

Phase 3:  
Regional Industrial Land Study  
for the  
Portland – Vancouver  
Metropolitan Area



PREPARED BY

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IN ASSOCIATION WITH

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# Introduction

Industrial jobs are important. They pay better than average wages, provide comprehensive benefits and help to sustain regional competitiveness in a global economy. Industrial jobs have been the heart of our economic engine, perhaps most impressively for several decades, and during the Oregon “Economic Miracle” of the 1990s. Jobs associated with high tech, creative services, metals, machinery and transportation equipment, lumber and wood products, nursery products, and specialty foods in particular have been at the heart of recent and probable future economic development opportunities.

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Despite the importance of industrial jobs, our region’s inattention to the supply of ready-to-develop industrial land and lack of preservation of strategically located sites for future industrial development now represents a brewing crisis. Industrial land supply is one of a number of important factors forming a foundation for our economic future, and the lack of clarity regarding industrial land supply objectives and overall economic development strategy creates an atmosphere of uncertainty for our region.

This phase of the Regional Industrial Land Study (RILS Phase 3) is the culmination of a three-phased study undertaken by several public, nonprofit, and private entities to obtain a better understanding of the industrial land supply challenges now squarely before area decision-makers.<sup>1</sup>

Phase 1 of RILS included focus group meetings with public and private representatives to define issues about the adequacy of the study region’s industrial land supply.

Phase 2 addressed questions about industrial supply and demand. Industrial land demand was forecasted to be 6,300 net acres over 20 years. The study region’s industrial land supply was sorted into two primary types—land that is “ready to develop” and land that is “constrained”. The total industrial land supply was found to consist of 9,200 acres of vacant and redevelopable parcels. About one-third of the land supply (2,400 acres was considered “ready to develop”) and two-thirds was considered to be “constrained”.<sup>2</sup>

With a long-term need for almost 4,000 additional ready-to-develop industrial acres, the RILS sponsors proceeded with Phase 3 to better understand the costs associated with making constrained industrial land ready for industrial use. Phase 3 of RILS combines the results of the prior two phases with new information gleaned from industrial development case studies and a more detailed assessment of industrial development

<sup>1</sup> The study region is defined as the six-county Portland-Vancouver Primary Metropolitan Statistical Area, which includes land in Clackamas, Columbia, Multnomah, Washington, and Yamhill Counties, Oregon; and Clark County, Washington.

<sup>2</sup> “Constrained” industrial land is defined as land that is designated for industrial use, but is not “ready to develop” because of one or more of the following factors: lack of urban services, environmental issues, natural hazards, brownfield designation, marine or aviation use restrictions, corporate land banking, and/or “major” traffic congestion on nearby arterial streets.

trends. Additionally, Phase 3 summarizes the industrial land supply policy issues and strategies requiring immediate attention from local and regional decision making bodies.

This report is presented as an immediate call to action for the deliberate, participatory engagement of industrial and economic development issues. The stakes are high. Strategic economic policy decisions made or not made by policy makers will affect our region's ability to compete in the global market place for years to come.

### **Purpose of RILS Phase 3**

The general purpose of RILS Phase 3 is to identify potential policies that can increase the supply of industrial land that is ready for development. The specific objectives of RILS Phase 3 include:

- Analyzing the feasibility, strategies, and potential impacts of converting constrained industrial land inside the Metro Urban Growth Boundary (UGB) and the Clark County Urban Growth Area (UGA) to ready-to-develop land.
- Analyzing the costs, tradeoffs, and impacts of creating new ready-to-develop industrial land outside the Metro UGB.
- Comparing the costs and development issues for selected sites inside the Metro UGB Clark County UGA, and outside the UGB/UGA; and
- Identifying policy issues that should be considered to enhance industrial land supply by increasing the supply of “ready to develop” land.



Historically, economic development policies interacting with market forces enabled goods to be “Made in Oregon” for export to the rest of the nation and the world.

### Study Methodology

RILS findings are based upon development case studies in this region, and information gleaned from interviews with industrial experts and a review of literature. The study also includes an industrial employment growth and development density analysis, with updated industrial land demand forecasts.

A consortium of local, regional, and state interests served as study sponsors and functioned as a Management Advisory Committee (MAC). The MAC met nine times during the study process to help formulate study methodology, select case studies, and to review preliminary study findings and conclusions. The MAC membership included individuals from the following organizations.

- Clackamas County
- Columbia County
- Columbia River Economic Development Council
- Commercial Real Estate Economic Coalition
- Metropolitan Service District (Metro)
- Oregon Economic and Community Development Department
- Oregon Department of Land Conservation and Development
- Oregon Department of Transportation
- Port of Portland
- Portland Development Commission
- Portland State University, Institute of Portland Metropolitan Studies
- 1000 Friends of Oregon

Dr. Ethan Seltzer, Institute of Portland Metropolitan Studies, served as the project facilitator. Consultant activities, including buildable land analysis, demand analysis, case studies, and preliminary strategies were led by Otak, Inc. with support from ECONorthwest and Parametrix, Inc.

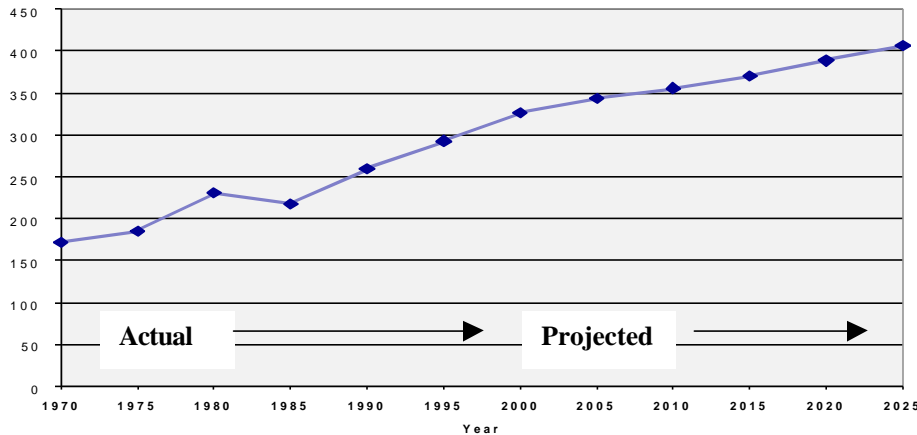
## Industrial Development Trends

Despite the recent slow-down in national and regional economic activity, industrial job growth in the study region is expected to increase from approximately 328,000 jobs in year 2000 to 476,000 jobs by year 2025. This represents a projected increase of 148,000 industrial jobs over this forecast time period.<sup>3</sup> As shown in the figure below, regional industrial job growth has generally trended upwards since the national recession that occurred in the early 1980s. While there will certainly be years where industrial job growth dips or declines (this year is a likely example), the long-term trends bode well, as long as demand is accommodated.

### Key Findings In This Section...

- Industrial Jobs are Projected to Increase ..... 4
- Industrial Land Requirements are Changing ..... 5
- A Variety of Parcel Sizes are Needed..... 6
- Availability of Ready-to-Develop Parcels is Constraining Market Potential ..... 7

**Figure 1: Industrial Employment in Study Region (000s)**



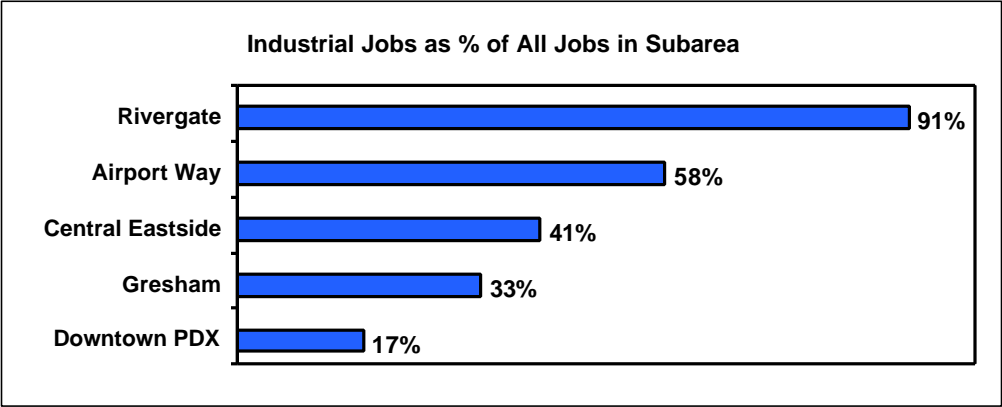
The literature review and interviews revealed that despite the gradual shift in our nation’s economy from manufacturing to services, technological advances and global competition are beginning to have a measurable impact on industrial development. Emerging trends are highlighted below.

### **Not all jobs in “industrial” sectors require vacant industrial-designated land.**

It is estimated that 15 percent of new industrial jobs can be accommodated within commercial buildings or through redevelopment. The distribution of industrial jobs as a percentage of all jobs tends to vary widely by location and land-use designation, as shown in Figure 2.

<sup>3</sup> Industrial jobs shown on Figure 1 include the following sectors: construction, manufacturing, transportation, communication, and public utilities. Job forecasts are from the “Economic Report to the Metro Council”, Metro Data Resource Center, January 2000.

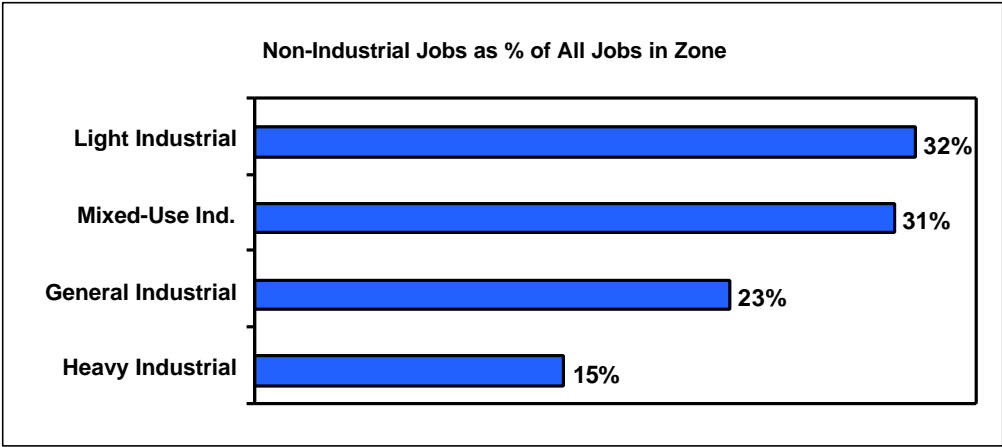
Figure 2: Industrial Job Distribution by Selected Subarea



Source: compiled by Otak, based on data provided by Oregon Employment Department for year 2000.

**Not all industrial-designated land is used by “industrial sectors.”** Uses such as restaurants, retail, athletic clubs, churches, training/education, and public facilities currently occupy about 20 percent of the industrial land base. Most local zoning ordinances allow some level of ancillary retail and commercial uses within industrial zones. The existing distribution of non-industrial jobs within industrial zones is shown on Figure 3.

Figure 3: Non-Industrial Jobs by Land Use Zoning Designation



Source: compiled by Otak, based on data provided by Oregon Employment Department for year 2000

**Certain building densities are decreasing while others are increasing.** Warehouse/distribution building-floor-area to land-area densities appear to be declining as building heights increase. The focus on administration/management and research and development occupations is expected to increase building densities for high-tech/flex



## Industrial Development Trends

*Continued*

buildings moderately. General industrial building densities are expected to remain fairly constant.

**Employment densities are also changing.** Increased automation is leading to lower employment densities for warehouse/distribution and general industrial uses. On the other hand, more focus on research and development and management/administrative positions is leading to higher employment densities for high-tech/flex building types.

**A variety of parcel sizes is required to meet future industrial demand requirements.** In response to increasing demands from the global and domestic markets, industrial operations must constantly strive to become more efficient and more cost effective. Industrial land users desire sites and building facilities that foster flexible and efficient production and efficient distribution environments.

**Table 1: Industrial Parcel Demand and Supply (Six-County Study Region)**

Parcel Size (buildable acres)	Projected Demand for Parcels (2000 to 2025)	Estimated Supply of Parcels		Conclusions
	Mid-Point of Sensitivity Analysis	Total Vacant Industrial Parcels	Vacant & Unconstrained Parcels	
1 to 3	<b>2,169</b>	730	188	Significant infill/redevelopment opportunities in this segment.
3 to 11	<b>235</b>	710	218	Market appears to be addressing this segment.
11 to 50	<b>58</b>	284	62	Upper end of range (i.e. parcels over 20 acres) should be more carefully monitored.
50 to 100 <sup>2</sup>	<b>9</b>	21	2	Land constraints are limiting market opportunities in this segment.
100 and above <sup>3</sup>	<b>6</b>	7	1	Immediate need to identify/preserve strategic sites for industrial use.
Total	<b>2,476</b>	1,752	471	

<sup>1</sup>In addition to these parcels, there are approximately 24 vacant unconstrained parcels (less than 15 acres) in small cities outside Metro UGB (including Estacada, Molalla, Sandy, Canby, North Plains, Banks, Newberg, McMinnville, Sheridan, St. Helens, etc.

<sup>2</sup>Adjusted to include the +/-75-acre James River site in St. Helens, Columbia County.

<sup>3</sup>Updated to reflect recent absorption/sales at Southshore Corporate Park and Westmark Industrial Park.

Source: Demand projections by ECONorthwest and Otak; supply estimates by Otak, Inc. derived from RILS Phase 2 Draft Final Report, December 1999 (with adjustments for sites over 75 acres.

A sensitivity analysis was conducted (provided in Appendix G) to estimate long-term demand for industrial parcels. The results of that analysis are provided in Table 1. It should be noted that the parcel demand forecasts reflect the consultant team's "best estimate" for industrial parcels based upon growth in industrial establishments. Industrial developers typically develop sites that are large enough to accommodate a variety of tenants in diversified building types. This approach helps to address the needs of small and large tenants, and those that desire to own or lease property. Hence,

## Industrial Development Trends

*Continued*

Table 1 does not reflect the likely aggregation of several parcels into large contiguous industrial developments.

**Availability of ready-to-develop parcels is constraining market potential.** As indicated in Table 1, the forecasted demand for small (less than 3-acre) and large (over 50-acre) industrial parcels may exceed the existing unconstrained industrial supply, unless proactive public policies interact with market forces to enhance and preserve strategic industrial holdings. The real estate community appears to be addressing the 3- to 11-acre category of parcel demand, but is not currently addressing demand for ready-to-develop parcels over 50 acres.

Large parcels are important to economic development. The forecasted demand for 15 large parcels (over 50 acres in net land area) accounts for only one percent of the total parcels, but is forecasted to accommodate approximately 13,500 industrial workers or 14% of the future industrial job growth. Additional analysis is recommended within the 11-50 acre category to determine if available parcel supply is in line with demand requirements.

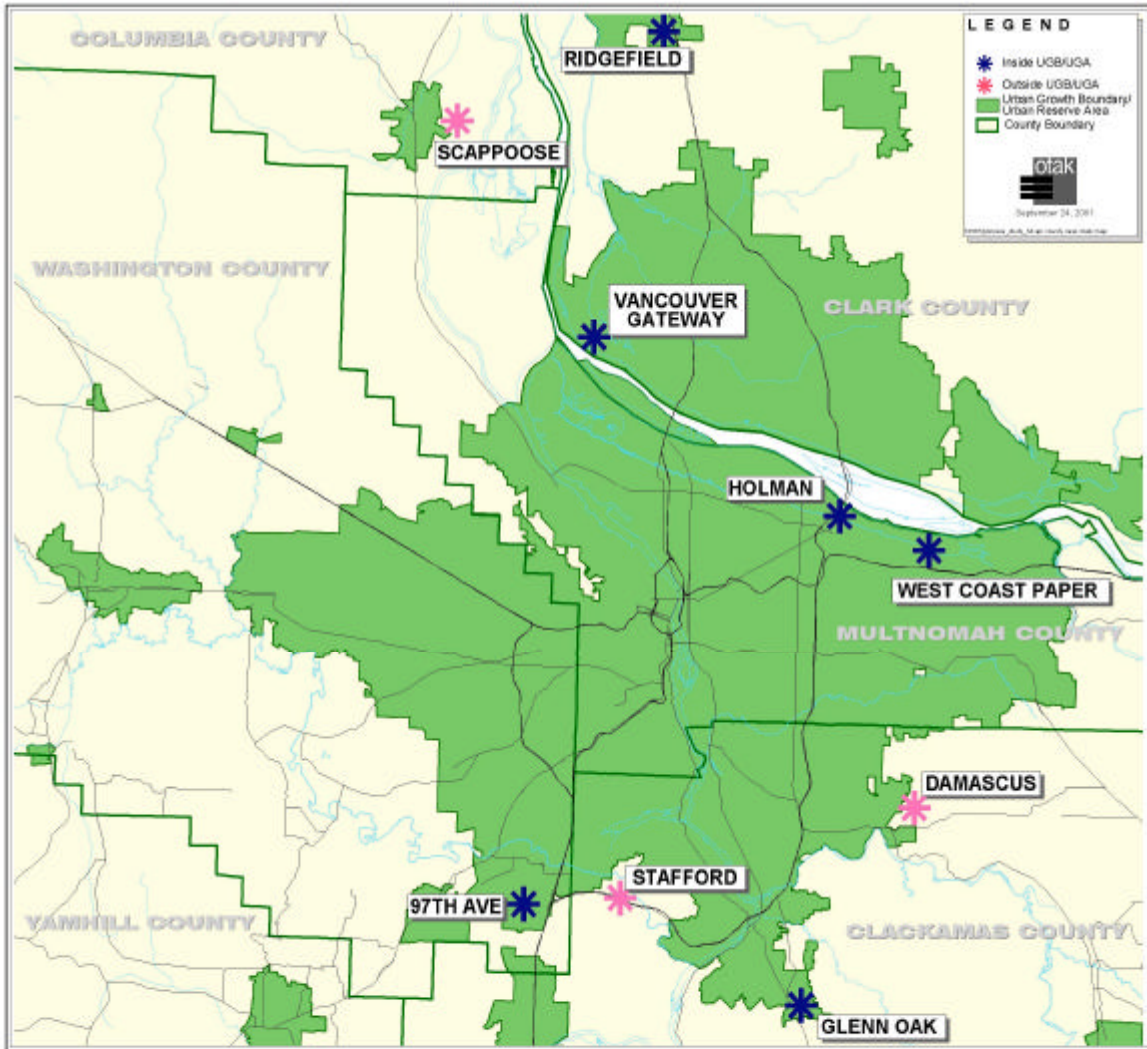
Given these findings, a sensitivity analysis was conducted using minimum, maximum, and mean job and building density assumptions. The results concluded that the long-term (year 2000 to 2025) industrial land demand in the study region ranges from 4,700 to 11,500 net acres, with 6,900 acres as the best estimate (90 percent confidence level) for net vacant land requirements. Of course, the location, configuration and availability of parcels are also important development considerations. As the available land supply tightens, the ability for the region to fully address market requirements, particularly from large industrial land users, may be lost.

# Industrial Development Case Study Findings

To better understand the costs of converting constrained industrial land to land that is “ready to develop,” RILS Phase 2 evaluated several industrial case studies located inside and outside the UGB/UGA. Case study locations were selected by the MAC after considering site selection criteria that are described in the Technical Appendix Report.

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**Figure 4: Case Study Location Map**



# Industrial Development Case Study Findings

*Continued*

The case studies, which included six locations inside the UGB/UGA and three locations outside the UGB/UGA, are useful for determining the relative cost of removing identified industrial development constraints. Site development constraints are defined as any extraordinary development costs required to address major offsite transportation and utility improvements, special on-site grading/fill, environmental mitigation, and property assembly. Conversion costs are intended to represent the cost of making the constrained land on par with ready-to-develop industrial properties.

Conversion costs should not be confused with “basic” site development costs, which includes additional costs for permitting, basic site preparation/grading, onsite utilities, roads and pathways for site circulation. Since “basic” site development costs apply to ready-to-develop vacant land and constrained land, they are excluded from the case study analysis.

While the sample size of the case studies is small, it does reflect the general spectrum of issues confronting the study region’s constrained industrial land supply. The case studies do provide an indication of the relative costs of converting constrained land to ready-to-develop industrial properties.

**There are two types of conclusions that can be derived from the case study analysis: 1) General Conclusions and 2) Inferred Conclusions.** General conclusions help shed light on the issues and relative costs of addressing development constraints. Inferred Conclusions are implied by the case studies but may require additional analysis to fully validate their basis or accuracy.

## **Inside UGB/UGA Case Studies**

The six inside UGB/UGA case study locations included: two sites in Multnomah County (West Coast Paper and Holman Area); one site in Clackamas County (Glenn Oak Industrial Park); one site in Washington County (97<sup>th</sup> Avenue site in Tualatin); and two sites in Clark County (one in Ridgefield and the Vancouver Gateway). Of these case studies, West Coast Paper and 97<sup>th</sup> Avenue sites were developed or under construction, and the remaining four were in various stages of planning. In light of its large size and number of development alternatives, the Vancouver Gateway site was evaluated in two potential configurations.

# Industrial Development Case Study Findings

*Continued*

**Table 2: Inside UGB/UGA Case Study Results**

<b>Site No.</b>	<b>Name</b>	<b>Net Buildable Acres</b>	<b>Avg. Parcel Size</b>	<b>Estimated Industrial Jobs on Site</b>	<b>Conversion Cost Adjusted to Industrial Uses</b>	<b>Conversion Cost Per Industrial Job Ratio</b>	<b>Conversion Cost Per Acre Ratio</b>
M-2	West Coast Paper	18.4	9.2	276	\$50,000	\$180	\$2,700
M-3	Holman Area	32	1.9	848	\$9,286,800	\$10,950*	\$290,175
C-3	Glenn Oak Industrial Park	51	3.9	1,548	\$7,905,000	\$5,110	\$155,104
WA-8	97 <sup>th</sup> Ave Site	7	1.8	124	\$555,000	\$4,476	\$79,286
CK-2	Ridgefield	44	44	579	\$550,000	\$950	\$12,501
CK-3	Columbia Gateway	375 to 575	N/A	4,200 (Alt.2) to 4,450 (Alt. 4)	\$29.3M (Alt 2) to \$68.54M (Alt 4)	\$6,980 to \$15,402	\$78,130 to \$119,200

\*Long-term cost per job is \$2,685 after sales/lease revenue is added.

Source: Case study research by Otak, Inc.

## ***Inside UGB/UGA Case Study General Conclusions***

**There is a very wide variation in the cost of addressing site development constraints.** Hence, each site must be evaluated on a case-by-case basis, and it may not be accurate to apply average cost factors to all constrained land within the study region.

### **There are three primary types of constrained<sup>4</sup> industrial land:**

- 1) land that will likely be developed over the long-term as industrial without public investment;
- 2) land that could accommodate some industrial as long as a mix of non-industrial use (e.g., commercial or other uses) is allowed; and
- 3) land that will likely not be developed as industrial unless there is a significant level of public investment in the form of land assembly and/or offsite infrastructure.

The constraints associated with the first category may be temporary or do not significantly impair site development, such as regional traffic congestion. Examples include the West Coast Paper and Ridgefield case studies.

The second category reflects the costs for addressing higher levels of constraints, such as onsite wetlands mitigation, and challenging site topography. Examples include 97<sup>th</sup> Avenue.

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<sup>4</sup> “Constrained” industrial land is defined as land that is designated for industrial use, but is not “ready-to-develop” because of one or more of the following factors: lack of urban services, environmental issues, natural hazards, brownfield designation, marine or aviation use restrictions, corporate land banking, and/or major traffic congestion on nearby arterial streets.

## Industrial Development Case Study Findings

*Continued*

Sites that possess multiple constraints with inadequate transportation connections and/or include small redevelopment parcels make up the third category of constrained land. Areas with these constraints will likely require a public agency to lead or facilitate development by making significant investments in infrastructure or land acquisition. Examples include Holman Area, Glenn Oak, and Columbia Gateway.

**Developer return on investment and certainty in the permitting process are the two main factors that determine if the private sector can address industrial land constraints.** In the *long run* it appears that the private sector is willing to pay for needed transportation improvements, and construct necessary environmental mitigation, if land-use permitting is timely and developer return on investment is sufficient. The property owner must also be a willing participant in the development process or the site will remain “land banked” for an indefinite time period.

**Transportation consistently emerges as the leading cost factor for removing industrial development constraints.** Providing adequate offsite transportation (e.g., new roads, intersection improvements, and to a lesser extent rail connections) appears to be the most costly development constraint for large parcels.

**Development costs are only one factor that can inhibit industrial development.** Land use and environmental permitting (which is required to make land ready for development), along with local political and community preferences can also hinder industrial development. Prolonged permitting processes, and competing growth pressure from non-industrial uses, such as schools, churches, parks, and housing developments are significant challenges to industrial development.

### ***Inside UGB/UGA Case Study Inferred Conclusions***

**A Regional Economic Development Strategy is needed.** Various cities, counties and state agencies, and private organizations within the study region tend to have economic development strategies that are independent and reactive. While some informal coordination is occurring among public and private economic development stakeholders, a more concerted and deliberate effort could help to retain and attract strategic industries.

**Public land assembly is likely necessary** when there are several property owners, non-conforming uses, and/or very small parcels that need to be aggregated for more intensive industrial development to occur. In the absence of public subsidies or tax incentives, developers will not provide the “patient equity” necessary to assemble several small (less than +/-5-acre parcels) into a contiguous industrial or business park. Once the land is assembled, however, it appears that developer’s will address constraints associated with permitting and infrastructure, as long as an adequate return on investment can be achieved.

# Industrial Development Case Study Findings

*Continued*

**Commercial/mixed-use development is sometimes necessary** on sites with significant development constraints. These sites have higher than typical development costs, which require enhanced revenues to generate adequate market return on investment. Hence, the developer may need to provide some amount of non-industrial use (e.g., commercial/mixed-use development) to justify the higher costs of removing site constraints. The amount of non-industrial use needed will vary, depending upon parcel location, size, and site marketability.

**Developing constrained industrial land may result in fewer industrial jobs than planned.** In the absence of public subsidies or tax incentives, developers must identify financially viable land uses to carry high development costs associated with addressing site constraints. Hence, developers will often seek to accommodate high revenue-generating land uses, such as commercial retail, in lieu of industrial uses. Commercial encroachment on industrial designated land is likely to result in an opportunity cost or a reduction in the region's ability to accommodate future industrial job growth on our remaining supply of vacant industrial land.

**Streamlined environmental/land use permitting and clear and objective Goal 5/ESA regulations can help developers manage the risk of industrial land conversion.** Increasing layers of federal, state, and local permitting are adding to the risks, costs and uncertainties of real estate development. Until clear and objective regulations are adopted, there may be adverse financing impacts on projects with potential Goal 5/ESA or wetland impacts. Also, no one can be sure about the adequacy of the study region's industrial land supply until new Goal 5/ESA regulations are clearly defined. This issue generally pertains to the desire for expedited review and due process for all land use regulations.

The conclusions from the inside UGB/UGA case studies point towards the importance of preserving and protecting vacant industrial sites within the UGB/UGA for industrial development. Also, given the cost and risk associated with developing constrained industrial sites, there are cases where the public sector must play a role to foster industrial development.

## **Outside UGB/UGA Case Studies**

The three outside UGB/UGA case studies included potential industrial locations in Damascus, Stafford, and Scappoose. Given the large expanse of the Damascus area, it was evaluated as two inclusive industrial areas: the southwest quadrant, and the entire Damascus area. Please refer to the Technical Appendix for site maps and descriptions.

# Industrial Development Case Study Findings

*Continued*

**Table 3: Outside UGB/UGA Case Study Results**

<b>Site No.</b>	<b>Name</b>	<b>Net Buildable Acres</b>	<b>Avg. Parcel Size</b>	<b>Estimated Industrial Jobs On Site</b>	<b>Conversion Cost Adjusted to Industrial Uses<sup>2</sup></b>	<b>Conversion Cost Per Industrial Job</b>	<b>Conversion Cost Per Acre</b>
C-2B	Stafford Area	80	N/A	2,708	\$10,504,500	\$3,879	\$131,306
C-1A	Damascus <sup>1</sup>	532	N/A	15,095	\$162,240,000	\$10,748	\$345,928
C-1B	Damascus (SW Quad.) <sup>1</sup>	234	N/A	5,537	\$29,775,000	\$5,383	\$133,520
CO-2	Scappoose	300	150	1,470	\$21,850,000	\$12,700	\$72,813

<sup>1</sup>Tier A conversion cost for Damascus property excludes Units 1-2 of Sunrise corridor (\$520M) given its assumed statewide/regional need.

<sup>2</sup>Applies to Damascus and Stafford mixed-use areas where planned non-industrial land uses must share infrastructure capacity.

Source: Case study research by Otak, Inc.

## ***Outside UGB/UGA Case Study General Conclusions***

**The cost-per-job and cost-per-net-acre for large parcels outside the UGB/UGA appear to be on par with the costs identified for the inside UGB/UGA case studies.** There may be some economies of scale attributed to the large case study areas, which can be used to spread the capital costs among several land use types.

**The total cost of converting large vacant sites is typically higher than smaller sites inside the UGB/UGA.** This is primarily attributed to the need to construct adequate public facilities (e.g., roads, intersections, water and sewer lines, etc.) to serve large sites as opposed to smaller close-in sites. This conclusion seems to apply more towards site size than location—with the largest inside and outside UGB/UGA case studies (e.g., Columbia Gateway, Stafford, and Damascus) costing the most to develop.

**Transportation costs were identified as the leading conversion cost item.** The potential level of transportation investment required to address site constraints for locations such as Stafford and Damascus is so large that it would likely require multiple funding sources and long-term phasing strategies.

**Large potential industrial areas in outside UGB/UGA locations, such as Stafford and Damascus, can provide opportunities for master-planned industrial parks that accommodate large (50+ net acres) industrial sites.** Such areas can be used as strategic locations for retaining or attracting large employers and can become the industrial sanctuaries of the future.

**Large potential industrial areas in outside UGB/UGA locations will not address near-term demand needs.** All case study areas outside the UGB/UGA would have to meet state and local land use law requirements to come into the UGB/UGA prior to industrial development. This process could take two to four years, and would be



## Industrial Development Case Study Findings

*Continued*

necessary prior to obligations of funding for infrastructure (which could take another 2-4 years or longer). Hence, developing parcels outside the UGB/UGA does not address near-term needs.

### ***Outside UGB/UGA Inferred Conclusions***

**A Regional Economic Development Strategy** is needed to ensure that the existing and planned industrial supply is consistent with regional and local economic development objectives. The region needs to clarify its economic development objectives and determine how it will accommodate a variety of industrial land users. If there is a strategy to accommodate large industrial establishments, then this strategy will likely impact areas outside the UGB/UGA. This process should confirm locations for future industrial development in conjunction with overall economic development objectives.

**Site size and public infrastructure costs are not the only factors to be considered when selecting locations for future industrial development.** In addition to the size of buildable industrial land areas and the public cost of providing infrastructure, the ultimate success or failure of future industrial locations will depend on: proximity to interstate transportation facilities, multi-modal freight access, relationship to sensitive environmental areas, labor force access/proximity, telecommunications access, the presence of training and education facilities, and community support.

The case study analysis indicates that the large outside UGB/UGA case study areas offer potential economies of scale that place the per-acre conversion costs in the ballpark with areas inside the UGB/UGA. Areas outside the UGB/UGA, if properly planned and zoned, can provide large contiguous industrial areas that can address site requirements of large-industrial users—if the region determines that is an economic development strategy it wants to pursue.

## Potential Industrial Policy Strategies

There is no easy or quick fix to the industrial development challenges confronting this region. No silver bullet or single strategy will create an adequate supply of ready-to-develop industrial land. As such, this report identifies several potential industrial policy strategies to assist regional officials and interested stakeholders in identifying appropriate actions to address industrial land needs.

The policy strategies below are grouped into four categories: overriding policy strategies, policy strategies that address ownership constraints; policy strategies that address environmental and land use constraints; and policy strategies that address infrastructure constraints.

### Overriding Policy Strategies

Overriding policy strategies require regional cooperation and function as the “umbrella” for creating specific policies tied to ownership, environmental, land use, and infrastructure constraints.

**Create a Clear Regional Economic Development Strategy** — The RILS concluded that a variety of parcel sizes is required to accommodate small, medium, and large industrial users. A proactive economic development approach is needed to confirm and clarify how much industrial development the region wants to accommodate, and where future industrial areas will be located. Special attention should be focused on retaining existing industrial establishments by providing expansion options. In addition to confirming the direction of our region’s economic development objectives, the strategy should build upon recently adopted local economic development plans, and address regional objectives for retaining and diversifying the regional economy. The strategy should address issues, such as:

- Determination of measurable economic development objectives with specific desired and measurable outcomes.
- Relationship between the regional labor force and job growth.
- Designation/preservation of strategic locations for future industrial development, and maintain consistency with local comprehensive plans.
- Consideration of environmental protection and preservation policies.
- Identification of infrastructure requirements, costs, priorities, and sources of funding. The strategy should identify new funding sources, as appropriate, and provide a linkage between infrastructure investments and economic development objectives.
- Determination of appropriate entities to coordinate regional economic development efforts, including marketing and land assembly establishment of benchmark indicators that relate economic development with quality of life (e.g., income levels, poverty rates, educational attainment, etc.).

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## Potential Industrial Policy Strategies

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The Regional Economic Development Strategy needs to be carefully orchestrated at all levels of government to include state, regional and local land use goals and objectives. In addition to coordinated, state and regional policy efforts, local community outreach is needed to maintain consistency between regional and local development objectives.

**Table 4: Summary of Industrial Land Demand and Supply (Net Buildable Acres)  
Six-County Study Region, Projected 2000 to 2025**

<i>County</i>	<i>Population (2000 Census)</i>	<i>Land Demand (net acres)</i>	<i>Vacant Industrial Land Supply (buildable acres)<sup>1</sup></i>	
		<i>Buildable Land Requirements</i>	<i>Total</i>	<i>Ready-to-Develop (Unconstrained)</i>
Clackamas	340,000	2,000	865	47
Multnomah	662,400	900	2,572	442
Washington	449,250	2,100	1,766	483
Columbia	43,700	50	883	70
Yamhill	85,500	250	243	—
<b>Oregon Subtotal</b>	<b>1,580,850</b>	<b>5,300</b>	<b>6,329</b>	<b>1,042</b>
Clark	345,000	1,600	2,869	1,345
<b>Total</b>	<b>1,925,850</b>	<b>6,900</b>	<b>9,198</b>	<b>2,387</b>

*Source: Land demand projections by ECONorthwest based upon Metro job growth forecasts. Supply estimates from Regional Industrial Land Study, Phase 2 Draft Final Report, December 1999. Population estimates from Population Research Center, Portland State University, and U.S. Census Bureau. Compiled by Otak, Inc.*

<sup>1</sup> *Derived from May 1999 land inventory; not updated to account for recent absorption.*

The region must re-confirm its stance on economic development and determine if the remaining supply of industrial land (as shown in Table 4) is consistent with its long-range growth objectives.

**Preserve Strategic Areas for Industrial Development** — Local policies that foster and retain “industrial sanctuaries” and limit commercial retail and other non-industrial uses in designated industrial areas are now more important than ever. In addition to preserving land in urban industrial locations, emerging areas such as the Ridgefield case study illustrate the relative cost advantage of utilizing vacant land near freeway/highway interchanges for industrial development. When located near interstate highways, industrial land use can serve as adequate buffers between the highway and residential or commercial areas, and can help pre-empt the need to extend major public facilities into outlying urban fringe areas.

**Link Public Investments with Economic Development Strategy** — There should be a direct relationship between the economic development strategy and regional infrastructure investments. Capital improvements to roads, rail, ports, and airports,

should be carefully evaluated for their direct relationship to strategic economic development efforts.

### **Strategies that Address Ownership Constraints**

According to the United States Bureau of Economic Analysis, approximately two-thirds of all job growth is attributed to growth within existing establishments. Industrial establishments often plan to accommodate future growth by increasing productivity and/or “land banking”. A limited industrial land supply underscores the importance of working with existing firms to provide adequate options for on and off-site expansion.

**Retain and Assist Existing Industrial Establishments** — Retaining existing industrial establishments requires a proactive and coordinated effort by local and regional governments and economic development representatives. An industrial outreach effort is recommended to get a better understanding of perceived regional industrial expansion issues and the anticipated land needs. Accurate building and job-density data could be acquired during the outreach effort to assist regional planners with making realistic land needs projections. The outreach effort could be completed over a six- to nine-month period through a combination of interviews, meetings and surveys. Establishments identified to have major expansion requirements could be connected with appropriate private, local, regional, or state industrial location experts.

**Encourage Industrial Redevelopment** — The RILS estimates that approximately 15 percent of the future industrial job growth could be accommodated through redevelopment, as opposed to “greenfield” development. Redevelopment includes reuse and/or expansion of existing industrial facilities. As existing businesses grow, expansion through redevelopment should be promoted as an alternative to relocation. Special incentives to consider may include:

- Tax abatement for the cost of providing structured parking or “roof top” additions;
- Low interest loans for seismic retrofits of older structures;
- Low interest loans or grants for brownfield or hazardous soils remediation;
- Expanded use of the Oregon Enterprise Zone program in distressed areas, reductions in Washington State business occupancy or sales taxes, or tax abatement for employers that exceed established minimum employment/income thresholds.

**Establish an Industrial Site Certification Program** — This low-cost strategy is intended to encourage participation by owners of constrained industrial property in a voluntary Site Certification Program. This proactive Site Certification process may prevent many of the more than 1,000 constrained properties from falling through the cracks, and help avoid excessive land banking. Special incentives, can include providing a free site certification feasibility evaluation, and web-based listing/designation of the site as a State Certified Industrial Site.<sup>5</sup> This outreach effort could be coordinated

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<sup>5</sup> Similar industrial site certification programs have been successfully used in states such as Virginia for many years.

## Potential Industrial Policy Strategies

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through a public agency(ies) or private non-profit organizations, such as the National Association of Industrial and Office Parks.

**Strategic Land Assembly** — Public land assembly is an important policy strategy, given the RILS finding that one-third of the constrained land supply (about 2,000 acres) is comprised of parcels less than five gross buildable acres. While significant industrial job growth is anticipated for small sites (1 to 3 net acres), industrial areas primarily comprised of small high-valued parcels and multiple owners may experience disinvestment and encroachment from non-conforming land uses (such as parking lots and commercial development). Public land assembly may entail the use of eminent domain (if area is identified within an urban renewal district) or can be leveraged using innovative financing programs, such as reverse mortgages to limit up-front public capital cost outlays while maintaining control over participating properties.<sup>6</sup>

### **Strategies that Address Environmental and Land Use Constraints<sup>7</sup>**

Industrial development and environmental protection are both important to the economic health of the region. Recent listing of Willamette Valley and Steelhead Salmon as “threatened and endangered species” by the U.S. Congress for protection under the National Environmental Policy Act has led to an uncertain regulatory environment for land near riparian habitats, such as streams and rivers. Complying with the Endangered Species Act (ESA) in Oregon and Washington and Oregon statewide Land Use Planning Goal 5 Natural Resources, Scenic and Historic Areas and Open Spaces along with other federal, state, and local permits creates risk and uncertainty for industrial development in our region.

**Establish Clear Goal 5/ESA Compliance Regulations** — The RILS analysis determined that as much as 25 to 30 percent of the remaining industrial land supply is impacted by wetlands, floodplains, and potential Goal 5/ESA buffers. When new Goal 5 riparian regulations are being formulated, property owners (and lenders) usually assume the “worst case” scenario for a properties development potential. Clear and objective regulations to implement Goal 5/ESA are needed before an accurate determination of developable land can be made in the study region.

**Streamline Entitlement/Permitting Process**—Overlapping federal, state, Metro/regional, and local land use regulations have created a myriad of permitting hoops, especially for land that is constrained by environmental features such as wetlands, floodplains, and steep slopes. This strategy endorses environmental streamlining, such as programmatic regulatory approvals within watersheds or other designated areas. The creation of centralized permitting/review agencies, and the use of web-based permitting systems should be considered.

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<sup>6</sup> Reverse mortgages in this example could entail a public agency, such as PDC, entering into an agreement with a property owner that provides equity payments in exchange for eventual transfer of property ownership.

<sup>7</sup> See also policy strategies identified under the headings “Prepare Model Industrial Development Code Handbook” and “Incentives that Encourage Industrial Redevelopment”.

## Potential Industrial Policy Strategies

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**Prepare Model Industrial Development Code Handbook** — This strategy attempts to establish mid- to long-term guidance that is imperative for protecting the remaining competitive industrial land supply. We recommend a Model Code handbook that succinctly describes appropriate local policies designed to protect and enhance industrial areas. This code should consider:

- New provisions that result in “no net loss” of industrial land when applications for industrial zone change amendments are processed.<sup>8</sup>
- Procedures for streamlining permitting and development review;
- Preservation and establishment of industrial sanctuaries where non-industrial uses are restricted.
- Performance standards for industrial/commercial mixed-use developments (e.g., outside storage can be allowed as long as adequate landscape buffers are provided).
- Performance zoning that allows “floating industrial zoning designation” as long as locally adopted (and state approved) performance measures are met (e.g., adequate public facilities, consistency with state land use laws, etc.).
- Model land use ordinance that promotes “shared parking” and supports transportation demand management (TDM) techniques such as transit vouchers, car pooling, and work-at-home/telecommute practices

### Strategies that Address Infrastructure Constraints

In conjunction with the Regional Economic Development Strategy it is recommended that additional resources be committed to funding infrastructure that supports development objectives. Ideas that emerged during the RILS planning process are highlighted below.

**Create a Strategic Transportation Investment Fund** — For the majority of the case studies, the largest single cost item is related to roads, traffic signals, and/or rail improvements. Transportation constraints are estimated to affect up to 20 percent of the constrained land supply. State or regional transportation programs, such as those administered by the Oregon Economic and Community Development Department (OECDD) and the Oregon Department of Transportation (ODOT) Immediate Opportunity Fund can help reimburse local jurisdictions or private entities for transportation improvements that facilitate expansion of industrial jobs. In the past, this has been an effective program at leveraging industrial investment by operations including Intel and LSI Logic. Unfortunately, statewide funding for this program was cut by approximately 75 percent during the 2001 legislative session.

**Establish an Industrial Development Fund Using Special Assessments from Mixed-Use Industrial Districts** — In urban areas such as the Holman District or the Central Eastside Industrial District, the cost of assembling/redeveloping small sites will likely be far higher than the revenues from industrial development can support. In the

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<sup>8</sup> A “no net loss” policy or strategy may compel periodic expansion of the Metro UGB to offset changing industrial zoning to commercial or mixed-use zoning.

## Potential Industrial Policy Strategies

*Continued*

absence of major public land assembly, we anticipate little change in these areas. While the industrial sanctuary designation may help preclude up-zoning and encroachment, little industrial redevelopment would likely occur without special public policy measures. Higher revenues can be obtained from specific up-zoning to allow some limited amounts of commercial/mixed-use, which can help leverage higher levels of industrial development.

If up-zoning is used in combination with a value-capture tax this strategy might spur industrial redevelopment, and help seed a mitigation fund used to address industrial land constraints in other parts of the study region. Potential value capture mechanisms may include: urban renewal authority as part of a tax increment financing district; special benefit assessment in combination with tax abatement; real estate transfer fee, or regional tax base sharing programs.

**Continue to Assist in Providing Basic Infrastructure in Small Urban Areas** — Oregon and Washington states must continue to assist local jurisdictions with updating local Public Facilities Ordinances, and in leveraging local, state and federal funding sewer, water, and roads using combinations of grants and loans. These actions can be combined with the other strategies identified above to assist small urban areas in funding infrastructure in a manner that's consistent with the regional economic development objectives.

### Closing Thoughts

Combinations of policy strategies are needed to foster efficient industrial development that's consistent with regional and local economic development objectives. The conversion of constrained industrial land to ready-to-develop sites within the UGB/UGA should be encouraged to prevent further erosion of the industrial land base. Industrial policy strategies, if directed only at inside UGB/UGA locations, would likely preclude the region's ability to accommodate large (50+ net acre) industrial employers—which support ancillary smaller industrial operations and service establishments.

A regional economic development strategy that considers, among other things, if/how large industrial users are to be accommodated is long overdue. There is a window of opportunity created by the sluggish national and regional economy that can allow the study region to take proactive and deliberate steps towards desired economic development, prior to the next wave of economic resurgence. This is only possible if industrial policy strategies are discussed, refined, adopted, and finally implemented.