 1,400 acres of industrial land from intrusion by commercial uses.

During hearings on the remand from LCDC, the Council received testimony that an increasing number of industrial jobs is finding space in office buildings rather than in traditional industrial buildings. The Council relied upon this testimony to revise Title 4 limitations on offices in industrial areas. The Council also relied upon the testimony to apply the 393-acre surplus of commercial land taken into the UGB by the December, 2002, ordinances to the need for 1,968 acres of industrial land. The Council assumed that offices in the region's designated Employment Areas, Centers, Corridors, Station Communities and Mains Streets would absorb industrial jobs. This assumption reduced the need for industrial land from 1,968 to 1,575 net acres.

Also during the hearings, the cities of Wilsonville, Oregon City and Fairview brought news of recent plan amendments (adopted after completion of Metro's inventory of industrial land) adding land to the industrial land supply. The Council concluded that the land added by Wilsonville (127 acres) and Oregon City (74 acres) are actually available for industrial use, subject to timing and infrastructure requirements. The Council concluded that the Fairview land, though designation industrial in the city's comprehensive plan, is not yet appropriately zoned to make it available for industrial use. These actions reduced the need for industrial land from 1,575 to 1,374 net acres.

The City of Gresham requested a change to the 2040 Growth Concept Map and the Title 4 Employment and Industrial Areas map for a 90-acre tract that is part of Study Area 12 and adjacent to land added to the UGB in December, 2002, for industrial use. The city says further planning work on its part has revealed that some 20 acres of the tract are suitable for industrial use. The Council makes this change in Ordinance No. 04-1040B, reducing the need from 1,374 to 1,354.

In a further effort to accommodate industrial development more efficiently within the UGB, the Council discovered that it had assumed a commercial development refill rate of 50 percent, lower than the most recently observed rate of 52 percent. For the reasons stated above, the Council concludes that this infill and re-development of lands in designated Employment Areas, Centers, Corridors, Station Communities and Mains Streets will accommodate some of the increasing number of industrial jobs that is locating in offices rather than factories or other traditional industrial buildings. Correction of the commercial refill rate assumption reduces the need for industrial land from 1,354 to 1,180 acres.

E. Alternatives: Expand the UGB

These findings address ORS 197.732(c)(B), (C) and (D) and Goal 2, Exceptions; ORS 197.298(1); Goal 11; Goal 14, Factors 3-7; OAR 660-004-0010(1) and 660-004-0020(2); RFP Policies 1.2, 1.3.1, 1.4, 1.4.1, 1.7, 1.7.2, 1.9, 1.12.1, 1.12.2 and 5.1.1; Regional Transportation Plan Policy 3.0 and Metro Code 3.01.020(b)(3) through (7) and 3.01.020(d)

The measures taken by the Council to increase the capacity of the existing UGB for industrial use, described above leave an unmet need for industrial land of 1,180 acres.

Metro began the search for the most appropriate land for inclusion in the UGB by applying the priorities in ORS 197.298(1). Because Metro has not re-designated "urban reserve" land since its 1997 designation was invalidated on appeal, the highest priority for addition of land is exception land.

Metro first included for consideration all exception land that was studied for inclusion in the December, 2002, ordinances, but not included at that time (59,263 acres). Metro then expanded the search to consider all other land, resource land included, that met the siting characteristics that help define the need for industrial land (less than 10 percent slope and within two miles of a freeway interchange or one mile of an existing industrial area (9,071 acres). In all, Metro looked at approximately 68,000 acres to find the most appropriate land.

Once Metro mapped land by its statutory priority, Metro analyzed the suitability of the land for industrial use, considering the locational factors of Goal 14, the consequences and compatibility criteria of the Goal 2 and statutory exceptions process, the policies of the Regional Framework Plan (RFP) and the criteria in the Metro Code that are based upon Goal 14. This analysis is set forth in the Alternatives Analysis Study, Item (c) in Appendix A of Ordinance No. 04-1040B and subsequent staff reports [Appendix A, Items (a) and (y)].

The Alternatives Analysis and testimony from the hearings gave the Council few easy or obvious choices among the lands it considered. The land most suitable for the types of industrial use forecast in the region for the next 20 years is flat land near freeway interchanges or near existing industrial areas. In addition, the region needs parcels 50 acres or larger for the warehouse and distribution and tech/flex sectors. The land most likely to meet these needs at the perimeter of the UGB is agricultural land, the last priority for inclusion under ORS 197.298(1).

The highest priority for inclusion, under the priority statute, where no urban reserves have been designated, is exception land. But the character of most exception areas makes them unable to fill the region's needs for industrial use. The great majority of exception land outside the UGB is designated for residential use, and most of that is settled with residences. Parcels are generally small (five acres and smaller), the topography is usually rolling and often steep, and streams, small floodplains and wildlife habitat are common. And residents, as evidenced by testimony at Council hearings, are often vigorously opposed to industrial intrusions into what they consider their neighborhoods.

The Council excluded from further consideration those exception lands that lie further than two miles from a freeway interchange and more than one mile from existing industries for the reason that these areas cannot meet the identified need for industrial land. The Staff Report [Appendix A, Item (a)] describes these specific areas in detail at pages 13 to 18.

The Council excluded other study areas (or portions of them) from further consideration even though they could meet the identified need (less than 10 percent slope and either within two miles from a freeway interchange or within one mile from existing industries) because they are unsuitable for industrial use. Further analysis showed that some combination of parcelization, existing development, limitations on use

imposed by Title 3 of the UGMFP (Water Quality, Flood Management and Fish and Wildlife Conservation), poor road access, difficulty in providing public services and negative effects of urbanization on nearby agricultural practices renders the areas unsuitable for industrial use. Portions of the areas contain designated farm or forest land. The Staff Report [Appendix A, Item (a)] describes these specific areas in detail at pages 18 to 25 (and portions of other areas at pages 13 to 18).

The Council also excluded those exception areas that are not contiguous to the UGB, or to areas added to the UGB for industrial use, and do not contain enough suitable land to comprise a minimum of 300 gross acres. Based upon an analysis of industrial areas within the pre-expansion UGB and reasoning set forth in "Formation of Industrial Neighborhoods", memorandum from Lydia Neill to David Bragdon, October 24, 2003, the Council concludes that these small areas cannot satisfy the need for industrial land.

The Council looked next to resource land, beginning with land of lowest capability. The Council included 354 acres (236 net acres) designated for agriculture in the Quarry Study Area, composed predominantly of the poorest soils (Class VII) in the region. Other land with poor soils in the vicinity were rejected due to steep slopes. The Council included 63 acres (30 net acres) designated for forestry in the Beavercreek Study Area composed of Class IV and VI soils and 102 acres (69 net acres) of Class III and IV soils in the Damascus West Study Area. No other land with soil capability lower than Class II can meet the need for industrial use identified by the Council.

Finally, the Council turned to the many lands under consideration with predominantly Class II soils. To choose among thousands of acres of this flat farmland near urban industrial areas or near freeway interchanges, the Council considered the locational factors of Goal 14 and policies in its Regional Framework Plan ("RFP") and Regional Transportation Plan ("RTP"). Further, the Council sought advice from a group of farmers and agriculturalists in the three counties, assembled by the Oregon Department of Agriculture ("ODA"). This group submitted a report to the Council entitled "Limited Choices: The Protection of Agricultural Lands and the Expansion of the Metro Area Urban Growth Boundary for Industrial Use." [Appendix A, Item (i).)] Preliminary guidance from ODA led the Council to consider an amendment to Policy 1.12 of the RFP on agricultural land, adopted and applied in Ordinance No. 04-1040B: "When the Council must choose among agricultural lands of the same soil classification for addition to the UGB, the Council shall choose agricultural land deemed less important to the continuation of commercial agriculture in the region." (Exhibit A.)

The Council finds that the region will be able to urbanize the lands it has added to the UGB in an efficient and orderly fashion. The Council concludes that the overall consequences of urbanization of these lands are acceptable, especially given the protections in place in the RFP and Metro Code for sensitive resources. Through mitigation measures required by the conditions in Exhibit F, the Council believes it can achieve compatibility between urbanization of the land added to the UGB and adjacent land outside the UGB.

The Council also believes that it is able to maintain separations between communities at the urban fringe sufficient to allow each community to retain a sense of place. The Council chose ridgelines, streams, power lines, roads and property lines to define the boundaries of the UGB in an effort to provide a distinct boundary and a clear transition between urban and rural uses.

The Council also finds that the lands it added to the UGB for industrial use contribute to a compact urban form. The lands are adjacent to the existing UGB. Many involve exception lands that are already partially urbanized and contain some components of public facilities needed to serve urban industrial uses. The Council rejected some areas of exception land that extend far from the UGB and would require long extensions of linear services such as sewer, water and stormwater lines. The Council chose land that adheres closely to siting characteristics needed by the industries likely to grow during the planning period: proximity

to existing industrial areas and accessibility to freeway interchanges. These choices contribute to the region's urban form which, among other things, calls for siting uses with higher densities (commercial and residential) in Centers and other design types served by high-capacity public transit.

Combined with areas added to the UGB for employment in the December, 2002, periodic review ordinances, areas added by Ordinance No. 04-1040B for industrial use are distributed round the region. Most of the jobs land was added to the east side of the region in December, 2002. This ordinance adds industrial land mostly to the south and west sides of the region. In particular, addition of 262 acres north of Cornelius will add jobs, income, investment and tax capacity to a part of the region with disproportionately little of those resources.

F. Water Quality

Each local government responsible for an area added to the UGB must complete the planning requirements of Title 11, Urban Growth Management Functional Plan ("UGMFP"), including compliance with the water quality provisions of Title 3 of the UGMFP.

G. Areas Subject to Natural Disasters and Hazards

The Council has excluded environmentally constrained areas from the inventory of buildable land (see UGRs) and from its calculation of the housing and jobs capacity of each study area (see Alternatives Analysis). Each local government responsible for an area added to the UGB must complete the planning requirements of Title 11, Urban Growth Management Functional Plan ("UGMFP"), including compliance with Title 3 of the UGMFP on floodplains and erosion control.

The Council considered the best information available on known hazards, including earthquake hazard. The study areas with the highest earthquake hazard have been rejected. The are small portions of several study areas with known earthquake hazards added to the UGB. Local governments responsible for Title 11 planning are required by that title (and Goal 7) to take these portions into account in their comprehensive plan amendments.

H. Economic Development

As part of Task 2 of periodic review, Metro reviewed the economic development elements of the comprehensive plans of each of the 24 cities and three counties that comprise the metro area. Metro used the review in its determination of the region's need for employment land and for coordination with local governments of its choices to add land to the UGB for employment purposes.

Revisions to Title 4 (Industrial and Other Employment Areas) of the UGMFP and the conditions placed upon lands added to the UGB (Exhibit F of Ordinance No. 04-1040B and exhibits to December, 2002, ordinances) add significant protection to sites designated for industrial use, both those added to the UGB and those within the UGB prior to expansion, to help ensure their availability for that purpose.

Inclusion of these areas adds 1,920 acres (1,047 net acres) to the UGB for industrial use. Combined with the efficiency measures described in Section D of these Findings (Alternatives: Increase Capacity of the UGB), above, and actions taken in December, 2002, these additions to the UGB accommodate approximately 99 percent of the need for industrial land [identified in the 2002-2022 Urban Growth Report: An Employment Land Need Analysis (9,366 net acres)]. Given the unavoidable imprecision of the many assumptions that underlie the determination of need for industrial land – the population forecast; the employment capture rate; the industrial refill rate; employment density (particularly given changes in building types used by industry over time); the rate of encroachment by non-industrial uses; and the vintage

industrial relocation rate – the Council concludes that its actions in the December, 2002, ordinances and in this Ordinance No. 04-1040B provide a 20-year supply of industrial land for the region and comply with part 2 (periodic review Subtask 17) of LCDC's Partial Approval and Remand Order 03-WKTASK-001524, July 7, 2003.

II. SPECIFIC FINDINGS FOR PARTICULAR AREAS ADDED TO UGB IN TASK 2 REMAND DECISION

These findings address ORS 197.298; ORS 197.732(1)(c)(B), (C) and (D); Goal 2, Exceptions, Criteria (c)(2), (3) and (4); Oregon Administrative Rules (OAR) 660-004-0010(1)(B)(ii), (iii) and (iv); OAR 660-004-0020(2)(b), (c) and (d); Goal 5; Goal 11; Goal 12; Goal 14, Factors 3 through 7; Metro Code 3.01.020(b)(3) through (7) and 3.01.020(d); Metro RFP Policies 1.2, 1.3, 1.4, 1.6, 1.7, 1.11 and 1.12; and Regional Transportation Plan Policies 2.0, 3.0, 4.0 and 14.0.

A. Damascus West

The Council relies upon the facts and analysis in the Industrial Land Alternative Analysis Study [Appendix A, Item(c) in Ordinance No. 04-1040B, pp. 21-23; 111; A-1 – A-4] and the Staff Report [Appendix A, Item (a), p. 27] to support its conclusion that addition of a portion of Damascus West will provide for an orderly and efficient transition from rural to urban land use. The Council chose this area of resource land because it contains a concentration of larger parcels (five parcels between 10 and 20 acres). Parcels of this range are needed for the types of industries Metro expects will grow during the planning period (UGR-E, p. 25) and are generally unavailable in exception areas. Also, soils in the area are Class III and IV, of lower capability than other resource land under consideration. In addition, the area lies within a ground-water restricted area designated by the Oregon Department of Water Resources. Finally, it occupies a small notch that extends into land within the UGB and is relatively isolated by topography and forested land from other agricultural lands to the south, as noted in the report of the Metro Agricultural Lands Technical Workgroup led by the Oregon Department of Agriculture ["Limited Choices: The Protection of Agricultural Lands and the Expansion of the Metro Area Urban Growth Boundary for Industrial Use", Appendix A, Item (i)].

1. Orderly Services

The Council relies upon the Study Area Goal 14 Analysis Summary and the Ratings for Transportation Services Feasibility contained in its Alternative Analysis Study (Appendix A, Item 6, pages 111 and Table A-2, respectively) for its determination that these services can be provided to the Damascus West area in an orderly and economic manner by extending services from existing serviced areas. Condition IIA(1) of Exhibit F calls for transportation and public facility and service plans within the same four years allowed for Title 11 planning of the entire Damascus area by Condition IIA(1) of Exhibit M of Ordinance No. 02-969B.

The Alternative Analysis Study (p. 20) sets forth the likely service providers for sewer, water and storm-water services and assigns a serviceability rating for the larger Damascus Study Area. Serviceability generally ranges from "easy" to "difficult" to serve (Table 1, p. 111) and compares favorably with areas not included (such as Borland Road South, Norwood/Stafford and Wilsonville West). Transportation services will be only moderately difficult to provide for reasons set forth in the Alternative Analysis Study, p. 21.

2. Efficiency

The Council relies on the same information on provision of essential services mentioned above for its conclusion that the area can urbanize efficiently, particularly knowing that Damascus West will be planned in conjunction with the greater Damascus area added to the UGB in December, 2002. The Council

also relies upon its findings and conclusions above (part I, General Findings, section D, Alternatives: Increase Capacity of UGB) regarding actions it has taken to increase the efficiency of the use of employment land within the existing UGB.

3. Consequences

The Council relies upon the analysis of the consequences of urbanization on the Damascus West area set forth in the Alternative Analysis Study, pp. 21-22 and Table A-3. The analysis indicates that the consequences will be low, especially considering the requirements of Title 11 of the UGMFP that comprehensive planning and land use regulations for the area protect the portions (streams, wetlands, floodplains and steep slopes) of the area subject to Title 3 of the UGMFP and the conditions in Exhibit F of Ordinance No. 04-1040B.

The Council has placed a condition on comprehensive planning for the area that the local government responsible for planning considered Metro's adopted Goal 5 inventory during its planning (see Condition IG, Exhibit F). The local governments will eventually adopt provisions to implement Metro's Goal 5 program following the Council's adoption of that program, if the local government's ordinance do not already comply.

4. Compatibility

The Agricultural Analysis Consequences shows that urbanization of the Damascus West area would have low adverse consequences for nearby agriculture (Alternative Analysis Study, p. 21; Table A-4). This is, in part, due to the facts that the area occupies a small notch that extends into land within the UGB and is relatively isolated by topography and forested land from other agricultural lands to the south, as noted in the report of the Metro Agricultural Lands Technical Workgroup led by the Oregon Department of Agriculture ["Limited Choices: The Protection of Agricultural Lands and the Expansion of the Metro Area Urban Growth Boundary for Industrial Use", Appendix A, Item (i)]. Ordinance No. 04-1040B, Exhibit F, imposes Condition IE upon urbanization of Damascus West to reduce conflict and improve compatibility between urban use in the area and agricultural use on land to the south.

5. Natural and Cultural Resources

The Alternative Analysis Study addresses Goal 5 and 6 resources in the Damascus West area protected by Clackamas County in its acknowledged comprehensive plan (p. 22). The county will be responsible for protecting these resources in the area when it amends its comprehensive plan and zoning ordinance to implement expansion of the UGB. Condition IG of Exhibit F requires the county to consider Metro's inventory of Goal 5 resources in their application of Goal 5 to the Damascus area. Title 3 (Water Quality, Flood Management and Fish and Wildlife Conservation) of the UGMFP requires Clackamas County to protect water quality and floodplains in the area. Title 11 of the UGMFP, section 3.07.1120G, requires the county to protect fish and wildlife habitat and water quality. Title 11, section 3.07.1110, protects the status quo in the interim period of county planning for the area.

6. Public Utilities and Services

Under statewide Planning Goal 11, Metro is responsible for coordination of the preparation of public facility plans within the district. Metro will fulfill this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Clackamas County from upzoning and from dividing land into resulting lots or parcels smaller than 20 acres until the county revises its comprehensive plan and zoning ordinances to authorize urbanization of land Metro brings into the UGB; and (2) requires the county to develop public facilities and services plans and urban growth diagrams with the general locations of necessary public

facilities such as sanitary sewers, storm sewers and water lines for the area. Metro and the county began this work with the evaluation of the serviceability of the Damascus area in the Alternative Analysis Study (pages 20-21 and 111).

7. Transportation

Metro shares responsibility to ensure that its Task 2 decision for the Damascus West area does not significantly affect a transportation facility or allow uses that are inconsistent with the identified function, capacity and performance standards of transportation facilities. Metro fulfills this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Clackamas County from upzoning and from land divisions into resulting lots or parcels smaller than 20 acres in the area until the county revises its comprehensive plans and zoning ordinances to authorize urbanization of land Metro brings into the UGB; and (2) requires the county to develop conceptual transportation plans and urban growth diagrams with the general locations of arterial, collector and essential local streets for the area. Metro and Clackamas County began this work with the evaluation of the serviceability of the area in the Alternative Analysis Study (p. 21 and Table A-2) and consideration of how to provide services as part of the analysis required to satisfy Goal 14, factors 3 and 4.

Metro's 2000 Regional Transportation Plan (RTP) anticipated inclusion of the area within the UGB. The plan's "Priority System" of planned transportation facilities shows improvements planned for the area to serve anticipated growth. Among the improvements is the Sunrise Highway, a likely alignment for which (shown on the 2040 Growth Concept Map) borders the portion of the Damascus West Study Area included by this ordinance. The "Financially Constrained System" includes improvements that will add capacity to East Sunnyside Road near the included area (see discussion of RTP below).

8. Regional Framework Plan

The area lies within ½-mile of Damascus Town Center and will provide additional employment to support the center. The area will not only provide employment opportunities for new residents of the Damascus area, but also improve the ratio between jobs and housing in the east side of the region.

9. Regional Transportation Plan

Through its Joint Policy Advisory Committee on Transportation, Metro has coordinated transportation planning and funding of transportation improvements with local governments in the region. The Regional Transportation Plan adopted a "Priority System" of improvements through the year 2020. The Priority System includes the most critical improvements needed to implement the 2040 Growth Concept. Among the improvements are the "East Multnomah County Transportation Projects" and the "Pleasant Valley and Damascus Transportation Projects" that will provide the basic transportation services to the area (pages 5-49 to 5-57). Figures 1.4, 1.12, 1.16, 1.17, 1.18 and 1.19 of the RTP show how the region's street design, motor vehicle, public transportation, freight, bicycle and pedestrian systems will extend into the Damascus area.

B. Beavercreek

The Council relies upon the facts and analysis in the Alternative Analyses Study [2003 in Appendix A, Item(d) in Ordinance No. 04-1040B, pp. 32-34; 111; A-1 – A-4] and the Staff Report [Appendix A, Item (a), p. 25] to support its conclusion that addition of a portion of the Beavercreek area will provide for an orderly and efficient transition from rural to urban land use. The Council added this single tract, zoned for forest use but occupied by a portion of a larger golf course, in part because the Council included the other half of the golf course in the UGB by Ordinance No. 02-969B in December, 2002 (as part of Task 2), and

designated it for industrial use. The predominant soils on the tract are Class IV and VI. This parcel (63 acres; 30 net acres) helps satisfy the identified need for large parcels (see UGR-E, page 25), particularly in combination with the other part of the golf course included in December, 2002.

1. Orderly Services

The Council relies upon the Study Area Goal 14 Analysis Summary and the Ratings for Transportation Services Feasibility contained in its Alternative Analysis Study (Appendix A, Item 6, pages 111 and Table A-2, respectively) for its determination that these services can be provided to this portion of the Beavercreek area in an orderly and economic manner by extending services from existing serviced areas. Condition IA of Exhibit F calls for transportation and public facility and service plans within two years. Condition IIB(2) specifies that Title 11 planning of the area be done in conjunction with Title 11 planning for the adjoining area added to the UGB by Ordinance No. 02-969B.

The Alternative Analysis Study (p. 32-33) sets forth the likely service providers for sewer, water and storm-water services and assigns a serviceability rating for the larger Beavercreek area. The developable portion of the area included in the UGB adjoins and will be served by the same providers that will serve the area added to the UGB in December, 2002. Serviceability generally ranges from "easy" to "difficult" to serve (Table 1, p. 111) and compares favorably with areas not included (such as Borland Road South, Norwood/Stafford and Wilsonville West). Table A-2 shows transportation services for the larger Beavercreek area to be difficult. However, for the portion of Beavercreek added, transportation services will be the same as those provided to the adjoining property added to the UGB in December, 2002.

2. Efficiency

The Council relies on the same information on provision of essential services mentioned above for its conclusion that the area can urbanize efficiently, particularly knowing that this portion of the Beavercreek area will be planned in conjunction with the portion added to the UGB and designated for industrial use in December, 2002. Both portions can be urbanized more efficiently if the portions are planned and urbanized together.

The Council also relies upon its findings and conclusions above (part I, General Findings, section D, Alternatives: Increase Capacity of UGB) regarding actions it has taken to increase the efficiency of the use of employment land within the existing UGB.

3. Consequences

The Council relies upon the analysis of the consequences of urbanization on this portion of the Beavercreek area set forth in the Industrial Land Alternative Analysis Study, p. 34 and Table A-3). The analysis indicates that the consequences will be high if the Council were to include the entire Beavercreek study area (2,540 acres). But Ordinance No. 04-1040B includes only a single, 63-acre tract, half of a golf course the other half of which was included in the UGB by Ordinance No. 02-969B. Title 11 of the UGMFP requires that comprehensive planning and land use regulations for the area protect the portions (streams, wetlands, floodplains and steep slopes) of the tract subject to Title 3 of the UGMFP and the conditions in Exhibit F of this ordinance.

The Council has placed a condition on comprehensive planning for the area that the local government responsible for planning considered Metro's adopted Goal 5 inventory during its planning (see Condition IG, Exhibit F). The local governments will eventually adopt provisions to implement Metro's Goal 5 program following the Council's adoption of that program, if the local government's ordinance do not already comply.

4. Compatibility

The Agricultural Analysis Consequences shows that urbanization of the Beavercreek area would have moderate adverse consequences for nearby agriculture (p. 111). There will be little effect on agriculture from urbanization of this small portion of the area, however, because the tract itself is part of a golf course, and there are no nearby agricultural activities.

5. Natural and Cultural Resources

The Alternative Analysis Study addresses Goal 5 and 6 resources in the larger Beavercreek area protected by Clackamas County in its acknowledged comprehensive plan (page 34). The single portion of the larger area added to the UGB by this ordinance contains no inventoried Goal 5 sites protected by Clackamas County. Condition IG of Exhibit F requires the county to consider Metro's inventory of Goal 5 resources in their application of Goal 5 to the small portion of the Beavercreek area included in the UGB. Title 3 (Water Quality, Flood Management and Fish and Wildlife Conservation) of the UGMFP requires Clackamas County to protect water quality and floodplains in the area. Title 11 of the UGMFP, section 3.07.1120G, requires the counties to protect fish and wildlife habitat and water quality. Title 11, section 3.07.1110, protects the status quo in the interim period of county planning for the area.

6. Public Facilities and Services

Under statewide Planning Goal 11, Metro is responsible for coordination of the preparation of public facility plans within the district. Metro will fulfill this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Clackamas County or Oregon City from upzoning and from dividing land into resulting lots or parcels smaller than 20 acres until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of land Metro brings into the UGB; and (2) requires the county or city to develop public facilities and services plans and urban growth diagrams with the general locations of necessary public facilities such as sanitary sewers, storm sewers and water lines for the area. Metro, the county and the city began this work with the evaluation of the serviceability of the Beavercreek area in the Alternative Analysis Study done as part of Ordinance No.02-969B (pages 108-09; A-9, A-13;) and the Industrial Land Alternative Analysis Study done as part of Ordinance No. 04-1040A (pages 25, 32-33 and 111).

7. Transportation

Metro shares responsibility to ensure that its Task 2 decision for the Beavercreek area does not significantly affect a transportation facility or allow uses that are inconsistent with the identified function, capacity and performance standards of transportation facilities. Metro fulfills this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Clackamas County or Oregon City from upzoning and from land divisions into resulting lots or parcels smaller than 20 acres in the area until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of land Metro brings into the UGB; and (2) requires the county or city to develop a conceptual transportation plan and urban growth diagram with the general locations of arterial, collector and essential local streets for the area. Metro, the county and the city began this work with the evaluation of the serviceability of the Beavercreek area in the Alternative Analysis done as part of Ordinance No.02-969B (pages 108-09; A-9, A-15-19) and the Analysis done as part of Ordinance No. 04-1040B (pages 25 and 33 and A-2).

The City of Oregon City indicates that the Beavercreek area can be provided with transportation services. The small included portion adjoins an area that is more serviceable than other portions of the larger Beavercreek area considered by the Council. It is contiguous to the city and can be served in an orderly manner.

8. Regional Framework Plan

This small addition of industrial land (63 acres) will be planned in combination with adjoining industrial land added by Ordinance No. 02-969B to comprise a more efficient industrial area. The area will provide employment to support the Oregon City Regional Center.

9. Regional Transportation Plan

Through its Joint Policy Advisory Committee on Transportation, Metro has coordinated transportation planning and funding of transportation improvements with local governments in the region. The Regional Transportation Plan adopted a "Priority System" of improvements through the year 2020. The Priority System includes the most critical improvements needed to implement the 2040 Growth Concept. Among the improvements is the "Highway 213 Corridor Study" to complete a long-term traffic management plan and identify projects to implement the plan (pages 5-59 to 5-61).

C. Quarry (Partial)

The Council relies upon the facts and analysis in the Industrial Land Alternative Analyses Study [Appendix A, Item(c) in Ordinance No. 04-1040B, pp. 64-66; 111; A-1 – A-4] and the Staff Report [Appendix A, Item (a), pp. 26-27] to support its conclusion that addition of a portion of the Quarry Study Area will provide for an orderly and efficient transition from rural to urban land use. The Council chose this area of resource land because it contains a concentration of larger parcels, relatively few of which are developed with residences. Parcels of this range are needed for the types of industries Metro expects will grow during the planning period (UGR-E, p. 25) and are generally unavailable in exception areas. Also, soils in the area are predominantly Class VII, of lower capability than other resource land under consideration. Significant portions are devoted to quarry operations, which have removed soils altogether. There are major quarry operations adjoining this area to the east and elsewhere nearby. There is also significant industrial development and zoning north and east of the Quarry area. See "Perfect for Industry", prepared by Davis, Wright, Tremaine, LLP, April 29, 2004. The Council included one of the quarry areas in the UGB in Ordinance No. 02-990A for industrial use. Some agricultural activity takes place in the northern section of this area, but it is isolated from other areas devoted to agriculture by quarry operations and other nonfarm activities [Tualatin Valley Sportsmens Club (gun club), for example].

1. Orderly Services

The Council relies upon the Quarry Study Area Goal 14 Analysis Summary and the Ratings for Transportation Services Feasibility contained in its Industrial Land Alternative Analysis Study (Appendix A, Item (c), pages 111 and Table A-2, respectively) for its determination that urban services can be provided to the Quarry area in an orderly and economic manner by extending services from existing serviced areas. Condition IIE(2) of Exhibit F calls for coordination of transportation and public facility and service planning for this area with the adjoining area added to the UGB for industrial use on December 12, 2002.

The Alternatives Analysis (p. 64-65) sets forth the likely service providers for sewer, water and storm-water services and assigns a serviceability rating for the Quarry Study Area. Serviceability ranges from "easy" to "moderately difficult" to serve (Table 1, p. 111) and compares favorably with areas not included (such as Borland Road South, Norwood/Stafford and Wilsonville West). Transportation services would be easy to provide for reasons set forth in the Alternative Analysis Study, p. 65.

2. Efficiency

The Council relies on the same information on provision of essential services mentioned above for its conclusion that the area can urbanize efficiently, particularly knowing that this portion of the Quarry Study Area will be planned in conjunction with the quarry area to the east, added to the UGB and designated for industrial use in December, 2002. This portion lies close to existing services and Tualatin-Sherwood and Oregon Roads. Both portions can be urbanized more efficiently if the portions are planned and urbanized together.

The Council also relies upon its findings and conclusions above (part I, General Findings, section D, Alternatives: Increase Capacity of UGB) regarding actions it has taken to increase the efficiency of the use of employment land within the existing UGB.

3. Consequences

The Council relies upon the analysis of the consequences of urbanization on this portion of the Quarry Study Area set forth in the Alternative Analysis Study, p. 65-66 and Table A-3). The analysis indicates that the environmental consequences will be low. In addition, Title 11 of the UGMFP requires that comprehensive planning and land use regulations for the area protect the portions (streams, wetlands, floodplains and steep slopes) of the area subject to Title 3 of the UGMFP and the conditions in Exhibit F of this ordinance.

The Council has placed a condition on comprehensive planning for the area that the local government responsible for planning considered Metro's adopted Goal 5 inventory during its planning (see Condition I G, Exhibit F). The local governments will eventually adopt provisions to implement Metro's Goal 5 program following the Council's adoption of that program, if the local government's ordinance do not already comply.

4. Compatibility

The Agricultural Analysis Consequences shows that urbanization of the Quarry Study Area would have few adverse consequences for nearby agriculture. The area has the UGB on three sides and quarry operations to the east and southeast. The portion devoted to agriculture is in the northwest portion, isolated from agricultural operations south of the quarries.

5. Natural and Cultural Resources

The Alternative Analysis Study addresses Goal 5 and 6 resources in the Quarry Study Area protected by Washington County in its acknowledged comprehensive plan (page 65-66). Significant portions of the area are identified as aggregate sites in the county's Goal 5 inventory and are protected by aggregate overlays. Under Metro's Title 11, current county land use regulations will remain in place until the county, or one of the cities (Tualatin or Sherwood), adopts new plan provisions and land use regulations to allow industrial uses in the area, at which time the county or city will apply Goal 5 to the area and re-consider the decision to protect the quarries under Goal 5.

Condition IG of Exhibit F requires the county or cities to consider Metro's inventory of Goal 5 resources in its application of Goal 5 to the Quarry area included in the UGB. Title 3 (Water Quality, Flood Management and Fish and Wildlife Conservation) of the UGMFP requires the county to protect water quality and wetlands in the area. Title 11 of the UGMFP, section 3.07.1120G, requires the county to protect fish and wildlife habitat and water quality. Title 11, section 3.07.1110, protects the status quo in the interim period of county or city planning for the area.

6. Public Facilities and Services

Under statewide Planning Goal 11, Metro is responsible for coordination of the preparation of public facility plans within the district. Metro will fulfill this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Washington County or the City of Sherwood or Tualatin from upzoning and from dividing land into resulting lots or parcels smaller than 20 acres until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of land Metro brings into the UGB; and (2) requires the county or city to develop public facilities and services plans and urban growth diagrams with the general locations of necessary public facilities such as sanitary sewers, storm sewers and water lines for the area. Metro, the county and the cities began this work with the evaluation of the serviceability of the Quarry Study Area in the Alternative Analysis done as part of Ordinance No.02-969B (pages 161-63; A-9) and the Analysis done as part of Ordinance No. 04-1040B (pages 64-65 and 111).

7. Transportation

Metro shares responsibility to ensure that its Task 2 decision for the Quarry Study Area does not significantly affect a transportation facility or allow uses that are inconsistent with the identified function, capacity and performance standards of transportation facilities. Metro fulfills this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Washington County or the City of Sherwood or Tualatin from upzoning and from land divisions into resulting lots or parcels smaller than 20 acres in the area until the county or city revises its comprehensive plan and land use regulations to authorize urbanization of land Metro brings into the UGB; and (2) requires the county or city to develop a conceptual transportation plan and urban growth diagram with the general locations of arterial, collector and essential local streets for the area. Metro and the county and cities began this work with the evaluation of the serviceability of the area in the Alternatives Analysis done as part of Ordinances No.02-969B (pages 108-09; A-9, A-15-19) and 990A and the Analysis done as part of Ordinance No. 04-1040B (pages 64-65 and A-2). The cities indicate a willingness to serve the Quarry area with transportation services pending the determination of service boundaries.

8. Regional Framework Plan

This addition of industrial land will be planned in coordination with adjoining industrial land to the east added by Ordinance No. 02-990A to comprise a more efficient industrial area. The area will provide employment to support the Sherwood and Tualatin Town Centers. The Quarry area runs along the Tualatin-Sherwood Road within two miles of the two centers. Given that the added portion of the Quarry area is suitable for the types of industry likely to grow in the future, the Council includes the area notwithstanding that this part of the region is relatively well-endowed with employment.

By adding the Quarry area to the UGB, following addition of the quarry area to the east, Metro will be bringing a “notch” into the UGB that lies between the two cities of Sherwood and Tualatin. This keeps the form of the region compact and efficient.

9. Regional Transportation Plan

Through its Joint Policy Advisory Committee on Transportation, Metro has coordinated transportation planning and funding of transportation improvements with local governments in the region. The Regional Transportation Plan adopted a “Priority System” of improvements through the year 2020. The Priority System includes the most critical improvements needed to implement the 2040 Growth Concept. Among the improvements are the “The Tualatin-Sherwood Major Investment Study”, to complete environmental design for the I-5 to 99W principal arterial connector, and the “Tualatin-Sherwood

Connector", to construct the four-lane tollway connection (pages 5-65 to 5-67). Although a final corridor for this facility has not yet been chosen, it is almost certain that it will pass less than a mile from the south border of the Quarry area.

D. Coffee Creek (partial)

The Council relies upon the facts and analysis in the Alternatives Analyses [Appendix A, Item(c) in Ordinance No. 04-1040B, pp. 58-60; 111; A-1 – A-4] and the Staff Report [Appendix A, Item (a), pp. 26] to support its conclusion that addition of a portion of the Coffee Creek Study Area [264 acres (97 net acres) of 442 in the study area] will provide for an orderly and efficient transition from rural to urban land use. The Council chooses this portion because it is almost entirely exception land (there is a 4.6-acre tract of resource at the northern edge), it can be planned in conjunction with land added to the UGB in December, 2002, for industrial use, urban services are available in the vicinity, and urbanization will have no effect on agricultural practices on adjacent land due to its isolation from agricultural activities.

1. Orderly Services

The Council relies upon the Coffee Creek Study Area Goal 14 Analysis Summary and the Ratings for Transportation Services Feasibility contained in its Industrial Land Alternative Analysis Study (Appendix A, Item 6, pages 111 and Table A-2, respectively) for its determination that urban services can be provided to the Quarry area in an orderly and economic manner by extending services from existing serviced areas. Condition IIF(1) of Exhibit F allows four years for Title 11 planning for this area so that planning for urban services can be done in conjunction with such planning for the adjoining area added to the UGB for industrial use on December 5, 2002.

The Alternative Analysis Study sets forth the likely service providers for sewer, water and storm-water services and assigns a serviceability rating for the Coffee Creek area (p. 58-60; Table 1, p. 111). Serviceability ranges from "moderate" to "difficult" to serve and compares favorably with areas not included (such as Borland Road South and Wilsonville West).

2. Efficiency

The Council relies on the same information on provision of essential services mentioned above for its conclusion that the area can urbanize efficiently, knowing that this portion of the Coffee Creek Study Area will be planned in conjunction with the area to the east, added to the UGB and designated for industrial use in December, 2002. The area lies adjacent to a principal north-south rail line that will make industrial use and movement of freight more efficient.

The Council also relies upon its findings and conclusions above (part I, General Findings, section D, Alternatives: Increase Capacity of UGB) regarding actions it has taken to increase the efficiency of the use of employment land within the existing UGB.

3. Consequences

The Council relies upon the analysis of the consequences of urbanization on this portion of the Coffee Creek area set forth in the Alternative Analysis Study, p. 58-60 and Table A-3). Because the Council included only the easternmost portion of the study area – the portion that borders the UGB on the west – the adverse consequences will be reduced. Title 11 of the UGMFP requires that comprehensive planning and land use regulations for the area protect the portions (streams, wetlands, floodplains and steep slopes) of the area subject to Title 3 of the UGMFP and the conditions in Exhibit F of this ordinance.

The Council has placed a condition on comprehensive planning for the area that the local government responsible for planning considered Metro's adopted Goal 5 inventory during its planning (see Condition IG, Exhibit F, Ordinance No. 04-1040B). The local government will eventually adopt provisions to implement Metro's Goal 5 program following the Council's adoption of that program, if the local government's ordinance do not already comply.

4. Compatibility

The Agricultural Analysis Consequences shows that urbanization of the included portion of the Coffee Creek area would have no adverse consequences for nearby agriculture (p. 111). The area has quarry operations nearby and is isolated from commercial agricultural activity by stream drainages.

5. Natural and Cultural Resources

The Alternative Analysis Study addresses Goal 5 and 6 resources in the Coffee Creek Study Area protected by Washington County in its acknowledged comprehensive plan (p. 60). The quarries in the area are protected by aggregate overlays by Washington County. Under Metro's Title 11, current county land use regulations will remain in place until the county, or the City of Wilsonville or Tualatin, adopts new plan provisions and land use regulations to allow industrial uses in the area, at which time the county or city will apply Goal 5 to the area and re-consider the decision to protect the quarries under Goal 5.

Condition IG of Exhibit F requires the county or city to consider Metro's inventory of Goal 5 resources in its application of Goal 5 to the portion of Coffee Creek area included in the UGB. The area contains streams, wetlands and floodplains. Title 3 (Water Quality, Flood Management and Fish and Wildlife Conservation) of the UGMFP requires the county or city to protect water quality and wetlands in the area. Title 11 of the UGMFP, section 3.07.1120G, requires the county or city to protect fish and wildlife habitat and water quality. Title 11, section 3.07.1110, protects the status quo in the interim period of county or city planning for the area.

6. Public Facilities and Services

Under statewide Planning Goal 11, Metro is responsible for coordination of the preparation of public facility plans within the district. Metro will fulfill this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Washington County or the City of Wilsonville or Tualatin from upzoning and from dividing land into resulting lots or parcels smaller than 20 acres until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of the area; and (2) requires the county or city to develop public facilities and services plans and urban growth diagrams with the general locations of necessary public facilities such as sanitary sewers, storm sewers and water lines for the area.

7. Transportation

Metro shares responsibility to ensure that its Task 2 decision for the Coffee Creek Study Area does not significantly affect a transportation facility or allow uses that are inconsistent with the identified function, capacity and performance standards of transportation facilities. Metro fulfills this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits the county or city from upzoning and from land divisions into resulting lots or parcels smaller than 20 acres in the area until the county or city revises its comprehensive plan and zoning ordinance to authorize urbanization of the area; and (2) requires the county or city to develop conceptual transportation plans and urban growth diagrams with the general locations of arterial, collector and essential local streets for the area.

8. Regional Framework Plan

This addition of industrial land will be planned in combination with adjoining industrial land to the east added by Ordinance No. 02-969B to comprise a more efficient industrial area. The Coffee Creek Study Area will provide employment to support the Tualatin and Wilsonville Town Centers, to the north and south respectively. Given that the developable portion of the area is exception land and is suitable for the types of industry likely to grow in the future, the Council includes the Coffee Creek area notwithstanding that this part of the region is relatively well-endowed with employment.

Adding the Coffee Creek area to the UGB, lying between and adjacent to the Cities of Tualatin and Wilsonville, following addition of the area to the east, keeps the form of the region compact and efficient.

9. Regional Transportation Plan

Through its Joint Policy Advisory Committee on Transportation, Metro has coordinated transportation planning and funding of transportation improvements with local governments in the region. The Regional Transportation Plan ("RTP") adopted a "Priority System" of improvements through the year 2020. The Priority System includes the most critical improvements needed to implement the 2040 Growth Concept. Among the improvements are improvements to Boones Ferry Road from Durham Road in the north to Elligsen Road in the south, east of the Coffee Creek Study Area.

The RTP also includes "The Tualatin-Sherwood Major Investment Study", to complete environmental design for the I-5 to 99W principal arterial connector, and the "Tualatin-Sherwood Connector", to construct the four-lane tollway connection (pages 5-65 to 5-67). Although a final corridor for this facility has not yet been chosen, it is almost certain that it will pass through or just to the north of the Coffee Creek area, likely enhancing its access to I-5. Finally, the principal north-south rail line that lies along the eastern boundary of the area will offer an additional mode of transport for movement of freight in the area.

E. Tualatin

The Council relies upon the facts and analysis in the Industrial Land Alternative Analyses Study [Appendix A, Item(c) in Ordinance No. 04-1040B, pp. 61-63; 111; A-1 – A-4] and the Staff Reports [Appendix A, Item (a), pp. 27-28] to support its conclusion that addition of a portion of the Tualatin Study Area will provide for an orderly and efficient transition from rural to urban land use. The Council chose this area because it is exception land (rural residential and rural industrial) with characteristics that make it suitable for industrial use. It lies within two miles of the I-5 corridor and within one mile of an existing industrial area, and portions of the area are relatively flat. These characteristics render it the most suitable exception area under consideration for warehousing and distribution, a significant industrial need facing the region.

The City of Tualatin and many residents of the area expressed concern about compatibility between industrial use and residential neighborhoods at the south end of the city. They have also worried about preserving an opportunity to choose an alignment between Tualatin and Wilsonville for the I-5/99W Connector; the south alignment for this facility passes through the northern portion of the Tualatin Study Area.

In response to these concerns, the Council placed several conditions upon addition of this area to the UGB. First, the Council extended the normal time for Title 11 planning for the area: two years following the identification of a final alignment for the Connector, or seven years after the effective date of Ordinance No. 04-1040B, whichever comes sooner. This allows Title 11 planning by Washington County, the cities of Tualatin and Wilsonville and Metro to accommodate planning for the Connector alignment. Second, the

Council states that, so long as the alignment for the Connector falls close to the South Alignment shown on the 2040 Growth Concept Map, it will serve as the buffer between residential development to the north (the portion least suitable for industrial uses) and industrial development to the south (the portion of the area most suitable for industrial use)

1. Orderly Services

The Council relies upon the Tualatin Study Area Goal 14 Analysis Summary and the Ratings for Transportation Services Feasibility contained in its Industrial Land Alternative Analysis Study (Appendix A, Item (c), pages 111 and Table A-2, respectively) for its determination that urban services can be provided to the area in an orderly and economic manner by extending services from existing serviced areas.

The Alternatives Analysis (pp. 61-62) sets forth the likely service providers for sewer, water and storm-water services and assigns a serviceability rating for the Tualatin Study Area. Serviceability ranges from "easy" to "difficult" to serve (Table 1, p. 111). Throughout Task 2 of periodic review the Council has found, however, that provision of services to almost every exception area is difficult and expensive. The City of Wilsonville anticipates further industrial development in the portion of the study area north and northwest of the existing city, in part due to the siting of the Coffee Creek Correctional Facility, and expects to be the service provider over time. Given the critical need for sites proximate to interchanges on I-5 and the rarity of such sites, the Council has decided to include the Tualatin Study Area notwithstanding.

2. Efficiency

The Council relies on the same information on provision of essential services mentioned above (Orderly Services) for its conclusion that the area can urbanize efficiently. The Council also relies upon its findings and conclusions above (part I, General Findings, section D, Alternatives: Increase Capacity of UGB) regarding actions it has taken to increase the efficiency of the use of employment land within the existing UGB.

This area lies between two cities and among areas added to the UGB for industrial use in December, 2002, making urbanization of the area more efficient than projecting urbanization from the UGB into a rural area. Given the likelihood that the region will build the I-5/99W Connector through this area, industrial development in the area will ensure efficient use of that facility.

3. Consequences

The Council relies upon the analysis of the consequences of urbanization on the Tualatin Study Area set forth in the Alternative Analysis Study, pp. 62-63 and Table A-3). The analysis indicates that the consequences will be low to moderate, especially considering the requirements of Title 11 of the UGMFP that comprehensive planning and land use regulations for the area protect the portions (streams, wetlands, floodplains and steep slopes) of the area subject to Title 3 of the UGMFP and the conditions in Exhibit F of Ordinance No. 04-1040B.

The Council has placed a condition on comprehensive planning for the area that the local government responsible for planning considered Metro's adopted Goal 5 inventory during its planning (see Condition IG, Exhibit F). The local governments will eventually adopt provisions to implement Metro's Goal 5 program following the Council's adoption of that program, if the local government's ordinance do not already comply.

4. Compatibility

The Agricultural Analysis Consequences shows that urbanization of the Tualatin Study Area would have low adverse consequences for agriculture (Alternative Analysis Study, p. 62; Table A-4). Although there are a few agricultural uses in the study area itself, the area is designated entirely for rural residential and rural industrial uses, pursuant to exceptions from statewide planning Goals 3 and 4. The area is isolated from land designated for agriculture by the UGB, I-5 and mining operations to the west. Hence, it is unlikely that industrial use will conflict with agricultural activities on land designated for agricultural or forest use.

5. Natural and Cultural Resources

The Alternative Analysis Study addresses Goal 5 and 6 resources in the Tualatin Study Area protected by Washington County in its acknowledged comprehensive plan (pp. 62-63). There are aggregate mines in the vicinity; portions of Washington County's Mineral and Aggregate Overlay District B cover small portions of the study are in the northwest and southwest corners and the top central portion.

The county, or the City of Wilsonville or Tualatin upon annexation to one of the cities, will be responsible for protecting these resources when it amends its comprehensive plan and zoning ordinance to implement expansion of the UGB. Condition IG of Exhibit F requires the county or city to consider Metro's inventory of Goal 5 resources in their application of Goal 5 to the Tualatin Study Area. Title 3 (Water Quality, Flood Management and Fish and Wildlife Conservation) of the UGMFP requires the county or city to protect water quality and floodplains in the area. Title 11 of the UGMFP, section 3.07.1120G, requires the county or city to protect fish and wildlife habitat and water quality. Title 11, section 3.07.1110, protects the status quo in the interim period of county or city planning for the area.

6. Public Facilities and Service

Under statewide Planning Goal 11, Metro is responsible for coordination of the preparation of public facility plans within the district. Metro will fulfill this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Washington County and the cities of Wilsonville and Tualatin from upzoning and from dividing land into resulting lots or parcels smaller than 20 acres until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of the area; and (2) requires the county or city to develop public facilities and services plans and urban growth diagrams with the general locations of necessary public facilities such as sanitary sewers, storm sewers and water lines for the area.

7. Transportation

Metro shares responsibility to ensure that its Task 2 decision for the Tualatin Study Area does not significantly affect a transportation facility or allow uses that are inconsistent with the identified function, capacity and performance standards of transportation facilities. Metro fulfills this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Washington County and the cities of Tualatin and Wilsonville from upzoning and from land divisions into lots or parcels smaller than 20 acres in the area until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of land added to the UGB; and (2) requires the county or city to develop conceptual transportation plans and urban growth diagrams with the general locations of arterial, collector and essential local streets for the area. Metro began this work with the evaluation of the serviceability of the area in the Alternative Analysis Study (pp. 61-62 and Table A-2) and consideration of how to provide services as part of the analysis required to satisfy Goal 14, factors 3 and 4.

Table A-2 recognizes that provision of transportation to new industrial uses in the area will be difficult. The Oregon Department of Transportation, Region 1 ("ODOT"), expects the volume-to-capacity ratio on I-5 in the vicinity of the North Wilsonville interchange to be "extremely poor" by 2025, and states

that the interchange "may need to be reviewed for impact" if the Council adds land to the UGB dependent upon the interchange. The "Priority System" in Metro's RTP calls for improvement to Boones Ferry Road from Durham Road in Tualatin to Elligsen Road in Wilsonville and for construction of a four-lane tollway between I-5 and Highway 99W, the sourthern and most likely alignment of which passes through the study area. There is no planned improvement to the capacity of the freeway or the interchange in the RTP or either city's TSP. In 2002, however, a joint ODOT/Wilsonville study concluded that in 2030, widening of I-5 to eight lands would be required to meet interstate freeway capacity standards set by Metro and ODOT. This study will help Metro, ODOT, Wilsonville and Tualatin understand the improvements needed to accommodate industrial use in the study area. The 2004 Federal RTP also identifies a corridor refinement study for I-5 in the vicinity. These studies will inform Title 11 planning for the study area.

8. Regional Framework Plan

The Tualatin Study Area lies midway between the Tualatin and Wilsonville Town Centers, and is nearly as close to the Sherwood Town Center as to Tualatin and Wilsonville. Industrial development in the study area will provide additional employment to support businesses in those centers. The Council includes this area, notwithstanding that this part of the region is relatively well-endowed with employment, because it has more of the characteristics needed for warehousing and distribution than other areas considered. The Wilsonville South Area has many of the same characteristics. But it lies on the opposite side of the Willamette River and requires a trip on I-5 across the river to gain access to the Wilsonville Town Center. The Council concludes that addition of the north portion of the Tualatin Study Area provides better urban form to the city and the region than adding land on the south side of the Willamette River.

9. Regional Transportation Plan

Through its Joint Policy Advisory Committee on Transportation, Metro has coordinated transportation planning and funding of transportation improvements with local governments in the region. The Regional Transportation Plan adopted a "Priority System" of improvements through the year 2020. The Priority System includes the most critical improvements needed to implement the 2040 Growth Concept. Among the improvements in the vicinity of the Tualatin Study Area are improvement to Boones Ferry Road from Durham Road in Tualatin to Elligsen Road in Wilsonville and construction of a four-lane tollway between I-5 and Highway 99W, the southern and most likely alignment of which passes through the study area.

F. Helvetia (Partial)

The Council relies upon the facts and analysis in the Industrial Land Alternative Analyses Study [Appendix A, Item(c) in Ordinance No. 04-1040B, pp. 104-06; 111; A-1 to A-4] and the Staff Reports [Appendix A, Item (a), p. 28] to support its conclusion that addition of a 249-acre portion of the Helvetia Study Area will provide for an orderly and efficient transition from rural to urban land use. The Council chose this area because it has several characteristics that render it among the most suitable sites under consideration for industrial use: a large parcels; relatively flat land; and proximity to a freeway interchange. The Urban Growth Report-Employment (UGR-E) identifies a specific need for large parcels (50 acres or larger) (Ordinance No. 02-969B, Appendix A, Item 4, page 25). This portion of the Helvetia Study Area contains one parcel between 50 and 100 acres.

Two-thirds of this area (162 acres) is designated for agriculture in Washington County's comprehensive plan (predominantly Class II soil). The farmland portion lies between the existing UGB (to the south and east) and the exception land portion to the west. West Union Road separates the included farmland from excluded farmland to the north. The Council includes this farmland because the exception land portion (87 acres) contains some land suitable for industrial use. Also, among farmlands considered,

this farmland is already affected by nearby urban and rural residential use. Further, the Council found only two areas designated for agriculture of higher priority (Class IV or III soils) suitable for industrial use (Damascus West and Quarry Study Areas) (see discussion of West Union Study Area, below).

The Council considered including a portion of the Evergreen Study Area, which also contains a combination of exception land and Class II farmland, because it, too, contains several large parcels. The Council favored the Helvetia area because the farmland portion of the Evergreen area that lies between the UGB to the east, the exception land to the west and NW Meek Road to the north includes considerably more farmland than the included portion of the Helvetia Area (478 acres versus 162 acres in Helvetia). Further, unlike the exception land portion of Helvetia, the exception land portion of the Evergreen Study Area does not contain land suitable for industrial use.

The Council also considered inclusion of the West Union Study Area, which contains farmland of Class II and III soils. The Council chose the Helvetia area rather that the West Union area because the portion of the West Union area with higher-priority Class III soils is not suitable for industrial use (slopes greater than 10 percent), and this portion lies to the north of the portion with predominantly Class II soils (adjacent to the UGB). Also, the Council found no good barrier in the West Union area to separate farmland included from farmland excluded until Cornelius Pass Road to the north, which would enclose many more acres of farmland (862 acres) than the 162 acres in the Helvetia area.

The Council also considered Class II farmland in the Wilsonville East Study Area in order to find large parcels suitable for industrial use. The Council chose the Helvetia Study Area over the Wilsonville area because the former will be considerably easier to provide with public facilities and services (p. 111). As a result, inclusion of the Helvetia area has the support of the City of Hillsboro, while the City of Wilsonville opposes inclusion of the Wilsonville East area.

The Council considered two other study areas composed predominantly of Class II soils: the Noyer Creek and South Hillsboro areas. According to the report of the Metro Agricultural Lands Technical Workgroup led by the Oregon Department of Agriculture ["Limited Choices: The Protection of Agricultural Lands and the Expansion of the Metro Area Urban Growth Boundary for Industrial Use", Appendix A, Item (i)], both areas have higher value for commercial agriculture than the Helvetia area.

Finally, the Council considered Class II farmland south of Wilsonville, near the I-5 corridor on the south side of the Willamette River. The Council rejected this farmland because inclusion would constitute a projection away from the urbanization portion of the metropolitan region, toward Marion County to the south. Industrial development south of the river would also be separated from the services of the City of Wilsonville and the rest of the metropolitan region, connected only by a limited access (interstate highway) bridge across the river. Inclusion of the Helvetia area would better achieve the compact urban form sought by Policies 1 and 1.6 of the RFP and Policy 3 of the Regional Transportation Plan. The Oregon Department of Agriculture urged the Council not to add farmland south of the Willamette River because it would further introduce urban uses into that core area of the Willamette Valley's commercial agriculture. Although the department also expressed concern about inclusion of the Helvetia area, it placed a higher priority on protection of farmland south of the Willamette River. The Council concludes that inclusion of the Helvetia area rather than the Wilsonville South Study area farmland better achieves Policy 1.12.2 of the RFP.

In short, of the Class II farmlands considered by the Council, this portion of the Helvetia Study Area best meets the identified need for industrial land and is most separated from nearby agricultural lands. Other than the exception lands that are part of this study area, there are no other exception lands that can help the region meet its need for larger parcels for industrial use.

1. Orderly Services

The Council relies upon the Helvetia Study Area Goal 14 Analysis Summary and the Ratings for Transportation Services Feasibility contained in its Industrial Land Alternative Analysis Study (Appendix A, Item (c), pages 111 and Table A-2, respectively) for its determination that urban services can be provided to the area in an orderly and economic manner by extending services from existing serviced areas.

The Alternatives Analysis (pp. 104-05) sets forth the likely service providers for sewer, water and storm-water services and assigns a serviceability rating for the larger Helvetia Study Area. Serviceability ranges from "easy" to "moderate" to serve the entire area (Table 1, p. 111). It will be easier to serve the smaller portion of the study area included by the Council because it is the portion closest to the existing UGB (borders on east and south) and services just to the east.

2. Efficiency

The Council relies on the same information on provision of essential services mentioned above (Orderly Services) for its conclusion that the area can urbanize efficiently. The Council also relies upon its findings and conclusions above (part I, General Findings, section D, Alternatives: Increase Capacity of UGB) regarding actions it has taken to increase the efficiency of the use of employment land within the existing UGB.

This area borders the UGB on two sides, with employment and industrial uses on the urban sides of the UGB, making urbanization of the area for industrial use more efficient than projecting urbanization from the UGB into a rural area.

3. Consequences

The Council relies upon the analysis of the consequences of urbanization on the Helvetia Study Area set forth in the Alternative Analysis Study, pp. 105-06 and Table A-3). The analysis indicates that the consequences will be moderate. The requirements of Title 11 of the UGMFP that comprehensive planning and land use regulations for the area protect the portions (streams, wetlands, floodplains and steep slopes) of the area subject to Title 3 of the UGMFP and the conditions in Exhibit F of Ordinance No. 04-1040B will reduce adverse consequences from urbanization of the area.

The Council has placed a condition on comprehensive planning for the area that the local government responsible for planning consider Metro's adopted Goal 5 inventory during its planning (see Condition IG, Exhibit F). The local government will eventually adopt provisions to implement Metro's Goal 5 program following the Council's adoption of that program, if the local government's ordinance do not already comply.

4. Compatibility

The Agricultural Analysis Consequences shows that urbanization of the Helvetia Study Area would have high adverse consequences for nearby agriculture (Alternative Analysis Study, pp. 105-06; Table A-4). The analysis, however, is based urbanization of the entire Helvetia Study Area (1,339 acres) rather than just the portion included within the UGB (249 acres). Adverse consequences and incompatibility from urbanization of the included portion will be much reduced, given that the UGB borders this portion on the east and south sides, West Union Road borders the portion on the north side, and much of this portion (87 acres) is exception area lying between the included farmland portion and the excluded farmland portion to the west.

According to the report of the Metro Agricultural Lands Technical Workgroup led by the Oregon Department of Agriculture ["Limited Choices: The Protection of Agricultural Lands and the Expansion of the Metro Area Urban Growth Boundary for Industrial Use", Appendix A, Item (i)], the included portion of the Helvetia area is less important to commercial agriculture in the region than other agricultural areas under consideration because it lies amid urban and rural residential uses: "However, the workgroup could not ignore the land use pattern both within the area, the location of the area within a small notch of the current urban growth boundary and the two hard edges provided by Helvetia and West Union Roads" (p. 11).

Ordinance No. 04-1040B, Exhibit F, imposes Condition IE upon urbanization of the area to reduce conflict and improve compatibility between urban use in the area and agricultural use on land to the north and west.

5. Natural and Cultural Resources

The Alternative Analysis Study addresses Goal 5 and 6 resources in the Helvetia Study Area protected by Washington County in its acknowledged comprehensive plan (p. 106). The county, or the City of Hillsboro upon annexation to the city, will be responsible for protecting these resources in the area when it amends its comprehensive plan and zoning ordinance to implement expansion of the UGB. Condition IG of Exhibit F requires the county or the City of Hillsboro to consider Metro's inventory of Goal 5 resources in their application of Goal 5 to the Helvetia area. Title 3 (Water Quality, Flood Management and Fish and Wildlife Conservation) of the UGMFP requires the county or city to protect water quality and floodplains in the area. Title 11 of the UGMFP, section 3.07.1120G, requires the county or city to protect fish and wildlife habitat and water quality. Title 11, section 3.07.1110, protects the status quo in the interim period of county or city planning for the area.

6. Public Facilities and Services

Under statewide Planning Goal 11, Metro is responsible for coordination of the preparation of public facility plans within the district. Metro will fulfill this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Washington County or the City of Hillsboro from upzoning or from dividing land into resulting lots or parcels smaller than 20 acres until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of land Metro brings into the UGB; and (2) requires the county or city to develop public facilities and services plans and urban growth diagrams with the general locations of necessary public facilities such as sanitary sewers, storm sewers and water lines for the area.

7. Transportation

Metro shares responsibility to ensure that its Task 2 decision for the Helvetia Study Area does not significantly affect a transportation facility or allow uses that are inconsistent with the identified function, capacity and performance standards of transportation facilities. Metro fulfills this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Washington County or the City of Hillsboro from upzoning and from land divisions into resulting lots or parcels smaller than 20 acres in the area until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of land Metro brings into the UGB; and (2) requires the county or city to develop conceptual transportation plans and urban growth diagrams with the general locations of arterial, collector and essential local streets for the area. Metro began this work with the evaluation of the serviceability of the area in the Alternative Analysis Study (pp. 104-05 and Table A-2) and consideration of how to provide services as part of the analysis required to satisfy Goal 14, factors 3 and 4.

The Oregon Department of Transportation ("ODOT"), Region 1, notes that the Shute Road interchange on Hwy. 26, to which most of the trips generated by development in the Helvetia area will go, "is already inadequate to accommodate the 2003 Urban Growth Boundary ("UGB") expansion in this area." Metro's 2004 RTP includes an interchange improvement to serve the industrial land added to the UGB for industrial use in December, 2002, with partial funding. The RTP also identifies the need to widen several stretches of Hwy. 26 from four to six lanes. The county or city, together with Metro, will fully assess the effects of development on these facilities during Title 11 planning. Title 11 calls for a conceptual transportation plan as part of amendment of city or county comprehensive plans and land use regulations, to which statewide planning Goal 12 and the Transportation Planning Rule apply.

8. Regional Framework Plan

The Helvetia Study Area lies adjacent to, and will likely become part of the North Hillsboro Industrial Area. This industrial area is the anchor of the high tech cluster that runs from this tract to Wilsonville. It contains the largest concentration of high technology firms in the state. The area supports businesses in the Hillsboro Regional Center, other Centers on the west side of the region, and the Central City. Industrial development in the Helvetia Study Area will provide additional employment to support those centers. The Council includes this area, notwithstanding that this part of the region is relatively well-endowed with employment, because, as noted above, it the characteristics needed for the industrial sectors likely to grow during the planning period.

9. Regional Transportation Plan

Through its Joint Policy Advisory Committee on Transportation, Metro has coordinated transportation planning and funding of transportation improvements with local governments in the region. The Regional Transportation Plan ("RTP") adopted a "Priority System" of improvements through the year 2020. The Priority System includes the most critical improvements needed to implement the 2040 Growth Concept. Among the improvements in the vicinity of the Helvetia Study Area in Metro's 2004 RTP is an interchange improvement to serve the industrial land added to the UGB for industrial use in December, 2002, with partial funding.

G. Cornelius

The Council relies upon the facts and analysis in the Industrial Land Alternative Analyses Study [Appendix A, Item(c) in Ordinance No. 04-1040B, pp. 84-87; 111; A-1 to A-4] and the Staff Reports [Appendix A, Item (a), p. 27] to support its conclusion that addition of this 262-acre portion of the Cornelius Study Area will provide for an orderly and efficient transition from rural to urban land use. Slightly more than half (56 percent) of the included portion is designated for agriculture in Washington County's comprehensive plan (predominantly Class II soil). The farmland portion lies in two tracts separated by an exception area. A second tract of exception land borders the farmland on the east side. Together, these four adjacent tracts comprise the portion of the study area included in the UGB.

The Council chose this portion of the study area because it has characteristics that render it suitable for industrial use: large and mid-sized parcels and relatively flat land. The Urban Growth Report-Employment (UGR-E) identifies a specific need for large parcels (50 acres or larger) (Ordinance No. 02-969B, Appendix A, Item 4, page 25). The included portion of the study area contains one parcel between 50 and 100 acres [Appendix A, Item (a), p.30].

The Council also chose this area to help achieve Policies 1.2, 1.3.1 and 1.4 of the Regional Framework Plan (RFP), which call, among other things, for an equitable and balanced distribution of employment opportunities, income, investment and tax capacity throughout the region. The Council considered the fiscal and equity effects of including this area on the City of Cornelius. Given that the city

has the highest poverty rate, the lowest property tax revenue per capita, the lowest land improvement market value and the longest average commute in the region, the Council concluded that industrial development in this area would help achieve these policies better than inclusion of any other Class II agricultural land.

The Council considered including a portion of the Evergreen Study Area, which also contains a combination of exception land and Class II farmland, because it, too, contains several large parcels. The Council favored the Cornelius area for the reasons stated above, and because the farmland portion of the Evergreen area that lies between the UGB to the east, the exception land to the west and NW Meek Road to the north includes considerably more farmland than the included portion of the Cornelius Study Area (478 acres versus 147 acres in the Cornelius area).

The Council also considered inclusion of the West Union Study Area, which contains farmland of Class II and III soils. The Council chose the Cornelius area rather that the West Union area because the portion of the West Union area with higher-priority Class III soils is not suitable for industrial use (slopes greater than 10 percent), and this portion lies to the north of the portion with predominantly Class II soils (adjacent to the UGB).

The Council also considered Class II farmland in the Wilsonville East Study Area in order to find large parcels suitable for industrial use. The Council chose the Cornelius area over the Wilsonville area for the reasons stated above, and because the former will be considerably easier to provide with public facilities and services (p. 111). As a result, inclusion of the Cornelius area has the support of the City of Cornelius, while the City of Wilsonville opposes inclusion of the Wilsonville East area.

The Council considered two other study areas composed predominantly of Class II soils: the Noyer Creek and South Hillsboro areas. The Cornelius area is easier to provide with public services than either Noyer Creek or South Hillsboro. Inclusion of industrial land in the Cornelius area will better accomplish Policies 1.2, 1.3.1 and 1.4 of the RFP than inclusion of Noyer Creek or South Hillsboro.

Finally, the Council considered Class II farmland south of Wilsonville, near the I-5 corridor on the south side of the Willamette River. The Council rejected this farmland because inclusion would constitute a projection away from the urbanization portion of the metropolitan region, toward Marion County to the south. Industrial development south of the river would also be separated from the services of the City of Wilsonville and the rest of the metropolitan region, connected only by a limited access (interstate highway) bridge across the river. Inclusion of the Cornelius area would better achieve the compact urban form sought by Policies 1 and 1.6 of the RFP and Policy 3 of the Regional Transportation Plan. The Oregon Department of Agriculture urged the Council not to add farmland south of the Willamette River because it would further introduce urban uses into that core area of the Willamette Valley's commercial agriculture. Although the department also expressed concern for expansion of the UGB north of Council Creek in the Cornelius area (part of the included area lies north of Council Creek; part lies south), it placed a higher priority on protection of farmland south of the Willamette River. The Council concludes that inclusion of the Cornelius area rather than the Wilsonville South Study Area farmland better achieves Policy 1.12.2 of the RFP.

1. Orderly Services

The Council relies upon the Cornelius Study Area Goal 14 Analysis Summary and the Ratings for Transportation Services Feasibility contained in its Industrial Land Alternative Analysis Study (Appendix A, Item (c), pages 111 and Table A-2, respectively) for its determination that urban services can be provided to the area in an orderly and economic manner by extending services from the City of Cornelius.

The Alternatives Analysis (pp. 84-85) sets forth the likely service providers for sewer, water and storm-water services and assigns a serviceability rating for the entire Cornelius Study Area. Serviceability ranges from "easy" to "moderate" to serve the entire area (Table 1, p. 111). It will be easier to serve the portion of the study area included by the Council because it is the portion closest to the existing UGB (borders on south) and existing services.

2. Efficiency

The Council relies on the same information on provision of essential services mentioned above (Orderly Services) for its conclusion that the area can urbanize efficiently. The Council also relies upon its findings and conclusions above (part I, General Findings, section D, Alternatives: Increase Capacity of UGB) regarding actions it has taken to increase the efficiency of the use of employment land within the existing UGB.

This area borders the UGB to the south, with employment and industrial uses along a portion of the urban side of the UGB. The included portion also includes two exception area of predominantly rural residential use. Inclusion of the exceptions areas will, over time, lead to more efficient use of the areas.

3. Consequences

The Council relies upon the analysis of the consequences of urbanization on the Cornelius Study Area set forth in the Alternative Analysis Study, pp. 86-87 and Table A-3). The analysis indicates that the consequences will be moderate. The requirements of Title 11 of the UGMFP that comprehensive planning and land use regulations for the area protect the portions (streams, wetlands, floodplains and steep slopes) of the area subject to Title 3 of the UGMFP and the conditions in Exhibit F of Ordinance No. 04-1040B will reduce adverse consequences from urbanization of the area.

The Council has placed a condition on comprehensive planning for the area that the local government responsible for planning consider Metro's adopted Goal 5 inventory during its planning (see Condition IG, Exhibit F). The local government will eventually adopt provisions to implement Metro's Goal 5 program following the Council's adoption of that program, if the local government's ordinance do not already comply.

4. Compatibility

The Agricultural Analysis Consequences shows that urbanization of the Cornelius Study Area would have high adverse consequences for nearby agriculture (Alternative Analysis Study, pp. 84-85; Table A-4). The analysis, however, is based urbanization of the entire study area (1,154 acres) rather than just the portion included within the UGB (262 acres). Adverse consequences and incompatibility from urbanization of the included portion will be much reduced, given that the UGB borders this portion on the south side, and that the farmland portions of the included area border two exception areas, also included.

Ordinance No. 04-1040B, Exhibit F, imposes Condition IE upon urbanization of the area to reduce conflict and improve compatibility between urban use in the area and agricultural use on land to the north and west.

5. Natural and Cultural Resources

The Alternative Analysis Study addresses Goal 5 and 6 resources in the Cornelius Study Area protected by Washington County in its acknowledged comprehensive plan (p. 86). The county, or the City of Cornelius upon annexation to the city, will be responsible for protecting these resources in the area when it amends its comprehensive plan and zoning ordinances to implement expansion of the UGB. Condition IG of

Exhibit F requires the county or the city to consider Metro's inventory of Goal 5 resources in their application of Goal 5 to the area. Title 3 (Water Quality, Flood Management and Fish and Wildlife Conservation) of the UGMFP requires the county or city to protect water quality and floodplains in the area. Title 11 of the UGMFP, section 3.07.1120G, requires the county or city to protect fish and wildlife habitat and water quality. Title 11, section 3.07.1110, protects the status quo in the interim period of county or city planning for the area.

6. Public Facilities and Services

Under statewide Planning Goal 11, Metro is responsible for coordination of the preparation of public facility plans within the district. Metro will fulfill this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Washington County or the City of Cornelius from upzoning or from dividing land into resulting lots or parcels smaller than 20 acres until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of land Metro brings into the UGB; and (2) requires the county or city to develop public facilities and services plans and urban growth diagrams with the general locations of necessary public facilities such as sanitary sewers, storm sewers and water lines for the area.

7. Transportation

Metro shares responsibility to ensure that its Task 2 decision for the Cornelius Study Area does not significantly affect a transportation facility or allow uses that are inconsistent with the identified function, capacity and performance standards of transportation facilities. Metro fulfills this responsibility through implementation of Title 11 of the UGMFP, which (1) prohibits Washington County or the City of Cornelius from upzoning and from land divisions into resulting lots or parcels smaller than 20 acres in the area until the county or city revises its comprehensive plan and zoning ordinances to authorize urbanization of land Metro brings into the UGB; and (2) requires the county or city to develop conceptual transportation plans and urban growth diagrams with the general locations of arterial, collector and essential local streets for the area. Metro began this work with the evaluation of the serviceability of the area in the Alternative Analysis Study (pp. 85 and Table A-2) and consideration of how to provide services as part of the analysis required to satisfy Goal 14, factors 3 and 4.

The Oregon Department of Transportation ("ODOT"), Region 1, notes that industrial development in the Cornelius area will worsen the level of service on the Tualatin Valley Highway between Cornelius and Hilslboro. The "Financially Constrained" and "Priority System" in Metro's Regional Transportation Plan ("RTP") include several projects that will address congestion in the corridor (Projects 3156, 3164, 3166, 3167, 3168 and 3171). The county or city, together with Metro, will fully assess the effects of development on these facilities during Title 11 planning. Title 11 calls for a conceptual transportation plan as part of amendment of city or county comprehensive plans and land use regulations, to which statewide planning Goal 12 and the Transportation Planning Rule apply.

8. Regional Framework Plan

The included portion of the Cornelius Study Area lies directly north of and adjacent to the City of Cornelius. The area is within one mile of the designated Main Street of Cornelius (there is no designated Town Center). Industrial development in the included area will provide additional employment to support the businesses on Main Street, and provide employment opportunities for the many residents of Cornelius who now travel to other parts of the region for work. As stated above, industrial development in this area will help achieve Policies 1.2, 1.3.1 and 1.4 of the RFP better than inclusion of any other land, including other farmland.

9. Regional Transportation Plan

Through its Joint Policy Advisory Committee on Transportation, Metro has coordinated transportation planning and funding of transportation improvements with local governments in the region. The Regional Transportation Plan ("RTP") adopted a "Priority System" of improvements through the year 2020. The Priority System includes the most critical improvements needed to implement the 2040 Growth Concept. Among the improvements in the vicinity of the included portion of the Cornelius Study Area in Metro's RTP are intersection safety improvements on the TV Highway couplet and improved transit service (see list of projects noted in section 8, above).

REQUIREMENT NO. 2:

REMAND ORDER ON SUBTASK 17: EITHER REMOVE TAX LOTS 1300, 1400 AND 1500 FROM THE BOUNDARY OF EXPANSION AREA 62, OR JUSTIFY THEIR INCLUSION UNDER GOAL 14.

Ordinance No. 04-1040A amends the UGB to remove Tax Lots 1300, 1400 and 1500, all in Study Area 62, from the UGB (Exhibit E). The Council concludes that there is no need to include these lots given the small surplus of land for residential use that resulted from expansion of the UGB by Ordinance No. 02-969B.

REQUIREMENT NO. 3:

REMAND ORDER ON SUBTASK 12B: PROVIDE DATA ON THE ACTUAL NUMBER DENSITY AND AVERAGE MIX OF HOUSING TYPES AS REQUIRED BY ORS 197.296(5) AND DETERMINE THE OVERALL AVERAGE DENSITY MUST OCCUR IN ORDER TO MEET HOUSING NEEDS OVER THE NEXT 20 YEARS AS REQUIRED BY ORS 197.296(7)

Ordinance No. 04-1040A further revises the Revised Housing Needs Analysis ("HNA") to display data required by ORS 197.296(5) (Exhibit D). The data show the number, density and average mix of housing types arranged by type of buildable land (vacant, partially vacant, redevelopment and infill and mixed-use land). These data were subsets of aggregated data in the HNA, but were not displayed in the Revised HNA submitted to LCDC with the Task 2 Submittal on January 24, 2003.

The purpose for collecting the data is to help determine "the overall average density and overall mix of housing types at which residential development of needed housing types must occur in order to meet housing needs over the next 30 years." ORS 197.296(7). Metro determined the overall density and mix of needed housing types in the Revised HNA submitted on January 24, 2003 (see pages 2-7, Figures 3.1, 3.2, 3.3, 5.1 and 5.3). [add text and explanation from earlier HNA] The data newly displayed in this revision do not affect Metro's earlier determination.

SUPPLEMENTAL STAFF REPORT

IN CONSIDERATION OF ORDINANCE NO. 04-1040B, FOR THE PURPOSE OF AMENDING THE METRO URBAN GROWTH BOUNDARY, THE REGIONAL FRAMEWORK PLAN AND THE METRO CODE TO INCREASE THE CAPACITY OF THE BOUNDARY TO ACCOMMODATE GROWTH IN INDUSTRIAL EMPLOYMENT

ORDINANCE NO. 04-1040B

Date: June 21, 2004 **Prepared by: Lydia Neill**

INTRODUCTION

This staff report is intended to summarize the deliberations by the Metro Council and the Metropolitan Policy Advisory Committee (MPAC) that have taken place since April 2004. Discussions and recommendations by MPAC are highlighted in italics. This report will also introduce several technical memorandums that address issues raised during testimony at public hearings in May and June 2004. Discussions in this supplemental staff report will address the Metro Council's revision to the Chief Operating Officer's (COO) recommendation. The primary staff report dated April 5, 2004 contains information that formed the basis for the COO recommendation.

BACKGROUND

Metro is required to assess the capacity of the urban growth boundary (UGB) every five years under ORS 197.299(1). Metro is currently in Periodic Review with the Department of Land Conservation and Development (DLCD) under work program approval order #001243. As part of this review Metro is required to forecast and provide a 20-year land supply for residential, commercial and industrial uses inside the UGB. The Metro Council had forecasted a shortage of 38,700 dwelling units, 140 acres of commercial land and 4,285 acres of industrial land for the period 2002 to 2022. In December 2002 the Metro Council added 18,638 acres of land to the UGB that satisfied all of the demand for residential and commercial uses but only a portion of the overall need for industrial land.

A remand work order was issued by the Land Conservation and Development Commission (LCDC) due to the incomplete actions on industrial lands and several other issues. The remand order 03-WK Task 001524 requires Metro to fulfill the industrial land need, complete the Housing Needs Analysis by providing data on the number mix and housing types required by ORS 197.296(5), and either remove tax lots 1300, 1400 and 1500 adjacent to King City or provide a justification for their inclusion in the UGB by June 2004.

The 2002-2022 Urban Growth Report: An Employment Land Need Analysis Updated December 2002 (Employment UGR), identified a demand for 4,285 net acres of industrial land and a demand for 140 net acres of commercial land. The Metro Council's December expansion decision included roughly half of the industrial land need. The 2002 UGB decision added 2,850 net acres of job land to the UGB that is divided among three 2040 design types; 533 net acres of employment land, 818 net acres of industrial land and 1,499 net acres of Regionally Significant Industrial Area (RSIA) land.[1] Thus, within the 2002 UGB expansion there is a current industrial land need of 1,968 net acres and a commercial land surplus of 393 net acres.

[1] RSIAs are a 2040 design type that identifies industrial areas that have regional significance because of their location near the region's most important transportation facilities for the movement of traded sector freight.

The Employment UGR identified the demand for vacant industrial land by employment sector and distributed the demand by parcel size. These sectors represent the industries that are expected to grow over the next 20 years and include their associated demand for land. This demand allocation reflects past demand, development practices and existing land use policies. The general demand for vacant industrial land is distributed as follows:

- 70 percent warehouse and distribution
- 13 percent general industrial
- 17 percent tech/flex[2]

Fulfilling the Need for Industrial Land

Adopting Efficiency Measures- Title 4

As part of the tasks to complete Periodic Review, Metro examined ways to use land more efficiently and adopted policies to maximize the use of land within the UGB. In 2002, Metro adopted provisions in the Urban Growth Management Functional Plan, Title 4, that limits non-industrial uses in industrial areas. Subsequent to its adoption, local governments and industry representatives have come before the Metro Council to make the case that traditional land use categories are now less relevant to understanding industrial uses because many industrial activities including research and development, office and manufacturing often occur in the same facility. Amendments to Title 4 are intended to preserve land for industrial uses by restricting the amount and types of commercial uses that currently locate on industrial land.

Changes to Title 4 will preserve the transportation capacity for the movement of goods and services and direct other types of employment to centers, employment areas, corridors, main streets and station communities. Both RSIA's and industrial areas place limitations on the size of the retail commercial uses not serving the industrial area. Allowances are made for locating training facilities in industrial areas and commercial uses in airport locations. A discussion of the legislative changes to Title 4 are included on pages 7 and 8.

Impacts of Adopting Title 4 on the UGR

New Title 4 regulations specifically limit the amount and square footage of retail and office uses justify the savings of industrial land discussed in the Employment UGR. The Employment UGR estimates a savings of 1,400 acres of industrial land from implementing new measures and mapping of RSIA lands.[3] Table 1 discusses the supply of industrial land and the impact of the Title 4 policy changes to reduce the deficit of industrial land.

Reductions to the Industrial Land Need

Commercial Land Surplus

The Employment UGR identified a commercial land surplus of 393 acres. The surplus is based upon the available supply of land for commercial purposes and an assumption that a percentage of commercial activities would continue to take place on industrially zoned lands. Testimony received during the discussion of revisions to Title 4, argued the traditional building types accommodating office and industrial uses are merging based on the needs of a knowledge-based economy. Approximately 30 percent of the land need identified in the Employment UGR is for tech-flex and general industrial uses. These uses have higher job densities that are consistent with office type buildings. Based on this fact additional

[2] Tech-flex development is a building type that provides flexible space to accommodate a variety of users from light assembly, product storage and research.
[3] Employment UGR, page 46.

flexibility has been incorporated into Title 4 regulations to accommodate the need for industrial office uses. Concurrently, these same types of office, industrial uses, (i.e. software development etc.) could also locate on commercial land in traditional office building types. Therefore, the surplus of commercial land is being applied to help satisfy the overall need for industrial lands.

Adjustments to the Commercial Refill Rate

This adjustment to the refill rate is reflective of the changes taking place in the industrial marketplace. As discussed above the industrial economy is transitioning from traditional manufacturing to more knowledge and information based economy which contains more office type uses and results in higher floor area ratios. A two percent adjustment to the commercial refill rate applied in the Employment UGR reduces the overall need for industrial land by 174 acres and reflects this change in the marketplace. An increase in the refill rate from 50 to 52 percent represents the observed refill rate. The observed rate was obtained from metroScope modeling work completed in 2002.

Table 1. Industrial Land Need Adjustments

Supply of Industrial Land	**Net Vacant Acres**
Industrial Deficit	1,968
Application of the commercial land surplus	393
Less adjustment based on increasing the commercial refill rate	174
Less adjustments:	
- City of Oregon City (Comprehensive plan industrial)	74
- City of Wilsonville (Comprehensive plan industrial)	127
- Re-instatement of area south of Gresham	20
Remaining Industrial Land Need	**1,180**

Employment UGR Conversion Rate

It was brought to Metro's attention by the City of Wilsonville has asserted that Metro has misapplied the commercial conversion rate in the 2002-2022 Employment UGR calculations to determine the need for industrial land. A discussion of the how a rate of 15-20 percent was derived begins on page 16 of the Employment UGR. The rate was developed by performing an analysis of the covered geocodes of commercial uses located on industrially zoned land. The study found that 2 out of 10 jobs in industrial areas had a commercial standard industrial code (SIC). The confusion lies in calculating a conversion rate of 44 percent by including the marginal increases of land instead of all of the industrially zoned land supply to compute the correct rate of 22 percent.

Adjustments Based on Zoning

Both the City of Wilsonville and Oregon City have brought to Metro's attention that several areas located within the current UGB have comprehensive plan designations of industrial but local zoning that does not reflect the future intent. Both cities use a two map system that anticipate rezoning of property consistent with the comprehensive plan. It is Metro's practice to assess land based on zoning, not comprehensive plan designation. It was determined that it was appropriate to count these acres as industrially zoned because of the legislative intent. Since Metro has a surplus of housing units based on the 2002 decision, this change does not affect the housing need. The addition of 201 net acres of industrial land shown in Table 1. Industrial Land Need Adjustments.

The area south of the City of Gresham (20 acres) is described as a re-instatement after its recommended removal by the COO. This acreage is part of the Springwater industrial area (designated as an RSIA) that is currently under concept planning. When this area was added to the UGB in 2002 it received a 2040 designation of inner neighborhood. The concept planning for the broader area indicated that this area

should be planned for industrial development and receive a 2040 designation of RSIA. The 20 year housing supply is not affected because Metro had a surplus of 666 net acres of residential land.

Completing Periodic Review

After adjustments the remaining industrial land need is 1,1180 net acres. The Metro Council expanded the UGB by adding 1,047 acres of land to substantially satisfy the need for Industrial land over the next 20 years. These lands area located in the following areas: Damascus West, Tulatin, Beavercreek, Quarry, Coffee Creek, Cornelius and Helvetia. The areas are shown in Table 3. Metro Council UGB Expansion Areas, were chosen because they meet the requirements in Goal 14 in the following order:

- Exception lands that meet the suitability factors identified for warehouse and distribution; general industrial and tech flex uses;
- Successively lowest capability farmlands which meet the suitability factors or;
- Located on lower priority farmland but are necessary to meet specific industry needs.

Specifics of the suitability factors are outlined in the April 5, 2004 staff report. Departure from either the COO recommendation or the MPAC recommendation is discussed below. Careful consideration was paid to the potential impacts on farmland and farm industry operations.

Table 2. Chief Operating Officer's Recommendation

				SUITABILITY FACTORS		
EXPANSION AREAS	**Total Acres**	**Net Acres**	**Dominant Earthquake Zone[4]**	**Access**	**Proximity**	**Slope less 10%**
Damascus West	102	69	D	✓	✓	✓
Tualatin ***(MPAC-partial)***	646	339	D	✓	✓	✓
Quarry ***(partial)***	354	236	D	✓	✓	✓
Borland Rd N. ***(partial)***	575	164	A	✓	✓	✓
Beavercreek. ***(partial)***	63	30	D	- -	✓	✓
Coffee Creek ***(partial)***	264	97	D	✓	✓	✓
Wilsonville East ***(partial)***	641	460	B	✓	✓	✓
Cornelius ***(partial)***	206	91	B	✓	✓	✓
Helvetia ***(partial)***	249	149	A	✓	✓	✓
Additional Areas						
Evergreen	985	730	A	✓	✓	✓
West Union	368	133	A & B	✓	- -	✓
TOTAL	3,100	1,635				

**Areas shown in bold/ italics were included in MPAC's June 9th recommendation*

Soil Classifications of Areas Under Consideration

Soil classifications of all areas under study. The soils were mapped to facilitate studying and choosing appropriate lands for UGB expansion that conform to Oregon Revised Statute 197.298. ORS 197.298 establishes a hierarchy of lands based on soil quality which is divided into tiers. These tiers establish a priority for urbanizing land with exception land being the first priority followed successively by better quality soils. The tier system used for analysis examined the class of soils in each area and determined which soil class was most prominent. As study area boundaries have changed over the course of the analysis the predominant soil type changed in some cases. Table 3. Metro Council UGB Expansion Areas, shown on page 10 contains the predominant soil type unique to each area. Attachment 1 contains a complete discussion of the soil classes in all areas.

[4] Based on 1997 Department of Geology and Mineral Study. Rating of A-D with D being the lowest hazard area.

Industrial Land Supply Available to Meet Demand
The need for industrial land is classified by parcel size. The majority of the need for industrial land is contained in the smaller lot size categories that range from under 1 acre up to 25 acres. A need has been identified for large parcels to accommodate warehouse and distribution, general industrial and tech flex uses (25 acres up to 100 acres). Some of the areas under consideration due to their existing lotting patterns fulfill the large lot need better than other areas. Assembly of large lots can be reasonably accomplished if there are adjacent parcels of sufficient size or are under the same ownership. An aggregation study of these areas which is contained in the April 5, 2004 staff report, demonstrated that the need for large parcels can be met in the areas slated for UGB expansion. The best potential for addressing large lot needs can be found in Damascus West, Quarry, Coffee Creek, Helvetia and Cornelius areas.

Assessment of Earthquake Hazards
All of the areas included in the UGB were evaluated for their relative earthquake hazard potential. This evaluation was based on the 1997 Oregon Department of Geology and Minerals Study. The areas were ranked from A through with D being the lowest hazard potential. The western portion of the region that contains the Cornelius, Helvetia areas have the highest hazard potential. The higher hazard potential in these areas will be addressed during Title 11 concept planning by the responsible city or county pursuant to Metro Code 3.07.1120(G) and Statewide planning Goal 7. The hazard potential is shown in Table 2 and a full discussion of this study is included in Attachment 2.

COO Recommendation - Areas Excluded

Assessment of Areas Excluded from Consideration
A full discussion of this analysis of all lands under study that were excluded from consideration is included in the staff report dated April 15, 2004 and in the 2003 Alternatives Analysis and Addendum.

Borland Road Area- North of I-205
The Borland Road area has not been included in the UGB based on additional information contained in the record and further examination by staff. Although this area is composed entirely of exception land, a number of factors make it suitable for industrial use. The area previously under consideration contains 575 gross acres of land with a number of conflicting uses (schools, churches, rural residential uses) and slopes/natural resources and yields only 164 net developable acres of land. The developable land is insufficient to allow formation of a cohesive industrial neighborhood and too small and too far from the existing UGB to justify the extension of urban services (see “Formation of Industrial Neighborhoods”, Appendix A, Item (u) of Ordinance No. 04-1040B).

Previous work by staff to reduce the total number of acres under consideration from 68,334 acres of land to a more manageable 29,000 acre study area applied the following decision rules. The decision rules included: 1) non-contiguous to the UGB, 2) predominance of lots under 5 acres in size, 3) large areas of steep slopes and floodplains, 4) less that 300 acres and failure to meet both the proximity to other industry (1 mile) or access requirements (2 miles within an interchange). The Borland Road area has access to I-205 but is not located adjacent to a developed industrial area. Based on possible access to I-205 this area was thought to be suitable for warehouse and distribution uses. A baseline size was established for industrial neighborhoods of 300 acres. This 300 acre threshold was obtained by analyzing metroScope results and comparing the sizes of different industrial areas located within the UGB. The Borland Road area has little chance of forming a 300 acre industrial neighborhood due to the fragmented buildable lands available in this area.

On June 9, 2004 MPAC recommended that this area be removed from consideration for UGB expansion.

Wilsonville East
The Wilsonville East area which contains over 400 net acres was removed from consideration due to servicing concerns raised by the City of Wilsonville and impacts on an existing single family neighborhood located south of the site. This site contains class II agricultural land. The Metro Council chose the Helvetia study area which also contains class II soils and exception lands over the Wilsonville East area due to the serviceability and because the area contained exception lands. The Helvetia area is particularly well suited to satisfy the demand for tech flex or general industrial land.

On June 9, 2004 MPAC recommended that this area be removed from consideration for UGB expansion.

Additional Areas Added to the COO Recommendation
No additional areas were added to the COO recommendation.

On June 9, 2004 MPAC recommended that the Evergreen area be considered by the Metro Council to satisfy the need for industrial land.

The Metro Council considered the inclusion of the Evergreen site to meet the need for industrial land. Deliberations weighed the potential impacts on the farm economy and the issue of establishing logical boundaries between urban and farm uses in this area.

Expansion of the Cornelius Area
The Metro Council expanded the Cornelius area (206 to 262 gross acres) to provide an additional 36 net acres of industrial land. Inclusion of this area will provide for an orderly and efficient transition from rural to urban use. Approximately 56 percent of the area is designated for agricultural use in the Washington County Comprehensive Plan and it contains class II soils. A total of 56 gross acres are isolated from the agricultural lands located north of Council creek. The Council chose this land because a portion of this land is located adjacent to an existing industrial area located south of Council Creek and contains large flat parcels suitable for industry.

The Employment UGR identifies a specific need for large parcels (50 acres or larger) (Ordinance No. 02-969B, Appendix A, Item 4, page 25). The included portion of the study area contains one parcel between 50 and 100 acres (Appendix A, Item (a), p.30).

The Council also chose this area to help achieve Policies 1.2, 1.3.1 and 1.4 of the Regional Framework Plan (RFP), which call, among other things, for an equitable and balanced distribution of employment opportunities, income, investment and tax capacity throughout the region. The Council compared the fiscal and equity effects of including this area on the City of Cornelius. Given that the City of Cornelius has the highest poverty rate, the lowest property tax revenue per capita, the lowest land improvement market value and the longest average commute in the region, the Council concluded that industrial development in this area would help achieve these policies better than inclusion of any other Class II agricultural land.

On June 9, 2004 MPAC recommended that the expanded Cornelius area be considered by the Metro Council to satisfy the need for industrial land.

Other Changes to the COO Recommendation
The COO recommendation called for removal of a small area south of Gresham based upon impacts to the Green Corridor Agreement with the City of Sandy. This area includes 90 gross acres of land that was proposed in the 2002 UGB expansion for residential use. The area will remain in the UGB and be assigned a 2040 designation as RSIA consistent with the area north of the site (Springwater Industrial

Area) which was also added to the UGB in 2002. The area provides approximately 20 net acres of land for industrial purposes.

On June 9, 2004 MPAC did not recommend that this area remain in the UGB.

Assigning 2040 Design Types and Conditions

All areas included in the UGB must be assigned a 2040 design type of either Industrial or RSIA. Concept planning as required in Title 11 of the Functional Plan will determine the location and extent of the boundaries of all of the industrial areas. The 2040 design types are included on maps of all expansion areas in Ordinance No. 04-1040B in Exhibit E and the specific conditions are contained in Exhibit F.

Generalized and specific conditions pertaining to all areas included in the UGB are found in Exhibit F.

The Council added or revised conditions recommended by the COO to address concerns raised in testimony following the April 15, 2004, COO recommendation. New conditions address compatibility between industrial use and nearby residential use, coordination of the timing of comprehensive planning and transportation planning, and improved protection of the future right-of-way for the I-5/99W Connector.

The Oregon Department of Transportation (ODOT) submitted general information about the likely effects of new industrial development on lands added to the UGB on a number of state transportation facilities in the region. Of particular concern to ODOT are areas added in the vicinity of the North Wilsonville interchange on I-5 in Wilsonville and of the Shute Road interchange on U.S. Highway 26 at Hillsboro. ODOT believes that adoption of an "interchange area management plan"(IAMP), as described in the Oregon Highway Plan and outlined in ODOT rules (OAR 734-051-0125), would protect the capacity and function of the interchanges and improve their management. ODOT prefers adoption of an IAMP at the time of Title 11 planning, prior to urban development.

Local governments believe IAMPs are more likely to add value to what statewide planning Goal 12 (Transportation) and the Transportation Planning Rule (TPR) already require if the IAMPs are adopted at the time that plans and commitments are made for improvements to the interchanges. They worry that limitations on industrial development that might be written into an IAMP prior to commitment of funding for improvements to the interchanges might, in light of budgetary constraints, become permanent or long-range limitations, denying the region of the full benefits of industrial development near the interchanges.

The Council shares ODOT's concern that new industrial development in the region not cause the region's transportation system to fail or fall below standards. The Council understands that new development, without timely investment in the region's transportation system, will likely degrade the system. The Council expects, however, that, given the high priority state government places on making industrial sites ready for development, the region (Metro and other local governments), with the aid of state government, will find the resources to make the necessary improvements. In pursuit of those improvements, Metro will encourage and facilitate the adoption of IAMPs in cooperation with local governments at the earliest appropriate time in the process of approval of improvements to the Shute Road and North Wilsonville interchanges.

Policy Changes

Part of Metro's review of the UGB includes examining ways to obtain more efficient utilization of land currently inside of the UGB. The proposed Title 4 amendments are one way of demonstrating to LCDC that Metro is achieving efficiencies inside of the UGB to meet the need for land in addition to expanding the UGB. The Metro Council adopted new measures to protect and maintain the supply of industrial land for future industrial uses in Ordinance 02-969B, adopted December 5, 2002. Title 4 Industrial and Other

Employment Areas regulations were amended in order to increase the capacity of industrial areas for industrial uses and to encourage non-industrial uses to locate in Centers and other more appropriate 2040 design type areas.

Metro staff, after consulting with cities, counties and other interests, developed a set of factors to consider in the identification of RSIAs. Metro staff worked with cities and counties in the region to apply the proposed factors to designated Industrial Areas within their jurisdictions. Several local governments, Portland, Gresham, Wilsonville and Clackamas County, submitted recommended Industrial Areas for consideration as RSIAs. Striving for region-wide consistency, Metro staff also applied the factors to areas in cities and counties that chose not to submit candidate areas. The factors are:

- *Distribution* - Area serves as support industrial land for major regional transportation facilities such as marine terminals, airports and rail yards;
- *Services* - Availability and access to specialized utilities such as specialty gases, triple redundant power, abundant water, dedicated fire and emergency response services;
- *Access* - Within 3 miles of I-5, I-205, I-84 (within the UGB), State Route 224 (within the UGB);
- *Proximity* - Located within close proximity of existing like uses; and
- *Primary Use* - Predominantly industrial uses.

Considering these factors and much input from local governments, the Metro Council by Ordinance No. 04-1040B (Exhibit C) adopted a generalized map of RSIA areas. Title 4 is amended to include a limitation on retail uses for single users of 5,000 square feet in Industrial areas and 3,000 square feet in RSIA areas, and added a performance based transportation requirement for non-industrial offices. The 3,000 and 5,000 square foot limitations as it relates to commercial eating establishments refers to the size of the seating area and not to kitchen or storage areas. The Title 4 language changes are included in Exhibit B of Ordinance No. 04-1040B. The map depicting RSIA's is included in Attachment 3.

On April 14, 2004 MPAC recommended that Title 4 be amended to limit non-industrial retail uses to a maximum of 5,000 square foot for individual uses and 20,000 square foot for single buildings in both RSIA's and industrial areas. This recommendation was incorporated into ordinance No. 03-1021B for Metro Council consideration. Other provisions were consistent with the language in ordinance No. 04-1040B.

Regional Framework Plan Amendments

The Regional Framework Plan is amended to add policy language to guide UGB decisions and minimize impacts on the agricultural industry. Comments from participants at the symposium called "Agriculture at the Edge" spurred the proposed policy changes. Expansion of the UGB has different impacts on nursery operations, farm related businesses and individual operations. Changes to Chapter 1, Land Use Policy 1.12 provide greater certainty for farmers regarding urbanization and reduce potential conflicts between farm operations and urban uses. The changes the Regional Framework Plan provide the following policy guidance:

- When choosing land among lands with the same soil class, chose land less important for commercial agriculture, and
- Develop agreements with neighboring cities and counties to protect agriculture.

On April 24, 2004 MPAC recommended that the original proposal introduced by Councilor Hostica in Ordinance No. 04-1041 included defining the region's urbanizable area by restricting future urban growth boundary expansions to an area north of the Willamette River and east of Pudding River as well as containing the additional language to address the impacts on the agricultural industry and additional criteria to choose land for urbanization.

The Metro Council considered this recommendation to establish a hard boundary at the Willamette River and chose to defer this issue until a comprehensive region-wide discussion can take place to consider other areas that may be effected by similar circumstances. There are number of areas in the region where a policy of establishing a hard edge could be used effectively. The Metro Council expressed a desire to explore the use of this concept more fully in upcoming work that may take a longer view of planning for the region's growth.

Fulfilling The Remaining Periodic Review Requirements

Housing Needs Analysis
A revised Housing Needs Analysis report was prepared pursuant to the remand work order. The report addresses densities by housing type. The supplemental information provided in this report does not materially change the conclusions found in the UGR. The supplemental study does not change the overall density or mix of housing types needed for the next 20 years. Revised refill rates are in the range of 25-30 percent.

KNOWN OPPOSITION
The selection of lands for inclusion into the UGB has been hotly debated in a number of areas for both inclusion and exclusion from the UGB. Details of the comments received throughout the workshops and public hearing processes are detailed in the Public Comment reports, Volume I and II dated May 2004 and the addendums to the original reports dated June 2004 contain comments up through the final hearing on June 24, 2004.

LEGAL ANTECEDENTS
Title 4 is part of the adopted and acknowledged Urban Growth Management Functional Plan. Authority to amend the 2040 Growth Concept map comes from ORS 268.380 and ORS 268.390(5). UGB evaluation and amendment requirements are found in ORS 197.298 and 197.299.

ANTICIPATED EFFECTS
Adoption of Ordinance No. 04-1040B will result in fulfilling the requirements in Metro code section 3.07.420I, which requires Metro to adopt a map of Regionally Significant Industrial Areas with specific boundaries that is derived from the Generalized Map of Regionally Significant Industrial Areas adopted in Ordinance No. 02-969B. Amendments to Title 4 address implementation issues and provides local governments with clear instructions as to the Metro Council's policy intent on preserving industrial lands. This ordinance also satisfies the three requirements of LCDC's Partial Approval and Remand Order #03-WK Task 001524. The effective date of the new Title 4 regulations is September 24, 2004. Local governments will have two years following LCDC's acknowledgement to adopt a local map and make changes to their codes.

Adoption of amendments to the UGB provide the industrial land necessary for the continued economic growth over the next 20 years.

BUDGET IMPACTS
The UGB and Metro Code amendments become effective September 2004. Any additions to the UGB require FTE for monitoring and minor participation in Title 11 concept planning. Metro has a commitment of 1.43 FTE dedicated to ongoing concept planning in Hillsboro, Damascus, Gresham and the City of Tualatin. Additional FTE and potential grants to local governments may be needed to assist in the concept planning process. Implementation of Metro Code changes requires a corresponding amendment of local planning ordinances to implement the intent of these policies. Compliance monitoring is already included in the 2004/ 2005 budget. Community Development staff currently

monitors all ongoing zone, comprehensive plan and code changes at the jurisdictional level as well as other project responsibilities.

DECISION

The Metro Council expanded the UGB by adding 1,047 acres of land to substantially satisfy the need for Industrial land over the next 20 years. The removal of tax lots 1300, 1400 and 1500 adjacent to King City and the completion of the addendum to the Housing Needs Analysis addresses all of the outstanding issues in LCDC's Partial Approval and Remand Order #03-WK Task 001524.

Table 3. Metro Council UGB Expansion Areas

EXPANSION AREAS	Total Acres	Net Acres	2040 Design Type	Soil Class
Damascus West	102	69	Industrial	class II & III
Tualatin	646	339	Industrial	class IV & III
Quarry (partial)	354	236	Industrial	class VII
Beavercreek	63	30	Industrial	class IV & V
Coffee Creek (partial)	264	97	Industrial	exception land
Cornelius (partial)	262	127	RSIA	class II
Helvetia (partial)	249	149	RSIA	exception land & class II
TOTAL	1,940	1,047		

Attachments:

Attachment 1- Dominant Soil Classification for Proposed UGB Expansion Areas, dated June 15, 2004
Attachment 2- Earthquake Hazard Memorandum, dated June 15, 2004
Attachment 3- Title 4 Map

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Attachment 1
Ordinance No. 04-1040B

M E M O R A N D U M

600 Northeast Grand Avenue | Portland, Oregon 97232-2736
(tel) 503-797-1700 | (fax) 503-797-1797

METRO

Date: June 16, 2004

To: Lydia Neill, Principal Regional Planner

From: Amy Rose, Assistant Regional Planner

Re: Dominant soil classifications for proposed UGB expansion areas

Background
The Metro Council is currently in the process of selecting land for inclusion in the urban growth boundary (UGB) for industrial use. The selection of appropriate land is dictated largely by Oregon Revised Statute (ORS) 197.298 that sets forth a hierarchical, tier-based system of land categorization, which indicates the order land should be considered for inclusion in the UGB based on comprehensive plan designations. Resource land is further prioritized on soil classification, which indicates the capability level of the farmland and ultimately its place in the hierarchy of land. The hierarchical tiers of land identified in ORS 197.298 are defined as follows:

- Tier 1 – exception land contiguous to the UGB and non-high value resource land completely surrounded by exception land.
- Tier 1a – exception land not contiguous to the UGB (within the one mile extent of study area boundaries).
- Tier 2 – marginal land, a unique classification of non-resource land in Washington County that allows dwelling units on EFU land.
- Tier 3 – resource land that may be needed to serve exception land.
- Tier 4 – resource land, majority of class III & IV soils, some class I & II soils.
- Tier 5 – resource land, majority class I & II soils, some class III & IV soils.

Purpose
The purpose of this memorandum is to identify the dominant soil classification and resulting tier category under ORS 197.298 for each of the resource land areas proposed for inclusion in the UGB for industrial use. The dominant soil classification has been determined using GIS soil data, displayed on a map dated October 30, 2002 in the record and was only undertaken for study areas identified as resource land. This information is presented in tabular form.

Soil Classifications by study area

Recommended Expansion Areas	Total Acres	Net Acres	Tier	Dominant Soil Classification
Damascus West	102	69	Tier 4	Class 3 & 4
Quarry (p)	354	236	Tier 4	Class 7
Beavercreek (p)	63	30	Tier 4	Class 4 & 6
Wilsonville East (p)	641	460	Tier 5	Class 2
Revised Wilsonville East	412	295	Tier 5	Class 2
Cornelius (p)	206	91	Tier 5	Class 2
Revised Cornelius	56	36	Tier 5	Class 2
Helvetia (p)	249	149	Tier 5	Class 2
West Union (p)	368	133	Tier 5	Class 2
Evergreen	985	730	Tier 5	Class 2
Noyer Creek	381	266	Tier 5	Class 2
Hillsboro South	791	695	Tier 5	Class 2

*Analysis was only undertaken for study areas identified as resource land.

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M E M O R A N D U M

600 Northeast Grand Avenue | Portland, Oregon 97232-2736
(tel) 503-797-1700 | (fax) 503-797-1797

METRO

DATE: June 16, 2004

TO: Dick Benner, Senior Metro Attorney

FR: Tim O'Brien, Senior Regional Planner

RE: ***RELATIVE EARTHQUAKE HAZARD FOR PROPOSED INDUSTRIAL LAND EXPANSION AREAS***

Background
In 1997 the Oregon Department of Geology and Mineral Industries (DOGAMI) produced data on the relative earthquake hazard for land in the Portland metropolitan region including a significant portion of land outside the Urban Growth Boundary (UGB). The information included individual hazard factors of liquefaction, slope instability, and amplification, as well as a composite relative earthquake hazard map based on the individual factors. Metro's Data Resource Center (DRC) mapped the relative earthquake hazard data utilized in this analysis. The map information does not cover all of the potential expansion areas nor has the information been updated since 1997.

Analysis
The relative earthquake hazard composite map is separated into four zones, A, B, C, and D, with A being the highest hazard, and D the lowest hazard. The dominant zone for each of the proposed expansion areas is reported in the table below, along with additional comments.

Relative Earthquake Hazard

Expansion Area	Dominant Zone	Comments
Damascus	D	Small areas of C & B
Beavercreek	D	Significant portion of C and two pockets of B
Borland Road	A	One large area of B southeast of Borland Rd./Stafford Rd. intersection
Wilsonville East	B	Significant portions of C & D
Coffee Creek	D	Areas of A, B & C. No information for southwest corner of expansion area
Tualatin	D	Significant areas of B & C
Quarry	D	Pockets of C and minor area of B
Cornelius	B	A few pockets of A scattered throughout area
Helvetia	A	Two pockets of B, one in the center and one at the very top of the area
Evergreen	A	Some B, no information for northern portion of area
West Union	B & A	Some areas of C, area of A along stream corridor

Summary
Information for two of the areas, Evergreen and Coffee Creek, is incomplete. In general the areas are either at the high or low hazard end of the range. The Borland Road North, Helvetia, Evergreen and West Union expansion areas contain the most Zone A classified land and thus have the highest earthquake hazard status. The Damascus, Beavercreek, Coffee Creek, Tualatin, and Quarry expansion areas contain mostly Zone D classified land and thus have the lowest earthquake hazard status.

The Council has decided not to include the North Borland, Evergreen or West Union Areas (areas with the highest hazard). The small hazard areas mapped in the Helvetia Area (also high) and other areas included in the UGB will be addressed in Title 11 planning by the responsible city or county, pursuant to Metro Code Section 3.07.1120G and statewide planning Goal 7.

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R L I S
REGIONAL LAND INFORMATION SYSTEM

Title 4 Industrial and Employment Areas

Ordinance No. 04-1040B

Exhibit C

Attachment 3

June 24, 2004

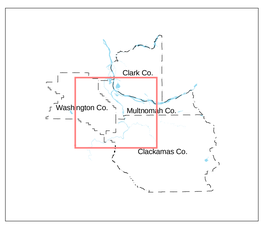
Employment Land

Industrial Land

Regionally Significant Industrial Areas

WARNING: some maps combine data layers of differing map accuracies, e.g. flood plains can be laid on tax lots. When this occurs, the map is not reliable to correctly show data at the tax lot level.

The information on this map was derived from digital databases on Metro's GIS. Care was taken in the creation of this map. Metro cannot accept any responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied, including the warranty of merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.



Location Map

METRO
METRO DATA RESOURCE CENTER
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TEL (503) 797-1742 | FAX (503) 797-1909
drc@metro.dst.or.us | www.metro-region.org

Project Date: Oct 3, 2003 Plot time: Jun 23, 2004 J:\hal\proj\04106\rsia_04_1040b.mxd

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ECOnorthwest

December 2024

Wilsonville Industrial Land Readiness Phase 1: Basalt Creek Recommendations Report

City of Wilsonville

Prepared for: City of Wilsonville

ECOnorthwest
222 SW Columbia Street • Suite 1600 • Portland, OR 97201 • 503-222-6060

Acknowledgments

ECOnorthwest prepared this report with support from the guidance and input of several partners, including members, staff, and leadership of the ***City of Wilsonville***. Most notably we are appreciative of the involvement and input of ***Cindy Luxhoj, Daniel Pauly, Miranda Bateschell, and Matt Lorenzen***. This work was financially supported by grants from ***Business Oregon and Metro.***

That assistance notwithstanding, ECOnorthwest is responsible for the content of this report. The staff at ECOnorthwest prepared this report based on their general knowledge of the economics of regional economies. ECOnorthwest staff contributing to this study included ***Bob Parker, Nicole Underwood, Barrett Lewis, and Michelle Anderson.*** ECOnorthwest also relied on information derived from government agencies, private statistical services, the reports of others, interviews of individuals, or other sources believed to be reliable. ECOnorthwest has not independently verified the accuracy of all such information and makes no representation regarding its accuracy or completeness. Any statements nonfactual in nature constitute the authors' current opinions, which may change as more information becomes available.

For more information about this report please contact:

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Table of Contents

Purpose and Background

The Cities of Tualatin and Wilsonville adopted the Basalt Creek Concept Plan (BCCP) in 2018 after a lengthy joint planning process. Now, in 2024-25, the City of Wilsonville is working to advance the Basalt Creek Planning Area (BCPA) beyond the concept plan to a development-ready status by designating zoning and refining infrastructure plans. However, since adoption of the BCCP, economic conditions at national, state, regional, and local levels have shifted significantly and must now be considered.

To address these evolving conditions, the City hired ECOnorthwest to conduct a market assessment and industrial lands study focused on Wilsonville's portion of the BCPA. This study is comprised of several interconnected tasks:

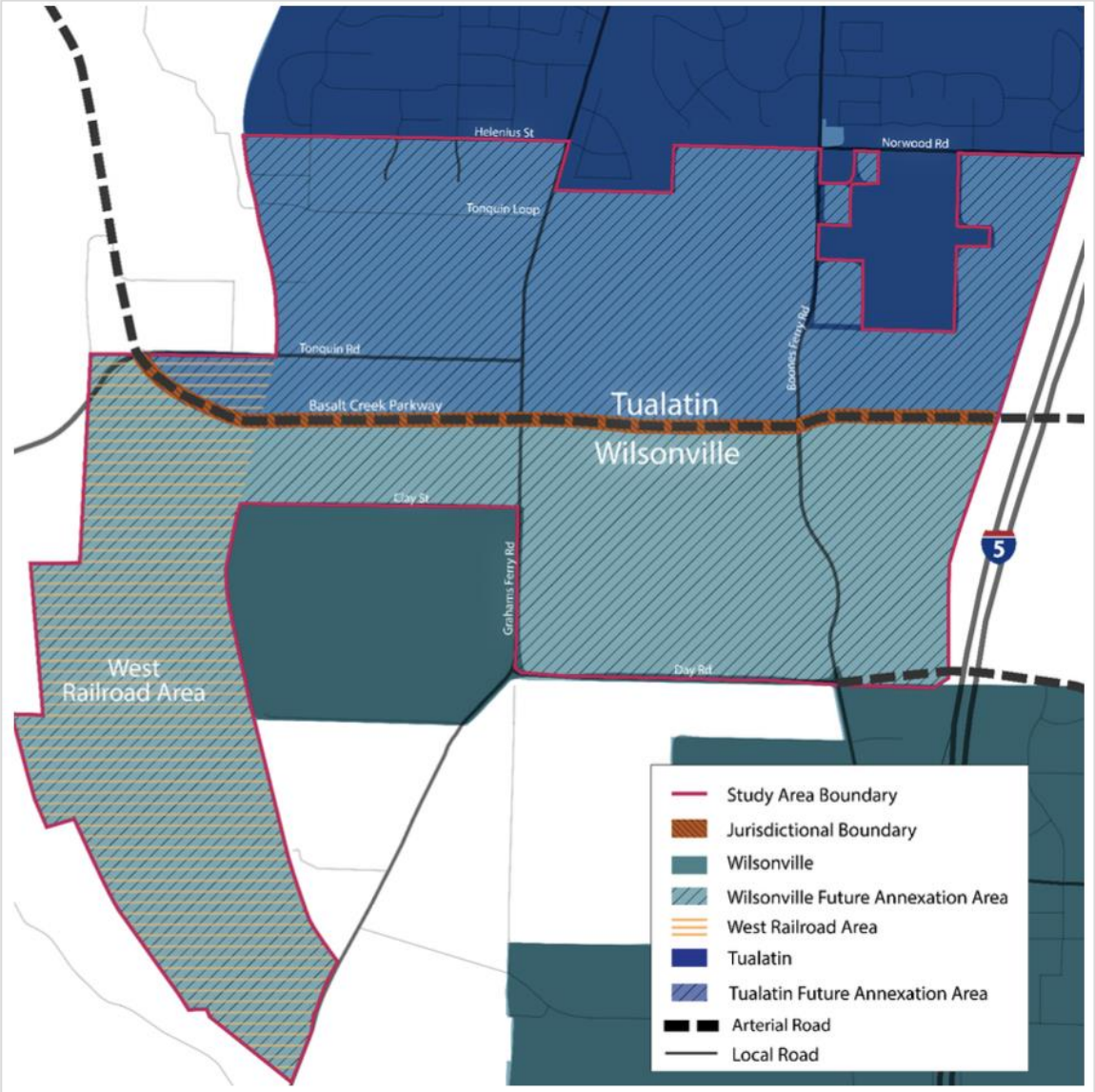
- An **Economic Inventory** that evaluates current market trends and identifies industries suitable for the area (Appendix A).
- A **Buildable Lands Inventory (BLI)** that reflects recent land developments, adjusted constraints, and revised capacity estimates (Appendix B).
- A **Site Suitability Analysis** that evaluates three key opportunity sites for their potential to support target industries based on attributes like size, location, and constraints (Appendix B).
- An **Analysis of Future Development of Contractor Establishments in the BCPA** given prevailing lease rates and market conditions (Appendix C).

This report summarizes the key findings from each task and outlines recommended policy interventions and strategic actions for the City. By addressing challenges and leveraging opportunities, these efforts aim to establish Basalt Creek as a vital hub for regional job growth and long-term economic vitality.

Basalt Creek Planning Area Overview

The Basalt Creek Planning Area (BCPA) is an 847-acre area located between southern Tualatin and northern Wilsonville. This report focuses on the Wilsonville section, which includes 453 acres in the main portion of the BCPA south of the Basalt Creek Parkway and land west of the railroad known as West Railroad (as depicted in Figure 1*). For the remainder of this report, references to the BCPA specifically refer to the Wilsonville portion.* The BCPA is centrally located in the southern portion of the Portland Metro, adjacent to Interstate-5, and easily accessible and connected to other growing industrial areas (including Sherwood and Tualatin). It has access to the Portland Metro and Mid-Valley labor sheds, making it well positioned to attract various types of industry.

Figure 1: Basalt Creek Planning Area



Source: Basalt Creek Concept Plan, 2018. Note: Wilsonville's portion of the Basalt Creek Planning Area (BCPA) is inclusive of the Wilsonville Future Annexation Area and West Railroad Area.

What is Wilsonville's portion of Basalt Creek Like today?

The Wilsonville portion of the BCPA is currently zoned under Washington County's FD-20 designation (Future Development, 20-acre minimum lot size), which permits low-intensity uses. Since the adoption of the BCCP, Washington County has continued to approve developments consistent with its zoning, resulting in much of the land now being used for contractor establishments. These establishments—used for storing tools, equipment, and vehicles—provide jobs and economic activity. But they fall short of the employment densities and development envisioned in the Concept Plan, and which are typical of land within the Metro urban growth boundary (UGB) and incorporated City limits.

Contractor establishment (above) and railroad crossing near West Railroad.

KEY STATISTICS

The Wilsonville portion of the BCPA spans 453 acres and includes 85 tax lots, with only 10 tax lots hosting covered employment. Some areas in the BCPA have a high degree of parcelization, while others are less fragmented. There are a handful of large contiguous landholdings by single ownership.

From 2012 to 2022, covered employment grew from 194 to 275 employees in the BCPA, with an average wage of $85,863—higher than the tri-county average ($73,995) and City average ($74,252)—indicating well-paying jobs. However, employment density remains low at 4.4 employees per acre (on parcels with covered employment), far below the BCCP vision of 18.5 employees per acre. It is important to note that these figures only account for covered employees.[1]

Some of the land in the BCPA is actively used despite minimal reported employment. The area is primarily used for contractor establishments, including storage yards for various businesses, which typically require fewer employees. It is likely that additional workers are present but not included in the covered employment estimates, such as sole proprietors or other types of uncovered contractors.

[1] Covered employment refers to employees covered by unemployment insurance. It *excludes* sole proprietors, certain contractors ("1099 employees"), and some railroad workers.

Due to the prevalence of storage-focused contractor establishments, many lots have minimal building improvements. The improvement-to-land-value ratio is low and has changed little over the past decade.


453 acres


85 tax lots


275 covered employees


$86,000 average wage


4.4 employees per acre in areas with employment


Little change in improvement-to-land value since 2012


Areas of high and low parcelization

Key Components of This Study

Economic Inventory: Basalt Creek's Market Context

The Economic Inventory provides a detailed analysis of market trends and industry opportunities for the BCPA, emphasizing its potential as a regional hub for industrial development (see Appendix A for the full inventory). Since adoption of the BCCP in 2018, economic conditions have been shifting considerably. Nationally, the industrial sector continues to experience robust demand fueled by e-commerce growth, reshoring efforts, and federal investments like the CHIPS Act, which supports semiconductor manufacturing. In the Portland Metro area, industrial trends mirror national patterns, with low vacancy rates and rising rents. While demand for industrial space has slowed from the highs of 2021–2023, it is expected to remain strong in the near term.

Locally, Wilsonville's industrial sector plays a crucial role in the City's economy, with manufacturing, wholesale trade, and construction accounting for 43 percent of employment compared to 22 percent regionally. Despite this strength, industrial growth in neighboring Sherwood and Tualatin has outpaced Wilsonville, primarily due to their supply of large, development-ready parcels. In the Portland Metro area, industrial demand is primarily driven by businesses expanding or upgrading facilities rather than businesses locating from out of state. To remain competitive, Basalt Creek must be prepared to accommodate these businesses' evolving needs.

Originally, the BCCP envisioned a mix of industrial and office uses, with the High-Tech Employment District assuming 45 percent of development in the area would be office. However, the demand for office space has declined regionally and nationally, driven by the rise of remote and hybrid work. While office space will likely remain part of the BCPA, its footprint may be smaller than originally planned.

Wilsonville is well positioned to capture industrial growth, particularly in key sectors such as semiconductor supply chain, cleantech, advanced manufacturing, and logistics. Basalt Creek's proximity to major transportation networks, its skilled labor force, and its location near established industrial clusters enhance its attractiveness. However, several challenges must be addressed to realize this potential. Fragmented land ownership, existing contractor establishments, and rural infrastructure that does not meet urban standards remain key barriers to high-intensity industrial uses.[2] Addressing these obstacles will be vital to unlocking Basalt Creek's capacity to compete for its commensurate share of regional economic growth.

[2] The City is refining its infrastructure plans for the BCPA. While plans exist, the infrastructure has not yet been built and will require funding for improvements.

Buildable Lands Inventory: Measuring Land Capacity and Development Potential

The updated Buildable Lands Inventory (BLI) revises the 2014 inventory from the BCCP, providing an updated assessment of Wilsonville's portion of the BCPA for employment-related growth (see Appendix B). It identifies developable land and highlights areas with existing economic uses that offer redevelopment potential due to low improvement values and/or low employment density.

Of the 453 acres in Wilsonville's portion of the BCPA:[3]

- **173 acres** are currently in active use and considered developed.
- **129 acres** are constrained by physical or environmental factors.
- **150 acres** are considered buildable and available for development.

This buildable land supply is distributed across a range of parcel sizes, from small lots under 5 acres to larger parcels exceeding 25 acres, offering flexibility to meet diverse industrial and employment needs. Given the 150 acres of buildable land and the expectation of employment densities between 10 and 18.5 employees per gross acre, the BCPA is expected to accommodate between 1,500 and 2,780 jobs. The BCCP estimated employment capacity at about 2,500 jobs in Wilsonville's portion of Basalt Creek in 2018.

The updated BLI provides a clearer understanding of the land available to attract industries and support future employment growth. It emphasizes the BCPA's potential to support a variety of industrial and employment uses aligned with Wilsonville's economic development goals. However, it also reveals an increase in land used for contractor establishments since the previous BLI, highlighting the decreasing supply of land for urban industrial development. This trend is likely to continue if the area remains outside the city and unprepared for urban growth.

CHANGES FROM THE 2014 BLI

Buildable Acres

The BCCP identified 130 buildable acres whereas the updated BLI shows 150 buildable acres. This 20-acre increase is primarily due to a revised assessment of constraints in West Railroad. The 2014 BLI classified much of West Railroad as constrained, but updated constraints data show more development capacity. However, this gain was partially offset by land now occupied by contractor establishments, which has been reclassified as developed, reducing buildable acres elsewhere.

Employment Density

ECOnorthwest applied the BCCP's assumption of 18.5 jobs per gross acre to model a high-density employment growth scenario. However, shifting market conditions—such as reduced demand for office space and increased demand for industrial and flex space (which typically have lower employment densities)—led ECOnorthwest to also model medium- and low-employment density growth scenarios. This approach provides a range of potential employment densities that more accurately reflect evolving market conditions.

[3] Note that the acres do not total to 453 due to rounding.

Site Suitability: Aligning Market Potential

The Site Suitability Analysis assesses the competitiveness of three opportunity sites (Figure 2) within the BCPA to host key industries identified in the Economic Inventory (Appendix B includes the full site suitability analysis). This high-level evaluation focused on physical site characteristics—such as size, location, and constraints—without factoring in the likelihood of redevelopment. It provides a broad understanding of site benefits, barriers, and potential industry suitability, serving as a foundation for planning and zoning rather than a definitive assessment of development feasibility, building configurations or sizes.

Figure 2. Opportunity Sites

Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro

Infrastructure will be pivotal in shaping the types of industries and scale of development suitable for the area. This analysis incorporated available information on infrastructure elements such as water, wastewater, and roads, and planned urban improvements with development; however, detailed system capacities, final road alignments, and the timing of improvements—particularly in areas like West Railroad—remain uncertain. These factors will play a significant role in determining the market competitiveness and potential development timeline for a site.

Water and wastewater systems are expected to meet most demands, though high-water users may require additional capacity. Similarly, industries with high electricity demands, such as those requiring five megawatts or more, may necessitate infrastructure upgrades. Road alignments will impact parcel configurations, building sizes, and overall development potential. While these elements are critical to understanding site suitability, they are not yet classified as definitive constraints or advantages.

- **The SW Greenhill** site spans 57 acres, with 91 percent (52 acres) of the land unconstrained. Minimal slopes (affecting 11 percent of the site), a high proportion of undeveloped land, consolidated land ownership (two owners), and proximity to existing infrastructure make it one of the most development-ready locations in Basalt Creek. The site could be physically suitable for high-tech supply chain, cleantech industries, advanced manufacturing, food processing, warehousing and distribution, and industrial business parks or R&D campuses. Its proximity to transportation networks and regional workforce access further enhances its competitiveness.
- **The Craft Industrial** area is split into eastern and western portions by site constraints and consists of seven tax lots with fragmented ownership, most under five acres. Only 14 acres are unconstrained, and its proximity to residential areas limits its suitability for high-intensity industrial uses. Instead, the area aligns with the BCCP's vision for small scale or micro-industrial uses, such as live-work spaces or makerspaces.

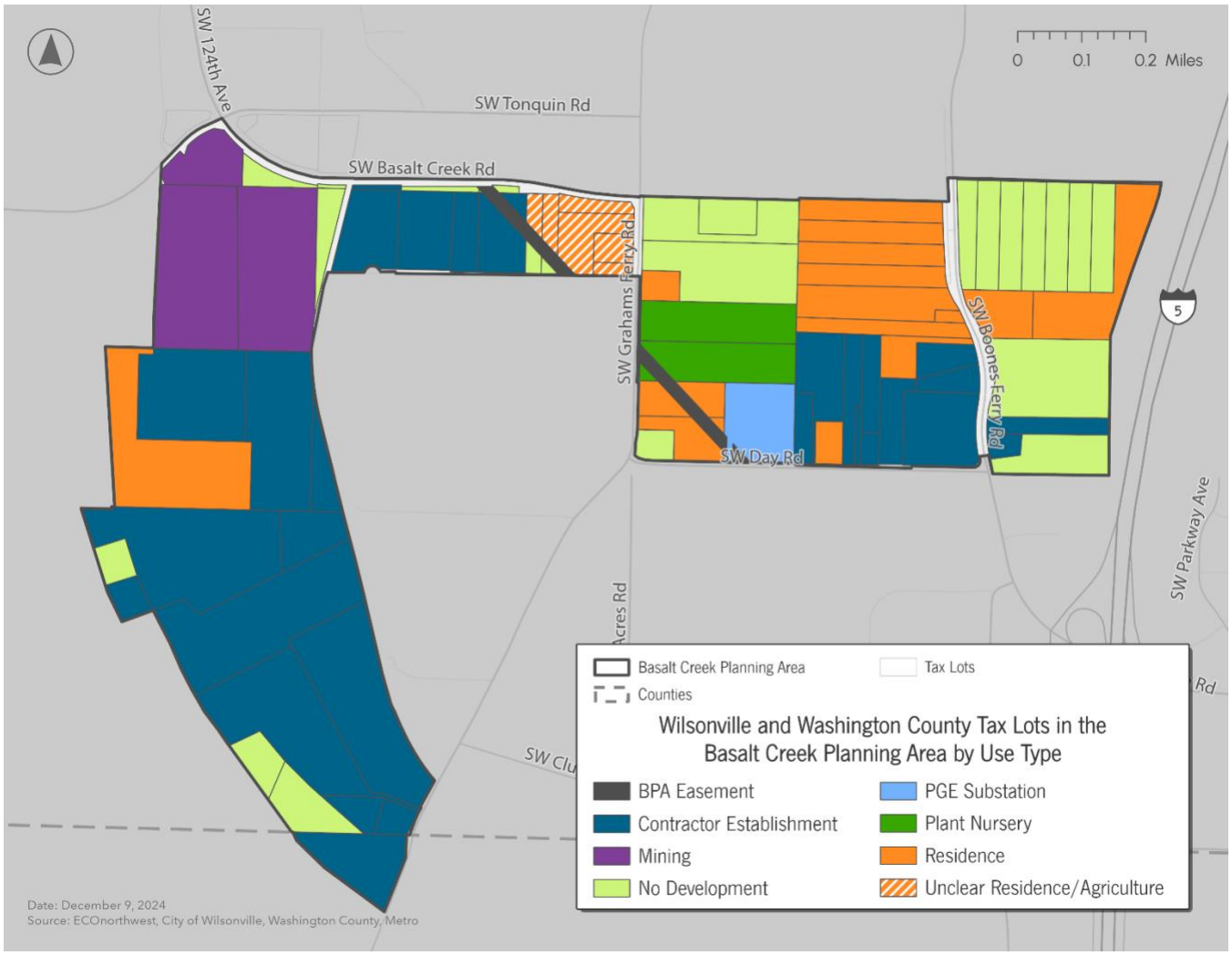
  With site aggregation, the southeastern portion could accommodate small-scale industrial or office users on up to five acres. These uses could resemble industrial condo developments like the Commerce Circle Business Park or Riverwood Business Center in Wilsonville, which integrate office and small-scale production spaces. The northeastern portion, while it could also redevelop, is likely less appealing due to its irregular shape and nearby high-value residences. The presence of existing residences, including some high-value homes, are likely to delay redevelopment timelines compared to other opportunity sites.
- **The West Railroad** site spans 165 acres, with 55 percent (90 acres) of the land unconstrained. Its large parcels and access to regional transportation networks could make it physically suitable for uses such as general manufacturing, food processing, and warehousing or distribution. Proximity to Coffee Creek's industrial area further enhances its appeal to businesses providing support services to neighboring industries. However, significant infrastructure upgrades are required, and access is limited by only one established point of vehicular ingress and egress, as well as the low railroad undercrossing on SW Grahams Ferry Road, which does not currently allow passage by standard-height semi-trucks. Additionally, the site's proximity to a rail line and a mining operation could make the site less attractive to advanced manufacturing or other industries sensitive to vibration. Ongoing infrastructure alignment and capacity studies will provide further clarity on the site’s suitability for targeted industries.

Contractor Establishments: Redevelopment Opportunities and Challenges

Contractor establishments have a substantial presence in Basalt Creek, particularly in West Railroad and along SW Day Road (Appendix C includes the full analysis of contractor establishments). These properties—often comprising small offices, storage buildings, and laydown yards—contribute limited employment and yield lower property values compared to urbanized industrial land. Figure 3 identifies the current land use categories and highlights areas occupied by contractor establishments.

While the Site Suitability Analysis assessed opportunity sites based on physical characteristics and their potential to support target industries should landowners opt to develop or redevelop, this analysis evaluates the redevelopment potential of contractor establishments under current market conditions.

Figure 3. Land Use Categories with Constraints, BCPA, 2024



Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro

Key Findings

Existing contractor establishments generate substantial income for property owners, reducing their motivation to sell or redevelop. For redevelopment to be financially viable, urban industrial rents would need to increase by 60 percent or more to justify the investment. Developers assess property value based on what remains after accounting for construction, entitlement, and operational costs, as well as conservative revenue assumptions. In Basalt Creek this is likely to result in developers offering less than what existing owners value their property for, especially when they are already hosting or running successful contractor establishments.

Relocation options for businesses currently occupying these sites are limited, creating additional challenges. Owner-occupied properties are even less likely to redevelop, as owners face relocation costs and potential increases in operational expenses. With limited regional industrial land, relocation could push these businesses farther from their markets, increasing costs for labor, transportation, and operations. Without considerable increases in urban industrial rents or land values, redevelopment for these properties remains unlikely.

Contractor establishments are unlikely to transition to higher intensity uses without City intervention. The gap between property values expected by owners and what developers can pay is unlikely to close naturally, as rising rents for industrial uses will likely coincide with increased contractor establishment rents. If the City seeks to promote urban industrial development in these areas, a more proactive approach will be necessary, including targeted incentives and policies to encourage redevelopment.

Conclusion and Recommendations

The BCPA offers a unique opportunity for Wilsonville to support regional economic growth and industrial development. Its strategic location near transportation networks, access to a skilled labor force, and proximity to established industrial clusters position the area as a strong candidate for attracting businesses supporting semiconductor supply chain, cleantech, advanced manufacturing, and logistics. However, realizing this potential will require addressing critical challenges and capitalizing on existing opportunities.

Fragmented land ownership and contractor establishments, which continue to be approved under Washington County's jurisdiction, remain barriers to the higher-intensity urban industrial uses envisioned in the BCCP. These establishments generate substantial revenue for property owners, reducing the incentive to sell or redevelop. For redevelopment to occur, urban industrial rents would need to rise substantially to bridge the gap between property owners' expectations and what developers are willing to pay. However, this gap is unlikely to close in the near term because as urban industrial rents rise, contractor establishment rents are also likely to increase. Additionally, relocation options for contractor establishment businesses, especially for owner-occupied properties, are limited, creating further challenges.

Rural infrastructure that does not meet urban standards also remains a key barrier to industrial development. This issue affects the feasibility of both immediate development and long-term growth, particularly in West Railroad where access is limited and the railroad undercrossing on SW Grahams Ferry Road precludes truck passage. Addressing these constraints is essential to unlocking the area's potential for higher-density employment uses.

Despite these challenges, there are clear opportunities. Development-ready sites and engaged property owners provide a strong starting point. Stakeholders have expressed a willingness to invest in infrastructure improvements if given access to large unconstrained sites, creating potential for catalytic projects that could spur additional development.

Wilsonville must balance its development goals with market realities. The Portland Metro area's industrial demand is driven by businesses expanding or upgrading facilities. Imposing restrictive requirements, such as mandating a high share of manufacturing, could deter development and drive users to more accommodating locations. Additionally, declining demand for office space nationally and regionally, driven by remote and hybrid work trends, suggests a reduced role for office uses compared to the original BCCP. While there are some exceptions to weak demand for suburban office space, our assessment is that the Portland Metro market dynamics are more consistent with national trends.

In conclusion, Basalt Creek presents a strong opportunity for Wilsonville to foster economic growth and industrial expansion. However, achieving this vision requires overcoming substantial challenges related to land use, infrastructure, and market dynamics. These findings provide the foundation for identifying actionable steps to unlock the area's full potential and align development with the City's long-term goals.

Recommendations

The recommendations for the BCPA are structured into four categories: **Further Exploration, Planning, Funding, and Investment.** These strategies address zoning, infrastructure, and development challenges while providing a phased approach for implementation. Central to these recommendations is the recognition that the status quo is unlikely to change without the City taking a more direct approach to encouraging development. Challenges such as fragmented ownership, the presence (and continued growth) of contractor establishments, and substantial needed infrastructure upgrades to serve urban developments are unlikely to resolve without City intervention.

Wilsonville can approach Basalt Creek's development with varying levels of involvement. A conservative approach would prioritize zoning and regulation, planning control, and limited infrastructure investments to guide development. A more proactive approach would accelerate the BCPA's vision by supporting relocation of contractor establishments, acquiring and aggregating land, and investing in additional infrastructure needs in areas like West Railroad. Which strategy the City chooses will ultimately depend on balancing risks with the desire to unlock the area's potential.

FURTHER EXPLORATION

This category focuses on gathering data, engaging stakeholders, and building a foundation of knowledge to support strategic decisions.

- **Outreach to Property Owners**: Engage with property owners to understand their development plans, challenges, and willingness to participate in redevelopment efforts. Explore opportunities for land assembly and redevelopment partnerships.
    - *Craft Industrial Opportunity:* Engage with landowners in the Craft Industrial area to explore dividing the site into east and west portions (by partitioning lots), focusing on creating developable parcels that align with the area's potential and constraints.
- **Coordinate with Portland General Electric (PGE) on Power Needs**: Collaborate with PGE to evaluate existing and future power requirements for industries such as advanced manufacturing and semiconductor supply chains, as identified in the Economic Inventory.
- **Explore Partnerships**: Identify opportunities to work with public entities (e.g., Port of Portland, Business Oregon, Greater Portland Inc.) and private partners to align resources and attract desired industries.
- **Support Contractor Establishment Relocation or Compliance:** Develop strategies to help contractor establishments relocate or consolidate or conform with City standards. This could involve creating incentives for relocation or, if necessary, working with them to bring existing operations into compliance with City service and land use standards.

PLANNING

Strategic planning ensures the alignment of zoning, policies, and infrastructure with long-term economic goals.

- **Apply the Planned Development Industrial (PDI) Zone across Basalt Creek with Modifications.** This approach would support a wide range of industrial and office uses consistent with the BCCP and the Economic Inventory. It allows the market to determine the most appropriate locations for various business types while still prioritizing industries aligned with the City's employment and wage goals.
  - *Prohibit Low-Intensity Uses and Address Existing Contractor Establishments.* Establish zoning prohibitions or limitations on low-intensity uses, such as contractor establishments, that do not meet long-term employment density goals. For existing contractor establishments, determine the appropriate regulatory approach, such as designating them as conditional, nonconforming, or prohibited uses.
  - *Evaluate Additional Standards or Allowances for the Craft Industrial Area.* Given the site's constraints and proximity to residential development, the Craft Industrial Area has limited development potential. To maximize its utility, consider allowing additional uses—such as live-workspaces, small-scale offices, and small-scale production facilities—that may not fully align with the current PDI zone. This could involve creating a separate zoning designation or an overlay to expand the range of permitted uses within the PDI zone.
- **Update Urban Planning Area Agreement (UPAA)**: Amend agreement with Washington County to transfer planning authority for Basalt Creek to the City, ensuring alignment with Wilsonville's long-term vision. This would reduce the risk of continued low-intensity uses, alleviate staffing burdens at the County level, and reduce future pressures to expand the urban growth boundary (UGB).
  - *Example*: Troutdale has an Intergovernmental Agreement with Multnomah County that transfers planning authority to the City for areas within its UGB.
- **Preliminary Urban Renewal Area (URA) Analysis**: Evaluate the feasibility of establishing a URA or expanding the Coffee Creek URA to help fund infrastructure improvements and catalyze development. NOTE: The City already has funding for this task as part of the Wilsonville Industrial Land Readiness project.
- **Consider a Development Plan for West Railroad**: Develop a plan for West Railroad that balances industrial development with community priorities. While the BCCP deemed much of the site unbuildable and omitted detailed future use recommendations, the City has continued to address the area in broader land use and infrastructure planning. Building on these efforts, the plan should involve input from landowners, potential users, and ideally a master developer to ensure alignment with stakeholder needs and market trends. Importantly, creating this plan would not preclude zoning the area to guide immediate development efforts.

FUNDING

Identifying and securing funding sources will be critical to addressing infrastructure needs and supporting redevelopment.

- **Explore and Establish Funding Mechanisms such as:**
  - Use Urban Renewal to finance infrastructure improvements and reduce barriers for developers pending the results of the URA feasibility study.
  - Explore the potential for Local Improvement Districts (LIDs) and/or public-private partnerships to share costs and responsibilities. NOTE: Cost sharing mechanisms of owners of contractor establishments may be less attractive if they do not need the infrastructure improvements or connections to continue business operations.
- **Explore and Leverage State and Federal Funding:** Leverage grants, loans, and other funding programs to support infrastructure upgrades and attract investment. These could include, but are not limited to:[4]
  - Statewide Transportation Improvement Program (STIP)
  - Immediate Opportunity Fund (IOF)
  - Oregon Transportation Infrastructure Bank (OTIB).
  - Safe Drinking Water Revolving Fund (SDWRLF).
  - Water Wastewater Fund (W/W).
  - Special Public Works Fund (SPWF).
  - U.S. Economic Development Association (EDA) Public Works Program

INVESTMENTS

Targeted investments will help unlock development opportunities and create momentum for future growth.

- **Develop Infrastructure**: Focus early infrastructure improvements on properties that are cost-effective to serve and likely to develop in alignment with the BCPA vision, such as the SW Greenhill Road site. These early investments can demonstrate feasibility and attract additional development.
  - The City could collaborate with property owners, Greater Portland Inc. (GPI), and Business Oregon to attract a catalytic user that could justify and accelerate infrastructure development for the site. Combining this strategy with site acquisition efforts and development planning for West Railroad would further enhance its effectiveness and overall development potential.
- **Provide Development Incentives such as**:

[4] As a first step, the City should draft a list of potential projects and evaluate eligibility for funding programs; ECOnorthwest did not evaluate eligibility for these funding programs.

- Consider system development charge (SDC) adjustments or deferrals for targeted developments that support the city's vision for BCCP and where it would not place undue burdens on funds available for capital improvements.
- Market the City's "WIN" (Wilsonville Investment Now) program in conjunction with Basalt Creek development opportunities. NOTE: This urban renewal program would no longer be available if an area-wide urban renewal area is established.
- Provide relocation assistance to contractor establishments to enable redevelopment. This could include support identifying alternative sites and streamlining permitting processes if those sites are in Wilsonville.

- **Site Acquisition and Aggregation**: Partner with public or private entities to assemble large, contiguous parcels that can support high-value industrial users. Consider using Urban Renewal funds and public partner contributions to facilitate these efforts.
  - The City could explore securing **purchase options** on key parcels to facilitate land assembly. A purchase option allows the City the right to buy property within a specified timeframe, offering flexibility without the immediate cost of full acquisition. This proactive approach provides leverage and control over future development while allowing the City to decline the purchase if circumstances change or acquisition becomes unfeasible. To advance this strategy, the City should identify and prioritize purchase option agreements with property owners of high-opportunity sites, building momentum for collaboration and development.

Phasing

The implementation of the BCPA recommendations is structured into three phases: Immediate (0–3 years), Midterm (3–7 years), and Long-Term (7–15 years). Each phase focuses on actionable steps to address development challenges, align infrastructure, and catalyze economic growth while adapting to market trends.

IMMEDIATE ACTIONS (0–3 YEARS)

The initial phase establishes the foundational elements for Basalt Creek's development by addressing zoning, engaging stakeholders, and identifying funding strategies. Key priorities include:

- Establish zoning
- Amend UPAA with Washington County
- Engage property owners to discuss future plans, development potential, and incentives
- Explore ways to support contractor establishment relocation and/or accommodate and bring them to City standards (urban industrial development)

- Analyze funding needs and sources and develop funding strategy to support infrastructure investments and other priorities such as land acquisition and developer incentives
- Explore partnerships
- Coordinate with PGE on anticipated power needs
- Prioritize infrastructure to properties that are both high opportunity and "low-cost-to-serve," to showcase early wins

MIDTERM ACTIONS (3–7 YEARS)

This phase builds on early successes by advancing funding mechanisms, solidifying plans for key areas, and fostering development agreements. Major actions include:

- Adopt funding mechanisms to support infrastructure investments and other priorities (this is a likely prerequisite to land acquisition)
- Acquire key parcels (or purchase options) as opportunity and funding allows
- Develop West Railroad's development plan with input from landowners, potential users, and preferably a master developer
- Secure initial development agreements and fund major infrastructure upgrades through URA or other funding mechanism
- Continue to coordinate with PGE

LONG-TERM ACTIONS (7–15 YEARS)

The final phase focuses on sustaining Basalt Creek's momentum by adapting to market trends and completing infrastructure build-out to support full site utilization. Long-term priorities include:

- Monitor market trends and adjust zoning or policies to accommodate emerging industries
- Complete phased infrastructure build-out to support full site utilization

This phased approach ensures that Basalt Creek's development progresses systematically, balancing immediate actions with long-term investments to achieve the City's vision for economic growth and industrial expansion.

Appendix A: Economic Inventory and Basalt Creek Concept Plan Land Use Analysis

ECOnorthwest

September 2024

Industrial Land Readiness:

Economic Inventory and Basalt Creek Concept Plan Land Use Analysis -

City of Wilsonville

Prepared for: City of Wilsonville

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Acknowledgments

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That assistance notwithstanding, ECOnorthwest is responsible for the content of this report. The staff at ECOnorthwest prepared this report based on their general knowledge of the economics of recreation, amenities, and regional economies. ECOnorthwest staff contributing to this study included ***Bob Parker, Nicole Underwood, Barrett Lewis, and Mackenzie Visser.*** ECOnorthwest also relied on information derived from government agencies, private statistical services, the reports of others, interviews of individuals, or other sources believed to be reliable. ECOnorthwest has not independently verified the accuracy of all such information and makes no representation regarding its accuracy or completeness. Any statements nonfactual in nature constitute the authors' current opinions, which may change as more information becomes available.

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Table of Contents

1. Introduction

Purpose and Background

After a multiyear planning process, Wilsonville, in partnership with Tualatin, developed and adopted the Basalt Creek Concept Plan (BCCP) in 2018. The BCCP established a framework for development in the area over the next twenty years. Wilsonville is planning for the development of its portion of the Basalt Creek Planning Area (BCPA), located in unincorporated Washington County.

The City adopted the BCCP in anticipation of future industrial development. However, at the time of adoption, a number of implementation steps remained. In the years following the adoption of the BCCP, Washington County has approved development consistent with County zoning. The BCPA now hosts several contractor establishments that, while providing jobs and economic activity, are not the type of development or commerce envisioned in the Concept Plan.

The City is currently working on the final implementation steps to make the BCPA development ready. These steps include designating the zoning to be used in the area as well as refining infrastructure funding plans. Since adoption of the BCCP in 2018, significant economic shifts have occurred at national, state, regional, and local levels to be considered during the current implementation steps. Given these economic shifts, reassessing Basalt Creek's market conditions is crucial for Wilsonville's implementation process. This reassessment will help ensure that development plans align with current economic realities and future projections.

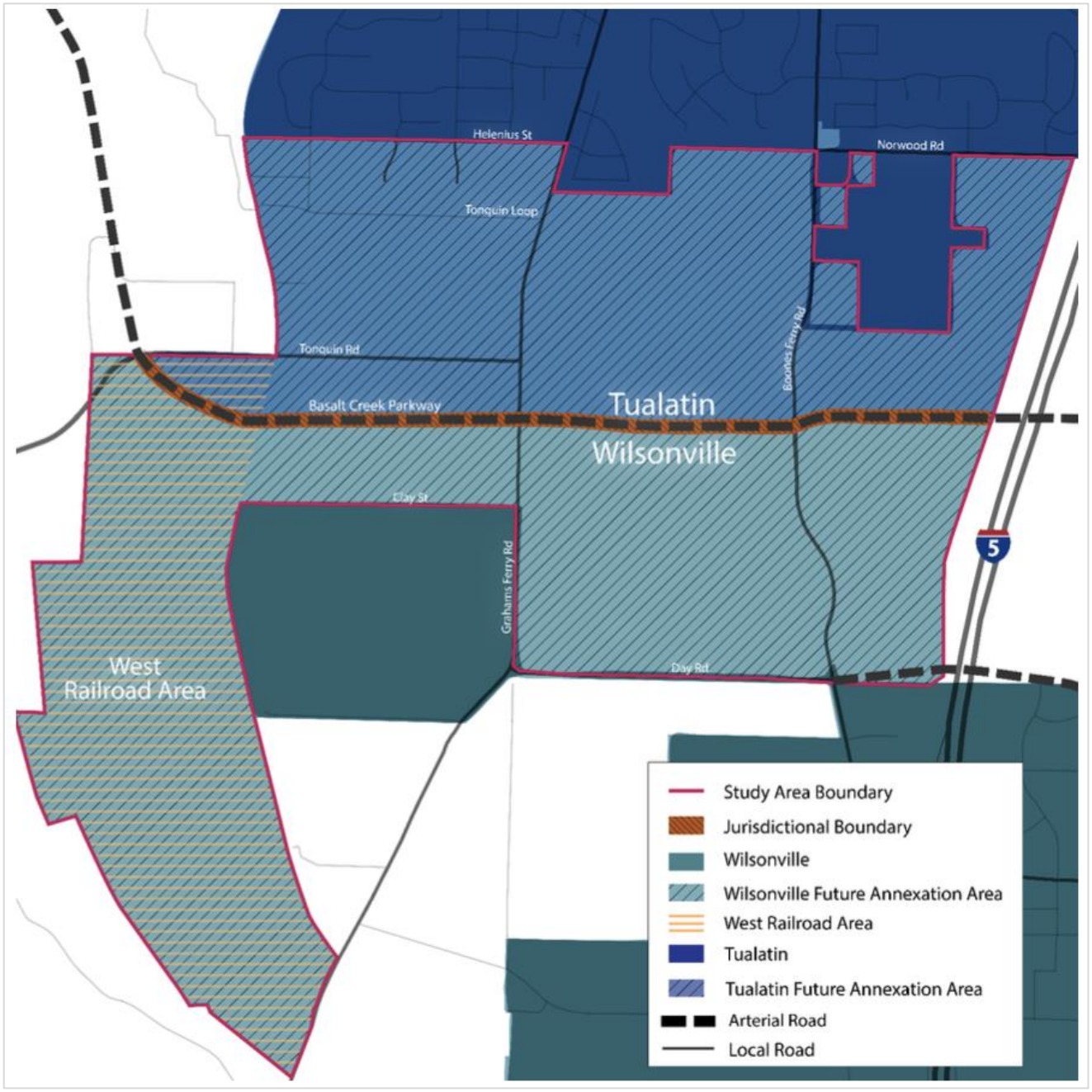
To understand the changing market conditions, Wilsonville engaged ECOnorthwest to conduct an updated market assessment and industrial lands study for Wilsonville’s portion of Basalt Creek. This Economic Inventory report is a key component of that study, providing an overview of the current economic conditions and trends affecting the BCPA. The findings from this analysis will inform recommendations on how to translate the BCCP’s land use concepts into zoning designations and inform infrastructure planning to support economic development opportunities in the area.

Basalt Creek Planning Area Overview

The Basalt Creek Planning Area (BCPA) is an 847-acre area located in unincorporated Washington County between the southern border of incorporated Tualatin and the northern border of incorporated Wilsonville. This report focuses on the Wilsonville section, which includes 480 acres within the designated Wilsonville Future Annexation Area and West Railroad Area (as depicted in Figure 1). The BCPA is centrally located in the southern portion of the Portland metro, easily accessible and connected to other growing industrial areas, including Sherwood and Tualatin. It has access to the Portland metro and Mid-Valley labor sheds, making it well positioned to attract various types of industry.

Currently, the Wilsonville portion of the BCPA falls under Washington County's Future Development 20-Acre District (FD-20) zoning, which allows a variety of low-intensity uses. The area has limited development, with much of the developed land used for contractor establishments, including storage of equipment and vehicles. A contractor establishment is a facility where contractors and/or subcontractors store and organize their tools, equipment, supplies, and materials. These facilities can include buildings, grounds, or structures, and often have outdoor storage and assembly areas. While important uses, these lands host limited employment and assessed property value, much less than the employment densities and development typologies envisioned in the BCCP and typical of land within the metro urban growth boundary (UGB) and incorporated City limits.

Figure 1: Basalt Creek Planning Area



Source: Basalt Creek Concept Plan, 2018. Note: Wilsonville's portion of the Basalt Creek Planning Area (BCPA) is inclusive of the Wilsonville Future Annexation Area and West Railroad Area.

How does the Basalt Creek Concept Plan guide development?

After a multiyear planning process, Wilsonville, in partnership with Tualatin, developed and adopted the Basalt Creek Concept Plan (BCCP) in 2018. The BCCP established a framework for development in the area over the next 20 years. The BCCP identifies preferred land uses across the area and strives to coordinate future land use, transportation, and infrastructure investments between Tualatin, Wilsonville, and Washington County. In particular, the BCCP:

- Established a vision for urbanization of the Basalt Creek Planning Area
- Established a new jurisdictional boundary between Tualatin and Wilsonville (to determine which parts of the Planning Area may be annexed into and served by each City)
- Identified conceptual land uses across the area
- Recommended high-level designs for transportation and infrastructure systems to support future development
- Set specific action items and implementation measures

GUIDING PRINCIPLES

Guiding Principles represent the collective interests and goals for the Basalt Creek Planning Area, as agreed to and established by the Joint Councils of Tualatin and Wilsonville.

- **Maintain and complement the Cities' unique identities.**
- **Capitalize on the area's unique assets and natural location.**
- **Explore creative approaches to integrate jobs and housing.**
- **Create a uniquely attractive business community unmatched in the metropolitan region.**
- **Ensure appropriate transitions between land uses.**
- **Meet region responsibility for jobs and housing.**
- **Design cohesive and efficient transportation and utility systems.**
- **Maximize assessed property value.**
- **Incorporate natural resource areas, and provide recreational opportunities as community amenities and assets.**

Land Use Designations

The BCCP identified a mix of land use designations for the area based on its land suitability analysis and adjacent land uses. For Wilsonville, the BCCP proposed four main land use designations. However, West Railroad did not include a specific concept because it was viewed as having lower development potential and was slated for future study and consideration. These designations, as defined in the BCCP, are:

HIGH-TECH EMPLOYMENT DISTRICT

Most of the buildable acres in the Planning Area south of the proposed Basalt Creek Parkway are devoted to a mix of higher-density employment land. The High-Tech Employment District is expected to accommodate the largest number of jobs (1,916) with a mix of warehousing, manufacturing, and office buildings. This land use is in the southern and eastern sections of the Planning Area, covering all Wilsonville land east of SW Boones Ferry Road and most of the land south of SW Clay Street, which extends to SW Day Road and is bordered to the west by Coffee Creek Correctional Facility.

The BCCP assumed the following breakdown of uses for the High-Tech Employment District, which helped estimate the amount of traffic the development would generate.

Table 1. BCCP Assumed Breakdown of Uses for the High-Tech Employment District

USE	SHARE
Retail	1%
Office	45%
Industrial	38%
Warehousing	15%
TOTAL	**100%**

Source: Basalt Creek Concept Plan, 2018. Note: Share may not equal 100% due to rounding.

CRAFT INDUSTRIAL

The southwest corner of the intersection of SW Boones Ferry Road and the new Basalt Creek Parkway is planned as Craft Industrial, which allows for a mix of smaller-scale commercial uses and may include live-work units. These envisioned development types respond to the topography on those parcels and their location directly south across the Parkway from residential land and southwest of the neighborhood commercial node across the Parkway in Tualatin. Craft Industrial is a better fit with those surrounding uses, providing a transition to the higher-intensity employment uses to the south. This area allows less than 20 percent residential use and is expected to accommodate 27 new jobs and 6 new housing units in the form of live-work units.

The BCCP assumed the following breakdown of uses for the Craft Industrial District, which helped estimate the amount of traffic the development would generate.

Table 2. BCCP Assumed Breakdown of Uses for the Craft Industrial District

USE	SHARE
Retail	24%
Office	31%
Industrial	44%
Warehousing	1%
TOTAL	100%

Source: Basalt Creek Concept Plan, 2018. Note: Share may not equal 100% due to rounding.

LIGHT INDUSTRIAL DISTRICT

This land is located across the southern edge of Basalt Creek Parkway and its future extension just north of Coffee Creek Correctional Facility, and it will be able to accommodate 581 new jobs, primarily in warehousing and light manufacturing.

The BCCP assumed the following breakdown of uses for the Light Industrial District, which helped estimate the amount of traffic the development would generate.

Table 3. BCCP Assumed Breakdown of Uses for the Light Industrial District

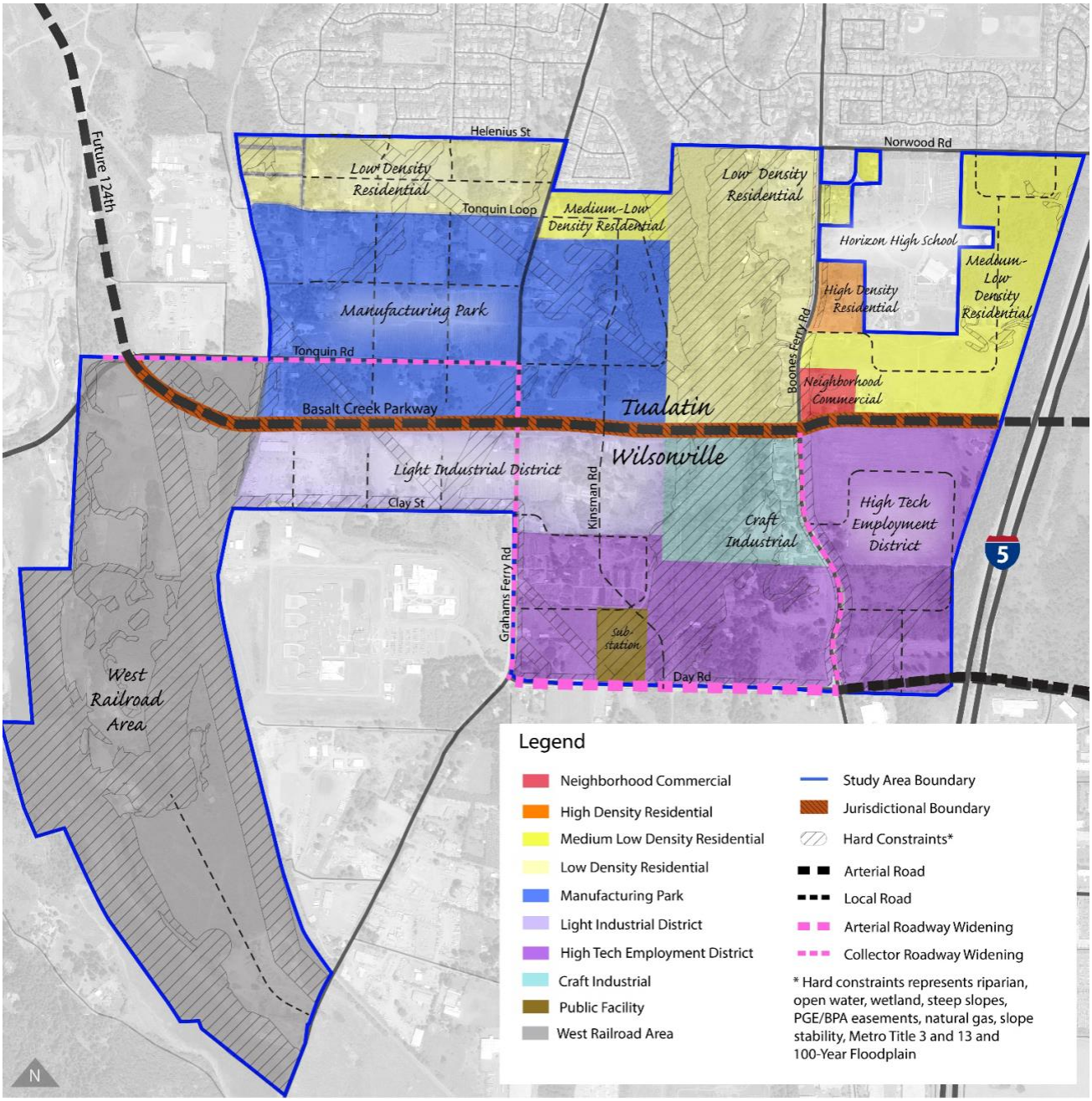
USE	SHARE
Retail	1%
Office	19%
Industrial	69%
Warehousing	11%
TOTAL	100%

Source: Basalt Creek Concept Plan, 2018. Note: Share may not equal 100% due to rounding.

WEST RAILROAD AREA

The West Railroad Area is divided from the rest of the Planning Area by the Portland and Western Railroad (PNWR) and the Coffee Creek Correctional Facility. When the BCCP was adopted, the area was heavily constrained by wetlands habitat, steep slopes, and fragmented property ownership. Initial estimates indicated that it would be costly to serve this area with adequate infrastructure due to its location. However, it was identified as having potential for resource conservation, future public access to nature, and possibly additional land uses. Because it was considered to have much lower development potential than the rest of the Planning Area, a future land use scenario was not created. Additional analysis on infrastructure funding and appropriate land uses was recommended once development and extension of infrastructure occurred in the rest of Basalt Creek.

Figure 2. Basalt Creek Land Use Concept Map



Source: Basalt Creek Concept Plan, 2018.
Note: West Railroad did not include a specific concept because it was viewed as having lower development potential and was slated for future study and consideration.

Implementation Measures

The BCCP also outlined the following implementation measures for the Cities:

1. **Update Urban Planning Area Agreements (UPAAs)** to acknowledge the future jurisdictional boundary and outline what areas may be annexed by each City, as well as transfer planning authority to the Cities.
2. **Amend Comprehensive Plans** to include the adoption of the Concept Plan.
3. **Assess zoning** and make sure it is compatible with anticipated land uses in the area and special design elements in the Concept Plan. The Concept Plan suggested Wilsonville consider applying the Coffee Creek Industrial Design Overlay District (form-based code) in the area.
4. **Annex as demand occurs** based on the pace of development and begin to make utility improvements adjacent to existing City services.
5. **Consider capital improvements** to spur development via financing the infrastructure themselves for reimbursement, creating a cooperative financing district, or developing the infrastructure to induce desired development.
6. **Consider master planning** in the area.

Wilsonville updated its UPAA in 2019 and amended its Comprehensive Plan after the Concept Plan was adopted. The City is now working on developing zoning and evaluating infrastructure needs as a part of this project.

Basalt Creek Concept Plan Proposed Employment Densities

The BCCP assigned employment densities to each land use designation to align with the regional employment capacity and traffic counts. According to the Concept Plan, the Wilsonville portion of the BCPA could support 2,524 jobs across 136.6 buildable acres, for an average employment density of 18.5 employees per gross buildable acre. The specific land use designations and respective employment densities are shown below. Note: West Railroad did not include a specific concept because it was viewed as having lower development potential in the near term and was slated for future study and consideration.

Table 4: Basalt Creek Concept Plan Land Use Designations

LAND USE DESIGNATION	BUILDABLE ACRES	TOTAL JOBS	JOBS PER GROSS BUILDABLE ACRE
Craft Industrial	1.3	27	21.7
Light Industrial District	35.3	581	16.5
High Tech Employment District	94.5	1,916	20.3
Functionally Unbuildable	5.6	0	0
TOTAL	**136.6**	**2,524**	**18.5**

Source: Basalt Creek Concept Plan.

Other Guiding Plans and Documents

WILSONVILLE COMPREHENSIVE PLAN

Wilsonville's Comprehensive Plan, updated in 2024, designates Basalt Creek and West Railroad as areas of special concern (M and N), and it describes special considerations that must be addressed in development of these areas. Design objectives established for Area of Special Concern M, Basalt Creek, include:

- Consider adopting a form-based code similar to that adopted in the Coffee Creek Industrial Area for new industrial development in Basalt Creek.
- Protect key natural resources and sensitive areas while making recreational opportunities accessible by integrating the new parkland, open spaces, natural areas, and trails in Basalt Creek into existing regional networks. Development should protect, enhance, and provide access to these natural resources.
- Locate north-to-south trails near the Basalt Creek Canyon and provide bicycle connections that would connect to other cities and trail systems, serving as an asset for both residents and employees in the area.
- Provide strong transit access to support employment within Basalt Creek. Integrate transit access with the bike, pedestrian, and trail services at key access points along SW Grahams Ferry Road, SW Boones Ferry Road, SW Day Road, SMART Central, and the Coffee Creek Correctional Facility.

No design objectives were included for Area of Special Concern N, West Railroad; however, it is noted that the area will require additional planning before any development occurs.

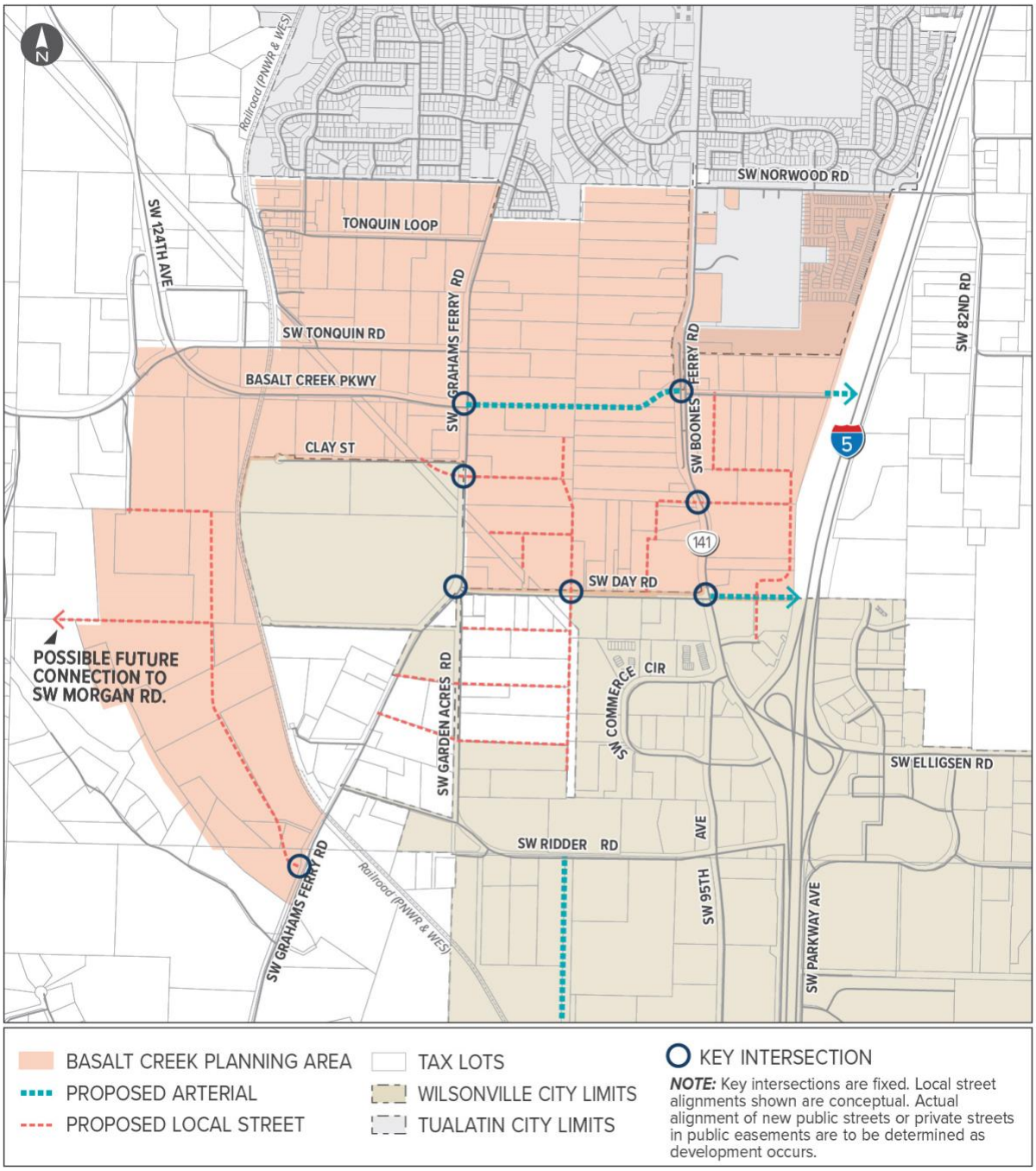
BASALT CREEK TRANSPORTATION REFINEMENT PLAN

The 2013 Basalt Creek Transportation Refinement Plan (TRP) set the layout of major new roads and improvements for the area, including enhanced bike and pedestrian facilities and connections to the future SMART transit system. The TRP included an Action Plan that consisted of 18 transportation investments, which were prioritized according to short-term, medium-term, and long-term projects.

ONGOING INFRASTRUCTURE AND NATURAL RESOURCE PLANNING

The City is currently collaborating with several consultants to update its understanding of infrastructure needs, natural resources, and hazards in the BCPA. The City is working with DKS Associates to refine the street alignment in the BCPA. A preliminary street alignment, provided below, may undergo further changes in future iterations.

Figure 3. Proposed BCPA Street Plan



Source: DKS Associates

Simultaneously, Pacific Habitat Services is assisting the City in updating and refining natural hazard and resource maps of the area. For utility infrastructure, the City has engaged Consor to help with assessing water, wastewater, and stormwater needs, as well as with determining the costs of necessary upgrades. These collaborative efforts aim to provide a comprehensive and up-to-date overview of the area's development requirements and environmental considerations. These simultaneous projects will be incorporated and inform this planning process as information becomes available.

What has happened since the Basalt Creek Concept Plan was adopted?

Since adoption of the BCCP, significant shifts have occurred in the office and industrial real estate markets. The pandemic accelerated the trend toward remote work, leading to higher office vacancy rates and a redefinition of office space needs. Conversely, the industrial sector experienced strong growth characterized by high demand, rising rents, and robust development, which was driven in part by the federal Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act. National trends in these industries are detailed in Section 2, while regional and Wilsonville-specific trends are covered in Section 3.

The City of Wilsonville has not annexed any of Basalt Creek since the BCCP was adopted in 2018. As a result, the BCPA has remained under Washington County's jurisdiction and zoning. Some development has occurred at much lower densities than envisioned in the BCCP, which is allowed under the more permissive County zoning code. Many existing businesses, including contractor establishments, have few employees and are using large areas of land for equipment storage, which conflicts with the City's vision for higher employment density. These uses are permitted under Washington County zoning but do not align with Wilsonville's goals for the area, or with the goals, priorities, and industrial land needs within the greater Portland metro area. Wilsonville's portion of the BCPA consisted of 90 tax lots in 2022. Some areas have a high degree of parcelization, while others are less fragmented. There are a handful of large contiguous landholdings by single ownership. While there has been growth in contractor establishments, many of them existed before the BCCP was in place. These trends are discussed in more detail in Section 3.

The City is interested in future development in Basalt Creek that better aligns with its vision for higher industrial employment density. To make meaningful progress, the City must first establish appropriate zoning designations and plan for necessary infrastructure—key objectives of this project.

2. Changes in Market Conditions

Following the COVID-19 pandemic, office and industrial real estate markets faced challenging development conditions, particularly due to high interest rates, significantly slowing commercial real estate development activity. The increased cost of capital has made many projects economically unfeasible, especially speculative projects that rely on debt financing and those with longer loan payback periods.[1] Higher interest rates have also reduced property valuations, complicating the ability of developers to secure construction financing and attract equity investments.[2] Additionally, rising construction costs—driven by inflation and supply chain disruptions—have further complicated development efforts across these sectors.

This section examines national trends that have shaped office and industrial real estate markets in recent years. It compares these trends to projections from the 2014 Market Analysis by Leland Consulting Group, which informed the BCCP. Understanding the broader national context is crucial for several reasons: It provides a benchmark for comparing local performance. National trends often influence regional and local markets, albeit sometimes with a delay. This understanding helps identify potential opportunities or challenges that may affect Wilsonville and Basalt Creek in the future. It also allows for more informed decision-making and strategic planning at the local level.

Regional and Wilsonville-specific trends are addressed separately in Section 3, building upon this national overview.

National and State Employment Trends

National Employment

The United States has seen robust employment growth since the COVID-19 pandemic. National employment increased by 21 percent between April 2020 and April 2024, surpassing prepandemic levels. The most recent year (April 2023 to April 2024) saw total nonfarm employment grow by 1.8 percent.[3]

Oregon Employment

Oregon's employment recovery, while positive overall since 2020, has fallen behind the national trend. From April 2020 to April 2024, the state's employment grew by 17 percent.

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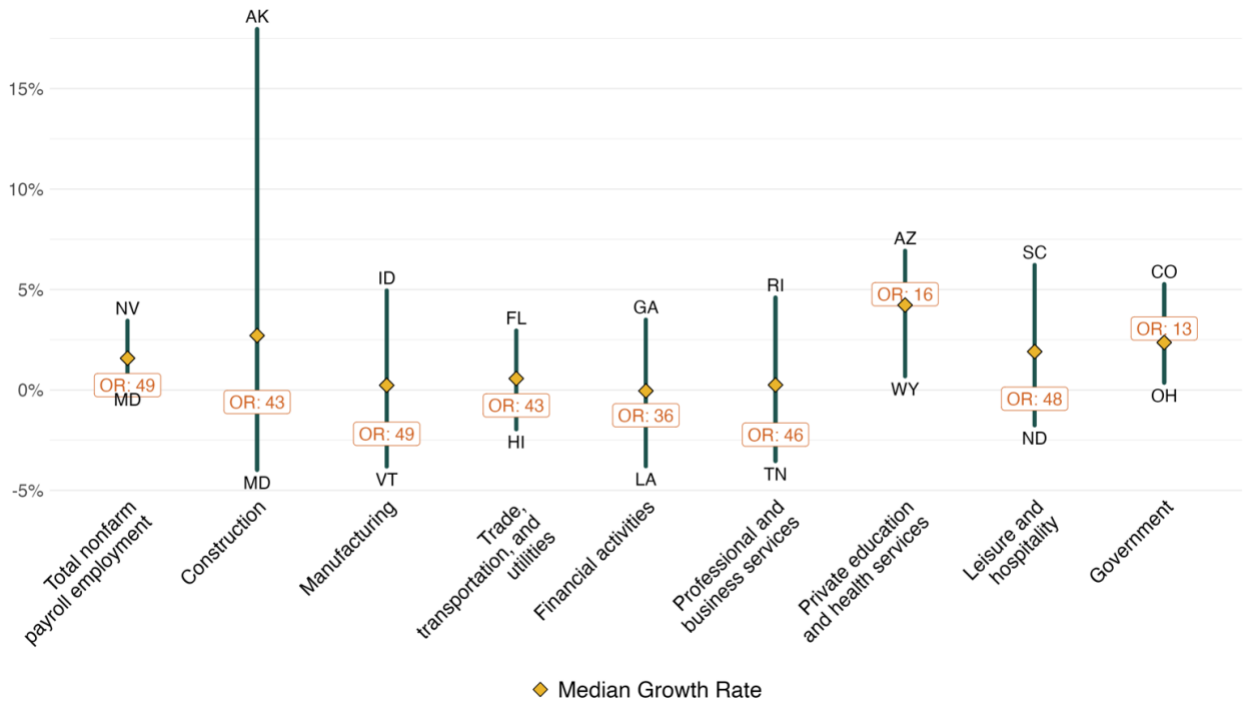
[1] If developers take on debt to finance a project, the longer they take to repay the loan, the more interest will accrue.
[2] In addition to loans, developers will typically finance projects in part with equity investments, in which investors become shareholders in the project.
[3] U.S. Bureau of Labor Statistics, Total Nonfarm Employment (not seasonally adjusted), 2020-2024.

However, in contrast to national growth, Oregon experienced a slight decline of 0.1 percent in employment between April 2023 and April 2024.[4]

The state's recent economic performance is concerning across multiple sectors. Oregon ranked 49th out of all states in nonfarm employment growth rate between April 2023 and April 2024. During this period, the state was among the bottom ten for employment growth (losing jobs while other states saw gains) in manufacturing, construction, trade, transportation and utilities, professional and business services, and leisure and hospitality.

Figure 4. Employment Growth Rates for All States by Sector (April 2023 to April 2024)



Source: U.S. Bureau of Labor Statistics Current Employment Survey, April 2024. Note: This figure compares Oregon's employment growth rate to all other states. For example, "OR: 49" for total nonfarm payroll employment means Oregon ranked 49th out of all states in employment growth rate between April 2023 and April 2024.

[4] U.S. Bureau of Labor Statistics, Total Nonfarm Employment (not seasonally adjusted), 2020-2024

National Office Trends

This section describes national trends for office space excluding industrial, manufacturing, or flex space, which is discussed in the following subsection. The 2014 Market Analysis, which informed the Basalt Creek concept planning process, highlighted a reduced demand for office space and a less robust market, predicting a slower pace for office development. This outlook was based on the fact that regional employment levels in Portland had only recently returned to their prerecession levels of 2008.

These trends have been further exacerbated by the COVID-19 pandemic and resulting market shifts toward remote work. According to the Bureau of Labor Statistics' American Time Use Survey, the share of employees working from home rose from 24 percent in 2019 to 34 percent in 2022.[5] Nationally, the office market as a whole is declining, although high-quality office space remains in relatively strong demand. Key findings include:

- **Negative net absorption:** National net absorption for office space came in negative (at negative 18.2 million square feet) for the tenth quarter in a row.[6] However, this trend is not uniform across U.S. markets, with a third of U.S. office markets having positive net absorption. JLL, a global commercial real estate and investment management company that tracks and reports on commercial real estate dynamics, noted that many properties and markets with high negative net absorption are earmarked for conversion to other uses.[7]
- **Shrinking inventory:** The construction pipeline has decreased by 67 percent since early 2020. As of Q2, 2024 office deliveries (referring to new construction added to the market) were 27 percent below the average since 2020, and the current pipeline is at its lowest point in a decade.[8] As office inventory removals outpace market deliveries, overall office market inventory has declined.[9]
- **Favored product types:** Certain types of office space are outperforming others, with tenants favoring high-quality buildings, such as those in attractive locations or featuring additional amenities. With new construction slowing down, existing high-quality assets will likely continue to see demand as competition decreases. In contrast, older and obsolete spaces may require investment or conversion, and the performance of middle-market spaces will vary depending on factors like location, space type, and submarket.[10]

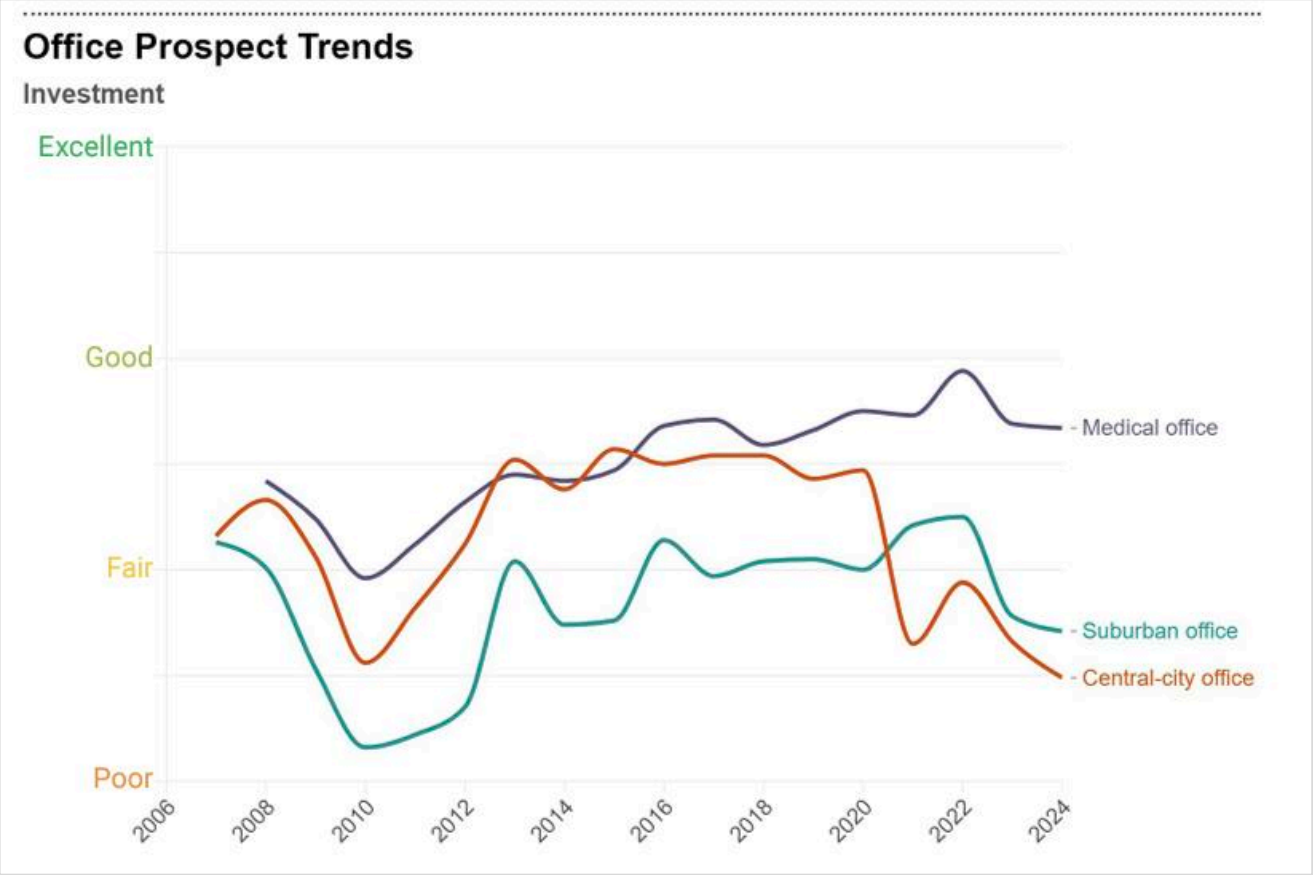
Looking ahead, the office sector is expected to adjust to a hybrid work model, with peak attendance levels stabilizing at around 60 to 70 percent. This shift will set a new baseline for office space requirements. Cushman & Wakefield predicts that office occupancy will start to stabilize in the latter half of 2025 as the pace of adjustments to hybrid spaces

[5] BLS, American Time Use Survey, 2023; does not differentiate between part- and full-time workers
[6] Cushman & Wakefield, U.S. Office Marketbeat Q2 2024
[7] JLL, JLL U.S. Office Outlook Q1 2024
[8] Cushman & Wakefield, U.S. Office Marketbeat Q2 2024
[9] JLL, JLL U.S. Office Outlook Q1 2024
[10] Cushman & Wakefield, U.S. Office Marketbeat Q2 2024

slows down and growth in both employees and new businesses generate demand for office space.[11]

Figure 5 shows the Urban Land Institute's national office market investment prospect trends by secondary market type. While the investment prospect for suburban and central city office space has fallen between "poor" and "fair" in recent years, the investment prospect for medical office space has risen relatively steadily and is rated just below "good."

Figure 5: Urban Land Institute National Office Investment Prospect Trends



Source: Urban Land Institute 2024 Emerging Trends in Real Estate, United States and Canada

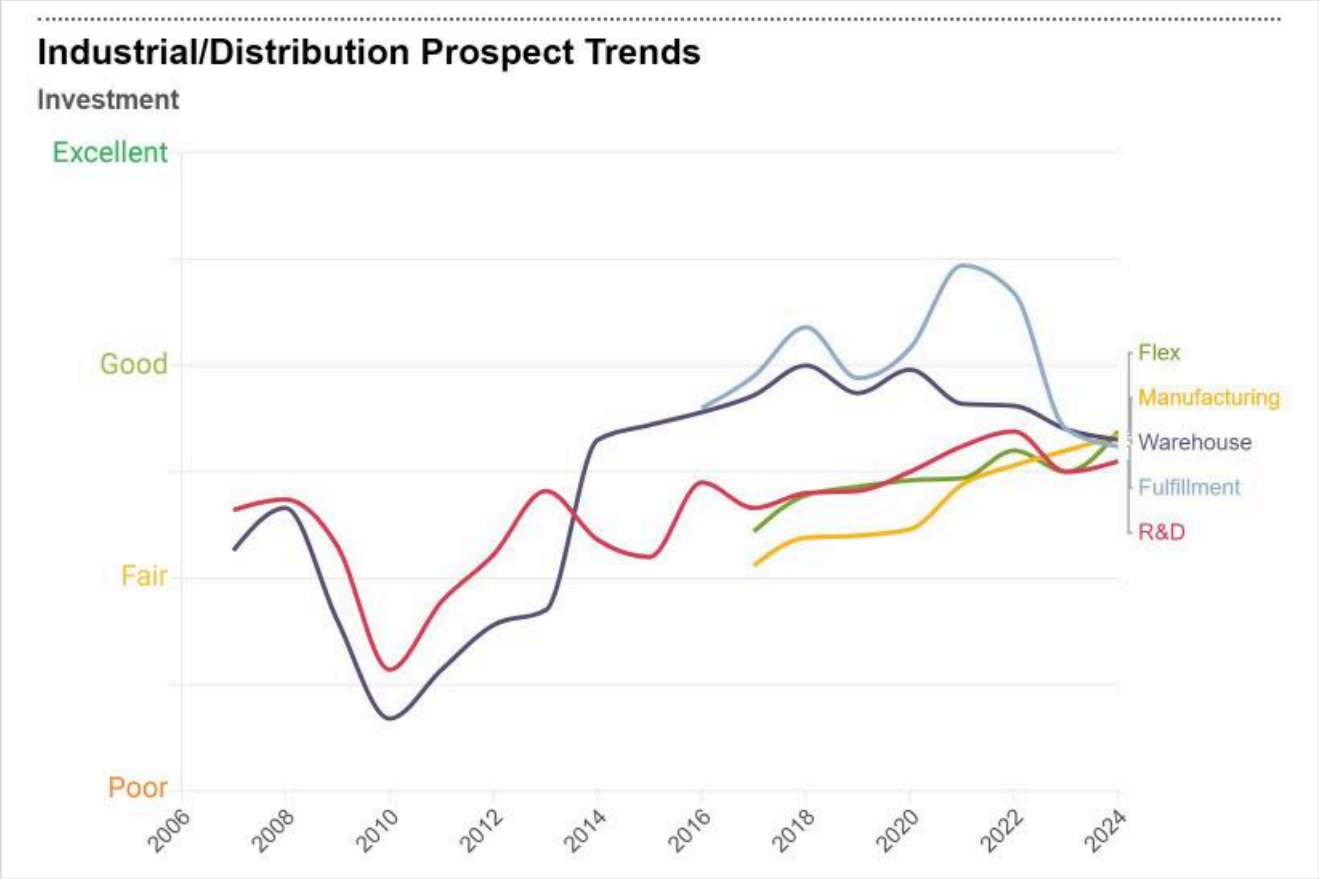
[11] Cushman & Wakefield, U.S. Office Marketbeat Q2 2024

National Industrial Trends

The 2014 Market Analysis, which informed the Basalt Creek concept planning process, reported that industrial space demand was likely to surge as the economy continued to recover from the 2008 recession, citing significant industrial space in the Portland region's development pipeline. It also highlighted that the I-5 South submarket would see some of the greatest demand, predicting that industrial development would continue to outpace office development—an accurate forecast.

The 2014 Market Analysis also correctly predicted stronger markets for research and development, advanced manufacturing, general manufacturing, and warehousing space. Figure 6 shows the Urban Land Institute's trends in investment prospects for industrial and distribution space nationally, showing increased development prospects for these space types from 2014 to around 2021. Historically, fulfillment and warehouse space were rated as better investment prospects than research and development, manufacturing, and flex space. However, in recent years the investment prospects for the various secondary market types have coalesced toward a similar prospect rating, just below "good."

Figure 6: Urban Land Institute National Industrial and Distribution Prospect Trends



Source: Urban Land Institute 2024 Emerging Trends in Real Estate, United States and Canada

In recent years, the industrial real estate market has shown strong performance, particularly in 2022 and 2023, though growth has started to slow in 2024. Despite this slowdown, the national industrial market remains relatively robust overall. Key trends include:[12]

- **Stabilizing vacancy rates:** Since mid-2022, vacancy rates have been rising, but the pace of increase has slowed. As of Q2 2024, the national vacancy rate stands at 6.1 precent and is expected to continue increasing. However, it remains below the 10-year prepandemic average (2010-2019) of 7 percent.
- **Positive net absorption:** Industrial market demand remains strong, with positive net absorption and rising rents. However, the rate of change has slowed compared to previous years. For instance, rents rose by 3.7 percent year over year since 2023 Q2, marking the slowest growth rate since 2020.
- **Slowing construction:** One reason for rising vacancy rates is the influx of new supply, with over 1.2 billion square feet delivered nationally in 2022 and 2023. However, the construction of new industrial projects has slowed significantly, decreasing by 46 percent from Q2 2023, reaching its lowest point in four years.

Nationally, the market is expected to stabilize over the next year as the shrinking construction pipeline and positive net absorption limit the available supply of industrial space. However, Cushman & Wakefield report that "the tailwinds of e-commerce growth, onshoring and nearshoring, and a resilient consumer all set the stage for fundamentals to trend positively going forward, albeit at a pace below 2021 and 2022 highs."[13,14] Key forecasted trends include:

- **Decreasing vacancy rates:** While vacancy rates are expected to continue to rise until early 2025, they are expected to peak at around 6.7 percent and then begin to decrease in the second half of 2025. In conjunction with this trend, annual net absorption is expected to increase through 2025.[15]
- **Increasing rents:** Although the rate of rent increase is expected to slow, asking rents for industrial space are anticipated to continue growing through 2025.[16]
- **Manufacturing growth:** According to JLL, the sustained growth in manufacturing due to reshoring trends (returning production to the United States) will likely continue to drive industrial demand nationally. Supply chains will seek strategically located facilities that can accommodate localized manufacturing, efficient distribution, and resilient inventory management systems.[17]

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[12] Cushman & Wakefield, Industrial Marketbeat Q2 2024 Portland Industrial Report
[13] Onshoring and nearshoring refers to the trend of businesses sourcing production within the United States as opposed to outside the United States.
[14] Cushman & Wakefield, Industrial Marketbeat Q2 2024 Portland Industrial Report
[15] Cushman & Wakefield, Industrial Marketbeat Q2 2024 Portland Industrial Report
[16] Cushman & Wakefield, Industrial Marketbeat Q2 2024 Portland Industrial Report
[17] JLL, Q1 2024 Industrial Outlook

3. Wilsonville Basalt Creek Updated Market Assessment

The Basalt Creek Concept Plan (BCCP) was based on a market assessment conducted in 2014. In the decade since, significant changes have occurred in employment patterns and market conditions. This section provides an updated analysis of regional and Wilsonville-specific employment trends, current forecasts, and present market dynamics, building on the national overview in Section 2.

This updated information establishes a new baseline for understanding Basalt Creek's current market context. Additionally, this section evaluates Basalt Creek's competitive strengths and weaknesses and identifies industries most likely to establish a presence in the area.

Employment Trends and Forecast

In 2022, Wilsonville's employment landscape was characterized by a strong concentration in industrial sectors, with manufacturing, wholesale trade, and construction making up 43 percent of the City's total employment—a much higher share compared to the broader tri-county region. This focus on industrial jobs sets Wilsonville apart, highlighting its distinct role in the regional economy.

Employment Trends

In 2022, Wilsonville had 21,383 covered employees, representing 2.2 percent of the region's covered employment.[18] The City's top three sectors are manufacturing (17.8 percent, 3,796 jobs), wholesale trade (14.4 percent, 3,083 jobs), and construction (10.5 percent, 2,248 jobs). These three industries combined represent 43 percent of Wilsonville's total employment, nearly double the 22 percent share these sectors hold in the broader tri-county region (Clackamas, Multnomah, and Washington Counties).

This concentration in industrial jobs sets Wilsonville apart from the surrounding area. While Wilsonville's top sectors are manufacturing, wholesale trade, and construction, the tri-county region's largest employers are in health care and social assistance, government, and manufacturing.

Table 5: Industry Distribution, Wilsonville and Tri-County Region, 2022

SECTOR	WILSONVILLE		TRI-COUNTY	
	2022 COVERED EMPLOYMENT	SHARE OF EMPLOYMENT	2022 COVERED EMPLOYMENT	SHARE OF EMPLOYMENT
Agriculture, Forestry, Fishing and Hunting	41	0.2%	9,532	1.0%
Utilities, Mining, Quarrying, Oil and Gas Extraction	101	0.5%	2,552	0.3%
Construction	2,248	10.5%	58,672	6.1%
Manufacturing	3,796	17.8%	102,378	10.6%
Wholesale Trade	3,083	14.4%	46,341	4.8%
Retail Trade	2,078	9.7%	90,895	9.4%
Transportation and Warehousing	748	3.5%	43,835	4.5%
Information	121	0.6%	21,957	2.3%
Finance and Insurance	231	1.1%	31,171	3.2%
Real Estate and Rental and Leasing	219	1.0%	16,947	1.8%
Professional, Scientific, and Technical Services	1,974	9.2%	69,299	7.2%
Management of Companies and Enterprises	555	2.6%	36,951	3.8%
Admin., Waste Mgmt, and Remediation	1,655	7.7%	58,605	6.1%
Private Education	90	0.4%	18,213	1.9%
Health Care and Social Assistance	1,007	4.7%	122,197	12.7%
Arts, Entertainment, and Recreation	193	0.9%	13,631	1.4%
Accommodation and Food Services	1,356	6.3%	77,278	8.0%
Other Services (except Public Administration)	454	2.1%	34,720	3.6%
Other (nonclassifiable)	28	0.1%	1,927	0.2%
Government	1,405	6.6%	107,431	11.1%
Total:	**21,383**	**100%**	**964,532**	**100%**

Source: QCEW

[18] **Covered** employment includes employees covered by unemployment insurance. Examples of workers not included in covered employment are sole proprietors, some types of contractors (often referred to as "1099 employees"), or some railroad workers. Covered employment data is from the Oregon Employment Department.

Over the past decade, Wilsonville's employment grew slightly faster than that of the tri-county region. This growth was largely driven by an increase in construction jobs, which more than tripled during this period. Although the tri-county region also experienced growth in construction jobs, Wilsonville's rate of growth was considerably higher. Wilsonville also had strong employment growth in wholesale trade. Notably, while wholesale employment rose in Wilsonville, it declined across the broader tri-county region.

In contrast, Wilsonville experienced a decline in manufacturing employment, even as the region saw growth in this sector. Wilsonville maintained stable employment in the transportation and warehousing sector, while the tri-county region grew substantially.

Table 6: Change in Employment, Wilsonville and Tri-County Region (2012 to 2022)

SECTOR	CHANGE 2012-2022			
	NUMBER		PERCENT	
	WILSONVILLE	TRI-COUNTY	WILSONVILLE	TRI-COUNTY
Agriculture, Forestry, Fishing and Hunting	(2)	810	-5%	9%
Utilities, Mining, Quarrying, Oil and Gas Extraction	(5)	263	-5%	11%
Construction	1,505	20,584	203%	54%
Manufacturing	(549)	8,332	-13%	9%
Wholesale Trade	703	(2,409)	30%	-5%
Retail Trade	81	6,254	4%	7%
Transportation and Warehousing	1	17,473	0%	66%
Information	(34)	1,946	-22%	10%
Finance and Insurance	(16)	(3,904)	-6%	-11%
Real Estate and Rental and Leasing	(31)	3,678	-12%	28%
Professional, Scientific, and Technical Services	452	19,014	30%	38%
Management of Companies and Enterprises	293	15,121	112%	69%
Admin., Waste Mgmt, and Remediation	780	9,821	89%	20%
Private Education	(87)	(617)	-49%	-3%
Health Care and Social Assistance	(435)	26,457	-30%	28%
Arts, Entertainment, and Recreation	33	2,277	21%	20%
Accommodation and Food Services	291	5,588	27%	8%
Other Services (except Public Administration)	51	1,062	13%	3%
Other (nonclassifiable)	15	1,627	115%	542%
Government	289	4,210	26%	4%
Total:	**3,335**	**137,587**	**18%**	**17%**

Source: QCEW

BASALT CREEK PLANNING AREA EMPLOYMENT

The BCPA (Wilsonville portion only) grew in employment from 2012 to 2022, with 275 covered employees reported as of 2022. The average wage in the BCPA was $85,863, which is higher than both the tri-county ($73,995) and City average wages ($74,252), suggesting these are relatively well-paying jobs.

Table 7. Change in Employment and Wage, BCPA 2012-2022

YEAR	TAX LOTS	ESTABLISHMENTS	EMPLOYMENT	TOTAL PAY*	AVERAGE WAGE*
2012	80	11.0	194	$9,593,330	$49,450
2022	90	10.0	275	$23,612,269	$85,863
CHANGE	**10**	**-1**	**81**	**$14,018,939**	**$36,413**

Source: QCEW
*not inflation adjusted

Wilsonville's portion of the BCPA consisted of 80 tax lots in 2012 and 90 tax lots in 2022. Some areas in the BCPA have a high degree of parcelization, while others are less fragmented. There are a handful of large contiguous landholdings by single ownership. In 2012, 8 tax lots had businesses with covered employment, increasing slightly to 10 tax lots in 2022. Employment density on lots with covered employment remains low at 4.4 employees per acre as of 2022, with most tax lots having no covered employment at all.

Table 8. Lots with and without Covered Employment in the BCPA, 2012-2022

	2012			2022		
	TAX LOTS	ACRES	EMPLOYMENT DENSITY	TAX LOTS	ACRES	EMPLOYMENT DENSITY
With Employment	8	62	3.1	10	63	4.4
Without Employment	72	410	n/a	80	406	n/a
Total	**80**	**472**	**0.4**	**90**	**469**	**0.6**

Source: QCEW Note: The minor change in acreage from 2012 to 2022 resulted from constructing of the Basalt Creek Parkway and small adjustments in the recording of tax lots over that period.

It is important to note that these figures only account for covered employees.[19] Some of the land in the BCPA is actively used despite minimal reported employment. The area is primarily used for contractor establishments, including storage yards for various businesses, which typically require fewer employees. It is likely that additional workers are present but not included in the covered employment estimates, such as sole proprietors or other types of uncovered contractors. Due to the prevalence of storage-focused contractor establishments, many lots have minimal building improvements. The improvement-to-land-value ratio is low and has changed little over the past decade.

Table 9. Improvement to Land Value, BCPA, 2012-2022

	LAND VALUE	BUILDING VALUE	IMPROVEMENT TO LAND VALUE
2012	$16,577,800	$6,738,020	0.41
2022	$32,892,790	$16,996,440	0.52

Source: Regional Land Information System (RLIS)

[19] **Covered** employment includes employees covered by unemployment insurance. Examples of workers not included in covered employment are sole proprietors, some types of contractors (often referred to as "1099 employees"), or some railroad workers. Covered employment data is from the Oregon Employment Department.

Employment Forecast

Between 2020 and 2045, the City is projected to grow by 3,471 employees at an average annual growth rate of 0.7 percent. This rate is faster than Tualatin but slightly slower than Sherwood and the region overall. Washington County is projected to grow the fastest of the three counties in the region.

Table 10: Metro Employment Forecast, 2020 to 2045

			CHANGE 2020-2045		
	2020	2045	NUMBER	PERCENT	AAGR
Tualatin	34,115	36,792	2,677	8%	0.3%
Wilsonville	**20,539**	**24,010**	**3,471**	**17%**	**0.7%**
Sherwood	6,646	8,013	1,367	21%	0.8%
Clackamas County	173,891	212,341	38,450	22%	0.9%
Multnomah County	538,628	651,090	112,462	21%	0.8%
Washington County	313,513	391,712	78,199	25%	1.0%
THREE COUNTY TOTAL	**1,026,032**	**1,255,143**	**229,111**	**22.3%**	**0.9%**

Source: Oregon Metro, 2045 Distributed Forecast
AAGR = Annual Average Growth Rate

For 2022 to 2032, the Oregon Employment Department (OED) forecasts the strongest growth for the Portland tri-county region in commercial sectors, led by information, leisure and hospitality, and private education and health services. However, OED also predicts growth in industrial sectors, with the strongest relative growth in the construction industry followed by transportation, warehousing, and utilities.

Table 11: Portland Tri-County Industry Projections, 2022 to 2032

INDUSTRY	EMPLOYMENT		CHANGE	
	2022	2032	NUMBER	PERCENT
Natural resources and mining	10,100	10,600	500	5.0%
Construction	59,100	67,800	8,700	14.7%
Manufacturing	101,300	109,800	8,500	8.4%
Wholesale trade	47,300	51,900	4,600	9.7%
Retail trade	90,000	93,500	3,500	3.9%
Transportation, warehousing, and utilities	46,500	52,500	6,000	12.9%
Information	23,400	28,700	5,300	22.6%
Financial activities	60,600	62,500	1,900	3.1%
Professional and business services	167,600	191,000	23,400	14.0%
Private educational and health services	143,400	168,700	25,300	17.6%
Leisure and hospitality	90,700	109,400	18,700	20.6%
Other services	38,200	43,100	4,900	12.8%
Government	114,200	123,500	9,300	8.1%
Self-employment	62,700	69,600	6,900	11.0%
Total	**1,055,100**	**1,182,600**	**127,500**	**12.1%**

Source: Oregon Employment Department Employment Projections

Real Estate Market Trends

The real estate market trends in Wilsonville and the Portland region generally align with the national trends outlined in Section 2. While Wilsonville's office market typically has a lower vacancy rate compared to the broader region, it has had consistently negative net absorption and recent spikes in the vacancy rate, reaching over 12 percent in 2024.

More positively, Wilsonville's industrial market has a relatively low vacancy rate, large average building sizes, and a variety of industrial space types that could appeal to a mix of tenants. Wilsonville is also well positioned to benefit from promising industrial trends in the broader region, including investments in semiconductor manufacturing and market growth that could attract tenants to the area. However, industrial development in Wilsonville has been limited over the past decade. Only 1.7 percent of its total industrial space has been built in the last 10 years, compared to 11 percent in the broader Portland metro area. According to CoStar, in the past five years, three buildings have been under construction in Wilsonville: one completed in 2022 and two slated to be completed in 2025.

NOTE ON COSTAR DATA

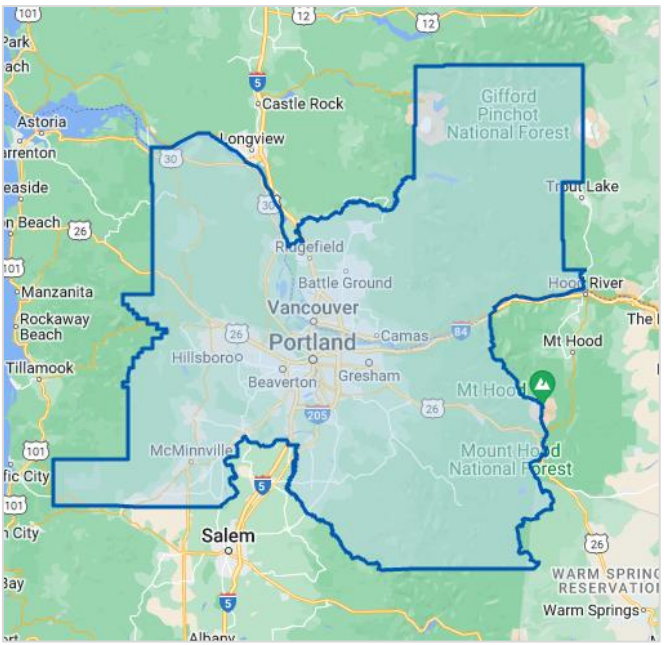
While CoStar data provides valuable, up-to-date data across a wide range of metrics, data quality is more limited in smaller markets and at the property level. The data here should be read as an indication of overall market statistics and trends, rather than an exact reflection of all properties in a given market.

This section analyzes real estate market trends for various submarkets encompassing the BCPA, including the I-5 South submarket (Figure 7) and the Portland metro area (Figure 8).

Figure 7: I-5 South Submarket Boundary

Source: CoStar

Figure 8: Portland Metro CoStar Boundary



Source: CoStar

Office Market Trends

Portland Metro Regional Trends

Like the national office space market, office spaces in the Portland metro are experiencing high vacancy rates and lower leasing activity. Work-from-home policies have decreased the demand for office space. Consequently, tenants have increased bargaining leverage; they are pressuring landlords to reduce rates, increase lease concessions, and raise tenant improvement budgets. Despite these adjustments, an increase in vacancies is expected, with interest rates and economic uncertainty adding volatility to the office market.[20] Other key findings include:

- **Record high vacancy rates:** High vacancy rates have continued to climb, reaching a record high of 13.3 percent vacant office space in 2024 Q2.[21]
- **Continued negative net absorption:** Net absorption in the Portland market was just over negative 500,000 square feet in 2024 Q2, the fourth quarter in a row of negative net absorption. Since the beginning of 2020, the Portland office market has only had positive net absorption for five quarters.[22]
- **Leasing activity:** Leasing and sales activity are on par with 2023, indicating that the vacancy and absorption trends are due to companies exiting the marketplace or downsizing at a higher rate, likely due to continued work-from-home policies.[23]

However, the Portland office market is not uniform, with the suburban office market performing better than the downtown and regional office markets. The Portland suburbs' office vacancy rates are 8.6 percent, compared to 23.9 percent downtown.[24]

Wilsonville Office Market

Wilsonville currently has approximately 1.4 million square feet of office space, representing roughly 18 percent of office space in the I-5 South submarket and 1 percent in the broader Portland metro region. According to CoStar, over the past decade, one office building was added to Wilsonville's market in 2020, located at 29250 Southwest Town Center Loop West. This office building was about 30,000 square feet, or roughly 2 percent of Wilsonville's total office space. Over the same period, the Portland metro added a greater share (9 percent) of

[20] Cushman & Wakefield, Office Marketbeat Q2 2024 Portland Office Report
[21] Cushman & Wakefield, Office Marketbeat Q2 2024 Portland Office Report
[22] Kidder Matthews, Portland Office Market Report Q2 2024
[23] Kidder Matthews, Portland Office Market Report Q2 2024
[24] Cushman & Wakefield, Office Marketbeat Q2 2024 Portland Office Report

space to its office market. These projects, on average, have been significantly larger than usual office buildings, with a few very large projects surpassing 100,000 square feet.

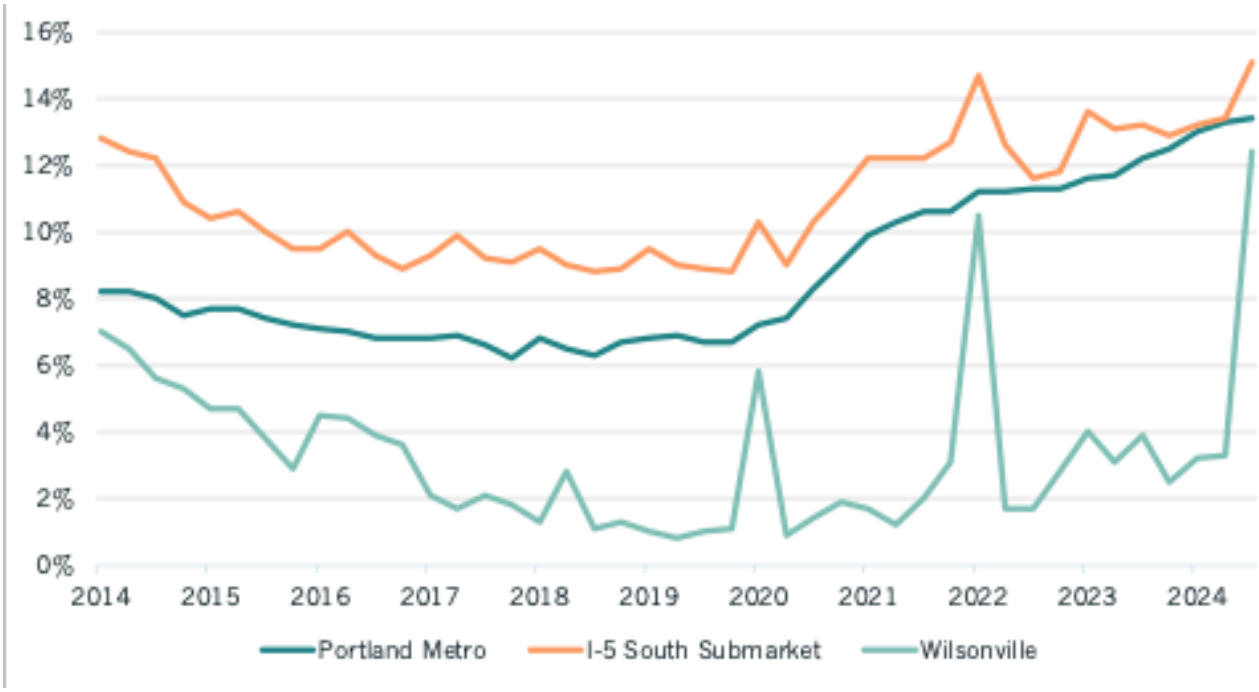
Table 12: Office Space Development Trends, 2014 to 2024

GEOGRAPHY	TOTAL BUILDINGS	TOTAL SQUARE FEET	AVERAGE BUILDING SIZE
ALL OFFICE DEVELOPMENT			
Portland Metro	6,217	118,809,170	19,110
I-5 South Submarket	431	7,533,437	17,479
Wilsonville	62	1,358,335	21,909
BUILT IN THE LAST 10 YEARS			
Portland Metro	66	10,354,342	156,884
I-5 South Submarket	4	80,976	20,244
Wilsonville	1	30,000	30,000

Source: CoStar, pulled August 2024

Per Costar, the I-5 South submarket office vacancy rates have been higher than the Portland metro's vacancy rates since 2014, although vacancy rates have been much more similar since 2022. Both have vacancy rates above 13 percent as of July 2024. While Wilsonville office vacancy rates have remained much lower, the end of a few leases are reflected in vacancy rate spikes in 2020, 2022, and 2024, when the vacancy rate spiked closer to the Portland metro average.

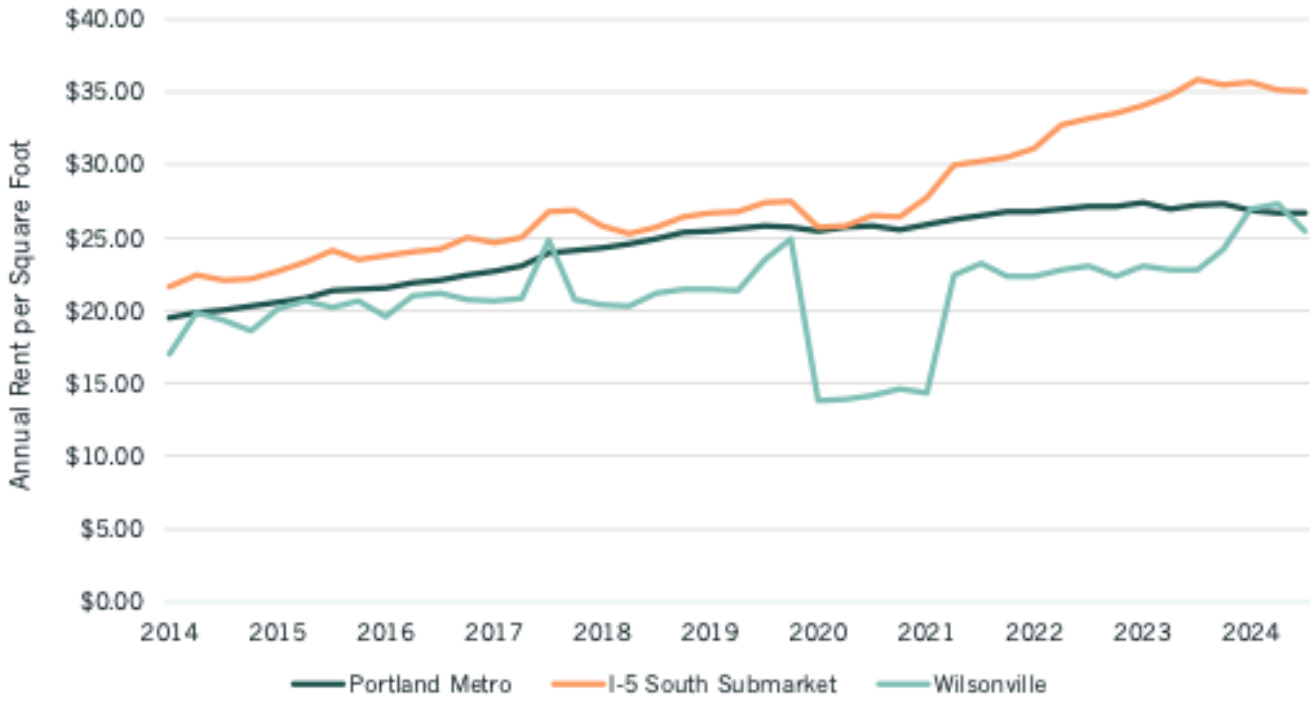
Figure 9: Office Vacancy Rate Trends, 2014-2024



Source: CoStar, pulled August 2024

Office rents have increased in the I-5 South submarket despite high vacancies, and they remain substantially above the Portland metro region's average, according to Costar. Historically, office rents in Wilsonville have been lower than in the Portland metro area. However, since an initial decline in 2020, rents in Wilsonville have risen steadily, reaching over $26 per square foot, now equal to the Portland metro average for the first time in a decade.

Figure 10: Office Lease Rate Trends, 2014-2024



Source: CoStar, pulled August 2024

Net absorption and delivery trends also indicate a relatively slow office market. From 2019 to 2024 Q3, net absorption was negative in all three areas. Over the same period, net absorption in the Portland metro area was negative 4.6 million square feet, negative 387,000 square feet in the I-5 South submarket, and negative 122,000 square feet in Wilsonville.

Industrial Market

Portland Metro Regional Trends

Like the national industrial market overall, the Portland metro area industrial market has been strong in recent years, particularly from 2021 to 2023. However, similar to national trends, a few metrics indicate that demand for industrial space is decelerating in the region:[25]

- **Increasing vacancy rates:** Vacancy for industrial space in the Portland metro region has risen steadily since early 2023, and net absorption was negative in both Q1 and Q2 of 2024. While overall leasing activity for industrial space in the area remained higher than the area's 10-year average, a few large companies downsizing or exiting the market contributed to negative net absorption and vacancy trends.
- **Slow lease-up for new construction:** The delivery of 1.2 million square feet to the market in early 2024 also contributed to the region's supply of vacant industrial space. However, newly constructed industrial space has been slow to lease up, with 93 percent of recent leasing activity in buildings built before 2010.
- **Rising unemployment rates:** In early 2024, Portland's unemployment rate (4.1 percent) surpassed the national average (3.8 percent) amid layoffs, including the shutdown of a large UPS location in North Portland, which impacted 300 sorting and distribution jobs.

However, investors and leasing professionals are confident in the regional market's long-term health, particularly due to significant investments in the region's semiconductor manufacturing sector.[26] Market strengths include:

- **CHIPS Act:** In 2022, the federal government allocated $50 billion as part of the CHIPS Act to bolster U.S. semiconductor manufacturing, which is expected to create thousands of regional manufacturing and construction jobs.[27] The expansion of the semiconductor industry could also have a ripple effect, creating demand for industrial space for equipment suppliers, supply chain materials manufacturers, and testing facilities.
- **Strong submarkets:** According to market reports from Cushman & Wakefield and CBRE, other strong industrial submarkets include food and beverage warehousing, tech warehousing, and auto part manufacturing.[28] These are some of the most common types of tenants seeking space in the market, although deals are taking longer on average to reach completion.[29]

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[25] CBRE, Q2 2024 Portland Industrial Market Update
[26] Cushman & Wakefield, Industrial Marketbeat Q2 2024 Portland Industrial Report
[27] Cushman & Wakefield, Industrial Marketbeat Q2 2024 Portland Industrial Report
[28] Cushman & Wakefield, Industrial Marketbeat Q2 2024 Portland Industrial Report
[29] CBRE, Q2 2024 Portland Industrial Market Update

- **Market growth:** Current forecasts estimate that 2.4 million square feet will be delivered to the market in 2024, roughly 1 percent of the current Portland industrial space inventory. As reported by CBRE, investors and leasing professionals are confident that the Portland market has additional room for growth.

Wilsonville Industrial Market

Wilsonville has about 8.6 million square feet of industrial and flex space, representing roughly 24 percent of the I-5 South submarket and 3 percent of the Portland metro region's industrial space. The average size of Wilsonville's industrial building is roughly 63,000 square feet, almost twice as large as the average industrial building in the broader Portland metro (34,000 square feet).

Wilsonville has had limited industrial development in the past decade. Only 1.7 percent of Wilsonville's total industrial space was built in the last 10 years, compared to roughly 11 percent of the I-5 South submarket and Portland metro industrial space. This slow pace of development makes sense given the limited supply of developable industrial land in the City and, more precisely, the development constraints that exist on those lands.

Table 13: Industrial & Flex Space Development Trends, 2014 to 2024

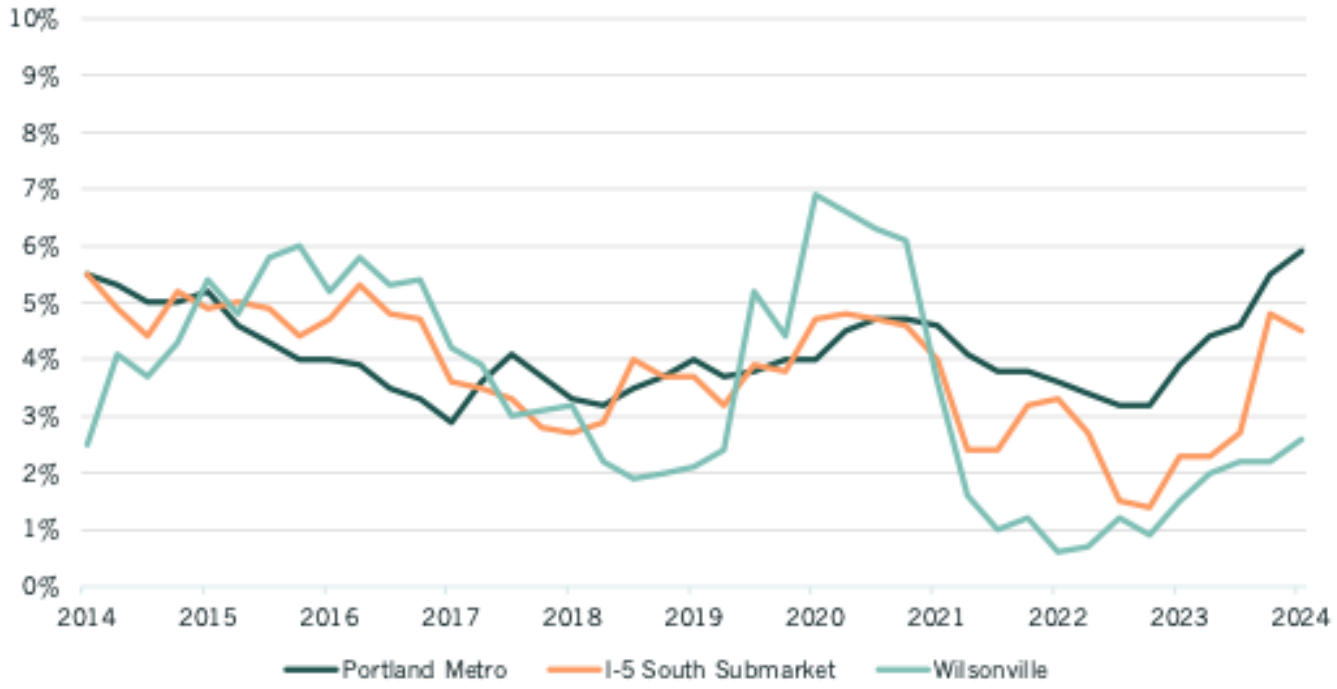
GEOGRAPHY	TOTAL BUILDINGS	TOTAL SQUARE FEET	AVERAGE BUILDING SIZE
ALL INDUSTRIAL DEVELOPMENT			
Portland Metro	7,535	257,487,989	34,172
I-5 South Submarket	900	35,089,559	38,988
Wilsonville	137	8,605,081	62,811
BUILT IN THE LAST 10 YEARS			
Portland Metro	278	30,328,230	109,094
I-5 South Submarket	50	3,848,383	76,968
Wilsonville	2[30]	145,611	72,806

Source: CoStar, pulled August 2024

[30] The two buildings listed in CoStar are located at 96500 SW Parkway Ave (2025) and 10680 SW Clutter Road (2022). However, city staff noted three others: the Black Creek development in the Coffee Creek industrial area and two SSI Shredding facilities.

Wilsonville's industrial vacancy rate has remained below 6 percent for most of the past decade. In 2020 and 2021, Wilsonville saw a brief spike in vacancy, likely driven by the COVID-19 pandemic, which quickly dropped to just over 1 percent in 2022. As of July 2024, Wilsonville's combined industrial and flex space vacancy rate was 2.6 percent (Figure 12). Wilsonville's industrial vacancy rate has been below the Portland metro since 2021. As of July 2024, the Portland metro had a vacancy rate of 5.9 percent and I-5 South submarket had a vacancy rate of 4.5 percent.

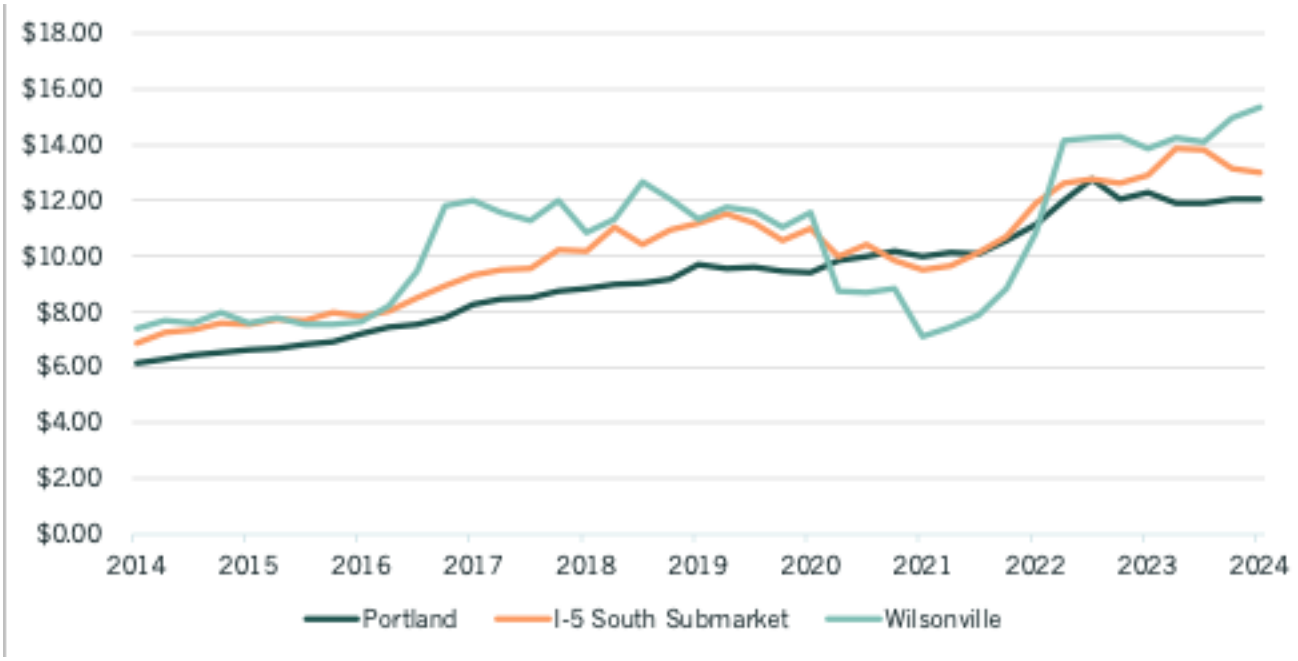
Figure 11: Industrial & Flex Vacancy Rate Trends, 2014-2024



Source: CoStar, pulled August 2024

Triple net industrial rents in Wilsonville increased from 2014 to 2020 and were generally higher than the Portland metro region over the period.[31] Wilsonville shows a large drop in lease rates between 2020 and 2021, likely due to COVID-19 impacts. However, rates rebounded in 2022, reaching $15.35 per square foot in July 2024, higher than the Portland metro ($12.03) and I-5 South submarket ($12.99). The combination of rising rents and very low vacancy rates suggests a robust industrial market in Wilsonville, potentially attracting new development, especially speculative development.

Figure 12: Industrial & Flex Rents Trends, 2014-2024

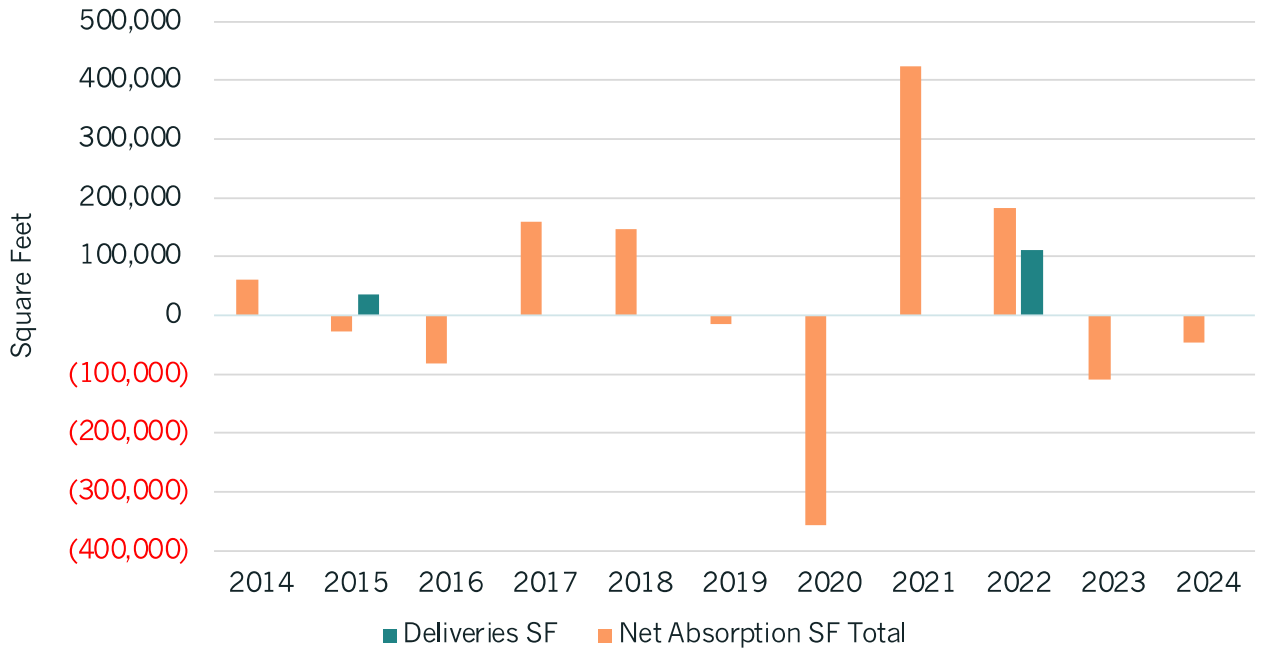


Source: CoStar, pulled August 2024

[31] Triple-net (NNN) rents are annual rents on a per-square-foot basis not including any pass-through expenses such as taxes, insurance, and any utilities or maintenance costs, which are passed on to the tenant and paid separately.

Net absorption has been generally positive for industrial properties over the past decade, with a large vacancy in 2020; however, it was followed by high positive net absorption the following year. Net absorption was negative in 2023 and through August 2024 (when data was pulled) but at a smaller magnitude than in 2020.

Figure 13: Net Absorption for Industrial & Flex Space in Wilsonville, 2014 to 2024



Source: CoStar, pulled August 2024

TYPE OF INDUSTRIAL PRODUCT BUILT SINCE 2014

Within the industrial product type, CoStar delineates the properties into a secondary type based on their use, size, and amenities to industrial users. CoStar utilizes the following definitions for the secondary types of industrial space:

- **Distribution:** Spaces used for warehousing and distribution of inventory that are typically 200,000 square feet or more, have clear heights of 28 feet, are less than 5 percent office space, and have site coverage that can be up to 40 percent.
- **Warehouse:** Buildings that are 25,000 square feet or greater, are up to 20 percent office area, have clear heights of 22 feet or greater, and have site coverage up to 50 percent.
- **Manufacturing:** Buildings that are typically 300,000 square feet or greater with an office area up to 50 percent.
- **R&D:** Flex space specifically used for research and development.
- **Flex/Other/Misc.:** A versatile building that may be used with office (corporate headquarters), research and development, mixed-use industrial and retail sales, and includes but is not limited to industrial, warehouse, and distribution uses. At least half of the rentable area of the building must be used as office space. Flex buildings typically have ceiling heights under 18 feet, with light industrial zoning. Flex buildings have also been called Incubator, Tech and Showroom buildings in markets nationwide.

Table 14 shows industrial development by submarket, or secondary market, types. Over the past 10 years, the I-5 South submarket has captured a slightly smaller share of the total market at 8.7 percent compared to its total share of 10.2 percent. The secondary market type distribution has also changed. While the I-5 South submarket contains roughly 27 percent of the total market space for R&D and warehouse space, it has captured about 35 percent of the space built in the last 10 years. Meanwhile, it captured a smaller share of manufacturing and distribution development (19 percent in the past 10 years compared to 27 percent of the total market share).

Table 14: Industrial Development Trends by Secondary Market Type, Portland Metro and I-5 South Submarket, 2014 to 2024

	ALL DEVELOPMENT		PAST 10 YEARS		I-5 CAPTURE RATES	
	METRO	I-5	METRO	I-5	ALL DEV'T	2014-2024
Distribution	49,002,646	5,677,113	16,716,663	1,222,159	11.6%	7.3%
Manufacturing	43,382,806	6,661,789	5,802,456	700,301	15.4%	12.1%
R&D	4,036,770	409,055	514,319	87,476	10.1%	17.0%
Warehouse	116,255,396	19,920,386	11,999,179	2,178,085	17.1%	18.2%
Flex/Other/Misc	156,220,367	4,831,339	24,957,511	1,053,586	3.1%	4.2%
Total	**368,897,985**	**37,499,682**	**59,990,128**	**5,241,607**	**10.2%**	**8.7%**

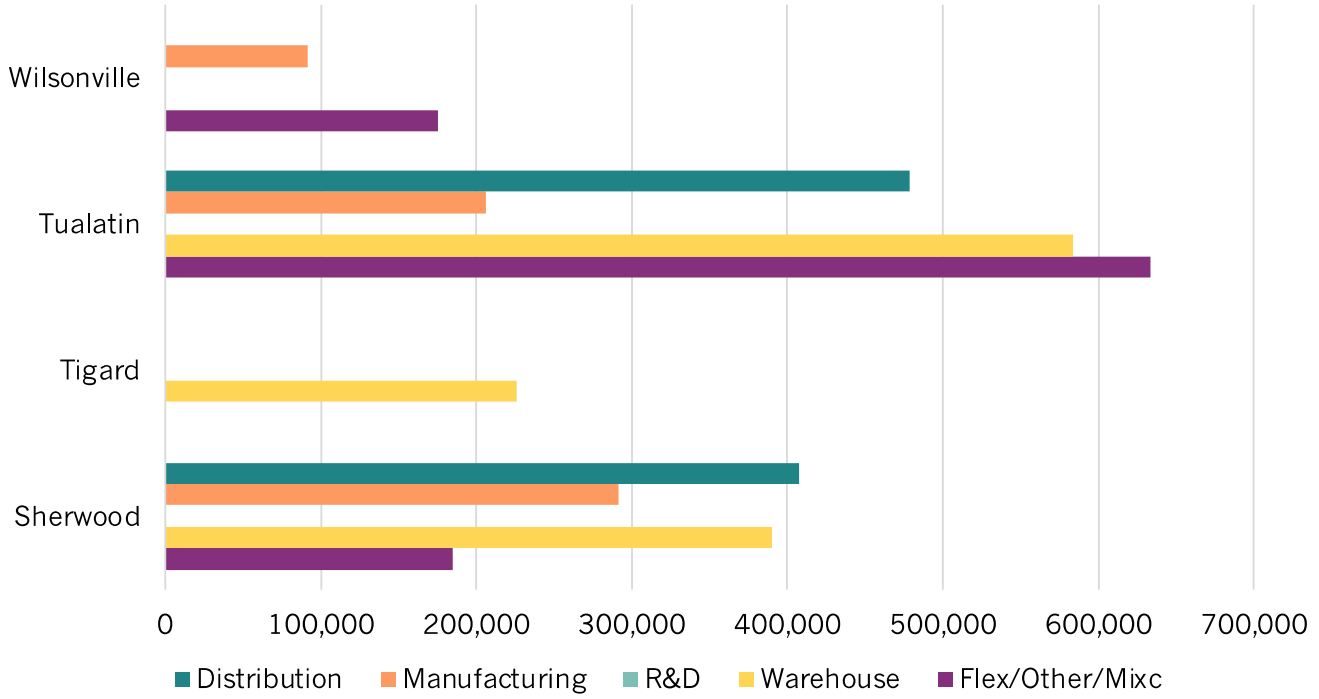
Source: CoStar, pulled August 2024

Industrial development along the I-5 South submarket has recently concentrated in Tualatin and Sherwood, with Wilsonville falling behind. This trend is likely due to Wilsonville's shortage of development-ready industrial land and large parcels, a view supported by interviews with local developers, brokers, and economic development organizations.

Many speculative industrial developers are seeking large sites, as demonstrated by recent developments in Sherwood and Tualatin on parcels exceeding 10 acres. Notable examples include the recently completed Sherwood Commerce Center on a 30+ acre site and the proposed Rock Creek industrial site development on 25 acres in Sherwood. In Tualatin, the Tualatin Sherwood Corporate Park was completed in 2022 on over 40 acres, while the Hedges Creek Industrial Park is expected to be completed in 2025 on a 20-acre site.

Local developers report that most of the industrial demand is coming from existing regional businesses rather than out-of-state companies. These local industrial users are primarily looking to expand or upgrade their current facilities within the area. Many express a desire to be outside the City of Portland and Multnomah County, citing concerns about public safety and higher rates of taxation.

Figure 14. Secondary Industrial Space Recently Built or Proposed in I-5 South Submarket by City, 2019-2026



Source: CoStar, pulled August 2024

Target Industry Assessment

Wilsonville is well positioned within the region to capture industrial growth. It has access to a strong base of employment, proximity to I-5, and connections to other growing industrial areas in Sherwood and Tualatin. This section examines industries likely to be drawn to Wilsonville, considering its strengths and competitive edge. The analysis begins by identifying common barriers to industrial development, based on local stakeholder interviews. It then reassesses strengths and weaknesses outlined in the Basalt Creek Concept Plan (BCCP), updating these factors to reflect market and employment trends over the past decade. The section concludes by summarizing how these market trends will shape Basalt Creek's development.

Barriers to Industrial Development

Stakeholders identified a number of key barriers for industrial users that prevent development. While some of these challenges are more directly applicable to Basalt Creek than others, they all represent important considerations for the City as it prepares the area for development:

- **Site Readiness:** Many sites lack the necessary transportation and utility infrastructure and preparations to immediately accommodate industrial users.
- **Power Availability:** Immediate or quick access to heavy power is currently the most significant barrier for many industrial businesses. The increasing power demands of modern industrial operations make this a crucial factor.
- **Outdated Existing Buildings:** Many existing structures do not meet the needs of modern industrial users, requiring significant renovations or complete rebuilds.
- **Lack of Intermediate Industrial Spaces:** Medium-sized industrial users (users that require 20,000 to 40,000 square feet) have limited spaces to choose from.
- **Misaligned Visions and Overly Prescriptive Zoning:** Sometimes, the landowners' or city's vision for an area does not align with the diverse needs of potential users. Discussions with local developers and brokers highlight the importance of allowing a mix of uses for better financing opportunities. This is particularly relevant for speculative development, where end users are not known at the time of entitlement and construction. Overly prescriptive zoning that designates specific uses, such as manufacturing, can be more challenging to finance because banks see risk and concern if they perceive the list of potential tenants is too small or narrow. Additionally, various types of uses tend to cluster together due to supply chain benefits. For example, manufacturers often have suppliers located nearby. Overly prescriptive zoning can disrupt this natural ecosystem by preventing clustering.
- **Fragmented Land Ownership:** Areas with multiple small parcels under different ownership can make it difficult to assemble larger sites needed for significant industrial development.

- **Incompatible Neighboring Uses:** The presence of nonindustrial uses in close proximity can preclude development out of concern for possible or future conflicts that have the potential to limit or complicate the operations of industrial businesses.
- **Requirements for Connectivity:** In some cases, required access roads can deter large industrial developers because the roads may decrease the area of developable land while adding significant cost to a speculative project. Additionally, some industrial users who prioritize confidentiality and security may be less attracted to areas with public access requirements.

Comparative & Competitive Advantage

The BCCP outlined the Basalt Creek area's advantages and challenges, many of which are still relevant. The following includes Basalt Creeks' advantages and challenges drawing from the BCCP and updating based on new information gathered as a part of this report.

STRENGTHS AND COMPETITIVE ADVANTAGES

- Centrally located in the south metro, within the urban growth boundary, and designated in the City's comprehensive plan for industrial uses.
- Large contiguous cluster of existing and planned industrial employment areas, including Wilsonville's Coffee Creek Industrial Area, and adjacent employment lands in Tualatin and Sherwood.
- Large areas of contiguous land ownership with property owners who are interested in developing or selling for redevelopment.
- Long-term growth projections for employment and population in the southwest Portland metro area.
- Excellent access to I-5, I-205, and Highway 217. Additional transportation strengths include existing and planned arterial roads as well as local and regional transit service provided by TriMet, WES Commuter Rail, and SMART.[32]
- Access to an educated workforce as part of the Metro labor shed and Mid-Valley labor shed.
- Easily accessible to other growing industrial areas, particularly in Tualatin and Sherwood.
- Planned substation development.

CHALLENGES

- Zoning needs to be in place prior to development.
- Planning, financing, and construction of new infrastructure.

[32] Existing major arterials include SW Grahams Ferry Road, SW Boones Ferry Road, and SW Day Road; the City is also planning the extension of Basalt Creek Parkway.

- Existing low employment density uses (contractor establishments and storage uses) that generate income for property owners may reduce appetite to sell for redevelopment.
- Lot sizes and property aggregation. There is a mix of large and small lots throughout Basalt Creek. The time and cost required to secure properties from multiple parties to aggregate developable industrial properties of adequate size can be a significant deterrent to developers.
- Natural features, including wetlands and slopes. Basalt Creek and its surrounding slopes and wetland areas run north-south through the study area and divide the area into east and west sections.
- Growing power demands from industrial users and uncertainty on timing and capacity of additional service.[33]

Which industries may be attracted to Basalt Creek?

Basalt Creek's long-standing vision as an industrial area aligns well with current market trends, which show strong demand for industrial space both nationally and in the Portland metro region. Stakeholders point to Wilsonville's potential to attract a diverse range of industrial businesses, including those in the semiconductor supply chain, cleantech, advanced manufacturing, and data centers.

Wilsonville's appeal to these sectors stems from its strategic location in the south metro area, access to a skilled labor force, and proximity to related industries. The semiconductor sector in particular is poised for expansion due to recent CHIPS Act investments. Similarly, cleantech industries are anticipated to see growth within the Portland metro region. The availability of large areas of contiguous land ownership in the Basalt Creek Planning Area further enhances its attractiveness to major industrial users who seek large lots for development.

It is worth noting that while the Basalt Creek Concept Plan (BCCP) originally envisioned a mix of uses—including office space associated with industrial operations, primarily in the High-Tech Employment district—current market conditions suggest that office use will likely play a smaller role than initially planned. Instead, the focus is expected to shift more toward industrial and tech-oriented developments to capitalize on emerging economic opportunities. Below are details about the potential sectors and industries that may be particularly attracted to Wilsonville:

- **Semiconductor Sector Supply Chain:** This sector includes companies involved in the design, manufacturing, and testing of semiconductor chips, as well as those providing materials, equipment, and services to chip manufacturers. Wilsonville is attractive for this industry due to its proximity to existing semiconductor clusters in

[33] ECOnorthwest has reached out to PG&E to understand how much of a challenge access to adequate power may be and is waiting to hear back. This statement may be updated after that conversation.

the Portland metro area, access to a skilled workforce, and potential for large industrial sites. Basalt Creek would likely host businesses that support the supply chain rather than producing the chips themselves.

- **Cleantech, including Battery Technology:** Cleantech encompasses renewable energy technologies, energy efficiency solutions, and sustainable manufacturing processes. Businesses in this sector include energy storage and related sustainable material technologies and a variety of alternative energy technologies and production. Battery technology, crucial for electric vehicles and energy storage, is a growing subsector that is already present in Wilsonville. Wilsonville's strategic location and potential for large industrial sites make it suitable for cleantech manufacturing and R&D facilities.
- **Advanced Manufacturing:** This sector involves the use of innovative technologies to create products. It includes robotics, 3D printing, and smart manufacturing systems. Wilsonville's access to a skilled workforce and its location near tech hubs make it attractive for advanced manufacturing operations.
- **Distribution and Logistics:** This sector involves the storage, transportation, and delivery of goods. Wilsonville's location near major transportation routes (I-5 and I-205) and its proximity to Portland make it an ideal location for distribution centers and logistics hubs.
- **Data Centers:** Data centers are facilities used to house computer systems and associated components. Wilsonville's access to available land and the potential access to reliable power sources could make it attractive for data center development.[34] The proximity to tech companies in the Portland metro area is an additional advantage.

This diverse range of potential industries positions Wilsonville to capitalize on various economic opportunities, creating a resilient industrial base in Basalt Creek.

[34] Interviews with stakeholders have suggested that Wilsonville may be attractive to data centers. ECOnorthwest has reached out to PG&E to understand if Basalt Creek has/will have access to the power necessary for this type of use and is waiting to hear back.

4. Conclusion

The Basalt Creek area in Wilsonville is strategically positioned for industrial development with the potential to attract a variety of users, from manufacturing and logistics to data centers. The area's suitability for supporting the semiconductor supply chain is underscored by recent expansions of semiconductor suppliers in nearby Sherwood. Additionally, the area could be attractive to cleantech businesses, including those involved in battery storage and alternative energy technologies.

However, realizing this potential presents several challenges. Existing contractor establishments generate sufficient income for some property owners, reducing their incentive to sell or redevelop the land for higher-intensity industrial uses. Furthermore, relocation options for these businesses may be limited, complicating redevelopment efforts. (The feasibility of redevelopment will be further explored in a subsequent separate study.)

Conversely, some developers have already assembled land, and they are ready for immediate development, eager to capitalize on the strong industrial demand seen in nearby Coffee Creek, Tualatin, and Sherwood. Stakeholders emphasized the importance of large parcels in facilitating area redevelopment, with many developers willing to fund necessary infrastructure improvements if given access to such lots. For example, Schnitzer Properties owns property east of Grahams Ferry Road, south of Basalt Creek Parkway, and north of Day Road and eagerly awaits the adoption of zoning and policy to enable industrial development in this area. They intend to submit development and annexation applications as soon as zoning and policy is in place. Their recent development in Sherwood, known as the Sherwood Commerce Center, is an example of the type of development they are envisioning for their Basalt Creek property, offering flexible spaces for various industrial users.

It is crucial for Wilsonville to carefully balance its development goals for Basalt Creek with market realities. While the City may have preferences for certain types of businesses, being overly selective could deter development altogether. This is especially significant given the current economic climate. The BCCP originally envisioned office space within each district with the highest share in its High-Tech Employment District and anticipated that this office space would be in connection with industrial users. However, nationally and regionally demand for office space has been in decline with remote and hybrid work trends continuing to impact the need for office space. While office will likely still be a part of the BCPA, it may occupy a smaller share than originally envisioned.

Nationally, there's strong demand for industrial space. But Oregon's employment growth, which has been lagging national trends since 2020, may moderate this trend locally. Developers have stated that current industrial demand in the metro area is largely driven by regional businesses seeking to expand or upgrade their facilities. If Wilsonville imposes overly burdensome or restrictive requirements on the types of industrial users it allows (such as requiring a high share of manufacturing space), it risks limiting development feasibility and driving developers and industrial users to more accommodating locations.

The City must navigate these challenges while working toward its vision for Basalt Creek: a diverse mix of industrial uses, higher employment density, high-wage jobs, an enhanced tax base, and increased community prosperity.

Next Steps

These findings are preliminary and will be refined through further analysis, stakeholder engagement, and discussions with the Planning Commission and City Council. Upcoming tasks include completing the buildable lands inventory, conducting site suitability analyses for key locations, and assessing the feasibility of redeveloping contractor establishments. All these elements will ultimately be synthesized into a comprehensive final report outlining key findings and recommendations.

Appendix B: Buildable Lands Inventory and Site Suitability Analysis

ECOnorthwest

DATE:	December 20, 2024
TO:	City of Wilsonville
FROM:	ECOnorthwest: Nicole Underwood, Bob Parker, and Barrett Lewis
SUBJECT:	WILR Phase 1: BLI and Site Suitability Analysis

The Cities of Tualatin and Wilsonville adopted the Basalt Creek Concept Plan (BCCP) in 2018 after a lengthy joint planning process. Now, in 2024-25, the City of Wilsonville is working to advance the Basalt Creek Planning Area (BCPA) beyond the concept plan to a development-ready status by designating zoning and refining infrastructure plans. However, since adoption of the BCCP, economic conditions at national, state, regional, and local levels have shifted significantly and must now be considered.

To address these evolving conditions, the City hired ECOnorthwest to conduct a market assessment and industrial lands study focused on Wilsonville's portion of the BCPA. The study began with an Economic Inventory, which reviewed current market trends and industries suitable for the area.

This memorandum addresses Task 3 in the Scope of Work: updating the **Buildable Lands Inventory (BLI)** for the BCPA and conducting a **Site Suitability Analysis** for key opportunity sites. The updated BLI reflects recent land developments, adjusted constraints, and revised capacity estimates.

The Site Suitability Analysis examines three selected "opportunity sites" within the BCPA, assessing their potential to support the target industries identified in the Economic Inventory. This analysis considers site attributes, including size, location, access, topography, constraints, and surrounding land uses. It also considers infrastructure (transportation, water, sewer, stormwater) based on available data, with the understanding that infrastructure planning may evolve as work progresses.

Land Supply

This industrial Buildable Lands Inventory (BLI) updates the 2014 BLI from the original concept plan, providing a revised assessment of the buildable land *supply* available within Wilsonville's portion of the BCPA for employment-related growth and development. The amount of land needed to accommodate anticipated growth, often referred to as *demand* for land, depends on the type of employment-related development and other factors.

This BLI update serves two purposes: 1) to provide a revised assessment for developable acres in the BCPA and 2) to identify lands that have existing economic uses but low improvement values and/or low-density employment. These uses are inconsistent with the development vision expressed in the BCCP and are sites that may have redevelopment potential.

The BCPA encompasses a total of 453 acres across 85 tax lots. Of this:

- **173 acres** are currently in active use and are considered developed.
- **129 acres** are constrained by physical or environmental factors.
- **150 acres** are considered buildable and available for development.

The BLI also provides a basis for updating employment capacity. Given the 150 acres of buildable land and the expectation of employment densities between 10 and 18.5 employees per acre, the BCPA is expected to accommodate between 1,500 and 2,780 jobs and 2.3 million and 2.9 million square feet of development. The BCCP estimated total employment capacity at about 2,500 jobs.

This section outlines the methodology used to develop the BLI and employment and built space capacities, and it presents the results for Wilsonville's portion of the BCPA. ECOnorthwest analyzed GIS data from the City of Wilsonville, Metro, and Washington County, with City staff reviewing the findings for accuracy and completeness.

Methodology

The buildable lands inventory followed a structured process to assess land status:

1. **Generate UGB "land base":** ECOnorthwest established a baseline of tax lots within Wilsonville's portion of the BCPA designated for industrial and employment uses.
2. **Classify lands by development status:** The project team categorized parcels as vacant, partially vacant, or developed.
3. **Identify constraints:** ECOnorthwest applied physical and regulatory constraints, such as wetlands and natural resource protections, to identify unbuildable portions.

4. **Verify inventory results:** City staff reviewed classifications and aerial imagery to confirm accuracy.
5. **Tabulate and map results:** The team compiled findings into tables and maps to provide a clear overview of buildable lands.

The following section summarizes the results of the industrial BLI for the BCPA, presented in tabular and map formats.

Land Base

The land base for the Buildable Lands Inventory (BLI) includes all tax lots within Wilsonville's portion of the BCPA. Table 1 provides a breakdown of the land base by Wilsonville Comprehensive Plan designation within the BCPA.

Table 1. Employment Land Base by Wilsonville Comprehensive Plan Designation, BCPA, 2024

Plan Designation	Number of Tax Lots	Percent	Total Tax Lot Acreage	Percent (Total Acreage)
Industrial	63	74%	237	52%
Undesignated	22	26%	215	48%
Total	**85**	**100%**	**453**	**100%**

Source: ECOnorthwest analysis, City of Wilsonville, Clackamas County, Washington County, Metro

Development Status Classification

Table 2 displays the total acres of tax lots, categorized based on whether land is buildable. ECOnorthwest applied a rule-based classification of vacant, partially vacant, or developed land to determine the initial development status and verified the results through reviews by City staff. These reviews incorporated local knowledge and analyses of aerial maps.

Table 2. Employment Acres by Classification and Wilsonville Comprehensive Plan Designation, BCPA, 2024

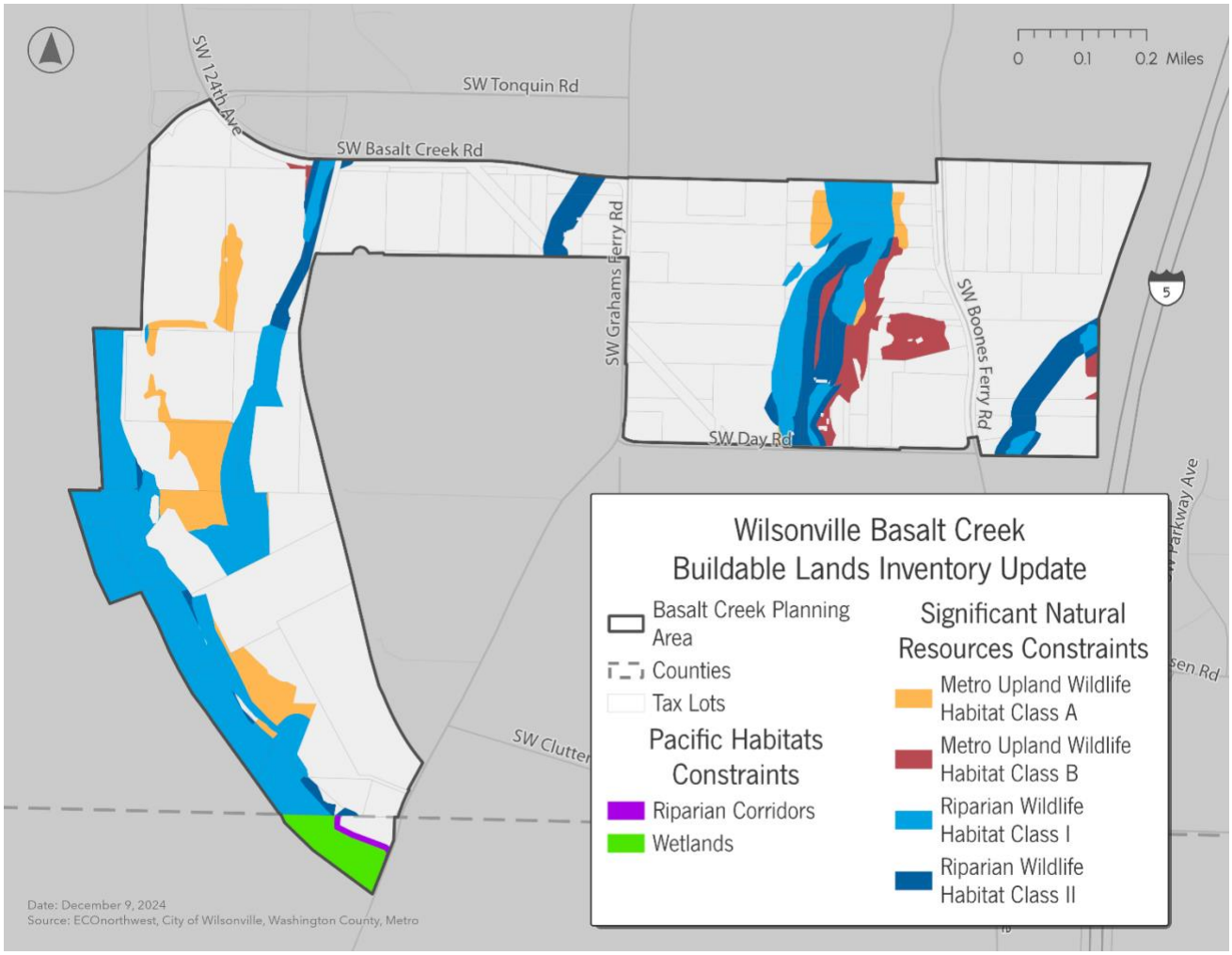
Plan Designation	Total Acres	Committed Acres	Constrained Acres	Buildable Acres
Industrial	237	63	48	127
Undesignated	215	110	81	24
Total	**453**	**173**	**129**	**150**

Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro, Pacific Habitat Services

Development Constraints

In coordination with City staff, ECOnorthwest identified physical constraints based on Washington County's Significant Natural Resources (SNR), as amended by Washington County Ordinances No. 901 and No. 902.[1] The SNR includes Metro Upland Wildlife Habitat Classes A and B, as well as Riparian Wildlife Habitat Classes I and II. For the single southern parcel located in the West Railroad area and within Clackamas County, GIS data provided by Pacific Habitat Services were used to identify physical constraints. These constraints are shown in Figure 1.

Figure 1. Development Constraints, BCPA, 2024

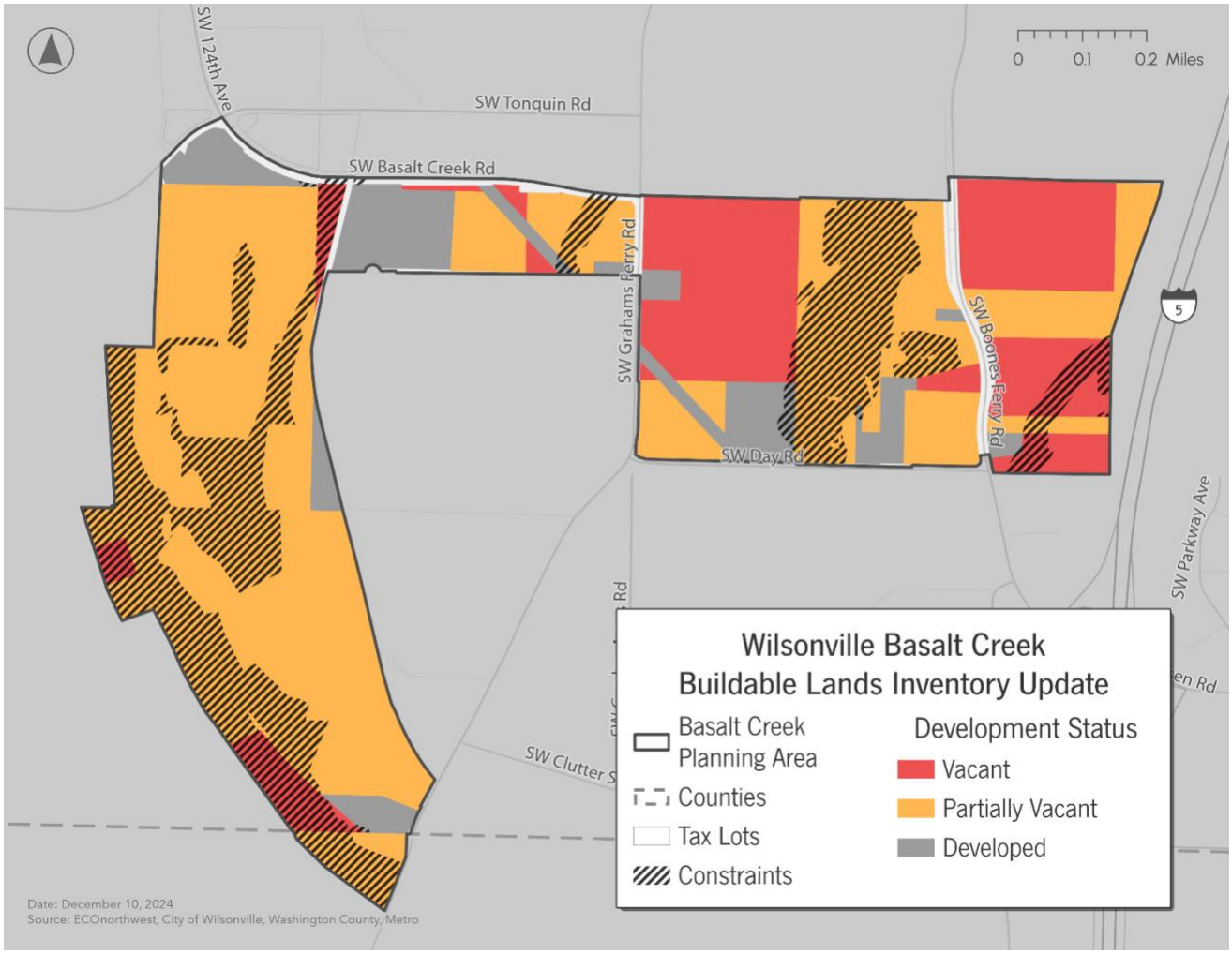


Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro, Pacific Habitat Services

[1] https://www.washingtoncountyor.gov/lut/planning/documents/ordinance-no-901a/download?inline

Figure 2 shows development status with constraints applied, resulting in buildable acres. Land classified as vacant or partially vacant and affected by these constraints is deemed unavailable for development and has been excluded from the inventory of buildable land.

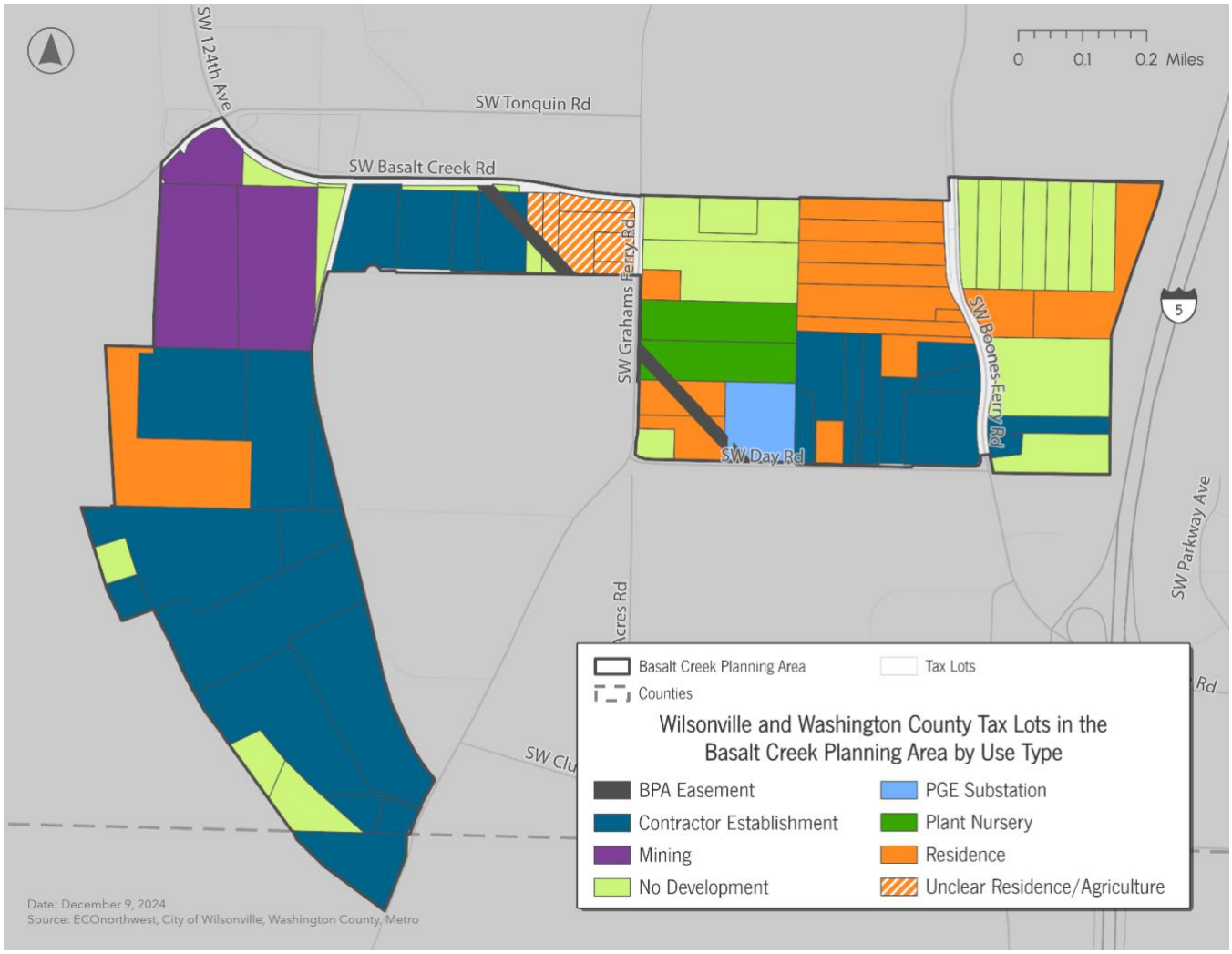
Figure 2. Development Status with Constraints, BCPA, 2024



Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro, Pacific Habitat Services

Figure 3 identifies land use categories for each site. ECOnorthwest collaborated with City staff to identify these categories through a detailed review process that combined local knowledge with aerial map analysis. Unlike basic classifications of vacant or partially vacant land, this map provides deeper insights into current land uses, offering valuable context for evaluating redevelopment potential and guiding the feasibility analysis (the results of which are shared in a separate memorandum).

Figure 3. Land Use Categories with Constraints, BCPA, 2024



Source: ECOnorthwest Analysis, City of Wilsonville, Metro

Vacant Buildable Land

The next step in the buildable lands inventory involved removing portions of vacant tax lots deemed unsuitable for development. Unsuitable areas fall into two categories:

1. Developed portions of partially vacant tax lots.
2. Areas affected by physical constraints (i.e., areas within Metro Upland Wildlife Habitat Classes A and B and Riparian Wildlife Habitat Classes I and II).

Table 3 presents the buildable acres—tax lot areas remaining after deducting these constraints—for both vacant and partially vacant land, categorized by Wilsonville's Comprehensive Plan designation. The BCPA has 150 total buildable acres available for development.

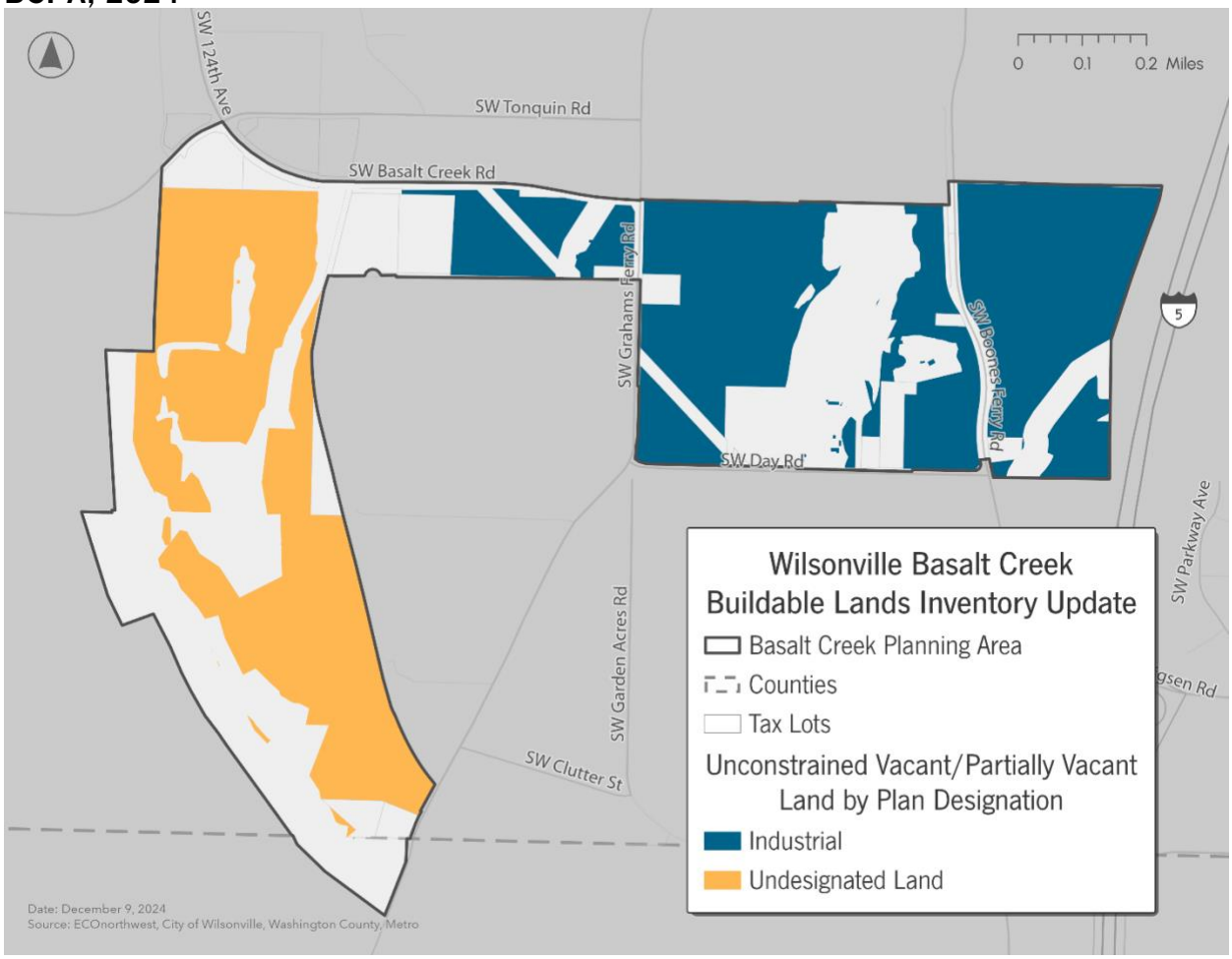
Table 3. Buildable Acres in Vacant and Partially Vacant Tax Lots by Wilsonville Comprehensive Plan Designations, BCPA, 2024

Plan Designation	Total Buildable Acres	Buildable Acres on Vacant Lots	Buildable Acres on Partially Vacant Lots
Industrial	127	87	40
Undesignated	24	0.4	23
Total	**150**	**87**	**63**

Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro

Figure 4 shows the buildable vacant and partially vacant land within the BCPA, categorized by Wilsonville Comprehensive Plan designation. It is important to note that tax lots shown as partially vacant in the map do not distinguish the part of the tax lot that is unavailable for development (or has redevelopment potential). However, the buildable lands inventory database accounts for these distinctions: the developed portions (unavailable for future development) are excluded, while the vacant portions are detailed in Table 4.

Figure 4. Buildable Employment Land by Wilsonville Comprehensive Plan Designation, BCPA, 2024



Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro, Pacific Habitat Services

Table 4 presents the size of buildable lots categorized by Wilsonville Comprehensive Plan designation across the BCPA. The planning area includes:

- Eight lots smaller than 0.5 acres, totaling 2 acres.
- Twenty-two lots between 0.5 and 2 acres, totaling 22 acres.
- Eighteen lots between 2 and 5 acres, totaling 57 acres.
- Six lots between 5 and 10 acres, totaling 46 acres.
- Two lots between 10 and 25 acres, totaling 23 acres.

Table 4. Buildable Acres and Tax Lots by Buildable Site Size by Wilsonville Comprehensive Plan Designation, BCPA, 2024

Plan Designation	Buildable Sites Size					
	0 - 0.5 Acres	0.5 - 1 Acres	1 - 2 Acres	2 - 5 Acres	5 - 10 Acres	10 - 25 Acres
Industrial	1	7	10	51	35	23
Undesignated	1	1	4	6	12	-
Acreage Total	**2**	**8**	**14**	**57**	**46**	**23**
Industrial	5	10	7	16	4	2
Undesignated	3	2	3	2	2	-
Tax Lot Total	**8**	**12**	**10**	**18**	**6**	**2**

Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro

Employment Capacity

ECOnorthwest analyzed the buildable land in Basalt Creek to update projections for potential job growth in the area. This assessment involved reviewing the capacity estimates from the BCCP and refining them using the updated land inventory of 150 buildable acres.

The analysis began with a review of research conducted by ECOnorthwest and other organizations on employment density. A common finding in such studies is the significant variability in employment density across industries, plan designations, and zoning districts. For example, an industrial zone may have employment densities ranging from 1-3 employees per acre for a warehousing facility and 10-15 employees per acre for flex spaces to densities over 25 employees per acre for office buildings.

The capacity estimates that follow are intended to provide a high-level estimate of job capacity based on the 2024 BLI update. Some factors, such as land needed for streets, would reduce capacity while others, such as higher lot coverages or multistory buildings, would increase capacity. The main utility of employment capacity estimates is in estimating

infrastructure needs. The figures that follow can be used to inform infrastructure demand estimates which can then be compared with infrastructure capacity to determine if existing and planned capacity are sufficient to accommodate expected employment densities.

Land Demand Methodology

When evaluating land and building capacity, two measures are commonly used to define the relationships between building size, floor area, and land area. These measures include:

- **Floor Area Ratio (FAR):** The ratio of a building's total square footage to the site's total square footage.
- **Employees Per Acre (EPA):** The total number of employees divided by the site size.

Basalt Creek Growth Capacity: Land Use Model Assumptions

This model builds on assumptions from the BCCP. Initially, the BCCP estimated an average of **18.5 jobs per gross acre** in Wilsonville's portion of Basalt Creek (excluding West Railroad). Key employment density estimates included:

- High-Tech Employment District: 20 jobs per gross acre.
- Craft Industrial: 22 jobs per gross acre.
- Light Industrial District: 16 jobs per gross acre.

ECOnorthwest applied the BCCP's assumption of 18.5 jobs per gross acre to model a high-density growth scenario. However, shifting market conditions—such as reduced demand for office space and increased demand for industrial and flex space (which typically have lower employment densities)—led ECOnorthwest to also model medium- and low-density growth scenarios to better reflect the potential range of employment densities in the study area. ECO also modeled different lot coverage ratios/FARs. The scenarios use lot coverages of 35 percent and 45 percent which is consistent with the assumptions used in the Task 4 redevelopment feasibility analysis of contractor establishments. The FARs of 0.35 and 0.45 reflect lot coverage ratios and the assumption that uses will be single story.

- **Low-Density Scenario:**
  - 10 employees per gross acre.
  - Lot coverage/FAR: 35 percent/0.35.
  - Reflects more traditional industrial densities and provides a more conservative estimate.
- **Medium-Density Scenario:**
  - 15 employees per gross acre.
  - Lot coverage/FAR: 45 percent/0.45.

- Assumes a greater share of office development compared to the low-density scenario, offering a more ambitious estimate.

- **High-Density Scenario (BCCP Adopted Assumption)**
  - 18.5 employees per gross acre.
  - Lot coverage/FAR: 45 percent/0.45.
  - Maintains the BCCP assumptions and envisions a greater share of office development than the other scenarios. It assumes the same lot coverage ratio which yields the same built space capacity as the medium-density scenario but with a higher number of employees occupying that space.

Results: Land Use Modeling for Basalt Creek

Table 5 outlines the results of this analysis, indicating that Wilsonville's portion of Basalt Creek has capacity for:

- **Employment:** Between 1,500 and 2,780 jobs.
- **Built Space:** Between 2.3 million and 2.9 million square feet.

These findings reflect the range of potential outcomes based on varying employment density assumptions.[2]

Table 5. Job Capacity and Built Space Capacity, Wilsonville BCPA

	Low	Medium	High
Job Capacity	1,500	2,250	2,780
Built Space Capacity (SF)	2,289,000	2,943,000	2,943,000

Source: Analysis by ECOnorthwest

[2] ECOnorthwest also analyzed the potential number of employees and built space under current density levels, estimated at approximately 5 employees per gross acre. If these existing conditions persist, the area is projected to accommodate around **750 employees** and **1.3 million square feet** of built space.

Site Suitability Analysis

The BCPA is well positioned to capture industrial growth in the South Metro region. It benefits from its strategic location with access to I-5, a robust employment base, and connections to other expanding industrial hubs in Sherwood and Tualatin. Over the summer, ECOnorthwest conducted an Economic Inventory to assess market conditions and identify industries most likely to establish a presence in Basalt Creek focusing on industrial and office uses in alignment with the BCCP vision.[3] The analysis highlighted strong national and regional demand for industrial space and identified key sectors with potential interest in the area, including the semiconductor supply chain, cleantech, advanced manufacturing, distribution and logistics, and data centers.

Although the BCCP originally envisioned a blend of industrial and office development, current market trends suggest a shift toward a greater emphasis on industrial uses. Office developments, while still anticipated, are expected to occupy a smaller footprint than initially planned.

WHICH SECTORS MAY BE ATTRACTED TO BASALT CREEK?

Below are the potential sectors that may be particularly attracted to Basalt Creek as identified in the Economic Inventory report.

- **Semiconductor Sector Supply Chain:** Companies providing materials, equipment, and services to chip manufacturers.
- **Cleantech, including Battery Technology:** Businesses involved in renewable energy technology, energy efficiency solutions, and sustainable manufacturing processes.
- **Advanced Manufacturing:** Companies using technology such as robotics, 3D printing, and computerized systems to manufacture specialized products or components.
- **Distribution and Logistics:** Storage, transportation, and delivery of goods.
- **Data Centers:** Facilities used to house computer systems and associated components.

To determine site specific competitiveness for these industries, ECOnorthwest evaluated three opportunity sites using the Mackenzie Infrastructure Finance Authority (IFA) Industrial Development Competitiveness Matrix as a foundation. Recognizing that industry requirements have evolved since the matrix's creation in 2015, the analysis incorporated updated reports and stakeholder feedback to align with current market demands. This Site Suitability Analysis assesses site characteristics such as size, location, and constraints to evaluate their ability to host target industries. While the analysis considered buildable land availability, its primary focus was on site potential, assuming redevelopment occurs. Feasibility and redevelopment likelihood of contractor establishments is addressed in a separate task.

[3] When evaluating the office market, medical office showed stronger growth than traditional office. However, ECOnorthwest did not further evaluate its potential, as it was not a use envisioned in the BCCP.

Opportunity Sites for Analysis

ECOnorthwest evaluated the following sites for their development potential (Figure 5):

- **SW Greenhill Site:** Selected for its consolidated land ownership and strong potential for near-term development, given the absence of active use.
- **Craft Industrial Area:** As a transitional area, the City seeks to assess this site's characteristics in detail to determine the most appropriate land uses. This will inform zoning designations.
- **West Railroad Site:** West Railroad lacked a defined concept in the original BCCP. To explore its potential, ECOnorthwest analyzed a portion of West Railroad, focusing on its development suitability. This will inform whether a zoning designation similar to the rest of the Basalt Creek area would be appropriate. The area also faces physical and service constraints, and the analysis evaluates whether these challenges might limit future development opportunities.

Figure 5. Opportunity Sites

Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro

Table 6 summarizes the size of unconstrained lots for the opportunity sites. Note that "unconstrained acres" here includes developed areas. In general, larger sites are more appealing to industrial users, who often seek parcels of 5 or more acres. Smaller sites, however, may require site aggregation to meet these needs. Notably, sites in SW Greenhill and West Railroad, which exceed 5 acres, could be especially attractive to developers. While all opportunity sites may require some degree of site aggregation, the Craft Industrial area faces the greatest challenge due to its relatively small lot sizes and fragmented land ownership.

Table 6. Unconstrained Acres and Tax Lots by Site Size for Opportunity Sites, BCPA, 2024

Site Suitability Area	Unconstrained Sites Size					
	0 - 0.5 Acres	0.5 - 1 Acres	1 - 2 Acres	2 - 5 Acres	5 - 10 Acres	10 - 25 Acres
Craft Industrial	-	1	5	8	-	-
SW Greenhill	-	-	-	31	-	21
West Railroad	0.3	-	3	10	19	60
Acreage Total	**0.3**	**1**	**9**	**49**	**19**	**81**
Craft Industrial	-	1	3	3	-	-
SW Greenhill	-	-	-	8	-	2
West Railroad	3	-	2	3	3	4
Tax Lot Total	**3**	**1**	**5**	**14**	**3**	**6**

Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro

Site Competitiveness Factors

The IFA Industrial Development Competitiveness Matrix includes the following factors for evaluating the competitiveness of different industries:

- Site Size
- Competitive Slope (physical slope of a parcel, which can impact its suitability for development)
- Access to Transportation and Trip Generation (Highway, Rail, and Airport Proximity)
- Access to Utility Infrastructure (Water, Sewer, Electricity, Telecommunications)
- Special Considerations

The industries evaluated in the IFA Industrial Development Competitiveness Matrix include the following, which align with the BCCP and the Economic Inventory findings, and are the focus of this analysis (the full matrix can be found in Appendix B.1):

- **Production Manufacturing:**
  - High-Tech/Cleantech Manufacturing
- **Value-Added Manufacturing and Assembly:**
  - Food Processing
  - Advanced Manufacturing and Assembly
- **Light/Flex Industrial:**
  - General Manufacturing
  - Industrial Business Parks and R&D Campuses
  - Business Services
- **Warehousing and Distribution**
  - Regional Warehouse/Distribution
  - Local Warehouse/Distribution
- **Specialized Uses:**
  - Data Centers

Industry-Specific Considerations

Recent growth in the semiconductor and cleantech sectors has prompted additional research to understand the evolving needs of these industries. To support this, the Oregon Legislature established the Oregon Semiconductor Task Force to identify industry needs and opportunities. Similarly, Business Oregon supported the creation of the Oregon Cleantech Competitiveness Assessment Report to evaluate the needs and prospects for cleantech industries. Key findings related to site-specific requirements from these initiatives are outlined below.

SEMICONDUCTOR SECTOR

The semiconductor industry offers Oregon a prime opportunity to expand advanced manufacturing, grow its traded sector, and create high-quality jobs. The $52 billion CHIPS Act, passed in July 2022, accelerates efforts to boost domestic semiconductor production by allocating $40 billion for manufacturing and $10 billion for research over five years.

The Metro region hosts a robust semiconductor cluster centered in Hillsboro. There has also been some semiconductor activity south of Hillsboro, including LAM Research in Sherwood and Tualatin, bolstering the supply chain presence in the South Metro. This established network positions the region to attract additional semiconductor-related investments.

The Semiconductor Task Force's Industrial Lands Subcommittee identified key site characteristics most important for the semiconductor industry:

- **Workforce Availability and Talent Proximity.** Access to skilled workers—engineers, technicians, and operators—is essential. Semiconductor clusters thrive where workers can easily transition between companies, creating a dynamic employment ecosystem. Workforce access is critical for both fabrication plants and supply chain operations.
- **Parcel Size and Usage.** Parcel size varies by operational needs. Fabrication plants require ***50–100 acres*** to accommodate clean rooms and infrastructure, with large-scale R&D and production facilities needing ***500+ acres***. Supply chain operations, such as equipment and material suppliers, generally need smaller parcels of ***15–35 acres***.
- **Infrastructure Readiness.** Reliable access to ***transportation, water, electricity, and wastewater systems*** is crucial. Semiconductor companies prioritize sites with infrastructure ready to support development within ***6 months to 3 years***.
- **Clustering with R&D Partners and Suppliers.** Collaboration with suppliers and R&D partners is vital. Fabrication plants benefit from proximity to suppliers for quick equipment maintenance and research. Supply chain operations also thrive in clusters, connecting with customers and transport hubs.
- **Environmental and Regulatory Considerations:** Predictable permitting processes are essential to avoid delays. While environmental regulations remain important, fast-tracked approvals are necessary to match the industry's pace.

SITE COMPETITIVENESS FOR THE CLEANTECH SECTOR

Oregon is well positioned to capitalize on the growth of cleantech industries, driven by federal initiatives like the Inflation Reduction Act and an increasing focus on sustainability. Cleantech encompasses a range of technologies, including renewable energy, energy-efficient materials, water technologies, and recycling systems. While the IFA Industrial Development Competitiveness Matrix provides general site characteristics for cleantech, the Oregon Cleantech Competitiveness Assessment Report—developed for Business Oregon—offers more detailed site selection criteria specific to established and emerging cleantech industries within the state. Key site characteristics for these subsectors are summarized below (a complete matrix is available in Appendix B.2). Scalability is essential for many users, as industries often begin on smaller sites but require the flexibility to expand as they grow.

- **Battery Storage:** These systems store renewable energy for later use, enhancing grid stability and reliability. Technologies range from lithium-ion to flow batteries, used in applications from small urban microgrids (0-5 acres) to large grid-scale facilities (25+ acres). Electrical system proximity and access for power generation facilities may vary, depending on the scale and intended use. Microgrid systems may only need connection to the local electrical grid, while large-scale grid storage may require connection to regional transmission lines or substations. Zoning flexibility for

energy uses is critical, while water needs and transportation access are generally less significant.

- **Mass Timber:** Engineered wood products like cross-laminated timber (CLT) and glued laminated timber (GLT) serve as sustainable alternatives to steel and concrete. Production facilities need medium to large sites (5-25+ acres), reliable transportation (particularly to arterial roads and railways) for raw materials, and substantial power supply.
- **Ag-Tech:** This sector integrates advanced technologies like AI, Internet of Things (IoT), agrivoltaics, and drones to optimize agriculture. Ag-tech operations, in this sense, are generally assumed to focus on software and small-scale equipment products, generally collaborating with large existing farms for R&D. These businesses typically require small sites (0-5 acres) with low transportation, water, and power demands.
- **Circular Economy:** This sector focuses on recycling and resource reuse, supporting waste-reduction and material-recovery technologies. Businesses range from R&D to recycling and upcycling facilities. Typically, these operations require small to medium-sized sites (0-25 acres), though the specific site needs depend on the types of raw materials and finished products, as well as the scalability of the industry. Good transportation access—especially to arterial roads and potentially railways—is important, along with moderate water and power requirements and flexible zoning options.
- **Solar and Wind Energy Production:** This sector encompasses both energy production and manufacturing. Manufacturing facilities share site requirements with advanced manufacturing industries, while energy production facilities vary significantly in scale. These range from small rooftop installations to large-scale farms, which require proximity to transmission lines and substations. The electrical system needs depend on the scale and purpose of the facility—microgrid systems may only require a connection to the local grid, while large-scale grid storage typically necessitates access to regional transmission lines or substations. Transportation access requirements also vary, but wind turbine manufacturing often requires rail access due to the size of components.
- **Water Technologies:** This sector focuses on addressing water scarcity and quality through innovations such as AI-driven leak detection, wastewater recycling, and desalination. It often involves both R&D and production facilities. These businesses typically require small to medium-sized sites (0-25 acres) with access to high-pressure water systems and significant power capacity, while having relatively low transportation needs.
- **Building Energy Technologies:** This sector focuses on innovations that improve energy efficiency, including smart HVAC systems and energy-efficient lighting to reduce building energy use. R&D and software development facilities in this space

typically require small sites (0-5 acres) with moderate to high electrical needs, while having low transportation and water requirements.

- **Electric Vehicle (EV) Infrastructure Technologies:** Supporting the adoption of EVs through charging networks and technology development, this sector generally requires medium to large sites (5-25+ acres) with high electrical power demands and good access to transportation networks.

Opportunity Site Characteristics

The market analysis revealed that Basalt Creek is well suited for various industrial uses, including light industrial, flex space, warehousing, distribution, advanced manufacturing, and support for cleantech and semiconductor sectors. These industries have specific site requirements. To assess how the three opportunity sites could accommodate different sectors, ECOnorthwest analyzed each site's characteristics and evaluated them against the competitiveness matrix and additional criteria specific to cleantech and semiconductor industries.

Table 7 outlines the physical characteristics of the three sites under analysis.

Table 7. Physical Characteristics of Opportunity Sites

SITE CHARACTERISTIC	SW GREENHILL	CRAFT INDUSTRIAL	WEST RAILROAD
Site Size and Ownership	♦ 57 acres ♦ 10 tax lots ♦ 2 owners (1 owns 42 acres, 1 owns 14 acres)	♦ 32 acres ♦ 7 tax lots ♦ 7 owners (fairly even site size distribution)	♦ 165 acres ♦ 15 tax lots ♦ 8 owners (1 owns 65 acres, 4 own ~20 acres each, 3 own smaller parcels)
Slope	Slopes of 10% or greater cover about 6 acres, or 11% of the total site area.	♦ Slopes of 10% or greater cover about 15 acres, or 46% of the total site area. These slopes are generally in the middle of the site, bordering Basalt Creek.	♦ Slopes of 10% or greater cover about 34 acres, or 20% of the total site area. However, some of these slopes are from activities on the sites and not physical attributes.
Surrounding Uses	♦ North: Planned for medium-low density residential and neighborhood commercial (Tualatin portion of BCPA) ♦ East: BCPA border and I-5 ♦ South: Undeveloped land, contractor establishment (planned High-Tech Employment District) ♦ West: Craft Industrial Opportunity Site	♦ North: Planned for (and under development) low-density residential (Tualatin portion of BCPA) ♦ East: SW Greenhill Opportunity Site (planned High-Tech Employment District) ♦ South: Contractor establishments, single residential property (planned High-Tech Employment District) ♦ West: Contractor establishments, plant nurseries, and undeveloped land (planned Light Industrial District)	♦ North: Adjacent to mining site ♦ East: Coffee Creek Correctional Facility and Coffee Creek Industrial area ♦ West: Coffee Creek provides a natural buffer ♦ South: Undeveloped land in Clackamas County
Constraints	♦ 52 unconstrained acres (91% of total area) ♦ Minimal constraints running along the eastern boundary	♦ 14 unconstrained acres (42% of total area); 9 of these acres are east of the constraints that dominate the central area; the remaining 5 acres occupy the northwest corner ♦ Constraints dominate the central north-south area	♦ 92 unconstrained acres (56% of total area) ♦ Constraints run along the entire western boundary and central northern half

Table 8 outlines the existing and planned utilities on the opportunity sites. Details on water, sewer, and roads were provided by City staff based on the most current local access maps from DKS. Final infrastructure alignment and capacity are still in the planning stages.

Table 8. Infrastructure and Utility Characteristics of Opportunity Sites

SITE CHARACTERISTIC	SW GREENHILL	CRAFT INDUSTRIAL	WEST RAILROAD
Water: Potable water delivery to BCPA requires Basalt Creek Parkway extension, Zone C booster station, and may require SW Grahams Ferry Rd extension. These systems will connect SW Tooze Rd to SW Day Rd – 10,200 LF 18" diameter pipe and 4,670 LF 12" diameter pipe. *Modeling needs to confirm these requirements.*	**Current:** No existing water lines in area. **Planned:** Requires water main along SW Boones Ferry Rd alignment (2,490 LF). Water lines assumed to generally follow local road layout (5,460 LF). Will connect proposed water lines to existing lines on SW Pioneer Ct and SW Day Rd. *Sizes to be confirmed during modeling.*	**Current:** No existing water lines in area. **Planned:** Assumed to utilize proposed water main along SW Boones Ferry Rd. *Sizes to be confirmed during modeling.*	**Current:** No existing water lines in area. **Planned:** Water lines assumed to follow road layout from SW Grahams Ferry to SW Tonquin Rd (6,900 LF). *Sizes to be confirmed during modeling.*
Roads	**Current:** Existing SW Boones Ferry Rd, SW Greenhill Rd **Planned:** New arterial to I-5 from SW Greenhill Rd (300 LF). New arterial from SW Day Rd to I-5 (1,060 LF). New local roads looping SW Greenhill Rd to SW Boones Ferry Rd (3,350 LF) and connecting to SW Pioneer Ct (2,110 LF).	**Current:** Existing SW Boones Ferry Rd. **Planned:** New local road looping SW Day Rd to SW Boones Ferry Rd (1,900 LF). Assumed to utilize SW Boones Ferry Rd.	**Current:** Existing SW Grahams Ferry Rd to south and SW Tonquin Rd to north. **Planned:** New local road connecting SW Grahams Ferry Rd to SW Tonquin Rd (6,900 LF) with a possible connection to SW Morgan Rd (2,570 LF).
Sewer: Wastewater collection for BCPA requires completion of Coffee Creek Interceptor Phase 2 – 2,000 LF of gravity system upsizing to 21" diameter pipe from SW Boeckman Rd along railroad to SW Ridder Rd. This also requires Coffee Creek Interceptor Railroad Crossing – 160 LF of 21" diameter pipe.	**Current:** No existing sewer lines in area. **Planned:** Gravity collection lines flow generally south and west along proposed road layout (5,460 LF). Requires new collection line along SW Day Rd (1,600 LF) and new line to travel south between SW Day Rd to connect to SW Garden Acres Rd just north of SW Ridder Rd (3,700 LF). *10-12" diameter collection lines are anticipated.*	**Current:** No existing sewer lines in area. **Planned:** Assumed to utilize proposed line along SW Boones Ferry Rd.	**Current**: No existing sewer lines in area. **Planned:** Gravity line flows from SW Clay St west, crosses railroad, and meets proposed local street alignment in West Railroad to SW Grahams Ferry Rd (6,900 LF). Lift station is required with pressure main along SW Grahams Ferry to SW Clutter St (380 LF) before returning to gravity along SW Clutter St to SW Garden Acres Rd (1,430 LF). *A 10" diameter pipe is anticipated for gravity lines.*
Natural Gas	The IFA matrix does not identify natural gas as a requirement for industries most likely to locate in the BCCP. Natural gas did not come up as a barrier for industrial development in interviews.		
Electricity	Discussions with PGE indicate that the area can accommodate industrial users with moderate power needs. However, large power users such as a data center may require infrastructure upgrades. These types of upgrades can take 3+ years.		
Telecommunication	Since the BCPA is located within the Metro, telecommunication service is expected to be adequate to meet the needs of likely users. Telecommunication capacity did not come up as a barrier for industrial development in interviews.		

Location in the overall region and access to highways, rail, other like businesses, and labor force also play a role in site selection for industries. Given the proximity of these sites within a very small area, we detail these overall characteristics for the BCPA rather than for each site (Table 9).

Table 9. Basalt Creek Transportation and Proximity Characteristics

SITE CHARACTERISTIC	BASALT CREEK EVALUATION
Available Trips	♦ The BCCP allocated 951 trips to Wilsonville's portion of Basalt Creek. The TRP identifies the necessary improvements to accommodate those trips. Additional development and trips would require an update to the TRP and additional capacity improvements to the planned system.
Transportation Access to Interstate or Principal Arterial	♦ The entirety of Basalt Creek is within 5 miles of access to I-5 and I-205 and is less than 10 miles from Highway 217.
Proximity to Regional Infrastructure Rail/Port/Airport	♦ Basalt Creek is ~27 miles from Portland International Airport and ~26 miles from the Port of Portland. ♦ A rail line runs through Basalt Creek. The type of rail line and potential for spurs are not known at this point.
Proximity to Labor Force	♦ Access to the broader Portland Metro and Mid-Valley labor forces.
Proximity to Goods	♦ Close proximity to wine region and agricultural land. ♦ Close proximity to distributors, other manufacturers, and tech hubs, including semiconductor businesses.

Evaluation of Compatible Uses

The suitability of potential users for each site is outlined below, based on site characteristics and industry-specific needs. This high-level evaluation focuses on physical site characteristics—such as size, location, and constraints—without factoring in the likelihood of redevelopment. It provides a broad understanding of site benefits, barriers, and potential industry suitability, serving as a foundation for planning and zoning rather than a definitive assessment of building configurations or sizes.

Infrastructure will be pivotal in shaping the types of industries and scale of development suitable for the area. This analysis incorporated available information on infrastructure elements such as water, wastewater, and roads; however, detailed system capacities, final road alignments, and the timing of improvements—particularly in areas like West Railroad—remain uncertain. These factors will play a significant role in determining site suitability.

Water and wastewater systems are expected to meet most demands, though high-water users may require additional capacity. Similarly, industries with significant electricity demands might necessitate infrastructure upgrades. Road alignments will impact parcel configurations, building sizes, and overall development potential. While these elements are critical to understanding site suitability, they are not yet classified as definitive constraints or advantages.

- **The SW Greenhill** site spans 57 acres, with 91 percent (52 acres) of the land unconstrained. Minimal slopes (affecting 11 percent of the site), a high proportion of undeveloped land, consolidated land ownership (two property owners), and proximity to existing infrastructure make it one of the most development-ready locations in Basalt Creek. The site could be physically suitable for a high-tech supply chain, cleantech industries, advanced manufacturing, food processing, small warehousing and distribution, and industrial business parks or R&D campuses. Its proximity to transportation networks and regional workforce access further enhances its competitiveness.
- **The Craft Industrial** area is split into eastern and western portions by site constraints and consists of seven tax lots with fragmented ownership, most under five acres. Only 14 acres are unconstrained, and its proximity to residential areas limits its suitability for high-intensity industrial uses. Instead, the area aligns with the Basalt Creek Concept Plan's vision for small-scale or micro-industrial uses, such as live-work spaces or makerspaces.

  With site aggregation, the southeastern portion could accommodate small-scale industrial or office users on up to five acres. These uses could resemble industrial condo developments like the Commerce Circle Business Park or Riverwood Business Center, which integrate office and small-scale production spaces. The northeastern portion, while it could also redevelop, is likely less appealing due to its irregular shape and nearby high-value residences. The presence of existing residences,

including some high-value homes, are likely to delay redevelopment timelines compared to other opportunity sites. However, the feasibility of redeveloping these residential properties was not assessed as a part of this study.

- **The West Railroad** site spans 165 acres, with 56 percent (92 acres) of the land unconstrained. Its large parcels and access to regional transportation networks could make it physically suitable for uses such as general manufacturing, food processing, and small to midsized warehousing or distribution. Proximity to Coffee Creek's industrial area further enhances its appeal to businesses providing support services to neighboring industries. However, significant infrastructure upgrades are required, and access is limited by the railroad undercrossing on SW Grahams Ferry Road. Additionally, the site's proximity to a rail line and a mining operation could make the site less attractive to advanced manufacturing or other industries sensitive to vibration. Ongoing infrastructure alignment and capacity studies will provide further clarity on the site's suitability for targeted industries.

In Table 10, the compatibility of each site with various industrial uses is color coded as follows:

- Red: Not competitive for the industry
- Yellow: Moderate potential
- Green: High compatibility and strong suitability

Table 10. Evaluation of Compatible Uses Based on Site Characteristics

INDUSTRIES		SW GREENHILL	CRAFT INDUSTRIAL	WEST RAILROAD
Production Manufacturing	High-Tech / Cleantech Manufacturing	Midsized, flat site; high power or utility demands could exclude some users depending on system capacity	May be able to accommodate a small user (under 5 acres) most likely on the southeastern portion; some users may prefer larger sites with expansion potential	Vibration *may* be a concern from nearby rail and/or mining; high power or utility demands could exclude some users depending on system capacity
Value-Added Manufacturing and Assembly	Food Processing	Water and sewer needs are high; high demands could exclude some users depending on system capacity	May be able to accommodate a small user (under 5 acres) most likely on the southeastern portion	Water and sewer needs are high; high demands could exclude some users depending on system capacity
	Advanced Manufacturing & Assembly	Midsized, flat site; lower water and sewer demand than high-tech industries	Site small and constrained; increased setbacks (if required) could be a problem; often requires on-site utility service areas	Vibration *may* be a concern from nearby rail and/or mining

INDUSTRIES		SW GREENHILL	CRAFT INDUSTRIAL	WEST RAILROAD
Light / Flex Industrial	General Manufacturing	Residential proximity may reduce appeal	Site small and constrained; residential proximity may reduce appeal	Desirable site size available; distance from sensitive uses (residential, park)
	Industrial Business Park and R&D Campus	Midsized, flat site; slightly small for some users	Site small and constrained	Constraints may limit large park potential
	Business / Admin Services	Midsized, flat site; high trip generation	May be able to accommodate a small user (under 5 acres) most likely on the southeastern portion; tolerates higher slopes; compatible near residential; high trip generation	Proximity to Coffee Creek Industrial area that hosts similar services is attractive; tolerates higher slopes; high trip generation
Warehouse & Distribution	Regional	Close to I-5; existing road infrastructure; site may be a little small for some users	Site too small and constrained; limited space for trucks	Constraints could limit large distribution centers; the City is evaluating needed improvement to better accommodate truck traffic
	Local	Close to I-5; existing road infrastructure; suitable for smaller users	Site too small and constrained; limited space for trucks	Close to I-5; suitable for smaller users; the City is evaluating needed improvement to better accommodate truck traffic
Specialized	Data Center	May be suitable, but power needs could exceed available capacity, requiring upgrades	Site too small and constrained	May be suitable, but power needs could exceed available capacity, requiring upgrades

Site Competitiveness for Semiconductor Industry

Basalt Creek lacks the large parcels required for fabrication plants but is positioned to accommodate supply chain businesses that support semiconductor manufacturing.

- **SW Greenhill:** High Potential – Could be competitive for the semiconductor supply chain businesses. This site is closest to development ready, which is highly competitive because semiconductor companies prioritize sites with infrastructure ready to support development within *6 months to 3 years.*
- **Craft Industrial:** Not Competitive – Given the small parcels on the Craft Industrial site, this site is not competitive for the semiconductor supply chain businesses.

- **West Railroad:** Moderate Potential – The longer timeline required to provide adequate infrastructure, combined with existing constraints, makes this site less attractive for the semiconductor industry.

Site Competitiveness for Cleantech

- **Craft Industrial:** Moderate Potential – Given the small parcels and extent of constraints, this site is not competitive for many cleantech businesses but may be attractive to small-scale users in ag-tech and building energy tech that require sites under 5 acres.

Table 11. Cleantech Evaluation of Compatible Uses for Craft Industrial

Battery Storage	Existing businesses add appeal, but energy demands may exceed supply; site size may be too small for many users
Mass Timber	Limited by small site size, lack of direct rail access, and high energy requirements
Ag-Tech	Site may be suitable for a small user
Circular Economy	Some users may prefer direct rail access; site may be too small for some users
Solar & Wind Energy	Small site; unsuitable for power generation and manufacturing
Water Tech	High demand user; water pressure adequacy and energy needs may pose challenges; site may be too small for some users
Building Energy Tech	Site may be suitable for a smaller user; energy demands could exceed supply
EV infrastructure Tech	Limited site size, lack of rail access, and high energy requirements

- **SW Greenhill and West Railroad:** High Potential – Site size and infrastructure could appeal to a variety of cleantech subsectors, including battery storage, ag-tech, circular economy, water tech, and building energy tech.

Table 12. Cleantech Evaluation of Compatible Uses

Battery Storage	Existing businesses add appeal, but energy demands may exceed supply
Mass Timber	Limited by lack of direct rail access and high energy requirements
Ag-Tech	Sites meet needs well
Circular Economy	High transportation needs: some facilities may prefer direct rail access
Solar & Wind Energy	Unsuitable for power generation; possible for manufacturing but limited by rail and power needs
Water Tech	High demand user; water pressure adequacy and energy needs may pose challenges; low transportation needs
Building Energy Tech	Sites meet needs well; energy demands could exceed supply
EV infrastructure Tech	Limited by lack of rail access and high power requirements

Conclusion

Land Supply

The BCPA offers a promising opportunity to support a diverse range of industrial and employment uses that align with Wilsonville's economic development goals. Since the previous Buildable Lands Inventory (BLI) update, the area has experienced growth in contractor establishments. The updated BLI identifies **150 acres of buildable land,** comprising **87 acres of vacant land** and **63 acres of partially vacant land,** after accounting for constraints and existing development. The supply is distributed across parcels of varying sizes, ranging from small lots under 5 acres to larger parcels exceeding 25 acres, providing a mix of options suitable for different industry needs. Given the 150 acres of buildable land and the expectation of employment densities between 10 and 18.5 employees per acre, the BCPA is expected to accommodate between **1,500 and 2,780 jobs**.

Site Suitability Analysis

The Site Suitability Analysis evaluates the competitiveness of three opportunity sites within the BCPA based on their ability to host key industries identified in the Economic Inventory. This evaluation focuses on physical site characteristics, such as size, location, and constraints, rather than the likelihood of redevelopment. Redevelopment feasibility is addressed in a separate deliverable.

- **SW Greenhill:** With its minimal constraints, lack of development, consolidated land ownership, and existing infrastructure, this site could be physically suited for cleantech, high-tech supply chains, advanced manufacturing industries, food processing, small warehousing and distribution, and industrial business parks or R&D campuses requiring medium-sized parcels. This validates the uses originally envisioned in the BCCP for the area.
- **Craft Industrial:** Due to significant constraints, the site is currently more suitable for micro-industrial uses, such as live-work spaces, as originally identified in the BCCP. However, with site aggregation, the southeastern portion could accommodate small-scale business or administrative services and production uses, similar to industrial condo developments like Commerce Circle Business Park or Riverwood Business Center. The presence of existing residences, including some high-value homes, are likely to delay redevelopment timelines compared to other opportunity sites.
- **West Railroad:** This site has potential for development in general manufacturing, food processing, warehousing and distribution, and business services. However, significant infrastructure upgrades are required, and existing constraints may limit the scale of some types of development.

Next Steps

The findings presented in this memorandum are preliminary and will be further refined through ongoing discussions with the Planning Commission and City Council. This analysis is being conducted in parallel with an evaluation of redevelopment feasibility for contractor establishments. Ultimately, these components, along with insights from the Economic Inventory, will be synthesized into a summary report that outlines key findings and recommendations.

Appendix B.1 IFA Industrial Development Competitiveness Matrix

ECOnorthwest

STATE OF OREGON - Infrastructure Finance Authority
Industrial Development Competitiveness Matrix

Infrastructure Finance Authority

			Production Manufacturing		Value-Added Manufacturing and Assembly		Light / Flex Industrial			Warehousing & Distribuiton		Specialized		
	PROFILE		A	B	C	D	E	F	G	I	H	J	K	L
	CRITERIA		Heavy Industrial / Manufacturing	High-Tech / Clean-Tech Manufacturing	Food Processing	Advanced Manufacturing & Assembly	General Manufacturing	Industrial Business Park and R&D Campus	Business / Admin Services	Regional Warehouse / Distribution	Local Warehouse / Distribution	UVA Manufacturing / Research	Data Center	Rural Industrial
1	**GENERAL REQUIREMENTS**		Use is permitted outright, located in UGB or equivalent and outside flood plain; and site (NCDA) does not contain contaminants, wetlands, protected species, or cultural resources or has mitigation plan(s) that can be implemented in 180 days or less.											
	PHYSICAL SITE													
2	TOTAL SITE SIZE**	Competitive Acreage*	10 - 100+	5 - 100+	5 - 25+	5 - 25+	5 - 15+	20 - 100+	5 - 15+	20 - 100+	10 - 25+	10 - 25+	10 - 25+	5 - 25+
3	COMPETITIVE SLOPE:	Maximum Slope	0 to 5%	0 to 5%	0 to 5%	0 to 7%	0 to 5%	0 to 7%	0 to 12%	0 to 5%	0 to 5%	0 to 7%	0 to 7%	0 to 5%
	TRANSPORTATION													
5	TRIP GENERATION:	Average Daily Trips per Acre	40 to 60 (ADT / acre)	40 to 60 (ADT / acre)	50 to 60 (ADT / acre)	40 to 60 (ADT / acre)	40 to 50 (ADT / acre)	60 to 150 (ADT / acre)	170 to 180 (ADT / acre)	40 to 80 (ADT / acre)	40 to 80 (ADT / acre)	40 to 80 (ADT / acre)	20 to 30 (ADT / acre)	40 to 50 (ADT / acre)
6	MILES TO INTERSTATE OR OTHER PRINCIPAL ARTERIAL:	Miles	w/ in 10	w/ in 10	w/ in 30	w/ in 15	w/ in 20	N/A	N/A	w/ in 5 (only interstate or equivalent)	w/ in 5 (only interstate or equivalent)	N/A	w/ in 30	N/A
7	RAILROAD ACCESS:	Dependency	Preferred	Preferred	Preferred	Not Required	Preferred	Preferred	Not Required	Preferred	Preferred	Not Required	Avoid	N/A
8	PROXIMITY TO MARINE PORT:	Dependency	Preferred	Preferred	Preferred	Not Required	Preferred	Preferred	Not Required	Preferred	Preferred	Not Required	Not Required	N/A
9	PROXIMITY TO REGIONAL COMMERCIAL AIRPORT:	Dependency	Preferred	Competitive	Preferred	Competitive	Preferred	Required	Preferred	Preferred	Preferred	Preferred	Competitive	N/A
		Distance (Miles)	w/ in 60	w/ in 60	w/ in 60	w/ in 30	w/ in 60	w/ in 30	w/ in 60	w/ in 60	w/ in 60	w/ in 30	w/ in 60	N/A
10	PROXIMITY TO INTERNATIONAL AIRPORT:	Dependency	Preferred	Competitive	Preferred	Competitive	Preferred	Competitive	Preferred	Preferred	Preferred	Competitive	Preferred	N/A
		Distance (Miles)	w/ in 300	w/ in 300	w/ in 300	w/ in 100	w/ in 300	w/ in 100	w/ in 300	w/ in 300	w/ in 300	w/ in 100	w/ in 300	N/A
	UTILITIES													
11	WATER:	Min. Line Size (Inches/Dmtr)	8" - 12"	12" - 16"	12" - 16"	8" - 12"	6" - 10"	8" - 12"	4" - 6"	4" - 8"	4" - 6"	4" - 8"	16"	4" - 8"
		Min. Fire Line Size (Inches/Dmtr)	10" - 12"	12" - 18"	10" - 12"	10" - 12"	8" - 10"	8" - 12"	6" - 10"	10" - 12"	6" - 8"	6" - 10"	10"-12"	6" (or alternate source)
		High Pressure Water Dependency	Preferred	Required	Required	Preferred	Not Required	Preferred	Not Required	Not Required	Not Required	Not Required	Required	Not Required
		Flow Gallons per Day per Acre)	1600 (GPD / Acre)	5200 (GPD / Acre)	3150 (GPD / Acre)	2700 (GPD / Acre)	1850 (GPD / Acre)	2450 (GPD / Acre)	1600 (GPD / Acre)	500 (GPD / Acre)	500 (GPD / Acre)	1600 (GPD / Acre)	50-200 (Gallons per MWh) †	1200 (GPD / Acre)
12	SEWER:	Min. Service Line Size (Inches/Dmtr)	6" - 8"	12" - 18"	10" - 12"	10" - 12"	6" - 8"	10" - 12"	6" - 8"	4"	4"	6"	8"-10"	4" - 6" (or on-site source)
		Flow (Gallons per Day per Acre)	1500 (GPD / Acre)	4700 (GPD / Acre)	2600 (GPD / Acre)	2500 (GPD / Acre)	1700 (GPD / Acre)	2000 (GPD / Acre)	1600 (GPD / Acre)	500 (GPD / Acre)	500 (GPD / Acre)	1300 (GPD / Acre)	1000 (GPD / Acre) ‡	1000 (GPD / Acre)

13	NATURAL GAS:	Preferred Min. Service Line Size (Inches/Dmtr)	4" - 6"	6"	4"	6"	4"	6"	2"	2"	2"	2"	4"	N/A
		On Site	Competitive	Competitive	Preferred	Competitive	Competitive	Competitive	Preferred	Preferred	Preferred	Preferred	Preferred	Preferred
14	ELECTRICITY:	Minimum Service Demand	2 MW	4-6 MW	2-6 MW	1 MW	0.5 MW	0.5 MW	0.5 MW	1 MW	1 MW	0.5 MW	5-25 MW	1 MW
		Close Proximity to Substation	Competitive	Competitive	Not Required	Competitive	Preferred	Competitive	Preferred	Not Required	Not Required	Not Required	Required, could be on site	Not Required
		Redundancy Dependency	Required	Preferred	Not Required	Required	Not Required	Competitive	Required	Not Required	Not Required	Not Required	Required	Not Required
15	TELECOMMUNICATIONS:	Major Communications Dependency	Preferred	Required	Preferred	Required	Required	Required	Required	Preferred	Preferred	Required	Required	Preferred
		Route Diversity Dependency	Not Required	Required	Not Required	Required	Not Required	Preferred	Required	Not Required	Not Required	Not Required	Required	Not Required
		Fiber Optic Dependency	Preferred	Required	Preferred	Required	Preferred	Required	Required	Preferred	Preferred	Required	Required	Not Required
16	SPECIAL CONSIDERATIONS:		Adequate distance from sensitive land uses (residential, parks, large retail centers) necessary. High throughput of materials. Large yard spaces and/or buffering required. Often transportation related requiring marine/rail links.	Acreage allotment includes expansion space (often an exercisable option). Very high utility demands in one or more areas common. Sensitive to vibration from nearby uses.	May require high volume/supply of water and sanitary sewer treatment. Often needs substantial storage/yard space for input storage. Onsite water pre-treatment needed in many instances.	Surrounding environment of great concern (vibration, noise, air quality, etc.). Increased setbacks may be required. Onsite utility service areas. Avoid sites close to wastewater treatment plants, landfills, sewage lagoons, and similar land uses. Lower demands for water and sewer treatment than Production High-Tech Manufacturing.	Adequate distance from sensitive land uses (residential, parks) necessary. Moderate demand for water and sewer. Higher demand for electricity, gas, and telecom.	High diversity of facilities within business parks. R&D facilities benefit from close proximity to higher education facilities. Moderate demand on all infrastructure systems.	Relatively higher parking ratios may be necessary. Will be very sensitive to labor force and the location of other similar centers in the region. High reliance on telecom infrastructure.	Transportation routing and proximity to/from major highways is crucial. Expansion options required. Truck staging requirements mandatory. Minimal route obstructions between the site and interstate highway such as rail crossings, drawbridges, school zones, or similar obstacles.	Transportation infrastructure such as roads and bridges to/from major highways is most competitive factor.	Must be located witihn or near FAA-regulated UAV testing sites. Moderate utility demands. Low reliance on transportation infrastructure.	Larger sites may be needed. The 25 acre site requirement represents the more typical site. Power delivery, water supply, and security are critical. Surrounding environment (vibration, air quality, etc.) is crucial. May require high volume/supply of water and sanitary sewer treatment.	Located in more remote locations in the state. Usually without direct access (within 50 miles) of Interstate or City of more than 50,000 people.

Mackenzie; Business Oregon

Terms:

More Critical ↑ Less Critical	**'Required'** factors are seen as mandatory in a vast majority of cases and have become industry standards
	'Competitive' significantly increases marketability and is *highly recommended by Business Oregon* . May also be linked to financing in order to enhance the potential reuse of the asset in case of default.
	'Preferred' increases the feasibility of the subject property and its future reuse. Other factors may, however, prove more critical.
* Competitive Acreage: Acreage that would meet the site selection requirements of the majority of industries in this sector.	
**Total Site: Building footprint, including buffers, setbacks, parking, mitigation, and expansion space	
† Data Center Water Requirements: Water requirement is reported as gallons per MWh to more closely align with the Data Center industry standard reporting of Water Usage Effectiveness (WUE).	
‡ Data Center Sewer Requirements: Sewer requirement is reported as 200% of the domestic usage at the Data Center facility. Water and sewer requirements for Data Centers are highly variable based on new technologies and should be reviewed on a case-by-case basis for specific development requirements.	

Appendix B.2 Cleantech Industrial Sector Land Use Competitiveness Matrix

The Oregon Cleantech Competitiveness Assessment Report (Appendix D in the report) identified the following land use requirements for key cleantech subsectors in Oregon as described below.

Cleantech Land Use Criteria

Land use requirements for attracting and growing industrial users vary across sectors. We have reviewed typical land use and infrastructure needs based on existing facility development, anticipated growth needs, and similarities to existing established industrial users within the State. We have reviewed land use competitiveness for the following development criteria, which are commonly used when evaluating sites for attracting potential industrial users:

1. Total site size: Gross property area, including building footprint, setbacks, parking, laydown space, buffers and/or mitigation areas, and expansion areas.
   A. Small: 0-5 acres
   B. Medium: 5-25 acres
   C. Large: > 25 acres
2. Use allowance: Specific manufacturing use allowed under current zoning. Development standards also may limit feasibility of necessary elements such as utility yards.
   A. Low: Allowed outright
   B. Medium: Allowed conditionally or with limitations
   C. High: Not allowed
3. Site slope tolerance: Elevation differences across the site; generally, industries with large-footprint buildings or laydown yards require flatter sites.
   A. Low: 0-5%
   B. Moderate: 0-7%
   C. High: 0-12%
4. Access to interstate or principal arterial transportation routes: Access to shipping routes and available capacity for trips generated.
   A. Low: Relatively low need for access to transportation routes.
   B. Moderate: Access to principal transportation routes is preferred.
   C. High: Access to principal transportation routes is required.
5. Railroad access: Proximity and capacity for rail freight systems, for either raw materials or finished goods.
   A. Low: Relatively low need for rail access.
   B. Moderate: Access to rail access is preferred.
   C. High: Access to rail access is required.
6. Marine port access: Proximity and capacity for marine cargo shipping, for either raw materials or finished goods.
   A. Low: Relatively low need for marine access.
   B. Moderate: Access to marine access is preferred.

C. High: Access to marine access is required.

7. Airport access: Proximity and flight availability for employees, customers, or air cargo.
   A. Low: Relatively low need for airport access.
   B. Moderate: Access to airport access is preferred.
   C. High: Access to airport access is required.
8. High-pressure water supply: Proximity and capacity for high-pressure water supply, typically as municipal water.
   A. Low: Significant water usage is not expected to be a critical component of this industry.
   B. Moderate: Water usage may be high for this industry; high-pressure water supply is preferred.
   C. High: High-pressure water supply is required.
9. Electricity supply: Proximity and capacity for electrical power.
   A. Low: Significant electricity usage is not expected to be a critical component of this industry.
   B. Moderate: Electrical usage may be high for this industry; high-demand service and/or redundancy is preferred.
   C. High: High-demand service and/or redundant electrical supply is required.

The following table summarizes our recommendations of land use competitiveness for the selected Cleantech sectors across the criteria listed above.

Table 13. Competitiveness Matrix for Select Cleantech Industries

	Battery Storage	Mass Timber	Ag-Tech	Circular Economy	Solar & Wind Energy Prod	Water Tech	Building Energy Tech	EV Infrastructure Tech
Site Size	Small to Large[4]	Med to Large	Small[5]	Small to Med[6]	Med to Large[7]	Small to Med	Small	Med to Large
Use Allowance	Varies by jurisdiction							
Slope Tolerance	Mod.	Low	High	Mod.	Mod.	Low	High	Mod.
Transportation Access	Low	High	Low	High	Mod.	Low	Low	High
Rail Access	Low	Mod.	Low	Mod.	Wind: High Solar: Low	Low	Low	Mod.
Marine Access	Low	Low	Low	Low to Mod.	Low to High[8]	Low	Low	Low to Mod.
Airport Access	Low	Low	Mod.	Low	Low	Low	Mod.	High
High-Pressure Water Needs	Low	Low to Mod.	Low	Mod.	Mod.	High	Low	Low
Electrical Supply Needs	High[9]	Mod. to High	Low	Mod.	High[6]	High	Mod. to High	High

Source: Oregon Cleantech Competitiveness Assessment Report, 2024

[4] Battery storage site sizes may vary widely, from urban microgrid installations to large-scale power grid storage.
[5] The Ag-Tech industries identified in this study are assumed to generally focus on software and small-scale equipment products. These companies may use large-scale farms for product development or research; however, since those are likely to be existing operating farm facilities, we do not identify them as a land use criterion here.
[6] Site facility size for circular economy is dependent on the raw materials and finished products involved and the industry scaling.
[7] Site size for solar/wind manufacturing facilities is similar to advanced manufacturing industries, while sites for solar/wind power generation vary greatly depending on scale, ranging from rooftop systems to grid-scale farms.
[8] Offshore wind power requires marine facilities to transport turbines and equipment to the generating site. Land-based wind power marine access varies.
[9] Electrical system proximity and access for power generation facilities may vary depending on the scale and intended use. Microgrid systems may only need connection to the local electrical grid, while large-scale grid storage may require connection to regional transmission lines or substations.

Appendix B.3 Buildable Lands Inventory Methodology

The BLI is intended to identify industrial lands that are available for development for employment uses within the City of Wilsonville's BCPA. The inventory is sometimes characterized as *supply* of land to accommodate anticipated employment growth. The amount of land needed to accommodate anticipated growth, often referred to as *demand* for land, depends on the type of employment-related development and other factors.

This appendix presents methods and definitions used to develop the industrial buildable lands inventory for the BCPA. The results (shown in the Land Supply section of the memorandum) are based on analyses by ECOnorthwest of data from the City of Wilsonville, Washington and Clackamas Counties, Metro, and Pacific Habitat Services. The analysis was reviewed by City staff. The remainder of this appendix summarizes key findings of the BLI.

Methods and Definitions

The BLI in Wilsonville's BCPA includes all land that allows industrial uses within the jurisdiction of Wilsonville's comprehensive plan use designations or unincorporated areas of Washington and Clackamas Counties. From a practical perspective, land was included in the BLI if it met all the following criteria:

1. It is inside the BCPA
2. It is within a Wilsonville Comprehensive Plan designation or unincorporated areas of Washington and Clackamas Counties.
3. It is inside a tax lot (as defined by Metro), and
4. Its plan designation allows employment uses. *Note that tax lots do not generally include road or railroad rights-of-way or water.*

The inventory then builds from the tax lot–level database to estimate buildable land by Comprehensive Plan designation.

Inventory Steps

The five steps in the BLI are:

1. Generate UGB "land base"
2. Classify lands by initial development status
3. Identify constraints
4. Verify inventory results
5. Tabulate and map results

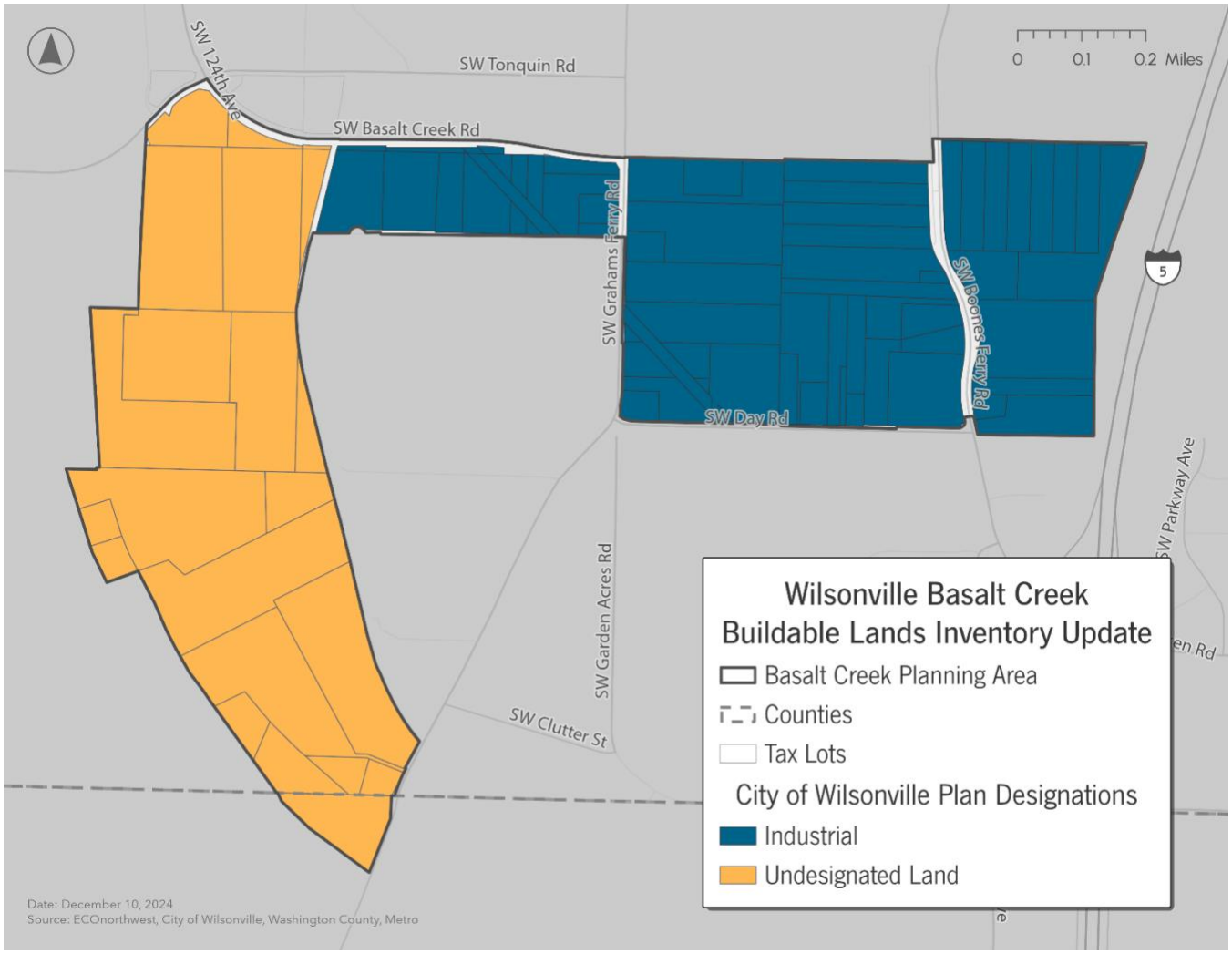
Step 1: Generate UGB "Land Base"

The industrial inventory used all tax lots within the BCPA with the appropriate types of comprehensive plan designations that fall under those land use categories:

- Industrial (I)
- Undesignated land (i.e., unincorporated land)

Figure 6 below shows a map of these designations used in the BLI.

Figure 6. Land Base by Wilsonville Comprehensive Plan Designation, BCPA, 2024



Source: ECOnorthwest Analysis, City of Wilsonville, Metro

Step 2: Classify Lands by Development Status

In this step, ECOnorthwest initially classified each tax lot with an employment plan designation (based on the definitions above) into one of three mutually exclusive categories based on development status:

- Vacant land
- Partially vacant land
- Developed land

ECOnorthwest identified buildable land and classified development status using a rule-based methodology adapted from Metro's Buildable Land Inventory documentation[10] and utilizing Metro's vacant and developed land GIS inventories. These classifications serve as a starting point for identifying development statuses and are further refined in step 4 through visual review by ECOnorthwest and the City of Wilsonville.

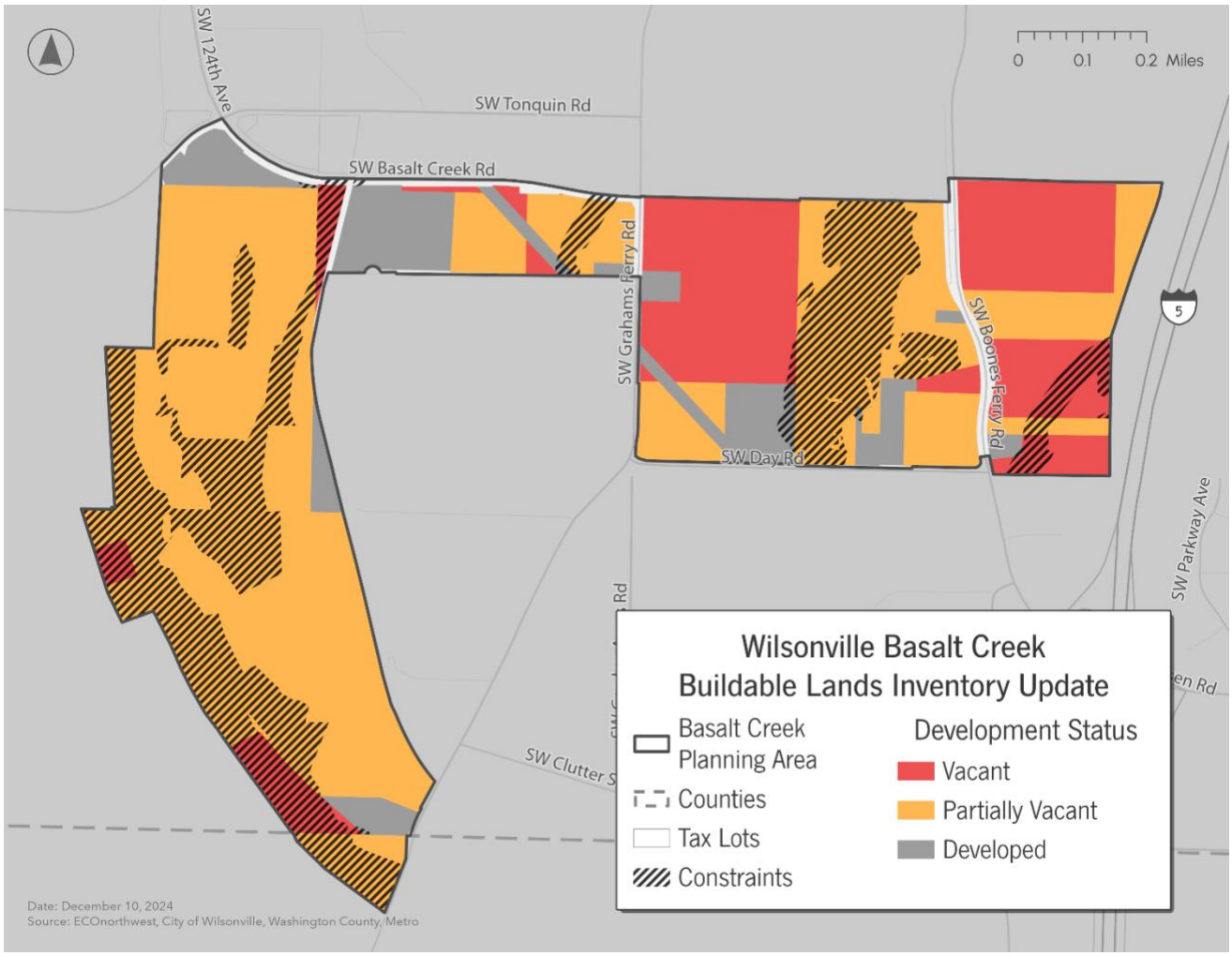
The rules are described in Table 14, and the development status classifications of the BLI land base are visualized in map format in Figure 7.

Table 14. Rules for Development Status Classification

DEVELOPMENT STATUS	DEFINITION	METHODOLOGICAL BASIS
Vacant Land	A tax lot where the area is: (a) Less than 2,000 sq ft and less than 10% developed, or (b) More than 95% vacant.	*Metro Appendix 2 - 2024 Buildable Land Inventory (BLI) and Capacity Estimates*[11]
Partially Vacant Land	A tax lot where the area does not meet the vacant land definition and is more than one-half acre vacant	No statutory definition
Developed Land	A tax lot that is not vacant or partially vacant.	*Metro Appendix 2*

[10] https://www.oregonmetro.gov/sites/default/files/2024/07/09/2024-UGR-Appendix-2-UGB-capacity-analysis-with-attachments.pdf
[11] Ibid.

Figure 7. Development Status with Constraints, BCPA, 2024



Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro, Pacific Habitat Services

Step 3: Identify Constraints

As shown in

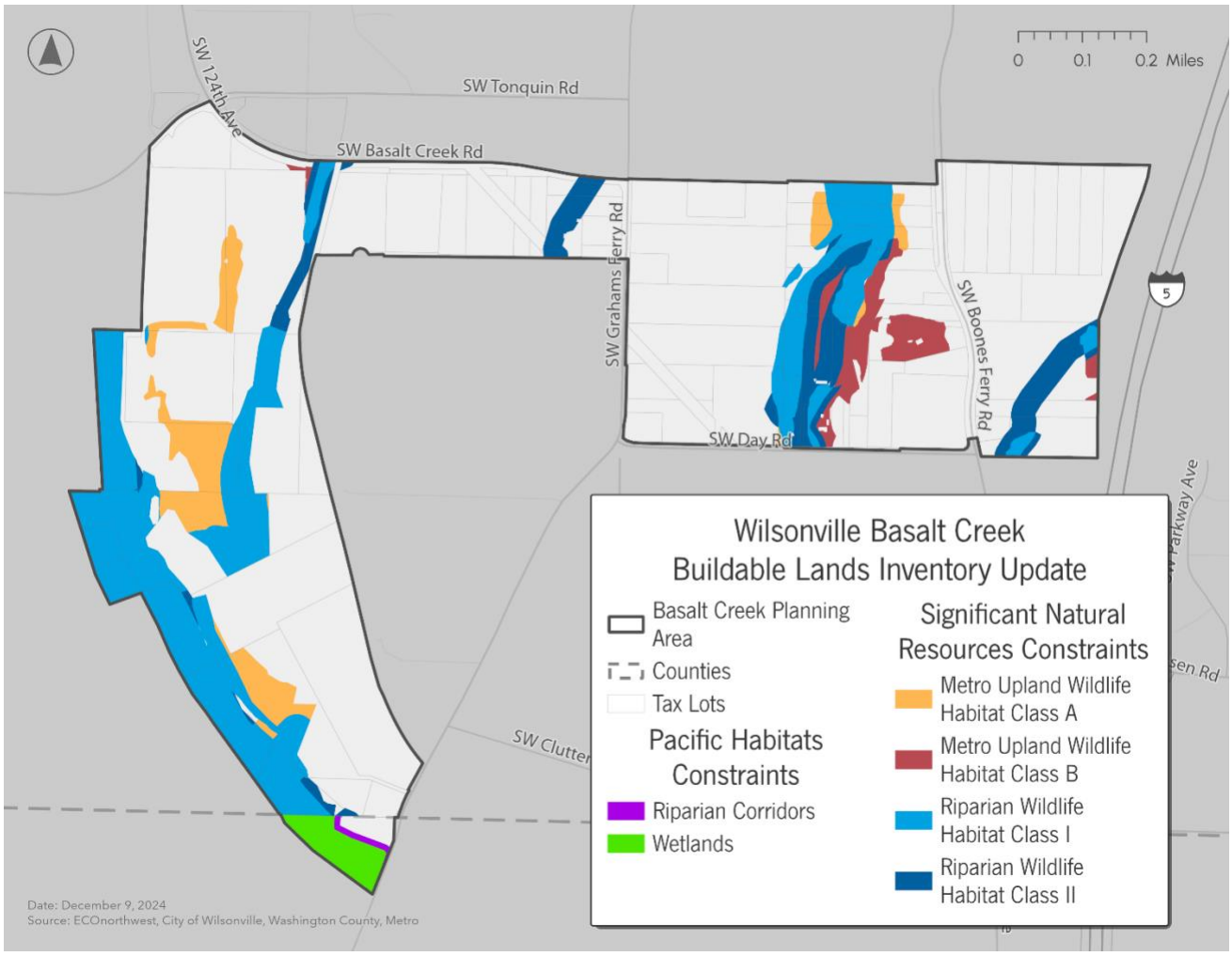
Table 15, the BLI included development constraints consistent with guidance in OAR 660-009-0005(2) and discussion with Wilsonville City staff.

Table 15. Constraints Included in BLI

DEVELOPMENT STATUS	STATUTORY AUTHORITY	THRESHOLD	SOURCE
Goal 5 Natural Resource Constraints			
Significant Natural Resources (SNR)	*OAR 660-009-0005(2)*	Lands within SNR classifications: ♦ Metro Upland Wildlife Habitat Classes A and B ♦ Riparian Wildlife Habitat Classes I and II	Washington County
Riparian Corridors	*OAR 660-009-0005(2)*	Lands within riparian corridors (Clackamas County only)	Pacific Habitat Services
Wetlands	*OAR 660-009-0005(2)*	Lands within wetlands (Clackamas County only)	Pacific Habitat Services

These areas were evaluated as prohibitive constraints (unbuildable). All constraints were merged into a single constraint file, which was then used to identify the area of each tax lot that is constrained. These areas were deducted from lands identified as vacant or partially vacant. Figure 8 shows a map of the individual constraints.

Figure 8. Development Constraints, BCPA, 2024



Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro, Pacific Habitat Services

Step 4: Verify Inventory Results

ECOnorthwest used a multistep verification process. The first verification step involved a "visual assessment" of land classifications using GIS and recent aerial photos. The visual assessment involved reviewing classifications overlaid on recent aerial photographs to verify uses on the ground. ECOnorthwest reviewed all tax lots included in the inventory using the visual assessment methodology. The second round of verification involved City staff verifying the visual assessment output. ECOnorthwest amended the BLI based on City staff review and a discussion of staff's comments.

Step 5: Tabulate and Map Results

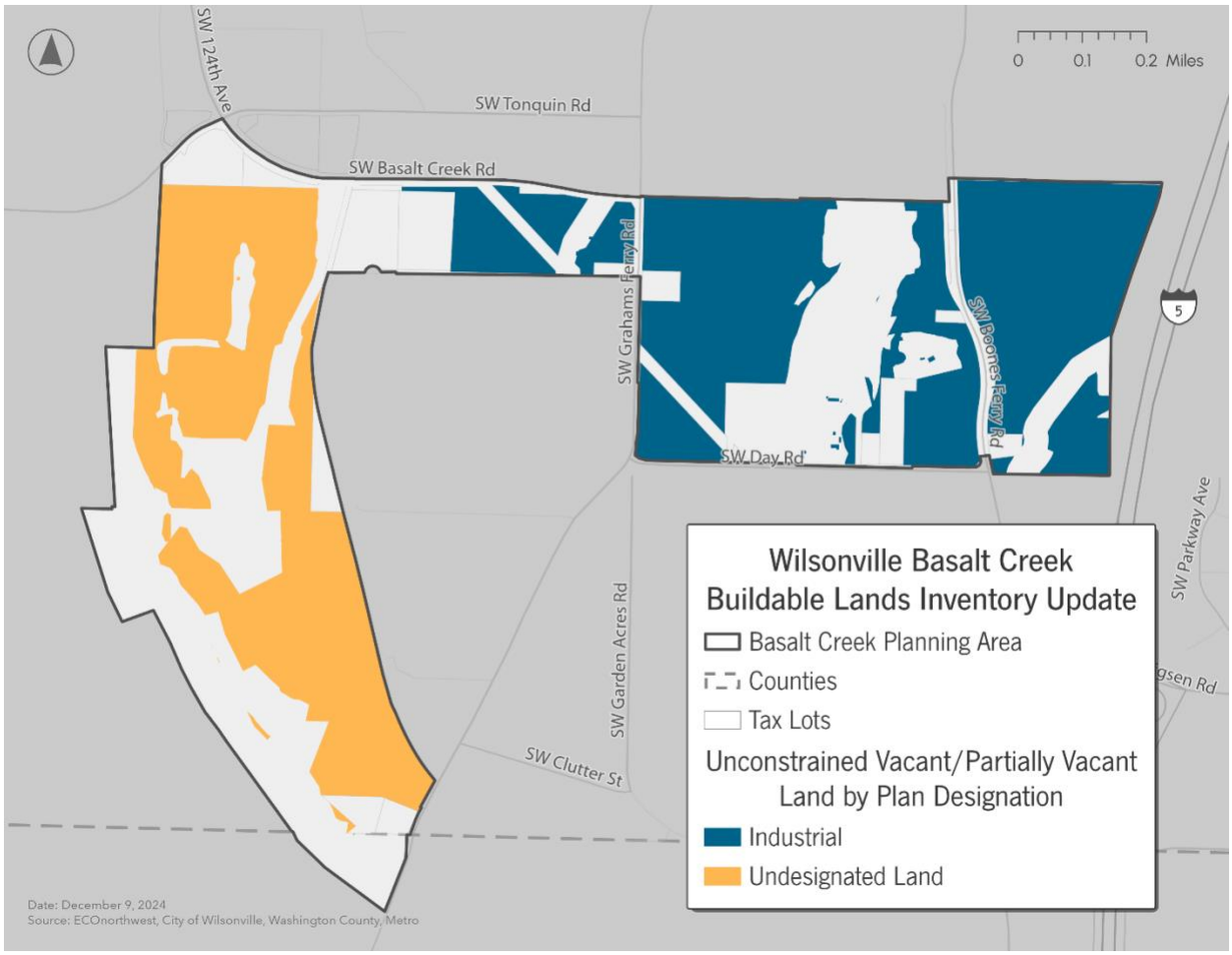
The results of the industrial BLI are presented in tabular form in Table 16 and in a map in Figure 9.

Table 16. Buildable Acres in Vacant and Partially Vacant Tax Lots by Wilsonville Plan Designations, BCPA, 2024

Plan Designation	Total Buildable Acres	Buildable Acres on Vacant Lots	Buildable Acres on Partially Vacant Lots
Industrial	127	87	40
Undesignated	24	0.4	23
Total	**150**	**87**	**63**

Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro

Figure 9. Buildable Employment Land by Wilsonville Plan Designation, BCPA, 2024



Source: ECOnorthwest Analysis, City of Wilsonville, Washington County, Metro, Pacific Habitat Services

Appendix C: Redevelopment Feasibility of Contractor Establishments

ECOnorthwest

DATE:	December 12, 2024
TO:	City of Wilsonville
FROM:	ECOnorthwest: Nicole Underwood, Michelle Anderson, and Bob Parker
SUBJECT:	WILR Phase 1: Redevelopment Feasibility of Contractor Establishments

The Cities of Tualatin and Wilsonville adopted the Basalt Creek Concept Plan (BCCP) in 2018 after a lengthy joint planning process. Now, in 2024-25, the City of Wilsonville is working to advance the Basalt Creek Planning Area (BCPA) beyond the concept plan to a development-ready status by designating zoning and refining infrastructure plans. However, since adoption of the BCCP, economic conditions at national, state, regional, and local levels have shifted significantly and must now be considered.

To address these evolving conditions, the City hired ECOnorthwest to conduct a market assessment and industrial lands study focused on Wilsonville's portion of the BCPA. This study comprises several interconnected tasks:

- An **Economic Inventory** that evaluated current market trends and identified industries suitable for the area (completed).
- An updated **Buildable Lands Inventory (BLI)** that reflects recent land developments, adjusted constraints, and revised capacity estimates (ongoing).
- A **Site Suitability Analysis** that evaluates three key opportunity sites for their potential to support target industries based on attributes like size, location, and access (ongoing).
- An **Analysis of Future Development of Contractor Establishments in the BCPA** given prevailing lease rates and market conditions (this memorandum).

This memorandum addresses the fourth task by evaluating the redevelopment potential of contractor establishments within the BCPA. Currently, the Wilsonville portion of the BCPA falls under Washington County's Future Development 20-Acre District (FD-20) zoning, which allows a variety of low-intensity uses. The area has limited development, with much of the developed land used for contractor establishments, which typically include small offices (often converted residences), storage buildings, and laydown yards. While these uses contribute to jobs and economic activity, they yield limited employment opportunities and lower property values compared to those envisioned in the BCCP or those typically expected for land within the metro urban growth boundary (UGB) and city limits.

The primary question we address in this task is: What is the redevelopment potential of existing contractor establishments in the BCPA, given prevailing lease rates and market conditions? This analysis will help the City understand what types of development the market will support, which desired development types identified in the BCCP are viable under current economic conditions, and what conditions might be necessary in the future to support desired development.

The findings from this analysis will guide recommendations on policy interventions and strategic actions the City can take to support desired development and promote redevelopment feasibility. These efforts are part of a broader initiative to position Basalt Creek as a key area for regional job growth and long-term economic success.

Redevelopment Feasibility of Existing Contractor Establishments

The Economic Inventory identified a range of industrial users who may find Basalt Creek particularly attractive due to its prime location in the Southwest Metro area, access to a skilled workforce, availability of industrial land, strong transportation networks, and proximity to existing industrial clusters. Discussions with stakeholders also highlighted strong regional demand for industrial space.

However, several challenges complicate redevelopment efforts. Many existing contractor establishments generate significant income for property owners, reducing their motivation to sell or redevelop the land for higher-intensity industrial uses. Additionally, relocation options for businesses currently occupying these sites may be limited, creating further barriers to redevelopment.

These challenges raise critical questions about whether current market rents and sales prices are sufficient to make redevelopment feasible in the BCPA. This analysis evaluates the conditions needed to support redevelopment in Basalt Creek.

WHICH SECTORS MAY BE ATTRACTED TO BASALT CREEK?

Below are the potential sectors that may be particularly attracted to Basalt Creek, as identified in the Economic Inventory report.

- **Semiconductor Sector Supply Chain:** Companies providing materials, equipment, and services to chip manufacturers.
- **Cleantech, including Battery Technology:** Businesses involved in renewable energy technology, energy efficiency solutions, and sustainable manufacturing processes.
- **Advanced Manufacturing:** Companies using technology such as robotics, 3D printing, and computerized systems to manufacture specialized products or components.
- **Distribution and Logistics:** Storage, transportation, and delivery of goods.
- **Data Centers:** Facilities used to house computer systems and associated components.

Methods and Approach

What are the key questions?

While there is clear demand for industrial space in the BCPA, the question remains: **What conditions (e.g., market, ownership, site, zoning) are needed to promote and incentivize urban industrial development as envisioned in the BCCP?** To answer this core question, ECOnorthwest identified several subquestions to guide the analysis.

- What types of property owners are in the study area, and who is respectively occupying the site (e.g., the owner or tenant)?
  - Understanding ownership and occupancy dynamics helps assess the financial motivations of property owners and helps determine whether redevelopment offers an incentive.
- What are the potential future uses for these sites?
  - Identifying potential future uses informs construction costs, market rents, and site utilization. Evaluating the likely range of site utilization (based on constraints and zoning) helps determine whether redevelopment would offer higher returns compared to current uses.

By addressing these supporting questions, ECOnorthwest evaluated scenarios where ownership, occupancy, and future uses align to incentivize redevelopment. This structured approach provides insights into the conditions necessary to drive redevelopment in the BCPA.

How did we answer the key questions?

ECOnorthwest used a detailed pro forma model to evaluate multiple potential development scenarios. These scenarios incorporated variations in current ownership and occupancy, potential future uses, and site utilization (for additional details, see Appendix). For this quantitative analysis, we focused on conditions that could support new development, either on recently acquired properties (e.g., speculative purchases) or on land likely to transact for redevelopment in the future.

WHAT IS A PRO FORMA?

The pro forma method, a standard tool in real estate feasibility studies, replicates the decision-making process of investors and lenders. It assesses the balance between development costs, expected revenue, and financing structures to identify potential viability gaps.

The pro forma considers the site utilization and potential building program of each scenario, development hard costs (construction labor and materials), other development costs (soft

costs, contingency, developer fee, etc.), costs of capital, relevant operating costs, and land acquisition costs. For each scenario, the pro forma calculated the rent levels required to cover these costs and achieve financial feasibility.

DATA LIMITATIONS AND METHODOLOGY

While the quantitative analysis provided valuable insights, data limitations in the study area and the I-5 South Submarket (such as limited observations of contractor establishment rents) posed some challenges. These limitations are typical for studies in smaller submarkets. To address this, we supplemented the analysis with qualitative methods, including interviews with developers and brokers, to validate assumptions and refine recommendations. We also conducted a range of sensitivity testing to account for potential variance (e.g., higher and lower potential contractor establishment rents) instead of basing the results of our analysis on one assumption. As a result, we believe the findings accurately reflect current market conditions in Wilsonville and provide a reliable basis for evaluating redevelopment feasibility in the BCPA.

WHY IS DEVELOPMENT FEASIBILITY AND PRO FORMA ANALYSIS IMPORTANT?

Development can be costly and risky. Getting funding to construct new development requires lenders and investors to be reasonably confident they will earn enough financial return to justify the risks.

Economic or market feasibility is generally assessed by comparing the expected revenues (rents, sales prices) against the costs of development. If a development project is not profitable, it is not feasible; it will not be built. While some of the factors that determine market feasibility are outside a jurisdiction's direct control (e.g., labor and materials costs, interest rates, market rents), local jurisdictions can provide incentives (such as tax exemptions or land donations) or adjust building, utility, and zoning fees; zoning; programs; and other regulations that can have a substantial impact on whether development could be feasible or not.

ASSUMPTIONS AND INDUSTRY STANDARDS

We based several assumptions on industry standards to ensure consistency and accuracy:

- **Construction Costs:** Used national averages adjusted with a Portland metro–specific multiplier to account for regional building conditions.
- **Other Development Costs and Operating Costs:** Applied standard rates for soft costs (architectural design, site engineering, permitting and entitlement fees, capital carrying costs, etc.), contingency, and developer fees.

For a more detailed overview of the data, assumptions, and methodology, please refer to the Appendix.

UNDERSTANDING THE PRICE OF LAND IN THE BCPA: HOW THIS IS FACTORED INTO FEASIBILITY RESULTS

Predicting the price that a landowner would require when selling property for development is an imperfect science—each landowner has reasons to sell or hold their land. Some property owners are willing to develop their land without selling, but based on interviews, we determined this would be rare in the study area. For the purposes of this analysis, we assumed the value of the property (i.e., the price of the land at which an owner would be willing to sell) could be derived from current comparable property sales prices in the area using a **"comps approach"** as well as using an **"income-based approach"** that considers the revenue stream from current tenants on the property. Therefore, this memo analyzes the rent needed based on the range of land values given these two approaches.

We identified vacant land sales (including contractor establishment sales) in the I-5 South Submarket using CoStar data. Most of the vacant land properties recently transacted (over the last 4 years) for approximately $7 to $17 per square foot of land. One improved land transaction (with a contractor establishment) had a sale price that indicated it transacted for $26 per square foot of land. These observations served as our range of land prices using a comps approach. Many of these comps, both vacant land and contractor establishments, might have been leased to tenants and generated income; however, the prices they sold for could have been decided via an unknown variety of methods (including an income-based approach and then a subsequent negotiation). Therefore, for the purposes of this analysis, we refer to all these observed transactions as being within the "comps approach" method.

The income-based approach relied on data collected during interviews, which indicated the rent for contractor yards in the area could range from $0.18 to $0.23 per square foot of land per month. We considered this gross annual revenue, net of approximately 5 percent for various operating costs, and divided by a range of capitalization (cap) rates (5 percent to 7 percent) to estimate the value. Using a cap rate is a common valuation approach in the commercial real estate industry. This analysis resulted in a range of $19 to $52 per square foot of land—considerably higher than most of the results from the comps approach. This approach more accurately reflects the value current owners place on the potential future revenue from their existing tenants, as well as the level of incentive required to encourage them to sell and repurpose the property. Although this income-based value could eventually be negotiated during a potential sale, we still use this range in our analysis to reflect values that a landowner might require to sell their land.

Key Findings

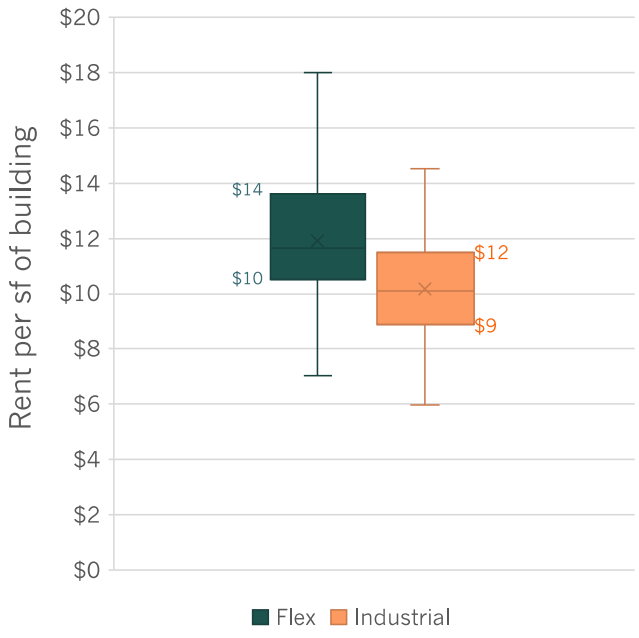
Current uses are generating substantial revenue with minimal management effort or risk.

Our market research and interviews highlighted that the rent for current uses varied based on whether the site was mostly open land or a building was present. Sites without buildings typically structured their rent per square foot of land, and this typically ranged from $0.18 to $0.23 per month. For example, a 1-acre site could generate annual gross rent of approximately $95,000 to $120,000 with minimal management effort or operating costs. (This is intended for illustrative purposes only and can scale to larger site sizes.)

Over the past four years, vacant land in the area has sold for around $7 to $17 per square foot. For the same illustrative 1-acre site, this translates to sale prices ranging from $305,000 to $750,000. The resulting ratio of annual gross lease revenue to property value ranges from 13 percent (a monthly rent of $0.18 per square foot relative to a land value of $17 per square foot) to 39 percent (a monthly rent of $0.23 per square foot relative to a land value of $7 per square foot). This means that property owners who recently purchased land and rent it to contractor establishments could recover their investment within 2.5 to 8 years. For long-term landowners who have already paid off their investment, rents represent additional income with minimal effort. Either way, given the substantial revenue from these uses, a landowner has very little incentive to redevelop.

For sites with buildings and yards, rents are typically based on the building area and range from $0.85 to $1.30 per square foot of building per month, or $10.20 to $15.60 per square foot per year. In comparison, flex and industrial spaces in the I-5 South Submarket rent for $9 to $14 per square foot per year, meaning that rent for an existing contractor establishment building with a yard is already achieving similar market rents to potential future uses. Not only are some of these contractor establishments already achieving comparable rents to flex and industrial uses, but they are also doing so without the risks of redevelopment (which include new capital investment, entitlements, the time to convert the land to the new use and generate revenue, and opportunity cost, among others).

Figure 1. Market Rent of Potential Future Uses



Source: ECOnorthwest analysis, CoStar

Rents would likely need to increase by at least three-fifths (60 percent), if not double (100 percent), to fund construction and create incentive to flip existing contractor establishments.

For our pro forma analysis, we evaluated a range of scenarios based on the variation in ownership and occupancy, future uses, future site utilization, and land acquisition costs (see Appendix for more detail). As previously discussed, ECOnorthwest solved for the rent needed to cover these various costs and then compared to the potential market rent of the flex and industrial uses observed in the I-5 South Submarket. We show these results for a range of potential land acquisition prices and construction costs.

We analyzed results for three different physical scenarios based on observed comparable developments (using the relationship between building square footage and site square footage):

- **Very high site utilization** based on 45 percent site coverage, similar to Graham's Ferry Industrial Center. Note: future development in some portions of BCPA may face constraints due to natural site features or zoning standards that may make achieving this site utilization challenging.
- **High site utilization** based on 35 percent site utilization, similar to the Sherwood Commerce Center
- **Low site utilization** based on 20 percent site utilization, similar to observed flex and industrial uses built over the last 20 years in the I-5 South Submarket

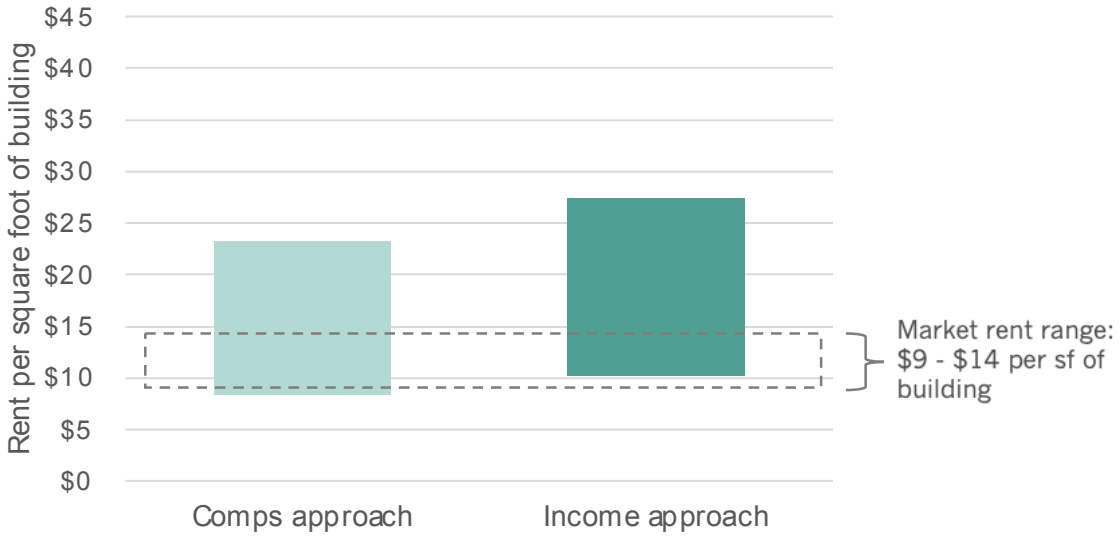
INTERPRETING THE RESULTS CHARTS

Development feasibility hinges on a range of different assumptions. Rather than picking one specific set of assumptions, the results charts shown in this memo encompass a range of potential assumptions, namely land acquisition costs and development costs.

ECOnorthwest compared the feasibility results to both the comps approach and income approach—**one column** in the following charts shows the resulting range of rents needed if assuming a comps approach, and **one column** shows the range needed based on an income approach. **Both columns** also include sensitivity testing given a range of construction costs and land prices, which is reflected in the size of the bars (the same range is assumed for each of the land price method scenarios). **A dashed box** is also shown to represent the range of observed rents for potential future uses. The rent results would ideally be within, if not lower than, this range for the development to be feasible.

In the **very high site utilization** scenario, future flex and industrial uses are only feasible when land acquisition costs remain low—below $20 per square foot—and other development costs are average or low. This combination of assumptions results in rents similar to the existing market rents of $9 to $14 per square foot of building (see comparison to gray bar shown in results chart in Figure 2). To make redevelopment feasible for properties with land costs higher than $20 per square foot (common for land with existing uses), the market rent for flex and industrial uses would likely need to increase by at least three-fifths, if not double, while construction costs remain constant.

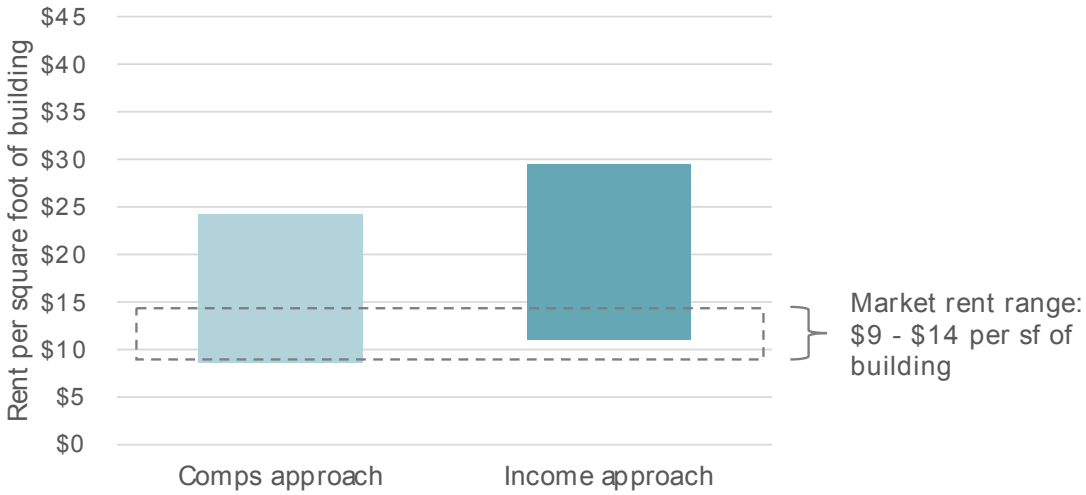
Figure 2. Rent Needed for Very High Site Utilization (45%)



Source: ECOnorthwest analysis

The results in the **high site utilization scenario** are similar to the very high site utilization scenario. However, relative to the latter, rents would need to increase to cover the same range of land and development costs. Future flex and industrial uses are only feasible when land acquisition costs remain low—below $20 per square foot—and other development costs are average or low. This combination of assumptions results in rents similar to the existing market rents of $9 to $14 per square foot of building (see comparison to gray bar shown in results chart in Figure 3). To make redevelopment feasible for properties with land costs higher than $20 per square foot (common for land with existing uses), the market rent for flex and industrial uses must increase by at least three-quarters, if not double, while construction costs remain constant.

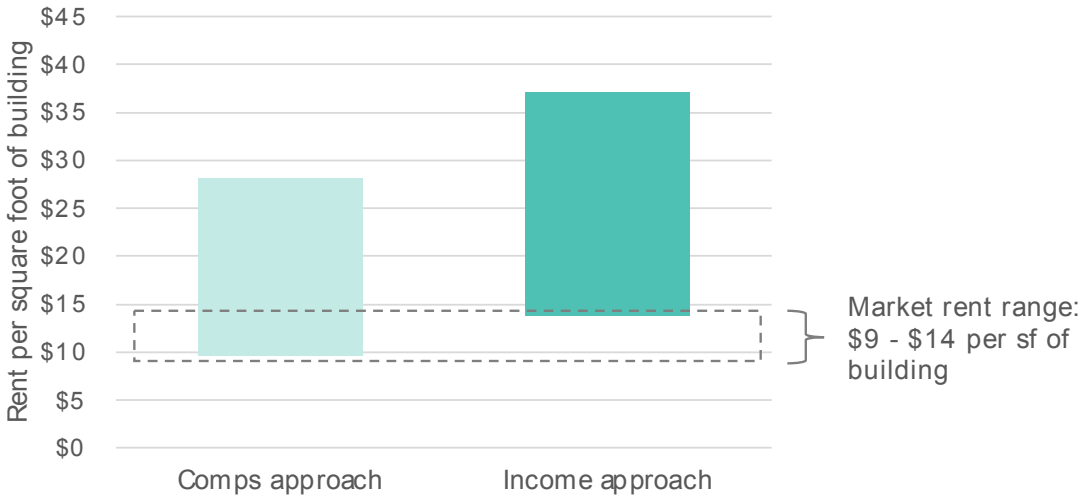
Figure 3. Rent Needed for High Site Utilization (35%)



Source: ECOnorthwest analysis

In the **low site utilization scenario**, future flex and industrial uses are only feasible when land acquisition costs are assumed to be low—less than $10 per square foot, based on the low end of recent comparable sales of vacant land—and other development costs are low. This combination of assumptions results in rents similar to the existing market rents of $9 to $14 per square foot of building (see comparison to gray bar shown in results chart in Figure 4). For properties with existing uses (where land is likely to transact between $19 and $52 per square foot), the market rent for flex and industrial uses must double while construction costs remain constant to make redevelopment feasible.

Figure 4. Rent Needed for Low Site Utilization (20%)



Source: ECOnorthwest analysis

Owner-occupied sites face greater feasibility challenges when landowners want to maintain their business operations.

Owner-occupied sites present more complex financial considerations compared to vacant or tenant-occupied properties. Landowners using their property for their own business must account for additional costs if they relocate, including relocation expenses, higher rents (or purchase prices) for new properties, and potentially higher ongoing business costs. For example, moving farther from suppliers or services could result in increased fuel or labor expenses.

To justify relocating their business, landowners would likely need to sell their property at an even higher price than what the quantitative analysis assumes. This requirement would, in turn, translate to higher rents than those shown in the results charts (Figure 3 and Figure 4). However, if the landowner does not intend to maintain their business, financial considerations would be less complex. Without the need to account for future business costs or the loss of tenant income, necessary rents could align more closely with those projected in the comps approach.

Conclusion and Next Steps

Current contractor establishments generate significant revenue with minimal effort or risk, reducing financial incentives for redevelopment. Rents for existing contractor establishments, particularly those with buildings, are already comparable to market rates for industrial and flex uses in the I-5 South Submarket. Therefore, for redevelopment to become financially feasible, market rents would likely need to rise by at least three-fifths, if not double, depending on site utilization, land acquisition costs, and construction costs. Higher site utilization scenarios present some redevelopment feasibility when land acquisition costs are low (below $20 per square foot). Conversely, properties with higher land costs or existing uses would either have substantially higher rents or reduced development costs (e.g., construction, financing) to achieve feasibility.

Owner-occupied properties are less likely to redevelop if the owner wants to maintain their business operations. Redevelopment is difficult for owner-occupants, as they must consider relocation costs and potential increases in operational expenses. Limited regional industrial land supply could push these businesses to relocate further from their markets, increasing costs for labor, transportation, and operations. Without substantial increases in land values or rents, redevelopment for these properties remains unlikely.

Achieving the City's development vision for Basalt Creek will require strategic interventions. Potential approaches could include purchasing and aggregating properties to create development-ready parcels, subsidizing infrastructure costs, adjusting system development charges (SDCs), offering other development incentives, or implementing other strategies yet to be identified.

The findings in this memorandum are preliminary and will be refined through further analysis and discussions. This study is being conducted alongside updates to the buildable lands inventory and site suitability analysis. Ultimately, these components will be synthesized with insights from the Economic Inventory into a comprehensive final report that outlines key findings and actionable recommendations.

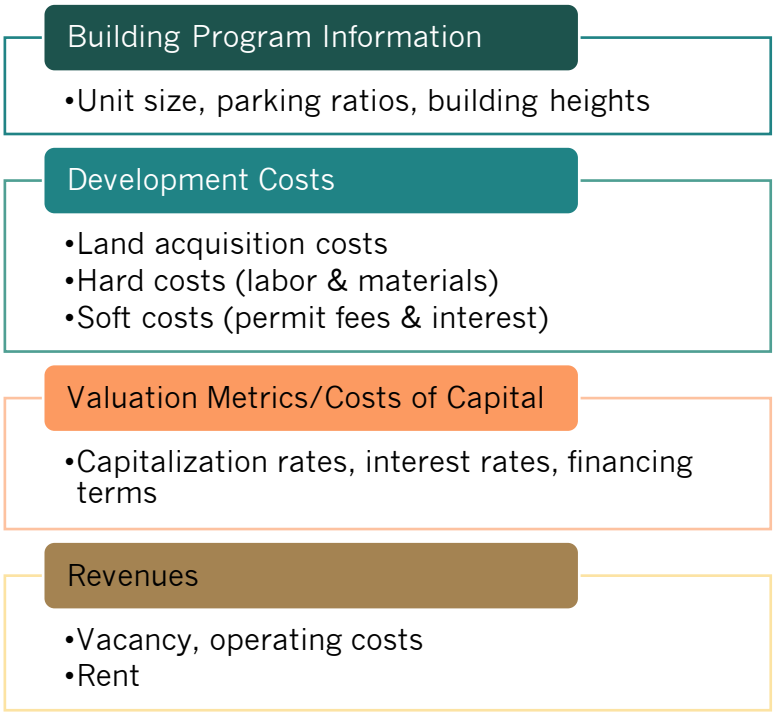
Appendix C.1

Financial Feasibility Methods

To model development feasibility, ECOnorthwest employed a pro forma model, which is a common method used in real estate feasibility studies because it simulates the decision-making process of investors and lenders. The pro forma assesses the balance between development costs, expected revenue, and financing structure, which helps to identify viability gaps.

Figure 5. Factors Used in the Pro Forma Analysis

Source: ECOnorthwest



This method provides a general analysis of prototypical development scenarios, or prototypes, without accounting for unique conditions that might influence development feasibility (e.g., higher predevelopment costs). Therefore, this analysis serves as a strong indicator of the relative likelihood of development rather than an absolute measure of feasibility.

The pro forma considers the site utilization and potential building program of each scenario, development hard costs (construction labor and materials), other development costs (soft costs, contingency, developer fee, etc.), costs of capital, relevant operating costs, and land acquisition costs. It then calculates the rent required to cover these costs for each scenario.

Scenarios Evaluated

To establish relevant assumptions for the pro forma model, we first identified the scenarios needed to address the research questions. These scenarios were based on variations in current ownership and occupancy, potential future uses, and site utilization.

CURRENT SITE OWNERSHIP AND OCCUPANCY

We started with an understanding of the current site ownership and occupancy. Based on our understanding, there were three main categories:

- **Owners of vacant or unused land.** This category includes people who recently purchased land with the intent to develop and existing owners potentially interested in selling their land for new development.
- **Owners renting to contractor establishment tenants.** These owners might sell their property but would need compensation for the foregone future revenue from their tenants.
- **Owners using the land for their own contractor establishments.** Financial considerations for this group vary substantially. Landowners would need to account for up-front and ongoing costs associated with relocating their businesses, making this scenario more complex to quantify compared to vacant or tenant-occupied sites.

APPROACH TO ESTIMATING LAND PRICE

- **Vacant and underutilized land:** We used a comparable sales ("comps") approach to estimate land price, which accounts for the sales price of recently purchased land, especially by those intending to develop (see the callout box on page 5 for details on the comps approach).
- **Tenant-occupied land:** For owners renting to contractor establishment tenants, we used an income-based approach to estimate the financial hurdle of land price. This better reflects the potential foregone revenue from tenants (see the callout box on page 5 for details on the income-based approach).
- **Owner-occupied land:** Due to varied business conditions of landowners who are using the land for their own contractor establishment, we evaluated this scenario qualitatively, considering insights from the other scenarios.

FUTURE BUILDING PROGRAMS

We then considered the potential future building programs that could occur on these former contractor establishment sites. We based the building square footage of our two prototypes on observed comparable flex and industrial spaces, based on CoStar data from the I-5 South Submarket. Key considerations included:

- **Site Utilization:** Over the past 20 years, average site utilization (building area relative to site area) in the I-5 South Submarket was about 20 percent. Recent developments such as the Sherwood Commerce Center and Graham's Ferry Industrial Center achieved 35 percent and 45 percent site utilization, respectively. But this was enabled by maximizing impervious coverage for parking and truck logistics. Future development in some portions of the study area may face constraints due to natural site features or zoning

standards. We therefore modeled three prototypes to capture a range of potential future development conditions:

- **Low utilization:** 20 percent
- **High utilization:** 35 percent
- **Very high utilization:** 45 percent

CONSTRUCTION COSTS

Lastly, for the scenarios we modeled, we evaluated a range of potential construction costs for flex and industrial uses. We referenced the **2024 National Building Cost Manual** by Craftsman to arrive at a range of potential construction costs for various building types that could house future flex and industrial uses. We conducted sensitivity testing of the potential rents needed to cover low to high construction costs, and the results that informed our key findings are inclusive of the range used.

The land cost, site utilization, and building costs were all assumptions that varied in our analyses as we conducted sensitivity testing of different scenarios (e.g., high site coverage, high land costs, high construction costs). All other pro forma assumptions we held constant. We describe the specifics of these assumptions in the section below.

Detailed Methods and Assumptions

To evaluate future flex or industrial rental uses, we began by calculating development costs. This involved applying the cost-per-square-foot values (see Table 1. Scenarios and Assumptions Used) to the building square footage derived from the site utilization. From that construction cost, we calculated the soft cost, contingency, and developer fees to arrive at the total development cost.

Given the potential range of sources to fund these projects, we used a high-level approach and assumed all sources of money that funded the project would require a 6 percent annual return based on a 30-year term. We calculated a payment inclusive of this return, based on the total development cost, to arrive at the rent needed to cover these annual costs. We also assumed these rents would be triple net and that, therefore, the operating costs would be passed on to the tenant, which is common for flex and industrial lease terms. We highlight the specific assumptions of this analysis, and any relevant ranges, in Table 1.

Table 1. Scenarios and Assumptions Used

Source: ECOnorthwest, CoStar, Redfin, Craftsman, Stakeholder Interviews

Assumption	Values
Land price	Ranged from $7 to $26 based on observed sales comps of vacant land as well as one sale observation of a contractor establishment. Ranged from $19 to $52 per square foot based on income-based approach.
Building program	(3) square footage estimates based on a calculation of 20% site utilization, 35% site utilization, 45% site utilization
Construction costs	$75 to $200 per square foot of building; $20 per square foot of paving
Soft costs	20% of hard costs
Contingency	5% of hard and soft costs
Developer fee	5% of hard and soft costs plus contingency
Costs of capital	6% annual interest range, 30-year term for all funding sources
Operating costs	Assumed triple net rents

Grahams Ferry Assemblage

Figure 1. Basalt Creek Concept Plan Map with Land Use Designations.

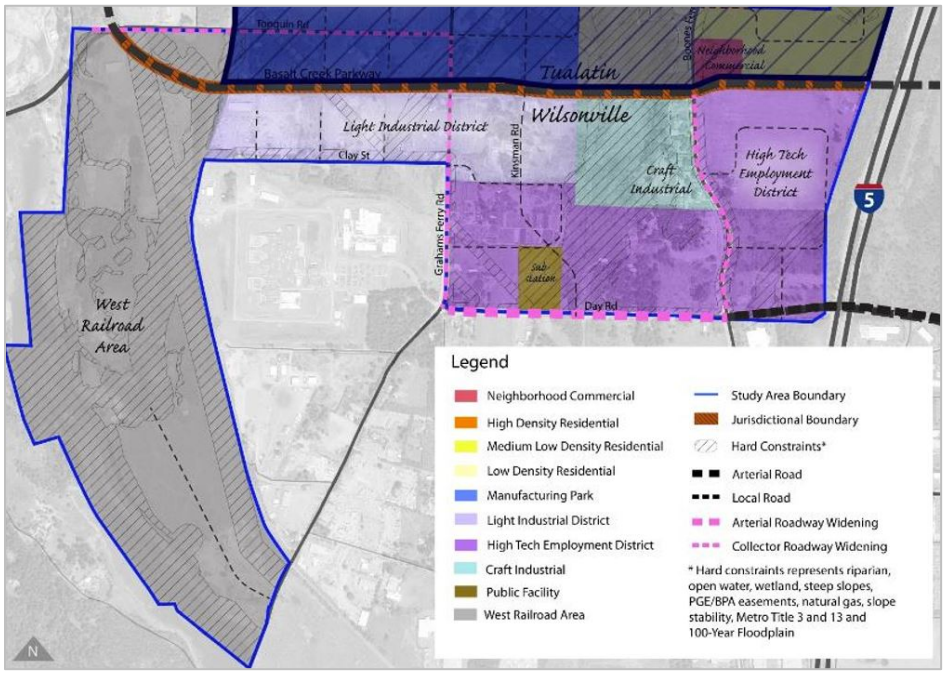
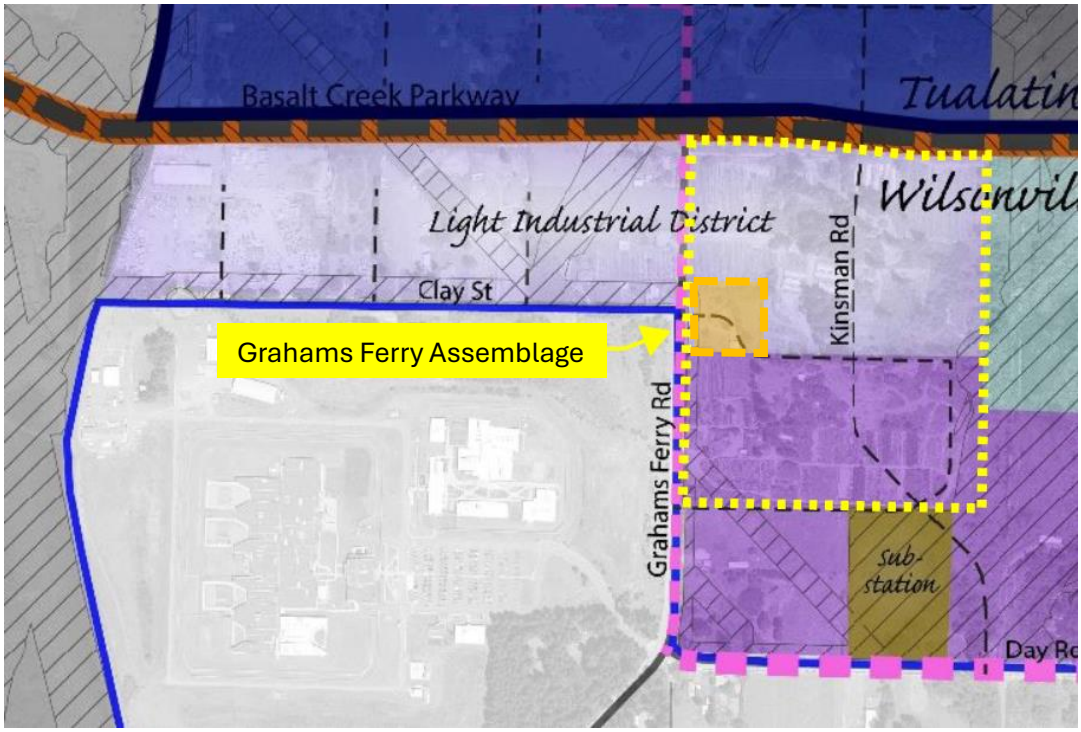


Figure 2. Location of Grahams Ferry Assemblage.



Wilsonville Industrial Land Readiness – Phase 1 Basalt Creek
Location of Grahams Ferry Assemblage