

City of Springfield:

**Commercial and Industrial
Buildable Lands Inventory
and Economic Opportunities
Analysis**

For the Planning Period 2010-2030

Prepared for

City of Springfield

by

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Final Report

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Executive Summary

This report presents the Commercial and Industrial Buildable Lands Inventory (CIBL) and Economic Opportunities Analysis (EOA) for the City of Springfield for the 2010 to 2030 period. The purpose of the analysis is to forecast employment growth in Springfield, document the inventory of commercial and industrial land in Springfield,¹ and determine whether Springfield has enough land to accommodate expected growth.

In addition, this project establishes a clear economic development direction that identifies the city's strengths and opportunities, and its position in the broader Southern Willamette Valley region. This project will facilitate employment opportunities and job creation in Springfield by identifying industrial/employment land needs and developing an economic development strategy aimed at selected target industries.

This analysis is consistent with the requirements of statewide planning Goal 9 and the Goal 9 administrative rule (OAR 660-009).

This document, the final CIBL and EOA, includes revisions from the Draft *Springfield Commercial and Industrial Buildable Lands Inventory and Economic Opportunities Analysis* from September 2009. These changes incorporate feedback about the report and address the requirements of recent legal cases about economic opportunity analyses. The primary changes to the document are:

- Clarifications to the methods, definitions, and terms used in the buildable lands inventory, including clarifications about potentially redevelopable land in Springfield.
- Analysis of potentially redevelopable sites larger than 5 acres to determine which sites are likely to redevelop over the 2010-2030 planning period.

¹ OAR 660-009 0005(3) defines "Industrial Use as "employment activities generating income from the production, handling or distribution of goods. Industrial uses include, but are not limited to: manufacturing; assembly; fabrication; processing; storage; logistics; warehousing; importation; distribution and transshipment; and research and development. Industrial uses may have unique land, infrastructure, energy, and transportation requirements. Industrial uses may have external impacts on surrounding uses and may cluster in traditional or new industrial areas where they are segregated from other non-industrial activities.

OAR 660-009 0005(6) defines "Other Employment Use: " all non-industrial employment activities including the widest range of retail, wholesale, service, non-profit, business headquarters, administrative and governmental employment activities that are accommodated in retail, office and flexible building types. Other employment uses also include employment activities of an entity or organization that serves the medical, educational, social service, recreation and security needs of the community typically in large buildings or multi-building campuses.

- Clarifications about Springfield’s target industries and their existing site and other characteristics of the target industries.
- Revision to the number of needed sites, removing the range of needed sites and using historical data to identify the number and size of needed sites.
- Revision to the categories of needed site size, to combine the largest site sizes into one category: sites 20 acres and larger.
- Additional information about the sites needs of Springfield’s target industries.
- Other clarifications that made the analysis and results clearer.

WHAT IS SPRINGFIELD’S ECONOMIC DEVELOPMENT VISION?

Springfield is a business-oriented city. The City is undergoing revitalization, with on-going redevelopment efforts in Downtown and Glenwood, and the opening of the hospital at RiverBend in 2008. The City’s vision for economic growth over the next 20-years combines sustaining existing businesses and helping those businesses expand, and embracing a broad variety of new opportunities for growth.

The economic development strategy for Springfield can be summarized as follows:

- (1) Facilitate the redevelopment of Downtown Springfield and Glenwood through strategic infrastructure and other investments from programs such as urban renewal and planning for redevelopment.
- (2) Provide sites with a variety of site characteristics to meet both commercial and industrial economic opportunities, including providing sites that are available for relatively fast development. This includes providing large sites for major employers.
- (3) Use land within the existing urban growth boundary efficiently, through promoting redevelopment, infill development, and dense development in nodal areas. The study assumes that 46% of new employment would not require vacant land.
- (4) Provide infrastructure efficiently and fairly by coordinating capital improvement planning with economic development planning.
- (5) Support and assist existing businesses within Springfield by assessing what help businesses need and developing programs to respond to business needs.

- (6) Attract and develop new businesses, especially those related to regional business clusters. The City would like to build on the developing health care cluster, promote development of high-tech businesses, and attract sustainable businesses.
- (7) Maintain flexibility in planning through providing efficient planning services and developing flexible planning policies to respond to the changing needs of businesses.

This is a brief summary of Springfield’s economic development strategy. Chapter 3 of this report provides more detail on Springfield’s comparative advantages and target industries; the Springfield Economic Development Strategy (included in Appendix D) articulates the City’s economic development vision.

TARGET INDUSTRIES

An analysis of growth industries in Springfield should address two main questions: (1) Which industries are most likely to be attracted to the Eugene-Springfield area? and (2) Which industries best meet Springfield’s economic objectives? The types of industries that Springfield wants to attract to meet economic development objectives are: high-wage, stable jobs with benefits; jobs requiring skilled and unskilled labor; employers in a range of industries that will contribute to a diverse economy; and industries that are compatible with Springfield’s community values.

The characteristics of Springfield will affect the types of businesses most likely to locate in Springfield. Springfield’s attributes that may attract firms are: the City’s proximity to I-5, high quality of life, proximity to the University of Oregon, the presence of the RiverBend campus, positive business climate, availability of skilled and semi-skilled labor, and proximity to indoor and outdoor recreational opportunities. Table S-1 summarizes target industries for Springfield during the 2010 to 2030 planning period.

Table S-1. Target industries, Springfield, 2010-2030

Target Industry	Types of firms	Attraction to Springfield
Medical Services	Medical firms, medical research firms, and other professional services	Development of a medical cluster at RiverBend

Target Industry	Types of firms	Attraction to Springfield
Manufacturing	Manufacturers of: food processing, high-tech electronics, recreational equipment, medical equipment manufacturing, furniture manufacturing, specialty apparel, cottage industries (such as jewelry, apparel, or personal care products), plastics manufacturing, and wood products manufacturing	Labor force, existing businesses, land availability, proximity to natural resources, access and proximity to Interstate 5, and access to comparatively inexpensive electricity
Specialty Food Processing	Food processing firms, such as those that specialize in organic or natural foods, brewing and wine industry	Proximity to agricultural resources, natural foods innovation cluster, access and proximity to Interstate 5, and access to comparatively inexpensive electricity,
High-Tech	The types of firms range from high-tech manufacturing to data centers to software development	Access to highly educated labor, access to comparatively inexpensive electricity, access and proximity to Interstate 5, and high quality of life
Professional and Technical Services	Engineering, research, medical-related professionals, and other professional services that are attracted to high-quality settings	Access to highly educated labor and high quality of life
Call Centers	Call centers	Existing call center cluster and trained labor force
Back-Office Functions	Back-office functions, including administrative functions such as accounting or information technology	High quality of life, available and trained labor force, and relatively low wages
Corporate Headquarters	Corporate headquarters	High quality of life, location along I-5, and availability of educated workers
Tourism	Industries that serve tourists, such as food services and accommodations	Proximity to University of Oregon, outdoor recreational opportunities and regional events such as the Olympic Track and Field trials, NCAA sporting events, the Oregon Country Fair, or the University of Oregon Bach Festival
Green businesses	Green construction firms, organic food processing, sustainable logging and/or lumber products manufacturing, or alternative energy production	Access to highly educated labor, access to natural resources, and high quality of life
Services for Residents	Retail and government services, especially education	Growing population
Services for seniors	Health services that provide services to older people, such as assisted living facilities or retirement centers	Aging population and presence of RiverBend Hospital and McKenzie Willamette Hospital

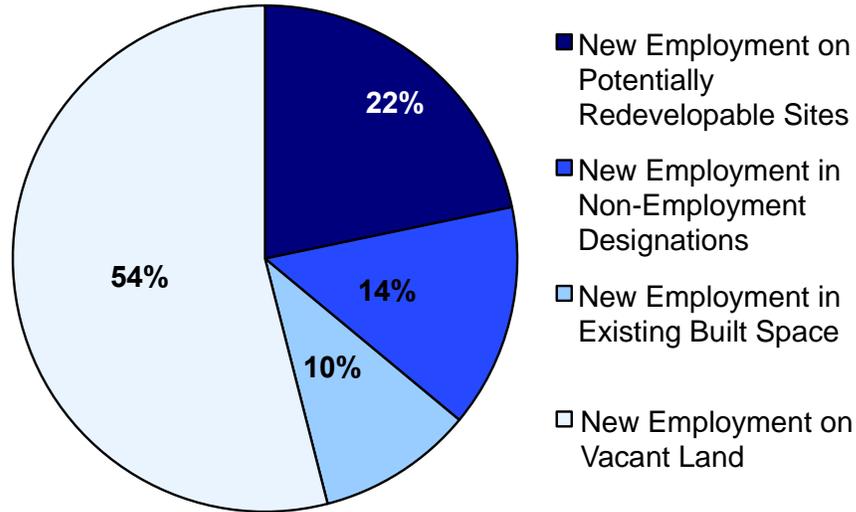
COMPARISON OF LAND CAPACITY AND DEMAND

This section presents an analysis of land availability and capacity for employment uses in Springfield. The key conclusions in this section are:

- (1) **The majority of employment growth in Springfield will not require vacant land.** The analysis concludes that that 46% of new employment would not require vacant land, consistent with the City's economic development strategies to encourage redevelopment, especially in Downtown and Glenwood. This portion of employment addresses the OAR 660-024-0050(4) requirement that the City demonstrate that some needs can reasonably be accommodated through by increasing the development capacity of land already inside the city prior to expanding the UGB. The City's Springfield 2030 Comprehensive Plan describes the specific policies the City will adopt to achieve this level of increased capacity through infill development and redevelopment. Those policies will be adopted as part of the City's overall UGB justification.
- (2) **Springfield will need employment land with characteristics that cannot be found within the existing UGB.** The City will need 7 sites with about 223 acres of industrial and other employment land, on sites five acres and larger that cannot be accommodated within the existing UGB.

Figure S-1 summarizes how Springfield will accommodate new employment based analysis in Chapter 5.

Figure S-1. Summary of Location of Employment Growth by Type of Land, Springfield UGB, 2010-2030



Source: ECONorthwest

Table S-2 shows a comparison of land supply and need in terms of sites by site size, based on the analysis of potential growth industries in Springfield in Chapter 4. The results show that Springfield has a deficit of two Industrial sites (both 20 acres and larger) and seven Commercial and Mixed Use sites (ranging in size from 2 to 5 acres and 20 acres and larger).

Table S-2. Comparison of vacant land supply and site needs, industrial and other employment land, Springfield UGB, 2010-2030

	Site Size (acres)				
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger
Buildable Land Inventory					
Vacant					
Industrial	72	24	20	12	0
Commercial and Mixed Use	104	14	6	4	0
Potentially Redevelopable					
Industrial	122	28	31	6	1
Commercial and Mixed Use	305	20	15	0	0
Total Buildable Sites					
Industrial	194	52	51	18	1
Commercial and Mixed Use	409	34	21	4	0
Site Needs					
Needed sites					
Industrial	7	7	7	12	3
Commercial and Mixed Use	174	31	23	8	1
Surplus (deficit) of sites					
Industrial	187	45	44	6	-2
Commercial and Mixed Use	235	3	-2	-4	-1

Source: ECONorthwest.

Note: The redevelopable sites in Table 5-1 are assumed to increase employment capacity on the redeveloped sites. As discussed in Chapter 2, redevelopment means a net increase in employment capacity, rather than only the replacement of an old building with a newer building.

Converting from the site needs shown in Table S-2 to an estimate of land needs requires making assumptions about average site sizes needed in Springfield. The average site sizes in Table 5-2 are based on empirical analysis of the size of Industrial and Commercial taxlots with employment in Springfield. Table S-3 shows the average site size for needed sites in Springfield.

Table S-3. Average size of needed sites based on average sizes of sites with employment in Springfield, Springfield UGB

	Site Size (acres)				
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger
Industrial	0.5	1.4	3.0	10.0	63.0
Commercial and Mixed Use	0.4	1.4	3.2	9.3	60.0

Source: ECONorthwest based on QCEW data

Note: Average site size for sites 20 acres and larger is rounded to the nearest acre.

Table S-4 shows sites needed (from Table S-2) and land need (based on number of sites needed in Table S-2 and average site size in Table S-3). The results show that Springfield has a deficit in the current UGB of the following land types for the 2010 to 2030 period:

- **Industrial land.** Springfield has a need for 126 acres of industrial land on two sites larger than 20 acres. In the context of this study,

industrial use means any use that would be allowed in an industrial land designation (e.g., campus industrial, light-medium industrial, light-medium industrial mixed use, heavy industrial, or special heavy industrial).

- **Commercial sites.** Springfield has a **need for 104 acres** of commercial land on 9 sites. Springfield’s commercial site needs range from sites 2 to 5 acres in size to one site that is 60 acres in size. In the context of this study, commercial use means any use that would be allowed in a commercial land designation (e.g., commercial, commercial mixed use, employment mixed use).

Table S-4. Comparison of employment land supply and site needs, Springfield UGB, 2010-2030

	Site Size (acres)					Total
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger	
Industrial						
Sites needed	none	none	none	none	2	2
Land need (acres)	none	none	none	none	126	126
Commercial and Mixed Use						
Sites needed	none	none	2	4	1	7
Land need (acres)	none	none	6	37	60	104
Total sites needed	none	none	2	4	3	9
Total acres needed	none	none	6	37	186	230

Source: ECONorthwest

The summary of land needs in Table S-4 shows Springfield’s land need for all sites of all sizes. One of the City’s economic development strategies is to encourage redevelopment, especially in Downtown and Glenwood. Table S-2 shows that 188 industrial sites and 340 commercial and mixed use sites would redevelop to address land needs over the 20-year period. In addition to this assumption about redevelopment, **Springfield concludes that all land needs on sites smaller than five acres would be accommodated through redevelopment.** The City had a deficit of two commercial and mixed use sites smaller than five acres, which would require six acres of land (Table S-4).

Table S-5 shows Springfield’s employment land need, assuming that all site needs for sites smaller than five acres would be addressed through redevelopment. **Springfield has the need for approximately two industrial sites on 126 acres and five commercial and mixed use sites on about 97 acres** that cannot be accommodated within the existing UGB over the 2010 to 2030 period.

Table S-5. Employment site and land needs, Springfield UGB, 2010-2030

	Site Size (acres)			Total
	Less than 5	5 to 20	20 and Larger	
Industrial				
Sites needed	none	none	2	2
Land need (acres)	none	none	126	126
Commercial and Mixed Use				
Sites needed	none	4	1	5
Land need (acres)	none	37	60	97
Total sites needed	none	4	3	7
Total acres needed	none	37	186	223

Source: ECONorthwest

CHARACTERISTICS OF NEEDED SITES

The Goal 9 Administrative Rule (OAR 660-009) requires that jurisdictions describe the characteristics of needed sites (OAR 660-009-0025(1)). The Administrative Rule defines site characteristics as follows in OAR 660-009-0005(11):

(11) "Site Characteristics" means the attributes of a site necessary for a particular industrial or other employment use to operate. Site characteristics include, but are not limited to, a minimum acreage or site configuration including shape and topography, visibility, specific types or levels of public facilities, services or energy infrastructure, or proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes.

The analysis of employment land needs in Springfield showed need for two industrial sites (both 20 acres and larger) and five commercial and mixed use sites (ranging in size from 5 to 20 acres and 20 acres and larger). The site characteristics for commercial and industrial sites are summarized in Table S-6.

Table S-6. Summary of characteristics of sites needed by target industries, Springfield

Type of site and target industries	Site Size	Topography	Transportation Access	Access to City Services
<p>Target Industries: Medical Equipment High-Tech Electronics and Manufacturing Recreational Equipment Furniture Manufacturing Specialty Food Processing Building Type: General Industrial Site Needs for: Manufacturing</p>	<p>Manufacturers similar to the target industries that needed sites larger than 5 acres, who considered locating in Oregon or in the Eugene-Springfield area, needed sites ranging in size from 10 acres to more than 100 acres.</p> <p>The size of sites needed by Springfield’s target industries will vary by the size of building: 100,000 sq ft building will need a site of between 9-12 acres 200,000 sq ft building will need a site of between 18-24 acres 500,000 sq ft building will need a site of between 45- 60 acres</p> <p>The average size of existing sites with employment in Springfield (Table 5-2) is: 5-20 acre site: 10 acres 20+ acre site: 63 acres</p>	<p>The slope for manufacturing sites should be 5% or less. High-tech and Campus manufacturing can have a slope of 7% or less.</p>	<p>At the furthest, sites should be located within 15 miles or less of I-5 or a principal arterial road that is designated as a freight route. Typically, most businesses in Springfield locate within one-mile of I-5 or within about one-half a mile of a state highway.</p>	<p>Access to Springfield’s municipal water and wastewater system, with a minimum pipeline size of 8 to 10 inches (varies by target industry).</p>
<p>Target Industries: High-Tech services Corporate Headquarters Biotech Professional and Technical Services Back Office Medical Services Building Type: Commercial and Other Site Needs for: Large Office Employers</p>	<p>Commercial office employers that needed sites larger than 5 acres, who considered locating in Oregon, needed sites ranging in size from 10 acres to 100 acres.</p> <p>The size of sites needed by Springfield’s target industries will vary by the size of building: 50,000 sq ft building will need a site of between 4- 6 acres 100,000 sq ft building will need a site of between 8-12 acres 200,000 sq ft building will need a site of between 16-24 acres</p> <p>If a business park is developed to meet the site needs of these businesses, typical business park sizes in the Portland region are between about 30 and 75 acres.</p> <p>The average size of existing sites with employment in Springfield (Table 5-2) is: 5-20 acre site: 9.3 acres 20+ acre site: 60 acres</p>	<p>The slope for manufacturing sites should be 5% or less. High-tech and Campus manufacturing can have a slope of 7% or less.</p>	<p>At the furthest, sites should be located within 15 miles or less of I-5 or a principal arterial road. Typically, most businesses in Springfield locate within one-mile of I-5 or within about one-half a mile of a state highway. Sites should have access to mass transit within one-half mile.</p>	<p>Access to Springfield’s municipal water and wastewater system, with a minimum pipeline size of 8 to 10 inches (varies by target industry).</p>

IMPLICATIONS

The analysis presented in the economic opportunities analysis has implications for Springfield's economic land needs.

- *Economic growth.* Decision makers and community members that participated in the economic opportunities analysis agreed that economic growth is desirable over the planning period. The employment forecast indicates Springfield will add 13,440 new employees between 2010 and 2030. The economic opportunities analysis assumes that Springfield will have employment growth in a wide variety of businesses, from services and retail for residents to industrial development to medical services. The City wants to diversify its economy and attract higher wage and professional jobs.
- *Buildable lands.* Springfield has 3,414 acres that are designated for industrial and other employment use. About two-thirds of the land designated for employment within Springfield's UGB is considered developed and is not expected to redevelop over the 20 year planning period. Less than 15% of this land is buildable, unconstrained land. The majority of buildable, unconstrained employment land in Springfield has existing development on it that is expected to redevelop over the planning period. Springfield has a lack of buildable large sites, with one buildable site 20 acres and larger and 22 buildable sites in the five to 20 acre size range.
- *Redevelopment potential.*² The analysis of potentially redevelopable land and need for employment land assumes that Springfield will have substantial redevelopment over the planning period. The analysis of potentially redevelopable land assumes that the employment capacity of redeveloped areas will increase, not simply that a new building will replace an old building. Consistent with City Council policies, the areas that are expected to have the most redevelopment are in Glenwood, especially along the Willamette Riverfront and Franklin/McVay corridor, and in the Downtown Urban Renewal District.

The City will need to make strategic investments that support redevelopment and continue supporting redevelopment through

² This study identifies land with redevelopment potential as land on which development has already occurred but on which, due to present or expected market forces, there exists the potential that existing development will be converted to more intensive uses (providing additional employment capacity) during the planning period.

City plans and policies. For example, redevelopment in the City's targeted Downtown and Glenwood areas will require substantial investments in public infrastructure to provide public facilities and to overcome the existing impediments to development, including parcel assembly issues.

- *Employment that will not require vacant land.* Springfield assumed that 46% of employment would not require vacant employment land.³ Springfield's assumptions about employment that will not require vacant land are as follows:
 - Fourteen percent of employment (1,918 employees) will locate in non-employment designations. These employees will include people with home occupations, working from home, and businesses that locate in residential or other non-employment designations.
 - Ten percent of new employment (1,344 employees) will locate in existing built space.
 - Twenty-one percent of new employment (2,921 employees) will locate on redevelopable sites. Table S-2 shows that Springfield assumes 188 industrial sites and 342 commercial and mixed use sites will redevelop over the planning period.
- *Need for large sites.* Springfield will be able to meet all employment land needs on sites five acres and smaller within the existing UGB, through redevelopment, infill development, and employment uses on non-employment land (e.g., home occupations). The employment land needs that may not be met within the UGB are for sites five acres and larger. The City has only one suitable site over 20 acres.

Availability of sites 20 acres and larger is important for attracting or growing large businesses, which are often trade-sector businesses. If the City does not have these large sites, there is little chance that the City will attract these types of businesses. While it may not be clear exactly what the business opportunities may be in ten to twenty years, it is clear that these businesses will not locate in Springfield if land is not available for development.

³ The estimate of 46% of new employment not requiring vacant land is based on the assumption that 1,918 employees will locate in non-employment designations, 1,344 employees will locate in existing built space, and 2,921 employees will locate on redevelopable sites. The total number of new employees not requiring new land is 6,183 employees, which is approximately 46% of the forecasted growth of 13,440 jobs.

- *Redesignation of Smaller Sites.* Springfield’s land deficit cannot be met through redesignating a surplus of small industrial- and commercial-designated sites, most of which are smaller than two acres. Map 2-3 shows that these sites are scattered throughout the City, generally along Main Street or in Mid- Springfield. There are few opportunities for assembly of a contiguous, unconstrained site with a configuration that makes it developable. These areas do not and are not expected to provide large sites for target employers that require large sites.

Even where small vacant sites are located adjacent to other small vacant sites, there are few places where a site larger than 5 acres could be assembled from small sites. There is probably no place where a 20-acre site could be assembled from small sites.

- *Site assembly.* Assembly of numerous small sites into 5 to 10 acre sites is difficult at best and often not feasible. Land assembly is difficult and often costly. Developers attempting land assembly often have difficulty assembling a site at a cost that makes development economically viable. When assembling land, developers often find that owners of key sites are not willing sellers, have unrealistic expectations of the value of their land, or cannot get agreement among multiple owners to sell the land. As a result, developers, especially developers of industrial buildings, typically choose to develop sites with one or two owners.
- *Need to expand the UGB to accommodate need for large sites.* Springfield’s need for large sites cannot be met within the UGB. Meeting this need for large sites for large employers requires the City to expand its UGB into areas with suitable sites. These areas will have relatively large, flat sites with little parcelization and few owners, where businesses will have access to I-5 or a State highway.
- *Short-term land supply.* Based on the Goal 9 definition of short-term land supply and criteria for “engineering feasibility,” the majority of inventoried commercial and industrial land supply within the Springfield UGB is part of the short-term land supply, assuming that funding is available to extend or increase capacity of infrastructure and urban services. The Goal 9 rule definition of short-term land supply does not account for land availability, such as whether the landowner is willing to sell it or the owner is willing to redevelop it. The Goal 9 rule definition of short-term land supply also does not account for needed site characteristics, such as site size. As a result, the City’s short-term land supply as defined by

Goal 9 may not be available and developers may have difficulty finding developable land with specific site characteristics.

This report presents an Economic Opportunities Analysis (EOA) for the City of Springfield consistent with the requirements of statewide planning Goal 9 and the Goal 9 administrative rule (OAR 660-009). Goal 9 describes the EOA as “an analysis of the community's economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends” and states that “a principal determinant in planning for major industrial and commercial developments should be the comparative advantage of the region within which the developments would be located.”

BACKGROUND

In 2007, the Oregon Legislature passed House Bill 3337 that directed Springfield and Eugene to establish separate Urban Growth Boundaries (UGBs). The city started work on a key element of its new UGB in 2006 by initiating a residential buildable lands inventory and contracting ECONorthwest to conduct a Goal 10 housing needs analysis. Springfield’s UGB was acknowledged in 2011. The City concurrently prepared additional studies necessary to determine employment land needs – including an economic opportunities analysis (EOA) and an economic development strategy.

The project includes two key phases:

1. An inventory of commercial and industrial lands and a projection of the acreage needed to accommodate Springfield’s future commercial and industrial needs. This phase is called the economic opportunities analysis (EOA).
2. An analysis of alternative locations where the UGB might be expanded to accommodate the city’s future commercial, industrial, and residential needs – if the City identifies a deficiency of lands. This phase is called the alternatives analysis.

This report presents the results of the economic opportunities analysis, with the economic development strategy presented in Appendix D. ECONorthwest worked closely with City staff, a Technical Advisory Committee, and a Stakeholder Committee in preparing the Springfield Economic Opportunities Analysis. This report incorporates many comments provided by these groups. It is an update to the 2009 Draft EOA, designed to address questions and comments about the EOA raised

through public testimony, as well as update the EOA to address requirements of recent court decisions.

FRAMEWORK FOR ECONOMIC DEVELOPMENT PLANNING IN OREGON

The content of this report is designed to meet the requirements of Oregon Statewide Planning Goal 9 and the administrative rule that implements Goal 9 (OAR 660-009). The Land Conservation and Development Commission adopted amendments to this administrative rule in December 2005.⁴ The analysis in this report is designed to conform to the requirements for an Economic Opportunities Analysis in OAR 660-009 as amended.

1. *Economic Opportunities Analysis (OAR 660-009-0015)*. The Economic Opportunities Analysis (EOA) requires communities to identify the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the planning area based on information about national, state, regional, county, or local trends; identify the number of sites by type reasonably expected to be needed to accommodate projected employment growth based on the site characteristics typical of expected uses; include an inventory of vacant and developed lands within the planning area designated for industrial or other employment use; and estimate the types and amounts of industrial and other employment uses likely to occur in the planning area. Local governments are also encouraged to assess community economic development potential through a visioning or some other public input based process in conjunction with state agencies.
2. *Industrial and commercial development policies (OAR 660-009-0020)*. Cities with a population over 2,500 are required to develop commercial and industrial development policies based on the EOA. Local comprehensive plans must state the overall objectives for economic development in the planning area and identify categories or particular types of industrial and other employment uses desired by the community. Local comprehensive plans must also include policies that commit the city or county to designate an adequate number of employment sites of suitable sizes, types and locations. The plan must also include policies to provide necessary public facilities and transportation facilities for the planning area. Finally, cities within a Metropolitan Planning Organization (which includes

⁴ The amended OAR 660-009, along with a Goal 9 Rule Fact Sheet, are available from the Oregon Department of Land Conservation and Development at <http://www.oregon.gov/LCD/econdev.shtml>.

Springfield) must adopt policies that identify a competitive short-term supply of land for desired industrial and other employment uses as an economic development objective.

3. *Designation of lands for industrial and commercial uses (OAR 660-009-0025.* Cities and counties must adopt measures to implement policies adopted pursuant to OAR 660-009-0020. Appropriate implementation measures include amendments to plan and zone map designations, land use regulations, public facility plans, and transportation system plans. More specifically, plans must identify the approximate number, acreage and characteristics of sites needed to accommodate industrial and other employment uses to implement plan policies, and must designate serviceable land suitable to meet identified site needs.

Plans for cities and counties within a Metropolitan Planning Organization or cities and counties that adopt policies relating to the short-term supply of land must designate suitable land to respond to economic development opportunities as they arise.

This report is an Economic Opportunities Analysis, the first key element required by Goal 9. This EOA includes an analysis of national, state, regional, and county trends as well as an employment forecast that leads to identification of needed development sites. It also includes an inventory of buildable commercial and industrial land in Springfield.

ORGANIZATION OF THIS REPORT

The remainder of this report is organized as follows:

- **Chapter 2, Land Available for Industrial and Other Employment Uses** presents an inventory of industrial and other employment lands.
- **Chapter 3, Economic Trends and Factors Affecting Future Economic Growth in Springfield** summarizes historic economic trends that affect current and future economic conditions in Springfield. It also summarizes Springfield's comparative advantages formed by the mix of factors present in Springfield
- **Chapter 4, Land Demand and Site Needs in Springfield** presents the employment forecast for Springfield and an estimate of how much land is needed to accommodate the 20-year employment forecast. It also describes the types of sites that are needed to accommodate industries that are likely to locate or expand in Springfield.

- **Chapter 5, Implications** presents a comparison of land supply and site needs and discusses the implications of the Economic Opportunities Analysis.

This report also includes three appendices:

- **Appendix A, Review of National, State, Regional, County, and Local Trends** describes national, state, and local economic trends that will influence the regional economy. Appendix A presents detailed information about economic trends that may affect Springfield, which is summarized in Chapter 3.
- **Appendix B, Factors Affecting Future Economic Growth in Springfield** discusses the comparative advantages formed by the mix of factors present in Springfield. Springfield's comparative advantages are summarized in Chapter 3.
- **Appendix C, Employment Forecast and Site Needs for Industrial and Other Employment Uses** presents an employment forecast and analysis of needed sites for Springfield for the period 2010-2030 and is summarized in Chapter 4.
- **Appendix D, Economic Development Objectives and Implementation Strategies** presents objectives and strategies to implement the City's economic development goals. It will be used to guide development of land use policies to implement the City's economic development vision.

Land Available for Industrial and Other Employment Uses

Chapter 2

The Springfield Commercial and Industrial Buildable Lands (CIBL) inventory is intended to identify lands within the Springfield urban Growth Boundary (UGB) that are suitable for development and can accommodate employment growth. This chapter addresses the requirements of OAR 660-009-0015(3) to inventory vacant and developed lands that are designated for industrial or other employment uses.

Buildable lands inventories are sometimes characterized as *supply* of land to accommodate growth. Population and employment growth drive *demand* for land. The amount of land needed depends, in part, on the density of development as well as assumptions about redevelopment and infill.

This chapter presents the CIBL inventory for the City of Springfield. The results are based on analysis of Geographic Information System data provided by the City of Springfield Public Works Department and the Lane Council of Governments. The buildable land inventory also used aerial orthophotographs and review by city staff for verification.

Some updates were made to this chapter as part of the 2015 update of the EOA. Text was added to clarify data and methodologies used in the BLI. The column titles were updated to clarify the results of the BLI in some tables. The results of the buildable lands inventory were not revised as part of this update. This update resulted in modifications to the narrative of this chapter, with the intent of clarifying the methods and results.

For the purpose of the buildable lands inventory, lands east of the Interstate 5 center line in the Metro UGB were considered to be in the Springfield portion of the UGB.⁵

ECO worked closely with City Staff, a Technical Advisory Committee, and a Stakeholder Committee during the development and review of the Springfield commercial and industrial buildable lands inventory (CIBL). ECO developed the inventory using the following steps:

⁵ Springfield did not have a separate UGB at the time this study was completed. The Springfield UGB was acknowledged in 2011.

- *Assemble and document datasets.* ECO identified data from the Regional Land Information Database (RLID) and GIS data from the City of Springfield and the Lane Council of Governments as primary datasets on which the inventory and analysis was built. RLID includes assessment and taxation data maintained by Lane County.
- *Preliminary analysis.* ECO conducted a preliminary analysis with the GIS and data tables selected for inclusion in the database. The purpose of this task was to work with City staff and the TAC to determine the optimal definitions and supporting methodology to base the final analysis and database structure.
- *Data processing and GIS analysis.* In this step ECO performed the GIS analysis and data processing steps necessary to populate the database. Table 2-1 shows plan designations that were included in the commercial and industrial buildable lands inventory. All of the designations included in the inventory allow employment outright. The inventory, however, includes several mixed use designations that allow both employment and housing. The inventory generally uses the 2004 Metro Plan designations with two exceptions: (1) Glenwood, where a 2005 plan amendment changed the designation on approximately 47 acres from Light Medium Industrial Mixed Use to Mixed Use; (2) the PeaceHealth site where land was redesignated from residential to designations that allow employment; and (3) the Marcola Meadows site that included a plan designation change from Campus Industrial to Medium Density Residential/Nodal Development, Mixed-Use Commercial/Nodal Development, and Community Commercial. The implication of these exceptions was to include land that would not have otherwise been included in the inventory. The intent of this step was to increase the accuracy of the inventory.

Table 2-1. Metro plan designations included in the Springfield commercial and industrial buildable lands inventory, 2008

Plan Designation	Allowed Land Uses (yes/no)			In CIBL?
	Commercial	Industrial	Residential	
Campus Industrial	yes	yes	no	yes
Commercial	yes	no	no	yes
Commercial Mixed Use	yes	no	yes	yes
Heavy Industrial	no	yes	no	yes
High Density Res Mixed Use	yes	no	yes	yes
Light Medium Industrial	no	yes	no	yes
Light Medium Industrial Mixed Use	no	yes	no	yes
Major Retail Center	yes	no	no	yes
Medium Density Res Mixed Use	yes	no	yes	yes
Mixed Use	yes	yes	yes	yes
Special Heavy Industrial	no	yes	no	yes

Note: Allowed land uses indicates which uses are allowed in each plan designation. The CIBL includes any plan designation that allows employment, including mixed use designations.

- Verification.* ECO used a multi-step verification process. The initial verification occurred as part of the preliminary analysis. This step included a staff-level review of preliminary database output (maps) showing the land base and plan designations. The second round of verification involved a “rapid visual assessment” of land classifications using GIS and recent aerial photos for this analysis. The rapid visual assessment involved reviewing classifications overlaid on 2005 aerial photographs to verify uses on the ground. ECO reviewed all tax lots included in the inventory using the rapid visual assessment methodology. The third round of verification involved city staff verifying the rapid visual assessment output. The draft inventory was then circulated for review by the TAC and the Stakeholder Committee. This review resulted in a number of changes which are reflected in the inventory as presented in this report.

In summary, ECO used a systematic process to complete the CIBL inventory that was intended to provide the greatest degree of accuracy possible.

DEFINITIONS

The first step in the buildable inventory was to develop working definitions and assumptions. ECO initially classified land using a rule-based methodology. The rules applied by ECO to classify land are described below. The accompanying maps show the results of the application of those rules, with some adjustments made based on review of 2004 aerial photos and building permit data.

ECO began the buildable lands analysis with a tax lot database provided by the City's GIS Staff. The inventory used tax lots as the unit of analysis because (1) it is a commonly accepted unit for land inventories, and (2) tax lots link directly to other data sets (e.g., assessment data, addresses, etc.) The tax lot database was current as of February 2008. The inventory builds from the tax lot-level database to estimates of buildable land by plan designation.

All of the methods, definitions, and assumptions used in the CIBL were reviewed by the CIBL Stakeholder Committee over the course of several meetings. The Committee made many suggestions that are reflected in the final set of methods, definitions, and assumptions used for the CIBL.⁶

⁶ Meetings with the CIBL Stakeholder Committee are documented in in Springfield planning file LRP 2007-00031 and on the City webpage <http://www.springfield-or.gov/dpw/2030Background.htm>

A key step in the buildable lands analysis was to classify each tax lot into a set of mutually exclusive categories. Table 2-2 shows the relationship between definitions used in this study and the definitions related to land inventories in OAR 660-009-0005.

Table 2-2 Relationship between land classification definitions used in the Springfield EOA and definitions in OAR 660-009-0005.

Land classification in EOA	Definition used in EOA	Related definition in OAR 660-009-0005	Implications
Vacant Land	Tax lots that have no structures or have buildings with very little value. For the purpose of this inventory, lands with improvement values under \$10,000 are considered.	(14) "Vacant Land" means a lot or parcel: (a) Equal to or larger than one half-acre not currently containing permanent buildings or improvements; or (b) Equal to or larger than five acres where less than one half-acre is occupied by permanent buildings or improvements.	Springfield included more land in the inventory than required by rule. The Stakeholder Committee believed it would provide a more accurate estimate of Total Land Supply as defined by OAR 660-009-0005(13).
Developed Land	Land that is developed at densities consistent with current zoning/plan designation and improvements that make it unlikely to redevelop during the analysis period.	(1) "Developed Land" means non-vacant land that is likely to be redeveloped during the planning period. The EOA separates the definition of developed and potentially redevelopable land.	Springfield uses a standard definition of developed—that is that the land has improvements and is committed to those uses for the planning period. The rule does not include a definition of “developed” in the standard context
Potentially Redevelopable Land	Land on which development has already occurred but on which, due to present or expected market forces, there exists the potential that existing development will be converted to <u>more intensive uses</u> (providing additional employment capacity) during the planning period. ⁷	EOA uses term “developed land” differently than OAR definition of “developed land” as “non-vacant land that is likely to be redeveloped during the planning period.” Instead the EOA uses “potentially redevelopable” to classify non-vacant land that is likely to be redeveloped during the planning period.	This category corresponds to the definition used in OAR 660-009-0005(1)

⁷ While Springfield expects many buildings and sites of all types to be re-used, re-purposed, revitalized and renovated throughout the city over the planning period, for the purposes of analyzing the capacity of the land base to absorb a portion of employment growth, only redevelopment that increases capacity for accommodating additional employment is identified as redevelopment in this analysis.

The inventory assigns only one land classification (e.g., vacant, developed, or potentially redevelopable) for each tax lot. Each tax lots in the UGB is classified into one of the following categories:

Identifying Vacant Land

The City's definition of vacant land is more inclusive than what statewide planning policy requires. The implication of using a more inclusive definition are that more land was considered available in the inventory than would be if the state definitions were used.

- *Vacant land.* Tax lots that have no structures or have buildings with very little value. For the purpose of this inventory, lands with improvement values under \$10,000⁸ are considered vacant (not including lands that are identified as having mobile homes).⁹ Note that this definition is considerably more inclusive than what is required by OAR 660-009-0005(14). It includes all lots or parcels that are less than one half-acre and did not automatically classify lots between 0.5 and 5.0 acres as developed if they had pre-existing development. Lots in that category were visually inspected to make a determination of whether they should be classified as developed or vacant.
- *Developed land.* Land that is developed at densities consistent with current zoning/ plan designation and improvements that make it unlikely to redevelop during the analysis period. Lands not classified as vacant, potentially redevelopable, or public are considered developed.¹⁰ Note that OAR 660-009-0005(1) uses the following definition: (1) "Developed Land" means non-vacant land that is likely to be redeveloped during the planning period. This study defines developed land as developed and defines land "likely to be redeveloped" as potentially redevelopable. Thus, the definition of developed land used for the CIBL is different (e.g., more inclusive) than the definition in the administrative rule. For purposes of the CIBL, developed land is considered committed during the 20-year period and unavailable for redevelopment.

Lands in public ownership were generally considered unavailable for development unless identified by City staff as being available for development at some time during the 20-year planning period. This includes uses such as electrical substations, parks, and private

⁸ Improvement values were from 2008 Lane County Assessment and Taxation data and reflect the County's estimate of the market value of improvements.

⁹ Note that this definition is more inclusive than what statewide planning policy requires. OAR 600-009-0005(14) provides the following definition: "Vacant Land" means a lot or parcel: (a) Equal to or larger than one half-acre not currently containing permanent buildings or improvements; or (b) Equal to or larger than five acres where less than one half-acre is occupied by permanent buildings or improvements. The implication of using a more inclusive definition are that more land was considered available in the inventory than would be if the state definitions were used.

¹⁰ Note that OAR 660-009-0005(1) uses the following definition: (1) "Developed Land" means non-vacant land that is likely to be redeveloped during the planning period. This study defines developed land as developed and defines land "likely to be redeveloped" as potentially redevelopable.

cemeteries. Lands in Federal, State, County, or City ownership were also considered committed.

- *Potentially Redevelopable land.* Land on which development has already occurred but on which, due to present or expected market forces, there exists the potential that existing development will be converted to more intensive uses during the planning period.¹¹

While Springfield expects many buildings and sites of all types to be re-used, re-purposed, revitalized and renovated throughout the city over the planning period, for the purposes of analyzing the capacity of the land base to absorb a portion of employment growth, only redevelopment that increases capacity for accommodating additional employment is a factor in this analysis.

Potentially redevelopable land is a subset of developed land that was identified using improvement to land value ratios and building coverage ratios. For the purpose of the CIBL, “potentially redevelopable” land corresponds with the definition of “developed land” as stated in OAR 660-009-0005(1) as described in Table 2-2. This study included a detailed evaluation of developed land to determine its redevelopment potential. Lands that were determined to be potentially redevelopable were classified as such. Redevelopment potential is discussed in more detail later in this chapter (See page 27).

The inventory assigns only one land classification (e.g., vacant, developed, or potentially redevelopable) for each tax lot. The land classifications result in identification of lands that are vacant or potentially redevelopable. The inventory includes all lands within the Springfield UGB. Map 2-1 shows lands by plan designation within the Springfield UGB.

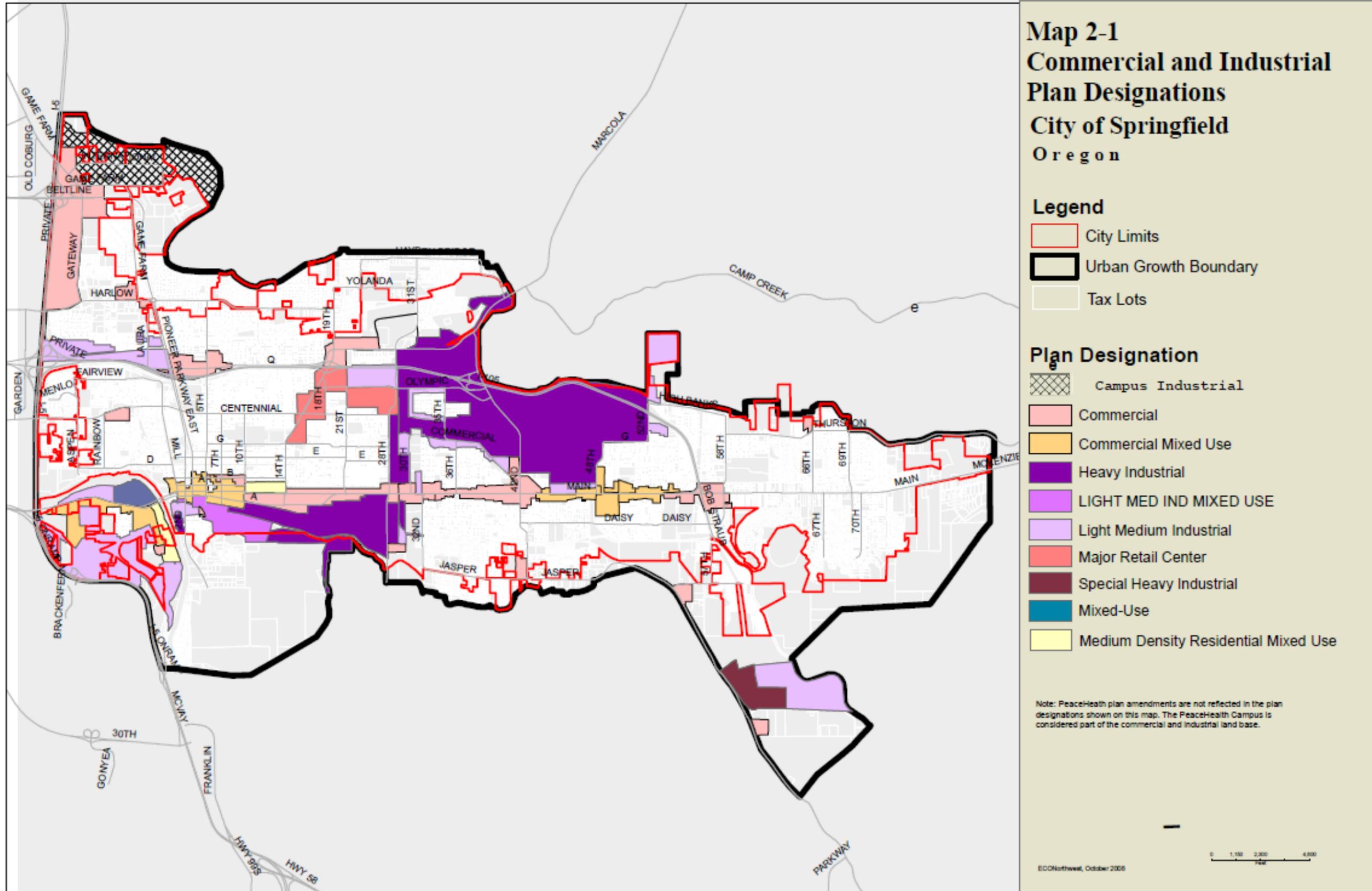
ECONorthwest used a systematic process to develop and review Springfield’s Commercial and Industrial land inventory. Processing and analyzing data from the Lane Council of Governments (LCOG) land use database (a database that inventories land uses at the sub-tax lot level), ECONorthwest identified the developed or unsuitable portions of tax lots. Areas of partially vacant tax lots with development were included in the “developed acres” category and remainders were considered “suitable”¹²

¹¹ This definition is based on the definition in OAR 660-009-0005(1).

¹² OAR 660-009-0005(12) defines “suitable” land as “serviceable land designated for industrial or other employment use that provides, or can be expected to provide the appropriate site characteristics for the proposed use.”

(unless they had absolute constraints). The inventory also deducted the “absolute constraints” that make land unsuitable for employment uses: wetlands (as identified in Springfield’s local wetland inventory), floodways, slopes over 15%, and riparian resource areas. Each of these constraints was available in a GIS format. The four constraints layers were “dissolved” together to create a single “absolute” constrained layer. This was done to avoid double counting since some constraints (e.g., floodways and wetlands) occur in the same place. The combined constraints layer was then used to calculate the portion of the lot that was constrained and therefore unsuitable for development.

Map 2-1 Plan Designation



CONSTRAINTS

Constraints are factors that preclude land development or affect the desirability of land for development. OAR 660-009-0005(2) provides the following definition of “development constraints:”

“Development Constraints” means factors that temporarily or permanently limit or prevent the use of land for economic development. Development constraints include, but are not limited to, wetlands, environmentally sensitive areas such as habitat, environmental contamination, slope, topography, cultural and archeological resources, infrastructure deficiencies, parcel fragmentation, or natural hazard areas.

Thus, the Administrative Rule provides a broad definition of constraints and leaves discretion for local governments in the application of the definition. Absolute constraints¹³ were deducted from the buildable portion of lots as they were determined to be factors that temporarily or permanently limit or prevent the use of land for economic development as defined in OAR 660-009-0005(2). For the purpose of this study, the following factors are considered **absolute development constraints** which make employment land unsuitable for development:¹⁴

- Wetlands – Source: City of Springfield Local Wetland Inventory. File used: wet_lwi.shp, accessed 2008
- Floodway – Source: Army Corps of Engineers digital “FIRM” maps. File used: fld_way.shp, accessed 2008
- Slopes over 15% - Source: 10 meter digital elevation model (DEM). File used: slopes_over_15.shp, accessed 2008
- Riparian resource areas – Source: City of Springfield. File used: Riparian_resource_areas.shp, accessed 2008

The following factors are **partial development constraints**. Partial constraints are factors that may create difficulties in development, but do not preclude development. Partial constraints were not deducted from the inventory. Land with these constraints is classified as “constrained” on employment land. Development can occur on “constrained” land and no deductions were made from the inventory for these factors.¹⁵

¹³ The subset of constraints to be considered “absolute constraints” for the purposes of this inventory and analysis were determined through ECONorthwest’s discussions with staff, the TAC, Stakeholder Committee, Planning Commission and City Council.

¹⁴ Each of these files were provided to ECONorthwest by the City in 2008.

¹⁵ Each of these files were provided to ECONorthwest by the City in 2008.

- Floodplain – Source: Army Corps of Engineers digital “FIRM” maps. File used: lane_dfirm.shp, accessed 2008
- Willamette River Greenway – Source: Lane Council of Governments. File used: Greenway_10m_20080303.shp, accessed 2008
- BPA Easements – Source: Bonneville Power Administration. File used: bparow_lane.shp, accessed 2008

The inventory summary that follows addresses “absolute” and “partial” constraints separately and summarizes lands as either “unbuildable acres” (e.g., no development may occur per “development constraints” as defined by OAR 660-009-0005(2)) or “constrained acres” (e.g., one or more constraints are present but those constraints do not preclude development). Portions of individual tax lots can be in one or more of the following categories: “unconstrained,” “constrained,” or “unbuildable” (e.g., they are not suitable for development).

Figure 2-1 shows the framework for constraint and classification used in buildable land inventory. The framework has two dimensions: development status (indicated by the presence or absence of improvements) and constraining conditions. Lands with constraints can be prohibitively constrained by commitment to a specific use (e.g., streets or parks) or protected (e.g., wetlands) or partially constrained. Lands with prohibitive constraints have no development capacity; those that are partially constrained have development capacity.

On the dimension of developments status (presence of improvements), developable lands (which can be thought of as vacant lands) have capacity; developed lands generally do not have capacity, but some may have redevelopment capacity. In short, redevelopment can be thought of as a subset of developed land.

Figure 2-1. Framework for land and constraint classification in a buildable land inventory

		Presence of Improvements	
		Developable	Developed
Constraining Conditions	Prohibitively Constrained	No capacity	
	Partially Constrained	Full capacity	Potential redevelopment capacity
	Unconstrained	Full capacity	

Constraints are one element of land suitability. Throughout this chapter, the following terms are used to refer to the status of employment land: suitable and unsuitable. These terms are defined as follows:

- "Suitable" means serviceable land designated for industrial or other employment use that provides, or can be expected to provide the appropriate site characteristics for the proposed use. (this definition is from OAR 660-009-0005(12))
- "Unsuitable" is land with absolute constraints.

RESULTS OF THE BUILDABLE LANDS INVENTORY

LAND BASE

The first step in the CIBL inventory was to determine the land base. This step was necessary because the inventory only covers a subset of land in the Springfield UGB (lands that accommodate employment). The land base is the subset of tax lots that fall within the plan designations included in the CIBL (see Table 2-1).

Table 2-3 shows acres within the Springfield UGB and city limits in 2008. According to the City GIS data, Springfield has about 14,603 acres within its UGB. Of the 14,603 acres, 12,139 acres (about 83%) are in tax lots. Land not in tax lots is primarily in streets and waterways. Springfield has about 9,958 acres within its City Limits; of these 8,060 acres (about 81% of total acres in the City Limit) are in tax lots. Additionally, the City has about 4,645 acres between the City Limits and Urban Growth Boundary (the UGA); of this about 4,079 acres are in tax lots.

Table 2-3. Acres in Springfield UGB and City Limit, 2008

Area	Tax Lots	Total Acres	Percent	
			Acres in Tax Lots	in Tax Lots
City Limits	19,477	9,958	8,060	81%
Urban Growth Area	3,150	4,645	4,079	88%
Total	22,627	14,603	12,139	83%

Source: City of Springfield GIS data; analysis by ECONorthwest

Note: Urban Growth Area is the unincorporated area between the City Limits and Urban Growth Boundary

Table 2-3 summarizes all land in the Springfield UGB. The next step was to identify the commercial and industrial land base (e.g., lands with plan designations that allow employment or “employment lands”). The land base includes traditional commercial and industrial designations, as well as mixed-use designations. Table 2-1 provides a list of plan designations included in the land base. Note that not all of the land in mixed-use designations will be used for employment. While mixed-use land can be used for the range of allowed uses, the CIBL inventory assumes that the mixed-use sites are available as employment sites consistent with their size.

Table 2-4 shows that about 3,415 acres within the Springfield UGB are included in the commercial and industrial land base. Thus, about 28% of land within the Springfield UGB is included in the Commercial and Industrial land base. The database includes all land in tax lots that have any portion that is in a commercial or industrial plan designation.

Table 2-4. Lands designated for commercial and industrial uses, Springfield UGB, 2008

Area	Value
Springfield UGB	
Number of Tax Lots	22,627
Acres in Tax Lots	12,139
Springfield CIBL	
Tax Lots in Employment Designations	2,104
Acres in Land Base in Employment Designations	3,415

Source: analysis by ECONorthwest

Table 2-5 summarizes acres by plan designation for employment lands within the Springfield UGB. Of lands designated for employment, about 65% (2,203 acres) are in industrial designations, 21% (716 acres) are in commercial designations, and 14% (495 acres) are in mixed use designations. .

Table 2-5. Acres by employment plan designation, Springfield UGB, 2008

Plan Designation	Total Acres	
	Tax Lots	in Tax Lots
Industrial		
Campus Industrial	43	352
Light Medium Industrial	375	541
Heavy Industrial	250	1,163
Special Heavy Industrial	5	147
Subtotal	673	2,203
Commercial		
Commercial	731	570
Community Commercial	4	30
Major Retail Center	119	116
Subtotal	854	716
Mixed Use		
Commercial Mixed Use	430	222
Light Medium Industrial Mixed Use	19	116
Medium Density Res Mixed	64	34
Mixed Use	64	123
Subtotal	577	495
Total	2,104	3,415

Source: City of Springfield GIS data; analysis by ECONorthwest
 Note: Totals may be off by up to one acre due to rounding.

Table 2-6 shows acres by classification and constraint status for the Springfield UGB in 2008. Analysis by constraint status (the table columns) shows that about 2,040 acres are classified as developed (e.g., unavailable for development), 543 were classified as vacant. Not all vacant lands are

available for development – the inventory identified 189 unbuildable acres on vacant tax lots, leaving 355 acres of vacant, Suitable land.

The inventory also includes two sites with approved master plans: Riverbend and Marcola Meadows. These sites have master plans that approve a specific amount of employment. The CIBL only inventoried the portion of these sites that are approved for employment uses.

The inventory identified 669 acres that are *potentially redevelopable* based on the criteria described in the definitions section. All of these lands have existing improvements, but the value or character of the improvements suggests redevelopment potential. Of lands with redevelopment potential, 88 acres are unsuitable and the remaining 581 acres are buildable (e.g., they have redevelopment potential).

Table 2-6. Acres by classification, Springfield UGB, 2008

Classification	Tax Lots	Acres in Tax Lots	Developed Acres	Unsuitable Acres (Absolute Constraints)	Suitable Acres		
					Constrained Suitable Acres (Partial Constraints)	Unconstrained Suitable Acres	Total Suitable Acres
Developed	1,295	2,040	1,711	329	0	0	0
Master Plan	18	163	0	2	0	161	161
Potentially Redevelopable	535	669	na	88	37	544	581
Vacant	256	543	0	189	76	279	355
Total	2,104	3,415	1,710	608	112	985	1,097

Source: City of Springfield data; analysis by ECONorthwest

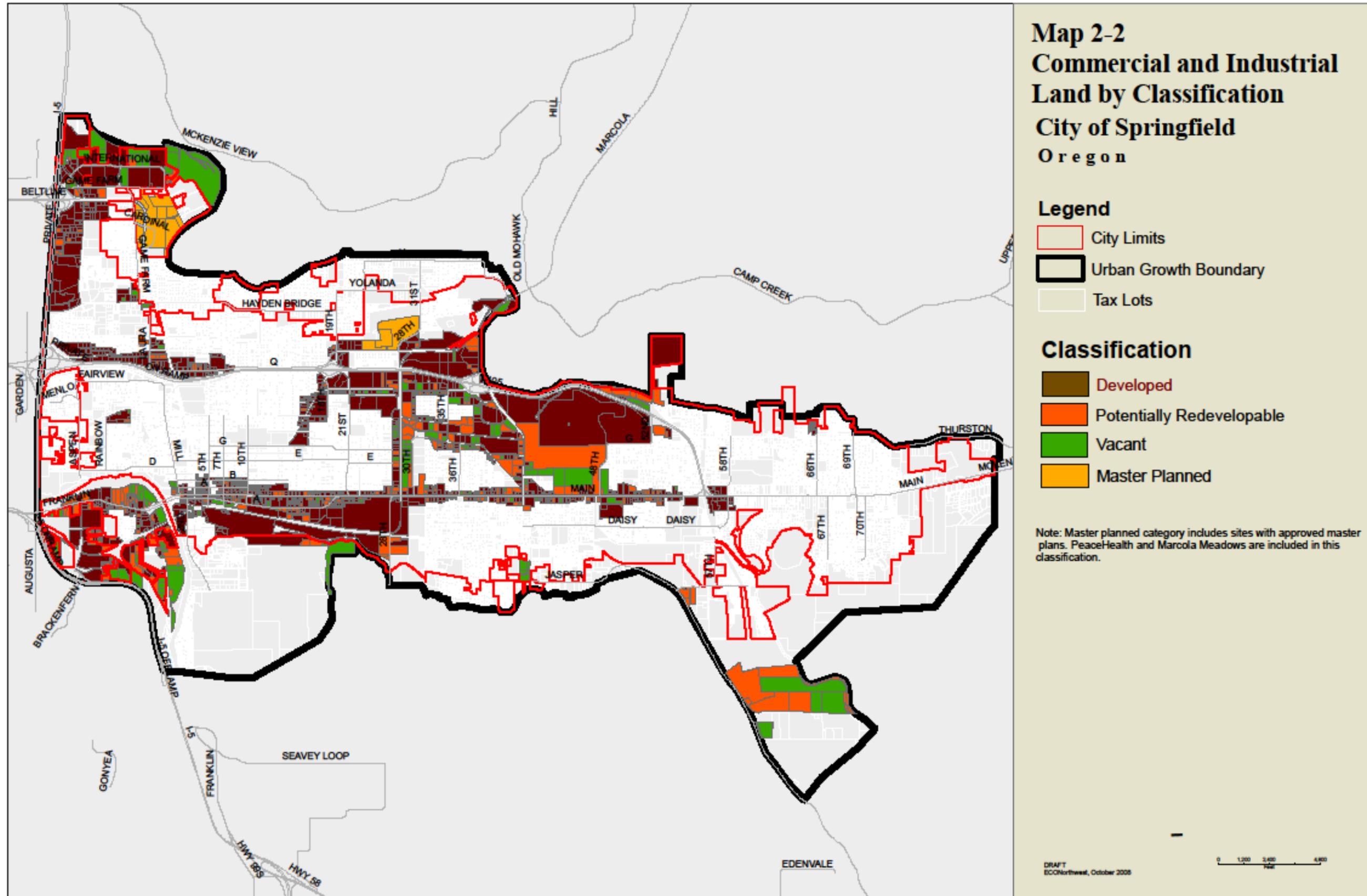
Note: Totals may be off by up to one acre due to rounding.

Note: The 2015 update to the EOA did not update the buildable land analysis. The changes in tables in Chapter 2 are clarifications of column titles.

Note: The CIBL only inventoried the portion of the master planned sites that are approved for employment uses.

Map 2-2 shows land by classification.

Map 2-2. Land by Classification, Springfield UGB



VACANT¹⁶ SUITABLE AND POTENTIALLY REDEVELOPABLE LAND

The next step in the land inventory is to deduct portions of vacant tax lots that are unavailable for development. Areas unavailable for development fall into two categories: (1) developed areas of partially vacant tax lots, and (2) areas with absolute development constraints (areas with steep slopes, floodway, riparian resource areas, or wetlands).

Table 2-7 shows vacant land by development and constraint status. The data show that about 189 acres within vacant tax lots have absolute development constraints, making them unsuitable, leaving about 355 vacant suitable acres (76 partially constrained and 279 unconstrained acres) within the UGB. About 88 acres of potentially redevelopable and suitable land has absolute development constraints, making them unsuitable, leaving about 581 potentially redevelopable and suitable acres (37 partially constrained and 544 unconstrained acres) within the UGB.

Table 2-7. Vacant and potentially redevelopable land by constraint status, Springfield UGB, 2008

Classification	Tax Lots	Acres in Tax Lots	Developed Acres	Unsuitable Acres (Absolute Constraints)	Suitable Acres		
					Constrained Suitable Acres (Partial Constraints)	Unconstrained Suitable Acres	Total Suitable Acres
Potentially Redevelopable	535	669	na	88	37	544	581
Vacant	256	543	0	189	76	279	355
Total	791	1,212	1,710	277	112	823	935

Source: City of Springfield GIS data; analysis by ECONorthwest

Note: Totals may be off by up to one acre due to rounding.

Note: The 2015 update to the EOA did not update the buildable land analysis. The changes to the table above were clarifications of column titles.

Table 2-8 shows vacant land by plan designation. Map 2-3 shows the location of suitable vacant land by plan designation. Map 2-4 shows vacant land with absolute constraints that are unsuitable and Map 2-5 shows suitable vacant land with partial constraints.

¹⁶ “Vacant” is defined in Chapter 2 of this document as “Tax lots that have no structures or have buildings with very little value. For the purposes of this inventory, lands with improvement values under \$10,000 (2008 Lane County Assessment and Taxation Data) are considered vacant (not including lands that are identified as having mobile homes).” This definition of “vacant” is more inclusive than what OAR 600-009-0005(14) requires, with the result that Springfield’s inventory includes more available land in the inventory than it would if the OAR600-009-0005(14) definition is used.

Table 2-8. Vacant land by Plan Designation, Springfield UGB, 2008

Plan Designation	Tax Lots	Acres in Tax Lots	Unsuitable Acres (Absolute Constraints)	Suitable Land			
				Constrained Suitable Acres(Partial Constraints)	Unconstrained Suitable Acres	Total Suitable Acres	
VACANT LAND							
Industrial							
Campus Industrial	14	131	77	40	14	54	
Light Medium Industrial	65	124	33	17	74	90	
Heavy Industrial	48	133	32	3	98	101	
Special Heavy Industrial	1	48	39	1	8	9	
Subtotal	128	435	181	61	194	255	
Commercial							
Commercial	71	51	3	3	45	49	
Community Commercial						0	
Major Retail Center	11	6	0	0	5	6	
Subtotal	82	57	3	3	51	54	
Mixed Use							
Commercial Mixed Use	27	28	2	2	24	26	
Light Medium Industrial Mixed Use						0	
Medium Density Res Mixed	7	2	0	1	1	2	
Mixed Use	12	21	3	9	9	18	
Subtotal	46	51	5	11	34	46	
Total	256	543	189	76	279	355	

Source: City of Springfield GIS data; analysis by ECONorthwest

Note: Totals may be off by up to one acre due to rounding.

Note: The 2015 update to the EOA did not update the buildable land analysis. The changes to the table above were clarifications of column titles.

Table 2-9 shows vacant land by plan designation and by parcel size.¹⁷ This analysis is useful in that it shows the distribution of vacant land by parcel size, which allows an evaluation of whether a sufficient mix of parcel sizes is available or not. The distribution of buildable land by parcel size varies by plan designation, with the results showing the City has no vacant tax lots 20 acres or larger. Parcel size is an important element in assessing whether the land supply meets needed site characteristics as defined by OAR 660-009-0005(11).

Table 2-9. Suitable acres in vacant tax lots by plan designation and parcel size, Springfield UGB, 2008

Plan Designation	Lot Size (Suitable Acres)								Total	
	<0.25	0.25-0.49	0.50-0.99	1.00-1.99	2.00-4.99	5.00-9.99	10.00-19.99	20.00-50.00		50+
Total Acres										
Industrial										
Campus Industrial	0.2	0.3	0.0	4.7	18.6	19.7	10.8	0.0	0.0	54.3
Light Medium Industrial	3.5	5.2	9.7	15.3	20.7	6.1	30.0	0.0	0.0	90.5
Heavy Industrial	1.0	2.4	8.8	14.7	29.3	19.0	25.8	0.0	0.0	101.0
Special Heavy Industrial	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	0.0	9.1
Subtotal	4.7	7.9	18.5	34.6	68.6	53.9	66.6	0.0	0.0	254.8
Commercial										
Commercial	4.4	6.4	10.8	7.5	6.5	13.0	0.0	0.0	0.0	48.6
Community Commercial										
Major Retail Center	0.7	1.4	1.8	1.7	0.0	0.0	0.0	0.0	0.0	5.6
Subtotal	5.0	7.8	12.6	9.3	6.5	13.0	0.0	0.0	0.0	54.1
Mixed Use										
Commercial Mixed Use	1.2	1.3	1.9	5.4	7.6	8.5	0.0	0.0	0.0	25.9
Light Medium Industrial Mixed Use										
Medium Density Res Mixed	0.5	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Mixed Use	0.5	0.3	0.0	4.9	7.2	5.2	0.0	0.0	0.0	18.0
Subtotal	2.2	2.2	2.5	10.3	14.8	13.6	0.0	0.0	0.0	45.6
Total	11.9	17.9	33.6	54.1	89.9	80.5	66.6	0.0	0.0	354.5
Number of Tax Lots										
Industrial										
Campus Industrial	1	1	0	3	5	3	1	0	0	14
Light Medium Industrial	19	13	12	11	7	1	2	0	0	65
Heavy Industrial	8	6	12	10	8	2	2	0	0	48
Special Heavy Industrial	0	0	0	0	0	1	0	0	0	1
Subtotal	28	20	24	24	20	7	5	0	0	128
Commercial										
Commercial	29	17	16	5	2	2	0	0	0	71
Community Commercial										
Major Retail Center	4	4	2	1	0	0	0	0	0	11
Subtotal	33	21	18	6	2	2	0	0	0	82
Mixed Use										
Commercial Mixed Use	12	5	3	4	2	1	0	0	0	27
Light Medium Industrial Mixed Use										
Medium Density Res Mixed	4	2	1	0	0	0	0	0	0	7
Mixed Use	4	1	0	4	2	1	0	0	0	12
Subtotal	20	8	4	8	4	2	0	0	0	46
Total	81	49	46	38	26	11	5	0	0	256

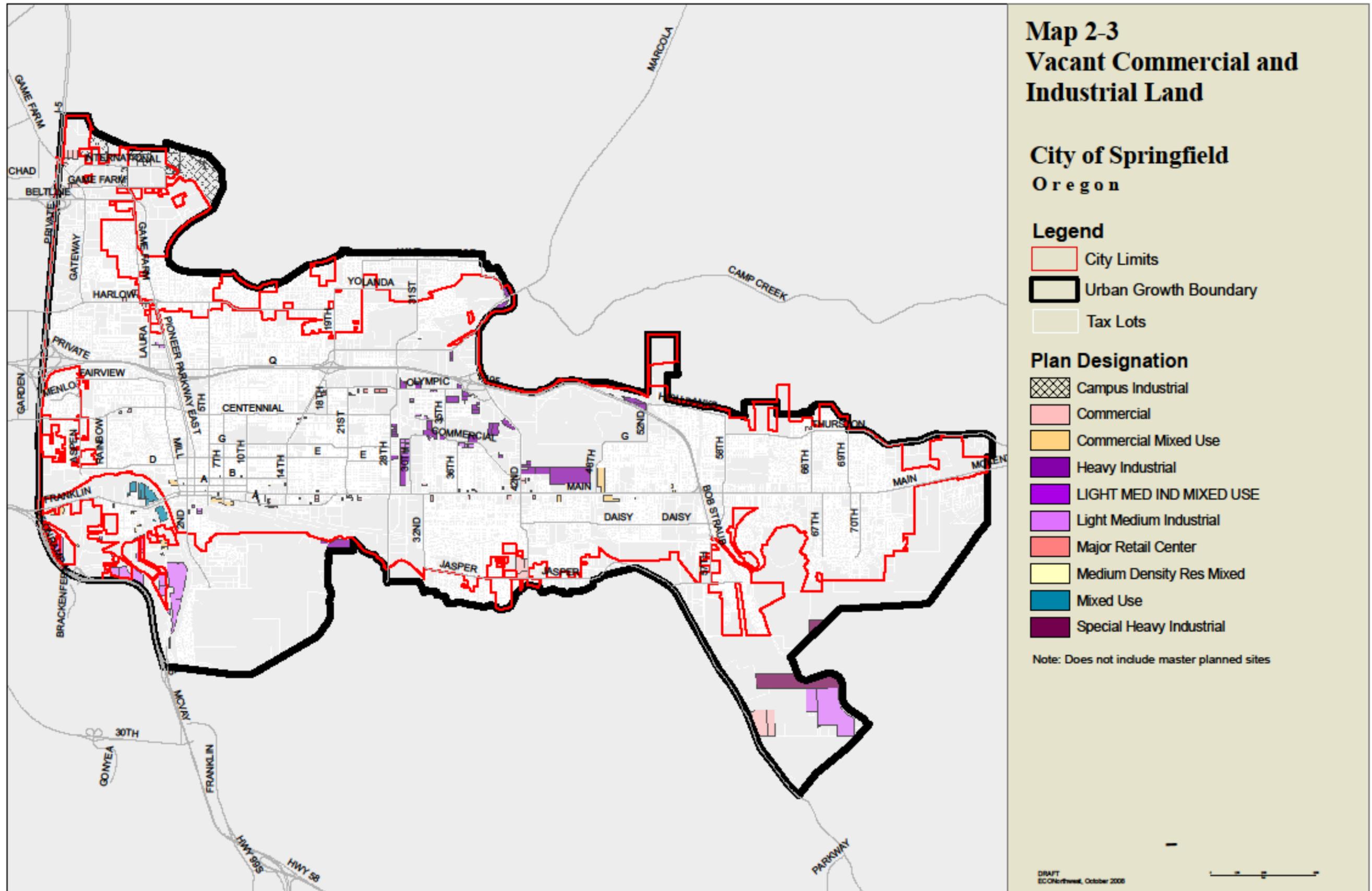
Source: City of Springfield GIS data; analysis by ECONorthwest

Note: Buildable acres includes "constrained" acres and "unconstrained" acres

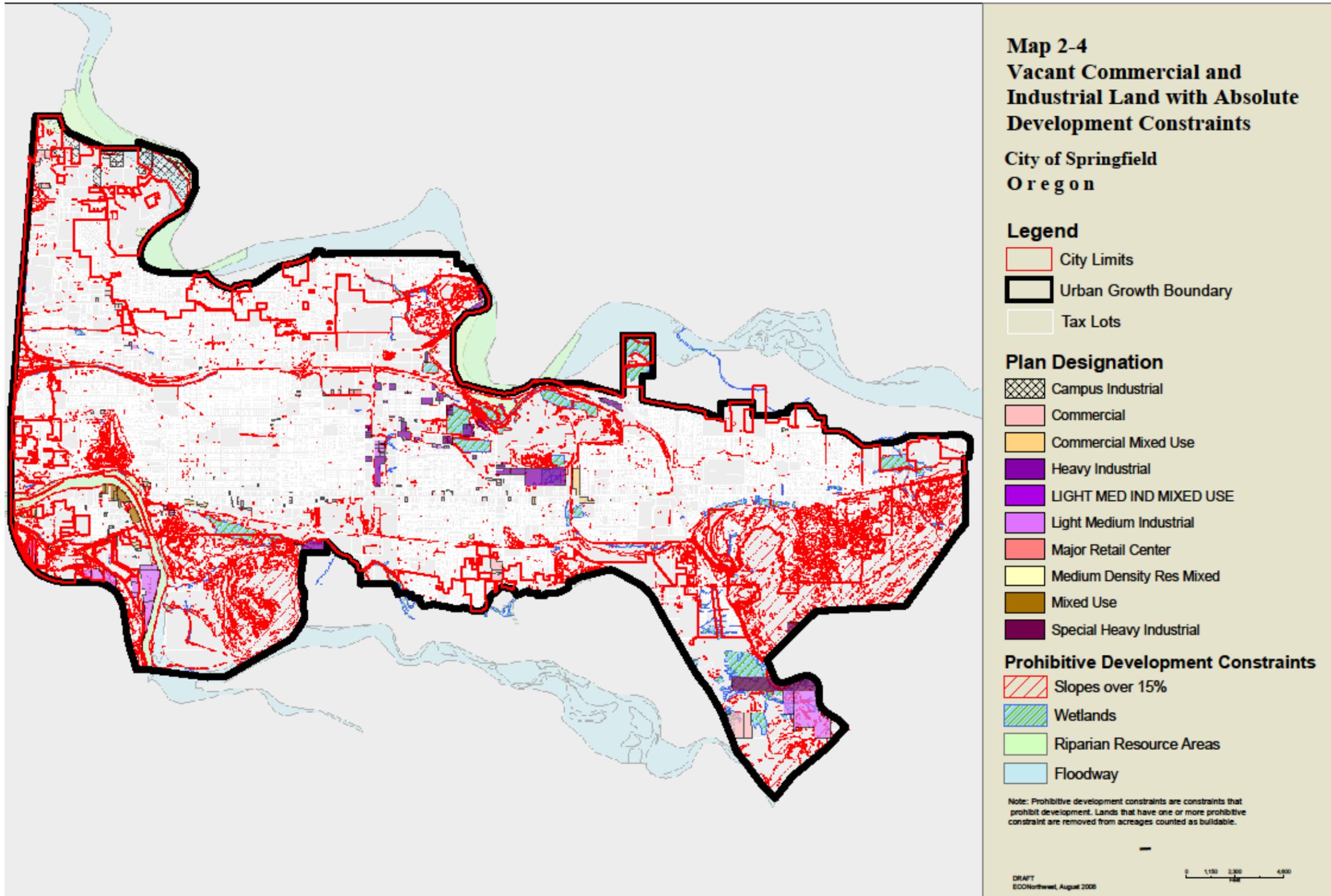
Note: Acres may not sum to tenths due to rounding.

¹⁷ The table shows total acres in vacant tax lots (constraints are not netted out)

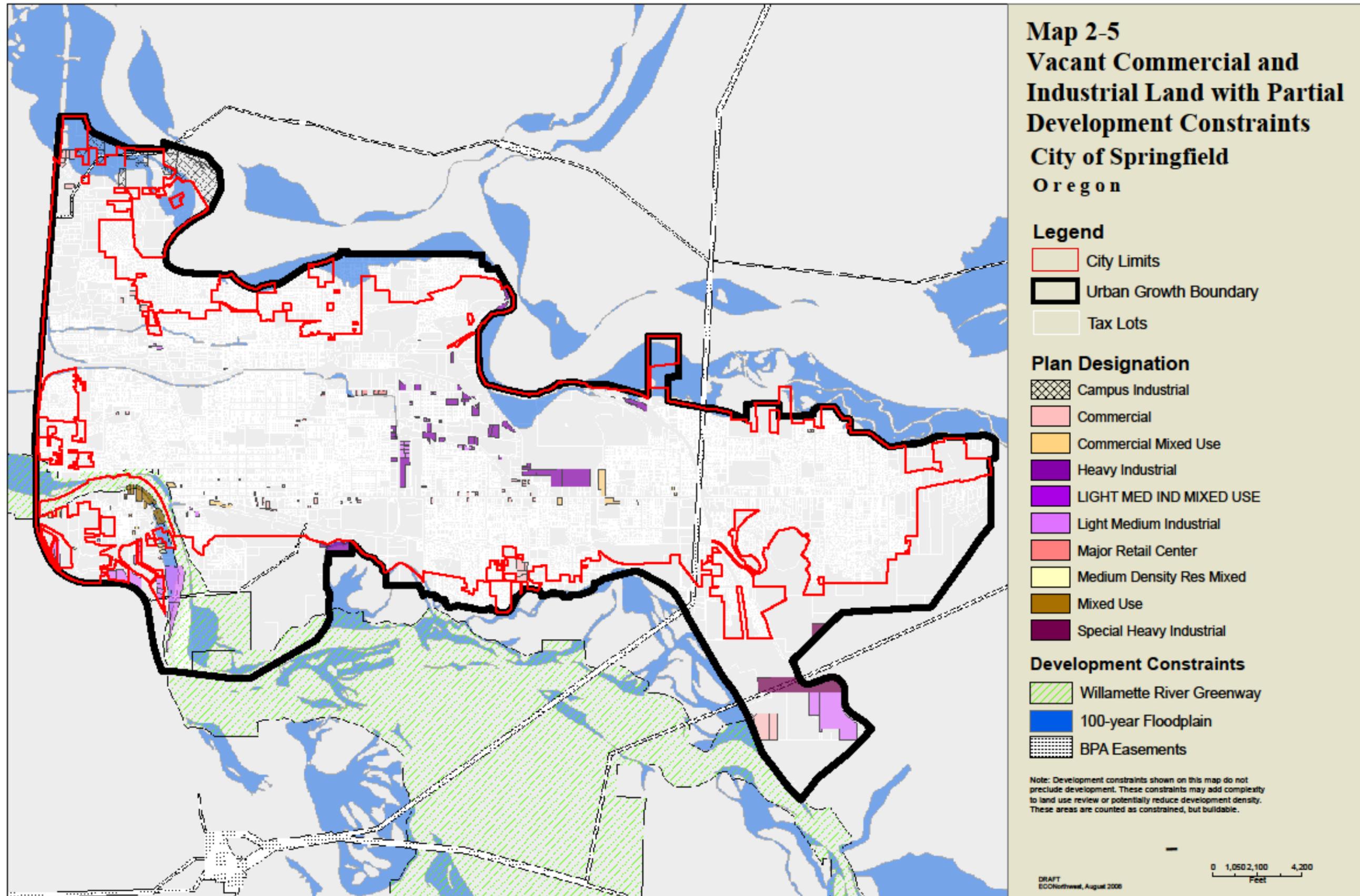
Map 2-3. Vacant Commercial and Industrial Land, City of Springfield



Map 2-4. Vacant Commercial and Industrial Land with Absolute Development Constraints, City of Springfield



Map 2-5. Vacant Lands with development constraints



CAPACITY TO ACCOMODATE EMPLOYMENT GROWTH THROUGH REDEVELOPMENT

For the purpose of this study, we define redevelopment in the context of the Goal 9 Administrative Rule. OAR 660-009-0005(1) defines developed land (redevelopment) as follows:

(1) "Developed Land" means non-vacant land that is likely to be redeveloped during the planning period.

The key components of this definition are “non-vacant” and “likely to be redeveloped.” Thus, any non-vacant land could be considered redevelopable, but only land that is “likely to be redeveloped” are required to be considered. Statewide planning statutes and administrative rules do not provide any guidance on how to determine what land is “likely to be redeveloped.”

Moreover, not all redevelopment is relevant to a buildable land inventory; only redevelopment that adds capacity for more employment is relevant in the context of Springfield’s commercial and industrial buildable lands inventory. An operational definition of redevelopment that would apply to both residential and employment lands in the context of the statewide planning program is:

Redevelopment is development that occurs on a tax lot that creates more employment space or capacity than the current use, and thus an increase in density on the tax lot.

For the purpose of this study, redevelopment must add capacity for it to be relevant to the buildable lands inventory.

IDENTIFICATION OF POTENTIALLY REDEVELOPABLE LAND

Redevelopment potential addresses land that is classified as developed that *may* redevelop during the planning period (e.g., potentially redevelopable land as defined for the purpose of the Springfield CIBL).¹⁸ While many methods exist to identify redevelopment potential, a common indicator is improvement to land value ratio. Different studies use different improvement to land value ratio thresholds.

Redevelopment potential can be thought of as a continuum – from more redevelopment potential to less redevelopment potential. The factors that

¹⁸ This study identifies land with redevelopment potential as land on which development has already occurred but on which, due to present or expected market forces, there exists the potential that existing development will be converted to more intensive uses (providing additional employment capacity) during the planning period.

affect redevelopment are complicated and include location, surrounding uses, current use, land and improvement values and other factors. To facilitate a discussion with the CIBL advisory committees about redevelopment, we established a set of three increasingly inclusive criteria: improvement-to-land value ratio, lot coverage, and amount of employment on the site.

In the context of the Springfield commercial and industrial buildable lands inventory, redevelopment potential addresses land that was initially classified as developed that may redevelop during the planning period. While many methods exist to identify redevelopment potential, a common indicator is improvement to land value ratio. A threshold used in some studies is an improvement to land value ratio of 1:1. Not all, or even a majority of parcels that meet this criterion for redevelopment potential will be assumed to redevelop during the planning period.

The factors that affect redevelopability are many, but the economics are pretty straightforward. Redevelopment occurs when achievable rents exceed the current return on investment of the land and improvements. The reality, of course, is much more complicated. One way to think about the market for land is “highest and best use,” which is a function of:

1. Achievable Pricing – Given the product type and location, what lease rates or sales prices are achievable?
2. Entitlements – What do local regulations allow to be built?
3. Development Cost – What is the cost to build the range of product types allowed (entitled) at that location?
4. Financing – What is the cost of capital, as well as the desired returns necessary to induce development of that form?

In our many conversations with commercial realtors and developers for this and other studies, the conclusion has been consistent: it is very difficult to develop reliable models of redevelopment potential. The factors are complicated and are location and time specific. Moreover, public policy can play a significant role in facilitating redevelopment.

To identify lands with redevelopment potential, ECO analyzed improvement to land value ratios and building coverage on tax lots. Tax lots were classified using the following criteria:

Category	Criteria
Higher Redevelopment Potential	Improvement to land value ratio $\leq 0.3:1.0$
Moderate Redevelopment Potential	Building coverage $< 10\%$ of total lot area and improvement value $\leq 0.3:1.0$
Lower Redevelopment Potential	Building coverage $< 20\%$ of total lot area and improvement value $\geq 0.3:1.0$ and $\leq 0.5:1.0$

The criteria above were used in combination with employment data to identify a reasonable threshold assumption to use for redevelopment.

Table 2-10 shows the results of applying the criteria above. To better understand the implications on pre-existing employment, ECO associated the number of employees associated with each category. The results show a distribution that suggests lands in the higher and moderate categories account for a relatively small percentage of total employment in Springfield (about 3.5%). The lower potential category includes 19% of the city's total employment.

Table 2-10. Tax lots by Redevelopment Potential categories

Category	Total Acres	Suitable Acres	% of Land Base	Employment (2006)
Higher Potential	352	352	10%	478
Moderate Potential	304	236	9%	833
Lower Potential	947	947	28%	7,107
Total	1,603	1,535	47%	8,418

Source: City of Springfield GIS data; analysis by ECONorthwest

Note: Table 2-10 shows all redevelopment potential categories; lands in the *lower potential* category are not included as part of the redevelopable land inventory as explained below.

Note: Suitable acres includes vacant land with partial constraints and unconstrained suitable land.

Note: The 2015 update to the EOA did not update the buildable land analysis. The changes to the table above was a clarifications of column titles.

Because the improvement to land value ratio is a gross indicator, it is reasonable to assume that not all of parcels that meet this criterion for redevelopment *potential* will be assumed to redevelop during the planning period.

The data show that the lower potential criteria (building coverage $< 20\%$ of total lot area and improvement value $\geq 0.3:1.0$ and $\leq 0.5:1.0$) includes 28% of the City's total employment land base and more than 20% of covered employment in 2006. **The significant amount of land and employment in this category suggests limited redevelopment potential (for a land capacity analysis, redevelopment provides sites for employment growth only when an existing use is replaced by a use that**

has more employment). The rationale for this statement is that land that has more employment on it, and/or higher improvement value is already in a higher use. The economics of real estate development make it less desirable to redevelop land with substantial employment on it – in large part because it has tenants that are paying leases. Thus, the lower potential category is not included as part of the redevelopable base.

Use of this approach in the analysis was discussed with the Technical Advisory and Stakeholder Committees and supported by Springfield’s Planning Commission and City Council. In these meetings ECONorthwest explained the challenge of estimating redevelopment potential – an issue that confounds many analysts. Approximating redevelopment potential with this analytical approach has its limitations. Statewide planning policy provides no direction on how to evaluate redevelopment potential, and the academic literature on redevelopment does not identify specific models or tools that provide reliable identification of redevelopment sites.

In previous studies, ECONorthwest has frequently approached redevelopment from the demand side by making deductions from total employment growth to account for new employment that will not need any new land. For the Springfield EOA, we explored supply side approaches to corroborate the demand side deductions. The problem with supply side approaches is that the base data available to conduct such analyses is quite coarse and as a result, the analyses are limited. One typical approach is to use the ratio between improvement value and land value. Lands that fall under a pre-specified threshold (1:1 or 0.5:1 or some other figure) are considered underutilized. This approach has many problems; for example, it does not make distinctions for land intensive employment uses that require minimal built structure investments.

More robust approaches can consider employment densities, floor area ratios, and other factors. Often, however, the quality of the data is a limiting factor and the analysis is a crude indicator of what properties will actually redevelop over the planning period. In the Springfield-Eugene metropolitan area, we have seen properties redevelop over the past decade that would not be identified with the methodology used for the Springfield EOA. Conversely, many properties that would be identified using this approach will not redevelop.

Excluding the “Lower Redevelopment Potential” category leaves 581 unconstrained acres that are *potentially redevelopable* in Springfield. This represents the redevelopable land base that is used for the purpose of this study.

Table 2-11 shows potentially redevelopable land by plan designation and by parcel size. This analysis is useful in that it shows the distribution of potentially redevelopable land by parcel size, which allows an evaluation of whether a sufficient mix of parcel sizes is available. The distribution of buildable land by parcel size varies by plan designation, with the results showing the City has very few tax lots (1) over 20 acres with redevelopment potential.

Table 2-11. Buildable acres in potentially redevelopable tax lots by plan designation and parcel size, Springfield UGB, 2008¹⁹

Plan Designation	Lot Size (Buildable Acres)									Total
	<0.25	0.25-0.49	0.50-0.99	1.00-1.99	2.00-4.99	5.00-9.99	10.00-19.99	20.00-50.00	50+	
Total Acres										
Industrial										
Campus Industrial	0.2	0.5	1.9	3.4	5.0	0.0	0.0	0.0	0.0	11.0
Light Medium Industrial	3.9	10.0	10.6	12.4	36.3	19.4	0.0	0.0	0.0	92.7
Heavy Industrial	1.4	2.8	9.7	24.5	53.7	32.7	22.4	0.0	89.5	236.7
Special Heavy Industrial	0.0	0.0	0.0	1.7	0.0	0.0	12.4	63.2	0.0	77.4
Subtotal	5.5	13.3	22.2	42.0	95.0	52.1	34.9	63.2	89.5	417.7
Commercial										
Commercial	7.6	13.7	21.8	12.7	22.6	0.0	0.0	0.0	0.0	78.4
Community Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Major Retail Center	1.5	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	4.3
Subtotal	9.1	15.5	22.8	12.7	22.6	0.0	0.0	0.0	0.0	82.7
Mixed Use										
Commercial Mixed Use	9.6	7.8	14.3	10.0	8.9	0.0	0.0	0.0	0.0	50.6
Light Medium Industrial Mixed Use	0.1	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Medium Density Res Mixed	0.4	0.3	2.5	1.2	9.2	0.0	0.0	0.0	0.0	13.5
Mixed Use	1.5	2.2	2.8	3.8	12.4	0.0	0.0	0.0	0.0	22.7
Subtotal	11.6	10.5	20.2	15.0	30.5	0.0	0.0	0.0	0.0	87.9
Total	26.2	39.4	65.2	69.7	148.1	52.1	34.9	63.2	89.5	588.2
Number of Tax Lots										
Industrial										
Campus Industrial	1	1	2	2	2	0	0	0	0	8
Light Medium Industrial	38	26	14	9	13	3	0	0	0	103
Heavy Industrial	22	6	12	16	16	5	2	0	1	80
Special Heavy Industrial	0	0	0	1	0	0	1	2	0	4
Subtotal	61	33	28	28	31	8	3	2	1	195
Commercial										
Commercial	70	37	31	9	6	0	0	0	0	153
Community Commercial	0	0	0	0	0	0	0	0	0	0
Major Retail Center	17	6	1	0	0	0	0	0	0	24
Subtotal	87	43	32	9	6	0	0	0	0	177
Mixed Use										
Commercial Mixed Use	69	22	21	7	3	0	0	0	0	122
Light Medium Industrial Mixed Use	1	1	1	0	0	0	0	0	0	3
Medium Density Res Mixed	2	1	3	1	2	0	0	0	0	9
Mixed Use	11	7	4	3	4	0	0	0	0	29
Subtotal	83	31	29	11	9	0	0	0	0	163
Total	231	107	89	48	46	8	3	2	1	535

Source: City of Springfield GIS data; analysis by ECONorthwest

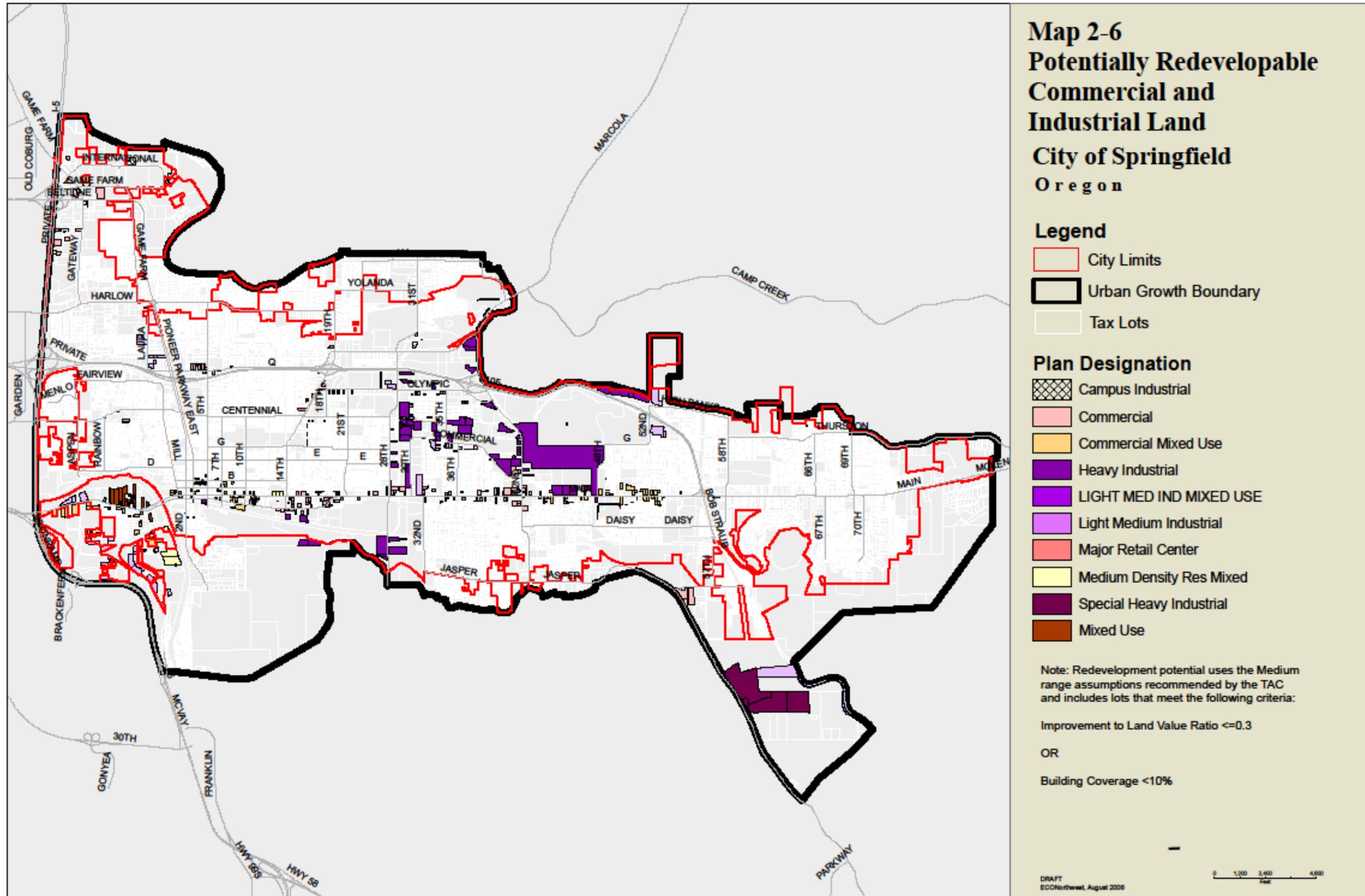
Note: Buildable acres includes "constrained" acres and "unconstrained" acres

Note: Acres may not sum to tenths due to rounding.

Map 2-6 shows the location of potentially redevelopable land in Springfield.

¹⁹ The table shows total buildable acres in potentially redevelopable tax lots (constraints are not netted out)

Map 2-6. Potentially redevelopable land



EVALUATION OF POTENTIALLY REDEVELOPABLE LAND IN SITES 5 ACRES AND LARGER

Table 2-11 identified 14 sites 5 acres and larger as being potentially redevelopable. Table 2-12 presents a site-by-site evaluation of these 14 potentially redevelopable sites. This evaluation determined whether the sites had at least 5 acres of redevelopment potential when site constraints, site configuration, and existing uses were considered. Table 2-12 presents the site-by-site summary of that analysis.

This section only evaluates sites five acres and larger because the analysis that determines whether Springfield has enough land in Chapter 5 (Table 5-1) assumes that all potentially redevelopable sites smaller than 5 acres may redevelop over the 2010-2030 period and that sites identified as providing redevelopment opportunities with at least 5 acres of suitable, unconstrained land in Table 2-12 may redevelop over the 2010-2030 period.

Table 2-12. Site-by-site review of parcels with redevelopment potential, sites 5 acres and larger, Springfield UGB, 2008

Site	Size and Absolute Development Constraints	Suitable Land and Other Development Considerations	Implications for Redevelopment Potential of Sites Larger than 5 Acres
Sites that provide redevelopment opportunities with at least 5 acres of suitable, unconstrained land.			
Taxlot: 1802100000200 Location: Jasper-Natron Plan Designation: Special Heavy Industrial 	47-acre site that is constrained by wetlands and slopes. It has a BPA easement in the southeast corner of the site.	This site has 36 acres of unconstrained land, which are divided by seven areas of wetlands on the site. Development on this site will be affected by the lack of contiguous areas for development, with wetland constraints and the BPA easement. The City is considering changing the plan designation and zoning from Special Heavy Industrial to General Employment. The rail spur that formerly served this site was eliminated when Straub Parkway was constructed.	This site provides opportunity for redevelopment of areas across the site but may not provide opportunities for redevelopment in a contiguous site. This site provides opportunity of 36 acres, across two or more areas within the site.

Site	Size and Absolute Development Constraints	Suitable Land and Other Development Considerations	Implications for Redevelopment Potential of Sites Larger than 5 Acres
<p>Taxlot: 1802100001001 Location: Jasper-Natron Plan Designation: Light Medium Industrial</p> 	<p>21-acre site constrained by wetlands and slopes.</p>	<p>This site has 12 unconstrained acres, with some interleaved wetlands.</p> <p>This tax lot has a split Plan Designation.</p>	<p>This site provides opportunity for redevelopment of a 12 acre site that is between wetland areas.</p>
<p>Taxlot: 1803010000100 Location: 28th Street Plan Designation: Heavy Industrial</p> 	<p>10 acre site with no absolute constraints.</p>	<p>This site has 10 acres of unconstrained land.</p>	<p>This site provides opportunity for redevelopment of a 10-acre site.</p>
<p>Taxlot: 1702311404300 Location: Commercial Ave. Plan Designation: Heavy Industrial</p> 	<p>8-acre site with little area with absolute constraints.</p>	<p>This site has 8 acres of unconstrained land.</p>	<p>This site provides opportunity for redevelopment of an 8-acre site.</p>

Site	Size and Absolute Development Constraints	Suitable Land and Other Development Considerations	Implications for Redevelopment Potential of Sites Larger than 5 Acres
<p>Taxlot: 1702300002002 Location: 30th/Olympic Plan Designation: Heavy Industrial</p> 	<p>7-acre site with no absolute constraints.</p>	<p>This site has 7 acres of unconstrained land. This site only has one access point for heavy trucks, which may constrain the types of uses on this site.</p>	<p>This site provides opportunity for redevelopment of a 7-acre site.</p>
<p>Taxlot: 1802060001004 Location: South 28th Street Plan Designation: Heavy Industrial</p> 	<p>7 acre site with no absolute constraints.</p>	<p>This site has 6.5 acres of unconstrained land.</p>	<p>This site provides opportunity for redevelopment of a 6.5-acre site.</p>
<p>Taxlot: 1702280000400 Location: Highbanks Road Plan Designation: Heavy Industrial</p> 	<p>7-acre site with about an acre in absolute constraints.</p>	<p>The site has 6 unconstrained acres of land. The site has developed since 2008, into Hyland Business Park.</p>	<p>This site provides opportunity for redevelopment of a 6.5-acre site.</p>

Site	Size and Absolute Development Constraints	Suitable Land and Other Development Considerations	Implications for Redevelopment Potential of Sites Larger than 5 Acres
Sites that <u>do not</u> provide opportunities for redevelopment of a site 5-suitable-acres and larger			
<p>Taxlot: 1702320000100 Location: 42nd Street Plan Designation: Heavy Industrial</p> 	<p>115 acre site with 25 acres of absolute constraints.</p> <p>Since the BLI was completed in 2009, the tax lot split. Willamalane Parks District owns 5 acres, at the south east portion of the site.</p>	<p>This site has 90 acres of unconstrained land, including the land now owned by Willamalane.</p> <p>This site is owned and used by a paper mill. As long as the paper mill is operational and continues to use this site, it will be unavailable for redevelopment.</p> <p>The City of Springfield identified the business on this site as one of its “Top thirty Springfield Employers,” with 225 employees.</p>	<p>This site provides <u>does not</u> provide an opportunity for redevelopment of a site 5-acres and larger.</p>
<p>Taxlot: 1802100000900 Location: Jasper-Natron Plan Designation: Special Heavy Industrial</p> 	<p>29-acre site with about 5 acres with absolute constraints.</p>	<p>The site has more than 24 acres of unconstrained land</p> <p>This site is owned and used by a wood products manufacturer. As long as the business is operational and continues to use this site, it will be unavailable for redevelopment.</p> <p>The City is considering changing the plan designation and zoning from Special Heavy Industrial to General Employment.</p>	<p>This site provides <u>does not</u> provide an opportunity for redevelopment of a site 5-acres and larger.</p>

Site	Size and Absolute Development Constraints	Suitable Land and Other Development Considerations	Implications for Redevelopment Potential of Sites Larger than 5 Acres
<p>Taxlot: 1702280000500 Location: Highbanks Road/Rice Farms Plan Designation: Heavy Industrial</p> 	<p>12-acre site with more than 3 acres in absolute constraints.</p>	<p>The site has 8.5 acres of unconstrained land. The site is separated into two segments, both of which are smaller than 5 acres of unconstrained land. Site is part of a 200-acre filbert orchard operation.</p>	<p>This site provides <u>does not</u> provide an opportunity for redevelopment of a site 5-acres and larger.</p>
<p>Taxlot: 1702332101219 Location: 52nd Street and Highway 126 Plan Designation: Light Medium Industrial</p> 	<p>6 acre site with little area with absolute constraints</p>	<p>This site has 6 acres of unconstrained land. This site is owned and operated by a mini-storage facility. As long as the mini-storage facility is operational and continues to use this site, it will be unavailable for redevelopment.</p>	<p>This site provides <u>does not</u> provide an opportunity for redevelopment of a site 5-acres and larger.</p>
<p>Taxlot: 1702311200100 Location: Industrial Ave./35th Plan Designation: Heavy Industrial</p> 	<p>6 acre site with little area with absolute constraints</p>	<p>This site has 6 acres of unconstrained land. This site is owned by and adjacent to an operational lumber yard. The site is used as a stacking area for the lumber yard. As long as the lumber yard is operational and continues to use this site, it will be unavailable for redevelopment.</p>	<p>This site provides <u>does not</u> provide an opportunity for redevelopment of a site 5-acres and larger.</p>

Site	Size and Absolute Development Constraints	Suitable Land and Other Development Considerations	Implications for Redevelopment Potential of Sites Larger than 5 Acres
<p>Taxlot: 1702310000400 Location: Main Street, east of 30th Plan Designation: Light Medium Industrial</p> 	<p>6 acre site with no absolute constraints.</p>	<p>The site has 6 acres of unconstrained land.</p> <p>This site is owned by the State Board of Forestry and has offices for the Oregon Department of Forestry and U.S. Fish and Wildlife. As long as these offices continue to be located on this site and the State owns the site, it will be unavailable for redevelopment.</p>	<p>The buildable lands inventory assumes that land in public ownership is not available for development, unless it is identified as surplus by the agency that owns it.</p> <p>This site provides <u>does not</u> provide an opportunity for redevelopment of a site 5-acres and larger.</p>
<p>Taxlot: 1702300001910 Location: Marcola Road Plan Designation: Heavy Industrial</p> 	<p>5 acre site with no absolute constraints</p>	<p>This site has 5 acres of unconstrained land.</p> <p>This site is owned by and used by a freight service business that is operational, with an office building in the middle of the site. As long as this business continues to operate, it will be unavailable for redevelopment.</p>	<p>This site provides <u>does not</u> provide an opportunity for redevelopment of a site 5-acres and larger.</p>

In summary, the evaluation of sites 5 acres and larger identified as potentially redevelopable shows that seven of these sites offer redevelopment opportunities, once site constraints, configuration issues, and existing employment uses are accounted for. These sites are:

- Six sites between 5 and 20 acres in size.
 - 12-acre site in the Jasper-Natron Special Heavy Industrial District
 - 10-acre site on 28th Street in Heavy Industrial
 - 8-acre site on 42nd Street in Heavy Industrial
 - 7-acre site at 28th and Marcola Road in Heavy Industrial
 - 6.5-acre site on 28th Street in Heavy Industrial

- 6-acre site on Highbanks Road in Heavy Industrial
- One site larger than 20 acres in size.
 - 36-acre site in the Jasper-Natron Special Heavy Industrial District

SHORT-TERM LAND SUPPLY

This section evaluates the short-term supply of land in the Springfield portion of the Metropolitan UGB. It begins with an overview of the policy context that requires this analysis, and then evaluates the short-term land supply.

POLICY CONTEXT

The Goal 9 Administrative Rule (OAR 660-009) includes provisions that require certain cities to ensure an adequate short-term supply of industrial and other employment lands. OAR 660-009-005(10) defines short term supply as follows:

“...means suitable land that is ready for construction within one year of an application for a building permit or request for service extension. Engineering feasibility is sufficient to qualify land for the short-term supply of land. Funding availability is not required. "Competitive Short-term Supply" means the short-term supply of land provides a range of site sizes and locations to accommodate the market needs of a variety of industrial and other employment uses.”

The Goal 9 rule also requires cities in a Metropolitan Planning Organization (MPO, which includes Springfield) to make a commitment to provide a competitive short-term supply of land and establishes targets for the short-term supply of land. Specifically, OAR 660-009-0020(1)(b) states:

“Cities and counties within a Metropolitan Planning Organization must adopt a policy stating that a competitive short-term supply of land as a community economic development objective for the industrial and other employment uses selected through the economic opportunities analysis pursuant to OAR 660-009-0015.”

The rule goes on to clarify short-term land supply targets for cities in an MPO (OAR 660-009-0025):

(3) Short-Term Supply of Land. Plans for cities and counties within a Metropolitan Planning Organization or cities and counties that adopt policies relating to the short-term supply of land must designate suitable land to respond to economic

development opportunities as they arise. Cities and counties may maintain the short-term supply of land according to the strategies adopted pursuant to OAR 660-009-0020(2).

(a) Except as provided for in subsections (b) and (c), cities and counties subject to this section must provide at least 25 percent of the total land supply within the urban growth boundary designated for industrial and other employment uses as short-term supply.

(b) Affected cities and counties that are unable to achieve the target in subsection (a) above may set an alternative target based on their economic opportunities analysis.

(c) A planning area with 10 percent or more of the total land supply enrolled in Oregon's industrial site certification program pursuant to ORS 284.565 satisfies the requirements of this section.

In summary, the rule requires Springfield to assess the short-term supply of land based on the criteria that land can be ready for construction within one year. The determination is based on “engineering feasibility.”

ANALYSIS OF SHORT-TERM SUPPLY OF LAND

The short-term supply analysis includes all lands within the Springfield portion of the Metropolitan UGB. To analyze the short term supply of land available for industrial and other employment uses, ECO worked closely with staff from the Springfield Public Works and Development Services Departments. A number of service issues were identified through this process that affect many different sites within the city. Identified deficiencies spanned the range of services, including water, wastewater, stormwater, and transportation.

Despite the issues staff identified, all areas within the Springfield UGB can be considered to technically meet the Goal 9 Rule criteria of “engineering feasibility.” Staff identified few areas where it was not possible to extend services within one year – provided that funding is available. Funding is a much broader and more complicated issue, but falls outside of the Goal 9 rule as written.

The analysis did identify the Jasper-Natron area as unlikely to meet the short-term supply criteria. This is due to a combination of wetlands that make drainage an issue as well as the distance from existing water and sewer trunk lines (more than one mile from the nearest 18” sewer line to the north end of the site).

Table 2-13 summarizes the number of vacant and potentially redevelopable acres in the short-term land supply. The results indicate that 91% of the vacant commercial and industrial land is considered available as short-term supply, and 85% of land with redevelopment potential is available as short-term supply. Buildable land in the Jasper-Natron area is not considered part of the short-term land supply.²⁰ The Jasper-Natron area is the only area of the city with employment lands that are not considered part of the short term supply.

Table 2-13. Short-term land supply

Category/Plan Designation	Buildable Acres	Acres in Short-Term Supply	Percent in Short Term Supply
Vacant			
Commercial	54.1	45.5	84%
Industrial	254.8	231.5	91%
Mixed Use	45.6	45.6	100%
Subtotal	354.5	322.7	91%
Potentially Redevelopable			
Commercial	80.7	80.7	100%
Industrial	412.2	325.6	79%
Mixed Use	87.9	87.9	100%
Subtotal	580.9	494.2	85%

Source: City of Springfield GIS data; analysis by ECONorthwest

Note: Acres may not sum to tenths due to rounding.

Note: This table has not been updated to reflect construction of the Jasper Natron Trunk Sewer Phase One, completed in 2013.

²⁰ In 2013, the City constructed the first phase of the Jasper Natron Trunk Sewer, serving the northern portion of the Jasper Natron area.

Economic Trends and Factors Affecting Future Economic Growth in Springfield

Chapter 3

Springfield exists as part of the larger economy of the southern Willamette Valley and is strongly influenced by regional economic conditions. For many factors, such as labor, Springfield do differ significantly from the broader region. For other factors, such as income, it does. Thus, Springfield benefits from being a part of the larger regional economy and plays a specific role in the regional economy.

This chapter summarizes national, state, county, and local trends and other factors affecting economic growth in Springfield. Each heading in this chapter represents a key trend or economic factor that will affect Springfield's economy and economic development potential. A more detailed analysis of economic trends and factors affecting Springfield's future economic growth is presented in Appendices A and B.

This chapter and the information in Appendices A and B addresses the following Goal 9 requirements:

- OAR 660-009-0015(1), which requires a review of national, state, regional, county, and local trends to “identify the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the planning area.”
- OAR 660-009-0015(4), which requires the City to assess community economic development potential to “estimate the types and amounts of industrial and other employment uses likely to occur in the planning area.” This estimate must consider the planning area's economic advantages and disadvantages.

AVAILABILITY OF LABOR

The availability of trained workers in Springfield will impact development of Springfield's economy over the planning period. Based on the analysis in this section, the key trends that will affect the workforce in Springfield over the next 20 years include Springfield's growing population, aging population, relatively low income, and commuting trends.

GROWING POPULATION

Population growth in Oregon tends to follow economic cycles. Historically, Oregon's economy is more cyclical than the nation's, growing faster than the national economy during expansions and contracting more rapidly than the nation during recessions.

Table 3-1 shows population growth in the U.S., Oregon, the Willamette Valley, Lane County, Eugene, and Springfield for the 1990 to 2007 period. Lane County grew slower than the State average between 1990 and 2007, growing at 1.1% annually and adding more than 60,000 people. More than 60% of the County's population lived in the Eugene-Springfield area in 2007, with about 17% of the County's population in the Springfield city limits. Springfield's population grew faster than the County average, at 1.5% annually, adding 12,637 residents over the seventeen-year period.

Table 3-1. Population in the U.S., Oregon, the Willamette Valley, Lane County, Springfield, and Eugene, 1990-2007

Area	Population			Change 1990 to 2007		
	1990	2000	2007	Number	Percent	AAGR
U.S.	248,709,873	281,421,906	301,621,157	52,911,284	21%	1.1%
Oregon	2,842,321	3,421,399	3,745,455	903,134	32%	1.6%
Willamette Valley	1,962,816	2,380,606	2,602,790	639,974	33%	1.7%
Lane County	282,912	322,959	343,140	60,228	21%	1.1%
Springfield	44,683	52,864	57,320	12,637	28%	1.5%
Eugene	112,669	137,893	153,690	41,021	36%	1.8%

Source: U.S. Census, the Population Research Center at Portland State University.

Notes: Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties represent the Willamette Valley Region. Figures for Springfield and Eugene are for areas inside their respective city limits.

Migration is the largest component of population growth in Oregon. Between 1990 and 2007, in-migration accounted for 70% of Oregon's population growth. Over the same period, in-migration accounted for 74% of population growth in Lane County, adding nearly 44,500 residents over the seventeen-year period.

AGING POPULATION

The number of people age 65 and older in the U. S. is expected to double by 2050, while the number of people under age 65 will only grow by 12%.

The economic effects of this demographic change include a slowing of the growth of the labor force, need for workers to replace retirees, aging of the workforce for seniors that continue working after age 65, an increase in the demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.²¹

The average age of Springfield residents is increasing. According to the US Census, Springfield's average age was 32 in 2000, 30 in 1990, and 26 in 1980. Table 3-2 shows the change in age distribution for Springfield between 2000 and 2008. The age group that increased the most was 45 to 64, which grew by 2,540 people (24%). This age group's proportion of the total population increased from 20% to 23% during this time period. The largest percentage decrease was in people aged 18 to 24, which shrunk by 913 people (16%).

Table 3-2. Change in age distribution, Springfield, 2000-2008

Age Group	2000		2008		Change 2000 to 2008		
	Number	Percent	Number	Percent	Number	Percent	Share
Under 5	4,327	8%	4,121	7%	-206	-5%	-0.8%
5-17	10,069	19%	10,477	19%	408	4%	-0.3%
18-24	5,890	11%	4,977	9%	-913	-16%	-2.3%
25-44	16,609	31%	17,372	31%	763	5%	-0.4%
45-64	10,546	20%	13,086	23%	2,540	24%	3.4%
65 and over	5,423	10%	5,983	11%	560	10%	0.4%
Total	52,864	100%	56,016	100%	3,152	6%	0.0%

Source: U.S. Census 2000 and Clarita's 2008

Note: Percent change over the 2000 to 2008 period is based on the growth in the age group divided by the number of people in the age group in 2000. For example, people 5 to 17 years old had a 4% percent change, which was calculated using the following calculation: $408/10,069 = 4\%$.

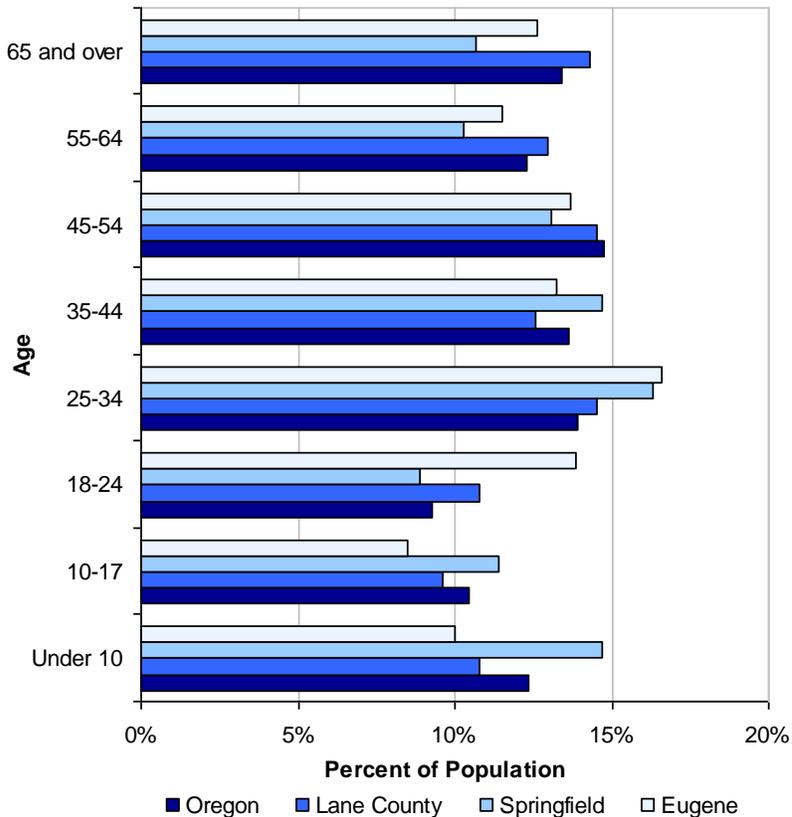
Note: Share refers to the change in the percent of an age group between 2000 and 2008. For example, the share of people 18 to 24 years old decreased from 11% to 9%, a decrease of 2.3%.

Note: Percentages may not add to 100% as a result of rounding errors.

Springfield's population was younger than the County or State averages in 2008. Figure 3-1 shows the age structure for Oregon, Lane County, Eugene, and Springfield in 2008. Springfield had a greater proportion of its population under 44 years of age (66%) than Eugene (62%), Lane County (58%), or Oregon (60%). Springfield also had a smaller share of population aged 55 and older, 21% of Springfield's population, compared to 24% in Eugene, 27% in the County, 26% in the State.

²¹ The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2008, *The 2008 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, April 10, 2008. *The Budget and Economic Outlook: Fiscal Years 2007 to 2016*, January; and Congressional Budget Office, 2005, *The Long-Term Budget Outlook*, December.

Figure 3-1. Population by age, Oregon, Lane County, Eugene, and Springfield, 2008



Source: Claritas 2008, percentages calculated by ECONorthwest.

INCOME

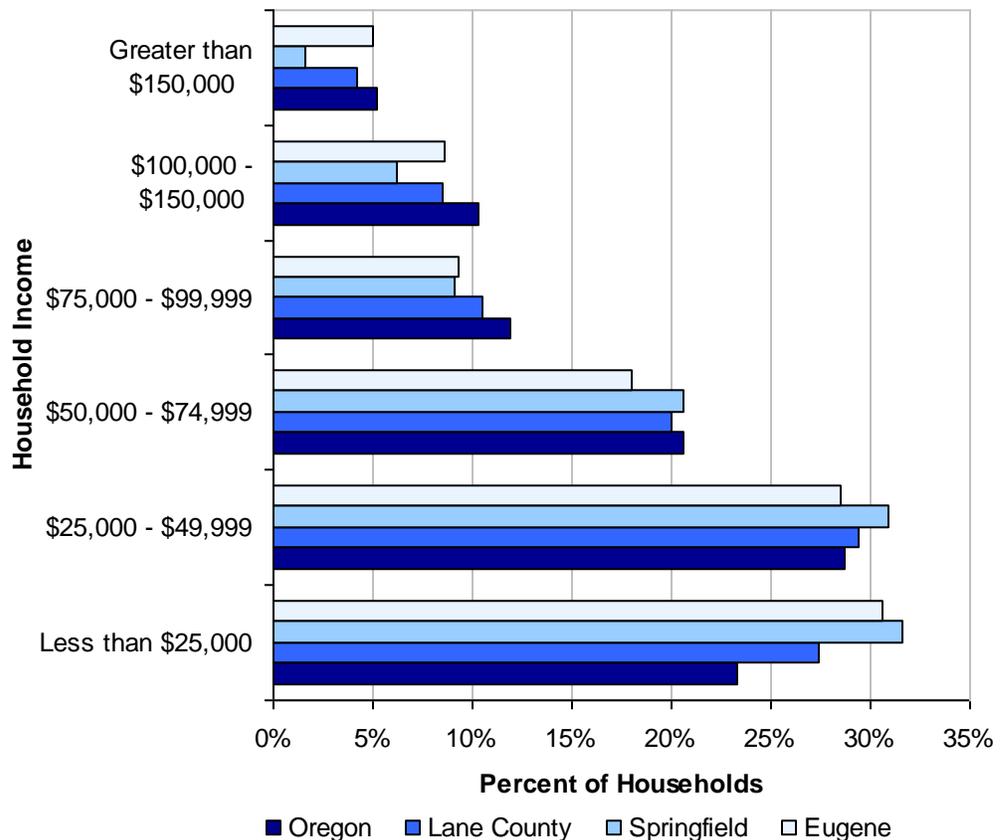
Over the last twenty-four years, income in Oregon has been below national averages and income in Lane County has been below state averages. There are four basic reasons that income has been lower in Oregon and Lane County than in the U.S.: (1) wages for similar jobs are lower; (2) the occupational mix of employment is weighted towards lower paying occupations; (3) a higher proportion of the population has transfer payments (e.g. social security payments for retirees), which are typically lower than earnings; and (4) lower labor force participation among working age residents. To a certain degree, these factors are all true for Oregon and Lane County. The combination of these factors results in lower income for Oregon and Lane County.

In addition, wages in Lane County and Oregon tend to be more volatile than the national average. The major reason for this volatility is that the relative lack of diversity in the State and County economy. Wages in Oregon and Lane County are impacted more than the national average by downturns in either the national economy or in industries in Oregon that

are dependent on natural resources (e.g., timber and wood processing or R.V. manufacturing).

Lane County’s median household income in 2006 was \$42,127, compared with \$46,230 for Oregon and the national average of \$48,451. Figure 3-2 shows the distribution of household income in Oregon, Lane County, Eugene, and Springfield in 2008. Figure 3-2 shows that a larger share of households in Springfield (32%) had an income of \$25,000 or less, compared to Lane County (27%) or the State (23%). Springfield also has a lower share of households with income above \$75,000 (17%), compared to Eugene (23%), the County (23%), or the State (27%).

Figure 3-2. Distribution of household income of U.S., Oregon, and Lane County, 2008



Source: Claritas 2008

The low average income in Lane County and Springfield, relative to Oregon and the U.S., makes Springfield attractive to some firms considering moving within the United States. Firms continue to outsource back-office functions, such as call centers or administrative functions, within the United States Lane County’s relatively low labor costs and the availability of trained workers make Lane County attractive to firms considering relocating back-office functions.

EDUCATIONAL ATTAINMENT

The availability of trained, educated workers affects the quality of labor in a community. Educational attainment is an important labor force factor because firms need to be able to find educated workers. In 2007, 26% of Springfield's residents had an associate's degree or higher, compared to the County average of 37% and Eugene's average of 47% of residents with an associate's degree or higher. Firms locating in Springfield will be able to attract employees from within Springfield and across the Eugene-Springfield region.

WORKFORCE PARTICIPATION

The current labor force participation rate is an important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. Children, retirees, students, and people who are not actively seeking work are not considered part of the labor force.

In 2007, Springfield's labor participation rate was 67% of their over-16 population of over 43,000. Of their 67% in the labor force, 10% were unemployed. In comparison, Lane County had 63% labor force participation, 8% of whom were unemployed. Labor force participation rates have dropped by about 1% since 2000, when Springfield's labor participation rate was 68%, compared to the State average of 64%.

COMMUTING PATTERNS

Commuting plays an important role in Springfield's economy. Springfield residents generally have a shorter commute than residents of Lane County or Oregon. Eighty percent of Springfield residents commute 29 minutes or less, compared to 77% of Lane County residents and 69% of Oregonians. Residents of Springfield are less likely to have a long commute, with 7% of Springfield's residents commuting 45 minutes or more, compared to 10% of Oregonians.

The majority of Springfield's workforce (79%) lives in Lane County, with 29% in Springfield and 23% in Eugene. The majority of Springfield residents (81%) work in Lane County, with 25% working in Springfield and 40% working in Eugene.

The implication of this data is that most people living or working in Springfield commute within the Eugene-Springfield area. This commuting pattern gives Springfield firms access to the workforce within the Eugene-Springfield region. Even though commutes in Springfield are generally

shorter than the State average, these commuting patterns create demand for automotive and other forms of transportation, both within Springfield and on roads throughout the Eugene-Springfield region.

Increasing energy prices may impact commuting patterns within the Eugene-Springfield area. The impact is most likely to be greatest for residents living in the smaller cities around the Eugene-Springfield area (e.g., Veneta or Oakridge) because the commute to Springfield is longer from these outlying cities. Willingness to commute by most workers living and working within Eugene and Springfield is likely to have relatively little impact from fuel prices, unless prices increase dramatically.

CHANGES IN EMPLOYMENT

The economy of the nation changed in the 1980 to 2006 period. These changes affected the composition of Oregon's economy, including Lane County and Springfield. The most important shift during this period at the national-level was the shift in employment from a focus on manufacturing to services. The most important shift in Oregon, including Lane County and Springfield, has been the shift from a timber-based economy to a more diverse economy, with the greatest employment in services. The most important trends and changes in employment for Springfield over the next 20-years are: shifts in employment, growing importance of health care, continued importance of manufacturing, and outlook for growth in Springfield.

SHIFTS IN EMPLOYMENT

Over the past few decades, employment in the U.S. has shifted from manufacturing and resource-intensive industries to service-oriented sectors of the economy. Increased worker productivity and the international outsourcing of routine tasks have led to declines in employment in the major goods-producing industries.

In the 1970s Oregon started to transition away from reliance on traditional resource-extraction industries. An important indicator of this transition is the shift within Oregon's manufacturing sector, with a decline in the level of employment in the Lumber & Wood Products industry²² and concurrent growth of employment in high-technology manufacturing industries (Industrial Machinery, Electronic Equipment, and Instruments²³).

²² Lumber and Wood Products manufacturing is in Standard Industrial Classification (SIC) 24

²³ SIC 35, 36, 38

As Oregon has transitioned away from natural resource-based industries, the composition of Oregon's employment has shifted from natural resource based manufacturing and other industries to service industries. The share of Oregon's total employment in Service industries increased from its 1970s average of 19% to 30% in 2000, while employment in Manufacturing declined from an average of 18% of total employment in the 1970s to an average of 12% in 2000.

The changes in employment in Lane County have followed similar trends as changes in national and state employment. Between 1980 and 2006, Lane County added more than 53,000 jobs. The sectors with the greatest change in share of employment were Services and Retail Trade, adding more than 38,500 or 73% of new jobs. Over the 26-year period, manufacturing added more than 4,000 jobs (8% of new jobs), with the greatest growth in: Transportation Equipment manufacturing (R.V. manufacturing), Computer and Electronics manufacturing, and Machinery manufacturing.

Some industries in the region's employment base have volatile employment cycles. These industries typically have boom and bust cycles, which result cycles of hiring and layoffs. The lumber and wood products industry is tied to national housing market cycles, with decreased productivity and employment in slow housing markets. The RV manufacturing industry is tied to broader national economic trends and energy price changes. Finally, the region's high-tech companies are subject to market trends in the high-tech industry, including changes in production methods and consumer purchasing patterns. Two major high-tech firms, Hynix and Sony, located in the Eugene-Springfield region and closed their production facilities between the mid-1990's and 2008.

The average pay per employee in Lane County in 2006 was \$33,240. The sectors with above average pay and high employment were: Construction, Manufacturing, Government, and Health and Social Services. The sectors with below average pay and high employment were: Retail, Accommodations and Food Services, and Administration and Support and Waste Management.

In 2006, Springfield had 27,310 jobs at 1,819 establishments, with an average firm size of 15 employees. The sectors with the greatest employees were: Retail (13%), Government (13%), Health Care and Social Assistance (11%), and Manufacturing (10%). These sectors accounted for 17,863 or 65% of Springfield's jobs.

OUTLOOK FOR GROWTH IN SPRINGFIELD

The State forecasts that employment will continue growing in Lane County at 1.4% average annual growth, compared with the State average of 1.3% average annual growth. The sectors that will lead employment growth in Lane County for the ten-year period are: Health Care & Social Assistance (adding 5,600 jobs), Government (adding 3,600 jobs), Professional and Business Services (adding 3,000 jobs), Leisure & Hospitality (adding 2,800 jobs), and Retail Trade (adding 2,400 jobs). Together, these sectors are expected to add 17,400 new jobs or 76% of employment growth in Lane County. Springfield has a high concentration of employment in Health Care & Social Assistance, especially with the relocation of PeaceHealth's regional hospital to RiverBend. Springfield's concentration of employment in health care may further increase based on where McKenzie-Willamette Medical Center relocates to and the size of the new hospital.

One way to determine opportunities for economic development is to determine the sectors with the greatest expected growth in the region (based on the Oregon Employment Department's forecast for employment growth in Lane County between 2006 and 2016) and the greatest concentration of existing employment in the community (based on a comparison of employment data in Springfield and the State in 2006). Sectors with high employment concentration in Springfield and high growth forecasts are the industry's most likely to grow. These sectors in Springfield are: Health and Social Assistance; Administrative and Support and Waste Management Services; Construction; and Accommodations and Food Services.

Springfield may have opportunities for growth in other sectors that the State forecasts will have high growth. Springfield, however, does not currently have high employment concentrations in some of these sectors: Arts, Entertainment, and Recreation; Management of Companies and Enterprises; Professional, Scientific, and Technical Services; and Private Educational Services.

It is unclear what long-term impact rising fuel and transportation costs will have on Oregon's economy, including Springfield. Globalization and outsourcing of jobs, especially manufacturing jobs, has occurred since the 1980's, changing the state's economy. Globalization depends, in part, on inexpensive transportation of materials and manufactured goods. Businesses have relocated from areas with lower labor costs, in part, because transportation costs were low.

Increases in fuel prices have resulted in higher transportation costs, decreasing the benefits of lower wages. It is possible that, if fuel and transportation costs remain high and/or increase, companies may move to be closer to suppliers or consumers. This effect occurs incrementally over time and it is difficult to measure the impact in the short-term. If fuel prices and transportation costs decrease over the planning period, businesses may not make the decision to relocate (based on transportation costs) because the benefits of being closer to suppliers and markets may not exceed the costs of relocation.

REGIONAL BUSINESS ACTIVITY

GROWING IMPORTANCE OF HEALTHCARE

PeaceHealth has recently relocated its main hospital to the Gateway area in Springfield. The RiverBend campus will have 2,500 PeaceHealth employees by the end of 2008, in occupations including: physicians, nurses, medical technicians, other medical staff, environmental services staff, and food services staff. PeaceHealth started relocating administrative and other staff to the RiverBend Annex in 2006 (located in the former Sony disc manufacturing building), which has 700 employees.

The RiverBend campus will attract additional firms. For example, Oregon Medical Labs, Oregon Imaging Center, and the Northwest Specialty Clinics will have approximately 350 staff and physicians at the RiverBend campus. The RiverBend Pavilion will have about 300 employees, at the Oregon Medical Group, Oregon Imaging, and other medical businesses.

Employment in health care may also increase in Springfield, depending on where McKenzie-Willamette Medical Center locates its new facility. If the new facility is located in Springfield and if the facility is bigger and employs more people than the existing hospital, Springfield will have another major healthcare center as well as more healthcare employment.

CONTINUED IMPORTANCE OF MANUFACTURING

Manufacturing continues to be important to the economy in Springfield and in Lane County. Manufacturing accounted for 14% of employment (more than 20,000 jobs) in Lane County and 10% of employment (more than 2,700 jobs) in Springfield in 2006.²⁴ Manufacturing industries continue to offer jobs with above-average wages, making these jobs more desirable.

²⁴ Oregon Employment Department

Manufacturing grew slowly in Lane County between 1980 and 2006, at an average annual rate of 0.3%, adding more than 4,000 jobs. The State forecasts continued growth in manufacturing at the same rate over the 2006 to 2016 period.

Manufacturing is a traded sector industry, which brings revenue into Oregon and Lane County from outside the State. The following manufacturing industries accounted for two-thirds (\$11 billion) of revenue from exports in Oregon in 2007: Computer & Electronic Production, Transportation Equipment, Machinery Manufacturers, Chemical Manufacture, and Primary Metal Manufacturers.²⁵ These industries are all present in Lane County, accounting for 44% of manufacturing employment in the County.

Continuing changes in the economy may impact manufacturing in Lane County. For example, high energy prices may have been a factor in the decrease of RV manufacturing in Lane County, which has resulted in the layoff of employees beginning in 2006. In addition, the economic downturn and consolidation of the paper manufacturing industry may result in layoffs in firms that manufacture wood products and paper.

Although much of this employment is located outside of Springfield, it affects residents of Springfield, either directly through job layoffs or indirectly through decreases in economic activity.

TOURISM IN LANE COUNTY

Tourism brings economic activity into Lane County from outside sources. Tourism expenditures in Lane County in 2006 grew 7.5%, to \$553 million, exceeding the statewide tourism growth rate for the year. Tourism accounts for about 7,500 jobs in Lane County.

A major source of tourism spending is overnight accommodations. In 2008, the Eugene-Springfield Region had 3,118 total rooms. Occupancy rates varied from 59% in fiscal year 2002 and 2003 to 72% in fiscal year 2006. Springfield levies a 9.5% transient lodging tax on overnight accommodations. Between 2000 and 2008, Springfield's lodging tax revenue varied from \$1.2 million in fiscal year 2004 to \$1.6 million in fiscal year 2007. Springfield's transient lodging tax revenues accounted for about one-quarter of total County lodging tax revenues.

²⁵ "Economic Data Packet, Mary 2008," Oregon Economic And Community Development Department

SIGNIFICANCE OF AGRICULTURE IN LANE COUNTY

Agriculture continues to be important in Lane County's economy. In 2002, Lane County had approximately \$88 million in total gross sales from agriculture. The top five agricultural products in Lane County in 2002 were: Nursery and greenhouse (\$21 million); milk and dairy (\$10.3 million); cattle and calves (\$7.6 million), fruits, tree nuts, and berries (\$6.7 million); and vegetables, melons, potatoes, and sweet potatoes (\$5.6 million).

While agriculture is an important source of economic activity in Lane County, Springfield has relatively little agricultural employment within the UGB. In 2006, about 1% of Springfield's covered employment (282 employees) were employed in the Agriculture, Forestry, Fishing, and Mining sectors. About half of these jobs (136 employees) were in Forestry and Logging. Consistent with statewide land use policy, land within the Springfield UGB is committed for future urban uses, rather than agricultural uses.

SPRINGFIELD'S COMPARATIVE ADVANTAGES

Economic development opportunities in Springfield will be affected by local conditions as well as the national and state economic conditions addressed above and described in Appendix A. Factors affecting future economic development in the Springfield include its location, availability of transportation facilities and other public facilities, quality and availability of labor, and quality of life. Economic conditions in Springfield relative to these conditions in other portions of the Lane County and southern Oregon form Springfield's comparative advantage for economic development. Springfield's comparative advantages have implications for the types of firms most likely to locate and expand in Springfield.

There is little that Springfield can do to influence national and state conditions that affect economic development. Springfield can influence local factors that affect economic development. Springfield's primary comparative advantages are its location on I-5, proximity to Eugene, access to skilled labor, cost of labor, and high quality of life. These factors make Springfield attractive to residents and businesses that want a high quality of life where they live and work.

The local factors that form Springfield's comparative advantage are summarized below and described in detail in Appendix B.

- **Location.** Springfield is located in the Southern Willamette Valley, next to Eugene, between the Willamette River (to the

south) and McKenzie River (to the north). Interstate 5 runs to the west of Springfield and Highway 126 runs east-west through Springfield.

Springfield's location, access to I-5 and Highway 126, and proximity to Eugene are primary comparative advantages for economic development in Springfield. These factors make Springfield attractive to businesses, especially those wanting to locate in the Willamette Valley.

- **Buying Power of Markets.** The buying power of Springfield and the Eugene-Springfield area forms part of Springfield's comparative advantage by providing a market for goods and services. According to estimates on household spending by Claritas, households in Springfield are expected to spend about \$937 million in 2008, about 14% of total household expenditures in the Eugene-Springfield Region. Springfield households spend an average of \$42,700 on commonly purchased items, not including housing, Springfield's households spent less than the regional and nation averages, with about 91% of the \$47,000 average expenditures for all households in the Eugene-Springfield MSA and 84% of national average household expenditures (Claritas, 2008).

The buying power of households in the Eugene-Springfield region provides Springfield with a comparative advantage. Access to households in the Eugene-Springfield Region provides businesses in Springfield with greater sales potential than other, smaller cities in the Southern Willamette Valley. As the population in Springfield (and the Eugene-Springfield region) grows, Springfield will need to provide more land for firms that provide services to residents and businesses.

- **Transportation.** Businesses and residents in Springfield have access to a variety of modes of transportation: automotive (Interstate 5, multiple State highways, and local roads); rail (Union Pacific and Amtrak); transit (LTD); and air (Eugene Airport). Springfield has excellent automotive access for commuting and freight movement. Springfield is located along Interstate 5, the primary north-south transportation corridor on the West Coast, linking Springfield to domestic markets in the United States and international markets via West Coast ports. Springfield has developed along Highway 126, Highway 126 is the primary east-west highway in Lane County, running from Florence to Redmond.

Other transportation options in Springfield include: multiple Union Pacific rail lines provide freight service; transit service from the Lane Transit District provides bus service within Springfield and connects Springfield with Eugene; and the Eugene Airport provides both passenger and freight service.

Springfield's access to multiple modes of transportation provides Springfield with advantages in attracting businesses that need easy access to I-5 for automotive or some types of freight movement. Springfield may have disadvantages in attracting businesses that need large lots and easy access to I-5 (e.g., warehousing and transportation) because of the lack of buildable industrial land along I-5 near Highway interchanges.

- **Public Facilities and Services.** Provision of public facilities and services can impact a firm's decision on location within a region. Once a business has chosen to locate within a region, they consider the factors that local governments can most directly affect: tax rates, the cost and quality of public services, and regulatory policies.

Springfield's property tax rate ranges from \$16.32 and \$18.65 per \$1,000 of assessed value, compared with a state average of \$15.20. The property tax rate in Eugene is more variable than Springfield's, ranging from \$10.31 (possibly located in an area outside of Eugene's city limits) to \$24.68 per \$1,000 of assessed value.²⁶ Springfield's property tax rates may provide the City with little comparative advantage in attracting businesses, relative to Eugene.

The City has sufficient water to meet expected residential and employment needs. The local water provider, Springfield Utility Board (SUB), is not concerned about its ability to supply water to any type of industry, including water-intensive industries like food processing. SUB has lower water rates than the national average. The combination of available and lower cost water may be an advantage to attracting some types of businesses to Springfield.

Based on discussions with staff at SUB, Springfield expects to be able to meet demand for wastewater services resulting from

²⁶ Property tax rates for Springfield and Eugene are a composite of the rates for all properties with an address in Eugene or Springfield. It is almost certain that some of these properties is located outside of both the Eugene and Springfield urban growth boundaries and are subject to unincorporated Lane County tax rates.

expected growth. The City expects to provide service to 6,100 new equivalent dwelling units, which includes residences and businesses, over the next 20-years.

- **Public Policy.** Public policy can impact the amount and type of economic growth in a community. The City can impact economic growth through its policies about the provision of land, redevelopment, and infill development. Success at attracting or retaining firms may depend on availability of attractive sites for development, especially large sites. For example, Springfield was attractive as a location of PeaceHealth's new hospital because the City had a large, relatively flat site located relatively near to Interstate 5 and Beltline Highway.

Springfield's decision makers articulated their support for provision of employment land through the economic development strategy and in other policy choices. Objectives in the economic development strategy supporting the provision of employment land include objectives to: (1) provide employment land in a variety of locations, configurations, and site sizes for industrial and other employment uses, (2) provide an adequate competitive short-term supply of suitable land to respond to economic development opportunities as they arise, (3) reserve sites over 20-acres for special developments and industries that require large sites, and (4) provide adequate infrastructure to sites.

The economic development strategy also includes objectives that support redevelopment of existing land within the UGB, especially in Downtown and in Glenwood, and infill development. In addition, the City is promoting redevelopment in Downtown through the creation of the Urban Renewal District in Downtown Springfield.²⁷

- **Labor Market.** The availability of labor is critical for economic development. Availability of labor depends not only on the number of workers available, but the quality, skills, and experience of available workers as well.

²⁷ Some of the redevelopment in Downtown and Glenwood may result in redevelopment of existing buildings, replacing old buildings with new buildings, but may not result in an increase in employment capacity in the new building. This study identifies land with redevelopment potential as land on which development has already occurred but on which, due to present or expected market forces, there exists the potential that existing development will be converted to more intensive uses (providing additional employment capacity) during the planning period.

Commuting is common in Springfield. About 40% of the people who live in Springfield commute to Eugene for work. Less than one-third of Springfield's workers live in Springfield. The implication of this workforce analysis is that, while only one-third of Springfield's workforce lives within the City, Springfield is able to attract educated workers from most of Eugene and surrounding areas in Lane County.

It does not appear that workforce will be a constraint on employment growth in Springfield. Springfield should be able to continue to draw on residents of Eugene for workers, even if energy prices continue to rise but Springfield's ability to attract workers from outside of the Eugene-Springfield area may be negatively impacted by continued increases in energy prices.

Opportunities for workforce training and post-secondary education for residents of the Eugene-Springfield area include: the University of Oregon, Lane Community College, Northwest Christian College, and Gutenberg College.

Land Demand and Site Needs in Springfield

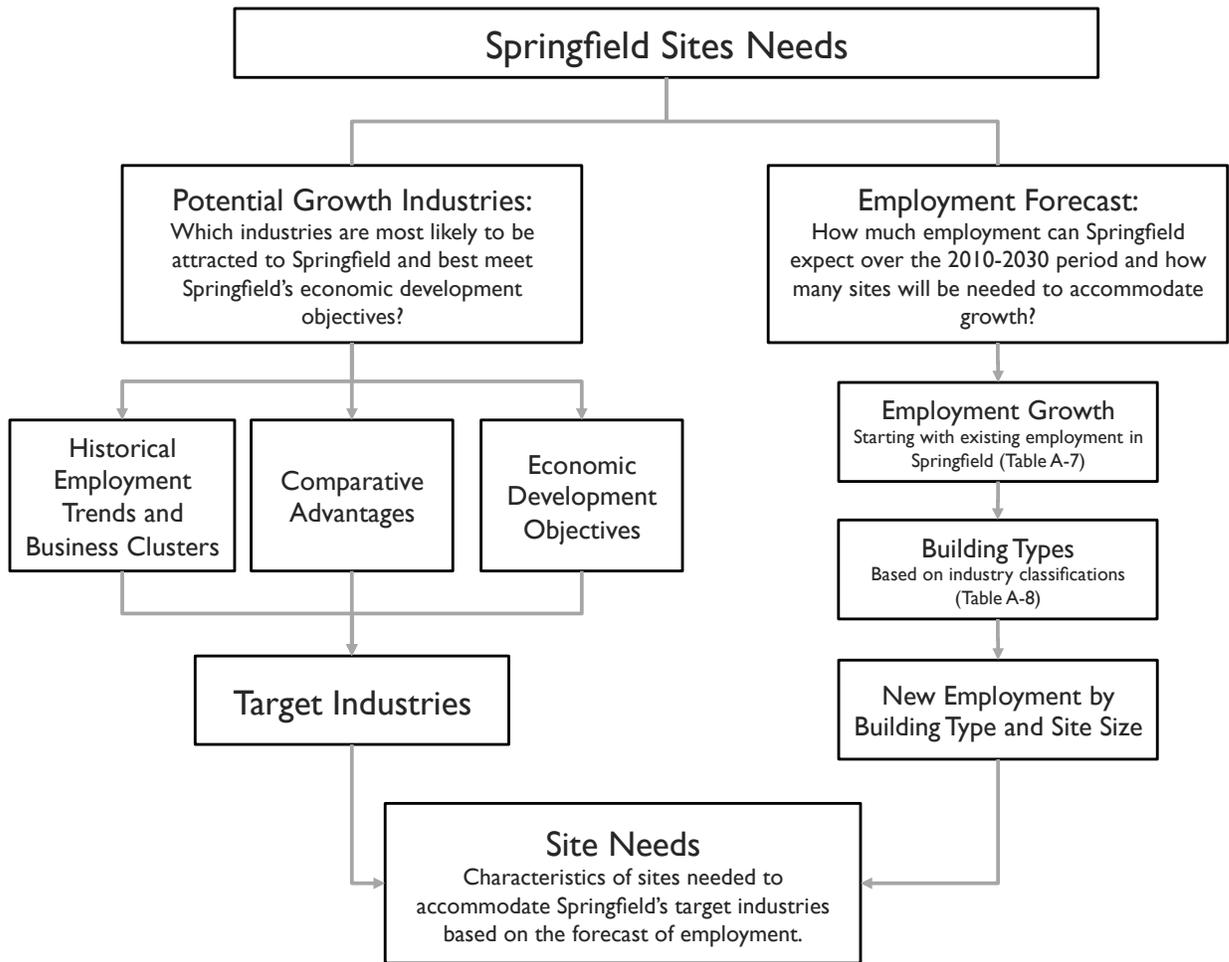
OAR 660-009 requires cities to maintain a 20-year inventory of sites designated for employment. To provide for at least a 20-year supply of commercial and industrial sites consistent with local community development objectives, Springfield needs an estimate of the amount of commercial and industrial land that will be needed over the planning period. Demand for commercial and industrial land will be driven by the expansion and relocation of existing businesses and new businesses locating in Springfield. The level of this business expansion activity can be measured by employment growth in Springfield.

This chapter and Appendix C (which presents the full forecast of employment growth and site needs) addresses the requirements of OAR 660-009-0015(2) for the City to “identify the number of sites by type reasonably expected to be needed to accommodate the expected employment growth based on the site characteristics typical of expected uses. Cities and counties are encouraged to examine existing firms in the planning area to identify the types of sites that may be needed for expansion.”

Figure 4-1 shows the process for identifying Springfield’s site needs. The process involved identifying potential growth industries, in the form of target industries, and identifying characteristics of sites needed by these industries. The process also involved forecasting employment growth in Springfield and allocating that employment growth to building types (e.g., general industrial or office buildings) and site sizes (by acres).

Chapter 4 presents Springfield’s potential growth industries and summarizes the employment forecast (which is documented in detail in Appendix C). Chapter 5 describes the site needs of the target industries.

Figure 4-1. Process for identifying site needs in Springfield.



Source: ECONorthwest

POTENTIAL GROWTH INDUSTRIES

An analysis of growth industries in Springfield should address two main questions: (1) Which industries are most likely to be attracted to the Eugene-Springfield area? and (2) Which industries best meet Springfield's economic objectives? The types of industries that Springfield wants to attract to meet economic development objectives: high-wage, stable jobs with benefits; jobs requiring skilled and unskilled labor; employers in a range of industries that will contribute to a diverse economy; and industries that are compatible with Springfield's community values.

KEY TRENDS AFFECTING EMPLOYMENT GROWTH

Previous chapters reviewed historical growth trends by industry in the Eugene-Springfield Region and Lane County since 1980 and employment in Springfield. A review of key historical trends in employment in the Eugene-Springfield Region can help identify potential growth industries in Springfield. In other words, economic opportunities in Springfield are a function of regional historical trends and future economic shifts.

While nearly all sectors of the economy in the Region experienced growth over this period, some sectors grew faster than others, resulting in a shift in the distribution of employment by sector. Key **historical trends** include in the 1980 to 2007 period include:

- A substantial increase in the share of employment in Services, which increased from 23% to 42% of covered employment in Lane County.
- A decrease in the share of employment in Retail Trade, from 21% to 13%. The number of jobs in retail did not decrease substantially over the 27-year period (a loss of nearly 550 retail jobs) but growth in retail jobs lagged behind growth in other sectors, especially service sectors.
- A decline in the share of employment in Manufacturing, which fell from 20% to 13% of covered employment.
- A decline in the share of employment in Government, which decreased from 20% to 16% of covered employment.

Together, these sectors represent about 84% of employment in the County. Other sectors of the County's economy have a relatively stable and small share of the County's employment.

Historical employment trends show a substantial shift in the Region's economy that mirrored shifts in the State and national economies, specifically the substantial growth in Services and decline of Manufacturing. While these trends are expected to continue into the future, **future shifts** are not expected to be as dramatic as those experienced over the past twenty years. There are several reasons for this expectation (e.g., that the future will be somewhat different than the past):

- Growth in the Services sector has matured and should track more closely with overall employment and population growth rather than continuing to gain a substantial share of total employment.
- The decline in Manufacturing was due, in part, to decreased timber harvests and the outsourcing of production to facilities in countries with lower costs. Timber harvests are expected to level off and increase in the future as commercial forests that were replanted since the 1970s grow to a harvestable size. While outsourcing will continue, much of what can be outsourced has already gone. Remaining Manufacturing firms are tied to their region to be near supplies or markets, or manufacture specialized goods where small production quantities, fast turn-around times, and the need for quality limit the ability to outsource.
- The mix of Manufacturing jobs in the Eugene-Springfield Region changed over the past twenty years with declines in Wood Products and the growth of employment in Recreational Vehicle (RV) manufacturing, machinery manufacturing, metals manufacturing, and high-tech industries, such as Computer and Electronics Manufacturing.

BUSINESS CLUSTERS IN SPRINGFIELD

One way to assess the types of businesses that are likely to have future growth in an area is to examine relative concentration and employment growth of existing businesses. This method of analysis can help determine relationships and linkages within industries, also called industrial clusters. Sectors that are highly concentrated (meaning there are more than the "average" number of businesses in a sector in a given area) and have had high employment growth are likely to be successful industrial clusters. Sectors with either high concentration of businesses or high employment growth may be part of an emerging cluster, with potential for future growth.

The sectors with the most growth potential (identified in Chapter 3) are: Health and Social Assistance; Administrative and Support; Construction;

and Accommodations and Food Services. Other sectors with growth opportunities are: Arts, Entertainment, and Recreation; Management of Companies and Enterprises; Professional, Scientific, and Technical Services; and Private Educational Services.

Table 4-1 shows existing and potential business clusters in Springfield. The clusters identified in Table 4-1 are based on employment trends, Springfield’s comparative advantages, the OED’s employment forecast for Lane County, the types of firms that have considered locating in Springfield, and analysis of existing and developing business clusters in Springfield and Lane County.

Table 4-1. Existing and potential business clusters in Springfield

Cluster	Employment Potential	Secondary Employment
Medical Services	Associated with RiverBend Regional Medical Center: 3,400 new jobs in 2008 Additional medical services Additional services Employment at a new or expanded McKenzie-Willamette Hospital Facility	Associated with RiverBend and McKenzie Willamette hospitals: Medical Services and Suppliers Research and Education Medical equipment manufacturing Non-medical office space Services like retail, restaurants, financial services, etc.
Manufacturing	Growth potential depends on firms growing locally or choosing to locate in Springfield. Types of firms include: <ul style="list-style-type: none"> • Food processing • High-tech electronics • Recreational Equipment • Medical Equipment manufacturing. • Furniture manufacturing • Specialty apparel • Cottage industries such as jewelry, apparel, or personal care products • Plastics manufacturing 	Manufacturing of related or complementary products Additional manufacturing Services like retail, restaurants, financial services, etc.
Wood Products and Specialty Wood Products	Growth potential depends on the international demand for wood products. The existing wood products and paper manufacturing cluster is evolving based on industry innovation.	Services like retail, restaurants, financial services, etc.
Call Centers	Growth potential depends on firms choosing to locate in Springfield. Eugene and Springfield have advantages for attracting call centers because of the pool of trained call center workers.	Back-office functions for companies with call centers Services like retail, restaurants, financial services, etc.

Cluster	Employment Potential	Secondary Employment
Back-Office Functions	Growth potential depends on firms growing locally or choosing to locate in Springfield. There is a lot of national competition for these functions.	Related back-office functions (if a cluster grows) Services like retail, restaurants, financial services, etc.
Tourism	Growth potential depends on holding events in the Eugene-Springfield area that attract visitors. Growth may also depend on development of infrastructure to attract and service visitors, such as hotels or outdoor activities.	Services like hotels, retail, restaurants, arts and entertainment, etc.
High-tech	Growth potential depends on firms growing locally or choosing to locate in Springfield. Types of firms include: <ul style="list-style-type: none"> • Software development • Computer electronics • Computer service providers • Data centers 	Service and materials providers Services like retail, restaurants, financial services, etc.
Biotech	Growth potential depends on firms choosing to locate in Springfield. There is a lot of national competition for these firms. Springfield has advantages in attracting these firms because of the University of Oregon's work in Biotech, presence of Invitrogen, and national growth in the industry.	Related biotech firms Suppliers or other specialized service providers Services like retail, restaurants, financial services, etc.

TARGET INDUSTRIES

Goal 9 requires cities to identify the number and characteristics of sites “the number of sites by type reasonably expected to be needed to accommodate the expected employment growth based on the site characteristics typical of expected uses (OAR 660-009-0014(2)).” In developing this assessment, cities are encouraged to examine existing firms in the planning area to identify the types of sites that may be needed for expansion (OAR 660-009-0015(2)). Cities are required to “estimate the types and amounts of industrial and other employment uses likely to occur in the planning area,” taking into consideration relevant economic advantages and disadvantages (OAR 660-009-0015(4)).

Identifying the number and characteristics of needed sites starts with understanding the types of businesses that may locate in Springfield over the 20-year planning period. Consistent with the requirements of Goal 9, these industries are grouped into “major categories of industrial or other employment uses” (OAR 660-009-0015(1)). This grouping is commonly referred to as “target industries.”

The target industries for Springfield were identified based on a range of factors:

- Springfield’s existing employment base and the clusters of businesses in Springfield, such as those shown in Table 4-1, Table A-12, or Table A-7.
- Springfield’s comparative advantages, especially Springfield’s location in the Southern Willamette Valley next to Eugene, the easy access to Interstate 5 in Springfield, and the availability of educated and trained labor force from across the region.
- Local and regional economic trends, such as changes in regional employment (Table A-5), changes in regional business clusters, growth in tourism (Table A-13), growth in agriculture production (Table A-14), or forecasts for regional employment growth (Table A-16).
- National and statewide economic trends over the last three decades, such as growth in services or decline in wood products manufacturing.
- Local and regional demographic trends, such as population growth and growth in people over age 60.
- Existing businesses and business clusters in Springfield, such as those identified in Table 4-1.
- Springfield’s economic development objectives, such as:
 - Increasing employment in regional clusters, including: Health Care, Communication Equipment, Information Technology (Software), Metals (Wholesalers), Processed Food and Beverage, Wood & Forest Products, and Transportation Equipment.
 - Recruiting businesses that pay higher than average wages for the region.

The characteristics of Springfield will affect the types of businesses most likely to locate in Springfield. Springfield’s attributes that may attract firms are: the City’s proximity to I-5, high quality of life, proximity to the University of Oregon, the presence of the RiverBend campus, positive business climate, availability of skilled and semi-skilled labor, and proximity to indoor and outdoor recreational opportunities. The types of businesses that may be attractive to Springfield include:

- **Medical Services.** The development of a regional medical center cluster at RiverBend presents an opportunity to attract medical

firms, medical research firms, and other professional services. PeaceHealth is in the process of attracting these firms, through development of a research-oriented relationship with OHSU and the University of Oregon. The possible expansion of the McKenzie-Willamette Medical Center in Springfield presents additional opportunities for attracting medical services and employment in healthcare.

- **Services for seniors.** Springfield's growing population of retirees or near retirees, may attract or create demand for health services that provide services to older people, such as assisted living facilities or retirement centers. These facilities may prefer to locate in relatively close proximity to RiverBend or McKenzie-Willamette.
- **Manufacturing.** Springfield's attributes may attract small scale manufacturing firms (e.g., firms with fewer than 50 employees). Springfield may also be attractive to large manufacturing firms, provided that land is available for development. Examples of manufacturing include medical equipment, high-tech electronics, recreational equipment, furniture manufacturing, specialty apparel, and other specialty manufacturing.
- **Specialty Food Processing.** Springfield's proximity to agricultural resources may make the City attractive to specialty food processing firms, such as those that specialize in organic or natural foods or wineries.
- **High-Tech.** Springfield's access to highly educated labor, access to comparatively inexpensive electricity, and high quality of life may make Springfield attractive to high-tech firms. The types of firms that may be attracted to Springfield range from high-tech manufacturing to data centers to software development.
- **Professional and Technical Services.** Springfield's attributes make it attractive to businesses that need access to educated workers and want a high quality of life. These types of businesses could include engineering, biotechnology, research, and other professional services that are attracted to high-quality settings.

Springfield's reputation as a blue-collar community may present challenges in attracting these types of businesses. Recent trends and efforts by the City suggest the reputation as a blue-collar community is in the process of changing. The City can facilitate this change through building off of the medical cluster forming at RiverBend and through promoting Springfield as a good place to locate professional service firms.

- **Call Centers.** The existing call center cluster including Symantec and Royal Caribbean may attract other call centers to Springfield. The potential for growth in call centers in the Eugene-Springfield area will be dependent of the availability of skilled labor.
- **Back-Office Functions.** Springfield's high quality of life and relatively low wages may attract back-office functions, such as Hawes Investments' offices in Springfield. Back-office functions include administrative functions, such as accounting or information technology. The potential for growth in back-office functions may be limited by national competition for this type of employment. Springfield may be more successful at attracting back-office functions for firms that have a reason to locate in the Region, such as firms with corporate headquarters on the West Coast or firms that do a substantial amount of business in the Willamette Valley.
- **Tourism.** Visitors may be attracted to Springfield to take advantage of recreational opportunities and other amenities. They may also be attracted as a result of regional events, such as the Olympic Track and Field trials, the Oregon Country Fair, or the University of Oregon Bach Festival. Industries that serve tourists, such as food services and accommodations, are likely to grow if tourism increases.
- **Green businesses.** There is no clear definition of what constitutes a green industry or business. In general, green businesses are those that produce products or services that improve or maintain environmental quality, as described in Appendix A. Opportunities for environmentally conscious businesses are growing. The types of green businesses that may choose to locate or expand in Springfield includes: green construction firms (e.g., firms that use LEED-certified building practices), organic food processing, sustainable logging and/or lumber products manufacturing, or alternative energy production (e.g., manufacturing solar panels or bio-fuels).
- **Corporate Headquarters.** Springfield's quality of life, location along I-5, and availability of educated workers may make Springfield attractive as a place to locate corporate headquarters. These same qualities, combined with the relatively low cost of semi-skilled labor and cluster of call centers, make Springfield attractive as a place to locate back-office functions, such as call centers.
- **Services for Residents.** Population growth will drive development of retail and government services, especially education, in Springfield.

- **Government and Public Services.** Springfield will continue to be the location for institutions such as: Springfield City Services, State services such as the Department of Motor Vehicles and Oregon Department of Transportation offices, the Springfield School District, and the Springfield Utility Board.

OAR 660-009-0025 requires cities designate sufficient land for employment to accommodate forecast needs. OAR 660-009-0025(1) and (2) articulate the requirements:

(1) Identification of Needed Sites. The plan must identify the approximate number, acreage and site characteristics of sites needed to accommodate industrial and other employment uses to implement plan policies. Plans do not need to provide a different type of site for each industrial or other employment use. Compatible uses with similar site characteristics may be combined into broad site categories. Several broad site categories will provide for industrial and other employment uses likely to occur in most planning areas. Cities and counties may also designate mixed-use zones to meet multiple needs in a given location.

(2) Total Land Supply. Plans must designate serviceable land suitable to meet the site needs identified in section (1) of this rule. Except as provided for in section (5) of this rule, the total acreage of land designated must at least equal the total projected land needs for each industrial or other employment use category identified in the plan during the 20-year planning period.

Thus, Springfield must identify the characteristics of “needed” sites and designate enough land to accommodate the needs. Table 4-2 shows a list of target industries and what plan designations in which the uses would be allowable. The conclusion is that each target industry is allowed in multiple plan designations.

Table 4-2. Target Industries and Plan Designations

Target Industry	Plan Designation										
	Campus Industrial	Commercial	Commercial Mixed Use	Heavy Industrial	High Density Residential Mixed Use	Light Medium Industrial	Light Medium Industrial Mixed Use	Major Retail Center	Medium Density Residential Mixed Use	Mixed Use	Special Heavy Industrial
Medical Services		✓	✓		✓		✓		✓	✓	
Services for Seniors		✓	✓		✓			✓	✓	✓	
Manufacturing	✓			✓		✓	✓			✓	✓
Specialty Food Processing	✓			✓		✓	✓			✓	✓
High-Tech	✓					✓	✓			✓	✓
Professional and Technical Services	✓	✓	✓		✓		✓	✓	✓	✓	
Call Centers	✓		✓				✓			✓	
Back Office Functions	✓		✓			✓	✓			✓	
Tourism		✓	✓				✓	✓		✓	
Green Businesses	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Corporate Headquarters	✓	✓	✓		✓		✓		✓	✓	
Services for Residents		✓	✓		✓		✓	✓	✓	✓	
Government and Public Services	✓	✓	✓							✓	

EMPLOYMENT FORECAST

To provide for an adequate supply of commercial and industrial sites consistent with plan policies, Springfield needs an estimate of the amount of commercial and industrial land that will be needed over the planning period. Goal 9 requires cities identify “the number of sites by type reasonably expected to be needed to accommodate the expected employment growth based on the site characteristics typical of expected uses.” The number of needed sites is dependent on the site requirements of employers. The estimate of land need is presented in the site needs analysis in the next section.

Demand for commercial and industrial land will be driven by the expansion and relocation of existing businesses and new businesses locating in Springfield. The level of this business expansion activity can be measured by employment growth in Springfield. This section presents a projection of future employment levels in Springfield for the purpose of estimating demand for commercial and industrial land.

The EOA presents a forecast for employment growth for Springfield for the 2010 to 2030 period. The City’s intent was to adopt this EOA in 2010 and the City noticed DLCD of this intent on October 30, 2009.²⁸ As a result, the employment forecast was developed in 2008 and is based on 2006 Quarterly Census of Employment and Wages (QCEW) data.

Appendix C presents the process used to arrive at the employment forecast for Springfield. Table 4-3 shows that employment is forecast to grow by 13,440 employees (a 32% increase) between 2010 and 2030.

²⁸ Springfield submitted a notice to adopt the 2009 Economic Opportunities Analysis on October 30, 2009. The date of the first evidentiary hearing in the notice was December 15, 2009, with a final hearing in July 2010. The purpose of this hearing was to provisionally adopt by resolution a draft Commercial and Industrial Building Lands Inventory, Economic Opportunities Analysis, Economic Development Objections and Implementation Strategies in order to carry out mandate of 2007 Or Laws Chapter 650 requiring Springfield to establish its own Urban Growth Boundary. The Resolution recognizes the that action was an interim step and that further steps were needed before adoption of a final inventory, analysis, and determination of capacity.

The City submitted notice with policy amendments to DLCD on December 31st, 2009, with a first evidentiary hearing on February 17, 2010. This notice included the 2009 Economic Opportunities Analysis.

Table 4-3. Employment growth in Springfield’s UGB, 2010–2040

Year	Total Employment
2008	41,133
2010	42,284
2030	55,724
2030	55,724
2031	56,498
2032	57,283
2033	58,079
2034	58,886
2035	59,704
2036	60,534
2037	61,375
2038	62,228
2039	63,093
2040	63,970
Change 2010 to 2030	
Employees	13,440
Percent	32%
AAGR	1.4%

Source: ECONorthwest

Springfield is part of the regional economic center in the Southern Willamette Valley region. The ratio of population to employment will decrease from 1.6 people per job to 1.5 people per job between 2008 and 2030. This change shows that employment will grow faster than population in Springfield, suggesting that some Springfield businesses will continue to have employees who commute from Eugene or other cities in the region.

Table 4-4 shows the forecast of employment growth by building type in Springfield’s UGB in 2030. In 2010, a total of about 60% of Springfield’s employment is in office and other services’ building types. About 18% is in retail, 15% is in general industrial and 7% is in warehousing and distribution.

For the purpose of the Springfield EOA, building types are used to relate employment by industry to site needs. In short, the method used to describe site needs is to group industries based on building and site characteristics. This is consistent with how real estate markets work for urban development – demand for land is derived from demand for space. The type of building and industry is then related to land characteristics needed (e.g., site needs) to accommodate that industry. It is also consistent with OAR 660-009-0015(1) which states “Industrial or other employment uses with compatible site characteristics may be grouped together into

common site categories. “ For this analysis, ECO relates industries by NAICS codes to building types which are used as a proxy for site needs. Each sector has been uniquely assigned to a “typical” building type, grouped by industrial and commercial uses. Table A-8 in the appendix shows how industries are related to building types and site needs.

Table 4-4. Forecast of employment growth in by building type, Springfield UGB, 2010-2030

Building Type	2010		2030		Change 2010 to 2030
	Employment	% of Total	Employment	% of Total	
Industrial					
Warehousing & Distribution	2,954	7.0%	3,343	6.0%	389
General Industrial	6,457	15.3%	7,523	13.5%	1,066
Commercial					
Office	12,561	29.7%	17,274	31.0%	4,713
Retail	7,709	18.2%	9,752	17.5%	2,043
Other Services	12,603	29.8%	17,832	32.0%	5,229
Total	42,284	100.0%	55,724	100.0%	13,440

Source: ECONorthwest

Note: Green shading denotes an assumption by ECONorthwest

Note: The forecast assumes that the share of employment in other services’ building types will increase by about 2.2% over the 20-year period. We expect that medical employment will grow faster than government employment, based on historical trends that show government accounting for a decreasing share of employment and the growing medical cluster in Springfield.

The forecast in Table 4-4 assumes that Springfield will have growth in all categories of employment. It also assumes that the share of employment will increase in other services (2.2% increase in share) and office (1.3% increase in share). At the same time, the share of employment will decrease in general industrial (1.8% decrease in share), warehousing and distribution (1.0% decrease in share), and retail (0.7% decrease in share). The rationale supporting these assumptions is presented in Appendix C.

SITE NEEDS

OAR 660-009-0015(2) requires the EOA identify the number of sites, by type, reasonably expected to be needed for the 20-year planning period. Types of needed sites are based on the site characteristics typical of expected uses. The Goal 9 rule provides flexibility in how jurisdictions conduct and organize this analysis. For example, site types can be described by plan designation (i.e., heavy or light industrial), they can be by general size categories that are defined locally (i.e., small, medium, or large sites), or it can be industry or use-based (i.e., manufacturing sites or distribution sites).

Firms wanting to expand or locate in Springfield will be looking for a variety of site and building characteristics, depending on the industry and specific circumstances. Previous research conducted by ECO has found

that while there are always specific criteria that are industry-dependent and specific firm, many firms share at least a few common site criteria. In general, all firms need sites that are relatively flat, free of natural or regulatory constraints on development, with good transportation access and adequate public services. The exact amount, quality, and relative importance of these factors vary among different types of firms. This section discusses the site requirements for firms in industries with growth potential in the Eugene-Springfield Region, as indicated by the Oregon Employment Department forecast (see Table A-12 in Appendix A for the regional forecast).

Appendix C discusses the productive factors that affect business' locational decisions and the implications of these factors for businesses that may locate in Springfield. The appendix also discusses the characteristics of sites needed to accommodate employment growth and Springfield's ability to provide sites with these characteristics.

LONG-TERM LAND AND SITE NEEDS

Appendix C presents the process for converting between the employment forecast to site needs. Table 4-5 presents the estimate of needed sites by site size and type of building. The results show that Springfield needs approximately 273 sites. Most sites are small, 2-acres or less. Springfield needs approximately 24 sites larger than 5-acres, including 4 sites larger than 20-acres.

Table 4-5. Estimated needed sites by site size and building type, Springfield, 2010 to 2030

	Site Size (acres)					Total
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger	
Warehousing & Distribution	2	2	3	4	1	12
General Industrial	5	5	4	8	2	24
Office	75	12	13	4	1	105
Retail	55	10	6	2		73
Other Services	44	9	4	2		59
Total	181	38	30	20	4	273

Source: ECONorthwest

The identified site needs shown in Table 4-5 do not distinguish sites by comprehensive plan designation. It is reasonable to assume that industrial uses will primarily locate in industrial or campus industrial zones. Retail and service uses could locate in commercial zones, mixed use zones, and residential mixed-use zones.

SHORT-TERM SITE NEEDS

Springfield has four large-scale development plans currently underway: RiverBend Node, Marcola Meadows Node, the Glenwood Riverfront Node and the Downtown District Node. RiverBend, Marcola Meadows and Glenwood Riverfront District have approved master plans and are available for immediate development. In addition, the City is currently developing a Downtown District Plan and Implementation Strategy to facilitate and promote downtown redevelopment.

- **RiverBend Node.** PeaceHealth’s main hospital at RiverBend opened in August 2008. The relocation or expansion of other medical firms to the RiverBend campus is underway. In addition to these uses, PeaceHealth plans further development of the RiverBend campus, which is about 72 acres in size. Other uses may include a mixture of residential development, office and commercial support services, retail, and educational and research functions to support collaborations with Oregon Health Services University and the University of Oregon. Studies for the RiverBend master plan indicated that there may be demand for additional office development (400,000-500,000 square feet) and commercial retail services (50,000 to 70,000 square feet).
- **Marcola Meadows Node.** Marcola Meadows is a master-planned proposed mixed use project located on a vacant 100-acre parcel in Springfield. The project is expected to include about 190 single unit detached homes, about 120 townhouses, about 120 homes in apartments, and 54 homes for senior living. The total proposed land requirement of the residential village would be 39 acres.

The Marcola Meadows Master Plan includes a commercial anchor development, professional offices and retail. The planned commercial component will occupy about 44 acres. The remaining land in the development will be used for common open space and streets.²⁹

- **Glenwood Node.** Glenwood currently has a mixture of residential, commercial, and industrial zoning, with areas that are underdeveloped or undeveloped. Glenwood’s current development pattern is: 83 acres of industrial land, 64 acres of retail, 66 acres of manufactured dwellings, 37 acres of single-family dwellings, and 167 acres of vacant land.

²⁹ Marcola Meadows Pre Plan.

Redevelopment of Glenwood is in the planning stages. The 48-acre Glenwood Riverfront Plan District is currently designated for Mixed Use Nodal Development and is available for development. The City is updating the Glenwood Refinement Plan for the rest of Glenwood in phases. Goals for redevelopment include developing residential, employment and mixed use areas, providing transition between residential and industrial areas, and capitalizing on Glenwood's location between Eugene and Springfield and riverfront land.³⁰

³⁰ Glenwood Refinement Plan. November 1999.

This chapter provides a brief summary of the implications of the economic opportunities needs analysis for the City of Springfield. This study looked at economic trends and land needs from a regional and local perspective. This chapter includes a general comparison of land supply and demand. The comparison of land capacity and demand is followed by a discussion of the key implications of the EOA for the City of Springfield.

COMPARISON OF LAND CAPACITY AND DEMAND

This section presents an analysis of land availability and capacity for employment uses in Springfield. Chapter 4 presents an analysis of potential growth industries in Springfield and the employment forecast for Springfield. Based on this analysis, Table 5-1 shows a comparison of land supply and need in terms of sites by site size.

Redevelopment Capacity

The City makes the following assumptions about redevelopment of industrial and commercial land:

- All sites 5 acres and smaller that were identified as having redevelopment potential may redevelop over the 2010-2030 period.
- Five sites between 5-20 acres and one site 20 acres and larger are likely to redevelop over the 2010-2030 period. Table 2-12 provides a site-by-site evaluation of redevelopment potential for sites larger than 5 acres.

Table 5-1 uses the inventory of buildable vacant land from Chapter 2.

- **Vacant land.** The vacant land summary in Table 5-1 is summarized from Table 2-9.
- **Redevelopable land.** The redevelopable land summary in Table 5-1 makes two assumptions about redevelopment potential:³¹
 - *Sites smaller than five acres.* All of the sites smaller than 5 acres with redevelopment potential in Table 2-11 are shown in Table 5-1.
 - *Sites larger than five acres.* Table 2-12 presents a site-by-site evaluation of redevelopment potential of sites identified as potentially redevelopable in Table 2-11. Table 5-1 includes all of the sites identified as providing an opportunity for redevelopment of a 5-acre site (in Table 2-12) as potentially redevelopable sites over the planning period.

The results show that Springfield has a deficit of about 2 industrial sites and 7 commercial and mixed use sites.

³¹ The redevelopable sites in Table 5-1 are assumed to increase employment capacity on the redeveloped sites. As discussed in Chapter 2, redevelopment means a net increase in employment capacity, rather than only the replacement of an old building with a newer building.

Table 5-1. Comparison of vacant land supply and site needs, industrial and other employment land, Springfield UGB, 2010-2030

	Site Size (acres)				
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger
Buildable Land Inventory					
Vacant					
Industrial	72	24	20	12	0
Commercial and Mixed Use	104	14	6	4	0
Potentially Redevelopable					
Industrial	122	28	31	6	1
Commercial and Mixed Use	305	20	15	0	0
Total Buildable Sites					
Industrial	194	52	51	18	1
Commercial and Mixed Use	409	34	21	4	0
Site Needs					
Needed sites					
Industrial	7	7	7	12	3
Commercial and Mixed Use	174	31	23	8	1
Surplus (deficit) of sites					
Industrial	187	45	44	6	-2
Commercial and Mixed Use	235	3	-2	-4	-1

Source: ECONorthwest.

Note: The redevelopable sites in Table 5-1 are assumed to increase employment capacity on the redeveloped sites. As discussed in Chapter 2, redevelopment means a net increase in employment capacity, rather than only the replacement of an old building with a newer building.

Converting the site needs shown in Table 5-1 to an estimate of land needs requires making assumptions about average site sizes needed in Springfield. The average site sizes in Table 5-2 are based on empirical analysis of the size of Industrial and Commercial taxlots with employment in Springfield in 2006. This analysis involved relating covered employment data (covered employment in Springfield is shown in Table C-1) to taxlots in Springfield. The taxlots were grouped into categories of site size (i.e., less than 1 acre, 1-2 acres, etc.) by type of land (i.e., industrial or commercial/mixed-use). For each group, the average site size was determined, as shown in Table 5-2. For example, there were 75 Industrial sites smaller than 1 acre in Springfield with employment, with an average of 0.5 acres per site.

Table 5-2. Average size of needed sites based on average sizes of sites with employment in Springfield, Springfield UGB

	Site Size (acres)				
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger
Industrial	0.5	1.4	3.0	10.0	63.0
Commercial and Mixed Use	0.4	1.4	3.2	9.3	60.0

Source: ECONorthwest based on QCEW data

Note: Average site size for sites 20 acres and larger is rounded to the nearest acre.

Table 5-3 shows sites needed (from Table 5-1) and land need (based on number of sites needed in Table 5-1 and average site size in Table 5-2). The results show that Springfield has a deficit in the current UGB of the following land types for the 2010 to 2030 period:

- **Industrial land.** Springfield has a **need for 126 acres** of industrial land on two sites larger than 20 acres. In the context of this study, industrial uses means any major employer that would be allowed in an industrial land designation (e.g., campus industrial, light-medium industrial, light-medium industrial mixed use, heavy industrial, or special heavy industrial).
- **Commercial sites.** Springfield has a **need for 104 acres** of commercial land on 9 sites. Springfield’s commercial site needs range from sites 2 to 5 acres in size to one site that is 60 acres in size. In the context of this study, commercial use means any use that would be allowed in a commercial land designation (e.g., commercial, commercial mixed use, employment mixed use).

Table 5-3. Comparison of employment land supply and site needs, Springfield UGB, 2010-2030

	Site Size (acres)					Total
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger	
Industrial						
Sites needed	none	none	none	none	2	2
Land need (acres)	none	none	none	none	126	126
Commercial and Mixed Use						
Sites needed	none	none	2	4	1	7
Land need (acres)	none	none	6	37	60	104
Total sites needed	none	none	2	4	3	9
Total acres needed	none	none	6	37	186	230

Source: ECONorthwest

The summary of land needs in Table 5-3 shows Springfield’s land need for all sites of all sizes. One of the City’s economic development strategies is to encourage redevelopment, especially in Downtown and Glenwood. Table 5-1 shows that Springfield concludes that 188 industrial sites and 340 commercial and mixed use sites would redevelop to address land needs over the 20-year period. In addition to this assumption about redevelopment, **Springfield concludes that all land needs on sites smaller than five acres would be accommodated through redevelopment.** The City had a deficit of two commercial and mixed use sites smaller than five acres, which would require six acres of land (Table 5-3).

Table 5-4 shows Springfield’s employment land need, assuming that all site needs for sites smaller than five acres would be addressed through redevelopment. **Springfield has the need for approximately two**

industrial sites on 126 acres and five commercial and mixed use sites on about 97 acres that cannot be accommodated within the existing UGB over the 2010 to 2030 period.

Table 5-4. Employment site and land needs, Springfield UGB, 2010-2030

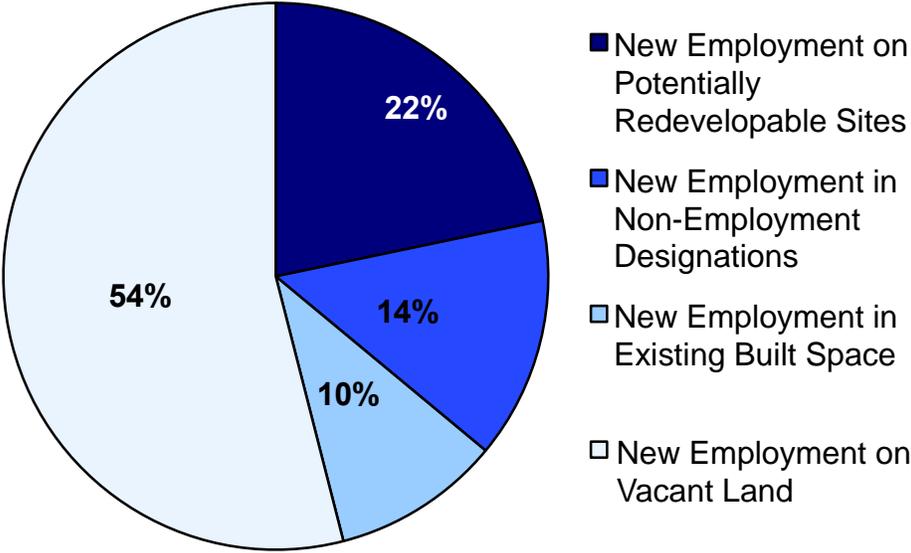
	Site Size (acres)			Total
	Less than 5	5 to 20	20 and Larger	
Industrial				
Sites needed	none	none	2	2
Land need (acres)	none	none	126	126
Commercial and Mixed Use				
Sites needed	none	4	1	5
Land need (acres)	none	37	60	97
Total sites needed	none	4	3	7
Total acres needed	none	37	186	223

Source: ECONorthwest

Figure 5-1 summarizes how Springfield will accommodate new employment based analysis in Chapter 5 and Appendix C. Springfield’s employment forecast shows growth of 13,440 new employees over the planning period (Table C-2).

- 14% of new employment (1,918 employees) will locate on **land not designated for employment use**, such as residential land (Table C-12).
- 10% of new employment (1,344 employees) will locate in **existing commercial or industrial built space**, such as vacant buildings or office spaces (Table C-12).
- 22% of new employment (about 2,921 employees) will locate on **potentially redevelopable sites**, where redevelopment results in an increase in the amount of employment accommodated on the site (Table 5-1 shows assumptions about potentially redevelopable sites and Table C-6 shows that need for sites smaller than 5 acres will be accommodated through redevelopment).
- 54% of new employment (about 7,256 employees) will locate on **land that is currently vacant**, including land within the UGB and sites that Springfield does not currently have within the UGB (Table 5-1 and Table C-6).

Figure 5-1. Summary of Location of Employment Growth by Type of Land, Springfield UGB, 2010-2030



Source: ECONorthwest

CHARACTERISTICS OF NEEDED SITES

The Goal 9 Administrative Rule (OAR 660-009) requires that jurisdictions describe the characteristics of needed sites (OAR 660-009-0025(1)). The Administrative Rule defines site characteristics as follows in OAR 660-009-0005(11):

(11) "Site Characteristics" means the attributes of a site necessary for a particular industrial or other employment use to operate. Site characteristics include, but are not limited to, a minimum acreage or site configuration including shape and topography, visibility, specific types or levels of public facilities, services or energy infrastructure, or proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes.

The site needs analysis in Chapter 4 identified site needs in five types of buildings: warehousing and distribution, general industrial, office, retail, and other services. The characteristics of needed sites for each of these building types are described below. All sites will need access to electricity, phone, and high-speed telecommunications.

The demand for employment sites (summarized in Table 5-1) is driven by expected employment growth in industries that have historically needed sites in different size groupings. Table C-6 shows that Springfield has a deficit of two Industrial sites 20 acres and larger, which may be needed by target industries such as light manufacturing, high-tech manufacturing, recreation equipment manufacturing, wood products manufacturing, medical products manufacturing, alternative energy manufacturing, or specialty food processing.

Springfield also has a deficit of Commercial and Mixed Use sites, including: four site 5 to 20 acres in size and one site 20 acres and larger. The target industries that may locate on these sites include: Medical Services, Professional and Technical Services, Back-Office Functions, Call Centers, or Corporate Headquarters. Table 4-2 summarizes the Comprehensive Plan Designations where Springfield's target industries are allowed within Springfield's existing UGB.

This section describes the site needs of these target industries, focusing on the deficit of 223 acres of employment land in Springfield identified in Table 5-4.

SITE SIZE AND OTHER CHARACTERISTICS

This section presents information about the sites needed by the target industries based on information by Business Oregon, economic development efforts in Springfield, a study about industry site needs in Springfield by Tadzo, and other sources. Appendix C (Tables C-6 to C-11) present details of research about site needs of Springfield's target industries from these sources. Table 5-5 summarizes these site needs.

Table 5-5. Summary of characteristics of sites needed by target industries, Springfield

Type of site and target industries	Site Size	Topography	Transportation Access	Access to City Services
<p>Target Industries: Medical Equipment High-tech Electronics and Manufacturing Recreational Equipment Furniture Manufacturing Specialty Food Processing Building Type: General Industrial Site Needs for: Manufacturing</p>	<p>Manufacturers similar to the target industries that needed sites larger than 5 acres who considered locating in Oregon or in the Eugene-Springfield area needed sites ranging in size from 10 acres to more than 100 acres.</p> <p>The size of sites needed by Springfield’s target industries will vary by the size of building: 100,000 sq ft building will need a site of between 9-12 acres 200,000 sq ft building will need a site of between 18-24 acres 500,000 sq ft building will need a site of between 45- 60 acres</p> <p>The average size of existing sites with employment in Springfield (Table 5-2) is: 5-20 acre site: 10 acres 20+ acre site: 63 acres</p>	<p>The slope for manufacturing sites should be 5% or less. High-tech and Campus manufacturing can have a slope of 7% or less.</p>	<p>At the furthest, sites should be located within 15 miles or less of I-5 or a principal arterial road that is designated as a freight route. Most businesses in Springfield typically locate within one-mile of I-5 or within about one-half a mile of a state highway.</p>	<p>Access to Springfield’s municipal water and wastewater system, with a minimum pipeline size of 8 to 10 inches (varies by target industry).</p>
<p>Target Industries: High Tech Services Corporate Headquarters Biotech Professional and Technical Services Back office Medical Services Building Type: Commercial and Other Site Needs for: Large Office Employers</p>	<p>Commercial office employers that needed sites larger than 5 acres who considered locating in Oregon needed sites ranging in size from 10 acres to 100 acres.</p> <p>The size of sites needed by Springfield’s target industries will vary by the size of building: 50,000 sq ft building will need a site of between 4- 6 acres 100,000 sq ft building will need a site of between 8-12 acres 200,000 sq ft building will need a site of between 16-24 acres</p> <p>If a business park is developed to meet the site needs of these businesses, typical business park sizes in the Portland region are between about 30 and 75 acres.</p> <p>The average size of existing sites with employment in Springfield (Table 5-2) is: 5-20 acre site: 9.3 acres 20+ acre site: 60 acres</p>	<p>The slope for manufacturing sites should be 5% or less. High-tech and Campus manufacturing can have a slope of 7% or less.</p>	<p>At the furthest, sites should be located within 15 miles or less of I-5 or a principal arterial road. Most businesses in Springfield typically locate within one-mile of I-5 or within about one-half a mile of a state highway.</p> <p>Sites should have access to mass transit within one-half mile.</p>	<p>Access to Springfield’s municipal water and wastewater system, with a minimum pipeline size of 8 to 10 inches (varies by target industry).</p>

SITE NEEDS FOR SPRINGFIELD'S TARGET INDUSTRIES

This section presents a refinement of the discussion of the characteristics of needed sites in Springfield on pages 59 to 63 of the EOA to describe the connection between the typical site need and operations of target industries.

The Goal 9 Administrative Rule (OAR 660-009) requires that jurisdictions describe the characteristics of needed sites (OAR 660-009-0025(1)). The Administrative Rule defines site characteristics as follows in OAR 660-009-0005(11):

(11) "Site Characteristics" means the attributes of a site necessary for a particular industrial or other employment use to operate. Site characteristics include, but are not limited to, a minimum acreage or site configuration including shape and topography, visibility, specific types or levels of public facilities, services or energy infrastructure, or proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes.

In *Friends of Yamhill County v. City of Newberg*, 62 Or LUBA 5 (2010), LUBA provided a recent interpretation of this requirement, by applying a “two-prong test” for establishing relevant site characteristics as follows: (1) that the attribute be “typical of the industrial or employment use” and (2) that it have “some meaningful connection with the operation of the industrial or employment use.” The first of those prongs, that the attributes be “typical,” appears expressly in OAR 660-009-0015(2), which refers to “site characteristics typical of expected uses.” In upholding LUBA’s two prong test, the Court of Appeals agreed, “[t]hat ‘necessary’ site characteristics are those attributes that are reasonably necessary to the successful operation of particular industrial or employment uses, in the sense that they bear some important relationship to that operation.” *Friends of Yamhill County v. City of Newberg*, 240 Or App 738, 747 (2011).

TARGET INDUSTRIES: MANUFACTURING

Springfield identified the following types of target industries in manufacturing (as part of the General Industrial employment category) that require sites 5 acres and larger: medical equipment, high-tech electronics and manufacturing, recreational equipment, furniture manufacturing, specialty food processing. Table 5-1 shows that Springfield has a deficit of two sites larger than 20 acres to accommodate these types of manufacturing businesses, with an average site size of 63 acres. Manufacturing is most likely to occur in an industrial or campus industrial zone.

The following summarizes the site characteristics and provides an overview of the two-prong test established for site characteristics under *Friends of Yamhill County v. City of Newberg*, 62 Or LUBA 5 (2010), *aff'd* 240 Or App 738 (2011).

1. **Site size.** Sites where manufacturing firms might locate range in size from 10 to 20 acres and up to 60 acres or more for large-scale manufacturers. Springfield has a deficit of two sites in the site size of “20 acres and larger,” which have an average site size of 63 acres.
 - Attribute has "some meaningful connection with the operation of the industrial or employment use" – Site size is important for manufacturers. The site needs to be large enough to accommodate the needed built space, as well as accommodate storage space or space for phased development. In addition, the site needs to be large enough to accommodate dedication of public right-of-way and/or easements that may be needed to extend or increase the capacity of existing transportation, infrastructure and utilities to serve the manufacturing use, on-site circulation, parking and loading, on-site stormwater management, waste management, and to meet applicable site coverage or open space requirements, and applicable land use or natural resource buffers required through the City’s development or building code regulations.

Table C-7 shows employment estimates for manufacturing businesses that considered locating in the Eugene-Springfield area. Size of site is generally connected to levels of employment, with larger amounts of employment generally locating on larger sites.

- Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(11) specifically cites “a minimum acreage” as a site characteristic. The average size of existing industrial employment sites larger than 20 acres in Springfield is 63 acres (Table 5-2).

In addition, Business Oregon finds that competitively sized general manufacturing firms are 10 acres in size and high-tech manufacturing or campus industrial manufacturing require 25-acre sites. Industrial businesses that considered locating in the Eugene-Springfield area needed sites ranging in size from 10 acres to 200 acres or larger. The Tadzo report concludes that manufacturers in Springfield’s target industries that need a 200,000 square foot building require

sites between 18 and 24 acres and businesses that need a 500,000 square foot building need sites between 45 and 60 acres in size. Major employment sites with industrial uses in the Portland Metro area range in size from 25 to 160 acres and average about 50 acres in size.

2. **Topography.** Manufacturing sites should be relatively flat, with slopes of not more than 7% and preferably no more than 5%. Consistent with OAR 660-009-0005(2), Springfield considers sites with slopes over 7% to be unsuitable for manufacturing uses.
 - Attribute has "some meaningful connection with the operation of the industrial or employment use" - Business Oregon identifies sites with a slope of less than 5% (or less than 7% for High Tech Manufacturing or Campus Industrial) as necessary for a competitive site. Manufacturing buildings require level floor plates to support efficient physical layout of equipment, materials staging, assembly, packing and loading processes, reducing costs and offering maximum flexibility, as well as level areas to provide for freight access and pedestrian walkways that meet ADA standards. The real estate development literature describes the increases in development costs and other difficulties associated with industrial development on a sloped site.
 - Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(11) specifically cites "site configuration including shape and topography" as a site characteristic. Business Oregon finds that competitive sites generally have a slope of 5% or less, except high tech manufacturing and campus industrial, which have a slope of 7% or less.
3. **Transportation Access.** Manufacturing buildings generally are located on arterial or major collector streets. Sites need to have unimpeded access within 15 miles of an interstate highway or principal arterial road that is designated as a freight route, based on analysis from Business Oregon (Table C-8).

Many businesses in Springfield, especially the large businesses like those in Springfield's target industries, are located as close to Interstate 5 or a state highway as possible. Map A-1 and Map A-2 show the location of employers in Springfield. Much of Springfield's employment base, especially large employers, is clustered in the Gateway area, within one mile (or less) of I-5. Most other employers are located along or within one-quarter to one-half mile of a state highway.

- Attribute has "some meaningful connection with the operation of the industrial or employment use" - Distance from transportation facilities is meaningful because it directly affects the industry's time, labor, and fuel costs. Cost efficient freight movement is necessary for effective and economical manufacturing operations. Designated Federal, State, and local freight routes have design features that ensure freight vehicle movement and weight. This attribute is meaningful to industry operations because it directly affects the industry's travel time, labor and fuel costs to use lower classification, slower speed streets that are designed for local traffic

Unimpeded access to designated freight routes that are designed and constructed to ensure passage of freight vehicle sizes and weights is meaningful to the operation of the manufacturing use because it directly affects the industry's ability to move its freight vehicles. Local streets are not designed and built to accommodate heavy freight vehicles. Avoiding use of the local street network minimizes traffic conflicts with adjacent residential land uses along streets not designed for freight vehicles and higher traffic volumes. This site characteristic also helps to minimize traffic conflicts on local streets, improve mobility, minimize adverse effects on urban land use and travel patterns, and provide for efficient long distance travel, which are all necessary for effective industrial operations.

- Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(11) specifically cites the "proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes" as a site characteristic. Business Oregon finds that manufacturing and industrial firms need to be located relatively close to an interstate highway or principle arterial road, generally within 15 minutes or less, for shipping freight. The literature about siting of industrial buildings, including manufacturing, is clear that manufactures must be adjacent to a major transportation facility to optimize supply chain flows and delivery response time.³² Most businesses in Springfield are located within one-mile of Interstate 5 or within one-half mile of a state highway.

³² *Business Park and Industrial Development Handbook*, Urban Land Institute, 2001.

4. **Access to services.** City services should be directly accessible to the site, including sanitary sewer, and municipal water. The pipeline must be at least 8 inches and some manufacturers may require a 10 inch pipe minimum for both water and wastewater. Some target industries, such as high tech or specialty food processing, may require higher volumes of water and wastewater treatment.
 - Attribute has "some meaningful connection with the operation of the industrial or employment use" - Industrial buildings require access to municipal water, municipal sanitary sewer, and electricity/gas. At a minimum, manufacturers must have access to water and wastewater for typical manufacturing uses. Some manufacturers, such as high tech or specialty food processors, may require water and wastewater services as part of their manufacturing process. Developing a site with direct access to municipal services is substantially more cost-effective than extending municipal services to an unserved site.³³
 - Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(11) specifically cites the "specific types or levels of public facilities, services or energy infrastructure" as a site characteristic. Business Oregon finds that competitive sites must have access to urban services, including water, wastewater, natural gas, electricity, and major telecommunications facilities.
5. **Land assembly.** Sites may include one or more tax lots. Sites with two or fewer owners are necessary (a single owner is most desirable) to reduce the cost and uncertainty of land assembly. Consistent with OAR 660-009-0005(2), Springfield considers parcel fragmentation as a development constraint that directly affects suitability as defined in OAR 660-009-0005(12).
 - Attribute has "some meaningful connection with the operation of the industrial or employment use" - The cost of land assembly, in financial terms and in terms of extra time needed for site assembly, can make developing an industrial site with multiple land owners infeasible, resulting in the business choosing not to build on the site and possibly not locating in Springfield.

³³ Miles, Mike E., Haney, Richard L., Bernes, Gayle, "Real Estate Development: Principles and Process," The Urban Land Institute, 1997.

- Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(2) specifically lists parcel fragmentation as a development constraint that “ temporarily or permanently limit or prevent the use of land for economic development.” Developing an industrial building on a site with more than two owners requires negotiating land assembly and purchase from multiple owners. Land assembly is difficult and often costly for a number of reasons. People own land for a variety of reasons, such as desire to develop the land, desire to keep the land undeveloped, desire to sell the land for a profit. Getting land owners to sell land can be difficult, especially if the ownership is legally disputed, such as in the case of inheritance cases. If a landowner is a willing seller, they may have an unrealistic expectation of their land’s value, in the context of comparable land values. In addition, one parcel of land may have multiple owners, compounding the issues described above.

Developers attempting land assembly often have difficulty assembling a site at a cost that makes development economically viable. When assembling land, developers often find that owners of key sites are not willing sellers, have unrealistic expectations of the value of their land, or cannot get agreement among multiple owners to sell the land. As a result, developers of industrial buildings typically choose to develop sites with one or two owners.

TARGET INDUSTRIES: LARGE OFFICE EMPLOYERS

Springfield identified the following types of large office employers as target industries that require sites of five acres or larger: high tech, corporate headquarters, biotech, professional and technical services, back office, and medical services. These and other target industries may locate on stand-alone sites or may locate in business parks. The types of buildings may be typical office buildings, flex buildings,³⁴ or multiple buildings in a “campus” environment.

Large office employers are likely to locate in commercial or mixed-use zones, with some large office employers (e.g., high tech, biotech,

³⁴ Flex space is buildings that could be used for light industrial, office space, or both. Flex space typically has less costly finishing and improvements, such as having bare concrete floors rather than carpet. Businesses that sometimes occupy flex space include plumbing or electrical contractors, computer technology companies such as internet service providers or some software businesses, or service firms that prefer a more “industrial” feeling to their office space, such as some architecture firms.

professional or technical services, back office) locating in mixed-employment zones, such as campus industrial. Table C-6 shows that Springfield has a deficit of four site 5 to 20 acres in size (average site size of 9.3 acres) and one site 20 acres and larger (average site size of 60 acres).

The following summarizes the site characteristics and provides an overview of the two-prong test established for site characteristics under *Friends of Yamhill County v. City of Newberg*, 62 Or LUBA 5 (2010), *aff'd* 240 Or App 738 (2011).

1. **Site size.** Sites for office, flex, and business parks where businesses might locate range in size from 10 to 20 acres in size to 75 or 100 acre business parks to very large (multi-hundred acre) sites for large employers.
 - Attribute has "some meaningful connection with the operation of the industrial or employment use" - Site size is important for businesses locating in office, flex, or business parks. The site needs to be large enough to accommodate the needed built space. In addition, the site needs to be large enough to accommodate commercial activities, meet landscaping requirements, meet parking requirements, dedication of public right-of-way and/or easements that may be needed to extend or increase the capacity of existing transportation or infrastructure to serve the businesses, on-site stormwater management, waste management. Sites must also be large enough to meet applicable site coverage or open space requirements, and applicable land use or natural resource buffers required through the City's development or building code regulations.
 - Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(11) specifically cites "a minimum acreage" as a site characteristic. The Tadzo report concludes that large employers in target industries (e.g., Back Office, Corporate Headquarters, and Professional and Technical Services) may require sites of 8 to 12 acres to 100,000 square foot buildings or sites of 16 to 24 acres for 200,000 square foot buildings. These and other target industries may locate in business parks. Key characteristics of business parks in the Portland Metro region are sites of 25 to 100 acres, with 500,000 to 750,000 square feet of built space.
2. **Topography.** Sites for office, flex, and business parks businesses should be relatively flat, with slopes of not more than 15%. Consistent with OAR 660-009-0005(2), Springfield considers sites with slopes over 15% to be unsuitable for large office employers.

- Attribute has "some meaningful connection with the operation of the industrial or employment use" - Commercial developments can occur on land with low- to moderate slopes. For the purposes of this analysis, including in the buildable lands inventory, the maximum slope that is appropriate for commercial development is 15%. Commercial buildings on sites with higher slope pose engineering challenges that increases costs and reduces building flexibility, as well as pose challenges for freight delivery. In addition, client and employee access is an important factor in commercial buildings. Sites with steeper slopes will require greater investment in pedestrian walkways that meet ADA standards. The real estate development literature describes the increases in development costs and other difficulties associated with commercial development on a more sloped site.
 - Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(11) specifically cites "site configuration including shape and topography" as a site characteristic. Commercial sites, including the business parks and office developments in Portland, are generally relatively flat.
3. **Transportation Access.** Commercial office, flex, and business park buildings generally locate on arterial or major collector streets, to ensure that there is sufficient automotive access for employees and customers, as well as for the visibility of a location along a major road. Large office, flex, and business park buildings need to have access to an arterial or state highway. In addition, transit access is important for Springfield's commercial office, flex, and business park buildings, especially those with many employees and customers and for businesses that employ and serve segments of the population without access to an automobile.

Many businesses in Springfield, especially the large businesses like those in Springfield's target industries, are located as close to Interstate 5 or a state highway as possible. Map A-1 and Map A-2 show the location of employers in Springfield. Much of Springfield's employment base, especially large employers, is clustered in the Gateway area, within one mile (or less) of I-5. Most other employers are located along or within one-quarter to one-half mile of a state highway. Large office employers that have located in Springfield over the last decade have located in the Gateway area, such as RiverBend Hospital, Symantec, Pacific Source, or Royal Caribbean Cruise Lines.

- Attribute has "some meaningful connection with the operation of the industrial or employment use" - This site characteristic helps to minimize the amount of traffic on local streets, minimize commercial traffic in residential neighborhoods, improve mobility, minimize adverse effects on urban land use and travel patterns, and provide for efficient long distance travel, which are all necessary for effective commercial operations. A location with access to an arterial or state highway will have greater visibility, which is important to businesses that depend on in-person customer access. A location with access to mass transit within one-half mile will provide transportation opportunities for employees and customers without access to an automobile.
 - Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(11) specifically cites the "proximity to a particular transportation or freight facility such as rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes" as a site characteristic.
4. **Access to services.** City services should be directly accessible to the site, including sanitary sewer, and municipal water.
- Attribute has "some meaningful connection with the operation of the industrial or employment use" - Commercial buildings require access to municipal water, municipal sanitary sewer, and electricity/gas. Developing a site with direct access to municipal services is substantially more cost-effective than extending municipal services to an unserved site.³⁵
 - Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(11) specifically cites the "specific types or levels of public facilities, services or energy infrastructure" as a site characteristic.
5. **Land ownership.** Sites may include one or more tax lots. Sites with two or fewer owners are necessary to reduce the cost and uncertainty of land assembly. Consistent with OAR 660-009-0005(2), Springfield considers parcel fragmentation as a development constraint that directly affects suitability as defined in OAR 660-009-0005(12).

³⁵ Miles, Mike E., Haney, Richard L., Bernes, Gayle, "Real Estate Development: Principles and Process," The Urban Land Institute, 1997.

- Attribute has "some meaningful connection with the operation of the industrial or employment use" - The cost of land assembly, in financial terms and in terms of extra time needed for site assembly, can make developing a commercial site with multiple land owners financially infeasible, resulting in the business choosing not to build on the site and possibly not locating in Springfield.
- Attribute is "typical of the industrial or employment use" - OAR 660-009-0005(11) specifically cites the "site configuration" as a site characteristic. Developing a commercial building on a site with more than two owners requires negotiating land assembly and purchase from multiple owners. Land assembly is difficult and often costly for a number of reasons. People own land for a variety of reasons, such as desire to develop the land, desire to keep the land undeveloped, desire to sell the land for a profit. Getting land owners to sell land can be difficult, especially if the ownership is legally disputed, such as in the case of inheritance cases. If a landowner is a willing seller, they may have an unrealistic expectation of their land's value, in the context of comparable land values. In addition, one parcel of land may have multiple owners, compounding the issues described above.

Developers attempting land assembly often have difficulty assembling a site at a cost that makes development economically viable. When assembling land, developers often find that owners of key sites are not willing sellers, have unrealistic expectations of the value of their land, or cannot get agreement among multiple owners to sell the land. As a result, developers of commercial buildings typically choose to develop sites with one or two owners.

The City of Springfield Economic Development Agency (SEDA) has provided and continues to provide public assistance to overcome parcelization constraints within the Glenwood and Downtown Urban Renewal Districts to facilitate redevelopment in Glenwood and Downtown. In addition to comprehensive planning and technical support to assist potential developer projects, SEDA assistance has included land purchase and purchase of options on future property sales. The City has limited resources for this type of activity and thus success with parcel assembly over the

past ten years has been mixed. The City does not have resources to facilitate parcel assembly throughout the City.

IMPLICATIONS

The analysis of presented in the economic opportunities analysis has implications for Springfield's economic land needs.

- *Economic growth.* Decision makers and community members that participated in the economic opportunities analysis agreed that economic growth is desirable over the planning period. The employment forecast indicates Springfield will add 13,440 new employees between 2010 and 2030 using the OAR 660-024-0040(8)(a)(ii) methodology. The economic opportunities analysis assumes that Springfield will have employment growth in a wide variety of businesses, from services and retail for residents to industrial development to medical services. The City wants to diversify its economy and attract higher wage and professional jobs.
- *Buildable lands.* Springfield has 3,414 acres that are designated for industrial and other employment use. About two-thirds of the land designated for employment within Springfield's UGB is considered developed and is not expected to redevelop over the 20 year planning period. Less than 15% of this land is buildable, unconstrained land. The majority of buildable, unconstrained employment land in Springfield has existing development on it that is expected to redevelop over the planning period. Springfield has a lack of buildable large sites, with one buildable site 20 acres and larger and 22 buildable sites in the five to 20 acre size range.
- *Redevelopment potential.*³⁶ The analysis of potentially redevelopable land and need for employment land assumes that Springfield will have substantial redevelopment over the planning period. The analysis of potentially redevelopable land assumes that the employment capacity of redeveloped areas will increase, not simply that a new building will replace an old building. Consistent with City Council policies, the areas that are expected to have the most redevelopment are in Glenwood, especially along the Willamette Riverfront and Franklin/McVay corridor, and in the Downtown Urban Renewal District.

³⁶ This study identifies land with redevelopment potential as land on which development has already occurred but on which, due to present or expected market forces, there exists the potential that existing development will be converted to more intensive uses (providing additional employment capacity) during the planning period.

The City will need to make strategic investments that support redevelopment and to continue supporting redevelopment through City plans and policies. For example, redevelopment in the City’s targeted Downtown and Glenwood areas will require substantial investments in public infrastructure to provide public facilities and to overcome the existing impediments to development, including parcel assembly issues.

- *Employment that will not require vacant land.* Springfield assumed that 46% of employment would not require vacant employment land.³⁷ Springfield’s assumptions about employment that will not require vacant land are as follows:

Employment that does not require vacant land

46% of all new employment (6,105 employees) will be accommodated on land that currently has improvements:

- 14% will locate on land designated for other uses (i.e., residential uses)
- 10% will locate in existing built space
- 22% will locate on “potentially redevelopable land”

Needed sites are based on the 54% of new employment (7,256) that will require vacant, suitable land.

- Fourteen percent of employment (1,918 employees) will locate in non-employment designations. These employees will include people with home occupations, working from home, and businesses that locate in residential or other non-employment designations. This assumption is based on the percent of employment located in non-employment designations in 2006. See Appendix C and Table C-12 for more information about this assumption.
- Ten percent of new employment (1,344 employees) will locate in existing built space. See Appendix C and Table C-12 for more information about this assumption.
- Twenty-one percent of new employment (2,921 employees) will locate on redevelopable sites. Table 5-1 shows that Springfield assumes 188 industrial sites and 342 commercial and mixed use sites³⁸ will redevelop over the planning period. The estimate of employment on these sites was based on the average number of employees per site by site size in 2006. See Chapter 2 for more information about redevelopment assumptions.

- *Need for large sites.* Springfield will be able to meet all employment land needs on sites five acres and smaller within the existing UGB, through redevelopment, infill development, and employment uses

³⁷ The estimate of 46% of new employment not requiring vacant land is based on the assumption that 1,918 employees will locate in non-employment designations, 1,344 employees will locate in existing built space, and 2,921 employees will locate on redevelopable sites. The total number of new employees not requiring new land is 6,183 employees, which is approximately 46% of the forecasted growth of 13,440 jobs.

³⁸ The analysis in Table 5-1 shows that 340 commercial and mixed-use sites are considered potentially redevelopable. Table 5-4 assumes that the need for two sites in the 2 to 5 acre size range will be accommodated through redevelopment. As a result, Springfield assumes demand for 342 commercial and mixed-use sites will be accommodated through redevelopment.

on non-employment land (e.g., home occupations). The employment land needs that may not be met within the UGB are for sites five acres and larger. The City has only one suitable site 20 acres or larger.

Availability of sites 20 acres and larger is important for attracting or growing large businesses, which are often traded-sector businesses. If the City does not have these large sites, there is little chance that the City will attract these types of businesses. While it may not be clear exactly what the business opportunities may be in ten to twenty years, it is clear that these businesses will not locate in Springfield if land is not available for development.

For example, in the past twenty years, most of the Gateway area developed. The area has a mix of uses including the International Way campus employment district, regional mall, apartments, offices, and more recently, the PeaceHealth RiverBend Medical Center Campus. Twenty-years ago it would have seemed highly unlikely that PeaceHealth would build their new regional facility in Springfield. If the City had not had desirable, serviceable land available, PeaceHealth would probably not have located their new facility in Springfield. Over the last 20 years, employment and commerce in the Gateway area has become a local and regional economic engine and major employment center. In 2006, the Gateway area had 33% of Springfield's employment (more than 9,800 employees) and 33% of payroll in the city, at \$325 million. By 2009, Gateway accounted for nearly 36% of the city's employment and \$368 million in payroll. In 2013, employment in the Gateway area accounted for 40% of employment in Springfield (more than 10,700 employees) and 43% of payroll in the city.³⁹

- *Redesignation of Smaller Sites.* Springfield's land deficit cannot be met through redesignating a surplus of small industrial- and commercial-designated sites, most of which are smaller than 2 acres. Map 2-3 shows that these sites are scattered throughout the City, generally along Main Street or in Mid- Springfield. There are few opportunities for assembly of a contiguous, unconstrained site with a configuration that makes it developable. These areas do not and are not expected to provide large sites for target employers that require large sites.

³⁹ Kim Thompson, Oregon Employment Department, "The Gateway Area & Growth in Springfield," presentation to Gateway Development Committee, October 24, 2014.

Even where small vacant sites are located adjacent to other small vacant sites, there are few places where a site larger than 5 acres could be assembled from small sites. There is probably no place where a 20-acre site could be assembled from small sites.

- *Site assembly.* Assembly of numerous small sites into 5 to 10 acre sites is difficult at best and often not feasible. Map 2-3 shows that of industrial- and commercial-designated sites are scattered throughout the City, generally along Main Street or in Mid-Springfield, and the majority of sites are smaller than 2 acres. Land assembly is difficult and often costly. Developers attempting land assembly often have difficulty assembling a site at a cost that makes development economically viable. When assembling land, developers often find that owners of key sites are not willing sellers, have unrealistic expectations of the value of their land, or cannot get agreement among multiple owners to sell the land. As a result, developers, especially developers of industrial buildings, typically choose to develop sites with one or two owners.
- *Need to expand the UGB to accommodate need for large sites.* Springfield's need for large sites cannot be met within the UGB. Meeting this need for large sites for large employers requires the City to expand its UGB into areas with suitable sites. These areas will have relatively large, flat sites with little parcelization and few owners, where businesses will have access to I-5 or a State highway.
- *Short-term land supply.* Based on the Goal 9 definition of short-term land supply and criteria for "engineering feasibility," the majority of inventoried commercial and industrial land supply within the Springfield UGB is part of the short-term land supply, assuming that funding is available to extend or increase capacity of infrastructure and urban services. The Goal 9 rule definition of short-term land supply does not account for land availability, such as whether the landowner is willing to sell it or the owner is willing to redevelop it. The Goal 9 rule definition of short-term land supply also does not account for needed site characteristics, such as site size. As a result, the City's short-term land supply as defined by Goal 9 may not be available and developers may have difficulty finding developable land with specific site characteristics.

National, State, County, and Local Trends

Appendix A

This appendix summarizes national, state, county, and local trends affecting Springfield. It presents a demographic and socioeconomic profile of Springfield (relative to Lane County and Oregon) and describes trends that will influence the potential for economic growth in Springfield. This appendix covers recent and current economic conditions in the City, and forecasts from the State Employment Department for employment growth in Lane County. This appendix meets the intent of OAR 660-009-0015(1).

NATIONAL, STATE, AND REGIONAL TRENDS

NATIONAL TRENDS

Economic development in Springfield over the next twenty years will occur in the context of long-run national trends. The most important of these trends include:

- **The aging of the baby boom generation, accompanied by increases in life expectancy.** The number of people age 65 and older will more than double by 2050, while the number of people under age 65 will grow only 22 percent. The economic effects of this demographic change include a slowing of the growth of the labor force, an increase in the demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.⁴⁰

Baby boomers are expecting to work longer than previous generations. An increasing proportion of people in their early to mid-50s expect to work full-time after age 65. In 2004, about 40% of these workers expect to work full-time after age 65, compared with about 30% in 1992.⁴¹ This trend can be seen in Oregon, where the share of workers 65 years and older grew from 2% of the workforce

⁴⁰ The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2008, *The 2008 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, April 10, 2008.

⁴¹ "The Health and Retirement Study," 2007, National Institute of Aging, National Institutes of Health, U.S. Department of Health and Human Services.

in 1992 to 3% of the workforce in 2002, an increase of 64%. Over the same ten-year period, workers 45 to 64 years increased by 70%.⁴²

- **Tightening labor force.** Growth in the labor force is projected to slow over the 2006-2016 period as a result of: (1) aging and retirement of the baby boomer generation and (2) the labor force participation by women has peaked. Job growth is expected to outpace population growth, with a 10% increase in employment (15.6 million jobs) compared to a 9% increase in civilian noninstitutional population 16 years and older (22 million people).⁴³
- **Need for replacement workers.** The need for workers to replace retiring baby boomers will outpace job growth. According to the Bureau of Labor Statistics, net replacement needs will be 33.4 million job openings over the 2006-2016 period, more than twice the growth in employment of 15.6 million jobs. Management occupations and teachers will have the greatest need for replacement workers because these occupations have older-than-average workforce.⁴⁴
- **Increases in labor productivity.** Productivity, as measured by output per hour, increased over the 1995 to 2005 period. The largest increases in productivity occurred over the 1995 to 2000 period, led by industries that produced, sold, or intensively used information technology products. Productivity increased over the 2000 to 2005 period but at a slower rate than during the latter half of the 1990's. The sectors that experienced the largest productivity increases over the 2000 to 2005 period were: Information, Manufacturing, Retail Trade, and Wholesale Trade. Productivity in mining decreased over the five-year period.⁴⁵
- **Continued trend towards domestic outsourcing.** Businesses continue to outsource work to less expensive markets. Outsourcing generally falls into two categories: (1) moving jobs from relatively expensive areas to less expensive areas within the U.S. and (2) moving jobs outside of the U.S. to countries with lower labor costs.

⁴² "Growing Numbers of Older Workers in Oregon," Oregon Employment Department.

⁴³ Arlene Dohm and Lyn Shnipper, "Occupational Employment Projections to 2016," *Monthly Labor Review*, November 2007, pp. 86-125.

⁴⁴ Arlene Dohm and Lyn Shnipper, "Occupational Employment Projections to 2016," *Monthly Labor Review*, November 2007, pp. 86-125.

⁴⁵ Corey Holman, Bobbie Joyeaux, and Christopher Kask, "Labor Productivity trends since 2000, by sector and industry," Bureau of Labor Statistics *Monthly Labor Review*, February 2008.

About three-quarters of layoffs in the U.S. between 1995 and 2004 were the result of domestic relocation, involving movement of work within the same company. The industries with the largest amounts of domestic outsourcing were: manufacturing, retail trade, and information.⁴⁶

- **Continued growth in global trade and the globalization of business activity.** With increased global trade, both exports and imports rise. Faced with increasing domestic and international competition, firms will seek to reduce costs through implementing quality- and productivity-enhancing technologies, such as robotics or factor automation. In addition, some production processes will be outsourced offshore.⁴⁷
- **Continued shift of employment from manufacturing and resource-intensive industries to the service-oriented sectors of the economy.** Increased worker productivity and the international outsourcing of routine tasks lead to declines in employment in the major goods-producing industries. Projections from the Bureau of Labor Statistics indicate that U.S. employment growth will continue to be strongest in healthcare and social assistance, professional and business services, and other service industries. Construction employment will also grow but manufacturing employment will decline.⁴⁸
- **The importance of high-quality natural resources.** The relationship between natural resources and local economies has changed as the economy has shifted away from resource extraction. Increases in the population and in households' incomes, plus changes in tastes and preferences, have dramatically increased demands for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such amenities contribute to a region's quality of life and play an important role in attracting both households and firms.⁴⁹

⁴⁶ Sharon P. Brown and Lewis B. Siegel, "Mass Layoff Data Indicate Outsourcing and Offshoring Work," *Monthly Labor Review*, August 2005, pp. 3-10.

⁴⁷ Eric B. Figueroa and Rose A. Woods, 2007, "Industry Output and Employment Projections to 2016," *Monthly Labor Review*, November 2007, pp. 53-85.

⁴⁸ Eric B. Figueroa and Rose A. Woods, 2007, "Industry Output and Employment Projections to 2016," *Monthly Labor Review*, November 2007, pp. 53-85.; Arlene Dohm and Lyn Shniper, "Occupational Employment Projections to 2016," *Monthly Labor Review*, November 2007, pp. 86-125.

⁴⁹ For a more thorough discussion of relevant research, see, for example, Power, T.M. and R.N. Barrett. 2001. *Post-Cowboy Economics: Pay and Prosperity in the New American West*. Island Press, and Kim, K.-K., D.W. Marcouiller, and S.C. Deller. 2005.

- **Continued westward and southward migration of the U.S. population.** Although there are some exceptions at the state level, a 2006 U.S. Census report documents an ongoing pattern of interstate population movement from the Northeast and Midwest to the South and West.⁵⁰
- **The growing importance of education as a determinant of wages and household income.** According to the Bureau of Labor Statistics, a majority of the fastest growing occupations will require an academic degree, and on average they will yield higher incomes than occupations that do not require an academic degree. The fastest growing of occupations requiring an academic degree will be: computer software application engineers, elementary school teachers, and accountants and auditors. Occupations that do not require an academic degree (e.g., retail sales person, food preparation workers, and home care aides) will grow, accounting for about half of all jobs by 2016. These occupations typically have lower pay than occupations requiring an academic degree.⁵¹

The national median income in 2006 was about \$32,000. Workers without a high school diploma earned \$13,000 less than the median income and workers with a high school diploma earned \$6,000 less than median income. Workers with some college earned slightly less than median and workers with a bachelor's degree earned \$13,000 more than median. Workers in Oregon experience the same patterns as the nation but pay is generally lower in Oregon than the national average.⁵²

- **Continued increase in demand for energy.** Energy prices are forecast to remain at relatively high levels, as seen in the 2006 to 2008 period, possibly increasing further over the planning period. Output from the most energy-intensive industries is expected to decline, but growth in the population and in the economy is expected to increase the total amount of energy demanded. Energy sources are expected to diversify and the energy efficiency of

"Natural Amenities and Rural Development: Understanding Spatial and Distributional Attributes." *Growth and Change* 36 (2): 273-297.

⁵⁰ Marc J. Perry, 2006, *Domestic Net Migration in the United States: 2000 to 2004*, Washington, DC, Current Population Reports, P25-1135, U.S. Census Bureau.

⁵¹ Arlene Dohm and Lyn Shniper, "Occupational Employment Projections to 2016," *Monthly Labor Review*, November 2007, pp. 86-125.

⁵² "Growing Number of Older Workers in Oregon," Oregon Employment Department and American Community Survey, U.S. Census, 2006.

automobiles, appliances, and production processes are projected to increase. Despite increases in energy efficiency and decreases in demand for energy by some industries, demand for energy is expected to increase over the 2008 to 2030 period because of increases in population and economic activity.⁵³

- **Impact of rising energy prices on commuting patterns.** Energy prices may continue to be high (relative to historic energy prices) or continue to rise over the planning period.⁵⁴ The increases in energy prices may impact willingness to commute long distances. There is some indication that increases in fuel prices have resulted in decreased suburban housing price (i.e., housing demand), especially in large urban areas (e.g., Los Angeles or Chicago) and suburbs far from the center city. If this pattern continues, the area in Oregon most likely to be most impacted is Portland, which has the largest area of urban and suburban development in the state.⁵⁵
- **Possible effect of rising transportation and fuel prices on globalization.** Increases in globalization are related to the cost of transportation: When transportation is less expensive, companies move production to areas with lower labor costs. Oregon has benefited from this trend, with domestic outsourcing of call centers and other back office functions. In other cases, businesses in Oregon (and the nation) have “off-shored” employment to other countries, most frequently manufacturing jobs.

Increases in either transportation or labor costs may impact globalization. When the wage gap between two areas is larger than the additional costs of transporting goods, companies are likely to shift operations to an area with lower labor costs. Conversely, when transportation costs increase, companies may have incentive to relocate to be closer to suppliers or consumers.

This effect occurs incrementally over time and it is difficult to measure the impact in the short-term. If fuel prices and transportation costs decrease over the planning period, businesses may not make the decision to relocate (based on transportation

⁵³ Energy Information Administration, 2008, *Annual Energy Outlook 2008 with Projections to 2030*, U.S. Department of Energy, DOE/EIA-0383(2008), April.

⁵⁴ Energy Information Administration, 2008, *Annual Energy Outlook 2008 with Projections to 2030*, U.S. Department of Energy, DOE/EIA-0383(2008), April.

⁵⁵ Cortright, Joe. “Driven to the Brink: How the Gas Price Spike Popped the Housing Bubble and devalued the Suburbs,” May 2008.

costs) because the benefits of being closer to suppliers and markets may not exceed the costs of relocation.

- **Growing opportunities for “green” businesses.** Businesses are increasingly concerned with “green” business opportunities and practices. These business practices are concerned with “the design, commercialization, and use of processes and products that are feasible and economical while reducing the generation of pollution at the source and minimizing the risk to human health and the environment.”⁵⁶

Green business opportunities have historically been at the mercy of feasibility and economics; if a firm ignores feasibility and economics while trying to be green, the firm may not be able to afford to operate long enough to learn how to make green businesses feasible. The three types of green business opportunities are products, processes, and education.

- *Producing green products.* Green products perform the function of regular products, but do it in a way that uses fewer resources or creates less pollution. For example, hybrid vehicles are green because they use less gasoline to operate and add fewer pollutants to the air. Yet hybrid vehicles serve the same function as non-hybrid cars. Another example is bamboo fencing and lumber, which is green because bamboo is more renewable than traditional lumber. Bamboo products have the strength necessary for building.
- *Providing education about green practices or products.* Green education is often closely related to producing green products and is often done by consultants or nonprofits. Examples of companies involved in green education include the U.S. Green Building Council, which certifies buildings as green (LEED certification), or a consulting firm that writes a green (or sustainable) plan for a city or business.
- *Using green business practices.* Green business practices are alternative methods of doing business that promote resource conservation, prevent or reduce pollution, or have other beneficial environmental effects. Examples of green business processes include: buying products locally to reduce shipping distance, recycling waste products (where

⁵⁶ Urban Green Partnership at urbangreenpartnership.org

possible), or maximizing the use of natural lighting to reduce use of electricity and light bulbs.

For example, ECONorthwest is a green educator because we help our clients manage natural resources effectively and take all costs and benefits of a particular action into account in order to properly judge the correct course of action. A frequent method of marketing green products involves green education. It is much easier to sell a hybrid car to a customer who knows the environmental benefits of owning a hybrid, so educating potential customers can aid greatly in increasing sales.

- **Potential impacts of global climate change.** There is growing support for but not a consensus about whether global climate change is occurring as a result of greenhouse gas emissions. There is a lot of uncertainty surrounding global climate change, including the pace of climate change and the ecological and economic impacts of climate changes. Climate change may result in the following changes in the Pacific Northwest: (1) increase in average temperatures, (2) shift in the type of precipitation, with more winter precipitation falling as rain, (3) decrease in mountain snowpack and earlier spring thaw and (4) increases in carbon dioxide in the air.⁵⁷ Assuming that global climate change is occurring and will continue to occur over the next 20-years, a few broad, potential economic impacts for the nation and Pacific Northwest include:⁵⁸
 - *Potential impact on agriculture and forestry.* Climate change may impact Oregon's agriculture through changes in: growing season, temperature ranges, and water availability.⁵⁹ Climate change may impact Oregon's forestry through increase in wildfires, decrease in the rate of tree growth, change in mix of tree species, and increases in disease and pests that damage trees.⁶⁰

⁵⁷ "Economic Impacts of Climate Change on Forest Resources in Oregon: A Preliminary Analysis," Climate Leadership Initiative, Institute for Sustainable Environment, University of Oregon, May 2007.

⁵⁸ The issue of global climate change is complex and there is a substantial amount of uncertainty about climate change. This discussion is not intended to describe all potential impacts of climate change but to present a few ways that climate change may impact the economy of cities in Oregon and the Pacific Northwest.

⁵⁹ "The Economic Impacts of Climate Change in Oregon: A preliminary Assessment," Climate Leadership Initiative, Institute for Sustainable Environment, University of Oregon, October 2005.

⁶⁰ "Economic Impacts of Climate Change on Forest Resources in Oregon: A Preliminary Analysis," Climate Leadership Initiative, Institute for Sustainable Environment, University of Oregon, May 2007.

- Potential impact on tourism and recreation. Impacts on tourism and recreation may range from: (1) decreases in snow-based recreation if snow-pack in the Cascades decreases, (2) negative impacts to tourism along the Oregon Coast as a result of damage and beach erosion from rising sea levels,⁶¹ (3) negative impacts on availability of water summer river recreation (e.g., river rafting or sports fishing) as a result of lower summer river flows, and (4) negative impacts on the availability of water for domestic and business uses.
- *Potential changes in government policies.* There is currently no substantial national public policy response to global climate change. States and regional associations of states are in the process of formulating policy responses to address climate change including: increasing renewable energy generation, selling agricultural carbon sequestration credits, and encouraging energy efficiency.⁶² Without clear indications of the government policies that may be adopted, it is not possible to assess the impact of government policies on the economy.

Global climate change may offer economic opportunities. The search for alternative energy sources may result in increased investment and employment in “green” energy sources, such as wind, solar, and biofuels. Firms in the Northwest are well positioned to lead efforts on climate change mitigation, which may result in export products, such as renewable technologies or green manufacturing.⁶³

Short-term national trends will also affect economic growth in the region, but these trends are difficult to predict. At times these trends may run counter to the long-term trends described above. A recent example is the downturn in economic activity in 2007 following declines in the housing market and the mortgage banking crisis. The result of the economic downturn has been a decrease in employment related to the housing market, such as construction and real estate. Employment in these industries will recover as the housing market recovers and will continue

⁶¹ “The Economic Impacts of Climate Change in Oregon: A preliminary Assessment,” Climate Leadership Initiative, Institute for Sustainable Environment, University of Oregon, October 2005.

⁶² Pew Center on Global Climate Change website: http://www.pewclimate.org/what_s_being_done/in_the_states/

⁶³ “The Economic Impacts of Climate Change in Oregon: A preliminary Assessment,” Climate Leadership Initiative, Institute for Sustainable Environment, University of Oregon, October 2005.

to play a significant role in the national, state, and local economy over the long run. This report takes a long-run perspective on economic conditions (as the Goal 9 requirements intend) and does not attempt to predict the impacts of short-run national business cycles on employment or economic activity.

STATE TRENDS

State and regional trends will also affect economic development in Springfield over the next twenty years. The most important of these trends includes: continued in-migration from other states, distribution of population and employment across the State,

- **Continued in-migration from other states.** Oregon will continue to experience in-migration from other states, especially California and Washington. According to a U.S. Census study, Oregon had net interstate in-migration (more people moved *to* Oregon than moved *from* Oregon) during the period 1990-2004.⁶⁴ Oregon had an annual average of 26,290 more in-migrants than out-migrants during the period 1990-2000. The annual average dropped to 12,880 during the period 2000-2004.⁶⁵ Most in-migrants come from California, Washington, and other western states.⁶⁶
- **Concentration of population and employment in the Willamette Valley.** Nearly 70% of Oregon's population lives in the Willamette Valley. About 10% of Oregon's population lives in Southern Oregon and 9% lives in Central Oregon. The Oregon Office of Economic Analysis (OEA) forecasts that population will continue to be concentrated in the Willamette Valley through 2040, increasing slightly to 71% of Oregon's population.

Employment growth generally follows the same trend as population growth. Employment growth varies between regions even more, however, as employment reacts more quickly to changing economic conditions. Total employment increased in each

⁶⁴ Marc J. Perry, 2006, *Domestic Net Migration in the United States: 2000 to 2004*, Washington, DC, Current Population Reports, P25-1135, U.S. Census Bureau.

⁶⁵ In contrast, California had net interstate *out-migration* over the same period. During 1990-2000, California had an annual average of 220,871 more out-migrants than in-migrants. The net outmigration slowed to 99,039 per year during 2000-2004.

⁶⁶ Oregon Department of Motor Vehicles collects data about state-of-origin for drivers licenses surrendered by people applying for an Oregon drivers license from out-of-state. Between 2000 and 2007, about one-third of licenses surrendered were from California, 15% to 18% were surrendered from Washington, and about 17% to 19% were from the following states: Arizona, Idaho, Nevada, Colorado, and Texas.

of the state's regions over the period 1970-2006 but over 70% of Oregon's employment was located in the Willamette Valley.

- **Change in the type of the industries in Oregon.** As Oregon has transitioned away from natural resource-based industries, the composition of Oregon's employment has shifted from natural resource based manufacturing and other industries to service industries. The share of Oregon's total employment in Service industries increased from its 1970s average of 19% to 30% in 2000, while employment in Manufacturing declined from an average of 18% in the 1970s to an average of 10% in 2005.
- **Shift in manufacturing from natural resource-based to high-tech and other manufacturing industries.** Since 1970, Oregon started to transition away from reliance on traditional resource-extraction industries. A significant indicator of this transition is the shift within Oregon's manufacturing sector, with a decline in the level of employment in the Lumber & Wood Products industry and concurrent growth of employment in other manufacturing industries, such as high-technology manufacturing (Industrial Machinery, Electronic Equipment, and Instruments), Transportation Equipment manufacturing, and Printing and Publishing.⁶⁷
- **Continued importance of manufacturing to Oregon's economy.** Revenue from exports totaled \$16.5 million in 2007, an increase of \$5.1 million or 45% since 2000. Four of the five industries that accounted for more than three-quarters of revenue from exports in 2007 (\$12.6 million) were manufacturing industries: Computers and Electronic Production (\$6.3 million); Crop Production (\$2.2 million); Transportation Equipment (\$1.7 million); Machinery Manufacturers (\$1.7 million); and Chemical Manufacturers (\$0.7 million). Manufacturing employment is concentrated in five counties in the Willamette Valley or Portland area: Washington, Multnomah, Lane, Clackamas, and Marion Counties. Average wages for employees of manufacturing firms in these counties in 2006 ranged from \$71,500 to \$34,200 and were generally above the state's average (about \$38,000)⁶⁸

⁶⁷ Although Oregon's economy has diversified since the 1970's, natural resource-based manufacturing accounts for more than one-third of employment in manufacturing in Oregon in 2006, with the most employment in Wood Product and Food manufacturing.

⁶⁸ OECD, "Economic Data Packet, March 2008."

- **Small businesses continue to account for over 50% of employment in Oregon.** Small business, with 100 or fewer employees, account for 51% of private sector employment in Oregon, up from about 50.2% of private employment in 2000 and down from 52.5% in 1996. Workers of small businesses typically had lower wages than the state average, with average wages of \$33,130 compared to the statewide average of about \$38,000 in 2006.
- **Continued lack of diversity in the State Economy.** While the transition from Lumber and Wood Products manufacturing to high-tech manufacturing has increased the diversity of employment within Oregon, it has not significantly improved Oregon's diversity relative to the national economy. Oregon's relative diversity has historically ranked low among states. Oregon ranked 35th in diversity (1st = most diversified) based on Gross State Product data for 1963–1986, and 32nd based on data for the 1977–1996 period.⁶⁹ A recent analysis, based on 2006 data, ranked Oregon 31st.⁷⁰ These rankings suggest that Oregon is still heavily dependent on a limited number of industries. Relatively low economic diversity increases the risk of economic volatility as measured by changes in output or employment.

The changing composition of employment has not affected all regions of Oregon evenly. Growth in high-tech and Services employment has been concentrated in urban areas of the Willamette Valley and Southern Oregon, particularly in Washington, Benton, and Josephine Counties. The brunt of the decline in Lumber & Wood Products employment was felt in rural Oregon, where these jobs represented a larger share of total employment and an even larger share of high-paying jobs than in urban areas.

⁶⁹ LeBre, Jon. 1999. "Diversification and the Oregon Economy: An Update." *Oregon Labor Trends*. February.

⁷⁰ CFED, 2007, The Development Report Card for the States, <http://www.cfed.org>.

ECONOMIC TRENDS IN LANE COUNTY AND SPRINGFIELD

Future economic growth in Springfield will be affected in part by demographic and economic trends in the city and surrounding region. A review of historical demographic and economic trends provides a context for establishing a reasonable expectation of future growth in Springfield. In addition, the relationship between demographic and economic indicators such as population and employment can help assess the local influence of future trends and resulting economic conditions. This section addresses the following trends in Springfield:

- Population and demographics
- Household and personal income
- Employment
- Business activity
- Outlook for growth in Springfield

POPULATION AND DEMOGRAPHIC CHARACTERISTICS

Population growth in Oregon tends to follow economic cycles. Historically, Oregon's economy is more cyclical than the nation's, growing faster than the national economy during expansions, and contracting more rapidly than the nation during recessions. Oregon grew more rapidly than the U.S. in the 1990s (which was generally an expansionary period) but lagged behind the U.S. in the 1980s. Oregon's slow growth in the 1980s was primarily due to the nationwide recession early in the decade. As the nation's economic growth has slowed during 2007, Oregon's population growth began to slow.

Oregon's population grew from 2.8 million people in 1990 to 3.7 million people in 2007, an increase of more than 900,000 people at an average annual rate of 1.6%. Oregon's growth rate slowed to 1.3% annual growth between 2000 and 2007.

Lane County grew slower than the State average between 1990 and 2007, growing at 1.1% annually and adding more than 60,000 people. More than 60% of the County's population lived in the Eugene-Springfield area in 2007, with about 17% of the County's population in Springfield. Springfield's population grew faster than the County average, at 1.5% annually, adding 12,637 residents over the seventeen-year period.

Table A-1. Population in the U.S., Oregon, the Willamette Valley, Lane County, Springfield, and Eugene, 1990-2007

Area	Population			Change 1990 to 2007		
	1990	2000	2007	Number	Percent	AAGR
U.S.	248,709,873	281,421,906	301,621,157	52,911,284	21%	1.1%
Oregon	2,842,321	3,421,399	3,745,455	903,134	32%	1.6%
Willamette Valley	1,962,816	2,380,606	2,602,790	639,974	33%	1.7%
Lane County	282,912	322,959	343,140	60,228	21%	1.1%
Springfield	44,683	52,864	57,320	12,637	28%	1.5%
Eugene	112,669	137,893	153,690	41,021	36%	1.8%

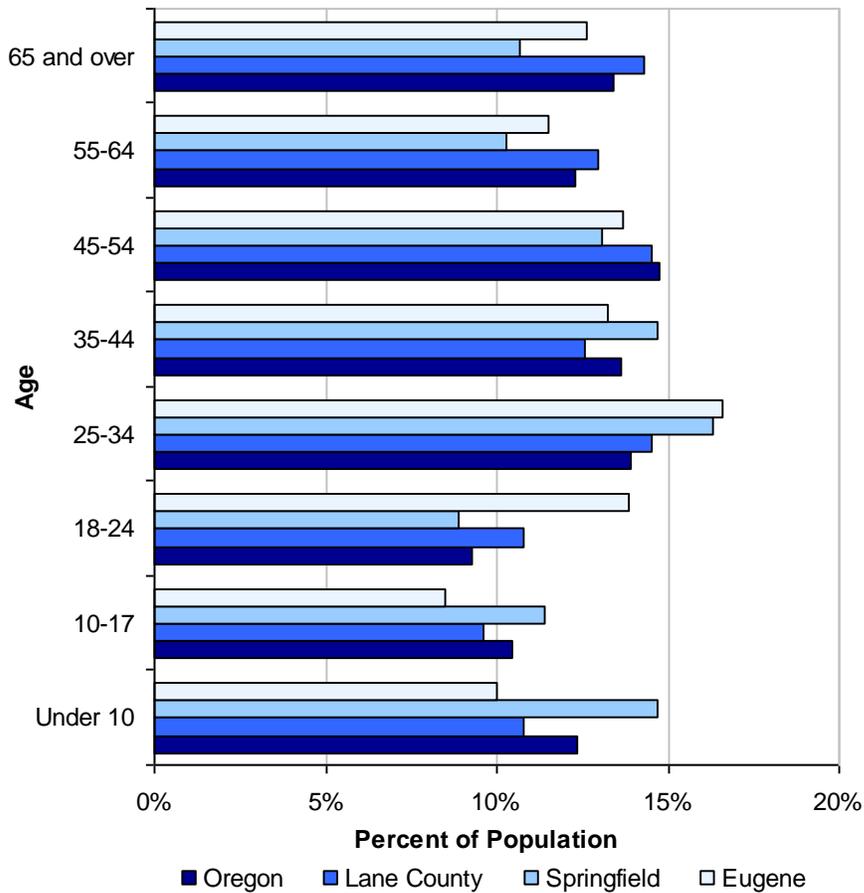
Source: U.S. Census, the Population Research Center at Portland State University.

Notes: Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties represent the Willamette Valley Region.

Migration is the largest component of population growth in Oregon. Between 1990 and 2007, in-migration accounted for 70% of Oregon's population growth. Over the same period, in-migration accounted for 74% of population growth in Lane County, adding nearly 44,500 residents over the seventeen-year period.

Springfield's population was younger than the County or State averages in 2008. Figure A-1 shows the age structure for Oregon, Lane County, Eugene, and Springfield in 2008. Springfield had a greater proportion of its population under 44 years of age (66%) than Eugene (62%), Lane County (58%), or Oregon (60%). Springfield also had a smaller share of population aged 55 and older, 21% of Springfield's population, compared to 24% in Eugene, 27% in the County, 26% in the State.

Figure A-1. Population by age, Oregon, Lane County, Eugene, and Springfield, 2008



Source: Claritas 2008, percentages calculated by ECONorthwest.

The average age of Springfield residents is increasing. According to the US Census, Springfield’s average age was 32 in 2000, 30 in 1990, and 26 in 1980. Table A-2 shows the change in age distribution for Springfield between 2000 and 2008. The age group that increased the most was people aged 45 to 64, which grew by 2,540 people (24%). This age group’s proportion of the total population increased from 20% to 23% during this time period. The largest percentage decrease was in people aged 18 to 24, which shrunk by 913 people (16%).

Table A-2. Change in age distribution, Springfield, 2000-2008

Age Group	2000		2008		Change 2000 to 2008		
	Number	Percent	Number	Percent	Number	Percent	Share
Under 5	4,327	8%	4,121	7%	-206	-5%	-0.8%
5-17	10,069	19%	10,477	19%	408	4%	-0.3%
18-24	5,890	11%	4,977	9%	-913	-16%	-2.3%
25-44	16,609	31%	17,372	31%	763	5%	-0.4%
45-64	10,546	20%	13,086	23%	2,540	24%	3.4%
65 and over	5,423	10%	5,983	11%	560	10%	0.4%
Total	52,864	100%	56,016	100%	3,152	6%	0.0%

Source: U.S. Census 2000 and Claritas 2008

Note: Percent change over the 2000 to 2008 period is based on the growth in the age group divided by the number of people in the age group in 2000. For example, people 5 to 17 years old had a 4% percent change, which was calculated using the following calculation: $408/10,069 = 4\%$.

Note: Share refers to the change in the percent of an age group between 2000 and 2008. For example, the share of people 18 to 24 years old decreased from 11% to 9%, a decrease of 2.3%.

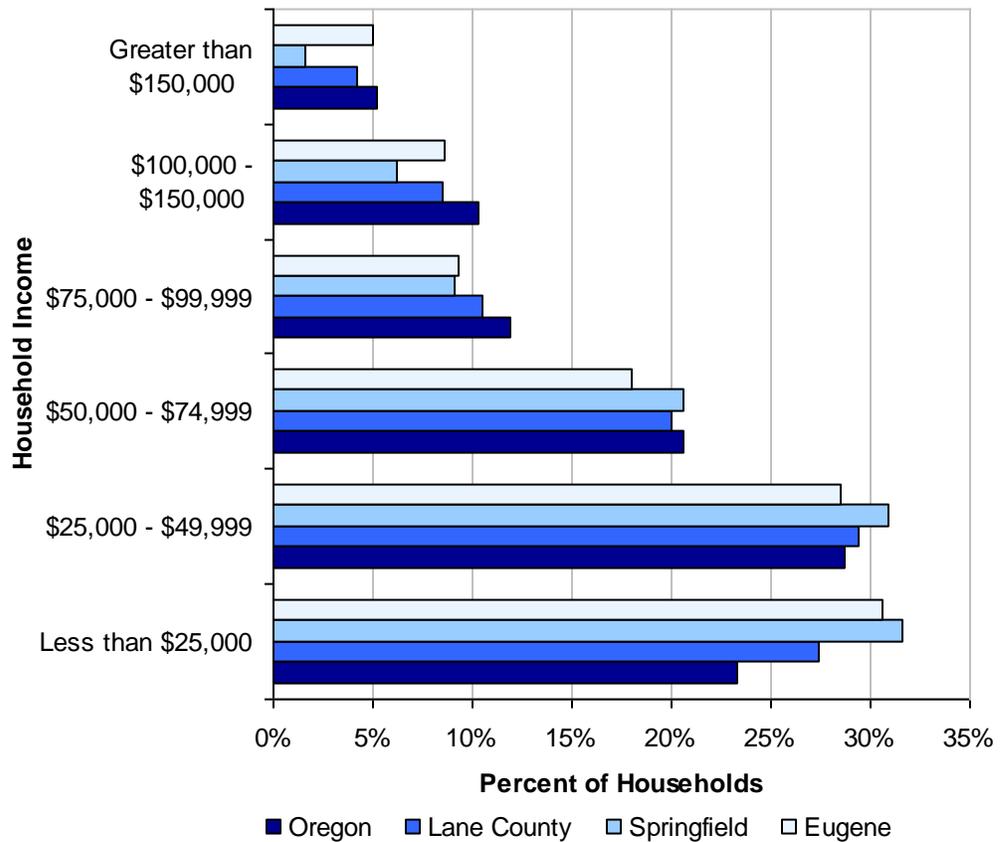
Note: Percentages may not add to 100% as a result of rounding errors.

HOUSEHOLD AND PERSONAL INCOME

Income in Lane County and Springfield has historically been lower than the State or national averages. Lane County's median household income in 2006 was \$42,127, compared with \$46,230 for Oregon and the national average of \$48,451. The median household income in Springfield in 1999 was \$33,031, 89% of the County average of \$36,942.

Lane County's median household income in 2006 was \$42,127, compared with \$46,230 for Oregon and the national average of \$48,451. Figure A-2 shows the distribution of household income in Oregon, Lane County, Eugene, and Springfield in 2008. Figure A-2 shows that a larger share of households in Springfield (32%) had an income of \$25,000 or less, compared to Lane County (27%) or the State (23%). Springfield also has a lower share of households with income above \$75,000 (17%) than Eugene (23%), the County (23%), or the State (27%).

Figure A-2. Distribution of household income of Oregon, Lane County, Eugene, and Springfield, 2008

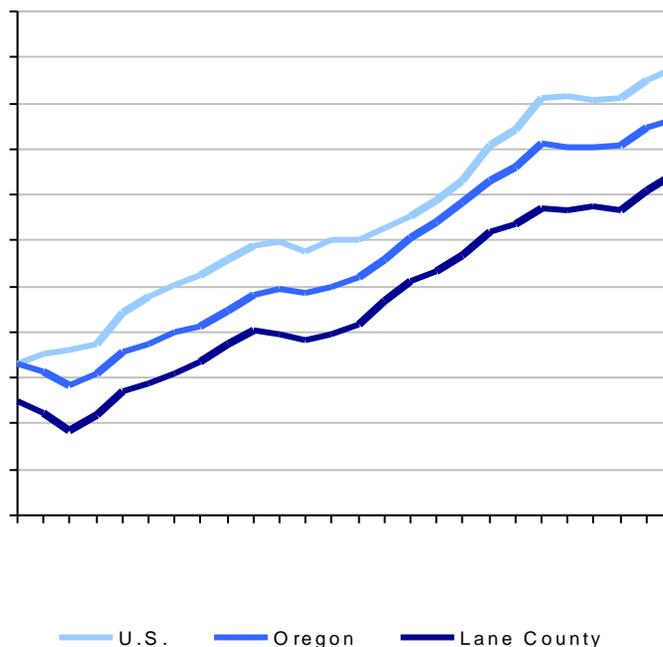


Source: Claritas 2008

Figure A-3 shows the change in per capita personal income for the U.S., Oregon, and Lane County between 1980 and 2005 (in constant 2005 dollars). Oregon’s per capita personal income was consistently lower than the U.S. average over the 25-year period. While the gap between the Oregon and U.S. average narrowed in the mid-1990s, it widened again starting in the late 1990’s.

Lane County’s personal income over the 25-year period was consistently lower than Oregon’s personal income. In 2005, per capita personal income in Lane County was approximately 92% of Oregon’s per capital income and 87% of the U.S. per capital income. During the 25-year period, per capita personal income in both Lane County and Oregon grew by 49%, while personal income grew by 59% nationally during the same period.

Figure A-3. Per capita personal income in the U.S., Oregon, and Lane County, 1980-2005, (\$2005)

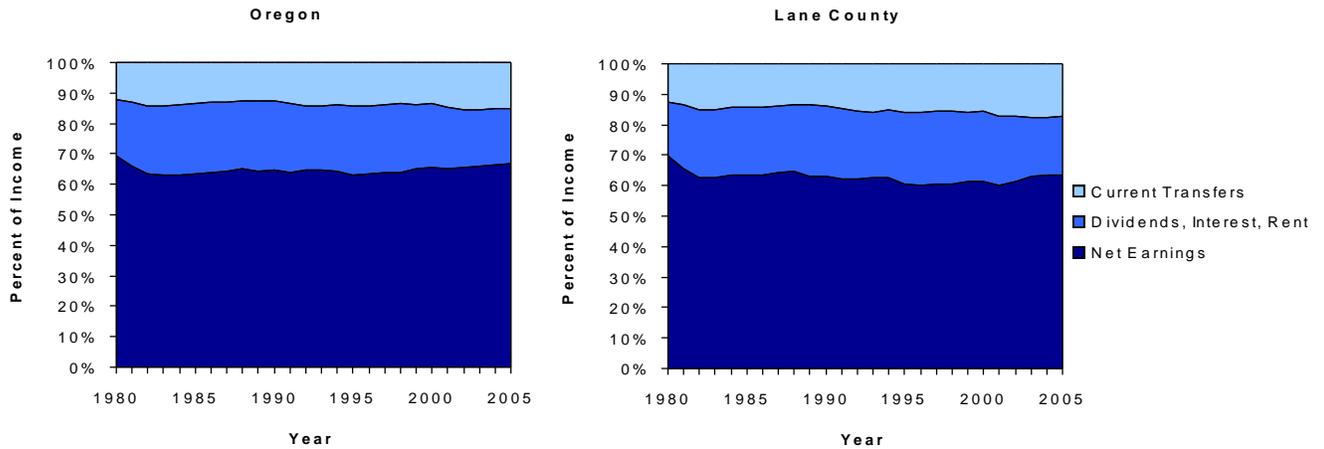


Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce

Figure A-4 shows the major sources of per capita personal income for Oregon and Lane County between 1980 and 2005. Lane County's share of personal income from net earnings was lower than for Oregon and the County's share of personal income from transfer payments and dividends, interest, and rent was higher than the State average.

Retirees are most likely to have personal income from current transfers and dividends, interest, and rent. The larger share of personal income from these sources makes sense because Lane County has a larger share of people over 60-years than the State average. Figure A-1 shows that Lane County has a higher percentage of residents over 60 years old than the State average. In addition, the share of population aged 65 and older increased by 16% between 1990 and 2000 in Lane County, compared with a 12% statewide increase in population 65 and older.

Figure A-4. Per capita personal income by major sources, Oregon and Lane County, 1980-2005



Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce

Table A-3 shows average annual pay per employee in the U.S., Oregon, and Lane County for 2000 to 2006. The national average wage grew faster than State or County averages. The average U.S. wage increased by 20% (more than \$7,000), compared to the State increase of 16% (more than \$5,000) or the County increase of 19% (more than \$5,000). Wages in Lane County relative to the U.S. decreased by 1% over the six-year period.

Lane County's average annual wage has increased by 19% (more than \$5,000) from \$27,878 to \$33,240 over the 2000 to 2006 period. Lane County's average pay has grown faster than the State average, increasing from 85% of the State average in 2000 to 87% in 2006.

Table A-3. Average annual pay, Oregon and Lane County (nominal dollars), 2000-2006

	U.S.	Oregon	Lane County	Lane County	
				% of U.S.	% of State
2000	\$35,323	\$32,776	\$27,878	79%	85%
2001	\$36,219	\$33,202	\$28,982	80%	87%
2002	\$36,764	\$33,685	\$29,427	80%	87%
2003	\$37,765	\$34,455	\$30,325	80%	88%
2004	\$39,354	\$35,627	\$31,339	80%	88%
2005	\$40,677	\$36,593	\$32,302	79%	88%
2006	\$42,535	\$38,070	\$33,240	78%	87%
Change 2000 to 2006					
Nominal Change	\$7,212	\$5,294	\$5,362		
Percent Change	20%	16%	19%		

Source: Oregon Employment Department and U.S. Bureau of Labor Statistics

Springfield's average wages are similar to the County average. The average wage for workers in Springfield in 2006 was nearly \$33,000.

LANE COUNTY EMPLOYMENT TRENDS

Tables A-4 and A-5 present data from the Oregon Employment Department that show changes in covered employment⁷¹ for Lane County between 1980 and 2005. The changes in sectors and industries are shown in two tables: (1) between 1980 and 2000 and (2) between 2001 and 2005. The analysis is divided in this way because of changes in industry and sector classification that made it difficult to compare information about employment collected after 2001 with information collected prior to 2000.

Employment data in this section is summarized by *sector*, each of which includes several individual *industries*. For example, the Retail Trade sector includes General Merchandise Stores, Motor Vehicle and Parts Dealers, Food and Beverage Stores, and other retail industries.

Table A-4 shows the changes in covered employment by sector in Lane County between 1980 and 2000. Covered employment in the County grew from 97,600 to 139,696, an increase of 43% or 42,096 jobs. Every sector added jobs during this period, except for Mining. The sectors with the greatest change in employment were Services and Retail Trade, adding a total of 29,423 jobs or about 70% of all new jobs.

Manufacturing grew by 4,020 jobs during the twenty-year period. The industries with the largest manufacturing growth were Transportation equipment manufacturing (R.V. manufacturing), computer and electronics manufacturing, and machinery manufacturing.

Average pay per employee increased from about \$13,700 in 1980 to \$27,900 in 2000. The sectors that grew the fastest generally paid less than average, with Services paying between 80% to 90% of average and Retail Trade paying about 60% of average. Manufacturing jobs generally paid more than the average, varying between 140% of average in 1980 to 124% of average by 2000.

⁷¹ Covered employment refers to jobs covered by unemployment insurance, which includes most wage and salary jobs but does not include sole proprietors, seasonal farm workers, and other classes of employees.

Table A-4. Covered employment in Lane County, 1980-2000

Sector	1980	1990	2000	Change 1980 to 2000		
				Difference	Percent	AAGR
Agriculture, Forestry & Fishing	1,137	1,863	2,101	964	85%	2.5%
Mining	231	179	154	-77	-33%	-1.6%
Construction	4,600	3,992	6,834	2,234	49%	1.6%
Manufacturing	19,638	20,654	23,658	4,020	20%	0.7%
Trans., Comm., & Utilities	3,836	3,750	3,845	9	0%	0.0%
Wholesale Trade	5,578	5,900	6,422	844	15%	0.6%
Retail Trade	20,299	24,429	28,758	8,459	42%	1.4%
Finance, Insurance & Real Estate	4,217	4,523	6,198	1,981	47%	1.6%
Services	18,272	27,817	39,236	20,964	115%	3.1%
Nonclassifiable/all others	13	50	37	24	185%	4.3%
Government	19,779	20,219	22,453	2,674	14%	0.5%
Total	97,600	113,376	139,696	42,096	43%	1.4%

Source: Oregon Employment Department, Oregon Labor Market Information System, Covered Employment & Wages. Summary by industry and percentages calculated by ECONorthwest
Note: AAGR is average annual growth rate

Table A-5 shows the change in covered employment by sector for Lane County between 2001 and 2007. Employment increased by 13,549 jobs or 10% during this period. The private sectors with the largest increases in numbers of employees were Administration Support and Cleaning, Retail Trade, Construction, and Health and Social Assistance. The sector that lost the greatest number of employees during this period was Agriculture, Forestry, Fishing and Mining.

Table A-5. Covered employment in Lane County, 2001-2007

Sector	2001	2007	Change 2001 to 2007		
			Difference	Percent	AAGR
Natural Resources and Mining	2,338	2,062	-276	-12%	-2.1%
Construction	6,366	8,034	1,668	26%	4.0%
Manufacturing	19,697	19,864	167	1%	0.1%
Wholesale	5,300	6,071	771	15%	2.3%
Retail	17,912	19,755	1,843	10%	1.6%
Transportation & Warehousing	2,606	3,047	441	17%	2.6%
Information	3,729	3,901	172	5%	0.8%
Finance & Insurance	3,963	4,313	350	9%	1.4%
Real Estate Rental & Leasing	2,508	2,530	22	1%	0.1%
Professional, Scientific & Tech. Srv.	5,571	5,658	87	2%	0.3%
Management of Companies	1,818	1,901	83	5%	0.7%
Admin. Support & Cleaning Srv.	6,399	8,738	2,339	37%	5.3%
Education	1,067	1,389	322	30%	4.5%
Health & Social Assistance	16,871	18,966	2,095	12%	2.0%
Arts, Entertainment & Recreation	1,542	2,163	621	40%	5.8%
Accommodations & Food Services	11,746	12,737	991	8%	1.4%
Other Services (except Public Admin.)	5,552	5,674	122	2%	0.4%
Private Non-Classified	49	45	-4	-8%	-1.4%
Government	22,398	24,133	1,735	8%	1.3%
Total	137,432	150,981	13,549	10%	2.4%

Source: Oregon Employment Department, Oregon Labor Market Information System, Covered Employment & Wages. Summary by industry and percentages calculated by ECONorthwest
Note: AAGR is average annual growth rate

Table A-6 shows a summary of employment in Lane County in 2007. Table A-6 shows the ten largest sectors in **bold** are the top ten employers, sectors with below average pay per employee in **red**, and sectors with above average pay per employee in **blue**. Table A-6 shows:

- Construction, Manufacturing, Government, and Health and Social Assistance were among the sectors with the greatest employment in Lane County and have above average pay per employee. These sectors accounted for 47% of employment or nearly 71,000 employees in Lane County.
- Retail, Accommodations and Food Services, and Administration and Support and Waste Management were among the sectors with the greatest employment in Lane County and have below average pay per employee. These sectors accounted for 27% of employment or more than 41,000 employees in Lane County.

Table A-6. Covered employment in Lane County, 2007

Sector/Industry	Establish- ments	Employment	Percent of Employment	Average Pay per Employee
Natural Resources & Mining	228	2,062	1%	\$34,662
Construction	1,249	8,034	5%	\$41,346
Construction of buildings	445	445	0%	\$445
Specialty trade contractors	695	695	0%	\$695
Manufacturing	599	19,864	13%	\$41,055
Wood product manufacturing	76	4,548	3%	\$42,423
Machinery manufacturing	51	1,816	1%	\$48,027
Computer & electronic product mfg.	20	1,934	1%	\$56,594
Transportation equipment mfg.	31	4,093	3%	\$31,942
Wholesale	588	6,071	4%	\$44,609
Retail	1,276	19,755	13%	\$24,258
Motor vehicle & parts dealers	159	2,997	2%	\$39,809
Building material & garden supply stores	85	1,603	1%	\$27,883
Food & beverage stores	205	4,044	3%	\$20,451
General merch&ise stores	58	4,073	3%	\$21,784
Miscellaneous store retailers	174	1,455	1%	\$20,513
Transportation, Warehousing & Utilities	267	3,047	2%	\$37,448
Information	180	3,901	3%	\$50,769
Finance & Insurance	611	4,313	3%	\$49,753
Credit intermediation & related activities	252	252	0%	\$252
Insurance carriers & related activitie	230	230	0%	\$230
Real Estate Rental & Leasing	566	2,530	2%	\$25,994
Professional, Scientific & Technical Svcs	1,004	5,658	4%	\$41,314
Management of Companies	87	1,901	1%	\$66,758
Admin. & Support & Waste Mgmt	484	8,738	6%	\$21,771
Private Education	135	1,389	1%	\$23,709
Health & Social Assistance	971	18,966	13%	\$39,836
Ambulatory health care services	598	6,453	4%	\$52,408
Nursing & residential care facilities	181	3,915	3%	\$22,013
Arts, Entertainment & Recreation	151	2,163	1%	\$13,533
Accommodations & Food Services	861	12,737	8%	\$13,749
Accommodation	100	100	0%	\$100
Food services & drinking places	734	734	0%	\$734
Other Services	1,322	5,674	4%	\$22,345
Repair & maintenance	309	309	0%	\$309
Membership associations & organization	437	437	0%	\$437
Private Non-Classified	66	45	0%	\$41,167
Government	376	24,133	16%	\$39,312
Federal	70	1,764	1%	\$57,977
State	61	6,878	5%	\$39,498
Local	245	15,491	10%	\$37,105
Education & Health Services	147	8,547	6%	\$31,343
Public Administration	49	4,268	3%	\$47,464
Total	11,021	150,981	100%	\$34,328

Source: Oregon Employment Department, Oregon Labor Market Information System, Covered Employment & Wages. Summary by industry and percentages calculated by ECONorthwest

Notes: Sectors in **bold** are the top ten employers, sectors in **red** have below average pay per employee, and sectors in **blue** have above average pay per employee.

Note: Average pay per employee is shown as reported by the Oregon Employment Department.

EMPLOYMENT IN SPRINGFIELD

Table A-7 shows a summary of confidential employment data for Springfield in 2006. Springfield had 27,310 jobs at 1,819 establishments in 2006, with an average firm size of 15 employees. The sectors with the greatest employees were: Retail (13%), Government (13%), Health Care and Social Assistance (11%), and Manufacturing (10%). These sectors accounted for 17,863 or 65% of Springfield's jobs.

Table A-7. Covered employment in Springfield, 2006

Sector / Industry	Establish- ments	Employees	
		Number	% of Total
Agriculture, Forestry, Fishing, and Mining	22	282	1%
Forestry and Logging	11	136	0%
Other Agriculture, Forestry, Fishing, and Mining	11	146	1%
Construction	205	1,922	7%
Manufacturing	104	2,714	10%
Wood Product Manufacturing	18	1,013	4%
Chemical Manufacturing	3	251	1%
Fabricated Metal Product Manufacturing	18	233	1%
Transportation Equipment Manufacturing	7	188	1%
Food Manufacturing	6	111	0%
Plastics and Rubber Products Manufacturing	6	111	0%
Furniture and Related Product Manufacturing	9	80	0%
Machinery Manufacturing	7	68	0%
Other Manufacturing	30	659	2%
Wholesale Trade	71	1,230	5%
Retail	265	3,632	13%
General Merchandise Stores	24	1,008	4%
Food and Beverage Stores	42	744	3%
Motor Vehicle and Parts Dealers	35	339	1%
Building Material, Garden Equipment, & Supplies Dealers	15	278	1%
Electronics and Appliance Stores	16	210	1%
Other Retail	133	1,053	4%
Transportation and Warehousing and Utilities	55	941	3%
Information	24	1,356	5%
Finance and Insurance	99	1,110	4%
Real Estate and Rental and Leasing	98	441	2%
Professional, Scientific, and Technical Services	97	576	2%
Management of Companies and Enterprises	24	343	1%
Admin. & Support and Waste Mgt Services	82	2,460	9%
Private Educational Services	12	109	0%
Health Care and Social Assistance	167	3,069	11%
Arts, Entertainment, and Recreation	30	321	1%
Accommodation and Food Services	179	2,453	9%
Accommodation	12	227	1%
Food Services and Drinking Places	167	2,226	8%
Other Services	217	816	3%
Government	68	3,535	13%
Federal and State	13	368	1%
Local	55	3,167	12%
Total	1,819	27,310	100%

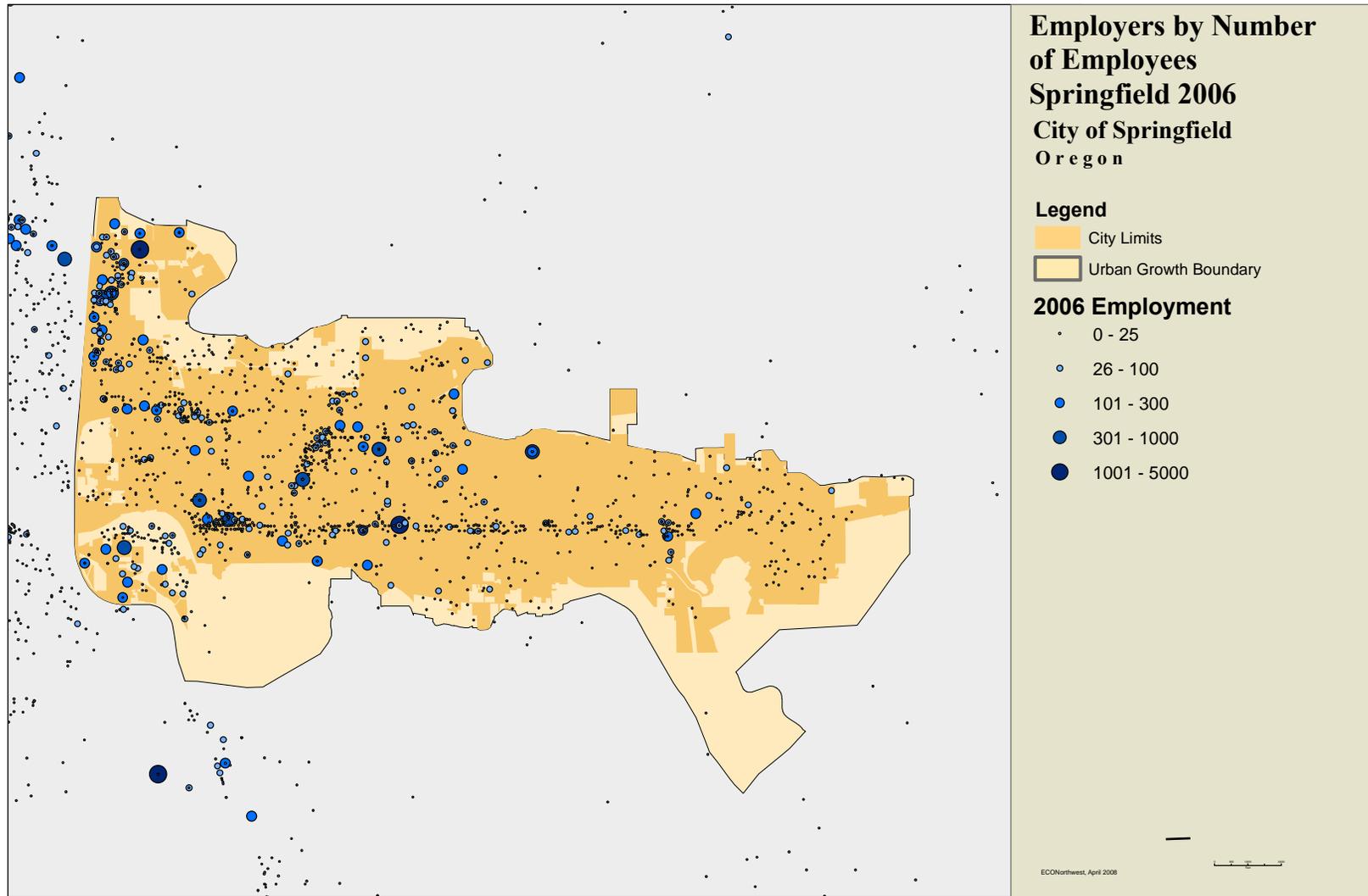
Source: Oregon Employment Department Quarterly Census of Employment and Wages (QCEW). Summary by industry and percentages calculated by ECONorthwest

Note: The percent column does not add to 100% as a result of rounding errors.

Map A-1 shows employment in Springfield by plan designations and number of employees in 2006. Map A-1 shows that employees are distributed throughout Springfield, with concentrations along Main Street and in Gateway.

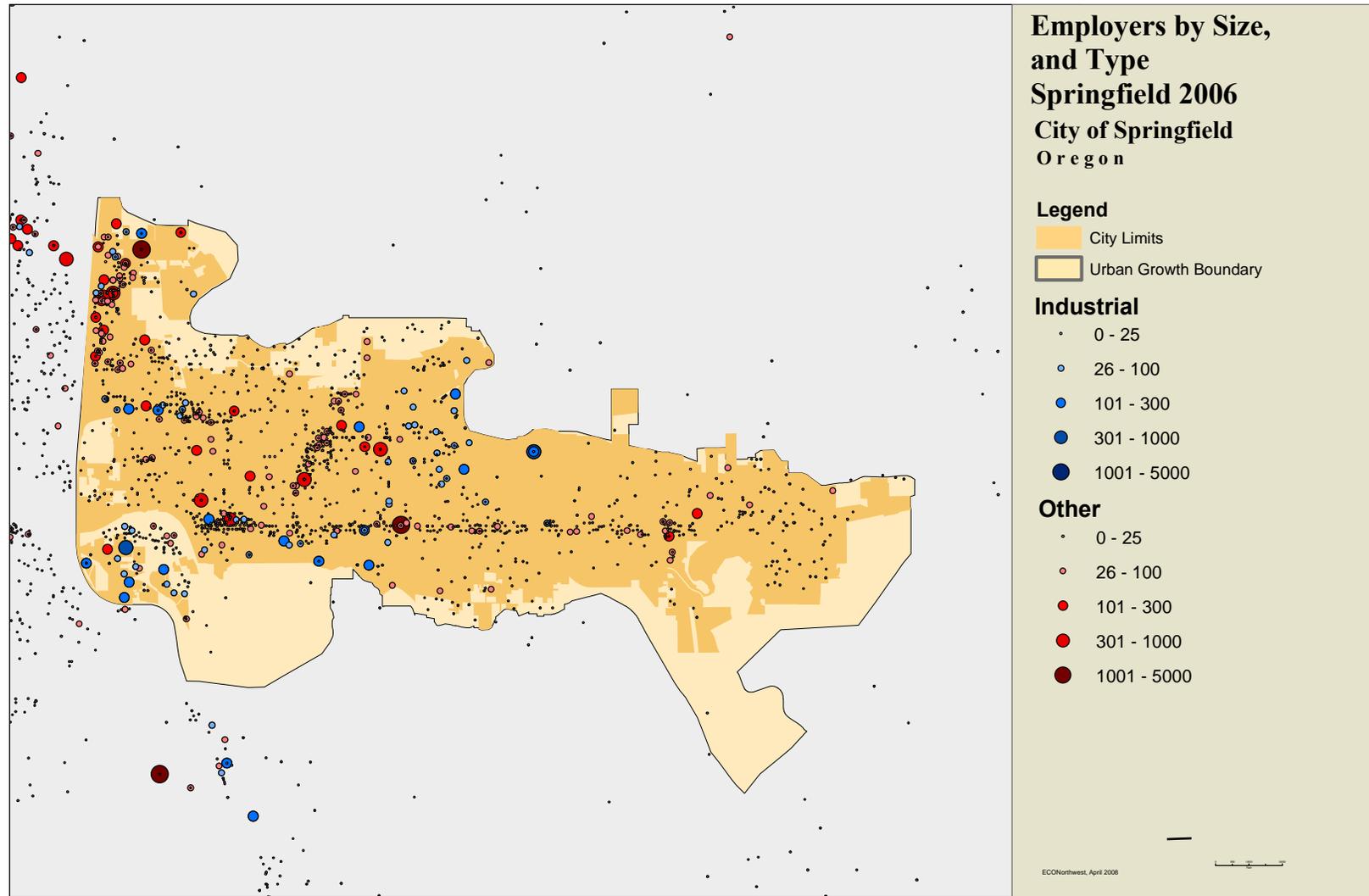
Map A-2 shows the size of employers in Springfield by Plan Designation. Larger employers are clustered along Main Street, in Gateway, and in other areas zoned for commercial and industrial use. Small employers are scattered in most parts of the City.

Map A-1. Employment by Employer Size, 2006



Source: Oregon Employment Department Quarterly Census of Employment and Wages (QCEW and Springfield GIS data).

Map A-2. Employment by Size and Employer Type, 2006



Source: Oregon Employment Department Quarterly Census of Employment and Wages (QCEW and Springfield GIS data).

Firms wanting to expand or locate in Springfield will be looking for a variety of site and building characteristics, depending on the industry and specific circumstances. One way to describe site needs is to group industries based on building and site characteristics. This is consistent with how real estate markets work for urban development – demand for land is derived from demand for space. The type of building and industry is then related to land characteristics needed (e.g., site needs) to accommodate that industry. For this analysis, ECO relates industries by NAICS codes to building types which are used as a proxy for site needs. Each sector has been uniquely assigned to a “typical” building type, grouped by industrial and commercial uses.

Table A-8. Converting employment to building types

Building Type	Types of industries	NAICS Sectors
Industrial		
W D	Warehousing & Distribution	Transportation & Wholesale Trade
		48-49, 42
		11, 21, 22,
GI	General Industrial	Ag, Mining, Utilities, Construction, Manufacturing
		23, 31-33
Commercial		
Office	Office	Information, FIRE, Professional Srv, Mgt of Companies, Adm in & Support & Waste Mgt, Utilities, Arts/Entertainment, Other Services
		51-56, 71, 81
Retail	Retail	Retail (incl. Accom & Food Srv)
		44-45, 72
Med/Gov.	Medical & Government Institutions	Health & Social Services, Public Administration
		61, 62, 92

Source: ECONorthwest based on methodology used by Metro in the report “Urban Growth Report: An Employment Need Analysis,” 2002

Table A-9 shows employment by Comprehensive Plan Designation in 2006. About 39% of Springfield’s employment is located in commercial plan designations, with more than 8,000 employees in the Commercial designation. An additional 34% of the City’s employment is located in industrial designations. About 16% of Springfield’s employment is located in residential designations with 10% in the Low Density Residential designation.

Table A-9. Covered employment by Plan Designation, Springfield, 2006

Plan Designation	Industrial		Commercial		Total	
	Emp.	Percent	Emp.	Percent	Emp.	Percent
Commercial						
Commercial	450	5.7%	7,649	39.8%	8,099	29.9%
Major Retail Center	20	0.3%	2,316	12.1%	2,336	8.6%
Subtotal	470	6.0%	9,965	51.9%	10,435	38.5%
Government						
Government & Education	67	0.9%	660	3.4%	727	2.7%
Industrial						
Campus Industrial	274	3.5%	2,142	11.1%	2,416	8.9%
Heavy Industrial, Special Heavy Industrial, and Sand and Gravel	2,908	36.9%	304	1.6%	3,212	11.7%
Light Medium Industrial	3,032	38.5%	645	3.4%	3,677	13.6%
Subtotal	6,214	78.9%	3,091	16.1%	9,305	34.3%
Mixed-Use						
Commercial Mixed Use	318	4.0%	1,450	7.5%	1,768	6.5%
Light Med Ind Mixed Use and Medium Density Res Mixed	113	1.4%	169	0.9%	282	0.7%
Subtotal	431	5.5%	1,619	8.4%	2,050	7.6%
Residential						
High Density Residential	0	0.0%	456	2.4%	456	1.7%
Low Density Residential	592	7.5%	2,093	10.9%	2,685	9.9%
Medium Density Residential	100	1.3%	1,082	5.6%	1,182	4.4%
Subtotal	692	8.8%	3,631	18.9%	4,323	16.0%
Other						
Parks and Open Space	0	0.0%	250	1.3%	250	0.9%
TOTAL	7,874	100.0%	19,216	100.0%	27,090	100.0%

Source: Oregon Employment Department Quarterly Census of Employment and Wages (QCEW) and Springfield GIS data; calculations and analysis by ECONorthwest

Note: The number of employees shown in Table A-9 (27,090) is fewer than shown in Table A-7 (27,310) because of data issues between the QCEW and GIS data.

Table A-10 shows the estimated covered employment located in non-residential plan designations by type of building in Springfield in 2006. More than half of Springfield's employment in 2006 was located in Office and Retail buildings. More than two-thirds of Springfield's firms were located in Office and Retail buildings.

Table A-10. Estimated covered employment in non-residential plan designations by type of building, Springfield, 2006

Building Type	Employees		Firms	
	Number	Percent	Number	Percent
W D	2,457	11%	50	8%
G I	4,336	20%	101	17%
Office	6,212	28%	192	31%
Retail	5,500	25%	220	36%
Med/Gov	3,604	16%	49	8%
Total	22,109	100%	612	100%

Source: ECONorthwest based on QCEW data

Table A-11 shows the distribution of employees by building type and site size in non-residential plan designations in Springfield in 2006. About 22% of Springfield's employment is on sites 5 to 20 acres, 21% is on sites less than 1-acre, and 19% is on sites greater than 50 acres.

Table A-11. Percent of employees by building type and site sizes, Springfield, 2006

Building Type	Site Size (acres)						Total Employees
	Less than 1	1 to 2	2 to 5	5 to 20	20 to 50	Greater than 50	
W D	13%	6%	3%	63%	12%	3%	100%
G I	15%	17%	17%	18%	2%	31%	100%
Office	28%	14%	15%	23%	13%	8%	100%
Retail	29%	13%	11%	18%	10%	18%	100%
Med/Gov	9%	4%	8%	5%	35%	38%	100%
Total	21%	12%	12%	22%	13%	19%	100%

Source: ECONorthwest based on QCEW data

Note: Total Employees may not add to 100% because of rounding errors.

The percent of employees by building type and site size was calculated based on the number of employees in each building type and site size categories using QCEW data and City of Springfield tax lot data.

BUSINESS CLUSTERS

One way to assess the types of businesses that are likely to have future growth in an area is to examine relative concentration and employment growth of existing businesses. This method of analysis can help determine relationships and linkages within in industries, also called industrial clusters. Sectors that are highly concentrated (meaning there are more than the "average" number of businesses in a sector in a given area) and have had high employment growth are likely to be successful industrial cluster. Sectors with either high concentration of businesses or high employment group may be part of an emerging cluster, with potential for future growth.

The Oregon Economic and Community Development Department (OECD) prepared a report titled "Oregon's Traded Clusters: Major Industries and Trends." This report identified 25 clusters in Lane County.

- **Business Services.** This cluster is dominated by Professional, Scientific, and Technical Services and Employment Services. The average annual wage varies by sector, with the highest pay in Professional, Scientific, and Technical Services (about \$51,800). Employment growth in these industries was moderate to fast between 2003 and 2005. Business Services firms may be attracted to Springfield as a result of firms located in Springfield, the availability of educated workers within the region, and the high quality of life and access to recreation in Springfield.
- **Communication Equipment** This cluster includes manufacturing and wholesaling of computer, communications, and audio and video equipment. Lane County has clusters of both manufacturing and wholesaling communication equipment but the manufacturing cluster is bigger in the County. Employment growth in the cluster was fastest in computer and peripheral manufacturing between 2003 and 2005. The average annual wage in this sector is higher than the State average, at \$68,076. Firms in this cluster may be attracted to Springfield as the City's location and access to transportation, the availability of educated workers within the region, and the high quality of life and access to recreation in Springfield.
- **Information Technology.** This cluster includes Telecommunications, Software Publishers, and Internet Service Providers. The average annual wage was above State averages. Growth in the cluster varied between 2003 and 2005, with a decrease in Telecommunications employment and increases in employment with Internet Service Providers. Information Technology firms may be attracted to Springfield because of the availability of educated workers within the region and the high quality of life and access to recreation in Springfield. Springfield may be attractive as a location to outsource back-office functions for larger Information Technology firms.
- **Logistics and Distribution.** This cluster includes truck transportation and warehousing. This cluster grew during the 2003-2005 period, with the greatest growth in Truck Transportation. Wages in this cluster were similar to State averages. Firms in this cluster may be attracted to Springfield as the City's location relative

to other cities in the Willamette Valley and Oregon and the access to transportation via I-5 and Highway 126.

- **Medical products.** This cluster includes medical and equipment supplies manufacturing. This sector has higher than average wages and had moderate employment growth during the 2003 to 2005 period. Firms may be attracted to Springfield as a result of firms located in Springfield, the availability of educated workers within the region, and the high quality of life and access to recreation in Springfield.
- **Metals and Related Products.** This cluster includes metals manufacturing, including Fabricated Metals Manufacturing and Primary Metals Manufacturing. Although employment decreased in this cluster over the 2003-2005 period, Lane County has the largest cluster of Metal Wholesalers outside of the Portland metropolitan area. Wages in this cluster were general at or above State averages. Firms may be attracted to Springfield as a result of existing businesses and the availability of labor.
- **Processed Foods and Beverages.** This cluster includes manufacturing of food and beverages. Employment in this cluster decreased over the 2003-2005 period and average wages in this cluster are at or below State averages. Firms may be attracted to Springfield as a result of the City's proximity to food growers and the availability of labor.
- **Wood and Other Forest Products.** This cluster includes wood product manufacturing, logging, paper making, and support activities. The average annual wage was below State averages and employment grew slowly within the cluster over the 2003-2005 period. Firms may be attracted to Springfield as a result of the City's proximity to natural resources and the availability of labor.

Table A-12 shows potential growth sectors in Springfield, based on existing concentrations of employment and the Oregon Employment Department's (OED) forecast for employment growth over the 2006-2016 period. Sectors with high employment concentration and high growth forecasts are the industries most likely to grow. These sectors are: Health and Social Assistance; Administrative and Support and Waste Management Services; Construction; and Accommodations and Food Services.

Springfield may have opportunities for growth in sectors that the OED forecasts will have high growth but Springfield does not currently have

high concentrations in: Arts, Entertainment, and Recreation; Management of Companies and Enterprises; Professional, Scientific, and Technical Services; and Private Educational Services.

Table A-12. Potential growth of industries in Springfield

Low Employment Growth Projection for Lane County	High Employment Growth Projection for Lane County
High Employment Concentration in Springfield (relative to Oregon)	
Information	Health Care & Social Assistance
Finance & Insurance	Admin. & Support & Waste Mgt Srv.
Transportation, Warehousing & Utilities	Construction
Real Estate & Rental & Leasing	Accommodation & Food Srv.
Wholesale Trade	
Low Employment Concentration in Springfield (relative to Oregon)	
Government	Arts, Entertainment, & Recreation
Other Srv.	Management of Companies & Enterprises
Manufacturing	Professional, Scientific, & Technical Srv.
Retail	Private Educational Srv.
Agriculture, Forestry, Fishing, & Mining	

Source: Oregon Employment Department; calculations by ECONorthwest

REGIONAL BUSINESS ACTIVITY

Springfield exists within with Eugene-Springfield regional economy. Springfield is able to attract labor from across the region, Springfield employers and residents benefit from training opportunities present in Eugene (e.g., the University of Oregon and Lane Community College), and Springfield businesses and residents are effected by economic activity within the region. This section presents the large-scale regional business activities.

- Peace Health at RiverBend.** Peace Health has built a new hospital complex at RiverBend and will complete the transition of staff from the University District facility to RiverBend by the end of Sept. 2008. The RiverBend campus will have 2,500 PeaceHealth employees, in occupations including: physicians, nurses, medical technicians, other medical staff, environmental services staff, and food services staff. PeaceHealth started relocating administrative and other staff to the RiverBend Annex in 2006, which has 700 employees.

The RiverBend campus will attract additional firms. For example, Oregon Medical Labs, Oregon Imaging Center, and the Northwest Specialty Clinics will have approximately 350 staff and physicians at the RiverBend campus. The RiverBend Pavilion will have about 300 employees, at the Oregon Medical Group, Oregon Imaging, and other medical businesses.

PeaceHealth plans to further develop the RiverBend campus to include a wide range of uses: a mixture of housing types, office and commercial support services, retail, and educational and research functions to support collaborations with Oregon Health Services University and the University of Oregon. Studies for the RiverBend master plan indicated that there may be demand for additional office development (400,000-500,000 square feet) and commercial retail services (50,000 to 70,000 square feet).

- **Manufacturing.** Manufacturing is important to the economy in Springfield and in Lane County. Manufacturing accounted for 14% of employment (more than 20,000 jobs) in Lane County and 10% of employment (more than 2,700 jobs) in Springfield in 2006.⁷²

Manufacturing is a traded sector industry, which brings revenue into Oregon and Lane County from outside the State. The following manufacturing industries accounted for two-thirds (\$11 billion) of revenue from exports in Oregon in 2007: Computer & Electronic Production, Transportation Equipment, Machinery Manufacturers, Chemical Manufacture, and Primary Metal Manufacturers.⁷³ These industries are all present in Lane County, accounting for 44% of manufacturing employment in the County. Other export industries with substantial employment in Lane County are: Woods Products Manufacturing, Food Manufacturing, and Fabricated Metal Product Manufacturing.⁷⁴

- **Recreational Vehicles.** Lane County has a cluster of recreational vehicles (RVs) manufacturers and retailers. Two of Lane County's largest manufacturers are Monaco Coach and County Coach. Employment in RV manufacturing has declined since 2006 as a result of declining demand for RVs due, in part, to increases in gasoline costs. High energy costs may continue to depress demand for RVs, at least in the next two to five years.
- **Wood Products and Paper Manufacturing.** Manufacturing timber-related products has historically been a source of

⁷² Oregon Employment Department

⁷³ "Economic Data Packet, Mary 2008," Oregon Economic And Community Development Department

⁷⁴ Oregon Employment Department

employment and exports in Lane County. Employment in these industries has declined since the 1980's but continues to account for more than one-quarter of manufacturing employment in Lane County in 2006. Continued changes create uncertainty for future employment in these industries. For example, Weyerhaeuser, one of Lane County's largest employers, announced in March 2008 that it was selling several facilities in Oregon and Lane County to International Paper Corporation. It is unclear whether and how this sale will impact employment in paper manufacturing.

- **Call centers.** The trend towards domestic outsourcing of back-office functions has lead several companies to locate call centers in the Eugene-Springfield area. The largest among these call centers is Symantec, located in Springfield. Other recent call centers to locate in the Eugene-Springfield area include Royal Caribbean and Enterprise. The Eugene-Springfield's trained labor pool of relatively low-cost workers for call centers gives the region an advantage for attracting additional call centers.
- **Tourism.** Tourism brings economic activity into an area from outside sources. Tourism expenditures in Lane County in 2006 grew 7.5%, to \$553 million, exceeding the statewide tourism growth rate for the year. Tourism accounts for about 7,500 jobs in Lane County.⁷⁵

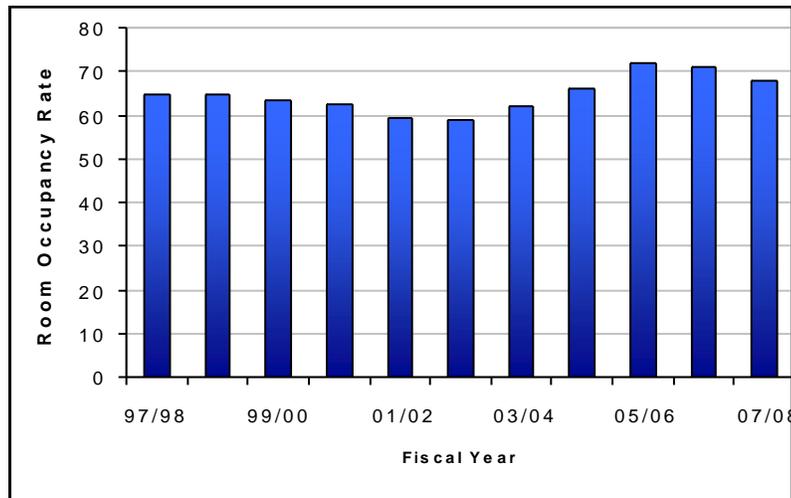
A major source of tourism spending is overnight accommodations. In 2008, the Eugene-Springfield Region has 3,118 total rooms. Since 1997, 629 limited service hotel rooms were added. During the same period, 377 full service rooms, 92 limited service rooms, and 15,464 square feet of meeting space have closed.⁷⁶

Figure A-5 shows the hotel occupancy rate in the Eugene-Springfield Region from fiscal year 1998 to fiscal year 2008. The Region's occupancy rate varied from 59% in fiscal year 2002 and 2003 to 72% in fiscal year 2006.

⁷⁵ Convention & Visitors Association of Lane County Oregon, CVALCO

⁷⁶ Convention & Visitors Association of Lane County Oregon, CVALCO

Figure A-5. Hotel room occupancy rate, Eugene-Springfield Region, Fiscal Years 1998 to 2008



Source: Convention & Visitors Association of Lane County Oregon, CVALCO
 Note: 2008 data current through March 2008

Springfield levies a 9.5% transient lodging tax on overnight accommodations. Springfield’s lodging tax rate is 9.5%. Table A-13 shows transient lodging tax revenue for Lane County and Springfield for fiscal year 2000 through 2008. Springfield’s lodging tax revenue varied from \$1.2 million in fiscal year 2004 to \$1.6 million in fiscal year 2007. Springfield’s transient lodging tax revenues accounted for about one-quarter of total County revenues.

Table A-13. Transient lodging tax revenues, Lane County and Springfield, Fiscal Years 2000 to 2008

Fiscal Year	Lane County	Springfield	Springfield's % of County
2000	\$4,753,583	\$1,366,788	29%
2001	\$4,834,210	\$1,314,714	27%
2002	\$4,865,320	\$1,265,825	26%
2003	\$4,820,662	\$1,275,426	26%
2004	\$5,095,869	\$1,187,367	23%
2005	\$5,378,361	\$1,242,653	23%
2006	\$6,016,364	\$1,504,813	25%
2007	\$6,611,718	\$1,597,994	24%
2008	\$5,103,490	\$1,235,685	24%

Source: Convention & Visitors Association of Lane County Oregon, CVALCO
 Note: 2008 data current through March 2008

- **Agriculture.** Agricultural production is an important component of Lane County’s economy. In 2002, Lane County had approximately \$88 million in total gross sales from agriculture.

Table A-14 shows the top five agricultural products in Lane County in 1997 and 2002. Lane County's agriculture products with the greatest value of sales in 2002 were Nursery (\$21 million) and Milk & dairy (\$10.3 million). Milk & dairy had the largest average sales value per farm (\$1.1 million), nearly double the 1997 average sales value for dairies in 1997 (\$0.6 million). This change may indicate that dairies have grown larger over the five-year period.

Other important changes are the decrease in value of sales for poultry and eggs (down \$4.2 million) cattle and calves (down \$2.2 million). The decrease in sales for cattle and calves may be explained by the decrease of 248 farms with cattle and calves.

Table A-14. Six agricultural products with the highest sales value, Lane County 1997 and 2002

Item	Value of Sales	Farms	Average Value of Sales per Farm
2002 Total Sales			
Nursery, greenhouse, floriculture, & sod	\$ 21,001,000	208	\$ 100,966
Milk & other dairy products from cows	\$ 10,290,000	9	\$ 1,143,333
Cattle & calves	\$ 7,622,000	779	\$ 9,784
Fruits, tree nuts, & berries	\$ 6,683,000	382	\$ 17,495
Vegetables, melons, potatoes, & sweet potatoes	\$ 5,955,000	155	\$ 38,419
Poultry & eggs	\$ 5,919,000	218	\$ 27,151
1997 Total Sales			
Poultry & eggs	\$ 10,074,000	144	\$ 69,958
Cattle & calves	\$ 9,780,000	1,027	\$ 9,523
Milk & other dairy products from cows	\$ 7,306,000	13	\$ 562,000
Fruits, tree nuts, & berries	\$ 6,842,000	303	\$ 22,581
Vegetables, melons, potatoes, & sweet potatoes	NA	NA	NA
Nursery, greenhouse, floriculture, & sod	NA	NA	NA

Source: USDA Census of Agriculture, 2002; Calculations by ECONorthwest

Note: The definition of the following categories of farm products changed between 1997 and 2002: Nursery, greenhouse, floriculture, and sod; Other crops and hay; and vegetables, melons, potatoes, and sweet potatoes. These changes prevent direct comparison between the Total Sales of these agricultural products in 1989 and 2002.

OUTLOOK FOR GROWTH IN SPRINGFIELD

Table A-15 shows the population forecast developed by the Office of Economic Analysis for Oregon and Lane County for 2000 through 2040. Lane County is forecast to grow at a slower rate than Oregon over the 2005 to 2030 period. The forecast shows Lane County's population will grow by about 96,600 people over the 25-year period, a 29% increase. Over the same period, Oregon is forecast to grow by more than 1.2 million people, a 35% increase.

**Table A-15. State population forecast,
Oregon and Lane County, 2000 to 2040**

Year	Lane	
	Oregon	County
2000	3,436,750	323,950
2005	3,618,200	333,855
2010	3,843,900	347,494
2015	4,095,708	365,639
2020	4,359,258	387,574
2025	4,626,015	409,159
2030	4,891,225	430,454
2035	5,154,793	451,038
2040	5,425,408	471,511
Change 2005 to 2030		
Amount	1,273,025	96,599
% Change	35%	29%
AAGR	1.2%	1.0%

Source: Office of Economic Analysis

Note: AAGR is average annual growth rate

Table A-16 shows the Oregon Employment Department's forecast for employment growth by industry for Lane County over the 2006 to 2016 period. The sectors that will lead employment growth in Lane County for the ten-year period are Health Care & Social Assistance (adding 5,600 jobs), Government (adding 3,600 jobs), Professional and Business Services (adding 3,000 jobs), Leisure & Hospitality (adding 2,800 jobs), and Retail Trade (adding 2,400 jobs). Together, these sectors are expected to add 17,400 new jobs or 76% of employment growth in Lane County.

Table A-16. Nonfarm employment forecast by industry in Lane County, 2006-2016

Sector / Industry	2006	2016	Change 2006-2016	
			Amount	% Change
Natural resources & Mining	900	900	0	0%
Construction	8,000	9,200	1,200	15%
Manufacturing	20,300	21,000	700	3%
Durable Goods	16,300	16,900	600	4%
Wood product mfg.	4,700	4,500	-200	-4%
Transportation equip. mfg.	4,400	4,700	300	7%
Nondurable goods	4,000	4,100	100	3%
Transportation, & utilities	3,300	3,700	400	12%
Wholesale trade	5,900	6,500	600	10%
Retail trade	19,700	22,100	2,400	12%
Information	3,700	4,100	400	11%
Financial activities	8,300	9,300	1,000	12%
Professional & business srv.	16,100	19,100	3,000	19%
Administrative & support srv.	8,200	9,700	1,500	18%
Education	1,500	1,900	400	27%
Health care & social assist.	18,100	23,700	5,600	31%
Health care	15,400	20,500	5,100	33%
Leisure & hospitality	14,200	17,000	2,800	20%
Accommodation & food srv.	12,100	14,300	2,200	18%
Food srv. & drinking places	10,700	12,700	2,000	19%
Other srv.	5,100	5,700	600	12%
Government	28,400	32,000	3,600	13%
Federal government	1,800	1,700	-100	-6%
State government	11,300	13,200	1,900	17%
State education	8,700	10,200	1,500	17%
Local government	15,400	17,100	1,700	11%
Local education	8,600	9,300	700	8%
Total nonfarm employment	153,400	176,100	22,700	15%

Source: Oregon Employment Department. Employment Projections by Industry 2004-2014. Projections summarized by ECONorthwest.

Note: Percent Change was calculated based on the change in employees divided by the number of employees in 2006. For example, Retail trade's expected percent change is 15% because 2,400 employees is 12% of the 19,700 employees in retail trade in 2006 (2400 divided by 19700 = 15%).

Factors Affecting Future Economic Growth in Springfield

Appendix B

This appendix presents a detailed analysis consistent with the requirements of OAR 660-009-0015(4) of Springfield’s comparative advantage relative to the Eugene/Springfield area, Lane County, Willamette Valley, and Oregon. The information presented in this appendix is summarized in Chapter 3.

Goal 9 requires cities to identify the number and characteristics of sites “the number of sites by type reasonably expected to be needed to accommodate the expected employment growth based on the site characteristics typical of expected uses (OAR 660-009-0014(2)).” In developing this assessment, cities are encouraged to examine existing firms in the planning area to identify the types of sites that may be needed for expansion (OAR 660-009-0015(2)). Cities are required to “estimate the types and amounts of industrial and other employment uses likely to occur in the planning area,” taking into consideration relevant economic advantages and disadvantages (OAR 660-009-0015(4)).

Identifying the number and characteristics of needed sites starts with understanding the types of businesses that may locate in Springfield over the 20-year planning period. Consistent with the requirements of Goal 9, these industries are grouped into “major categories of industrial or other employment uses” (OAR 660-009-0015(1)). This grouping is commonly referred to as “target industries.”

This appendix summarizes the factors that affect the types of businesses likely to locate in Springfield. These factors are a key consideration when identifying Springfield’s target industries (in Chapter 4).

WHAT IS COMPARATIVE ADVANTAGE

Each economic region has different combinations of productive factors: land (and natural resources), labor (including technological expertise), and capital (investments in infrastructure, technology, and public services). While all areas have these factors to some degree, the mix and condition of these factors vary. The mix and condition of productive factors may allow firms in a region to produce goods and services more cheaply, or to generate more revenue, than firms in other regions.

By affecting the cost of production and marketing, comparative advantages affect the pattern of economic development in a region

relative to other regions. Goal 9 and OAR 660-009-0015(4) recognizes this by requiring plans to include an analysis of the relative supply and cost of factors of production.⁷⁷ An analysis of comparative advantage depends on the geographic areas being compared. In general, economic conditions in Springfield will be largely shaped by national and regional economic conditions affecting the Willamette Valley. Chapter 2 and Appendix A present trends and forecasts of conditions in Oregon and Springfield to help establish the context for economic development in Springfield. Local economic factors will help determine the amount and type of development in Springfield relative to other communities in Oregon.

This appendix focuses on the comparative advantages of Springfield relative to the rest of Oregon. The implications of the factors that contribute to Springfield's comparative advantage are discussed at the end of this chapter.

LOCATION

Springfield is a city with a population of approximately 57,320 people in 2007, located in the Southern Willamette Valley. Interstate 5 runs to the west of Springfield and Highway 126 runs east-west through Springfield. Springfield is located between the Willamette River (to the south) and McKenzie River (to the north). Springfield's location will continue to impact Springfield's future economic development.

- Springfield shares a border with Eugene, the 2nd largest city in the State of Oregon, with a population of approximately 153,690 people in 2007. The Eugene-Springfield Metropolitan Statistical Area (MSA), which includes all of Lane County, had more than 343,000 people in 2007, accounting for 9% of Oregon's population.
- Springfield has easy access to the State's highway system and other transportation opportunities. Interstate 5 runs to the west of Springfield and Highway 126 is the main east-west route through Springfield. Residents and businesses in Springfield can access other modes of transportation in Eugene, including the Eugene Airport, Greyhound bus service, and passenger rail service.
- Residents of Springfield have easy access to shopping, cultural activities, indoor and outdoor recreational activities, and other amenities in Springfield, Eugene, and rural Lane County.

⁷⁷ OAR 660-009-0015(4) requires assessment of the "community economic development potential." This assessment must consider economic advantages and disadvantages—or what Goal 9 broadly considers "comparative advantages."

- Springfield residents have several opportunities for post-secondary education: the University of Oregon, Lane Community College, Northwest Christian College, and Gutenberg College.

Springfield’s location, access to I-5 and Highway 126, and proximity to Eugene are primary comparative advantages for economic development in Springfield.

BUYING POWER OF MARKETS

The buying power of Springfield and the Eugene-Springfield area forms part of Springfield’s comparative advantage by providing a market for goods and services. Table B-1 shows the combined total expenditures for households in Springfield and the Eugene-Springfield Metropolitan Statistical Area (MSA) in 2008. Households in Springfield are expected to spend about \$937 million in 2008, about 14% of total household expenditures in the Eugene-Springfield MSA.

Table B-1. Aggregate annual household expenditures for common purchases, Springfield and the Eugene-Springfield Metropolitan Statistical Area (MSA), 2008

	Springfield	Eugene/ Springfield MSA	Springfield % of MSA Spending
Apparel	\$ 78,765,734	\$ 548,162,423	14%
Entertainment	\$ 106,917,462	\$ 777,731,151	14%
Food at Home	\$ 135,808,782	\$ 875,120,493	16%
Health Care	\$ 72,511,784	\$ 534,882,328	14%
Household Equipment	\$ 48,498,974	\$ 367,679,233	13%
Shelter-Related Expenses	\$ 49,925,453	\$ 369,146,828	14%
Transportation	\$ 185,522,716	\$ 1,304,243,991	14%
Miscellaneous Items	\$ 259,702,794	\$ 1,890,881,821	14%
Total	\$ 937,653,699	\$ 6,667,848,268	14%

Source: Claritas, 2008

Note: Table B-1 does not include spending on shelter or housing

Table B-2 shows average household expenditures for common purchases in Springfield and the Eugene-Springfield MSA in 2008. Springfield households spend an average of \$42,700 on commonly purchased items, not including housing, which typically accounts for 20% or more of household expenditures. Springfield’s households spent less than the regional and nation averages, with about 91% of the \$47,000 average expenditures for all households in the Eugene-Springfield MSA and 84% of national average household expenditures.

Springfield households spent the most on miscellaneous items (\$11,800), such as personal care items, education, child care, pet care, and eating out.

Transportation accounted for 20% of Springfield household expenditures, food at home accounted for 14%, and entertainment accounted for 11% of expenditures. Compared to household spending for the entire MSA or the nation, Springfield households spent a more on food at home and less on household equipment (e.g., home furnishings and major appliances) and shelter-related expenses (e.g., household repairs, fuel, and telephone service).

Table B-2. Average annual household expenditures for common purchases, Springfield and the Eugene-Springfield Metropolitan Statistical Area (MSA), 2008

	Springfield Households		Eugene/ Springfield MSA	Springfield's Expenditures Compared to:	
	Expenditures	% of Total		E/S MSA	U.S
Apparel	\$ 3,589	8%	\$ 3,869	93%	77%
Entertainment	\$ 4,871	11%	\$ 5,490	89%	84%
Food at Home	\$ 6,187	14%	\$ 6,177	100%	98%
Health Care	\$ 3,304	8%	\$ 3,775	88%	77%
Household Equipment	\$ 2,210	5%	\$ 2,595	85%	76%
Shelter-Related Expenses	\$ 2,275	5%	\$ 2,606	87%	75%
Transportation	\$ 8,452	20%	\$ 9,206	92%	90%
Miscellaneous Items	\$ 11,832	28%	\$ 13,347	89%	80%
Total	\$ 42,720	100%	\$ 47,065	91%	84%

Source: Claritas, 2008

Note: Table B-2 does not include spending on shelter or housing, which typically accounts for 20% or more of household expenditures.

Note: The Percent of Total does not add to 100% as a result of rounding errors.

AVAILABILITY OF TRANSPORTATION FACILITIES

Businesses and residents in Springfield have access to a variety of modes of transportation: automotive (Interstate 5, multiple State highways, and local roads); rail (Union Pacific and Amtrak); transit (LTD); and air (Eugene Airport).

Springfield has excellent automotive access for commuting and freight movement. Springfield is located along Interstate 5, the primary north-south transportation corridor on the West Coast, linking Springfield to domestic markets in the United States and international markets via West Coast ports. Springfield has developed along Highway 126, connecting Springfield to rural areas to the East of Springfield. Highway 126 is the primary east-west highway in Lane County, running from Florence to Redmond. Businesses and residents of Springfield also have access to Highway 99 in Eugene and Highway 58 in Pleasant Hill.

Other transportation options in Springfield are:

- **Rail.** Multiple Union Pacific rail lines serve Springfield, providing freight service. There are two primary junctions in Springfield: (1) the Springfield Junction is located in the Glenwood area in Southwest Springfield and (2) the Mohawk Junction is near the city's southern boundary, near 25th St.
- **Transit.** The Lane Transit District (LTD) provides transit service to the Eugene-Springfield region. LTD serves Springfield with multiple bus lines, providing bus service within Springfield and connecting Springfield with Eugene. LTD recently began operating a bus rapid transit (BRT) system, called EmX, which provides service between Springfield Station and Eugene Station. Construction is underway for the new Pioneer Parkway BRT route, which will connect to the Sacred Heart Medical Center, and the Gateway Mall.
- **Air.** The Eugene Airport provides both passenger and freight service for Eugene and Springfield residents. The airport is the second busiest in the state, and the fifth largest in the Pacific Northwest. The airport is served by five commercial airlines, and is the primary airport for a six county region.

Transportation is a comparative advantage that primarily affects the overall type of employment and its growth for the region.

PUBLIC FACILITIES AND SERVICES

Provision of public facilities and services can impact a firm's decision on location within a region but ECO's past research has shown that businesses make locational decisions primarily based on factors that are similar with a region. These factors are: the availability and cost of labor, transportation, raw materials, and capital. The availability and cost of these production factors are usually similar within a region.

Once a business has chosen to locate within a region, they consider the factors that local governments can most directly affect: tax rates, the cost and quality of public services, and regulatory policies. Economists generally agree that these factors do affect economic development, but the effects on economic development are modest. Thus, most of the strategies available to local governments have only a modest effect on the level and type of economic development in the community.

PUBLIC POLICY

Public policy can impact the amount and type of economic growth in a community. The City can impact economic growth through its policies about the provision of land, redevelopment, and infill development. Success at attracting or retaining firms may depend on availability of attractive sites for development, especially large sites. For example, Springfield was attractive as a location of PeaceHealth's new hospital because the City had a large, relatively flat site located relatively near to Interstate 5 and Beltline Highway.

Springfield's decision makers articulated their support for provision of employment land through the economic development strategy and in other policy choices. Objectives in the economic development strategy supporting the provision of employment land include objectives to: (1) provide employment land in a variety of locations, configurations, and site sizes for industrial and other employment uses, (2) provide an adequate competitive short-term supply of suitable land to respond to economic development opportunities as they arise, (3) reserve sites over 20-acres for special developments and industries that require large sites, and (4) provide adequate infrastructure to sites.

The economic development strategy also includes objectives that support redevelopment of existing land within the UGB, especially in Downtown and in Glenwood, and other infill development opportunities. In addition, the City has established financial mechanisms to support redevelopment through the creation of the Glenwood Urban Renewal District and Downtown Urban Renewal District.

TAX POLICY

The tax policy of a jurisdiction is a consideration in economic development policy. Table B-3 shows that Springfield's property tax rate is between \$16.32 and \$18.65 per \$1,000 of assessed value, compared with a state average of \$15.20. The property tax rate in Eugene is more variable than Springfield's, ranging from \$10.31 to \$24.68 per \$1,000 of assessed value.⁷⁸

Table B-3. Property tax rate per \$1,000 assessed value for Springfield, Eugene, and Oregon, 2007.

Area	Tax Rate (per \$1,000 assessed value)
Oregon	\$15.20
Lane County	\$15.47
Springfield	\$16.32 - \$18.65
Eugene	\$10.31 - \$24.68

Source: Oregon Department of Revenue

WATER

Springfield's water provider is the Springfield Utility Board (SUB). Springfield's primary source of water is wells, supplemented by surface water from the Middle Fork of the Willamette River. Springfield has 33 wells in 7 well fields, which provide the majority of Springfield's water. SUB has purchased rights to water from the McKenzie River, to supply future need for water.

Springfield's water treatment plant is located on the Middle Fork of the Willamette River, which provides water treatment for the city. The water treatment plant is at or near capacity, with peak summer residential and commercial irrigation demands exceeding the plant's capacity at times. SUB is addressing peak demands by educating customers peak shifting, the practice of irrigating landscaping in the evening or at night.

SUB is planning upgrades to the water treatment plant in 2008 and 2009 to address issues meeting demand at peak times. SUB is also planning upgrades double the plant's capacity in 2010. Springfield plans to build two additional water treatment plants on the McKenzie River, as demand

⁷⁸ Property tax rates for Springfield and Eugene are a composite of the rates for all properties with an address in Eugene or Springfield. It is almost certain that some of these properties is located outside of both the Eugene and Springfield urban growth boundaries and are subject to unincorporated Lane County tax rates.

for water increases. SUB expects to need the new treatment plants by 2013 to 2018.

SUB has sufficient water to meet expected growth and be able to meet residential and employment needs. SUB is not concerned about its ability to supply water to any type of industry, including water-intensive industries like food processing. SUB has lower water rates than the national average. The combination of available and lower cost water may be an advantage to attracting some types of businesses to Springfield.

WASTEWATER

Springfield's wastewater services are provided by Metropolitan Wastewater Management Commission (MWMC), which operates a wastewater facility that serves Springfield, Eugene, and Lane County. Springfield's wastewater system, which includes the sanitary sewer and other equipment, is managed by Springfield Public Works.

Springfield is about to meet current wastewater demands, except in instances of heavy rainfall. On dry days, Springfield generates about 6 million gallons of wastewater per day. During heavy rainfall, Springfield can generate 100 million gallons of wastewater per day, as a result of infiltration and inflow into wastewater pipes.

Springfield recently completed an update of the Wastewater Master Plan, which identified \$65 million of upgrades to the system, which will provide service to unserved areas in Springfield and address problems with infiltration and inflow into wastewater pipes.

Springfield expects to be able to meet expected growth. The City expects to provide service to 6,100 new equivalent dwelling units, which includes residences and businesses, over the next 20 years. If Springfield needs to expand its urban growth boundary, the City will need to plan how to provide service to the new areas.

LABOR MARKET FACTORS

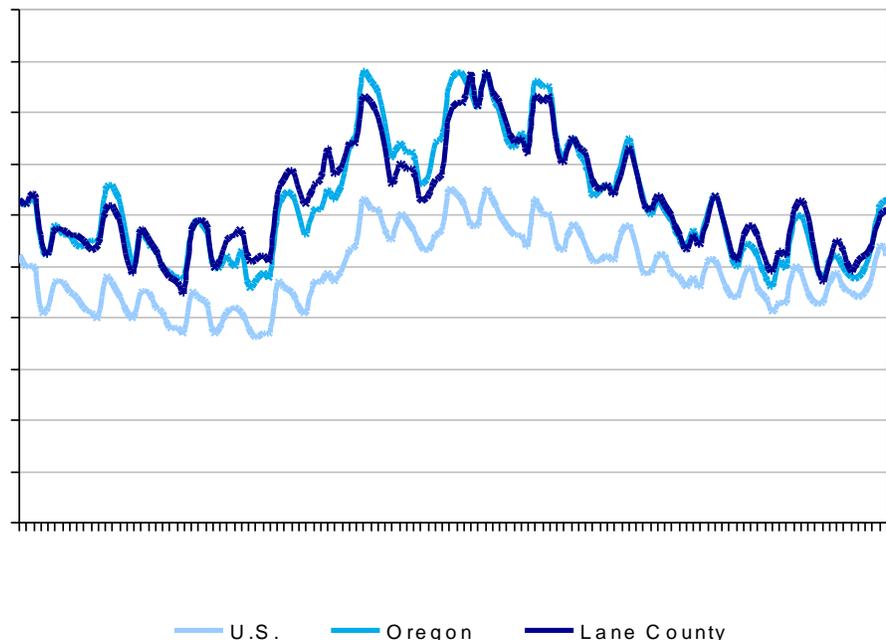
The availability of labor is critical for economic development. Availability of labor depends not only on the number of workers available, but the quality, skills, and experience of available workers as well. This section examines the availability of workers for Springfield.

The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. Children, retirees, students, and people who are not actively seeking work are not considered part of the

labor force. According to the 2000 Census, Lane County has more than 166,000 people in its labor force, with 16% of the County's labor force located in Springfield (27,000 participants in the labor force).

The unemployment rate is one indicator of the relative number of workers who are actively seeking employment. Labor force data from the Oregon Employment Department shows that unemployment in Lane County 6.1% in February 2008, lower than the State average of 6.3%. Figure B-1 shows the unemployment rate for Lane County, Oregon, and the United States for the past decade. During this period, Lane County's unemployment has been very similar to the statewide unemployment rate. The County and State unemployment rates have been consistently higher than the national average, but the difference has decreased in recent years.

Figure B-1. Unemployment rates for Lane County, Oregon, and the U.S., January 1998 to February 2008



Source: Bureau of Labor Statistics

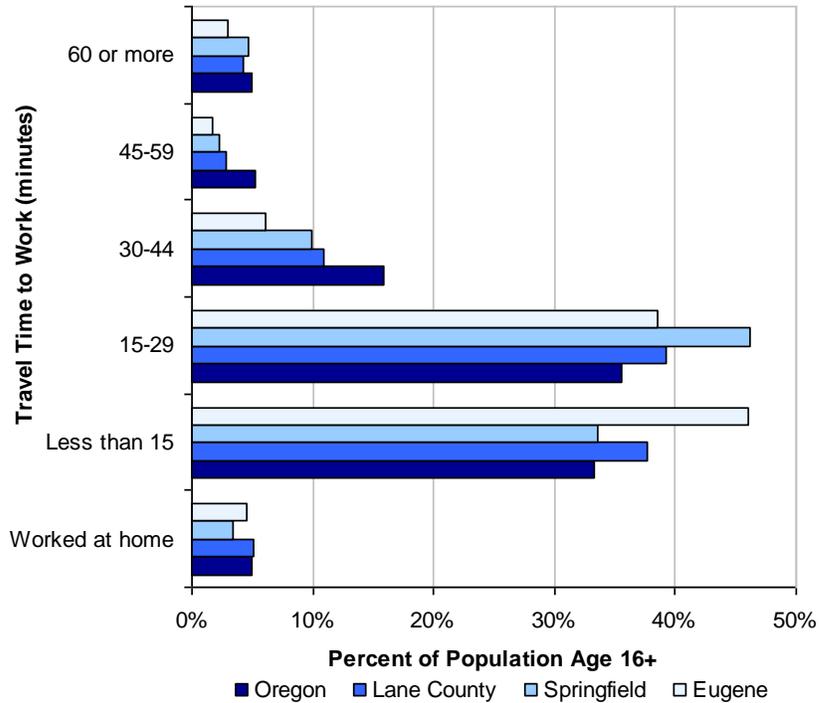
Note: unemployment data is not seasonally adjusted

Another important factor in the labor force is the distance that workers are willing to commute. Figure B-2 shows a comparison of the commute time to work for residents 16 years and older for Oregon, Lane County, Eugene, and Springfield in 2008.

Springfield residents were more likely to have a commute of between 15 and 29 minutes than residents of the State, County, or Eugene. About 46% of Springfield residents commute 15 to 29 minutes, compared with the

36% of State residents, 39% of County residents, and 38% of Eugene’s residents.

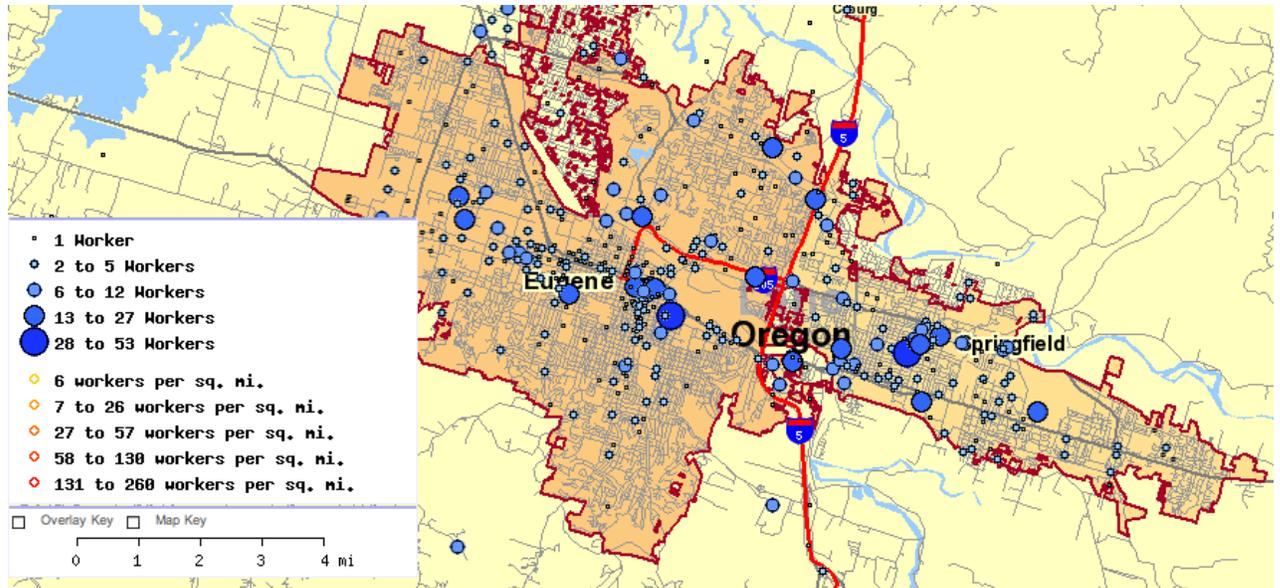
Figure B-2. Commuting time to work in minutes for residents 16 years and older, Oregon, Lane County, Eugene, and Springfield, 2008



Source: Claritas 2008

Figure B-3 and Table B-4 show where residents of Springfield work in 2004. Figure B-3 and Table B-4 show that 81% of Springfield’s residents were employed in Lane County, with 40% of Springfield’s residents working in Eugene and 25% working in Springfield. Close to 1,000 Springfield workers (4%) commute to Multnomah County, the majority of who work in Portland.

Figure B-3. Places that residents of Springfield were employed, 2004



Source: U.S. Census Bureau: LED on the Map

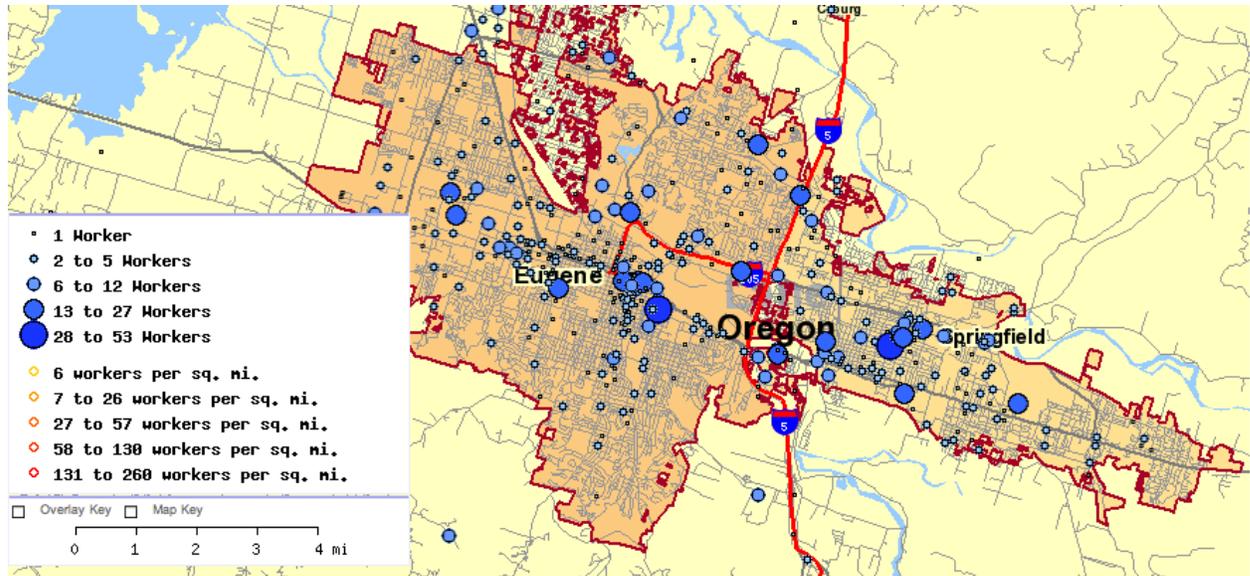
Table B-4. Places that residents of Springfield were employed, 2004

Location	Number	Percent
Lane County	18,649	81%
Eugene	9,261	40%
Springfield	5,675	25%
Coburg	638	3%
Junction City	475	2%
Multnomah Co.	975	4%
Portland	839	4%
All Other Locations	3,385	15%
Total	23,009	100%

Source: U.S. Census Bureau: LED on the Map

Figure B-4 and Table B-5 show where employees of firms located in Springfield lived in 2004. Seventy-nine percent of Springfield’s workers lived in Lane County. Twenty-nine percent lived in Springfield, and 23% lived in Eugene. About 27% of Springfield’s workers lived in unincorporated areas of Lane County and 21% lived outside of Lane County.

Figure B-4. Places where workers in Springfield lived, 2004



Source: U.S. Census Bureau: LED on the Map

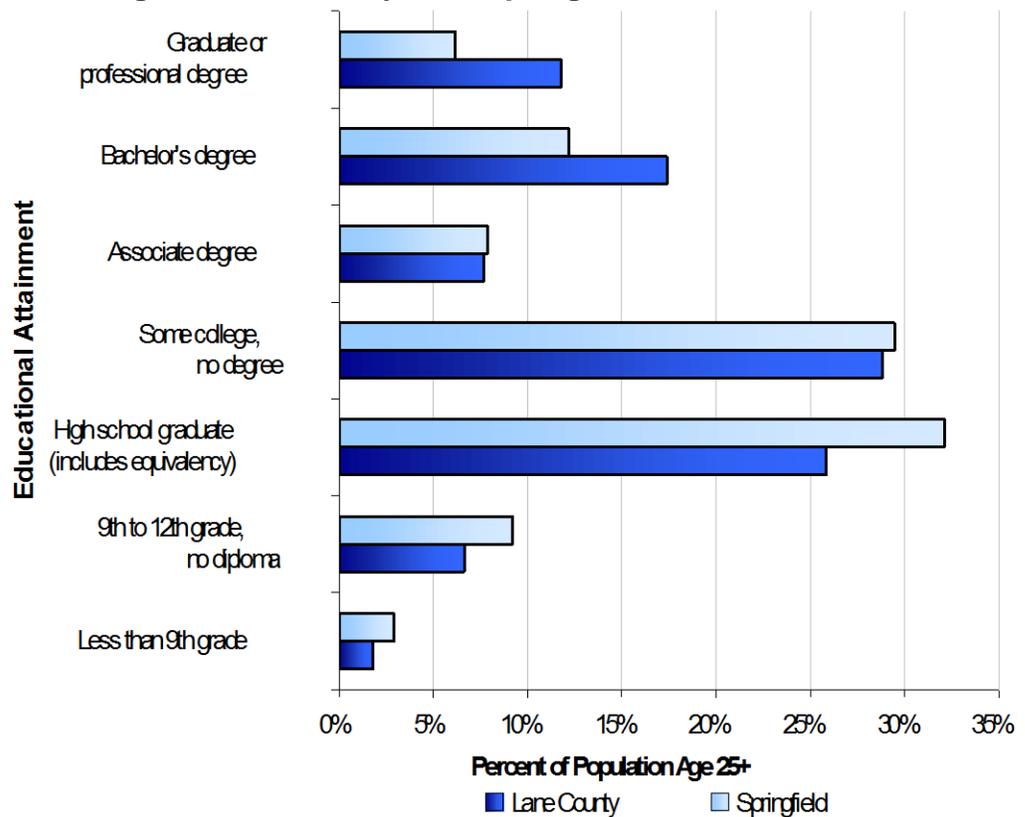
Table B-5. Places where workers in Springfield lived, 2004

Location	Number	Percent
Lane County	15,341	79%
Springfield	5,675	29%
Eugene	4,565	23%
All Other Locations	4,112	21%
Linn County	537	3%
Marion County	428	2%
Jackson County	409	2%
Other locations	2,738	14%
Total	19,453	100%

Source: U.S. Census Bureau: LED on the Map

Educational attainment is an important labor force factor because firms need to be able to find educated workers. Figure B-5 shows the share of population by education level completed in Springfield and Lane County in 2007. In 2007, Springfield had a smaller share of residents with an associate’s degree or higher (26%) than residents of Lane County (37%). In comparison, 47% of Eugene’s residents have an associate’s degree or higher.

Figure B-5. Educational attainment for the population 25 years and over, Oregon, Lane County, and Springfield, 2007



Source: OregonProspector.com

Opportunities for workforce training and post-secondary education for residents of the Eugene-Springfield area include: the University of Oregon, Lane Community College, Northwest Christian College, and Gutenberg College.

Table B-6 shows changes in ethnicity Oregon, Lane County, and Springfield between 1990, 2000, and 2008. This table shows that the Springfield has a larger share of Hispanic or Latino residents than Lane County 2000, with 6.6% of residents in Springfield were Hispanic compared to the County average of 4.6%. Between 1990 and 2000, Springfield’s Hispanic and Latino population grew by 168% (2,176 people), compared with growth in the Hispanic and Latino population of 117% in Lane County and 144% in Oregon.

In 2008, Hispanic residents accounted for about 11% of Oregon’s population and 6% of Lane County’s population. Springfield’s Hispanic population grew by 95% between 2000 and 2008, more than twice the rate of growth for the County or State during the same period.

Table B-6. Changes in ethnicity, Oregon, Lane County, and Springfield, 1990, 2000, and 2008

	Oregon	Lane County	Springfield
1990			
Total Population	2,842,321	282,912	44,683
Hispanic or Latino	112,707	6,852	1,299
Percent Hispanic or Latino	4.0%	2.4%	2.9%
2000			
Total Population	3,421,399	322,959	52,729
Hispanic or Latino	275,314	14,874	3,475
Percent Hispanic or Latino	8.0%	4.6%	6.6%
2008			
Total Population	3,772,854	343,961	56,016
Hispanic or Latino	400,435	20,941	5,293
Percent Hispanic or Latino	10.6%	6.1%	9.4%
Change 1900-2000			
Hispanic or Latino	162,607	8,022	2,176
Percent Hispanic or Latino	144%	117%	168%
Change 2000-2008			
Hispanic or Latino	125,121	6,067	1,818
Percent Hispanic or Latino	45%	41%	52%

Source: U.S. Census 1990 and 2000, Claritas 2008

Commuting is common in Springfield. About 40% of the people who live in Springfield commute to Eugene for work. Less than one-third of Springfield's workers live in Springfield. The implication of this workforce analysis is that, while only one-third of Springfield's workforce lives within the City, Springfield are able to attract educated workers from most of Eugene and surrounding areas in Lane county.

It does not appear that workforce will be a constraint on employment growth in Springfield. Springfield should be able to continue to draw on residents of Eugene for workers, even if energy prices continue to rise but Springfield's ability to attract workers from outside of the Eugene-Springfield area may be negatively impacted by continued increases in energy prices.

Employment Forecast and Site Needs for Industrial and other Employment Uses

This appendix presents a detailed analysis of Springfield's site needs consistent with the requirements of OAR 660-009-0015(2) and of OAR 660-009-0025(1). This appendix includes an employment forecast and an analysis of site needs to accommodate industrial and other employment uses in Springfield for the 2010 to 2030 period. The information presented in this appendix is summarized in Chapter 4.

EMPLOYMENT FORECAST

To provide for an adequate supply of commercial and industrial sites consistent with plan policies, Springfield needs an estimate of the amount of commercial and industrial land that will be needed over the planning period. Goal 9 requires cities to identify "the number of sites by type reasonably expected to be needed to accommodate the expected employment growth based on the site characteristics typical of expected uses." The number of needed sites is dependent on the site requirements of employers. The estimate of land need is presented in the site needs analysis in the next section.

Demand for commercial and industrial land will be driven by the expansion and relocation of existing businesses and new businesses locating in Springfield. The level of this business expansion activity can be measured by employment growth in Springfield. This section presents a projection of future employment levels in Springfield for the purpose of estimating demand for commercial and industrial land.

The projection of employment has three major steps:

1. **Establish base employment for the projection.** We start with the estimate of covered employment in Springfield's UGB presented in Chapter 3. Covered employment does not include all workers, so we adjust covered employment to reflect total employment in Springfield.
2. **Project total employment.** The projection of total employment will be calculated using the safe harbor method suggested in OAR 660-024.

3. **Allocate employment.** This step involves allocating employment to different building types, based on similar requirements for built space.

EMPLOYMENT BASE FOR PROJECTION

To forecast employment growth in Springfield, we must start with a base of employment growth on which to forecast. Table C-1 shows ECO's estimate of total employment in the Springfield UGB in 2006. To develop the figures, ECO started with estimated covered employment in the Springfield UGB from confidential QCEW (Quarterly Census of Employment and Wages) data provided by the Oregon Employment Department.

Covered employment, however, does not include all workers in an economy. Most notably, covered employment does not include sole proprietors. Analysis of data shows that covered employment reported by the Oregon Employment Department for Lane County is only about 74% of total employment reported by the U.S. Department of Commerce. We made this comparison by sector for Lane County and used the resulting ratios to convert covered employment to total employment in Springfield.

Table C-1 shows Springfield had an estimated 36,706 employees within its UGB in 2006. This figure results in a population-to-employment ratio of 1.7 persons per employee. The statewide average is about 1.9 persons per employee.

Table C-1. Estimated total employment in the Springfield UGB by sector, 2006

Sector	Covered Employment		Estimated Total Employment
	Number	% of Total Emp.	
Agriculture, Forestry, Fishing, & Mining	282	73%	387
Construction	1,922	65%	2,973
Manufacturing	2,714	99%	2,750
Wholesale Trade	1,230	85%	1,446
Retail	3,632	79%	4,609
Transportation & Warehousing & Utilities	941	70%	1,349
Information	1,356	79%	1,710
Finance & Insurance	1,110	66%	1,673
Real Estate & Rental & Leasing	441	33%	1,341
Professional, Scientific, & Technical Services	576	52%	1,107
Management of Companies & Enterprises	343	97%	354
Admin. & Support & Waste Mgt Services	2,460	76%	3,239
Private Educational Services	109	38%	290
Health Care & Social Assistance	3,069	77%	4,008
Arts, Entertainment, & Recreation	321	41%	777
Accommodation & Food Services	2,453	91%	2,686
Other Services	816	48%	1,685
Government	3,535	82%	4,322
Total	27,310	74%	36,706

Source: 2005 covered employment from confidential Quarterly Census of Employment and Wage (QCEW) data provided by the Oregon Employment Department. Covered employment as a percent of total employment calculated by ECONorthwest using data for Lane County employment from the U.S. Department of Commerce, Bureau of Economic Analysis (total) and the Oregon Employment Department (covered).

The employment forecast covers the 2010 to 2030 period, requiring an estimate of total employment for Springfield in 2008. Between 2006 and 2008, Springfield has had one major change in employment, beyond expected employment growth: PeaceHealth has built a new regional medical center at RiverBend. PeaceHealth estimates that there will be approximately 3,400 new employees in Springfield in 2008 as a result of the hospital at RiverBend.

ECO estimates that Springfield has 37,733 employees in 2008, plus the 3,400 employees at RiverBend. The result is an employment base of 41,133 total employees in Springfield in 2008 for the planning period 2010-2030.

EMPLOYMENT PROJECTION

OAR 660-024-0040 (9) (a) (A) allows the City to determine employment land needs based on “The county or regional job growth rate provided in the most recent forecast published by the Oregon Employment Department.” Springfield is part of Region 5, which includes all of Lane County. Based on this safe harbor, employment in Springfield can be assumed to grow at 1.4% annually. Table C-2 shows the result of applying this growth rate to the total employment base of 41,133 in Springfield. Table C-2 shows that employment is forecast to grow by 13,440 employees (a 32% increase) between 2010 and 2030.

Table C-2. Forecast of employment growth in Springfield’s UGB, 2010–2040

Year	Total Employment
2008	41,133
2010	42,284
2030	55,724
2030	55,724
2031	56,498
2032	57,283
2033	58,079
2034	58,886
2035	59,704
2036	60,534
2037	61,375
2038	62,228
2039	63,093
2040	63,970
Change 2010 to 2030	
Employees	13,440
Percent	32%
AAGR	1.4%

Source: ECONorthwest

Springfield is part of the regional economic center in the Eugene-Springfield region. The ratio of population to employment will decrease from 1.6 to 1.5 people per job between 2010 and 2030. This change shows that employment will grow faster than population in Springfield, suggesting that some Springfield will continue to have employees who commute from Eugene or other cities in the region.

ALLOCATE EMPLOYMENT TO DIFFERENT BUILDING TYPES

The next step in the employment forecast is to allocate future employment to building type, as described in Table A-8 in Appendix A. The allocation was done by grouping employment into building types with similar building and site requirements. For example, the following service sectors were grouped together into the “office” building type because they need similar types of built space with similar site requirements: information, finance, real estate, professional services, management of companies, administrative support, utilities, arts and entertainment, and other services.

Table C-3 shows the forecast of employment growth by building type in Springfield’s UGB in 2030. Table C-3 shows the amount of employment by building type in 2010. In 2010, a total of about 60% of Springfield’s employment is in office and other services’ building types. About 18% is in retail, 15% is in general industrial and 7% is in warehousing and distribution.

Table C-3. Forecast of employment growth in by building type, Springfield UGB, 2010–2030

Building Type	2010		2030		Change 2010 to 2030
	Employment	% of Total	Employment	% of Total	
Industrial					
Warehousing & Distribution	2,954	7.0%	3,343	6.0%	389
General Industrial	6,457	15.3%	7,523	13.5%	1,066
Commercial					
Office	12,561	29.7%	17,274	31.0%	4,713
Retail	7,709	18.2%	9,752	17.5%	2,043
Other Services	12,603	29.8%	17,832	32.0%	5,229
Total	42,284	100.0%	55,724	100.0%	13,440

Source: ECONorthwest

Note: Green shading denotes an assumption by ECONorthwest

The forecast in Table C-3 assumes that Springfield will have growth in all categories of employment. It also assumes that the share of employment will increase in other services (2.2% increase in share) and office (1.3% increase in share). At the same time, the share of employment will decrease in general industrial (1.8% decrease in share), warehousing and distribution (1.0% decrease in share), and retail (0.7% decrease in share). In terms of jobs, employment will increase in all of these sectors.

The assumptions about the changes in share of all employment are based on the following considerations:

- **Increase in the share of employment in office and other services.** Springfield's target industries are predominantly office and other services, such as medical services, services for seniors, call centers, back office functions, high tech, professional services, corporate headquarters, and other services. The forecast assumes that these industries will grow faster than other employment in Springfield.
- **Decrease in employment in other categories.** The decreases in employment in other categories is based on the following factors:
 - While Springfield expects that general industrial will grow, the City expects industrial employment will grow slower than all employment in the City. This expectation is based on the target industries that Springfield has identified and the Oregon Employment Department's forecast for employment growth in Lane County for 2006 to 2016.
 - Springfield expects that employment in warehousing and distribution will grow but slower than all employment because Springfield is at a disadvantage for siting warehouse and distribution firms. These firms need sites that have easy access to I-5 and flat sites of 20 or more acres. There are relatively few sites in or around Springfield that meet these criteria.
 - Employment in retail will grow with population. Springfield expects that retail will grow slightly slower than all employment. This assumption is based on the expectation that Springfield's target industries will grow faster than overall employment growth, including retail employment.

It is worth noting that the employment projections in this appendix do not take into account a major jump in employment that could result from the location of one or more large employers in the community during the planning period. This could take place if the City were successful in its recruitment efforts, either on its own and/or in conjunction with the Governors Initiative to bring new industry to the State. PeaceHealth and Symantec are examples of such events. Such a major change in the community's employment would essentially be over and above the growth anticipated by the City's employment forecast and the implied land needs (for employment, but also for housing, parks and other uses). Major economic events such as the successful recruitment of a very large employer are very difficult to include in a study of this nature. The implications, however, are relatively predictable: more demand for land (of all types) and public services.

If the City were successful in recruitment of a major business to the City, the land needed by such a business would be over and above the land need identified in this EOA. If the business needed a site larger than five acres, especially one larger than 20 acres, this growth may result in land deficiencies before 2030 and the City may need to reexamine whether there is enough land within the UGB to accommodate additional growth.

SITE NEEDS

OAR 660-009-0015(2) requires the EOA identify the number of sites, by type, reasonably expected to be needed for the 20-year planning period. Types of needed sites are based on the site characteristics typical of expected uses. The Goal 9 rule provides flexibility in how jurisdictions conduct and organize this analysis. For example, site types can be described by plan designation (i.e., heavy or light industrial), they can be described by general size categories that are defined locally (i.e., small, medium, or large sites), or can be identified by industry or use (i.e., manufacturing sites or distribution sites).

Firms wanting to expand or locate in Springfield will be looking for a variety of site and building characteristics, depending on the industry and specific circumstances. Previous research conducted by ECO has found that while there are always specific criteria that are industry-dependent and specific to a firm, many firms share at least a few common site criteria. In general, all firms need sites that are relatively flat, free of natural or regulatory constraints on development, with good transportation access and adequate public services. The exact amount, quality, and relative importance of these factors vary among different types of firms. This section discusses the site requirements for firms in industries with growth potential in the Eugene-Springfield Region, as indicated by the Oregon Employment Department forecast shown in Table A-12.

FACTORS THAT AFFECT LOCATIONAL DECISIONS

Why do firms locate where they do? There is no single answer – different firms choose their locations for different reasons. Key determinates of a location decision are a firm's *factors of production*. For example, a firm that spends a large portion of total costs on unskilled labor will be drawn to locations where labor is relatively inexpensive. A firm with large energy demands will give more weight to locations where energy is relatively inexpensive. In general, firms choose locations they believe will allow them to maximize net revenues: if demand for goods and services is held roughly constant, then revenue maximization is approximated by cost minimization.

The typical categories that economists use to describe a firm's production function are:

- **Labor.** Labor is often and increasingly the most important factor of production. Other things equal, firms look at productivity – labor output per dollar. Productivity can decrease if certain types of labor are in short supply, which increases the costs by requiring either more pay to acquire the labor that is available, the recruiting of labor from other areas, or the use of the less productive labor that is available locally. Based on existing commuting patterns, Springfield has access to labor from the Eugene-Springfield Region.
- **Land.** Demand for land depends on the type of firm. Manufacturing firms need more space and tend to prefer suburban locations where land is relatively less expensive and less difficult to develop. Warehousing and distribution firms need to locate close to interstate highways.
- **Local infrastructure.** An important role of government is to increase economic capacity by improving quality and efficiency of infrastructure and facilities, such as roads, bridges, water and sewer systems, airport and cargo facilities, energy systems, and telecommunications.
- **Access to markets.** Though part of infrastructure, transportation merits special attention. Firms need to move their product, either goods or services, to the market, and they rely on access to different modes of transportation to do this. Springfield's access to I-5 and Highway 126 provide the City with advantages in attracting businesses that need easy access to highways.
- **Materials.** Firms producing goods, and even firms producing services, need various materials to develop products that they can sell. Some firms need natural resources. For example, lumber manufacturing requires trees. Or, farther down the line, firms may need intermediate materials: for example, dimensioned lumber to build manufactured housing.
- **Entrepreneurship.** This input to production may be thought of as good management, or even more broadly as a spirit of innovation, optimism, and ambition that distinguishes one firm from another even though most of their other factor inputs may be quite similar.

The supply, cost, and quality of any of these factors depend on market factors: on conditions of supply and demand locally, nationally, and even

globally. But they also depend on public policy. In general, public policy can affect these factors of production through:

- **Regulation.** Regulations protect the health and safety of a community and help maintain the quality of life. Overly burdensome regulations, however, can be a disincentive for businesses to locate in a community. Simplified bureaucracies and straightforward regulations can reduce the burden on businesses and help them react quickly in a competitive marketplace.
- **Taxes.** Firms tend to seek locations where they can optimize their after-tax profits. Studies show that tax rates are not a primary location factor within a region – they matter only after businesses have made decisions based on labor, transportation, raw materials, and capital costs. The cost of these production factors is usually similar within a region. Therefore, differences in tax levels across communities within a region are more important in the location decision than are differences in tax levels between regions.
- **Financial incentives.** Governments can offer firms incentives to encourage growth. Studies have shown that most types of financial incentives have had little significant effect on firm location between regions. For manufacturing industries with significant equipment costs, however, property or investment tax credit or abatement incentives can play a significant role in location decisions. Incentives are more effective at redirecting growth within a region than they are at providing a competitive advantage between regions.

This discussion may suggest that a location decision is based entirely on a straight-forward accounting of costs, with the best location being the one with the lowest level of overall costs. Studies of economic development, however, have shown that location decisions depend on a variety of other factors that indirectly affect costs of production. These indirect factors include agglomerative economies (also known industry clusters), quality of life, and innovative capacity.

- **Industry clusters.** Firms with similar business activities can realize operational savings when they congregate in a single location or region. Clustering can reduce costs by creating economies of scale for suppliers. For this reason, firms tend to locate in areas where there is already a presence of other firms engaged in similar or related activities.

- **Quality of life.** A community that features many quality amenities, such as access to recreational opportunities, culture, low crime, good schools, affordable housing, and a clean environment can attract people simply because it is a nice place to be. A region's quality of life can attract skilled workers, and if the amenities lure enough potential workers to the region, the excess labor supply pushes their wages down so that firms in the region can find skilled labor for a relatively low cost. The characteristics of local communities can affect the distribution of economic development within a region, with different communities appealing to different types of workers and business owners. Sometimes location decisions by business owners are based on an emotional or historical attachment to a place or set of amenities, without much regard for the cost of other factors of production.
- **Innovative capacity.** Increasing evidence suggests that a culture promoting innovation, creativity, flexibility, and adaptability is essential to keeping U.S. cities economically vital and internationally competitive. Innovation is particularly important in industries that require an educated workforce. High-tech companies need to have access to new ideas typically associated with a university or research institute. Innovation affects both the overall level and type of economic development in a region. Government can be a key part of a community's innovative culture, through the provision of services and regulation of development and business activities that are responsive to the changing needs of business.

Table C-4 provides a summary of production factors in Springfield as well as comments received through the Technical Advisory and Stakeholder Advisory Committees and Citizen Involvement process on local opportunities and constraints. It also discusses implications of each factor for future economic development in Springfield.

Table C-4. Summary of production factors and their implications for Springfield

Category	Opportunities	Challenges	Implications
Labor	<ul style="list-style-type: none"> • Access to labor from the across the Eugene-Springfield Region 	<ul style="list-style-type: none"> • Existing workforce has lower educational attainment than regional averages • Potential difficulty in finding dependable labor for manufacturing jobs 	<p>The City has access to labor from the region. As the City adds more high-end housing stock, the City is likely to attract a more educated workforce.</p> <p>Commuting patterns may be negatively impacted by increases in energy prices. The impact is likely to be less in the immediate Eugene-Springfield area but is likely to be greater for commuters that live further from Eugene and Springfield.</p>
Land	<ul style="list-style-type: none"> • Opportunities for redevelopment and infill development, especially in Downtown and Glenwood 	<ul style="list-style-type: none"> • Lack of large parcels of land near highways • Cost of land • Short-term availability 	<p>Firms that prefer large, undeveloped parcels near highways are unlikely to locate in Springfield under current conditions, (e.g. manufacturers that require freight access).</p>
Local infrastructure	<ul style="list-style-type: none"> • Proximity to I-5 and Highway 126 and availability of freight shipping by rail • Opportunities for transportation via transit, bicycle, and pedestrian • Capacity of water and wastewater systems 	<ul style="list-style-type: none"> • Cost of providing infrastructure 	<p>Springfield has sufficient local infrastructure to attract and retain businesses.</p>
Access to markets	<ul style="list-style-type: none"> • Proximity to I-5 and Highway 126 and availability of freight shipping by rail • Proximity to Eugene Airport for transportation of people and small quantities of goods 	<ul style="list-style-type: none"> • Lack of sites with good transportation access, especially to I-5 	<p>Springfield's location relative to highway and rail transportation corridors is sufficient to attract firms that need access to markets via highways. Existing developed land uses are able to use the I-5 and rail freight corridors.</p> <p>The City lacks large sites that are well-located in relation to the I-5 corridor. At present, Springfield is relatively unlikely to attract firms that need close proximity to I-5. If the City had suitable sites for development near I-5, the city would be more likely to attract these firms.</p>

Category	Opportunities	Challenges	Implications
Materials	<ul style="list-style-type: none"> • Proximity to natural resources (e.g., timber or agricultural products) • Access to multiple rail lines 	<ul style="list-style-type: none"> • Cost of shipping raw and finished products 	Springfield may be attractive to manufacturers that need access to natural resources. However, firms dependent on highway access to transport large quantities of materials may not locate in Springfield until infrastructure needs are addressed or the City adds suitable land with direct access to I-5.
Entrepreneurship	<ul style="list-style-type: none"> • Proximity of the University of Oregon • Quality of life 	<ul style="list-style-type: none"> • Springfield's image as having a "blue collar" business environment. 	Springfield may be attractive to entrepreneurs who value the City's quality of life attributes, access to outdoor recreation, and other locational attributes. Springfield has opportunities to encourage entrepreneurship through continued improvement of the City's image and through attracting more professional jobs, such as the developing medical cluster.
Regulation	<ul style="list-style-type: none"> • Pro-business attitudes among City officials and leaders • Ability to craft regulations that are conducive to business 	<ul style="list-style-type: none"> • High Systems Development Charges (SDCs) 	The City has the opportunity to develop a regulatory framework that can promote economic activity through economic development policies, plans for providing infrastructure, and provision of a variety of housing types.
Taxes	<ul style="list-style-type: none"> • Property taxes are comparable to Eugene 		Springfield needs revenue sources for providing public services and infrastructure, just as other cities do. The City has options about how to raise these funds: through property taxes, development fees, and other fees to taxes.
Industry clusters	<ul style="list-style-type: none"> • Presence of a developing medical cluster and existing call center cluster • Opportunities for development of other clusters 	<ul style="list-style-type: none"> • Availability of sites • Transportation access • Labor availability 	Springfield may be able to build employment in existing clusters, especially the developing medical cluster. Springfield has opportunities to develop other clusters, such as high-tech or small scale manufacturing.

Category	Opportunities	Challenges	Implications
Quality of life	<ul style="list-style-type: none"> • High quality of life, including access to recreation, proximity to cultural amenities in Eugene, regional shopping opportunities and environmental quality 	<ul style="list-style-type: none"> • Growth management challenges, such as balancing development with protection of environmental quality 	Springfield's policy choices will affect the City's quality of life, such as decisions regarding development of natural areas, housing policies, or policies that lead to redevelopment of downtown.
Innovative capacity	<ul style="list-style-type: none"> • Educated regional workforce • Existing professional and business service firms • Proximity to the University of Oregon • Existing businesses, clusters, and innovators in the Region 	<ul style="list-style-type: none"> • Attracting and retaining good workers in the region • Availability of higher-end housing and cultural amenities to attract creative class workers 	Government can be a key part of a community's innovative culture, through the provision of services and regulation of development and business activities that are responsive to the changing needs of business.

CHARACTERISTICS OF SITES NEEDED TO ACCOMMODATE EMPLOYMENT GROWTH

Table C-5 summarizes common site needs for target industries and key issues related to sites in Springfield.

Table C-5. Summary of site requirements

Site Attribute	Comments about these site attributes in Springfield
<p>Flat sites. Flat topography (slopes with grades less than 5% for industrial businesses and less than 15% for commercial businesses) is needed by almost all firms in every industry except for small Office and Commercial firms that could be accommodated in small structures built on sloped sites. Flat sites are particularly important for Industrial firms in manufacturing, trucking, and warehousing, since these firms strongly prefer to locate all of their production activity on one level with loading dock access for heavy trucks.</p>	<p>The commercial and industrial land inventory excluded lands with slopes over 15%. Some available sites in the Glenwood area have slopes that exceed 5% which may be inappropriate for some employment uses.</p>
<p>Parcel configuration and parking. Large Industrial and Commercial firms that require on-site parking or truck access are attracted to sites that offer adequate flexibility in site circulation and building layout. Parking ratios of 0.5 to 2 spaces per 1,000 square feet for Industrial and 2 to 3 spaces per 1,000 square feet for Commercial are typical ratios for these firms. In general rectangular sites are preferred, with a parcel width of at least 200-feet and length that is at least two times the width for build-to-suit sites. Parcel width of at least 400 feet is desired for flexible industrial/business park developments and the largest Commercial users.</p>	<p>Parcel configuration and parking do not appear to be a constraining factor on vacant land with the city's existing land base.</p> <p>The parcel configuration and need for parking on some sites identified as potentially redevelopable make some sites unlikely to redevelop over the 20-year planning period, as described in Chapter 2.</p>
<p>Soil type. Soil stability and ground vibration characteristics are fairly important considerations for some highly specialized manufacturing processes, such as microchip fabrications. Otherwise soil types are not very important for Commercial, Office, or Industrial firms—provided that drainage is not a major issue.</p>	<p>Soils do not appear to be a constraining factor on most sites in Springfield. The City Code provides special development and engineering standards to protect wetlands, flood plains, riparian corridors, wildlife areas, steep slopes and other sensitive areas.</p>
<p>Road transportation. All firms are heavily dependent upon surface transportation for efficient movement of goods, customers, and workers. Access to an adequate highway and arterial roadway network is needed for all industries. Close proximity to a highway or arterial roadway is critical for firms that generate a large volume of truck or auto trips or for firms that rely on visibility from passing traffic to help generate business. This need for proximity explains much of the highway strip development prevalent in urban areas today.</p>	<p>Businesses in Springfield have access to I-5, Highway 126, Highway 99 (in Eugene), and Highway 58.</p> <p>The Gateway area is highly visible from I-5. Springfield also has a well-developed street network within the City. The City may need to work with large businesses to increase automotive capacity in newly developed areas or in areas where the intensity of employment uses increase substantially.</p>

Site Attribute	Comments about these site attributes in Springfield
<p>Rail transportation. Rail access can be very important to certain types of heavy industries. The region has good rail access to many industrial sites.</p>	<p>Springfield is served by multiple Union Pacific rail lines. There are two primary junctions in Springfield: (1) the Springfield Junction is located in the Glenwood area in Southwest Springfield and (2) the Mohawk Junction is near the city's southern boundary, near 25th St.</p>
<p>Air transportation. Proximity to air transportation is important for some firms engaged in manufacturing, finance, or business services.</p>	<p>Springfield is located 15 miles from the Eugene Airport.</p>
<p>Transit. Transit access is important for Springfield's target industries, especially those with many employees and customers and for businesses that employ and serve segments of the population without access to an automobile.</p>	<p>Springfield has access to transit through the Lane Transit District (LTD). There are multiple bus lines that run throughout Springfield and multiple buses that connect Springfield and Eugene. The first two lines of the EmX bus rapid transit system serves existing employment nodes in Glenwood, Downtown and RiverBend/Gateway. Additional Frequent Transit Network (FTN) routes are identified in the Regional Transportation Plan and are being planned for the Main Street Corridor.</p>
<p>Pedestrian and bicycle facilities. The ability for workers to access amenities and support services such as shopping, entertainment and recreation areas by foot or bike is increasingly important to employers, particularly those with high-wage professional jobs. The need for safe and efficient bicycle and pedestrian networks will prove their importance over time as support services and neighborhoods are developed adjacent to employment centers.</p>	<p>Springfield has pedestrian and bicycle facilities. Springfield last updated the City Bicycle Plan in 1998. The plan proposes expansion of bicycle facilities to improve bicycle connectivity throughout the City and to neighboring communities.</p> <p>People in Springfield are able to use bicycle facilities for commuting if they live and work in areas of the City that have bicycle infrastructure. Commuting via pedestrian facilities may be more limited to people who live near their work.</p> <p>Springfield's pedestrian and bicycle facilities can be used on conjunction with LTD buses to provide opportunities for alternative methods of commuting for people that live further from work.</p>
<p>Labor force. Firms are looking at reducing their workforce risk, that is, employers want to be assured of an adequate labor pool with the skills and qualities most attractive to that industry. Communities can address this concern with adequate education and training of its populace. Firms also review turnover rates, productivity levels, types and amount of skilled workers for their industry in the area, management recruitment, and other labor force issues in a potential site area.</p>	<p>Commuting patterns within Springfield suggest that businesses in Springfield have access to the workforce of the Eugene-Springfield Region.</p> <p>Firms in Springfield will need employees with a range of skills, from people with customer service skills to highly educated professionals. Some types of skills that employers may need include: management skills, technology, manufacturing (e.g., machinist or wood-working), a range of medical training, creative skills, and other skills or education. The educational and skill requirements of businesses in Springfield are likely to be similar to the needs of businesses throughout the Eugene-Springfield Region.</p>

Site Attribute	Comments about these site attributes in Springfield
<p>Amenities. According to the International Economic Development Council,⁷⁹ attracting and retaining skilled workers requires that firms seek out places offering a high quality of life that is vibrant and exciting for a wide range of people and lifestyles.</p>	<p>Springfield offers access to outdoor amenities. Many urban amenities are available in Springfield and Eugene.</p>
<p>Fiber optics and telephone. Most, if not all industries expect access to multiple phone lines, a full range of telecommunication services, and high-speed internet communications.</p>	<p>Springfield has access to high-speed telecommunications facilities.</p>
<p>Potable water. Potable water needs range from domestic levels to 1,000,000 gallons or more per day for some manufacturing firms. However, emerging technologies are allowing manufacturers to rely on recycled water with limited on-site water storage and filter treatment. The demand for water for fire suppression also varies widely.</p>	<p>Springfield has sufficient potable water to meet current and expected needs.</p>
<p>Power requirements. Electricity power requirements range from redundant (uninterrupted, multi-sourced supply) 115 kva to 230 kva. Average daily power demand (as measured in kilowatt hours) generally ranges from approximately 5,000 kwh for small business service operations to 30,000 kwh for very large manufacturing operations. The highest power requirements are associated with manufacturing firms, particularly fabricated metal and electronics. For comparison, the typical household requires 2,500 kwh per day.</p>	<p>Springfield has access to sufficient power supply to accommodate most commercial and industrial users.</p>
<p>Land use buffers. According to the public officials and developers/brokers ECO has interviewed, industrial areas have operational characteristics that do not blend as well with residential land uses as they do with Office and Commercial areas. Generally, as the function of industrial use intensifies (e.g., heavy manufacturing) so too does the importance of buffering to mitigate impacts of noise, odors, traffic, and 24-hour 7-day week operations. Adequate buffers may consist of vegetation, landscaped swales, roadways, and public use parks/recreation areas. Depending upon the industrial use and site topography, site buffers range from approximately 50 to 100 feet. Selected commercial office, retail, lodging and mixed use (e.g., apartments or office over retail) activities are becoming acceptable adjacent uses to some light industrial areas.</p>	<p>Springfield's employment sites are generally located in areas where employment is compatible with other development. In areas where employment is not directly compatible with adjacent uses, the City may require buffers between incompatible uses.</p>

⁷⁹ International Economic Development Council. "Economic Development Reference Guide," <http://www.iedconline.org/hotlinks/SiteSel.html>. 10/25/02.

Table C-6 through Table C-11 present information from a range of sources about site needs of businesses that either considered locating in Oregon (including in the Eugene-Springfield area) or are in Springfield's target industries. The examples of site needs of these businesses illustrate that businesses have a wide range of need for site size, location, and characteristics based on the business's individual operational needs. The site needs of businesses vary from business to business, even within the same industry. As a result, one business's site needs may be different and potentially even conflicting with another business's site needs.

One of the key factors that businesses consider when making decisions about where to locate is the availability of vacant, large, and flat parcels of land. Table C-6 shows examples of traded-sector firms that considered locating in Oregon and Southern Washington between 1997 and 2010. Table C-6 shows that firms looking for office or flex space⁸⁰ required sites from 30 acres up to more than 100 acres. Warehouse and distribution firms looked for sites between about 50 and 200 acres. Manufacturing firms required sites from 25 acres to 250 acres in size.

These firms worked with Business Oregon to find suitable sites in Oregon. Some of the firms chose to locate in Oregon and some chose to locate elsewhere. One of the factors that influenced decisions to locate elsewhere was availability of large parcels of land with infrastructure services (e.g., transportation access, wastewater, etc.).

⁸⁰ Flex space is buildings that could be used for light industrial, office space, or both. Flex space typically has less costly finishing and improvements, such as having bare concrete floors rather than carpet. Businesses that sometimes occupy flex space include plumbing or electrical contractors, computer technology companies such as internet service providers or some software businesses, or service firms that prefer a more "industrial" feeling to their office space, such as some architecture firms.

Table C-6. Examples of firms that considered locating in Oregon and Southern Washington between 1997 and 2010

Type of business	General Location Considered	Site size (acres)	Building Size (square feet)	Located in Oregon ?
Office or Flex space				
Private technology firm	Northern Oregon I-5	100+	1 msf	
Facebook Data Center	Prineville	118	147,000 sf	Yes
Siltronics	Portland Harbor	35		
Nautilus	Vancouver	35	489,000	Yes
Google Data Center	The Dalles	30		Yes
Warehouse and Distribution				
Lowe's	Lebanon	204	1.3 to 2.2 msf	Yes
NOAH-PepsiCo	Albany	204	2.5 msf	No
Wal-Mart	Hermiston	200	1.3 msf	Yes
Target	Albany	175	1.3 msf	Yes
Fed Ex	Troutdale	78	500,000 sf	Yes
Dollar-Tree	Ridgefield, Wa	75	800,000 sf	
Home Depot	Salem	50 to 100	400,000+	Yes
Manufacturing				
Apricus	Northern Oregon	250	Very large	No
Navitas	Oregon	150 to 200		No
Pacific Ethanol	Boardman	137		Yes
SolarWorld	Hillsboro	75	1 msf	Yes
Schott Solar	I-5 corridor	50+	up to 800,000 sf	No
Genentech	Hillsboro	50	500,000 sf	Yes
Amy's Kitchen	White City	50		Yes
Sanyo Solar	Salem	25	150,000 sf	Yes
Spectrawatt	Hillsboro	25	225,000 sf	No

Source: Business Oregon

Table C-7 provides examples of businesses that considered locating in the Eugene-Springfield area between 2008 and 2013. These businesses all required sites at least 10 acres in size.

Table C-7. Examples of manufacturing and other businesses that considered locating in the Eugene-Springfield area between 2008 and 2013

Industry	Site size	Other information about site needs	Est. number of jobs	Year
Life science and biopharmaceutical manufacturing	60 acres	400,000 sq. ft. building Rectangular configuration and flat topography Avoid proximity to heavy industry, < 5 miles to highway	1,000	
Solar module manufacturing	10 to 20 acres	Existing bldg. 210,000 sq ft	434	2013
Manufacturing	15 to 25 acres and proximity to 40-100 acre site for expansion	120,000 sq. ft. building + 150,000 support space Flat and rectangular site configuration Close proximity to highway	150-200 up to 2,000	2008
MIT Solar Grade Silicon	30-40 acres		350	2008
Manufacturing	200 to 400 acres		347	2013
Manufacture and assembly of solar energy chemicals	65 acres	Build new	300	2009
Food processing and distribution	Needs at least 30 acres + more for expansion	300,000 sq. ft. w potential to expand Rectangular configuration Within 10 miles of highway Prefer a business park with compatible industries, buffered from commercial and residential areas, aesthetics of site important, visibility not required	215	2013
Manufacturing	25 acres	350-400,000 sq. ft. w/ 25 acres	135	2013
Lithium- ion batteries manufacturing	10 to 12 acres	200-300,000 sq. ft	124 up to 350	2009
High tech manufacturing		50,00 sq. ft. bldg. w outside storage	80-100	2013
Musical instrument manufacturer		100,000 sq. ft. bldg. with highway access	50 up to 350	2013
Chemical and plastic manufacturing	20 to 25 acres	Rectangular shaped site	50	2013
Data Center	20 acres or more	200,000-400,000 sq. ft. bldg.	25	2013
Aquaculture	10 to 25 acres	Two water sources	25	2013
Manufacturing	15 to 20 acres	Access to rail		2013
Food processing and warehouse		80-100,000 sq. ft. manufacturing facility 150-200,000 Sq. ft. warehouse Pref rail access		

Source: City of Springfield based on information from Business Oregon, Lane Metro Partnerships, and City of Springfield business contacts

Tables C-6 and C-7 provide examples of businesses that considered locating in Oregon and in Springfield. Business Oregon is the State agency that recruits businesses to Oregon, including the Eugene-Springfield area. Table C-8 presents information from Business Oregon about the characteristics that businesses similar to Springfield's target industries are seeking on employment sites larger than 10 acres. The matrix describes the site characteristics necessary to make a site competitive for by the industries shown in Table C-8, including site sizes that would meet selection requirements of the majority of industries in the listed industry sectors.

Table C-8. Industrial Development Competitiveness Matrix

Industry Sector	Site size* (Acres)	Site topography (Slope)	Site Access Max distance in miles to interstate or major arterial	Utilities (Min. line size in inches) Water / Sanitary Sewer	Special Considerations
Regionally to Nationally Scaled Clean-Tech Manufacturer	50	0-5%	10	10 / 10	Acreage allotment includes Expansion space (often an exercisable option). Very high utility volumes in one or more areas common. Sensitive to nearby uses.
Globally Scaled Clean Technology Campus	100	0-5%	10	10 / 10	Demanding criteria-driven site selection. High material and visitor throughput. Major Commercial Airport a must. Redundancy in trip routes and utilities vital. Surrounding Environmental (vibration, noise, etc.) Buffering and expansion space necessary. Sensitive to encroachment activities of nearby uses (residential, institutional, commercial).
Heavy Industrial/ Manufacturing	25	0-5%	10	8 / 8	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.
General Manufacturing	10	0-5%	20	8 / 8	Adequate distance from sensitive land uses(residential, parks) necessary.
Food Processing	20	0-5%	30	10 / 10	May require high volume/supply of water and sanitary sewer treatment. Often needs substantial storage/yard space for input storage. On-site water pretreatment needed in many instances.
High-tech Manufacturing or Campus Industrial	25	0-7%	15	10 / 10	Surrounding environment of great concern (vibration, noise, air quality, etc.). Increased setbacks may be required and/or on-site utility service areas. Avoid sites close to wastewater treatment plants, landfills, sewage lagoons, and other such land uses. May require high volume/supply of water and sanitary sewer treatment.
Regional (multistate) Distribution Center	200	0-5%	5 Only Interstate highway or equivalent	4 / 4	Transportation routing and proximity to/from major highways is crucial. Expansion options required. Truck staging requirements mandatory. Does not like to site or have routing issues between site and interstate that have rail crossings, school zones, airport runways, or drawbridges
Warehouse/Distribution	25	0-5%	5 Only Interstate highway or equivalent	4 / 4	Transportation infrastructure such as roads and bridges to/from major highways is most competitive factor.

Source: Business Oregon

*Note: Site size is the competitive acreage that would meet the site selection requirements of the majority of industries in this sector.

Table C-9 and Table C-10 present analysis from excerpted from the “Industry Intelligence” report developed for the City of Springfield by Tadzo.⁸¹ The report provides information about the range of site size needs for some of Springfield’s target industries.

Table C-9 shows that Springfield’s manufacturing target industries generally need sites at least 10 acres for a 100,000 square foot building and need sites 45 to 60 acres for a 500,000 square foot building. These site sizes are consistent with the sizes of sites and buildings needed by manufacturing firms that considered locating in Springfield since 2008 (see Table C-7). These types of manufacturing uses are likely to locate in districts that allow light industrial and campus industrial uses, possibly mixing with large-scale office employment uses.

Table C-9. Manufacturing site needs, Springfield, selected target industries

	<i>Minimum Acreage Needs²</i>			Building Type	Building Layout	Comments
	100,000 s.f. bldg.	200,000 s.f. bldg.	500,000 s.f. bldg.			
Medical Equipment Mfg	10	20	50	Light Manufacturing	Rectangular	Acreage needed to account for storm water drainage; green space; employee parking and truck movement.
High Tech Electronics Mfg	9	18	45	Light Manufacturing	Rectangular	Acreage needed to account for storm water drainage; green space; employee parking and truck movement. High tech manufacturing is typically more automated, thus requiring less employee parking than food processing or other manufacturing.
Recreational Equipment	10	20	50	Light Manufacturing	Rectangular or Square	Acreage needed to account for storm water drainage; green space; employee parking and truck movement. Early-stage operations for start-up operations are often housed in square building layouts and advance to more automated assembly lines as the company grows in product offerings and technology. Currently there is a growing trend for reshoring of recreational equipment manufacturing to boast USA branding. Also wages in China and India are steadily rising so the cost advantages are reducing.
Wood Furniture	12	24	60	Light Manufacturing	Rectangular or Square	The wood furniture manufacturing process is often completed in pods due to craftsman nature of operations versus large assembly lines. Outside storage of input goods is a typical siting criterion that contributes to larger acreage demands. Finished goods are typically large, requiring larger warehouse space as part of the operations.
Specialty Food Processing	10	20	50	Food Grade Mfg	Rectangular	Acreage needed to account for buffer from other operations is critical for protecting food quality. Acreage needed also encompasses storm water drainage; green space; waste water pre-treatment operations; parking and truck movement. Additionally, food processors typically desire extra acreage to plan for expansions adjacent to facility.

Source: “Industry Intelligence” report developed for the City of Springfield by Tadzo, November 21, 2014

⁸¹ Tadzo is a Washington State-based firm that specializes in economic development and site selection.

Table C-10 shows that target industries in office sectors need sites less than 5 acres for a building of 50,000 square foot or less. Larger office site needs range from about 10 acres for a 100,000 square foot building to 20 or more acres for a 200,000 square foot building. Office uses on sites larger than 10 acres are likely to occur in a range of zones, including commercial, mixed use, or a mixed employment zone (with compatible light industrial uses).

Table C-10. Office site needs, Springfield, selected target industries

	<i>Minimum Acreage Needs</i>				Building Type	Building Layout	Comments
	20,000 s.f. bldg.	50,000 s.f. bldg.	100,000 s.f. bldg.	200,000 s.f. bldg.			
Back Office	2-3	4-6	8-12	16-24	Urban Office ≤ 50,000 s.f. building	Single story	Typical urban office setting is utilized for back office operation via reuse of retail facilities that offer one-story building with open floor plan. Campus style office will be important for larger operations and more prestigious companies.
					Campus Style Office ≥ 50,000 s.f. building		Acreage needed to account for storm water drainage; green space; and employee parking. Employee density can be high so employee parking can be much higher than other office operations.
Headquarters	2	5	10	20	Urban Office ≤ 50,000 s.f. building	1 to 4 story buildings typical for Oregon outside of Portland.	Urban office may be adequate for small headquarter operations. Significant North American headquarters as well as major corporate headquarters will likely prefer campus style office with integrated amenities on-site.
					Campus Style Office ≥ 50,000 s.f. building	Urban office space could be part of mixed-used development.	Acreage needed to account for storm water drainage; green space; and employee parking. Extensive green space that integrates the natural environment into building design is typically important for these operations, along with employee amenities for outside experiences such as trails/walking paths and break areas.
Professional/ Technical Services	2	5	10	20	Urban Office ≤ 50,000 s.f. building	1 to 4 story buildings typical for Oregon outside of Portland.	Urban office may be adequate although as campus style office develops, professional/technical services will want to locate in close proximity of customers.
					Suburban Multi-Tenant Office ≥ 50,000 s.f. office	Urban office space could be part of mixed-used development.	Acreage needed to account for storm water drainage; green space; and employee parking. Extensive green space that integrates the natural environment into building design is typically important for these operations, along with employee amenities for outside experiences such as trails/walking paths and break areas.

Source: "Industry Intelligence" report developed for the City of Springfield by Tadzo, November 21, 2014

Businesses in Springfield’s target industries may consider locating within a business or industrial park. Table C-11 shows examples of business park sites in the Portland Metro area. Business parks in the Portland area generally range in size from 25 acres to 75 or 100 acres in size.

Table C-11. Examples of business park sites, Portland Metro area

Business Park	Site Acres	Building Square Feet
AmberGlen Business Center	72	572,685
AmberGlen East and West	44	536,000
Beaverton Creek	56	512,852
Columbia Commerce Park	31	562,888
Cornell Oaks Corporate Center	107	684,000
Creekside Corporate Park	50	615,113
Kruse Woods Corporate Center	76	1,652,105
Lincoln Center	22	728,770
Nimbus Corporate Park	47	688,632
Oregon Business Park 1	36	782,294
Oregon Business Park 3	35	501,029
PacTrust Business Center	40	570,539
Pacific Business Park (South)	26	340,864
Pacific Corporate Center	56	601,542
Parkside Business Center	52	687,829
Southshore Corporate Park	312	1,630,000
Tualatin Business Center I and II	33	383,305
Wilsonville Business Center	30	710,000
Woodside Corporate Park	37	579,845

Source: Metro UGR, Appendix 5 Multi-tenant (business park)/Large lot analysis

In addition, the Portland Metro area has the following types of major employment sites, which range from 25 to more than 500 acres.⁸² These provide examples of site needs of employers located on sites larger than 25 acres of the type included in Springfield’s target industries.

- **General industrial.** The Portland region has 21 general industrial major employment sites, ranging in size from 25 acres to 164 acres and averaging 53 acres. Firms on these sites range from beverage manufacturing to manufacturers of construction products to specialty manufacturing.
- **Warehouse and distribution.** The Portland region has 15 warehouse and distribution major employment sites, ranging in size from 25 acres to 452 acres and averaging 74 acres. Firms on these sites range from wholesalers to general warehouse and distribution to company-specific distributors.

⁸² These examples are documented in the Portland Metro 2009-2030 Urban Growth Report, Appendix 4

- **Flex.** The Portland region has 14 flex major employment sites, ranging in size from 25 acres to 522 acres and averaging 112 acres. Firms on these sites include small and large semiconductor manufacturing and other high tech manufacturing.
- **Office.** The Portland region has three office major employment sites, ranging in size from 44 acres to 123 acres and averaging 82 acres. Firms on these sites are generally high-tech businesses.
- **Institutional.** The Portland region has six medical major employment sites, ranging in size from 31 acres to 75 acres and averaging 54 acres.

LONG-TERM LAND AND SITE NEEDS

Table C-3, presented earlier in this appendix, discusses Springfield's forecast for employment by building type. The analysis of long-term site needs in Springfield builds off of the employment forecast for Springfield. Consistent with the requirements of OAR 660-009-0015(2), the site needs analysis presented in this section identifies the number of sites by broad category of site type and size reasonably expected to be needed for the 20-year planning period.

The steps to get from the employment forecast in Table C-3 to an estimate of needed sites are:

1. Determine the amount of employment that can be accommodated in non-employment plan designations based on historical development patterns and market trends. (See Table C-12)
2. Allocate new employment requiring land in employment designations⁸³ to sites ranging in size from less than 1 acre to greater than 20 acres. This allocation is based on historic employment patterns, discussed in Appendix A. (See Table C-13 and Table C-14)
3. Estimate the number of sites needed based on the employment forecast, historic development patterns, and infill and redevelopment potential. (See Table C-15)
4. Estimate the needed sites by site size and building type, using the range of sites identified in the previous step. (See Table C-16)

The remainder of this section is organized based on these steps.

⁸³ Not all new employment will require additional land in employment plan designations. Some employment growth will occur on land not designated for employment use (e.g., employment in residential and residential mixed use plan designations) and some employment growth will not require new commercial or industrial built space or land (e.g., new employment accommodated in existing built space).

Step 1: Determine amount of employment that can be accommodated in non-employment plan designations.

In 2006, approximately 16% of Springfield's employment was located in non-employment (predominantly residential) plan designations. Of this employment in non-employment plan designations, 2% was employment in industrial employment categories (such as a construction business run from a residence) and 14% was in commercial employment categories (such as neighborhood retail, doctor's offices, or home-based employment). Table A-9 and Map A-1 show the location of existing employment in Springfield.

Employment that does not require vacant land

Some employment will not require new land for development, including:

- 14% (1,918 employees) will locate on land designated for other uses (i.e., residential uses)
- 10% (1,344 new employees) will locate in existing built space

We assumed that a similar percentage of commercial employment (14% of new employment) would continue locating in non-employment designations. This assumption is reasonable because Springfield's plans call for integration of selected commercial uses in residential neighborhoods. In addition, telecommuting and working from home full-time is becoming more common and is likely to become more widely accepted over the next 20 years. We did not assume that additional industrial employment would locate in non-employment designations because these uses are relatively uncommon and Springfield's development policies do not actively encourage location of industrial employment in residential neighborhoods.

Table C-12 shows employment growth by the employment location. Table C-12 makes two assumptions that decrease land needed for new employment:

- **Some commercial employment growth will occur on land not designated for employment use.** Currently, 14% of commercial employment occurs within non-employment zones, predominantly in residential zones. These types of employment uses generally include neighborhood markets, medical offices, small restaurants, and home offices. ECO assumes that this trend will continue based on Springfield's development policies and the increasing acceptance of telecommuting and working from home.
- **Some employment growth will not require new commercial or industrial built space or land.** Some employment growth will be accommodated on existing developed or redeveloped land, such as a business occupying a vacant building or when an existing firm adds employees without expanding space.

Between 2003 and 2009, vacancy rates of commercial and

industrial buildings in the Eugene-Springfield region varied from a vacancy rate of about 1% (in 2006) to about 7% (in 2009). Vacancy rates in Springfield were generally similar, except that Springfield had a higher vacancy rate for industrial buildings (about 8%) between 2003 and 2005.^{84 85}

This analysis only accounts for vacant space in buildings and does not account for businesses adding employees to an existing space, such as adding a new desk in an existing office without expansion. Although space per employee fluctuates with changes in the economy because it is easier to layoff employees than to downsize office space, the amount of space allocated to office employees has been shrinking since 2000, when the national average amount of space per employee was about 200 square feet. By 2007 to 2009, the average space decreased to between 194 to 196 square feet per employee.⁸⁶

ECO assumed that employment would be accommodated in existing commercial and industrial space through filling vacant built space and through increases in efficient use of work space. ECO assumed that 10% of new employment will be accommodated in existing commercial or industrial built space, both through filling vacant built space and through increasing efficient use of existing work space.

Using these assumptions, Springfield will need to provide land for approximately 10,178 new employees between 2010 and 2030.

⁸⁴ This analysis is based on Co-Star data for the City of Springfield and the Eugene-Springfield region combined.

⁸⁵ During the recent recession, vacancy rates in the Eugene-Springfield region increased in 2009 and peaked around 7%, with industrial vacancy peaking at about 11%.

⁸⁶ This analysis is based on CoStar data and documented in an article on NAIOP, the Commercial Real Estate Development Association website. <http://www.naiop.org/en/Magazine/2015/Spring-2015/Business-Trends/Trends-in-Square-Feet-per-Office-Employee.aspx>

Table C-12. New employment locations, including employment locating in non-employment plan designations in existing built space, or on new land, Springfield, 2030

Type	New Employment	Employment Location		
		Non-employment designations	Existing Com. & Ind. Built Space	Employment on New Land
Industrial				
Warehousing & Distribution	389	0	39	350
General Industrial	1,066	0	107	959
Commercial				
Office	4,713	754	471	3,488
Retail	2,043	327	204	1,512
Other Services	5,229	837	523	3,869
Total	13,440	1,918	1,344	10,178

Source: ECONorthwest

Step 2. Allocate new employment requiring land in employment designations to sites by site size.

Determining Springfield's site needs requires distributing employment to a range of site sizes, ranging from small sites (less than 1 acre and 1 to 2 acre sites) to large sites (20 acres and larger). Table C-13 shows the distribution of employees by building type and site size in non-residential plan designations in Springfield in 2006. About 22% of Springfield's employment is on sites 5 to 20 acres, 21% is on sites of less than 1-acre, and 33% is on sites larger than 20 acres.

Table C-13. Percent of employees by building type and site sizes, Springfield, 2006

Building Type	Site Size (acres)					Total Employees
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger	
Warehousing & Distribution	13%	6%	3%	63%	15%	100%
General Industrial	15%	17%	17%	18%	34%	100%
Office	28%	14%	15%	23%	20%	100%
Retail	29%	13%	11%	18%	28%	100%
Other Services	9%	4%	8%	5%	74%	100%
Total	21%	12%	12%	22%	33%	100%

Source: ECONorthwest based on QCEW data

Note: Total Employees may not add to 100% as a result of rounding.

The percent of employees by building type and site size was calculated based on the number of employees in each building type and site size categories using QCEW data and City of Springfield tax lot data.

Table C-14 distributes employees (shown in Table C-12) based on the historic distribution of employment by site size and building type shown in Table C-13. In other words, the analysis assumes that future employment will require similar site sizes as current firms. For example, 21% of employment will locate on sites less than 1 acre.

Table C-14. Forecast of growth employment by building type and site size, Springfield, 2010 to 2030

Building Type	Site Size (acres)					Total Employees
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger	
Warehousing & Distribution	46	21	9	221	53	350
General Industrial	141	161	167	168	322	959
Office	1,024	448	400	645	970	3,488
Retail	143	65	116	76	1,111	1,512
Other Services	817	451	460	869	1,271	3,869
Total	2,171	1,148	1,153	1,979	3,728	10,178

Source: ECONorthwest

Note: The number of employees by site size may not add to the total shown in Table C-14 as a result of rounding in the calculation of number of employees.

Step 3: Estimate the number of sites needed based on the employment forecast, historic development patterns, and infill and redevelopment potential.

Table C-15 shows the range of sites needed by site size and building type in Springfield in 2030. The table uses information the following information to determine the range of site needs:

- **Total employment** is employment by site size from Table C-14.
- **Average employees per firm** is based on analysis of the average number of employees per firm by site size in Springfield in 2006.
- **Needed sites based on historic employment patterns** estimates the number of sites needed by dividing the total employment by average number of employees per firm. This calculation provides an estimate of the number of sites needed based on historical data. Table C-15 does not take into account redevelopment potential of existing sites, which is addressed through analysis in the buildable lands inventory in Chapter 2.

Table C-15. Needed sites by site size and building type, Springfield, 2010 to 2030 *

	Site Size (acres)					Total
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger	
Total Employment	2,171	1,148	1,153	1,979	3,728	10,178
Average Employees per Firm	12	30	39	101	908	
Needed Sites based on historic employment patterns	181	38	30	20	4	273

Source: ECONorthwest

*Note: Table C-15 calculates total number of needed sites by size and type and does not factor in number of needed sites that assumed to be provided through vacant land or on potentially redevelopable sites. Redevelopment potential of existing sites is addressed through analysis in the buildable lands inventory in Chapter 2, in Table 2-12.

Step 4: Estimate the needed sites by site size and building type, using the range of sites identified in the previous step.

Table C-16 presents an estimate of needed sites by site size and type of building. The results show that Springfield needs approximately 273 sites. Most sites are small, 2 acres or less. Springfield needs approximately 4 sites larger than 20 acres.

Table C-16. Estimated needed sites by site size and building type, Springfield, 2010 to 2030*

	Site Size (acres)					Total
	Less than 1	1 to 2	2 to 5	5 to 20	20 and Larger	
Warehousing & Distribution	2	2	3	4	1	12
General Industrial	5	5	4	8	2	24
Office	75	12	13	4	1	105
Retail	55	10	6	2		73
Other Services	44	9	4	2		59
Total	181	38	30	20	4	273

Source: ECONorthwest

*Note: Table C-16 calculates total number of needed sites by size and type and does not factor in number of needed sites that assumed to be provided through vacant land or on potentially redevelopable sites. Redevelopment potential of existing sites is addressed through analysis in the buildable lands inventory in Chapter 2, in Table 2-12.

The implication of Table C-16 is that Springfield will continue to need sites in a range of site sizes, consistent with the City's established development patterns. While much of Springfield's employment will locate on sites smaller than 5 acres, 22% of employment will locate in sites 5 to 20 acres and 33% of new employment will locate on sites 20 acres and larger.

The identified site needs shown in Table C-16 do not distinguish sites by comprehensive plan designation. This study assumes employment will continue to locate on land designated for industrial and other employment uses, as identified on Table 4-2.

Springfield Economic Development Objectives and Strategies

Appendix D

This appendix presents the memorandum that describes Springfield's Economic Development Objectives and Strategies.

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October 15, 2008

TO: Springfield City Council & Planning Commission
FROM: Bob Parker and Beth Goodman
SUBJECT: ECONOMIC DEVELOPMENT OBJECTIVES AND IMPLEMENTATION STRATEGIES

The City of Springfield is conducting a Commercial Industrial Buildable Land Needs analysis. Broadly, the project has three components: (1) a buildable lands inventory; (2) an economic opportunities analysis; and (3) an economic development strategy. All of these elements are required to comply with statewide planning Goal 9 and the Goal 9 rule (OAR 660-009). The economic development strategy builds from previous work by the City and will be used to guide development of land-use policies to implement the City's economic development vision.

Economic development policies may address a range of outcomes, from policies to attract firms or retain existing firms to policies to improve or maintain quality of life. The economic development strategy presented in this memorandum was developed in support of the EOA and is designed to meet the requirements of Goal 9. As a result, the economic development strategy focuses on land-use issues, without addressing broader economic development strategies such as labor force education that may also be a priority to the City and residents of Springfield.

The economic development strategy is the result of input from multiple sources:

- **City Council and Planning Commission.** At joint worksessions in June 2008, decisionmakers provided guidance on economic development objectives for Springfield.
- **Commercial Industrial Buildable Lands Stakeholder Committee.** The Stakeholder Committee provided input on the economic development objectives suggested by decisionmakers and suggested implementation strategies for each objective.
- **Community Development Survey.** The City administered an on-line survey about community development issues.
- **Visioning Workshops.** The City of Springfield held two community workshops to discuss community development issues.
- **Springfield Economic Development Plan.** The City of Springfield completed a draft Economic Development Plan, dated April 13, 2006. The Economic Development Plan addresses a range of economic development issues, including (but not limited to) land-use planning for economic growth.

ORGANIZATION OF THIS MEMORANDUM

The remainder of the memorandum is organized as follows:

- **Public Opinions about Economic Development Summarizes** selected results from the on-line community development survey and the public workshops.
- **Framework for Understanding Economic Development Policies and Actions** provides an overview of economic development issues and types of economic development policies and strategies that municipalities can adopt to achieve various economic development goals.
- **Economic Development Strategies and Implementation Steps** for Springfield presents objectives and strategies related to land-use to implement the City's economic development goals.
- **Appendix A: Metro Plan Economic Element** presents the economic goal, findings, objectives and policies from the Metro Plan to provide context about existing regional economic development policies.

PUBLIC OPINIONS ABOUT ECONOMIC DEVELOPMENT

While the analysis required to meet Goal 9 emphasizes market conditions and local productive factors as the primary determinant of potential economic growth, Oregon's Statewide Planning Goals also recognize a role for local governments and citizens to express their desire for the level and type of economic growth in their community. The desires of a city are formally stated in its adopted Comprehensive Plan, economic development plans, and refinement plans. Development of these plans always includes opportunities for public comment and plans are adopted by elected bodies, so these plans collectively represent the community economic development vision.

The 2004 Update of the Eugene-Springfield Metropolitan Area General Plan includes an economic element that articulates the region's economic goals and objectives (presented in Appendix A). The Metro Plan lists a single economic development goal:

Broaden, improve, and diversify the metropolitan economy while maintaining or enhancing the environment.

The range of views by individual citizens, however, is more diverse than the consensus represented in adopted plans. This project included two public workshops and an online survey to solicit citizen's views on economic opportunities in Springfield, issues affecting economic development, and potential policies to address these issues. This section summarizes the views expressed at the public workshop and in the online survey.

RESULTS OF THE ONLINE SURVEY

As a part of this project, ECONorthwest developed and implemented an online survey from April 4, 2008 through May 27, 2008. The intent of the survey was to collect anecdotal information on the opinions and preferences of survey respondents on a variety of community

development issues ranging from pace of growth to the importance of amenities and issues to opinions about broad economic development policies. Following is a summary of the key findings from the survey. The survey had 214 respondents, with 186 respondents completing the entire survey, nearly three-quarters of whom lived inside the Springfield Urban Growth Boundary (UGB).

- A majority of survey respondents (60%) think that Springfield is a better place to live than it was 10 years ago. Respondents identified a broad range of reasons. Some frequently mentioned reasons were new businesses, newer, more vibrant buildings, an improved downtown, and the EmX.
- About 66% of respondents felt the rate of growth was “about right,” while about 18% indicated it is “too fast.” The remaining 16% of respondents thought that growth was too slow (10%) or did not have an opinion (6%).
- About 76% of respondents felt that the city should “manage growth” as opposed to limited growth or pursuing faster rates of growth. About 78% of respondents thought that Springfield should manage growth by targeting specific types of employers.
- Respondents identified the following three land-use issues as the top problems in Springfield: (1) availability of family wage jobs; (2) development on steep slopes and in floodplains; and (3) availability of affordable housing.
- A majority of respondents felt that redevelopment is a high priority in Downtown (71%) and in Glenwood (63%).
- A majority of respondents support economic development policies that increase economic activity, including policies to recruit new businesses and retain existing businesses.
- About 85% of respondents supported policies to maintain Springfield’s existing environmental quality.

RESULTS OF PUBLIC WORKSHOP

The City of Springfield held two community workshops to discuss community development issues, one on May 20, 2008 and one on July 31, 2008. The intent of the workshops was to collect anecdotal information on the opinions and preferences about community issues. At the workshops, small groups formed to discuss issues of concern for developing Springfield’s economy. The City summarized the results of each group’s discussion. This section summarizes the themes discussed the workshops.

Table 1. Summary of input from the Springfield Economic Development Workshop

Category	Issues and themes
Jobs and the economy	Attract businesses that provide stable, living or family wage jobs that provide benefits Recruit businesses that provide green or sustainable products Lower the costs of doing business in the City, such as system development charges and permitting fees Attract businesses to the City through the use of enterprise zones
Sustainability and the environment	Balance environmental protection and greenfield development Encourage green building practices for new development Capitalize on opportunities to increase walkability and bicycling
Land use and zoning	Balance the use of developing green-fields with redeveloping existing land and emphasizing infill Encourage more efficient land uses, including higher density development where appropriate Promote nodal development and mixed-use development, especially in downtown Provide opportunities for high quality development along the riverfront Reevaluate allowable uses, especially near schools Consider parking and transportation needs when planning for new uses, especially in downtown
Redevelopment	Focus on redevelopment in downtown and Glenwood. Revitalize downtown through redevelopment and rehabilitation of old buildings Promote re-use of vacant buildings in downtown Keep a historical perspective when considering redevelopment

Source: Springfield economic development workshops, May 20, 2008 and July 31, 2008

FRAMEWORK FOR UNDERSTANDING ECONOMIC DEVELOPMENT POLICIES AND ACTIONS

A wide range of economic development policies and actions are available to cities that can affect the level and type of economic development in their community. To affect economic development, any policy or action must affect a factor of production that influence business locations and job growth. In brief, the factors that have the most impact on business locations and job growth are:

- Labor
- Land
- Local Infrastructure
- Access to markets and materials
- Agglomerative economies (clusters)
- Quality of life
- Entrepreneurship

The supply, cost, and quality of any of these factors obviously depend on national and global market forces that local government has no influence over. But they also depend on public policy, which can generally affect these factors of production through:

- Planning
- Regulation
- Provision of public services
- Taxes
- Incentives

The location decisions of businesses are primarily based on the availability and cost of labor, transportation, raw materials, and capital. The availability and cost of these production factors are usually similar within a region. Most economic development strategies available to local governments only indirectly affect the cost and quality of these primary location factors.

Local governments can most directly affect tax rates (within the bounds of Measures 5 and 50), the cost to businesses and quality of public services, and regulatory policies. Economists generally agree that these factors do affect economic development, but the effects on economic development are modest. Thus, most of the strategies available to local governments have only a modest affect on the level and type of economic development in the community.

Local governments in Oregon also play a central role in the provision of buildable land through inclusion in the Urban Growth Boundary, plan designation, zoning, and provision of public services. Obviously, businesses need buildable land to locate or expand in a community. Providing buildable land alone is not sufficient to guarantee economic development in a community—market conditions must create demand for this land, and local factors of production must be favorable for business activity. The provision of buildable land is one of the most direct ways that the City of Springfield can affect the level and type of economic development in the community.

POTENTIAL ECONOMIC DEVELOPMENT POLICIES AND ACTIONS

A broad range of policies and actions are available to cities in achieving local economic development objectives. The effectiveness of any individual tool or combination of tools depends on the specific objectives the municipality wants to achieve. In short, local strategies should be customized not only to meet locally defined objectives, but to recognize economic opportunities and limitations (as defined in the Economic Opportunity Analysis (EOA)). Positive outcomes are not guaranteed: even good programs can result in limited or modest results.

Table 2 identifies a range of potential economic development strategies that the City of Springfield could consider implementing. These strategies range from those closely associated with the basic functions of government (provision of buildable land and public services) to those sometimes viewed as outside the primary functions of government (such as financial incentives and business assistance). The actual policies and actions adopted by the City of Springfield will depend on the specific economic development issues and the role of the City in economic development in the community.

Table 2. Range of potential economic development strategies

Category/Policy	Description
Land Use	
	Policies regarding the amount and location of available land and allowed uses.
Provide adequate supply of land	Provide an adequate supply of development sites to accommodate anticipated employment growth with the public and private services, sizes, zoning, and other characteristics needed by firms likely to locate in Springfield.
Increase the efficiency of the permitting process and simplify city land-use policies	Take actions to reduce costs and time for development permits. Adopt development codes and land use plans that are clear and concise.
Public Services	
	Policies regarding the level and quality of public and private infrastructure and services.
Provide adequate infrastructure to support employment growth	Provide adequate public services (i.e. roads, transportation, water, and sewer) and take action to assure adequate private utilities (i.e. electricity and communications) are provided to existing businesses and development sites.
Focused public investment	Provide public and private infrastructure to identified development or redevelopment sites.
Communications infrastructure	Actions to provide high-speed communication infrastructure, such as developing a local fiber optic network.
Business Assistance	
	Policies to assist existing businesses and attract new businesses.
Business retention and growth	Targeted assistance to businesses facing financial difficulty or thinking of moving out of the community. Assistance would vary depending on a given business' problems and could range from business loans to upgrades in infrastructure to assistance in finding a new location within the community.
Recruitment and marketing	Establish a program to market the community as a location for business in general, and target relocating firms to diversify and strengthen the local economy. Take steps to provide readily available development sites, an efficient permitting process, well-trained workforce, and perception of high quality of life.
Development districts (enterprise zones, renewal districts, etc.)	Establish districts with tax abatements, loans, assist with infrastructure, reduced regulation, or other incentives available to businesses in the district that meet specified criteria and help achieve community goals.
Business clusters	Help develop business clusters through business recruitment and business retention policies. Encourage siting of businesses to provide shared services to the business clusters, including retail and commercial services.
Public/private partnerships	Make public land or facilities available, public lease commitment in proposed development, provide parking, and other support services.
Financial assistance	Tax abatement, waivers, loans, grants, and financing for firms meeting specified criteria. Can be targeted as desired to support goal such as recruitment, retention, expansion, family-wage jobs, or sustainable industry.
Business incubators	Help develop low-cost space for use by new and expanding firms with shared office services, access to equipment, networking opportunities, and business development information. Designate land for live-work opportunities.
Mentoring and advice	Provide low-cost mentors and advice for local small businesses in the area of management, marketing, accounting, financing, and other business skills.
Export promotion	Assist businesses in identifying and expanding into new products and export markets; represent local firms at trade shows and missions.

Category/Policy	Description
Workforce	Policies to improve the quality of the workforce available to local firms.
Job training	Create opportunities for training in general or implement training programs for specific jobs or specific population groups (i.e. dislocated workers).
Job access	Provide transit/shuttle service to bring workers to job sites.
Jobs/housing balance	Make land available for a variety of low-cost housing types for lower income households, ranging from single-family housing types to multifamily housing.
Other	
Regional collaboration	Coordinate economic development efforts with the County, the State, and local jurisdictions, utilities, and agencies so that clear and consistent policies are developed.
Quality of life	Maintain and enhance quality of life through good schools, cultural programs, recreational opportunities, adequate health care facilities, affordable housing, neighborhood protection, and environmental amenities.

Source: ECONorthwest.

ECONOMIC DEVELOPMENT STRATEGIES AND IMPLEMENTATION STEPS FOR SPRINGFIELD

The following economic development strategies for Springfield are based on five sources of information: (1) guidance on developing the strategies from the City Council and Planning Commission; (2) input from the Stakeholder Committee on the strategies and implementation steps; (3) public input on preferred types of growth and development strategies from the visioning survey and public workshops; (4) existing goals and strategies in the Economic Development Plan; and (5) the principles of economic development presented in the section above and Table 2.

Together these considerations suggest the following criteria and strategy for the City to support economic development in Springfield. The strategies and implementation steps suggested below are organized with objectives most related to land-use planning presented first. The objectives were proposed by Springfield's decisionmakers or through the Stakeholder group. The implementation strategies was developed by the Stakeholder group or taken from Springfield's draft Economic Development Plan.

Objective 1: Provide an adequate supply of sites of varying locations, configurations, and size, to accommodate industrial and other employment over the planning period.

The Economic Opportunities Analysis (EOA) identifies the size and characteristics of sites needed in Springfield for employment uses over the planning period. Using the site needs described in the EOA, the City should track employment land use trends and re-evaluate employment land needs in five to seven years. The City should always maintain an adequate supply of land for employment uses.

Suggested implementation steps:

- Provide land to meet the site characteristics and site sizes described in the EOA. These sites may include vacant, undeveloped land, partially developed sites with

potential for additional development through infill development, and redevelopable areas. The City can provide land in two ways: (1) increasing commercial and industrial land-use efficiency by promoting infill or redevelopment or (2) bringing new land into the urban growth boundary.

- Work with property owners and their representatives to ensure that prime development and redevelopment sites throughout the City and Urban Growth Boundary are known, aggregated, ready to develop, and marketed.
- Work with property owners and their representatives to ensure that prime development and redevelopment sites throughout the City and Urban Growth Boundary that are designated for employment use are preserved for future employment needs and are not subdivided or used for non-employment uses.
- Expand industrial site opportunities through rezoning and evaluating commercial, residential, and industrial land for the best economic return for the community through the process of Periodic Review of the Metro Plan, expanding the urban growth boundary, and other means (e.g., Transportation Growth Management Grants from the State of Oregon).
- Develop and implement a system to monitor the supply of commercial and industrial lands. This includes monitoring commercial and industrial development (through permits) as well as land consumption (e.g. development on vacant, or redevelopable lands).

Objective 2: Provide an adequate competitive short-term supply of suitable land to respond to economic development opportunities as they arise.

“Short-term supply” means suitable land that is ready for construction usually within one year of an application for a building permit or request for service extension. “Competitive Short-term Supply” means the short-term supply of land provides a range of site sizes and locations to accommodate the market needs of a variety of industrial and other employment uses.

Suggested implementation steps:

- Where possible, concentrate development on sites with existing infrastructure or on sites where infrastructure can be provided relatively easily and at a comparatively low cost.
- Work with the State to have sites certified as project-ready through the state’s certified Industrial Lands program.
- Track development of land in the short-term supply and replace developed land with undeveloped or redevelopable land with similar characteristics (e.g., location, size, topography, etc.) as the land that recently developed. The City may want to replenish the short-term supply of land on an annual basis or every two to three years.

Objective 3: Reserve sites over 20-acres for special developments and industries that require large sites.

There are comparatively few large sites relatively near to I-5 available for development in the Southern Willamette Valley and no sites with these characteristics in the Eugene-Springfield

area.¹ The City should preserve large sites, especially sites with access to I-5, to provide opportunities for development by industries that require large sites.

Suggested implementation steps:

- Designate land for industrial or business parks to provide opportunities for development of business clusters for related or complementary businesses.
- Develop policies that provide flexibility in the industrial or non-retail commercial use of land on large sites.

Objective 4: Provide adequate infrastructure efficiently and fairly.

Public infrastructure and services are a cornerstone of any economic development strategy. If roads, water, sewer, and other public facilities are unavailable or inadequate, industries will have little incentive to locate in a community.

Suggested implementation steps:

- Coordinate capital improvement planning with land use and transportation planning to coincide with the City's Economic Development Strategy.
- Target resources of the Systems Development Funds of infrastructure on sites that provide prime opportunities for employment uses as a result of location, site size, or other significant site characteristics.
- Ensure that public-private development agreements to recover costs are in effect prior to financing public improvements.
- Establish alternative funding mechanisms in addition to debt service that provide timely completion of 'connecting' public facilities (unpaved block of a street or missing sections of sewer line) with preferences to projects in existing neighborhoods and those fostering economic development.
- Efficiently use existing infrastructure by promoting development, infill, re-use, and redevelopment for commercial and industrial uses and developing strategies and incentives to stimulate private investment that overcome anticipated impacts or downturns in the local economy.
- Support development of citywide high-speed internet access and other telecommunications infrastructures.
- Provide information on infrastructure availability on a site-by-site basis so that developers are able to readily assess infrastructure availability on any given site.
- Assist with providing infrastructure through the use of Urban Renewal funding, where appropriate.

¹ According to Oregon Prospector, there are only nine sites in the Southern Willamette Valley with the following characteristics: 20 acres or larger, Project Certified, and within about five miles of I-5. The following counties have sites that match these characteristics: three sites in Marion County, one site in Benton County, two sites in Linn County, no sites in Lane County, and three sites in Douglas County.

- Assess lower systems development charges (SDCs) in redevelopment areas with the capacity to provide land for employment, especially for redevelopment of areas five acres and larger.

Objective 5: Encourage employers to locate in downtown Springfield, when appropriate.

The City has policies to encourage residential and commercial redevelopment in downtown. The redevelopment of downtown Springfield provides opportunities to both use land more efficiently and minimize the costs of providing infrastructure.

Suggested implementation steps:

- Support the continued revitalization of Springfield's Downtown
- Pursue policies to promote infill and redevelopment in downtown Springfield
- Provide the infrastructure and services that businesses need to operate in downtown Springfield
- Develop programs to promote investments in existing buildings to make downtown more attractive, such as the Urban Renewal program.
- Develop a marketing strategy to attract businesses to downtown Springfield, including providing low-cost assistance for businesses moving to downtown

Objective 6: Encourage redevelopment of Glenwood with a mixed use employment and housing center.

The City has policies to encourage residential and commercial redevelopment in Glenwood. Like redevelopment in downtown, redevelopment in Glenwood provides opportunities to both use land more efficiently and minimize the costs of providing infrastructure.

Suggested implementation steps:

- Redevelop and develop sites in Glenwood through key investments, special standards, and focused activity through the Springfield Economic Development Agency (SEDA), the Glenwood Urban Renewal Plan, the Glenwood Refinement Plan and the Riverfront Development Plan.
- Provide the infrastructure and services to necessary for development in Glenwood.
- Coordinate economic development in Glenwood with regional economic development agencies.
- Promote economic development in Glenwood through techniques, such as land assembly and cooperative development agreements, to assist developers with land assembly problems.

Objective 7: Redevelop brownfields as the opportunities for reuse arise.

Springfield has more than 20 brownfield sites that will require clean-up before the sites can be redeveloped. Springfield has about 20 to 50 more sites that may be brownfields if the sites were available for redevelopment. The cost of clean-up will vary, depending on the prior uses and type of contamination on the site.

Suggested implementation steps:

- Inventory existing brownfields in the Springfield UGB. The inventory should include information about the site and brownfield: site location and size, previous uses, pollution or contaminants, and other site characteristics.
- Develop policies that support redevelopment of brownfields. Opportunities to encourage brownfield redevelopment may include tax incentives, decreases or waiving development fees, or private-public partnerships for state or federal grant funding for brownfield redevelopment.
- Provide non-monetary assistance with clean-up and redevelopment of ‘brownfield’ commercial and industrial sites, including, for example, the possible sponsorship of applicable state and federal grants.

Objective 8: Encourage development of commercial businesses in close proximity with residential uses, where appropriate.

Mixing commercial and residential development is appropriate in some areas of Springfield. The City should encourage mixed used development that includes retail, office commercial, and multifamily housing in areas like downtown. In more residential neighborhoods, the City should consider mixing neighborhood retail or small-scale offices with residential uses.

Suggested implementation steps:

- Continue to support policies to encourage mixed-use development and nodal development in Springfield’s downtown, Glenwood, and mixed-use nodes identified in TransPlan.
- Support policies to mix small-scale commercial uses into existing and new residential neighborhoods where these uses are appropriate and acceptable to residents.
- Support the co-location of residential and commercial uses in existing buildings by providing financial assistance for necessary building upgrades to meet requirements in the City’s building code, such as improvements to meet seismic standards.
- Reduce systems development charges (SDCs) and other development costs to encourage redevelopment and commercial uses in residential areas, where appropriate.

Objective 9: Support and assist existing businesses in Springfield.

Springfield's existing businesses are important to the City's continuing economic well-being.

Suggested implementation steps:

- Develop and implement an outreach strategy to determine how the City can assist existing businesses. Opportunities for assistance may range from ensuring availability of on-street parking to providing assistance with the development process to forming public-private partnerships to promote Springfield businesses.
- Encourage self-help methods and programs for business districts such as the formation of business associations and special self-assessment districts for parking and economic improvement.
- Pursue special projects and grant applications that provide support to local business and industry.
- Support the co-location of residential and commercial uses in existing buildings by providing financial assistance for necessary building upgrades to meet requirements in the City's building code, such as improvements to meet seismic standards.
- Reduce systems development charges (SDCs) and other development costs to encourage redevelopment and commercial uses in residential areas, where appropriate.

Objective 10: Increase the potential for employment in one of the regional industry clusters.

The clusters include: Health Care, Communication Equipment, Information Technology (Software), Metals (Wholesalers), Processed Food and Beverage, Wood & Forest Products, and Transportation Equipment.

Suggested implementation steps:

- Provide the services, infrastructure, and land needed to attract these types of businesses, especially where it can increase connectivity between businesses.
- Designate land for industrial/technology/business parks to provide opportunities for development of business clusters for related or complementary businesses.
- Promote development of support businesses for business clusters, including specialized suppliers for the business cluster, restaurants, financial institutions, and other services.
- Promote further development of the health care cluster in the Gateway area by examining land-use policies in the area and, if necessary, modify the policies to promote development of medical and other employment that requires specific types of land.
- Promote development of high-tech businesses by continuing to target these businesses for recruitment and expansion in Springfield.

- Coordinate development of business clusters with other cities and economic development agencies in the Eugene-Springfield region but emphasize development of the business cluster in Springfield.

Objective 11: Increase the potential for convention- and tourist-related economic activities.

Tourism results in economic activity, especially in the service industries like retail, food services, and accommodations. For example, the direct economic benefit of lodging tax receipts from overnight accommodations to Springfield in 2007 was \$1.2 million. Springfield could increase tourism through building tourism-related facilities, such as a convention center, through growth of businesses that bring tourists to the City, and through increased marketing.

Suggested implementation steps:

- Assist with conference center development at a suitable site in Springfield with a goal of making it financially independent with self-sustaining operations.
- Encourage development of destination point projects (like the Springfield Museum Interpretive Center, Dorris Ranch Living History Farm and McKenzie River fishing and recreational activities) that draw visitors to the Springfield area from regional, national, and international areas.
- Ensure that the factors that are likely to attract visitors to Springfield, especially Springfield's environmental quality and natural beauty, are protected and enhanced.

Objective 12: Attract sustainable businesses and support sustainable development practices.

The City should foster the creation of a local, sustainable economy by partnering with other organizations to watch for opportunities and vulnerabilities, incubate and coordinate projects and facilitate dialogue, action and education within the community. The City should also work to reduce Springfield's exposure to global economic and social vulnerabilities that could result as fuel supplies cease to be abundant and inexpensive.

Suggested implementation steps:

- Define "sustainable businesses" and what business practices qualify as "sustainable."
- Promote and recruit businesses that produce sustainable products, have sustainable business practices, and/or have sustainable manufacturing processes.
- Support land use patterns that reduce transportation needs, promote walkability and provide easy access to services and transportation options.
- Rebate development fees for development projects that are certified as sustainable to nationally recognized standards (e.g., LEED buildings).
- Provide incentives for development that uses sustainable building materials or solutions (e.g., instead of using traditional asphalt, using permeable asphalt) or use of sustainable energy sources (e.g., solar or wind power).

- When developing policies that will impact land outside of the Springfield UGB, consider future agricultural needs and economic opportunities to protect agricultural lands for production of local food.

Objective 13: Recruit businesses that pay higher than average wages for the region.

Maintaining and creating high-wage jobs is important for the development of Springfield's economy. Economic development recruitment efforts the City engages in should target high-wage jobs.

Suggested implementation steps:

- Work with Lane Metro Partnership and other economic development organizations to target and recruit businesses: (1) with above average wages (as reported by the Oregon Employment Department), (2) other benefits such as health insurance, especially for part-time employees, and/or (3) that provide other benefits such as job advancement or ownership opportunities.
- Work with local agencies to meet workforce needs, such as: training and education, job advancement, or local expansion of businesses that are less subject to boom and bust cycles.
- Coordinate with community economic development organizations to develop a coherent and effective marketing program. Coordinate development of the strategy local and state economic development agencies.
- Use word-of-mouth to market Springfield to prospective businesses based on the City's reputation for: rapid processing of permits and applications, maintaining City agreements and commitments, minimizing surprises in the development process, and providing developers with certainty and flexibility in the development process. Depending on this type of marketing will require that the City strive to enhance and maintain the City's reputation for these attributes.

APPENDIX A: METRO PLAN ECONOMIC ELEMENT (2004)

This appendix is the Economic Element from the 2004 update of the Metropolitan Area General Plan. The purpose of this appendix is to provide context for the existing regional economic development policies.

In recent years, there has been a strong structural shift in the Eugene-Springfield metropolitan area's economy. This shift is characterized by four trends: (a) a decline in the lumber and wood products industry as a source of employment; (b) limited increase in employment in other manufacturing activities; (c) diversification of the non-manufacturing segments of the local economy, primarily in trade, services, finance, insurance, and real estate; and (d) the development of this metropolitan area as a regional trade and service center serving southern and eastern Oregon.

The decline in lumber and wood products and diversification of the non-manufacturing sectors are consistent with changes that are occurring in other portions of the state and throughout the nation as a result of rising real incomes and higher productivity of labor in manufacturing. The increase in employment in other manufacturing activities in this area has lagged behind other portions of the state, particularly the Portland area, and many other places in the nation. Given the projected growth in this area's economy, it is essential that an adequate supply (quantitatively and qualitatively) of commercial and industrial land be available. An adequate supply of land includes not only sites sufficient in size to accommodate the needs of the commercial or industrial operations (including expansion), but also includes sites which are attractive from the standpoint of esthetics, transportation costs, labor costs, availability of skilled labor, natural resource availability, proximity to markets, and anticipated growth of local markets.

In striving toward the Land Conservation and Development Commission's (LCDC) Statewide Planning Goal 9: Economic Development, "To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens," the Eugene-Springfield metropolitan area must take advantage of and encourage the further diversification of this area's economic activities and role as a regional center.

This diversification and growth can improve the opportunities for presently underutilized human resources and generally raise the standard of living for metropolitan area residents.

Implicit in the goals and objectives that follow is the premise that the economic health of the area is integrally related to the quality of life for residents. Improved welfare of the residents of the metropolitan area, measured by increases in employment opportunities and reductions in unemployment, increases in real incomes, and improved environmental quality are the ultimate goals of all economic efforts. Economic growth or industrial expansion is acceptable when it is consistent with these goals and objectives.

ECONOMIC GOAL

Broaden, improve, and diversify the metropolitan economy while maintaining or enhancing the environment.

FINDINGS, OBJECTIVES, AND POLICIES

Findings

1. The structure of the Eugene-Springfield metropolitan area economy is undergoing a shift away from lumber and wood products manufacturing (and other heavy industrial activities) and towards a more diverse economic base characterized by growth in light manufacturing activities and the non-manufacturing activities of trade, commercial and professional services, finance, insurance, and real estate.
2. The lumber and wood products sector is the metropolitan area's dominant manufacturing activity; and in this respect, Lane County's forest is the area's most important natural resource utilized as a factor of production.
3. Major institutions in the metropolitan area including the University of Oregon and Sacred Heart Hospital, have had a stabilizing influence on the local economy.
4. The Eugene-Springfield metropolitan area is developing as a regional center for activities, such as tourism, distribution, and financial services, serving the southwestern and central Oregon area.
5. Based on data from the 2000 U.S. Census, the per capita income in 1999 for the Eugene- Springfield metropolitan area was lower than for Oregon as a whole and the Portland metropolitan area.
6. In 2000, the unemployment rate in the Eugene-Springfield metropolitan area was comparable to Oregon and higher than the national rate.
7. Historically, heavy-manufacturing industries, including primary metals, chemicals and paper, have been characterized by high levels of pollution or energy consumption. Changes in technology and environmental regulations have reduced the potential environmental impacts of these industries. Heavy manufacturing industries provide benefits, such as relatively high wage scales and the potential for generating secondary manufacturing activities.
8. Both expansion of existing businesses through use of local capital and entrepreneurial skills and the attraction of new employers offer realistic opportunities for economic development.
9. The healthful environment of the metropolitan area can help attract industrial development, hold workers, and attract convention- and tourist-related economic activities. The concern for clean air and water is high priority with area residents.
10. The provision of adequate public facilities and services is necessary for economic development.
11. There are presently inefficiently used resources in the metropolitan area, including land, labor, and secondary waste products.
12. Major employment areas include the Eugene and Springfield central business districts, the University of Oregon area, Sacred Heart Hospital, the west Eugene industrial area, the north (Gateway) and south Springfield industrial areas, the Highway 99N industrial area, Country Club Road, Chad Drive, and the Mohawk-Northgate area.
13. The metropolitan economy is made up of a number of interrelated and important elements, one of which is construction and construction-related activities. Construction, for example, is essential for all sectors of the economy, as well as for the provision of an adequate supply of affordable housing.
14. The mixture of commercial and office uses with industrial uses can reduce or enhance the utility of industrial areas for industrial purposes, depending upon circumstances.

- Uncontrolled mixing creates problems of compatibility and traffic congestion, and may limit the area available for industrial development. Limited mixing, subject to clear and objective criteria designed to minimize or eliminate incompatibility, traffic problems, and which preserve the area for its primary purpose, can make an industrial area more pleasant, convenient, economical, and attractive as a place to work or locate.
15. Campus industrial firms prefer city services.
 16. Campus industrial firms have varied site location requirements, prefer alternative sites to choose from, and usually benefit from location of other special light industrial firms within the community and within the same industrial development.

Objectives

1. Improve the level, stability, and distribution of per-capita income for metropolitan residents.
2. Reduce unemployment in the resident labor force, especially chronic long-term unemployment.
3. Encourage local residents to develop skills and other educational attributes that would enable them to obtain existing jobs.
4. Promote industrial and commercial development with local capital, entrepreneurial skills, and experience of the resident labor force, as well as with new light manufacturing companies from outside the metropolitan area.
5. Supply an adequate amount of land within the urban growth boundary to accommodate: (a) the diversifying manufacturing sector (especially low polluting, energy-efficient manufacturing uses); and (b) the expansion of the metropolitan area as a regional distribution, trade, and service center.
6. Maintain strong central business districts to provide for office-based commercial, governmental, and specialized or large-scale retail activities.
7. Ensure compatibility between industrial lands and adjacent areas.
8. Reserve enough remaining large parcels for special developments requiring large lots.
9. Increase the potential for convention- and tourist-related economic activities.
10. Provide the necessary public facilities and services to allow economic development.
11. Attempt to find ways to more effectively use inefficiently used resources such as land, labor, and secondary waste products.
12. Provide for limited mixing of office, commercial, and industrial uses subject to clear, objective criteria which: (a) do not materially reduce the suitability of industrial, office, or commercial areas for their primary use; (b) assure compatibility; and (c) consider the potential for increased traffic congestion.

Policies

- B.1 Demonstrate a positive interest in existing and new industries, especially those providing above average wage and salary levels, an increased variety of job opportunities, a rise in the standard of living, and utilization of our existing comparative advantage in the level of education and skill of the resident labor force.
- B.2 Encourage economic development, which utilizes local and imported capital, entrepreneurial skills, and the resident labor force.
- B.3 Encourage local residents to develop job skills and other educational attributes that will enable them to fill existing job opportunities.

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- B.4 Encourage the continuance of career preparation and employment orientation for metropolitan area residents by the community's educational institutions, labor unions, businesses, and industry.
 - B.5 Provide existing industrial activities sufficient adjacent land for future expansion. B.6 Increase the amount of undeveloped land zoned for light industrial and commercial uses correlating the effective supply in terms of suitability and availability with the projections of demand.
 - B.7 Encourage industrial park development, including areas for warehousing and distributive industries and research and development activities.
 - B.8 Encourage the improvement of the appearance of existing industrial areas, as well as their ability to serve the needs of existing and potential light industrial development.
 - B.9 Encourage the expansion of existing and the location of new manufacturing activities, which are characterized by low levels of pollution and efficient energy use.
 - B.10 Encourage opportunities for a variety of heavy industrial development in Oregon's second largest metropolitan area.
 - B.11 Encourage economic activities, which strengthen the metropolitan area's position as a regional distribution, trade, health, and service center.
 - B.12 Discourage future *Metro Plan* amendments that would change development-ready industrial lands (sites defined as short-term in the metropolitan *Industrial Lands Special Study*, 1991) to non-industrial designations.
 - B.13 Continue to encourage the development of convention and tourist-related facilities.
 - B.14 Continue efforts to keep the Eugene and Springfield central business districts as vital centers of the metropolitan area.
 - B.15 Encourage compatibility between industrially zoned lands and adjacent areas in local planning programs.
 - B.16 Utilize processes and local controls, which encourage retention of large parcels or consolidation of small parcels of industrially or commercially zoned land to facilitate their use or reuse in a comprehensive rather than piecemeal fashion.
 - B.17 Improve land availability for industries dependent on rail access.
 - B.18 Encourage the development of transportation facilities which would improve access to industrial and commercial areas and improve freight movement capabilities by implementing the policies and projects in the *Eugene-Springfield Metropolitan Area Transportation Plan (TransPlan)* and the *Eugene Airport Master Plan*.
 - B.19 Local jurisdictions will encourage the allocation of funds to improve transportation access to key industrial sites or areas through capital budgets and priorities.
 - B.20 Encourage research and development of products and markets resulting in more efficient use of underutilized, renewable, and nonrenewable resources, including wood waste, recyclable materials, and solar energy.
 - B.21 Reserve several areas within the UGB for large-scale, campus-type, light manufacturing uses. (See *Metro Plan* Diagram for locations so designated.)
 - B.22 Review local ordinances and revise them to promote greater flexibility for promoting appropriate commercial development in residential neighborhoods.
 - B.23 Provide for limited mixing of office, commercial, and industrial uses under procedures which clearly define the conditions under which such uses shall be permitted and which: (a) preserve the suitability of the affected areas for their primary uses; (b) assure compatibility; and (c) consider the potential for increased traffic congestion.

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- B.24 Continue to evaluate other sites in and around Springfield and Eugene for potential light-medium industrial and special light industrial uses, as well as potential residential uses.
 - B.25 Pursue an aggressive annexation program and servicing of designated industrial lands in order to have a sufficient supply of “development ready” land.
 - B.26 In order to provide locational choice and to attract new campus industrial firms to the metropolitan area, Eugene and Springfield shall place as a high priority service extension, annexation, and proper zoning of all designated special light industrial sites.
 - B.27 Eugene, Springfield, and Lane County shall improve monitoring of economic development and trends and shall cooperate in studying and protecting other potential industrial lands outside the urban boundary.
 - B.28 Recognize the vital role of neighborhood commercial facilities in providing services and goods to a particular neighborhood.
 - B.29 Encourage the expansion or redevelopment of existing neighborhood commercial facilities as surrounding residential densities increase or as the characteristics of the support population change.
 - B.30 Industrial land uses abutting the large aggregate extraction ponds north of High Banks Road in Springfield shall demonstrate that they require the location next to water to facilitate the manufacture of testing of products made on-site.