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**SPRINGFIELD
COMPREHENSIVE PLAN:
TECHNICAL
SUPPLEMENT**
(VOL. 2.)
.....

**WHERE WE LIVE ■ WHERE WE WORK ■
HOW WE MOVE ■ HOW WE GROW ■**

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VOL. 2a



ECONOMIC
ELEMENT



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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The CIBL Stakeholder Committee provided community and business input in the economic opportunities analysis. The Committee provided guidance on developing Springfield's economic development strategy and provided input on assumptions used in the economic opportunities analysis. Committee members included: City of Springfield elected or appointed officials, local business owners and business people, land-use advocacy groups, and residents of Springfield.

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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

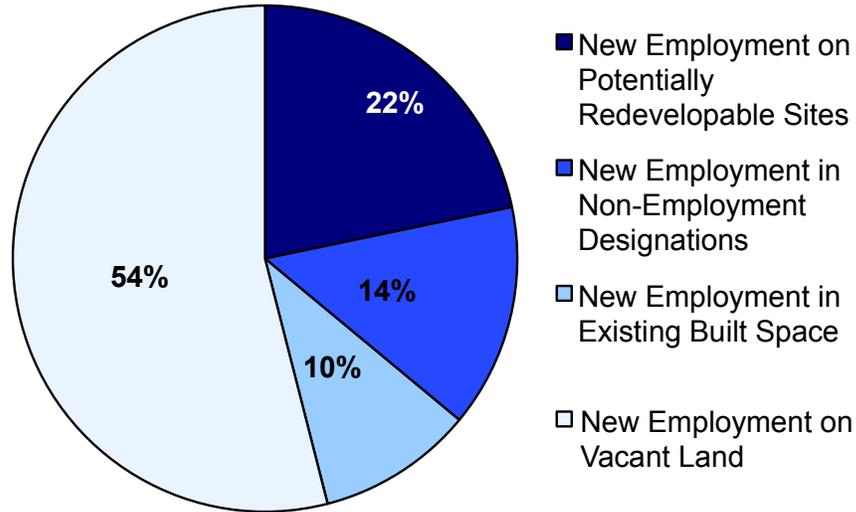
COMPARISON OF LAND CAPACITY AND DEMAND

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. 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 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. 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 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. 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)			
	Commercial	Industrial	Residential	In CIBL?
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 lot 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.

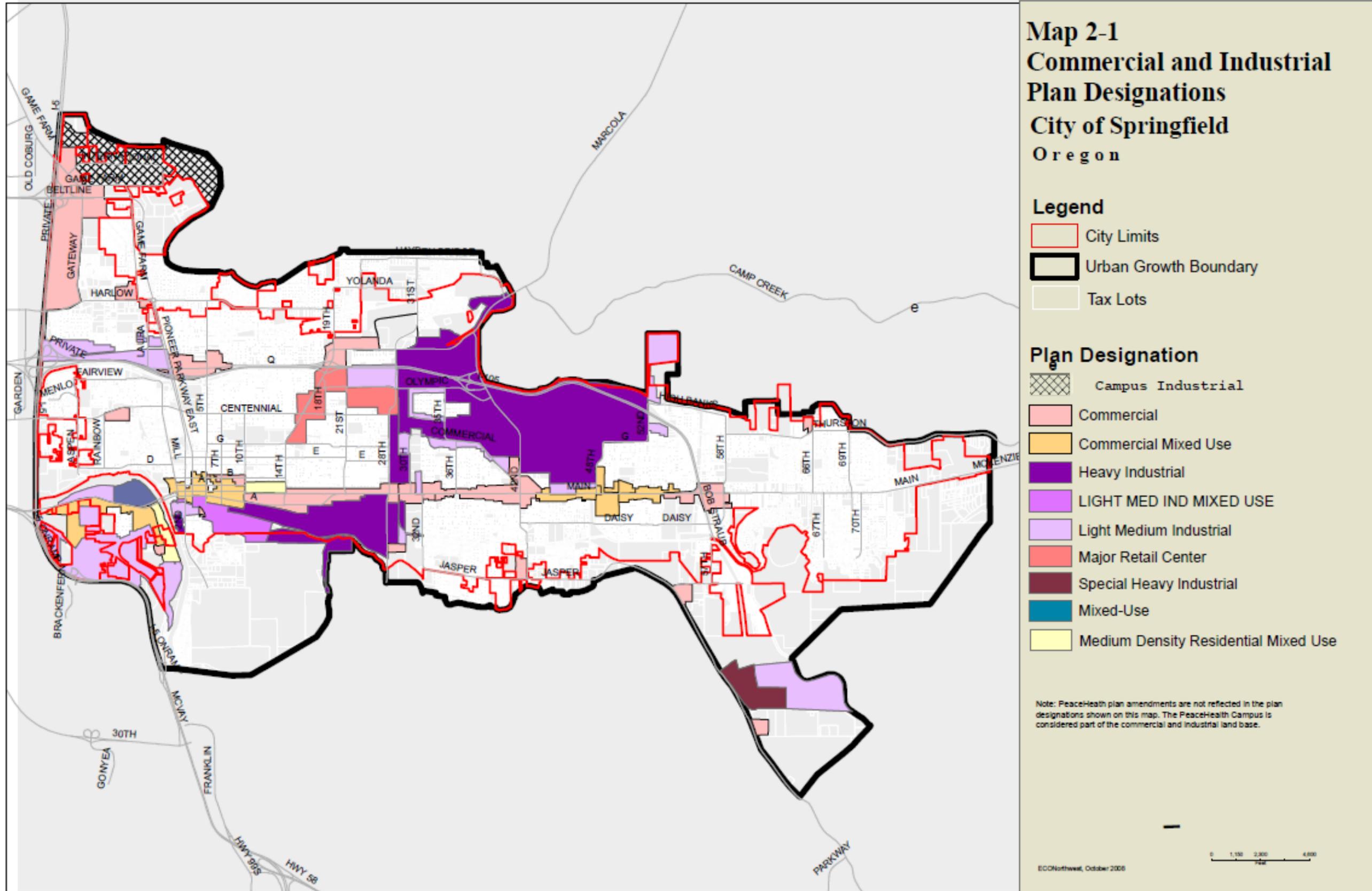
ECONorthwest used a systematic process to develop and review Springfield’s Commercial and Industrial land inventory. Processing and analyzing data from the Lane Council of Governments (LCOG) land use database (a database that inventories land uses at the sub-tax lot level), ECONorthwest identified the 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 as 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

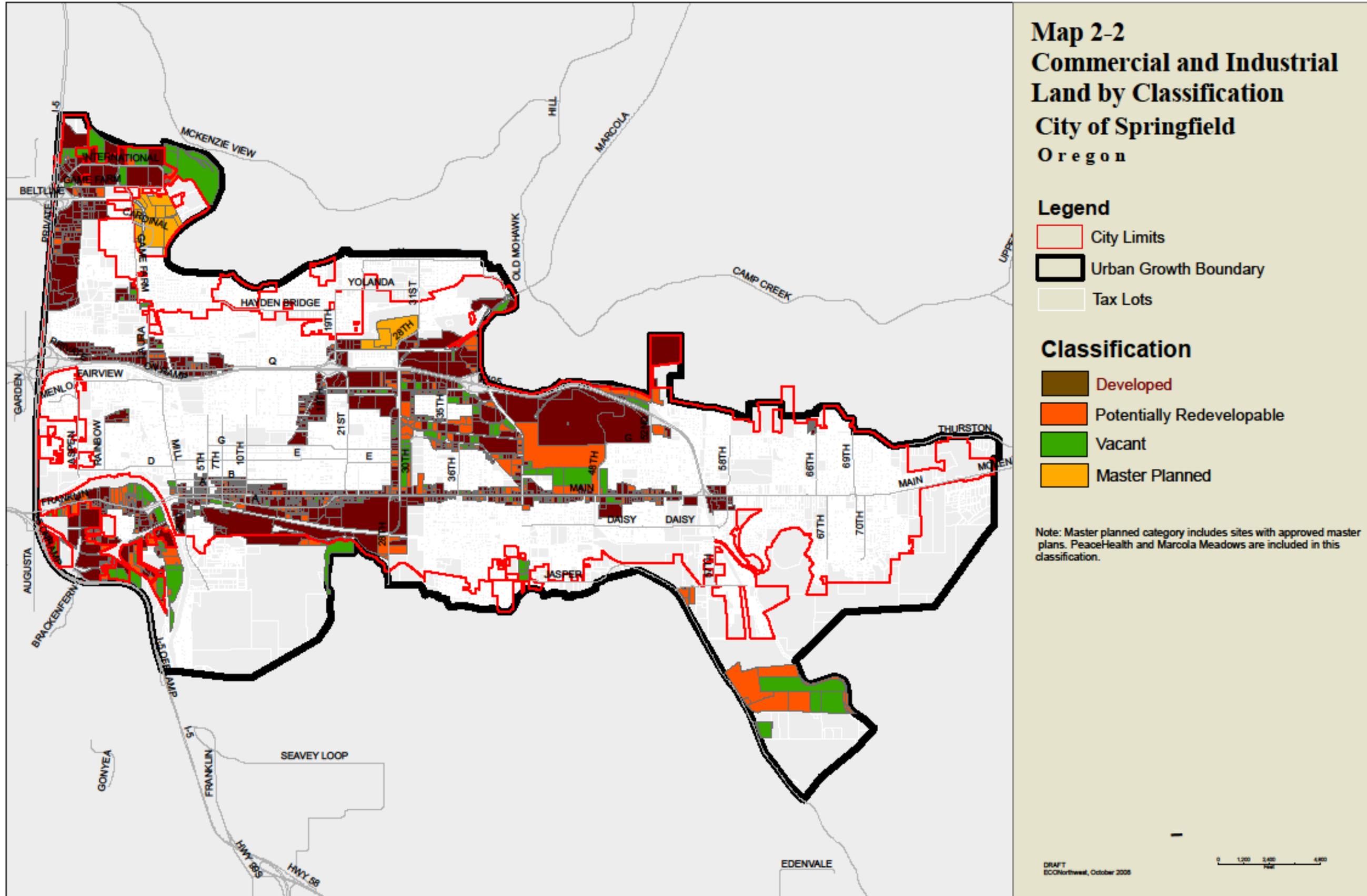
Note: Totals may be off by up to one acre due to rounding.

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

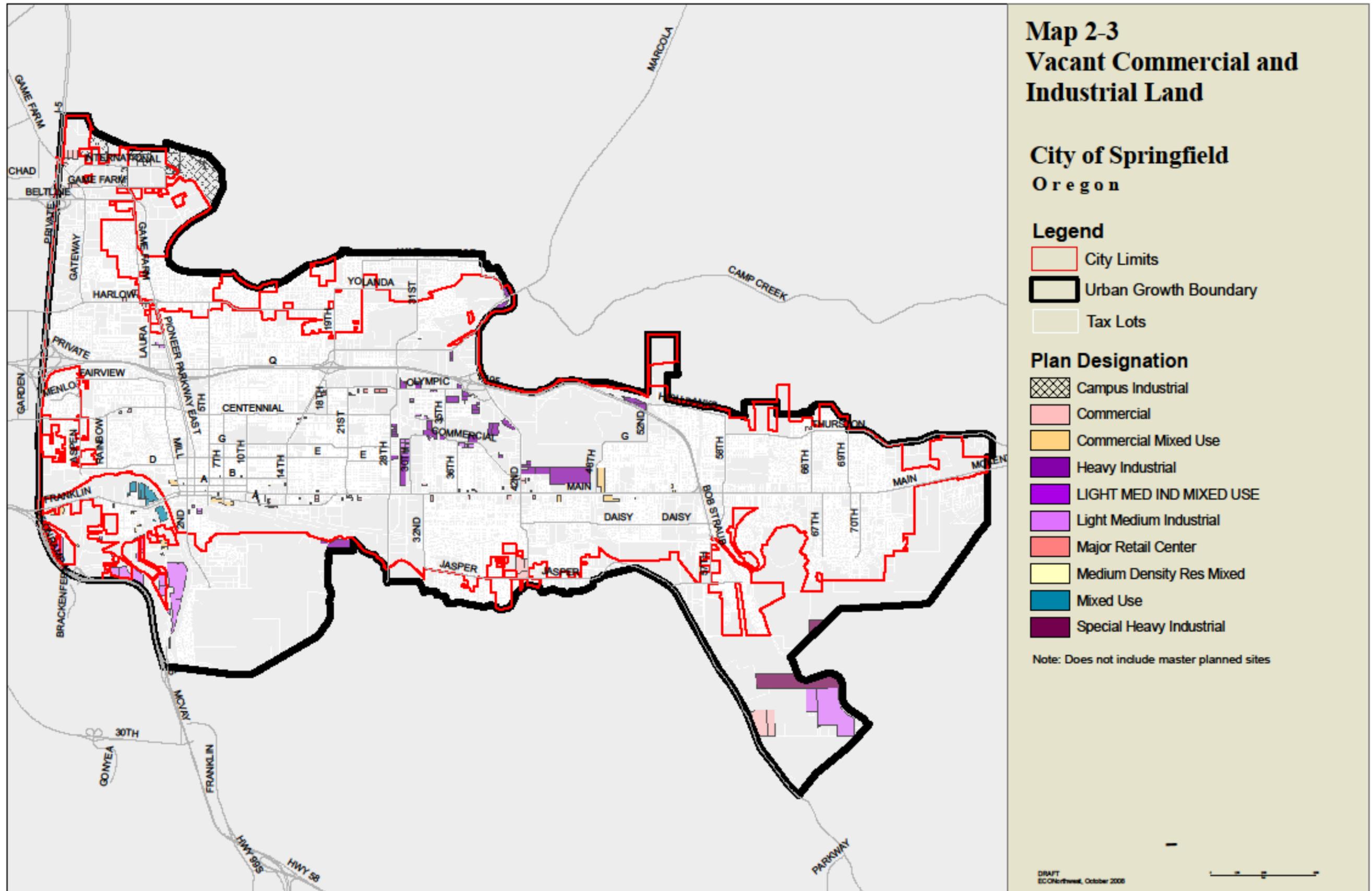
Source: City of Springfield GIS data; analysis by ECONorthwest

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

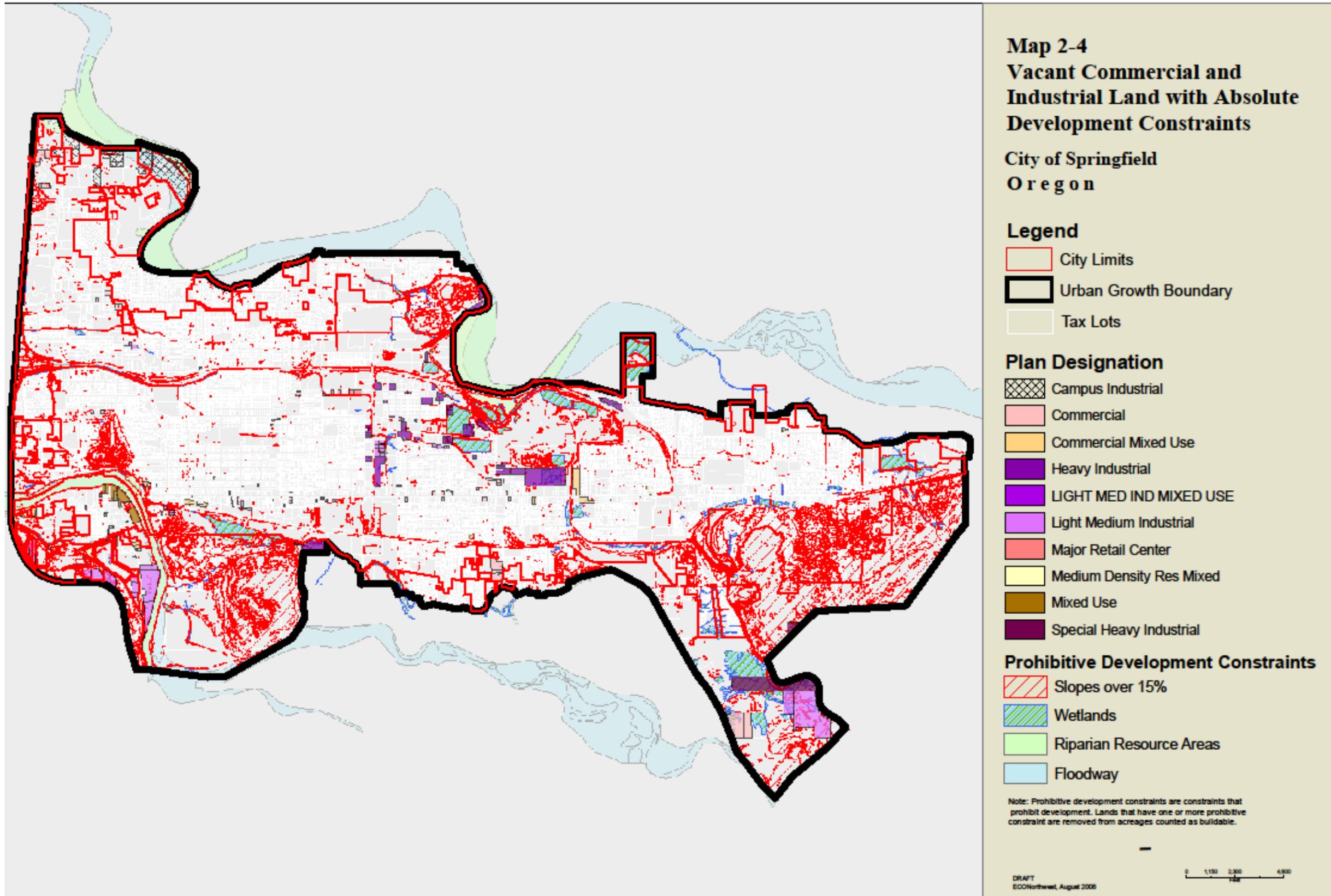
Note: Acres may not sum to tenths due to rounding.

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

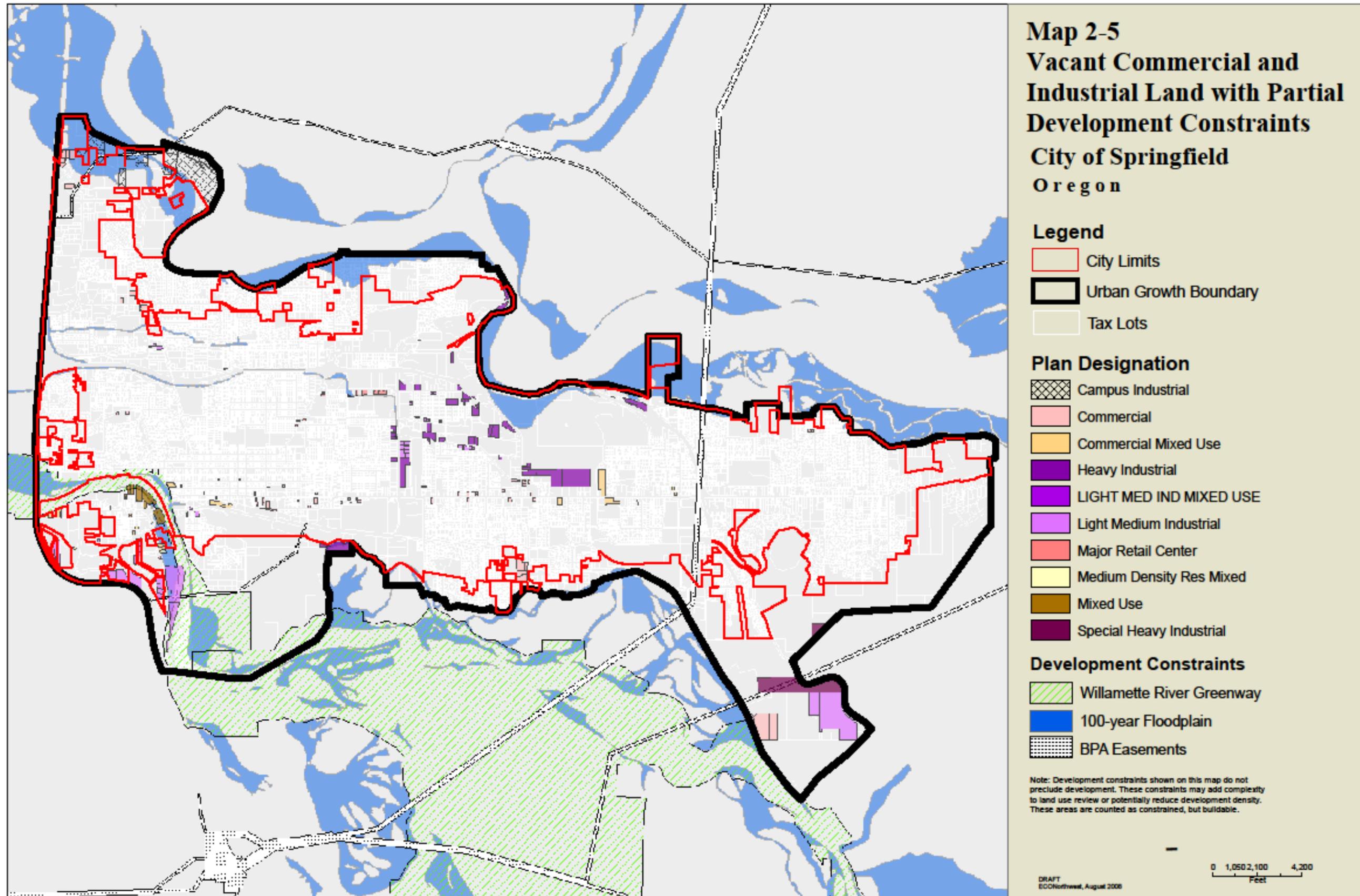
Map 2-3. Vacant Commercial and Industrial Land, City of Springfield



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

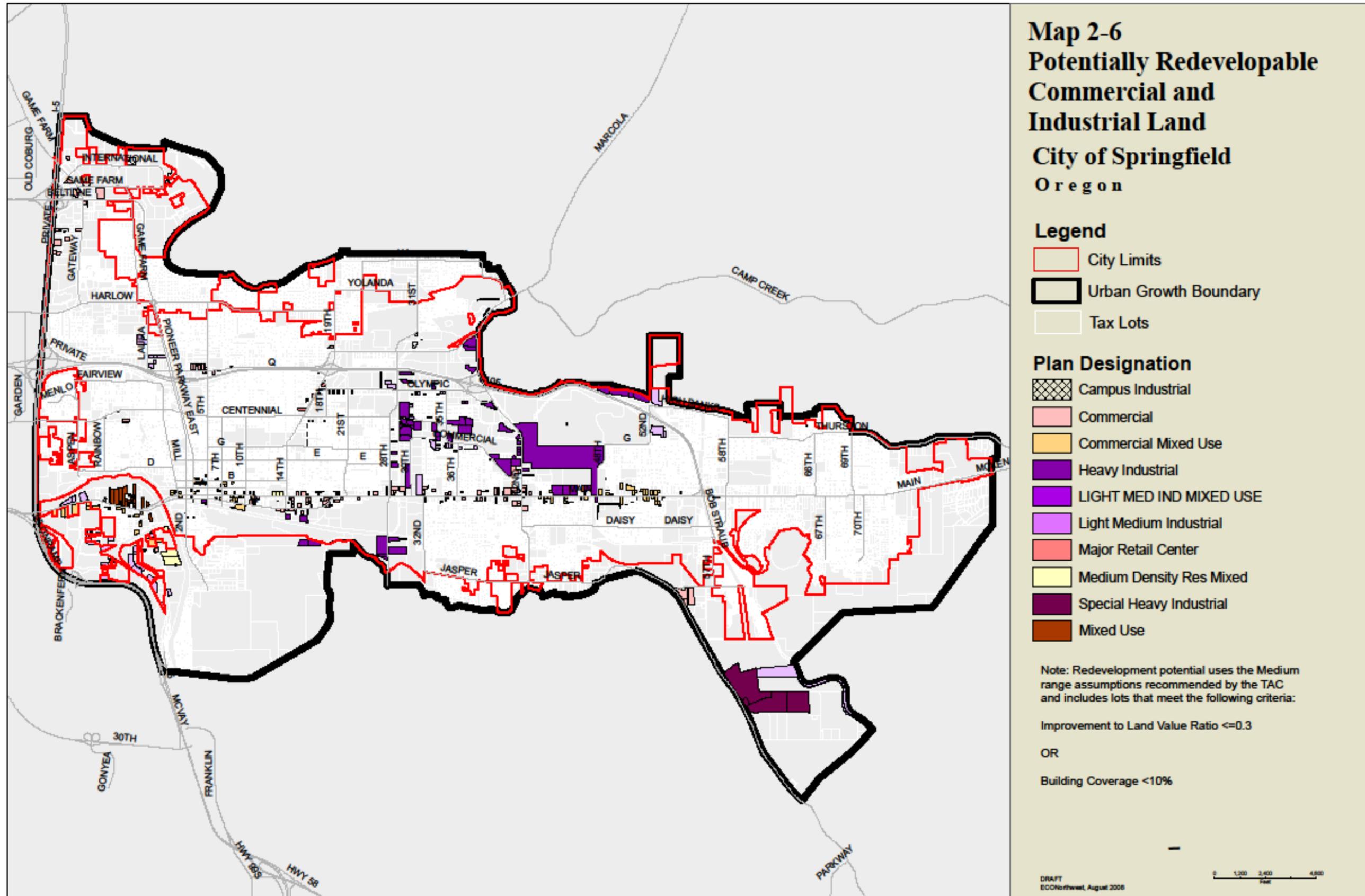
Plan Designation	Lot Size (Buildable Acres)									Total
	<0.25	0.25-0.49	0.50-0.99	1.00-1.99	2.00-4.99	5.00-9.99	10.00-19.99	20.00-50.00	50+	
Total Acres										
Industrial										
Campus Industrial	0.2	0.5	1.9	3.4	5.0	0.0	0.0	0.0	0.0	11.0
Light Medium Industrial	3.9	10.0	10.6	12.4	36.3	19.4	0.0	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 acres 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: $408/10,069 = 4\%$.

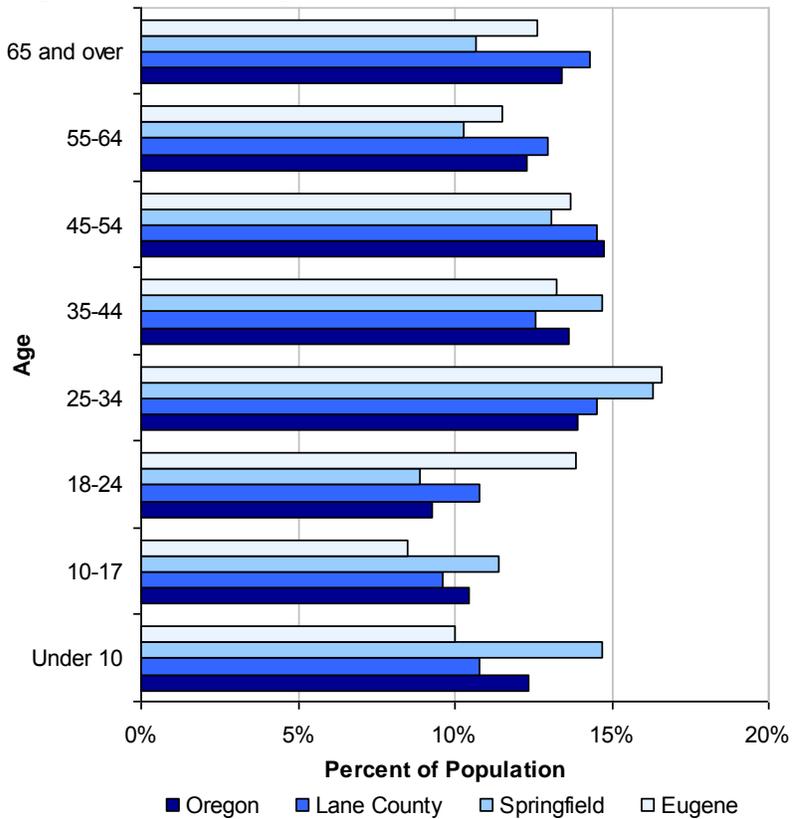
Note: Share refers to the change in the percent of an age group between 2000 and 2008. For example, the share of people 18 to 24 years old decreased from 11% to 9%, a decrease of 2.3%.

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

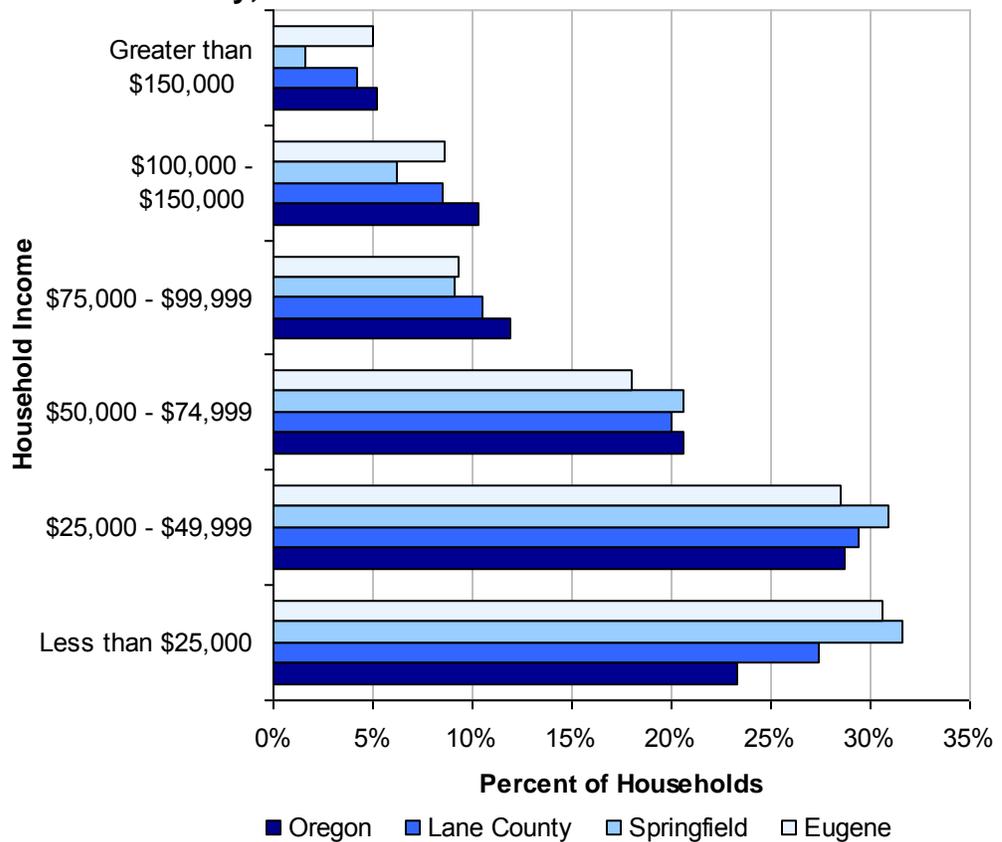
Over the last twenty-four years, income in Oregon has been below national averages and income in Lane County has been below state averages. There are four basic reasons that income has been lower in Oregon and Lane County than in the U.S.: (1) wages for similar jobs are lower; (2) the occupational mix 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

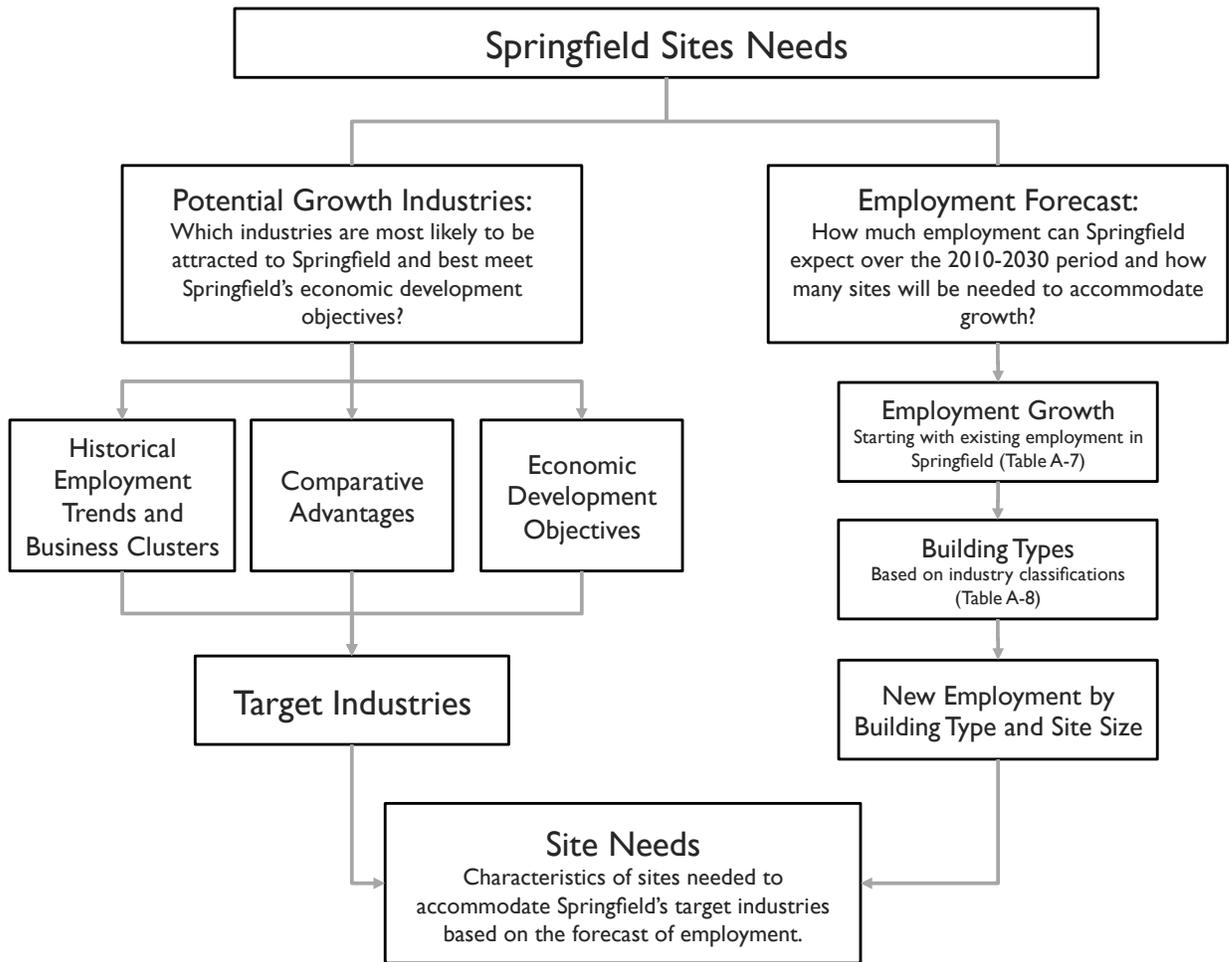
OAR 660-009 requires cities to maintain a 20-year inventory of sites designated for employment. To provide for at least a 20-year supply of commercial and industrial sites consistent with local community development objectives, Springfield needs an estimate of the amount of commercial and industrial 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 Mixed Use	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

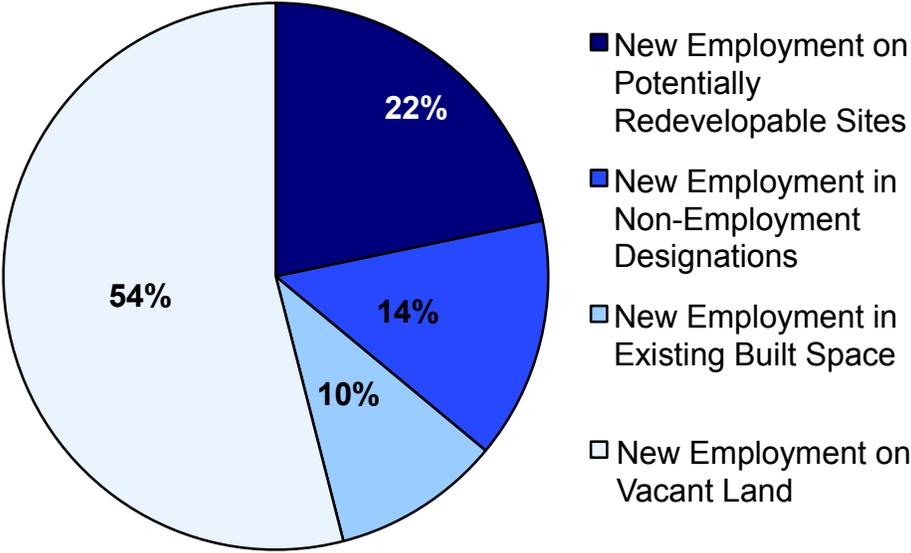
	Site Size (acres)			Total
	Less than 5	5 to 20	20 and Larger	
Industrial				
Sites needed	none	none	2	2
Land need (acres)	none	none	126	126
Commercial and Mixed Use				
Sites needed	none	4	1	5
Land need (acres)	none	37	60	97
Total sites needed	none	4	3	7
Total acres needed	none	37	186	223

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. 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 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. 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 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. 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. 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 Shnipper, "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 snow-pack 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%

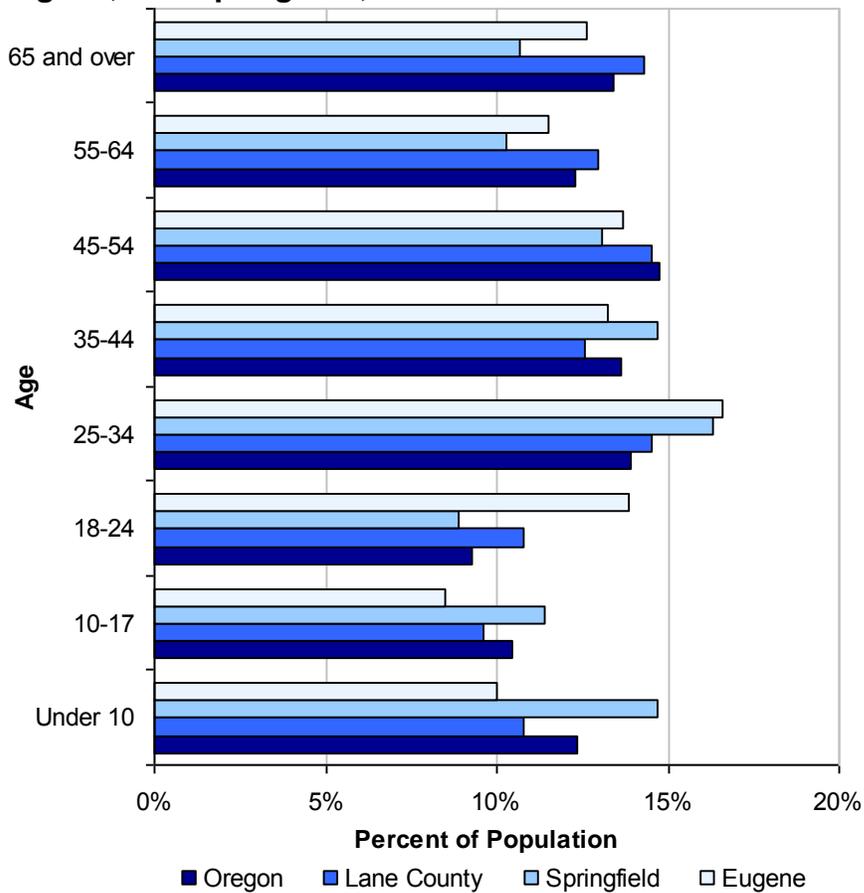
Source: U.S. Census, the Population Research Center at Portland State University.

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%.

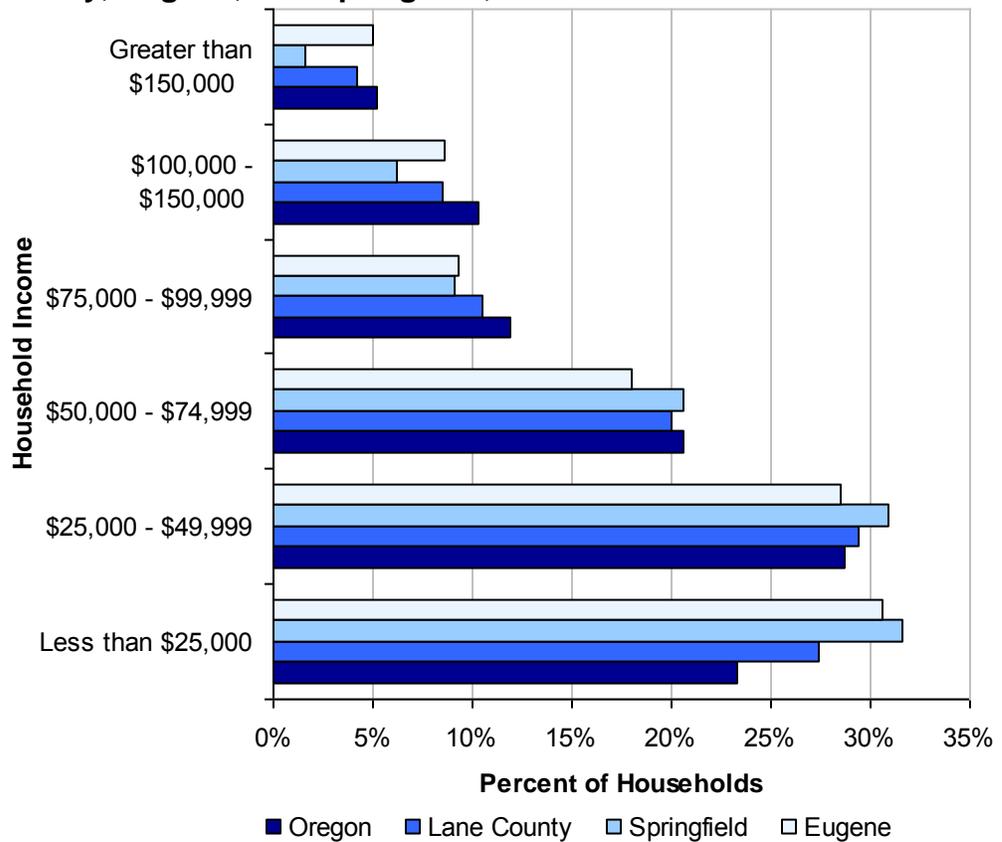
Note: Percentages may not add to 100% as a result of rounding errors.

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

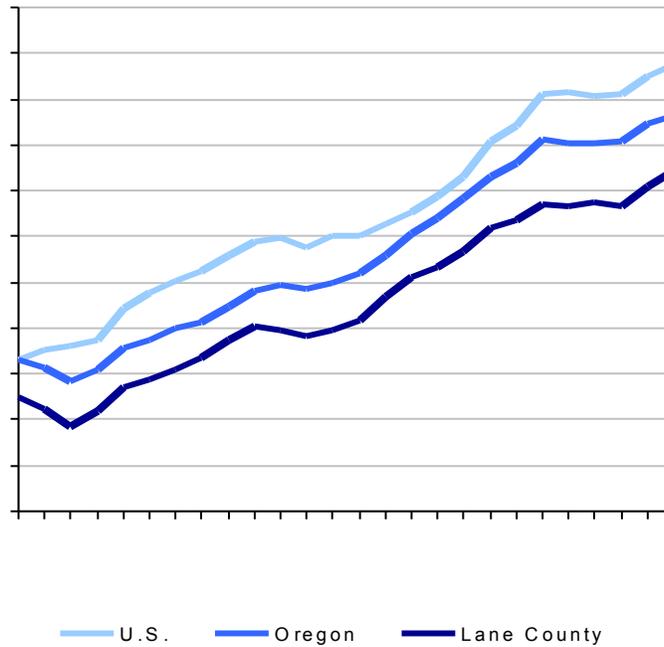


Source: Claritas 2008

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)

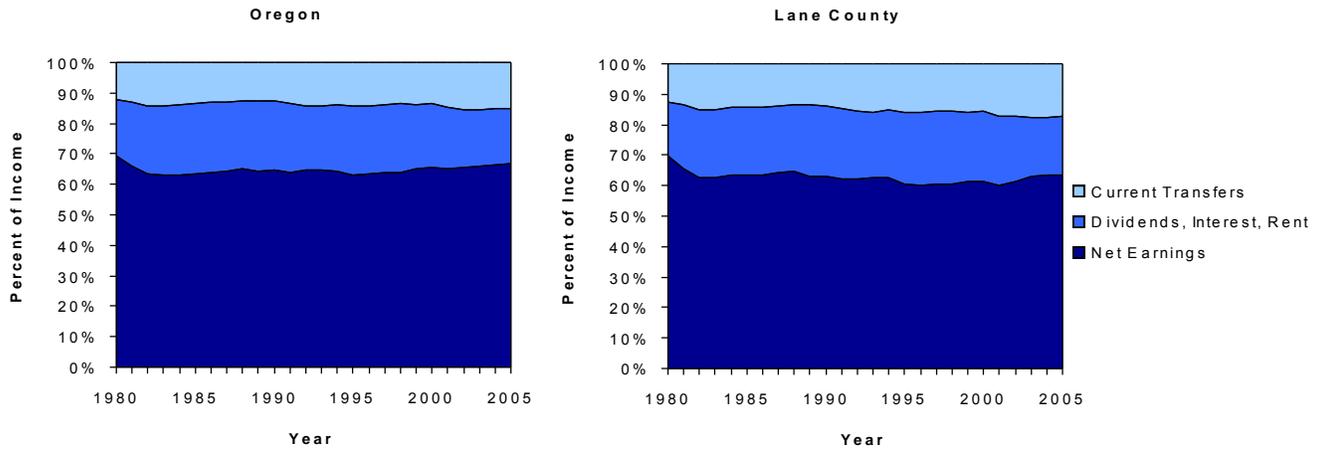


Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce

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%

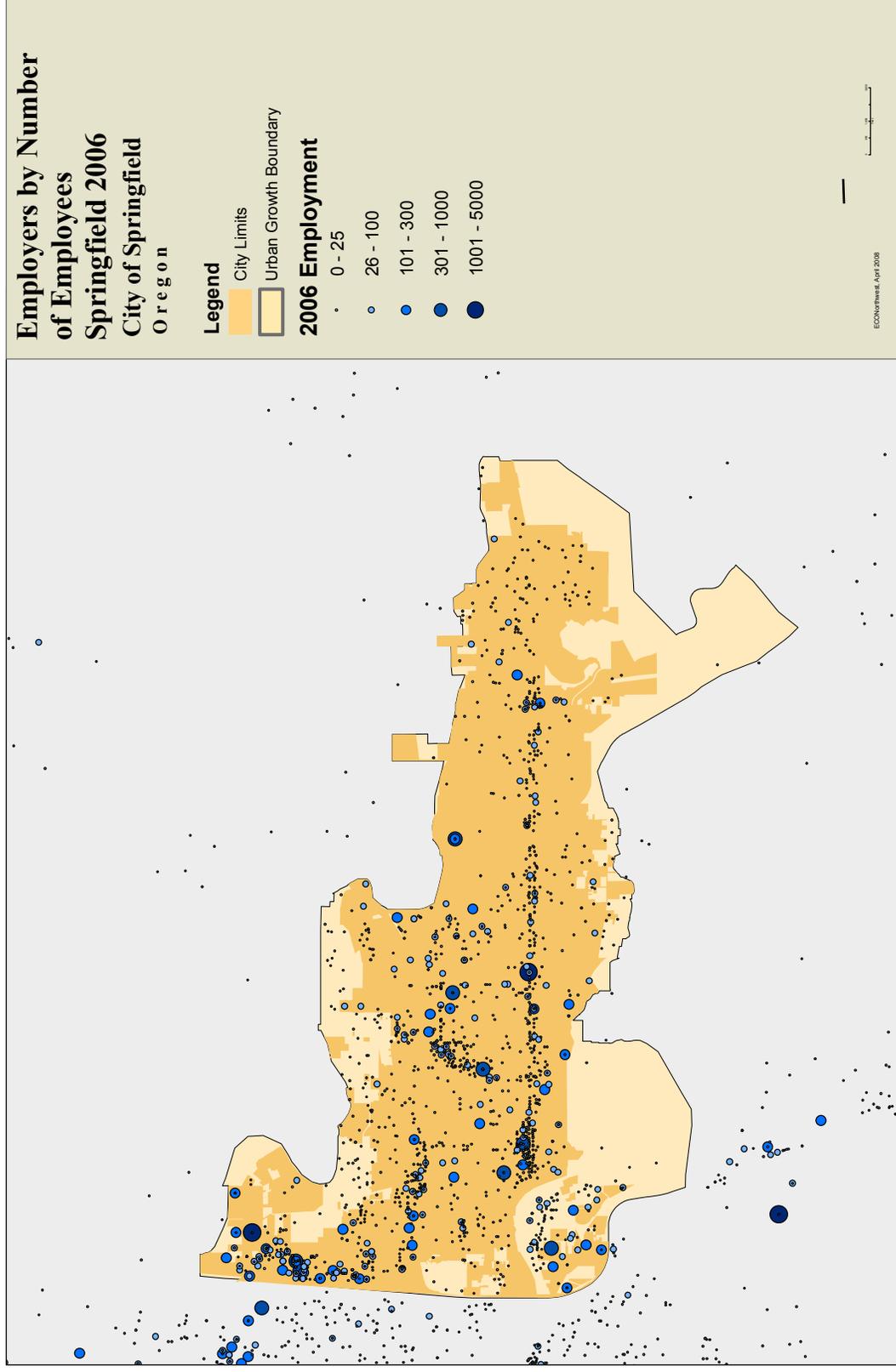
Source: Oregon Employment Department Quarterly Census of Employment and Wages (QCEW). Summary by industry and percentages calculated by ECONorthwest

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.

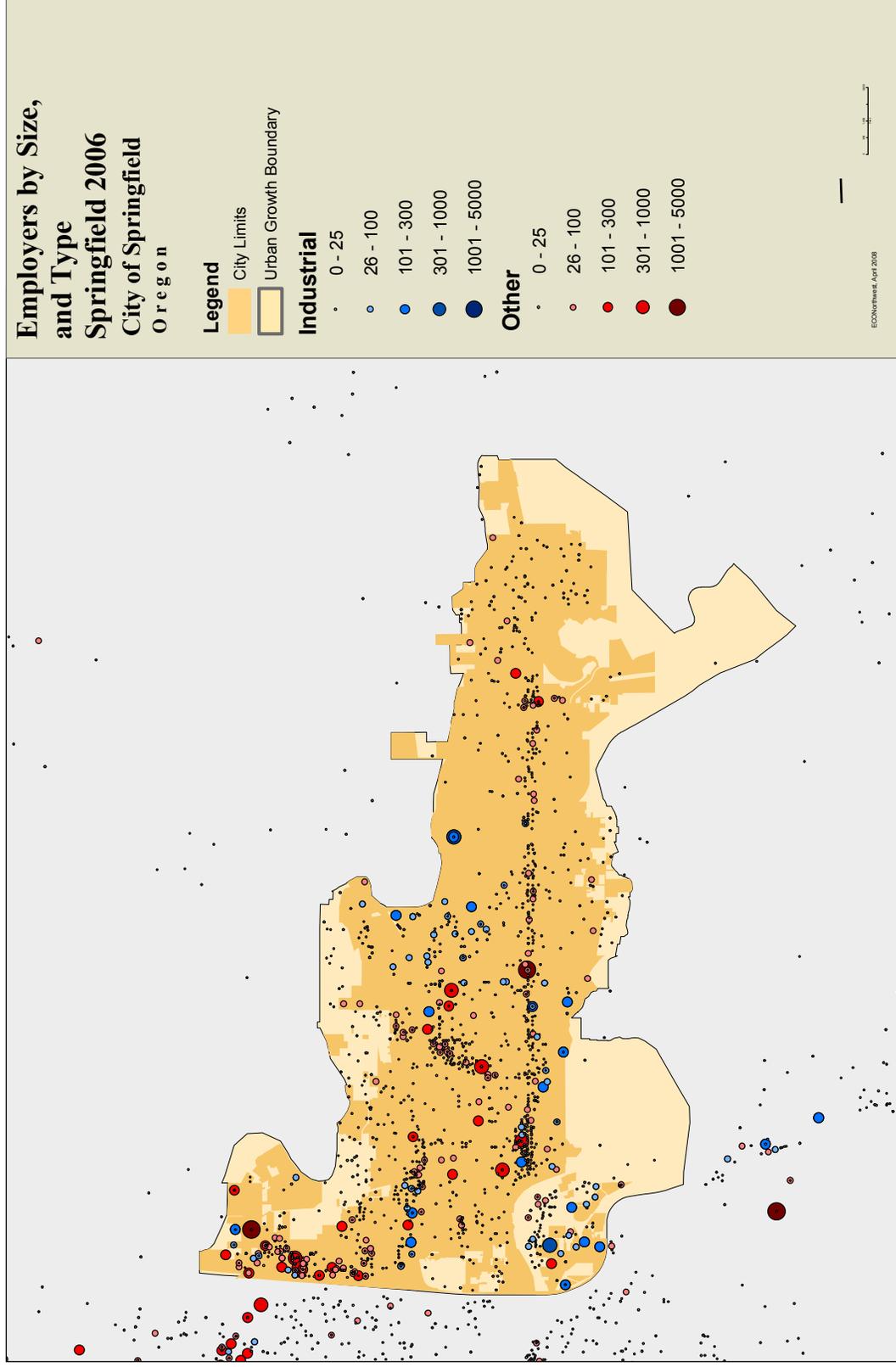
Map A-2 shows the size of employers in Springfield by Plan Designation. Larger employers are clustered along Main Street, in Gateway, and in other areas zoned for commercial and industrial use. Small employers are scattered in most parts of the City.

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
GI	General Industrial	Ag, Mining, Utilities, Construction, Manufacturing	11, 21, 22, 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

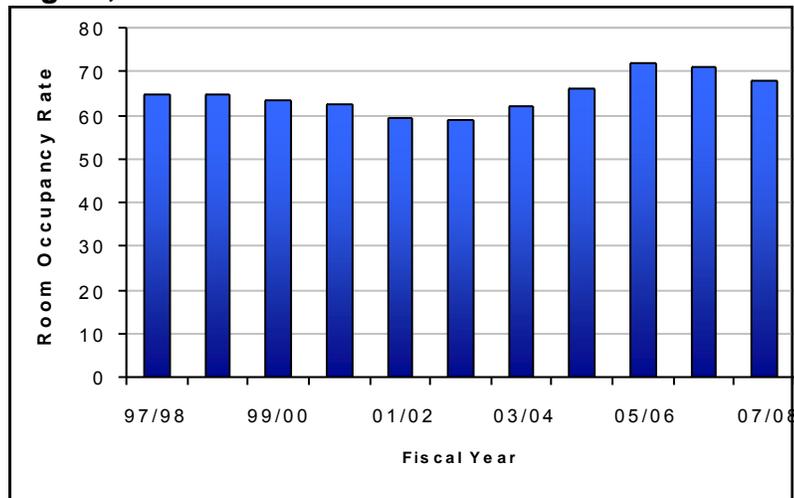
A major source of tourism spending is overnight accommodations. In 2008, the Eugene-Springfield Region has 3,118 total rooms. Since 1997, 629 limited service hotel rooms were added. During the same period, 377 full service rooms, 92 limited service rooms, and 15,464 square feet of meeting space have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

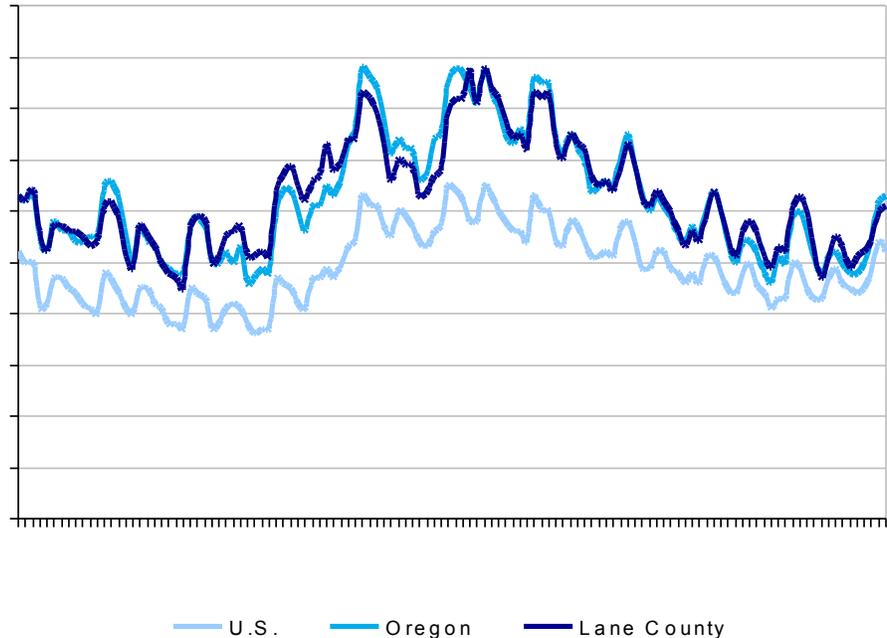
The availability of labor is critical for economic development. Availability of labor depends not only on the number of workers available, but the quality, skills, and experience of available workers as well. This section examines the availability of workers for Springfield.

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

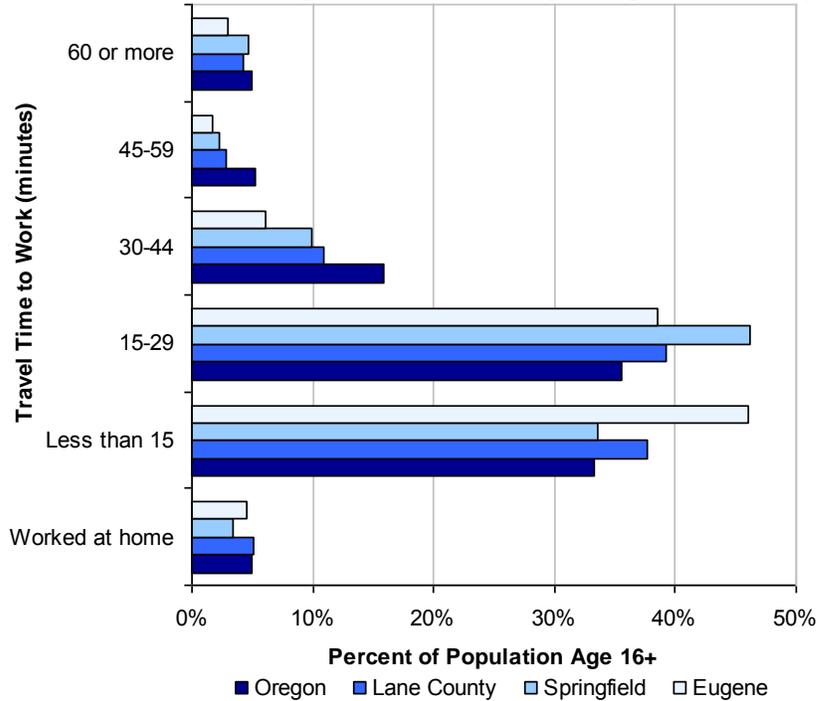
Note: unemployment data is not seasonally adjusted

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.

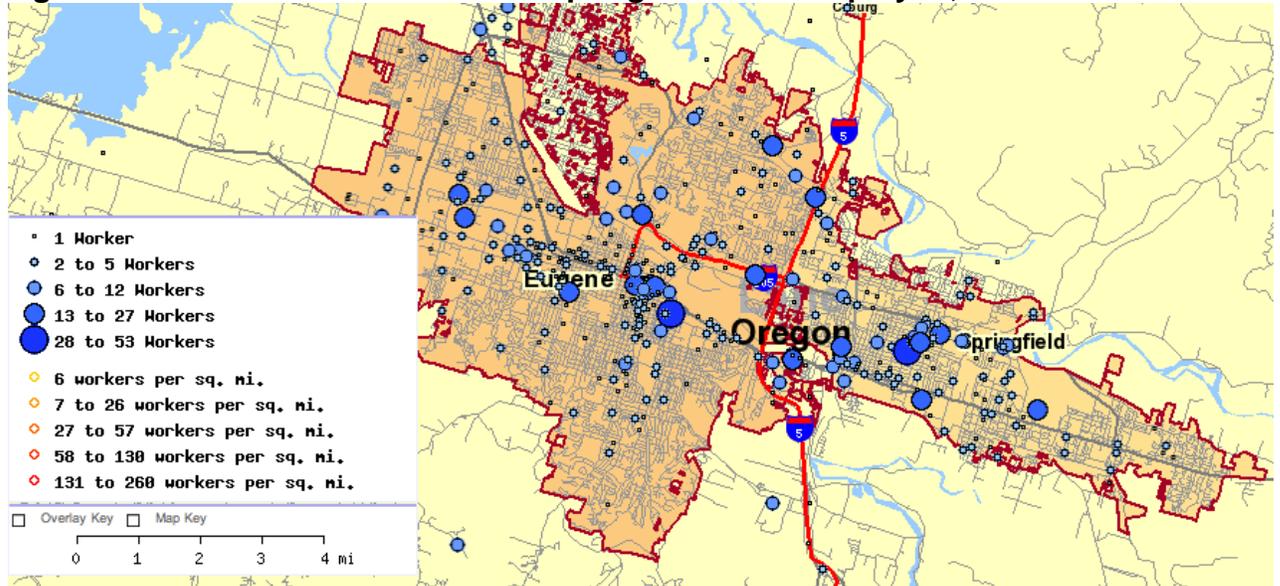
Figure B-2. Commuting time to work in minutes for residents 16 years and older, Oregon, Lane County, Eugene, and Springfield, 2008



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

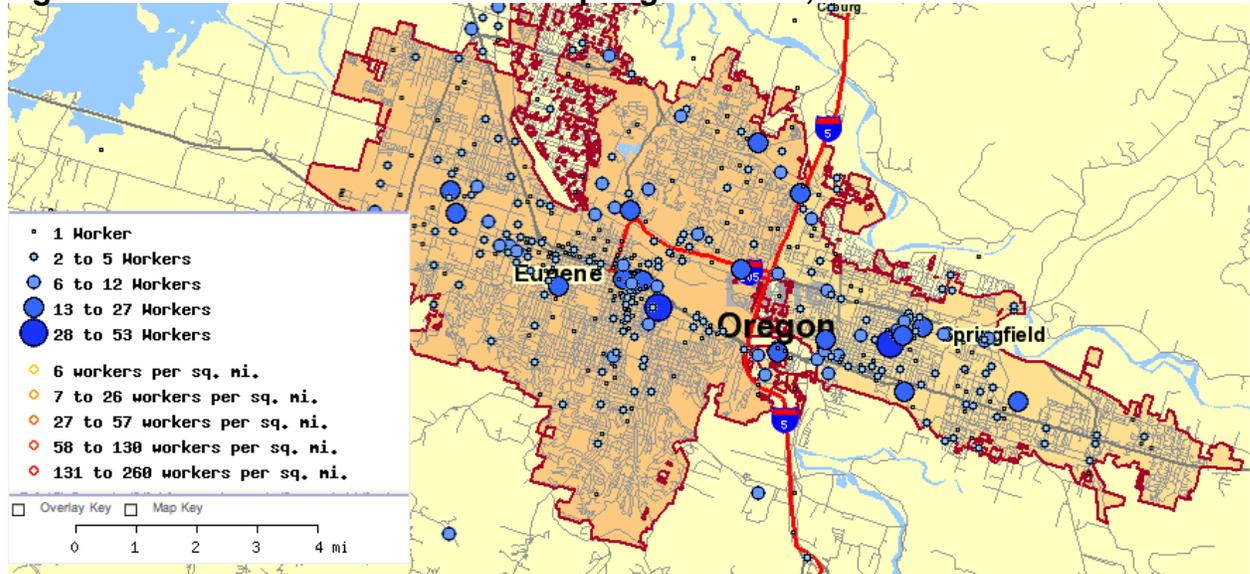
Table B-4. Places that residents of Springfield were employed, 2004

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

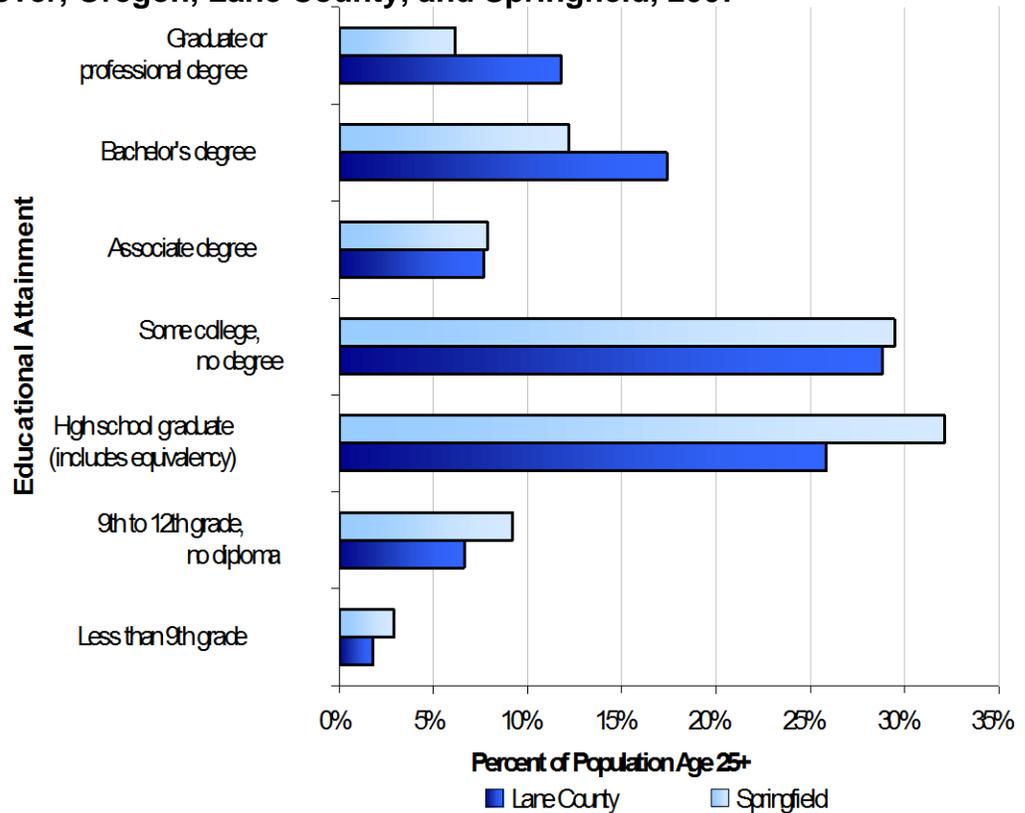
Table B-5. Places where workers in Springfield lived, 2004

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 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)		Special Considerations
				Water	Sanitary Sewer	
Regionally to Nationally Scaled Clean-Tech Manufacturer	50	0-5%	10	10 / 10	10 / 10	<p>Acreage allotment includes</p> <p>Expansion space (often an exercisable option).</p> <p>Very high utility volumes in one or more areas common. Sensitive to nearby uses.</p> <p>Demanding criteria-driven site selection.</p> <p>High material and visitor throughput.</p> <p>Major Commercial Airport a must. Redundancy in trip routes and utilities vital.</p> <p>Surrounding Environmental (vibration, noise, etc.) Buffering and expansion space necessary.</p> <p>Sensitive to encroachment activities of nearby uses (residential, institutional, commercial).</p>
Globally Scaled Clean Technology Campus	100	0-5%	10	10 / 10	10 / 10	<p>Adequate distance from sensitive land uses (residential, parks, large retail centers) necessary.</p> <p>High throughput of materials. Large yard spaces and/or buffering required.</p> <p>Often transportation related requiring marine/rail links.</p> <p>Adequate distance from sensitive land uses(residential, parks) necessary.</p> <p>May require high volume/supply of water and sanitary sewer treatment.</p> <p>Often needs substantial storage/yard space for input storage.</p> <p>On-site water pretreatment needed in many instances.</p>
Heavy Industrial/ Manufacturing	25	0-5%	10	8 / 8	8 / 8	<p>Surrounding environment of great concern (vibration, noise, air quality, etc.).</p> <p>Increased setbacks may be required and/or on-site utility service areas.</p> <p>Avoid sites close to wastewater treatment plants, landfills, sewage lagoons, and other such land uses.</p> <p>May require high volume/supply of water and sanitary sewer treatment.</p>
General Manufacturing	10	0-5%	20	8 / 8	8 / 8	<p>Transportation routing and proximity to/from major highways is crucial.</p> <p>Expansion options required.</p> <p>Truck staging requirements mandatory.</p> <p>Does not like to site or have routing issues between site and interstate that have rail crossings, school zones, airport runways, or drawbridges</p>
Food Processing	20	0-5%	30	10 / 10	10 / 10	<p>Transportation infrastructure such as roads and bridges to/from major highways is most competitive factor.</p>
High-tech Manufacturing or Campus Industrial	25	0-7%	15	10 / 10	10 / 10	
Regional (multistate) Distribution Center	200	0-5%	5 Only Interstate highway or equivalent	4 / 4	4 / 4	
Warehouse/Distribution	25	0-5%	5 Only Interstate highway or equivalent	4 / 4	4 / 4	

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

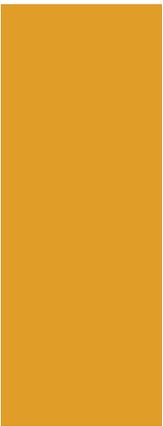
- B.1 Demonstrate a positive interest in existing and new industries, especially those providing above average wage and salary levels, an increased variety of job opportunities, a rise in the standard of living, and utilization of our existing comparative advantage in the level of education and skill 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.

-
- 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.

-
- 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.

VOL. 2b

RESIDENTIAL
LAND USE &
HOUSING ELEMENT



Springfield Residential Land and Housing Needs Analysis

Prepared for

City of Springfield

by

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Executive Summary

The 2007 Oregon Legislature passed HB 3337 which requires Springfield to establish a separate urban growth boundary (UGB). In response to HB 3337, the City is conducting this study to evaluate the sufficiency of land available for residential uses in its UGB. To make this determination, the draft Residential Lands Study (RLS) presents a housing needs analysis consistent with requirements of HB 3337, Goal 14, ORS 197.296, and OAR 660-008.

The *Springfield Residential Lands Study* is intended to provide the technical analysis required to determine the 20-year need for residential land for Springfield's jurisdictional share of the area subject to the Eugene-Springfield Metropolitan Area, i.e., the area east of Interstate 5, and whether the city has enough capacity within the area east of I-5 inside the current regional UGB to meet that need. The Executive Summary provides key findings from the Springfield Residential Lands Study.

The purpose of the Residential Study is to (1) present growth forecasts, (2) inventory how much buildable residential land the City has, (3) identify housing needs, (4) identify land needed for housing and other uses, and (5) determine how much land the City will need to accommodate growth between 2010 to 2030.

HOW MUCH GROWTH IS SPRINGFIELD PLANNING FOR?

Population forecasts provide the foundation for assessing land needs. Springfield must have a population forecast to project expected population change over the 20-year planning period (in this instance, 2010-2030). Lane County adopted coordinated population forecasts for the County and its incorporated cities in June 2009. The forecasts include figures for Springfield for 2030 and 2035.

Table S-1 shows the coordinated population forecast for the area within the current Springfield city limits, the current unincorporated urban area (the area between the city limit and UGB), and within Springfield's jurisdictional share for the current Metro Plan UGB for 2010 to 2030. The Springfield UGB forecast for 2030 is 81,608 persons—an increase of 14,577 persons during the 20-year planning period.

Table S-1. Springfield coordinated population forecast, Springfield UGB, 2010 to 2030

Year	City Limit	Urban Area	UGB
2010	58,891	8,140	67,031
2030	74,814	6,794	81,608
Change 2010-2030			
Number	15,923	(1,346)	14,577
Percent	27%	-17%	22%
AAGR	1.2%	-0.9%	1.0%

Source: Lane County Rural Comprehensive Plan, 1984 (Amended in 2009), Table 1-1, pg 5

HOW MUCH BUILDABLE RESIDENTIAL LAND DOES SPRINGFIELD CURRENTLY HAVE?

Springfield has 2,485 acres in tax lots that are designated for residential uses. Of these, about 1,447 acres within the Urban Growth Boundary (UGB) are considered vacant and buildable. Table S-2 shows vacant land by plan designation.

Table S-2. Vacant residential land by plan designation, Springfield UGB, 2008

Plan Designation	Tax Lots	Total Acres in Tax Lots	Developed Acres	Constrained Acres	Buildable Acres
Low Density Residential	981	2,137	71	765	1,301
Medium Density Residential	126	329	142	58	128
High Density Residential	8	19	1	0	18
Total	1,115	2,485	214	824	1,447

Source: City of Springfield GIS data; analysis by ECONorthwest

The purpose of the residential buildable lands inventory is to estimate the capacity of buildable land in dwelling units. The capacity of residential land is measured in dwelling units and is dependent on densities allowed in specific zones as well as redevelopment potential. In short, land capacity is a function of buildable land and density.

The buildable lands inventory indicates that Springfield has about 1,447 acres of vacant and partially-vacant residential land and an additional 21 acres in the Glenwood mixed-use refinement plan area (these acres were included in the commercial and industrial lands inventory and are included here only for the

purpose of estimating residential capacity).¹ This yields a total of 1,468 buildable acres.

Table S-3 provides an estimate of how much housing could be accommodated by those lands based on needed densities after making deductions for development constraints. It includes capacity for areas with approved master plans that were not included in the acreage estimates. This includes Marcola Meadows (518 dwellings in the MDR designation) and RiverBend (730 dwellings in the MDR designation). Additionally, the housing needs analysis assumes that 5% of new housing (299 dwelling units) will be a result of redevelopment and will not require vacant land. Table S-3 shows that Springfield has capacity for 9,021 dwelling units within the existing UGB.

Table S-3. Estimated residential development capacity, Springfield UGB, 2009

Plan Designation	Buildable Acres	Residential Capacity (DU)	Percent of Capacity
Low Density Residential	1,301	5,379	60%
Medium Density Residential	128	2,718	30%
High Density Residential	18	355	4%
Mixed-Use (Glenwood)	21	270	3%
Redevelopment	na	299	3%
Total	1,468	9,021	100%

Source: City of Springfield residential BLI; analysis by ECONorthwest
 Note: Estimated residential development capacity includes sites with approved master plans (RiverBend – 730 DU and Marcola Meadows – 518 DU. All of this capacity is in the Medium Density Residential plan designation).

HOW MUCH HOUSING WILL THE CITY NEED?

Springfield will need to provide about 5,920 new dwelling units to accommodate growth between 2010 and 2030 plus 291 group quarter dwellings for a total 6,211 dwelling units. For non-group quarter dwellings, about 3,552 dwelling units (60%) will be single-family types, which includes single-family detached, manufactured dwellings, and single-family attached housing. About 2,368 units (40%) will be multi-family housing.

HOW MUCH LAND WILL BE REQUIRED FOR HOUSING?

Table S-4 shows the capacity for residential development by plan designation. The results show that, not considering other land needs (public and semi-public), Springfield has an overall surplus of residential land. The Springfield UGB has enough land for 9,018 new dwelling units. The housing needs forecast projects a need for 5,920 dwelling units and 291 group quarter dwellings, or 6,211 total

¹ Capacity in the Glenwood mixed-use area was calculated as follows: 21 buildable acres (45% of the 47-acre site; the policy requires 30% to 60% of the site be used for housing) multiplied by 15 dwelling units per gross acre equals 317 dwelling units, minus 47 dwelling units that would be displaced from the River Bank Mobile Home Park equals 270 dwelling units.

dwellings. The 291 group quarter dwellings are evenly allocated between the Medium-Density and High-Density residential designations.

Table S-4. Residential capacity for needed dwelling units by plan designation, Springfield UGB, 2010-2030

	1	2	3	4	5	6	7
Plan Designation	Need (DU)	Capacity (DU)	Surplus/ Deficit (DU)	Needed Density (DU/GRA)	Housing Land Need (Gross Acres)	Housing Surplus/ Deficit (Gross Ac)	
Low Density Residential	3,316	5,379	2,063	4.5	-455	455	
Medium Density Residential	1,982	3,136	1,154	12.5	-93	93	
High Density Residential	914	503	-411	20.0	21	-21	
Total	6,211	9,018	2,807		-527	527	

Source: ECONorthwest

Column Notes:

1. Plan designations
2. Needed dwellings by plan designation (table 5-30)
3. Capacity by plan designation (table 6-2); Note: MDR capacity includes capacity in master planned areas (Glenwood, Marcola Meadows, Riverbend); MDR and HDR includes capacity for redevelopment.
4. Capacity (column 3) minus Need (column 2); Note: a positive number denotes enough capacity within the existing UGB
5. Needed Gross Density (from bottom of page 62)
6. Total additional land needed (if a deficit exists). Equals -column 4 divided by column 5
- 7, Surplus/deficit gross acres (negatives mean a UGB expansion). Equals Column 4 divided by Column 5

The last step in the analysis is to add in public and semi-public land needs. Table S-5 shows the reconciliation of land need and supply. The results show that Springfield has an overall surplus of residential land, but has deficits in the High-Density Residential and Parks and Open Space categories.

Table S-5. Reconciliation of land need and supply, Springfield UGB, 2010

Plan Designation	Residential		Total Surplus/ Deficit
	Land Surplus/Deficit (From Table S-4)	Public/Semi- Public Land Need	
Low Density Residential	455	77	378
Medium Density Residential	93	17	76
High Density Residential	-21	7	-28
Parks and Open Space		300	-300
Government/Employment		62 Met through land need in EOA	
Total	527	463	126

Source: ECONorthwest

The results lead to the following findings:

- The Low Density Residential designation has a *surplus* of approximately 378 gross acres.

- The Medium Density Residential designation has a *surplus* of approximately 76 gross acres.
- The High Density Residential designation has a *deficit* of approximately 28 gross acres. At a minimum, the City will meet the deficit of 411 dwellings (21 acres) through its redevelopment strategies in Downtown and Glenwood. The additional seven acres of public/semi-public land is intended to provide public open space for the higher density development, as well as any needed public facilities. This need could potentially be met through a variety of approaches—from designating seven additional acres high-density residential to ensuring that land designated park and open space is provided adjacent to high density residential developments.
- The Parks and Open Space designation has a *deficit* of 300 acres. This need does not imply that the City should expand the UGB for parks and open space. The City has a surplus of buildable lands in the low and medium density residential plan designations that can provide land for future parks within those designations, consistent with the objectives of the adopted Park and Recreation Comprehensive Plan. A portion of the parks and open space need can also be met on residentially designated land that has constraints and therefore is not counted as buildable acres (e.g., ridgeline trail systems). Since no surplus of land designated for high density residential uses exists, the 21-acre high density residential plan designation deficit has been increased by seven (7) acres to provide parkland immediately adjacent to the proposed high density residential district.
- Government and employment land needs will be met through existing lands or land needs identified in the Springfield Economic Opportunities Analysis.

This report presents a housing needs analysis for the City of Springfield. The primary purpose of this report is to address the requirement of H.B. 3337 that Springfield “demonstrate, as required by ORS 197.296, that its comprehensive plan provides sufficient buildable lands within an urban growth boundary established pursuant to statewide planning goals to accommodate estimated housing needs for 20 years.” The study is intended to comply with statewide planning policies that govern housing, including Goal 10 (Housing), ORS 197.296, and OAR 660 Division 8.

The primary goals of this study are to (1) project the amount of land needed to accommodate the city’s future housing needs of all types, and (2) evaluate the existing residential land supply within the Springfield Urban Growth Boundary to determine if it is adequate to meet that need. The methods used for this study generally follow the *Planning for Residential Growth* guidebook, published by the Oregon Transportation and Growth Management Program (1996).

BACKGROUND

The City of Springfield has not conducted a housing needs analysis since the *Eugene-Springfield Residential Lands and Housing Study* was completed in 1999. In the six years since the study was completed, Springfield’s population has increased by nearly 3,000 residents, an increase of more than 5% over the six-year period.

In 2007, the Oregon State Legislature passed House Bill 3337 which requires Springfield to:

- (a) Establish an urban growth boundary, consistent with the jurisdictional area of responsibility specified in the acknowledged comprehensive plan; and
- (b) Demonstrate, as required by ORS 197.296, that its comprehensive plan provides sufficient buildable lands within an urban growth boundary established pursuant to statewide planning goals to accommodate estimated housing needs for 20 years.

The analysis and determination of land sufficiency required under section (b) must be completed by December 31, 2009. This study is intended to meet the requirements of section (b) by determining whether the City has sufficient land within the Springfield Urban Growth Boundary (UGB) to accommodate expected future housing needs. To make this determination, this report presents a housing needs analysis consistent with requirements of Goal 14, ORS 197.296, and OAR 660-008. As required by HB 3337, the City intends to "complete the inventory, analysis and determination required under ORS 197.296(3)" before the end of 2009, and to complete the remainder of its obligations under HB 3337 and ORS

197.296 early in 2010. Consistent with the requirements of ORS 197.296(2) the planning period for this study is 2010-2030.

PURPOSE

The purpose of this study is to provide an assessment of residential development capacity and demand for residential land. The study will serve two purposes: (1) to inform policy makers about planning options and (2) to fulfill state planning requirements for a twenty-year supply of residential land. Consistent with the requirements of ORS 197.296, communities engaged in a buildable lands analysis and housing need assessment must complete, in part, the following:

- Inventory the supply of buildable lands within the current urban growth boundary;
- Determine the actual density and the actual mix of housing types of residential development that have occurred within the urban growth boundary since the last periodic review or five years, whichever is greater. Development activity used for this review was between 1999 and June 2008.²
- Conduct an analysis of housing need by type and density range, in accordance with ORS 197.303 and statewide planning goals and rules related to housing, to determine the amount of land needed for each needed housing type for the next 20 years (2010-2030).

This report presents an analysis consistent with the above outlined requirements, and draws upon previous work that ECONorthwest for a number of Oregon cities and regions. The report is intended to serve as the basis for subsequent discussions and policy choices regarding the management of growth in Springfield and to enable the city to complete the residential lands inventory, analysis and determination required by ORS 197.296(3) and Section 3 of 2007 Or Laws Chapter 650 (HB 3337). It does not address land use efficiency measures as required by ORS 197.296 and OAR 660-024. Land use efficiency measures will be addressed through a separate process.

In general, a housing needs analysis contains a *supply* analysis (existing housing, planned housing, and buildable land) and a *demand* analysis (population and employment growth leading to demand for more built space: housing by type and density). The geographic scope of the housing needs analysis is all land inside the current acknowledged Eugene-Springfield Metropolitan Urban Growth Boundary east of Interstate 5.

² The City uses the 1999-2006 period for analysis due to limited availability of permit data that can be cross-referenced to tax lot data to develop density estimates. Moreover, the 1990 and 2000 Census provides an accurate source for analysis of housing mix trends during the 1990s.

ORGANIZATION

The rest of this report is organized as follows:

- **Chapter 2, Framework For A Housing Needs Analysis**, describes the theoretical and policy underpinnings of conducting a Goal 10 housing needs analysis for Oregon cities.
- **Chapter 3, Residential Land Inventory**, describes the supply of residential land available to meet the 20-year need for housing.
- **Chapter 4, Historical Development Trends**, summarizes building permit and subdivision data to evaluate residential development by density and mix for the period beginning September 1, 1988, through June 30, 2000.
- **Chapter 5, Housing Needs Analysis**, presents a housing needs analysis consistent with HB 2709 requirements and the HB 2709 Workbook.
- **Chapter 6, Comparison of Supply and Need**, compares buildable land supply with estimated housing need.

The report also includes two appendices:

- **Appendix A, Context for Assessing Housing Needs** provides an overview of planning for housing and typical local policy objectives related to affordable housing.
- **Appendix B, National and Regional Housing Trends** presents research ECO has performed over the course of several years describing key factors affecting housing at the national and regional level.

Framework for a Housing Needs Analysis³

Economists view housing as a bundle of services for which people are willing to pay: shelter certainly, but also proximity to other attractions (job, shopping, recreation), amenity (type and quality of fixtures and appliances, landscaping, views), prestige, and access to public services (quality of schools). Because it is impossible to maximize all these services and simultaneously minimize costs, households must, and do, make tradeoffs. What they can get for their money is influenced by both economic forces and government policy. Moreover, different households will value what they can get differently. They will have different preferences, which in turn are a function of many factors like income, age of household head, number of people and children in the household, number of workers and job locations, number of automobiles, and so on.

Thus, housing choices of individual households are influenced in complex ways by dozens of factors; and the housing market in Lane County and Springfield are the result of the individual decisions of thousands of households. These points help to underscore the complexity of projecting what types of housing will be built between 2010 and 2030.

The complexity of a housing market is a reality, but it does not obviate the need for some type of forecast of future housing demand and need, and its implications for land demand and consumption. Such forecasts are inherently uncertain. Their usefulness for public policy often derives more from the explanation of their underlying assumptions about the dynamics of markets and policies than from the specific estimates of future demand and need. Thus, we start our housing analysis with a framework for thinking about housing and residential markets, and how public policy affects those markets.

OREGON HOUSING POLICY

The passage of the Oregon Land Use Planning Act of 1974 (ORS Chapter 197), established the Land Conservation and Development Commission (LCDC), and the Department of Land Conservation and Development (DLCD). The Act required the Commission to develop and adopt a set of statewide planning goals. Goal 10 addresses housing in Oregon and provides guidelines for local governments to follow in developing their local comprehensive land use plans and implementing policies.

At a minimum, local housing policies must meet the requirements of Goal 10 (ORS 197.295 to 197.314, ORS 197.475 to 197.490, and OAR 600-008). Goal 10 requires incorporated cities to complete an inventory of buildable residential lands

³ This chapter is based on studies ECONorthwest has completed for other Oregon cities and regions.

and to encourage the availability of adequate numbers of housing units in price and rent ranges commensurate with the financial capabilities of its households.

Goal 10 defines needed housing types as “housing types determined to meet the need shown for housing within an urban growth boundary at particular price ranges and rent levels.” ORS 197.303 defines needed housing types:

- (a) Housing that includes, but is not limited to, attached and detached single-family housing and multiple family housing for both owner and renter occupancy;
- (b) Government assisted housing;⁴
- (c) Mobile home or manufactured dwelling parks as provided in ORS 197.475 to 197.490; and
- (d) Manufactured homes on individual lots planned and zoned for single-family residential use that are in addition to lots within designated manufactured dwelling subdivisions.

ORS 197.296 defines factors to establish sufficiency of buildable lands within urban growth boundary and requires analysis and determination of residential housing patterns. It applies to cities with populations of 25,000 or more and requires cities to:

- Demonstrate that its comprehensive plan or regional plan provides sufficient buildable lands within the urban growth boundary established pursuant to statewide planning goals to accommodate estimated housing needs for 20 years (ORS 197.296(2));
- Inventory the supply of buildable lands within the urban growth boundary and determine the housing capacity of the buildable lands (ORS 197.296(3)(a)); and
- Conduct an analysis of housing need by type and density range to determine the number of units and amount of land needed for each needed housing type for the next 20 years (197.296(3)(b)).

ORS 197.296 also defines a process for cities to following when considering UGB expansions to meet identified residential needs. ORS 197.296(6) requires cities to take one or more of the following actions if the housing need is greater than the housing capacity to accommodate the additional housing need:

- a. Amend its urban growth boundary to include sufficient buildable lands to accommodate housing needs for the next 20 years. As part of this process,

⁴ Government assisted housing can be any housing type listed in ORS 197.303 (a), (c), or (d).

the local government must consider the effects of “land use efficiency measures.” The amendment must include sufficient land reasonably necessary to accommodate the siting of new public school facilities;

- b. Amend its comprehensive plan, regional plan, functional plan or land use regulations to include new measures that demonstrably increase the likelihood that residential development will occur at densities sufficient to accommodate housing needs for the next 20 years without expansion of the urban growth boundary; or
- c. Adopt a combination of the actions described in paragraphs (a) and (b) of this subsection.

ORS 197.296 is also explicit about what must be considered in a housing needs analysis and the buildable lands inventory. For the purpose of the inventory, “buildable lands” includes:

- (A) Vacant lands planned or zoned for residential use;
- (B) Partially vacant lands planned or zoned for residential use;
- (C) Lands that may be used for a mix of residential and employment uses under the existing planning or zoning; and
- (D) Lands that may be used for residential infill or redevelopment.

To visually display the buildable lands inventory, the inventory includes a map that identifies lands that are vacant, partially vacant, or designated for mixed-use development.

The needs analysis includes an analysis of historical housing density and mix. This analysis, which must include data in the last periodic review or five years, whichever is greater.⁵

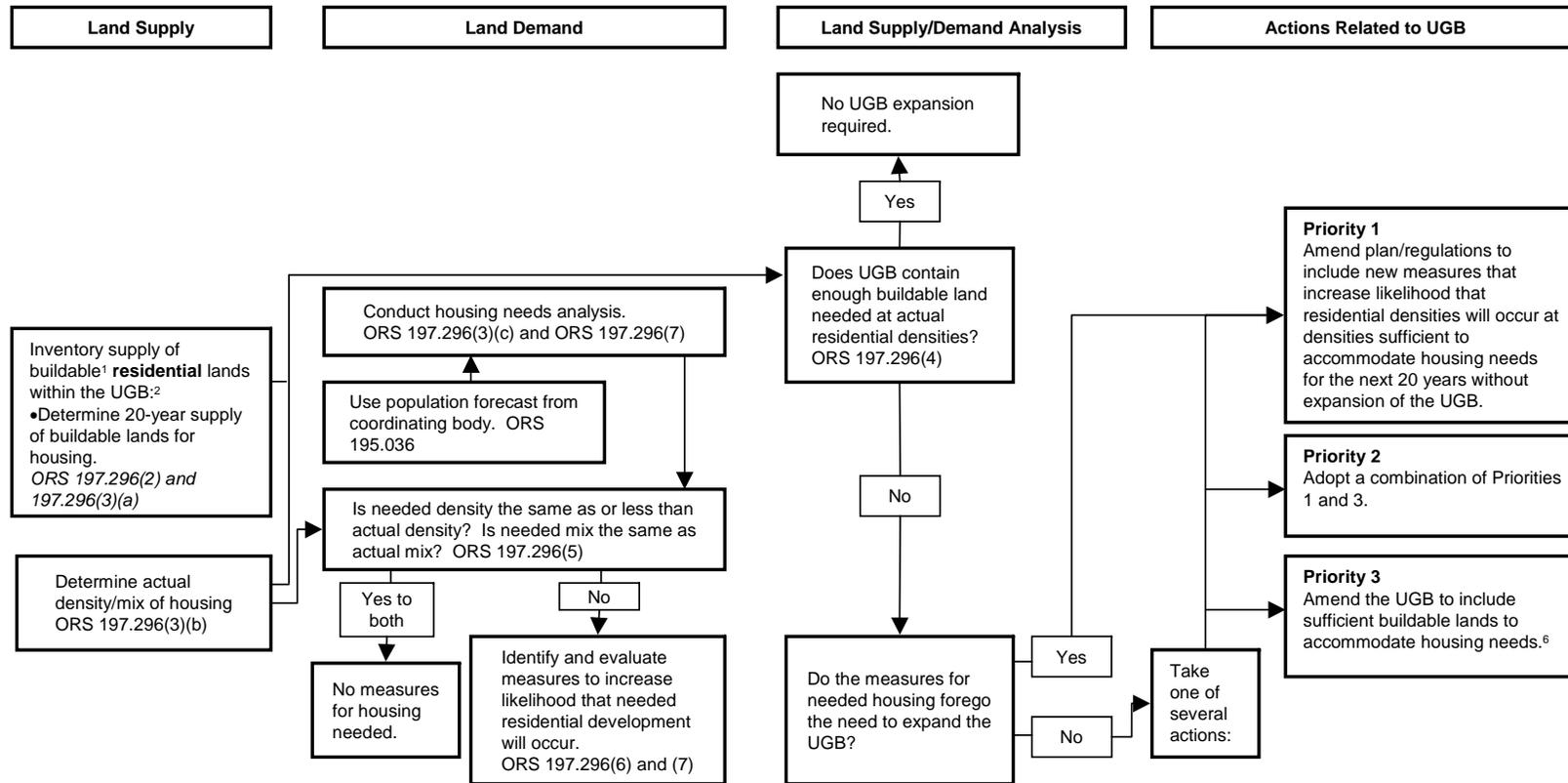
- (A) The number, density and average mix of housing types of urban residential development that have actually occurred;
- (B) Trends in density and average mix of housing types of urban residential development;
- (C) Demographic and population trends;
- (D) Economic trends and cycles; and

⁵ A local government can make a determination to use a shorter time period than the time period described if the local government finds that the shorter time period will provide more accurate and reliable data related to housing capacity and need. The shorter time period may not be less than three years.

(E) The number, density and average mix of housing types that have occurred on the buildable lands.

Figure 2-1 provides a graphic representation of the housing needs analysis process as defined in ORS 197.296.

Figure 2-1. Process for determining the sufficiency of residential lands



Footnotes:

1 Buildable lands means vacant and redevelop-able lands in urban and urbanizable areas that are suitable, available and necessary for residential uses. ORS 197.295(2)

2 Goal 14 requires UGB amendments to be adopted by City and County County. OAR 660-015-0000(14)

Residential Land Inventory

Chapter 3

The residential lands inventory is intended to identify lands that are available for development within the UGB. The inventory is sometimes characterized as *supply* of land to accommodate growth. Population and employment growth drive *demand* for land. The amount of land needed depends on the density of development.

This chapter presents the *residential* buildable lands inventory for the City of Springfield.⁶ The results are based on analysis of Geographic Information System data provided by City of Springfield GIS and Lane County Assessment data. The analysis also used aerial orthophotographs for verification.

METHODS, DEFINITIONS, AND ASSUMPTIONS

The first step of the residential buildable lands inventory was to identify the “land base.” The land base includes all lands in the Springfield portion of the Metro UGB that are either fully or partially within a residential plan designation. The following plan designations were included in the residential land base:

- High Density Residential
- Medium Density Residential
- Low Density Residential

The foundational assumptions for the residential lands inventory were reviewed and discussed by the Residential Lands Stakeholder Committee. The committee recommended a package of definitions and assumptions for use in the residential land inventory. These were reviewed with the Planning Commission and Council and approved for use in the study. The draft acreages presented in this chapter utilize the definitions and assumptions and also incorporate more detailed information from the Lane County Assessor’s Office to determine the character of the parcels.

Property Class and Stat Class codes from the Lane County Assessor’s Office were used to help determine if a property is vacant and what type of structure (if any) is present on the land. Property Class is a three digit code to define the current use of the land (residential, commercial, industrial, multi-family, etc) and whether is vacant or developed. Stat Class is also a three digit code used by the Assessor’s Office to describe the type of structure on a parcel (single-family home, multi-family structure, agricultural outbuilding, etc.). Aerial Photos were

⁶ The residential buildable lands inventory was a collaborative effort between City of Springfield staff and ECONorthwest.

also used in some cases to help determine presence and extent of development on a site if other information was not clear.

A key step in the buildable lands analysis was to classify each tax lot into a set of mutually exclusive categories. All tax lots in the UGB are classified into one of the following categories:

- *Vacant Land.* This category includes parcels with no structures or with structures with a value of less than \$10,000; parcels have not been precluded from development by a conditional use permit (CUP) or other commitment.
- *Partially Vacant Land.* This category includes parcels over 0.5 acre in a residential plan designation with an existing dwelling. The vacant portion of each lot was calculated by deducting 0.25 acres for each existing dwelling, and constrained areas as defined in the “Unbuildable, Not Serviceable” land definition.
- *Unbuildable, Not Serviceable Land.* This category includes land that is undevelopable. It includes tax lots or areas within tax lots with one or more of the following attributes: (1) slopes greater than 25%; (2) within the floodway; (3) in areas with severe landslide potential (DOGAMI map); (4) within wetlands and riparian corridors and setbacks; (5) with an easement a 230KV transmission line; (6) small irregularly shaped lots; and (7) publicly owned land.
- *Developed land.* Land that is developed at densities consistent with zoning and improvements that make it unlikely to redevelop during the analysis period. Lands not classified as vacant, partially-vacant, or undevelopable are considered developed.
- *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. Rather than speculating on which lands will redevelop during the planning period, Springfield uses historical rates of redevelopment as the basis for estimating how much redevelopment will occur during the planning period.

The initial classifications, while not perfect, provided a starting point. The initial classification was used to help City staff to define a list of parcels that meet the assumptions and criteria in the definitions listed below. The next step in the process was verification. City staff and ECONorthwest spent considerable effort to review and verify land classifications. Verification steps included review of classifications on top of 2008 aerial photographs, cross referencing data with LCOG land use data, and in selected instances, field verification.

The land classifications result in identification of lands that are vacant or partially vacant. The inventory includes all lands within the Springfield UGB. Public and semi-public lands are generally considered unavailable for development. Map 3-1 shows *residential* lands by plan designation within the Springfield UGB.

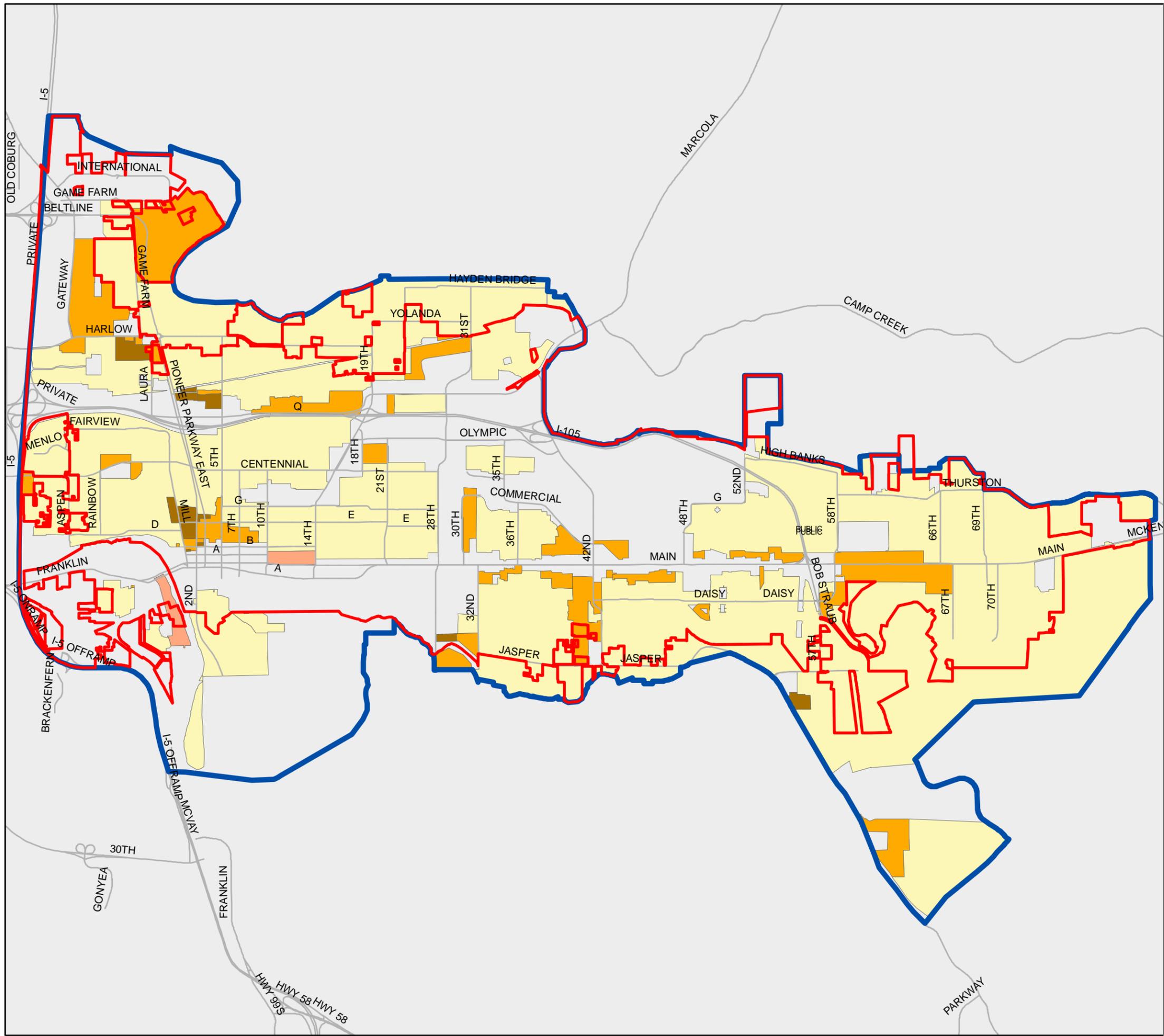
Map 3-1. Residential Land by Plan Designation City of Springfield Oregon

Legend

- City Limits
- Urban Growth Boundary

Plan Designation

- High Density Residential
- Low Density Residential
- Medium Density Res Mixed
- Medium Density Residential



RESULTS

LAND BASE

The first step in the residential land inventory was to determine the land base. This step was necessary because the inventory only covers a subset of land in the Springfield UGB. The land base is the subset of tax lots that fall within the plan designations included in the residential portion of the inventory.

Table 3-1 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 3-1. Acres in Springfield UGB and City Limit, 2008

Area	Tax Lots	Total Acres	Acres in Tax Lots	Percent 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 3-1 summarizes all land in the Springfield UGB. The next step is to identify the residential land base (e.g., lands with plan designations that allow housing or “residential lands”). The land base includes traditional residential designations, as well as mixed-use designations. Note that not all of the land in mixed-use designations will be used for employment.

Table 3-2 shows that about 7,482 acres within the Springfield UGB is included in the residential land base. Thus, about 62% of land within the Springfield UGB is included in the residential land base. The database includes all land in tax lots that have any portion that is in a residential plan designation.

Table 3-2. Lands designated for residential 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 Residential Designations	20,159
Acres in Land Base in Residential Designations	7,482

Source: analysis by ECONorthwest

Table 3-3 shows residential acres by classification and constraint status for the Springfield UGB in 2009. Analysis by constraint status (the table columns) shows that about 4,832 acres are classified as built or committed (e.g., unavailable for development), 1,203 acres were classified as constrained, and 1,447 were classified as vacant buildable.

Table 3-3. Residential acres by classification, Springfield UGB, 2009

Classification	Tax Lots	Total Ac	Land not available for housing		Land available for housing		
			Developed Ac	Constrained Ac	Buildable Ac	Capacity (DU)	
Land with no development capacity							
Developed	18,745	4,408	4,124	284	0	0	
Park/School	96	335	314	21	0	0	
Public	58	79	35	44	0	0	
Right of Way	145	175	145	30	0	0	
Subtotal	19,044	4,997	4,618	379	0	0	
Land with development capacity							
Master Planned	18	151	138	13	See notes	1,248	
Partially Vacant	234	841	77	170	595	3,206	
Vacant	863	1,493	0	641	852	4,039	
Subtotal	1,115	2,485	214	824	1,447	8,493	
Total	20,159	7,482	4,832	1,202	1,447	8,493	

Source: City of Springfield data; analysis by ECONorthwest

Note: No buildable acres are shown for master planned areas because the master plan identifies the number of dwelling units. This capacity is reflected in Table 3-7.

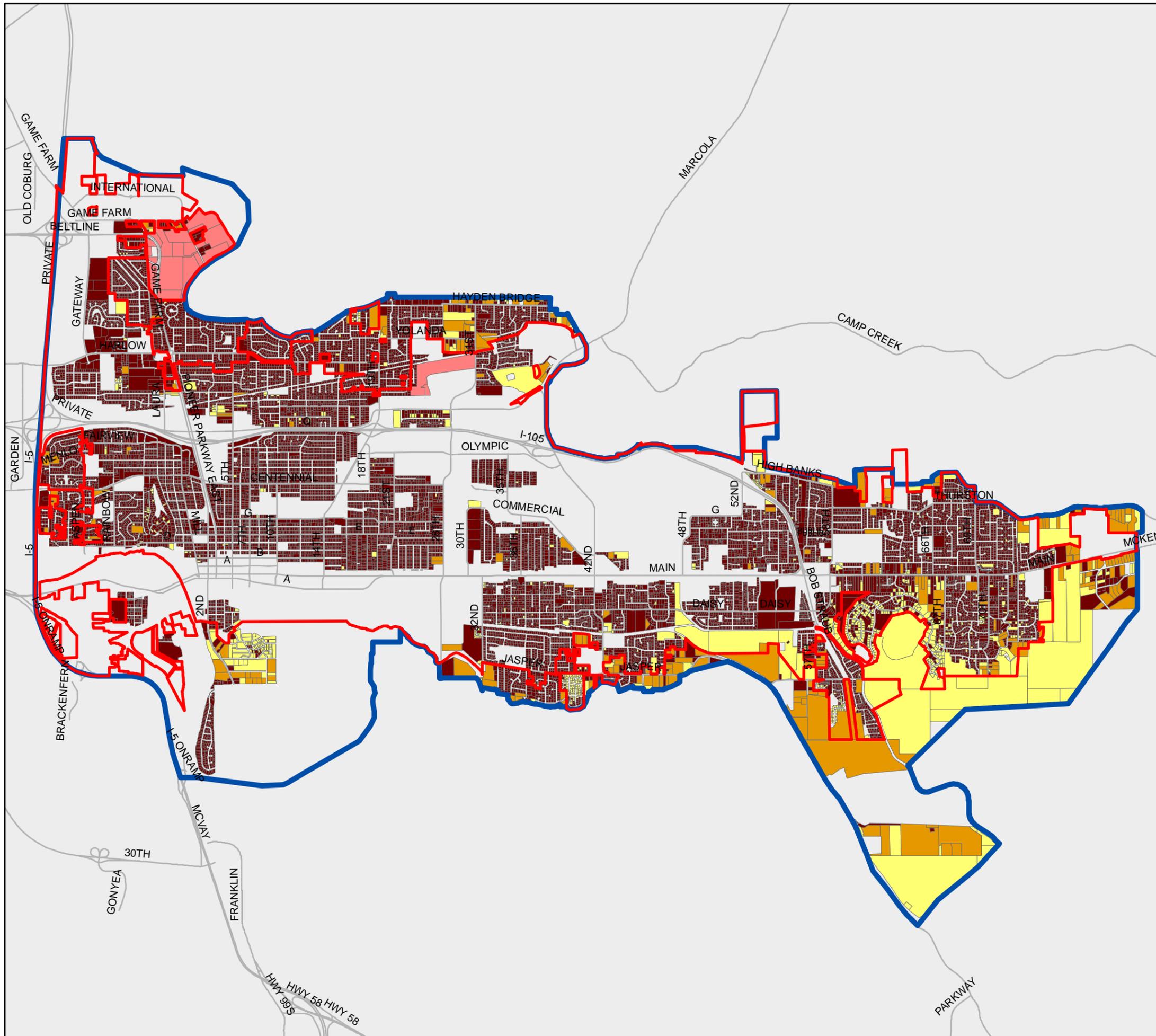
Map 3-2 Residential Land by Classification City of Springfield Oregon

Legend

- City Limit
- Urban Growth Boundary

Classifications

- MASTER PLAN
- PARTIALLY VACANT
- VACANT
- DEVELOPED



VACANT BUILDABLE LAND

The next step in the buildable land inventory is to net out 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 physical constraints (in this instance areas with steep slopes, waterway buffers, or wetlands).

Table 3-4 shows land with development capacity by constraint status. The data show that about 214 acres within tax lots with development capacity are developed. An additional 824 acres have development constraints that are unbuildable, leaving about 1,447 vacant buildable residential acres within the UGB.

Table 3-4. Residential land with development capacity by constraint status, Springfield UGB, 2009

Classification	Tax Lots	Acres unavailable for housing			Buildable Acres
		Acres in Tax Lots	Developed Acres	Unbuildable Acres	
Master Planned	18	151	138	13	See notes
Partially Vacant	234	841	77	170	595
Vacant	863	1,493	0	641	852
Total	1,115	2,485	214	824	1,447

Source: City of Springfield GIS data; analysis by ECONorthwest

Note: No buildable acres are shown for master planned areas because the master plan identifies the number of dwelling units. This capacity is reflected in Table 3-7.

Table 3-5 shows vacant land by plan designation. Map 3-3 shows the location of vacant land by plan designation. Map 3-4 shows vacant land with constraints that are unbuildable.

Table 3-5. Residential land with development capacity by plan designation, Springfield UGB, 2008

Plan Designation	Tax Lots	Total Acres in Tax Lots	Developed Acres	Constrained Acres	Buildable Acres
Low Density Residential	981	2,137	71	765	1,301
Medium Density Residential	126	329	142	58	128
High Density Residential	8	19	1	0	18
Total	1,115	2,485	214	824	1,447

Source: City of Springfield GIS data; analysis by ECONorthwest

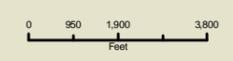
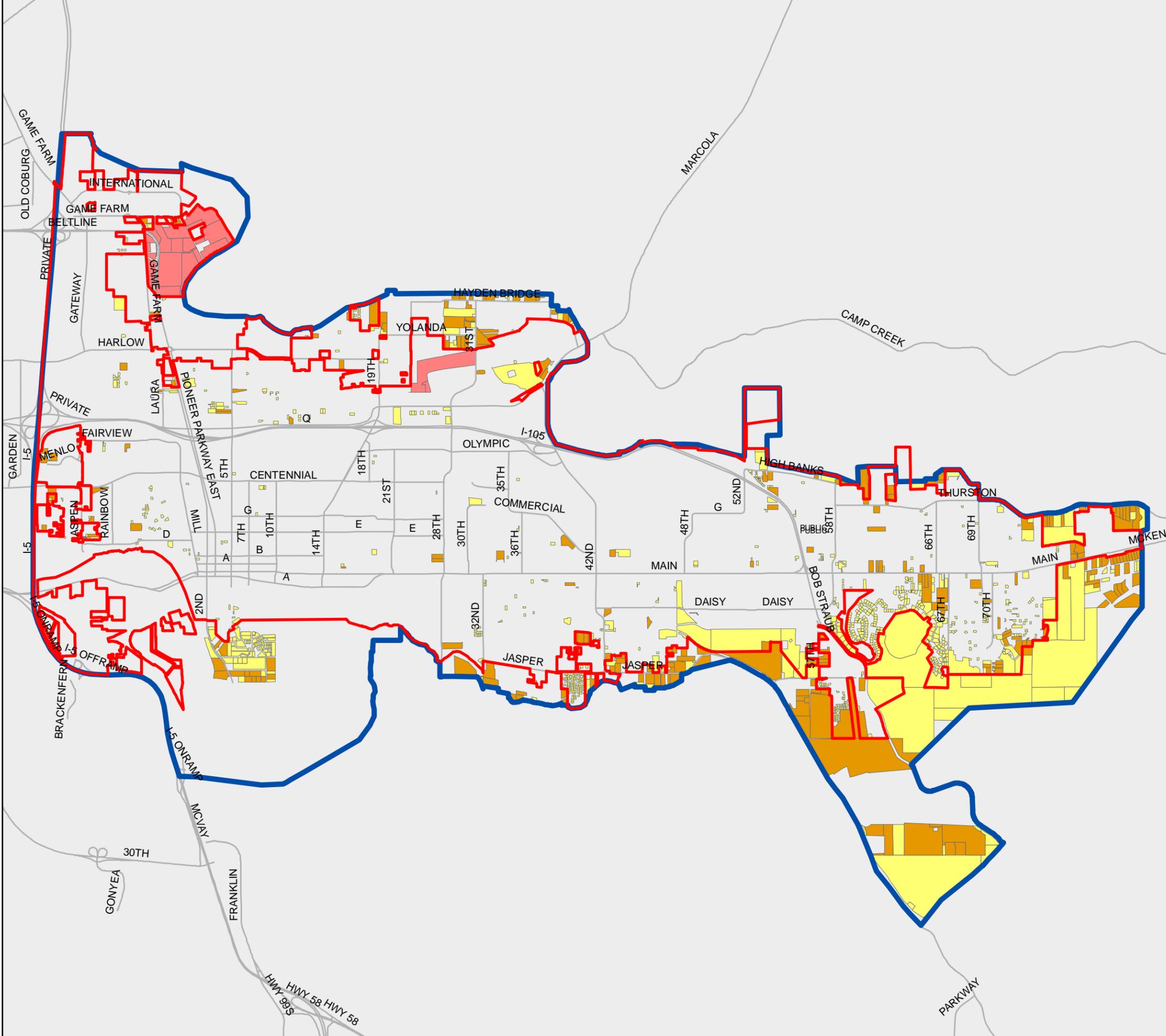
Map 3-3 Residential Land by Classification City of Springfield Oregon

Legend

- City Limits
- Urban Growth Boundary

Classifications

- MASTER PLAN
- PARTIALLY VACANT
- VACANT



Map 3-4 Residential Land by Classification and Constraint Status City of Springfield Oregon

Legend

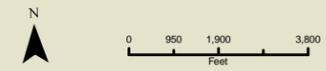
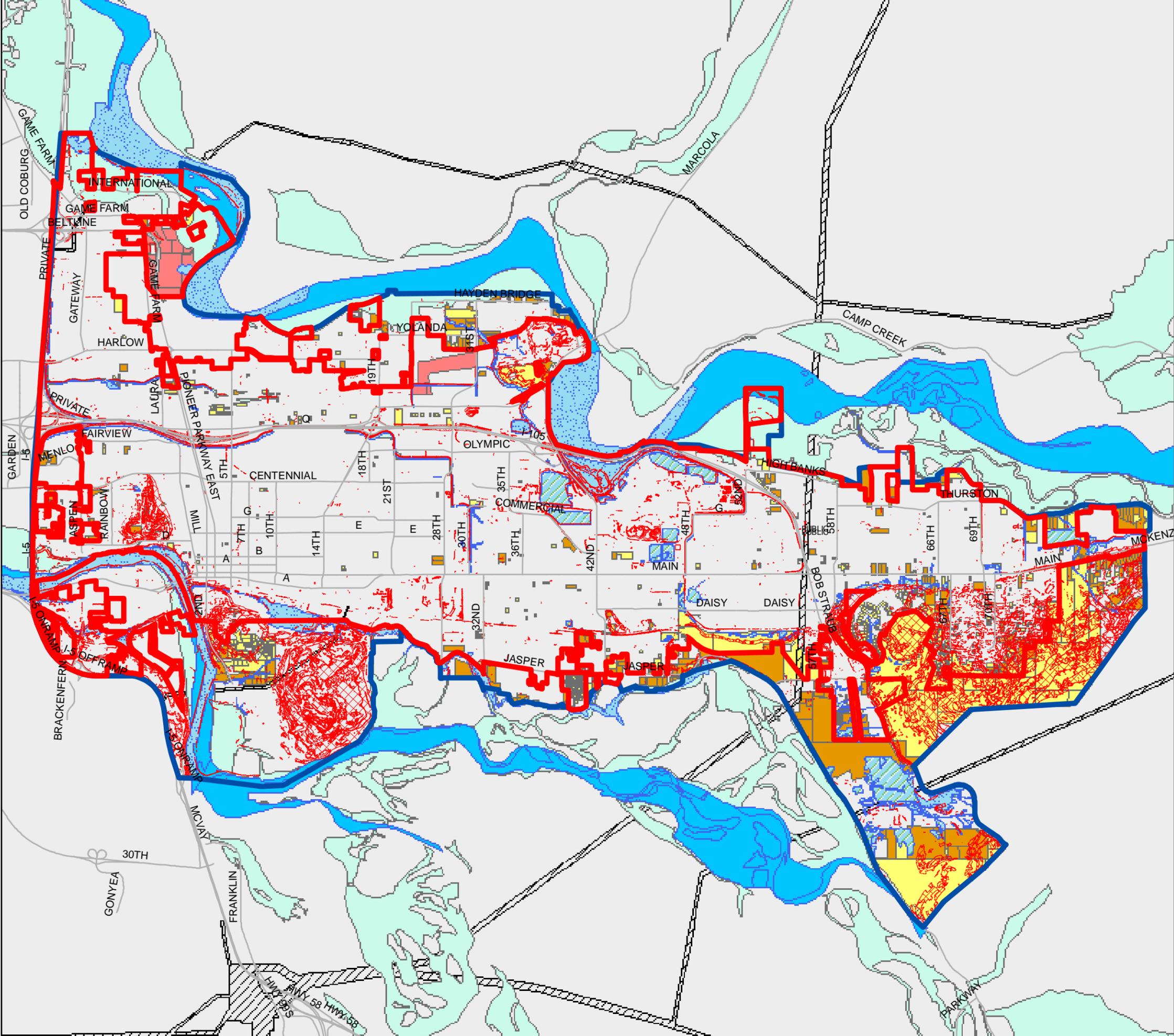
- City Limit
- Urban Growth Boundary

Classifications

- MASTER PLAN
- PARTIALLY VACANT
- VACANT

Constraints

- Slope >25%
- Riparian Resource Areas
- Floodway
- 100-yr Floodplain
- Wetlands
- BPA Easement



REDEVELOPMENT POTENTIAL

Redevelopment potential addresses land that is 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. Different studies use different improvement to land value ratio thresholds.

This study does not use improvement-to-land value ratios as a redevelopment threshold. The City of Springfield understands that low-value housing is an integral part of the City's affordable housing stock and that encouraging redevelopment of such housing will likely result in an overall loss of affordable housing in Springfield.

Springfield uses a demand-based method to identify redevelopment potential. Redevelopment capacity is estimated based on historical redevelopment rates as described below.

Lane Council of Governments (LCOG) maintains a database that tracks all addresses and the attributes of the address, including: the record creation date, the type of residential use (e.g. single-family, duplex), the spatial location of the address, and other information. LCOG has stated that this information can be used in combination with building permit reports, Lane County tax assessor's data, and other boundary information for to estimate rates of residential redevelopment. The address database has a high degree of accuracy and is used for a variety of purposes, including emergency responses to 911 calls.

Analysis of historical redevelopment of residential lands provides context for determining how much redevelopment will occur over the 20-year planning period. Specifically, the analysis addressed redevelopment by analyzing new dwellings on developed lots. This includes lots that had addresses coded before 1999 and received additional addresses after 1999. In other words, it focuses on lands that were identified as "developed" in the buildable lands inventory, but had additional residential development in the 1999-2008 period.

The analysis found 102 new dwellings were added on developed lots between 1999 and 2008. This is about 4% of 2,860 dwellings added in Springfield during this period. Of the 102 new dwellings added, 32 were on land designated for Commercial Mixed Use, and 70 were on land designated Medium Density Residential.

Based on the analysis above, the City assumes that residential redevelopment rates will increase slightly over the planning period to 5% of needed new dwellings. The analysis presented in Chapter 5 (Table 5-30) shows that the City will need 5,920 new dwellings over the planning period. Applying the 5% redevelopment assumption to the 5,920 needed units yields 296 dwellings that will be allocated to land that is already developed. In other words, these 296 units will not need new vacant land.

RESIDENTIAL CAPACITY

The final step in a residential buildable lands inventory is to estimate the capacity of buildable land in dwelling units. The capacity of residential land is measured in dwelling units and is dependent on densities allowed in specific zones as well as redevelopment potential. In short, land capacity is a function of buildable land and density.

The buildable lands inventory indicates that Springfield has about 1,447 acres of vacant and partially-vacant residential land and an additional 21 acres in the Glenwood mixed-use refinement plan area (these acres were included in the commercial and industrial lands inventory and are included here only for the purpose of estimating residential capacity).⁷ This yields a total of 1,468 buildable acres.

Table 3-7 provides an estimate of how much housing could be accommodated by those lands based on the needed densities identified in Table 5-30 after making deductions for development constraints. It includes capacity for areas with approved master plans that were not included in the acreage estimates. This includes Marcola Meadows (518 dwellings in the MDR designation) and RiverBend (730 dwellings in the MDR designation). These figures are derived from the city-approved master plans for both of these developments.

Table 3-7 shows that Springfield has capacity for 9,018 dwelling units within the existing UGB. Note that this figure includes capacity for 8,722 dwellings on vacant land an additional 296 units through redevelopment.

Table 3-7. Estimated residential development capacity, Springfield UGB, 2009

Plan Designation	Buildable Acres	Residential Capacity (DU)	Percent of Capacity
Low Density Residential	1,301	5,379	60%
Medium Density Residential	128	2,718	30%
High Density Residential	18	355	4%
Mixed-Use (Glenwood)	21	270	3%
Redevelopment	na	296	3%
Total	1,468	9,018	100%

Source: City of Springfield residential BLI; analysis by ECONorthwest
 Note: Estimated residential development capacity includes sites with approved master plans (RiverBend – 730 DU and Marcola Meadows – 518 DU. All of this capacity is in the Medium Density Residential plan designation).

⁷ Capacity in the Glenwood mixed-use area was calculated as follows: 21 buildable acres (45% of the 47-acre site; the policy requires 30% to 60% of the site be used for housing) multiplied by 15 dwelling units per gross acre equals 317 dwelling units, minus 47 dwelling units that would be displaced from the River Bank Mobile Home Park equals 270 dwelling units.

Chapter 4 **Historical Development Trends**

Analysis of historical development trends in Springfield provides insights into how the local housing market functions. The housing type mix and density are also key variables in forecasting future land need. Moreover, such an analysis is required by ORS 197.296. The specific steps are described in Task 2 of the DLCDCD HB 2709 Workbook:

1. Determine the time period for which the data must be gathered
2. Identify types of housing to address (all needed housing types)
3. Evaluate permit/subdivision data to calculate the actual mix, average actual gross density, and average actual net density of all housing types

ORS 197.296 requires the analysis of housing mix and density to include the past five years or since the most recent periodic review, whichever time period is greater.⁸

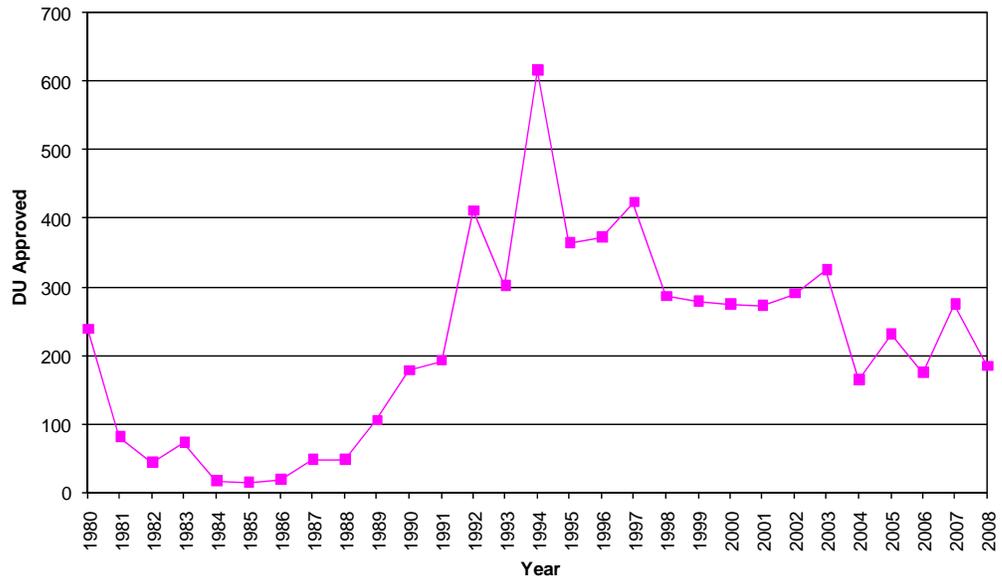
The City of Springfield used the 1999- July 2008 period for this analysis. The rationale for using this period is that permit data prior to 1999 could not be associated with tax lots to develop density estimates. Moreover, the most recent housing needs analysis and inventory for the Eugene-Springfield Metropolitan Area was conducted in 1999. With respect to housing mix, the 1990 and 2000 Census provide more accurate counts.

RESIDENTIAL DEVELOPMENT TRENDS

Figure 4-1 shows dwelling units approved in the Springfield city limits between 1980 and July 2008. Springfield approved 5,836 dwellings during this 26-year period. The number of dwellings approved annually ranges from a low of 14 in 1985 to a high of 616 in 1994. Springfield averaged about 217 dwelling unit approvals per year during this period. The rate of development, however, shows considerable variation from year to year. That variation can be largely tied to economic conditions in the region.

⁸ Specifically, ORS 197.296(5) (b) states: “A local government shall make the determination described in paragraph (a) of this subsection using a shorter time period than the time period described in paragraph (a) of this subsection if the local government finds that the shorter time period will provide more accurate and reliable data related to housing capacity and need. The shorter time period may not be less than three years.”

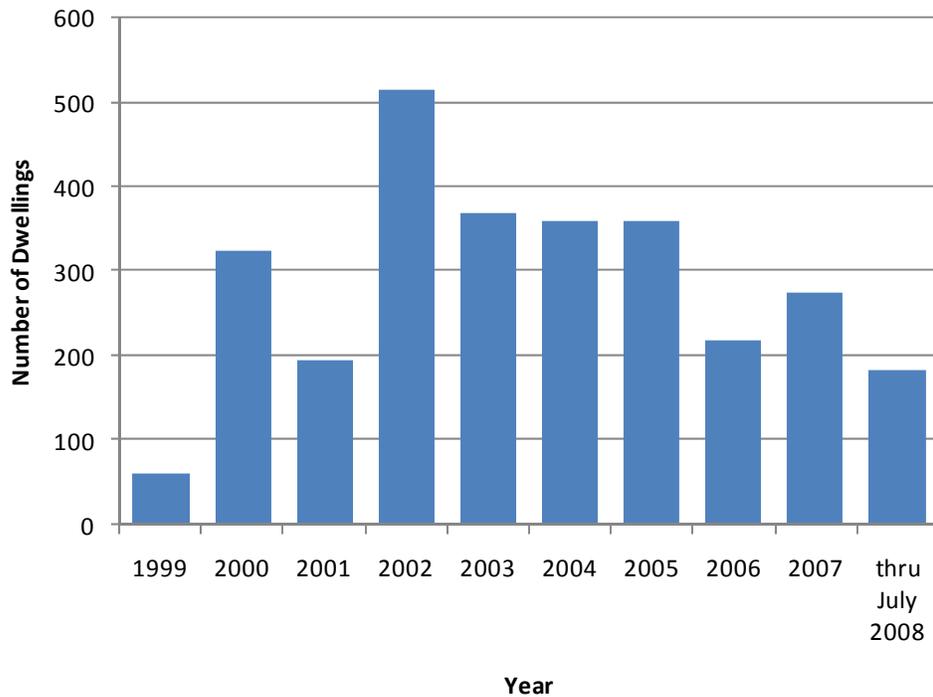
Figure 4-1. Dwelling units approved through building permits issued for new residential construction, Springfield, 1980 – July 2008



Source: City of Springfield Planning Department, 2008
 Note: 2008 includes January through July.

Between July 1999 and July 2008, Springfield issued a total of 1,971 building permits for new residential construction that allowed 2,860 dwelling units. Figure 4-1 shows that the number of dwelling units approved varies from year to year and peaked at 515 in 2002. The number of dwellings approved was slower in 1999 and 2001. Between 2003 and 2005, the number of dwellings approved remained relatively steady at around 360 annually. By 2006, residential permits reflected the downturn in the national housing market, but still remained relatively strong averaging around 200 permits per year.

Figure 4-1. Dwelling units approved through building permits issued for new residential construction, Springfield, July 1999 – July 2008



Source: City of Springfield Planning Department, 2006

Table 4-1 shows dwelling units approved through building permits issued for new residential construction by type within Springfield. The data indicate that about 54% of residential dwellings approved were for single-family detached dwellings, manufactured homes accounted for about 10% of all permits issued, and multifamily housing of all types accounted for 36% of permits issued.

Table 4-1. Dwelling units approved through building permits issued for new residential construction by type, Springfield, July 1999 – July 2008

Year	Single Family	Manufactured Home	Duplex	Tri-Plex	Four-Plex	Apartment	Total Units
1999	30	9	22	0	0	0	61
2000	209	38	30	3	4	40	324
2001	121	46	16	6	0	6	195
2002	252	45	14	0	4	200	515
2003	230	31	18	6	84	0	369
2004	155	26	38	6	12	122	359
2005	144	31	38	6	140	0	359
2006	116	27	17	3	56	0	219
2007	180		30	0	4	61	275
thru July 2008	92	27	10	0	0	55	184
Total Units	1529	280	233	30	304	484	2860
% of Units	53.5%	9.8%	8.1%	1.0%	10.6%	16.9%	100.0%

Source: City of Springfield Planning Department, 2006

TRENDS IN HOUSING MIX AND TENURE

The housing mix by type (i.e., percentage of single family, multi-family, and mobile/manufactured home units) is an important variable in any housing needs assessment. Distribution of housing types is influenced by a variety of factors, including the cost of new home construction, area economic and employment trends, demographic characteristics, and amount of land zoned to allow different housing types and densities.

Table 4-2 shows changes in Springfield's housing mix from 1990-2000. Between 1990 and 2000, Springfield increased its housing stock by 19%, adding 3,451 dwelling units. The mix of housing did not change substantially. In 1990 and 2000, 54% of dwelling units were single-family detached units. Over the ten-year period, Springfield added more than 2,000 single-family detached dwellings.

Thirty-one percent of the new dwellings added between 1990 to 2000 were multifamily or manufactured. However, the share of these more affordable housing types did not increase in Springfield over the ten-year period. In 1990, these housing types accounted for 37% of the housing stock and in 2000 they accounted for 37% of the housing stock.

With respect to tenure, Springfield experienced a 4% increase in the ownership rate between 1990 and 2000. About 49% of housing in the Springfield city limits was owner-occupied in 1990 and 54% was owner-occupied in 2000. Homeownership rates in Springfield are lower than County and State averages. In 1990, about 61% of homes were owner-occupied in Lane County, a figure that increased to 63% by 2000. State homeownership rates were 63% in 1990 and 64% in 2000.

Table 4-2. Dwelling units by type and tenure, Springfield city limits, 1990 and 2000

Housing Units	1990 Census		2000 Census		New DU 90-00		
	Number	Percent	Number	Percent	Number	Percent	% Increase
Single-family detached	9,687	53.5%	11,721	54.3%	2,034	58.9%	21%
Single-family attached	1,755	9.7%	1,794	8.3%	39	1.1%	2%
Multifamily	4,777	26.3%	6,118	28.4%	1,341	38.9%	28%
Mobile/Manufactured	1,902	10.5%	1,939	9.0%	37	1.1%	2%
Total housing units	18,121	100.0%	21,572	100.0%	3,451	100.0%	19%
Occupied Housing Units	17,447	100.0%	20,514	100.0%	3,067	100.0%	18%
Owner-occupied	8,599	49.3%	10,987	53.6%	2,388	77.9%	28%
Renter-occupied	8,848	50.7%	9,527	46.4%	679	22.1%	8%

Source: U.S. Census of Population and Housing; SF-3 1990 and 2000.

Table 4-3 shows type of dwelling by tenure (owner/renter-occupied) in 2000. The results show that single-family and manufactured housing types have a much higher ownership rate than other housing types—about 95% of owner-occupied units were in these housing types. Multifamily housing types, including duplexes were predominately renter occupied. It is also notable that 88% of the single-family attached dwellings were renter occupied. By contrast, 20% of single-family detached and 13% of mobile homes were renter occupied in 2000.

Table 4-3. Housing units by type and tenure, Springfield city limits, 2000

Housing Type	Owner-Occupied			Renter-Occupied			Total	
	Number	% by Tenure	% by Type	Number	% by Tenure	% by Type	Number	% by Type
Single-family detached	8,989	80%	82%	2,219	20%	23%	11,208	55%
Single-family attached	204	12%	2%	1,494	88%	16%	1,698	8%
Multifamily-duplex	118	10%	1%	1,113	90%	12%	1,231	6%
Multifamily-3+ units	89	2%	1%	4,447	98%	47%	4,536	22%
Mobile home	1,581	87%	14%	244	13%	2%	1,825	9%
Total	10,981	54%	100%	9,517	46%	100%	20,498	100%

Source: US Census 2000, Summary File 3; Percentages calculated by ECONorthwest.

Note: Total number of units is slightly different than reported in Table 4-2 due to different data sources (this table uses Summary File 3 sample data; Table 9.30.2 uses Summary File 1, 100% count data).

Table 4-4 shows changes in Springfield's housing mix from 2000-July 2008 based on 2000 Census and residential building permit data provided by the City of Springfield. Between 2000 and July 2008, Springfield increased its housing stock about 13%, adding 2,799 dwelling units. The mix of housing changed slightly, with multifamily dwellings accounting for about 0.9% greater share in July 2008 than 2000.

Table 4-4. Estimated dwelling units by type, Springfield city limits, 2000 and July 2008

Housing Units	2000 Census		2006 Est.		New DU 00-06		
	Number	Percent	Number	Percent	Number	Percent	% Increase
Single-family detached	11,721	54.3%	13,220	54.2%	1,499	53.6%	13%
Single-family attached	1,794	8.3%	1,794	7.4%	na	na	0%
Multifamily	6,118	28.4%	7,147	29.3%	1,029	36.8%	17%
Mobile/Manufactured	1,939	9.0%	2,210	9.1%	271	9.7%	14%
Total housing units	21,572	100.0%	24,371	100.0%	2,799	100.0%	13%

Source: U.S. Census of Population and Housing; SF-3 1990 and 2000; City of Springfield Building Permit Data, 2006.

Note: the City building permit data does not distinguish between single-family attached and detached dwellings. Thus, the 2008 estimate probably overestimates single-family detached dwellings and underestimates single-family attached dwellings.

DENSITY

Table 4-5 summarizes approved *net* residential densities by housing type from July 1999 through July 2008. During this period, 2,860 dwelling units were approved by residential building permits. The dwellings are associated with individual tax lots to calculate the net residential density (expressed in dwelling units per acre).⁹ This development consumed 436.3 net vacant acres. New housing in Springfield developed at an average net density of 6.6 dwelling units per net buildable acre between 1999 and July 2008.

The data indicate that single-family detached housing types averaged a density of 5.4 dwelling units per net acre, while manufactured homes achieved a lower density of 4.6 dwelling units per net acre. Multifamily housing types show more variation—from 25 units per net acre for triplexes, to 8.5 dwelling units per net acre for fourplexes, and 24.4 dwellings per net acre for apartment buildings with five or more units.

⁹ OAR 660-024-0040(9) defines a net buildable acre as follows: For purposes of this rule, a "Net Buildable Acre" consists of 43,560 square feet of residentially designated buildable land, after excluding present and future rights-of-way, restricted hazard areas, public open spaces and restricted resource protection areas.

Table 4-5. Actual residential density by housing type, in net acres, Springfield, July 1999 – July 2008

Housing Type	Dwelling Units	Percent of DU	Net Acres	DU/Net Acre
Single-Family Detached	1,529	53%	280.7	5.4
Manufactured Home	280	10%	61.2	4.6
Duplex	233	8%	37.5	6.2
Triplex	30	1%	1.2	25.0
Fourplex	304	11%	35.9	8.5
Apartments 5+ Units	484	17%	19.8	24.4
Total	2,860	100%	436.3	6.6

Source: City of Springfield building permit data

Chapter 2 described the framework for conducting a housing "needs" analysis. ORS 197.296 (HB 2709) requires cities over 25,000 or fast growing cities to conduct a housing needs analysis. A recommended approach is described in Task 3 of the HB 2709 Workbook. The specific steps in the housing needs analysis are:

1. Project number of new housing units needed in the next 20 years.
2. Identify relevant national, state, and local demographic and economic trends and factors that may affect the 20-year projection of structure type mix.
3. Describe the demographic characteristics of the population and, if possible, housing trends that relate to demand for different types of housing.
4. Determine the types of housing that are likely to be affordable to the projected households based on household income.
5. Estimate the number of additional needed units by structure type.
6. Determine the needed density ranges for each plan designation and the average needed net density for all structure types.

STEP 1: PROJECT NUMBER OF NEW HOUSING UNITS NEEDED IN THE NEXT 20 YEARS

Step 1 in the housing needs analysis is to project the number of *new* housing units needed during the planning period. This section describes the key assumptions and estimates of new housing units needed in Springfield between 2000 and 2020.

POPULATION

Springfield must have a population forecast to project expected population change over the 20-year planning period (in this instance, 2010-2030). Lane County adopted coordinated population forecasts for the County and its incorporated cities in June 2009. The forecasts include figures for Springfield for 2010 and 2030.

Table 5-1 shows the coordinated population forecast for the Springfield city limit, urban area (the area between the city limit and UGB), and the UGB for 2010 to 2030. The UGB forecast for 2030 is 81,608 persons—an increase of 14,577 persons during the 20-year planning period.

Table 5-1. Springfield coordinated population forecast, Springfield UGB, 2010 to 2030

Year	City Limit	Urban Area	UGB
2010	58,891	8,140	67,031
2030	74,814	6,794	81,608
Change 2010-2030			
Number	15,923	(1,346)	14,577
Percent	27%	-17%	22%
AAGR	1.2%	-0.9%	1.0%

Source: Lane County Rural Comprehensive Plan, 1984 (Amended in 2009), Table 1-1, pg 5

PERSONS IN GROUP QUARTERS

Persons in group quarters do not consume standard housing units: thus, any forecast of new people in group quarters is typically backed out of the population forecast for the purpose of estimating housing need. Group quarters can have a big influence on housing in cities with colleges (dorms), prisons, or a large elderly population (nursing homes). In general, one assumes that any new requirements for these lodging types will be met by institutions (colleges, state agencies, health-care corporations) operating outside what is typically defined as the housing market. Group quarters, however, require land and are typically built at densities that are comparable to multiple-family dwellings.

Table 5-2 shows persons in group quarters in the City of Springfield as reported by the 1980, 1990, and 2000 Census.

Table 5-2. Persons in group quarters, City of Springfield, 1980, 1990, and 2000

VARIABLE	1980	1990	2000
Total Population	41,621	44,683	52,864
Persons in Group Quarters	184	298	635
Percent in Group Quarters	0.44%	0.67%	1.20%

Source: U.S. Census of Population and Housing, Summary File 1

For the purpose of estimating housing needs for Springfield, ECO assumed that 2% of new persons (291 persons) will reside in group quarters. This assumption reflects the trend shown in Table 5-2. The majority of these new persons will live in assisted living quarters.

A final note on persons in group quarters: persons in group quarters require land. While the Planning for Residential Growth workbook backs this component of the population out of total population that needs housing, it does not otherwise make accommodations for land demand for new group quarters. For the purpose of this analysis, we assume that persons in group quarters require land at

approximately the same density as multiple family housing. Land needed for group quarters is estimated at the end of this chapter.

HOUSEHOLD SIZE AND COMPOSITION

Twenty years ago, traditional families (married couple, with one or more children at home) accounted for 29% of all households in Oregon. In 1990 that percentage had dropped to 25%. It will likely continue to fall, but probably not as dramatically. The average household size in Oregon was 2.60 in 1980 and 2.52 in 1990. One and two person households made up the majority of Oregon households in 1990. The direct impact of decreasing household size on housing demand is that smaller households means more households, which means a need for more housing units even if population were not growing.

Table 5-3 shows average household size for Springfield as reported by the 1980, 1990, and 2000 Census. OAR 660-024-0040(7)(a) established a “safe harbor” assumption for average household size—which is the figure from the most recent Census (2.54 persons). The estimate of future housing needs uses an average household size of 2.54 persons, as allowed by the safe harbor.

Table 5-3. Average household size, Springfield, 1980, 1990 and 2000

Year	Average household size
1980	2.57
1990	2.54
2000	2.54

Source: U.S. Census of Population and Housing, Summary File 1

VACANCY RATE

Vacant units are the final variable in the basic housing need model. Vacancy rates are cyclical and represent the lag between demand and the market’s response to demand in additional dwelling units. Vacancy rates for rental and multiple family units are typically higher than those for owner-occupied and single-family dwelling units.

Table 5-4 shows that the average vacancy rate for Springfield varies by time period. The most recent Census showed an overall vacancy rate of 5%. The HCS housing needs model, however, requires separate vacancy rate figures for single-family and multifamily units. The vacancy rate in 2000 was 4.7% for single-family units and 5.7% for multifamily units.

Table 5-4. Average vacancy rate, Springfield, 1980, 1990 and 2000

Variable	1980	1990	2000
Housing Units	17,469	18,121	21,500
Occupied Housing Units	16,173	17,447	20,426
Vacant Housing Units	1,296	674	1,074
Vacancy Rate	7.42%	3.72%	5.00%

Source: U.S. Census of Population and Housing, Summary File 1

Thus study assumes an average vacancy rate of 5%--the same figure as reported in the 2000 Census. The countywide vacancy rate was 6.1% in 2000.

FORECAST OF NEW HOUSING UNITS, 2010-2030

The preceding analysis leads to a forecast of new housing units likely to be built in Springfield during the 2010 to 2030 period. Based on the assumptions shown in Table 5-5, Springfield will need 5,920 new dwelling units to accommodate forecast population growth between 2010 and 2030. These figures do not include new group quarters. The forecast assumes 60% will be single-family housing types (single-family detached and manufactured) and 40% will be multifamily. The rationale for the household mix is described in the housing needs analysis section of this chapter.

The results indicate that Springfield will need to issue permits for about 296 new dwelling units annually during the planning period. This figure is consistent with the 300 dwelling units approved annually during the 1999 to July 2008 period, but is still significantly below the 515 dwellings approved in 2002.

The forecast of new units does not include dwellings that will be demolished and replaced. This analysis does not factor those units in; it assumes they will be replaced at the same site and will not create additional demand for residential land.

Table 5-5. Demand for new housing units, Springfield UGB, 2010-2030

Variable	Assumptions / Results
Change in persons	14,577
<i>minus</i> Change in persons in group quarters	291
<i>equals</i> Persons in households	14,286
Average household size	2.54
New occupied DU	5,624
Average vacancy rate	5%
Total new DU	5,920
Single-family dwelling units	
Percent single-family DU	60%
New occupied single-family DU	3,552
Multiple family dwelling units	
Percent multiple family DU	40%
New occupied multiple-family DU	2,368
Totals	
<i>equals</i> Total new occupied dwelling units	5,920
Dwelling units needed annually	296

Source: Calculations by ECONorthwest based on safe harbor population forecast and assumptions described above.

STEP 2: IDENTIFY RELEVANT NATIONAL, STATE, AND LOCAL DEMOGRAPHIC AND ECONOMIC TRENDS AND FACTORS THAT MAY AFFECT THE 20-YEAR PROJECTION OF STRUCTURE TYPE MIX

NATIONAL HOUSING TRENDS

The overview of national, state, and local housing trends builds from previous work by ECO and conclusions from *The State of the Nation's Housing, 2008* report from the Joint Center for Housing Studies of Harvard University. The Harvard report summarizes the national housing outlook for the next decade as follows:

“Housing markets contracted for a second straight year in 2007. The national median single-family home price fell in nominal terms for the first time in 40 years of recordkeeping, leaving several million homeowners with properties worth less than their mortgages. With the economy softening and many home loans resetting to higher rates, an increasing number of owners had difficulty keeping current on their payments. Mortgage performance—especially on subprime loans with adjustable rates—eroded badly. Lenders responded by tightening underwriting standards and demanding a higher risk premium, accelerating the ongoing slide in sales and starts.

“It is still uncertain how far, and for how long, the housing crisis will drive down household growth. Regardless, given the solid underpinnings of long-term demand—including the recent strength of immigration and the aging of the echo-boom generation into young adulthood—household growth will pick up again once the economy recovers. But if the nation suffers a prolonged economic downturn that results in lower immigration and more doubling up, household growth in 2010-2020 may fall short of the 14.4 million level currently projected.

This evaluation presents a bleak outlook for housing markets and for homeownership in the short-term brought on by the subprime mortgage crisis. However, the image painted of the future looks brighter, as the increase in housing demand is naturally induced by the growth of the population in the necessary age groups. Following is a summary of key national housing trends:

- By 2006, higher prices and rising interest rates had a negative impact on market demand. Investor demand, home sales and single-family starts dropped sharply. Growth in national sales prices also slowed. By 2007 and early 2008, housing market problems had reached the rest of the economy, resulting in a nationwide economic slowdown and fear of recession.
- Homeownership rates are decreasing. After 12 successive years of increases, the national homeownership rate slipped in 2005, again in 2006 to 68.8%, and again in 2007 to 68.1%. The Joint Center for Housing Studies predicts that once the corrections made to work off the housing oversupply and prices start to recover, a return to traditional mortgage products and the strength of natural demand will invigorate the homeownership rate.
- The long-term market outlook shows that homeownership is still the preferred tenure. Over the next decade, 88% of net household growth is expected to come from gains in the number of homeowners. While further homeownership gains are likely during this decade, they are not assured.
- Population increases will drive future demand. The Joint Center for Housing Studies indicates that demand for new homes could total as many as 14.4 million units nationally between 2010 and 2020. Nationally, the vast majority of these homes will be built in lower-density areas where cheaper land is in greater supply.
- People and jobs have been moving away from central business districts (CBDs) for more than a century: the number of the country’s largest metropolitan areas with more than half of their households living at least 10 miles from the CBD has more than tripled from 13 in 1970 to 46 in 2000; in six metropolitan areas more than a fifth of households live at least 30 miles out. While people older than 45 years are generally continuing to move away from CBDs, younger people have begun to move nearer to CBDs.

- Demand for higher density housing types exists among certain demographics. They conclude that because of persistent income disparities, as well as the movement of the echo boomers into young adulthood, housing demand may shift away from single-family detached homes toward more affordable multifamily apartments, town homes, and manufactured homes. Supply-side considerations, however, outweigh these demographic forces.
- Immigration will play a key role in accelerating household growth over the next 10 years. Between 2000 and 2006, immigrants contributed to over 60% of household growth. Minorities will account for 68% of the 14.6 million projected growth in households for the 2005 to 2015 period. Immigrants now comprise a growing share of young adults and children in the United States. Twenty percent of Americans ages 25-34 are foreign born, and an additional 9% are second generation Americans.
- An aging population, and of baby boomers in particular, will drive changes in the age distribution of households in all age groups over 55 years. A recent survey of baby boomers showed that more than a quarter plan to relocate into larger homes and 5% plan to move to smaller homes. Second home demand among upper-income homebuyers of all ages also continues to grow. Households aged 50 to 69 are expected to account for the purchase of nearly half a million second homes between 2005 and 2015.
- The Joint Center for Housing studies expects rental housing demand to grow by 1.8 million households over the next decade. Minorities will be responsible for nearly all of this increased demand. The minority share of renter households grew from 37% in 1995 to 43% in 2005. The minority share is forecast to exceed 50% of renter households in 2015. Demographics will also play a role.
- Ratios of rent to income are forecast to continue to increase. In 2006, one in three American households spent more than 30% of income on housing, and more than one in seven spent upwards of 50%. The national trend towards increased rent to income ratios is mirrored regionally in that a salary of two to three times the 2007 Federal minimum wage of \$5.85 is needed to afford rents in Lane County.

The U.S Bureau of Census Characteristics of New Housing Report presents data that show trends in the characteristics of new housing for the nation, state, and local areas. Several trends in the characteristics of housing are evident from the New Housing Report:

- Larger single-family units on smaller lots. Between 1997 and 2007 the median size of new single-family dwellings increased 15%, from 1,975 sq. ft. to 2,277 sq. ft. nationally and 18% in the western region from 1,930 sq. ft. to 2,286 sq. ft. Moreover, the percentage of units

under 1,200 sq. ft. nationally decreased from 8% in 1997 to 4% in 2007. The percentage of units greater than 3,000 sq. ft. increased from 15% in 1997 to 26% of new one-family homes completed in 2007. In addition to larger homes, a move towards smaller lot sizes is seen nationally. Between 1994 and 2007 the percentage of lots under 7,000 sq. ft. increased by 13% from 29% of lots to 33% of lots. A corresponding 4% decrease in lots over 11,000 sq. ft. is seen.

- Larger multifamily units. Between 1999 and 2007, the median size of new multiple family dwelling units increased by 15%. The percentage of multifamily units with more than 1,200 sq. ft. increased from 26% to 47% in the western region and from 28% to 50% nationally. The percentage of units with less than 600 sq. ft. stayed at 1% both regionally and nationally.
- More household amenities. Between 1994 and 2007 the percentage of single-family units built with amenities such as central air conditioning, fireplaces, 2 or more car garages, or 2 or more baths all increased. The same trend in increased amenities is seen in multiple family units.

A clear linkage exists between demographic characteristics and housing choice. This is more typically referred to as the linkage between life-cycle and housing choice and is documented in detail in several publications. Analysis of data from the Public Use Microsample (PUMS) in the 2000 Census to describe the relationship between selected demographic characteristics and housing choice. Key relationships identified through this data include:

- Homeownership rates increase as income increases;
- Homeownership rates increase as age increases;
- Choice of single-family detached housing types increases as income increases;
- Renters are much more likely to choose multiple family housing types than single-family; and
- Income is a stronger determinate of tenure and housing type choice for all age categories.

STEP 3: DESCRIBE THE DEMOGRAPHIC CHARACTERISTICS OF THE POPULATION AND, IF POSSIBLE, HOUSING TRENDS THAT RELATE TO DEMAND FOR DIFFERENT TYPES OF HOUSING

State and regional demographic and housing trends are important to a thorough understanding of the dynamics of the Springfield housing market. Springfield exists in a regional economy; trends in the region impact the local

housing market. This section documents state and regional demographic and housing trends relevant to Springfield.

DEMOGRAPHIC TRENDS

This section reviews historical demographic trends in the Lane County and Springfield. Demographic trends provide a broader context for growth in a region; factors such as age, income, migration and other trends show how communities have grown and shape future growth. To provide context, we compare the Springfield with Lane County and Oregon where appropriate. Characteristics such as age and ethnicity are indicators of how population has grown in the past and provide insight into factors that may affect future growth.

State Demographic Trends

Oregon's *2006-2010 Consolidated Plan* includes a detailed housing needs analysis as well as strategies for addressing housing needs statewide.¹⁰ The plan concludes that "Oregon's changing population demographics are having a significant impact on its housing market." It identified the following population and demographic trends that influence housing need statewide:

- 11th fastest growing in the United States
- Facing dramatic housing cost increases
- Facing median and adjusted incomes less than those of 1999
- Growing faster than national rates: 4.0% v. 3.3% and expecting a non-entitlement growth during this consolidated plan of about 6%, 82% of which will come from in-migration.
- Increasingly older
- Increasingly diverse
- Increasingly less affluent¹¹

Richard Bjelland, State Housing Analyst at the Housing and Community Services Department of the State of Oregon, analyzed recent demographic changes taking place in Oregon and discussed their implications in a 2006 presentation "Changing Demographics: Impacts to Oregon and the US." Some of Bjelland's most significant findings are summarized below:

- Oregon's **minority population is growing** quickly. Minorities made up 9.2% of the population in 1990 and 16.5% of the population in 2000, a 52% increase.
- **Hispanics and Latinos make up a large share of that population** and their growth rate is higher than non-Hispanics/ Latinos. The growth rate of

¹⁰ http://www.ohcs.oregon.gov/OHCS/HRS_Consolidated_Plan_5yearplan.shtml

¹¹ State of Oregon Consolidated Plan, 2006-2010, pg. 23.

Oregon’s non-Hispanic/ Latino population between 1990 and 2000 was 15.3% compared to 144.3% for Hispanics and Latinos.

- The **birth rates** of Hispanic/ Latino residents are higher than non-Hispanic/ Latino residents. In 1998, for the US, white non-Hispanic/ Latino residents had a birth rate of 12.3 per 1,000, lower than Asians and Pacific Islanders (16.4 per 1,000), black non-Hispanics (18.2 per 1,000) and Hispanic/ Latino (24.3 per 1,000).
- The share of resident births and deaths in Oregon shows the implications of that birthrate: Hispanic/ Latino residents accounted for 17.4% of births but only 1.4% of deaths in Oregon for 2001. In addition, **Hispanic/ Latino Oregonians are younger than non-Hispanic/ Latino residents**: in 2000, 75.9% of Hispanic/ Latino residents of Oregon are under age 35, compared to 45.7% of non-Hispanic/ Latino residents.
- In Oregon, Hispanic/ Latino **per capita income** in 2005 was only 44% of white per capita income.
- Hispanic/ Latino residents of Oregon become **homeowners** at younger ages than non-Hispanic/ Latino residents. Table 5-6 shows that Hispanic/ Latino Oregonians under 45 have higher homeownership rates than non-Hispanic/ Latino residents.

Table 5-6. Oregon homeownership rates by age of householder, 2000

Age of householder	Non-Hispanic/ Latino	Hispanic/ Latino
25-34	10.2%	25.7%
35-44	20.6%	31.0%
45 and older	68.1%	39.4%

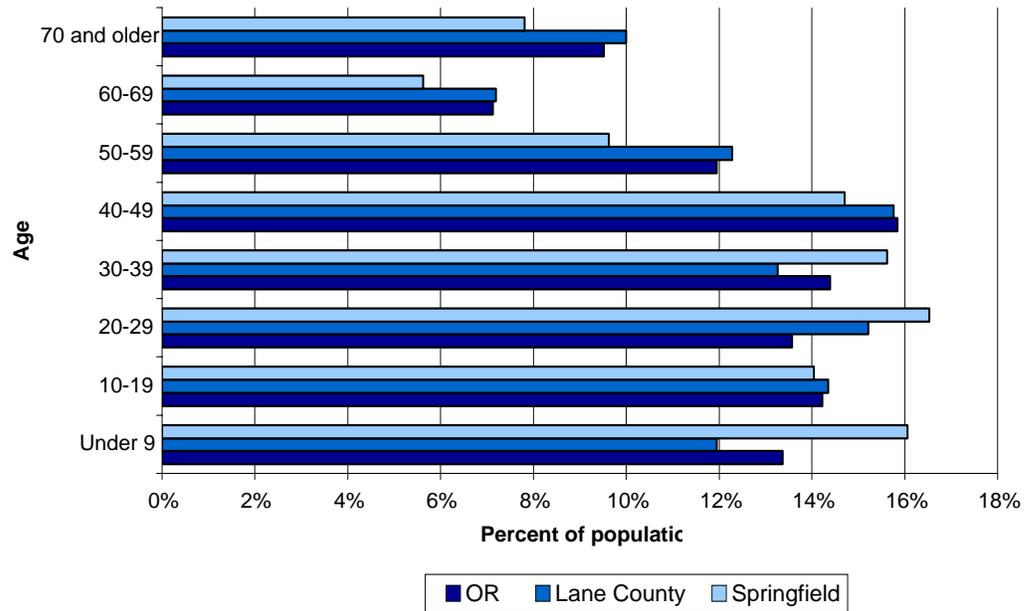
Source: Richard Bjelland, State Housing Analyst at the Housing and Community Services Department of the State of Oregon, "Changing Demographics: Impacts to Oregon and the US" 2006. He obtained his data from US Census 2000. Note: Percentages represent percent of households in each age group that own homes; columns do not sum to 100%.

Regional Demographic Trends

Regional demographic trends largely follow the statewide trends discussed above, but provide additional insight into how demographic trends might affect housing in Springfield.

Figure 5-1 shows the populations of Oregon, Lane County, and Springfield by age for 2000. Springfield has a greater proportion of its population less than 40 years old than Oregon and Lane County, especially residents aged 20-29 and under 9 years. Springfield has comparatively fewer residents over 40 than the state.

Figure 5-1. Population distribution by age, Oregon, Lane County, and Springfield, 2000



Source: U.S. Census, 2000

Some outlying communities in the region have populations similar in age distribution to Springfield. Outlying communities with the largest percent of households with children from the 2000 census were: Creswell (41%), Veneta (40%), Junction City (40%), and Coburg (38%). The communities with the smallest percent of households with children were Eugene (27%), Oakridge (28%), and Cottage Grove (35%).

In the communities with larger shares of children, attendance rates of children in elementary school are *not* declining, unlike districts such as Oakridge, McKenzie, and Pleasant Hill. School districts that have experienced increases in the Kindergarten-2nd grade populations are Fern Ridge District 28J (increased since 2003), Lowell 71 (since 2004), Creswell 40 (since 1999 with a dip in 2004), and Junction City 69 (from 2002 to 2005). However, this data is based on small districts with small class sizes, so it is not entirely conclusive.

Outlying communities with the largest percent of persons 65 and over from the 2000 Census were: Oakridge (21%) and Cottage Grove (15%). The community with the smallest percent of persons 65 and older was Veneta (9%). These data indicate that some outlying communities' trend toward older populations, others trend towards younger populations with families with younger children.

Table 5-7 shows population by age for Lane County for 2000 and 2006. The data show that Lane County grew by 13,479 people between 2000 and 2006, which is a 4% increase. The age breakdown shows that the County experienced an increase in population for every age group over age 25. The fastest growing age

groups were aged 45 to 64 years and 65 and over. The group that experienced the fastest negative growth was ages 18-24.

Table 5-7. Population by age, Lane County, 2000 and 2006

Age Group	2000		2006		Change		
	Number	Percent	Number	Percent	Number	Percent	Share
Under 5	18,584	6%	18,056	5%	-528	-3%	0%
5-17	55,230	17%	52,730	16%	-2,500	-5%	-1%
18-24	38,662	12%	34,666	10%	-3,996	-10%	-2%
25-44	88,849	28%	95,171	28%	6,322	7%	1%
45-64	78,680	24%	88,926	26%	10,246	13%	2%
65 and over	42,954	13%	46,889	14%	3,935	9%	1%
Total	322,959	100%	336,438	100%	13,479	4%	0%

Source: U.S. Census, 2000 and Claritas, 2006

Table 5-8 shows Claritas Inc. population forecast by age for Lane County from 2006 to 2011. The data show that, with the exception of the 5-17 and 18-24 year old groups, each age group will experience growth and that groups aged 65 years and older and 45 to 64 years will grow at the fastest rates. The forecast shows that the 5 to 17 and 18 to 24 year age groups will decline.

Table 5-8. Claritas Inc. population projection by age, Lane County, 2006 and 2011

Age Group	2006		2011		Change		
	Number	Percent	Number	Percent	Number	Percent	Share
Under 5	18,056	5%	18,615	5%	559	3%	0%
5-17	52,730	16%	51,098	15%	-1,632	-3%	-1%
18-24	34,666	10%	31,827	9%	-2,839	-8%	-1%
25-44	95,171	28%	99,401	29%	4,230	4%	0%
45-64	88,926	26%	94,999	27%	6,073	7%	1%
65 and over	46,889	14%	52,765	15%	5,876	13%	1%
Total	336,438	100%	348,705	100%	12,267	4%	0%

Source: Claritas, 2006

The data in Tables 5-7 and 5-8 suggest that Lane County is attracting older people and experiencing comparatively slow growth (or negative growth) in people under 44 years old. The age distribution in Figure 3 suggests a higher percentage of young adults (20-29) and children live in Springfield, indicating that Springfield's population and age trends are somewhat different from the projections for the county as a whole.

Between 1990 and 1999, almost 70% of Oregon's total population growth was from net migration (in-migration minus out-migration), with the remaining 30% from natural increase (births minus deaths).¹² Migrants to Oregon tend to have many characteristics in common with existing residents, with some differences—recent in-migrants to Oregon are, on average, younger and more educated, and are

¹² Portland State University, Population Research Center, 2000. *1990-2000 Components of Population Change*

more likely to hold professional or managerial jobs, compared to Oregon's existing population. The race and ethnicity of in-migrants generally mirrors Oregon's established pattern, with one exception: Hispanics make up more than 7% of in-migrants but only 3% of the state's population. The number-one reason cited by in-migrants for coming to Oregon was family or friends, followed by quality of life and employment.¹³

Migration is a significant component of population growth in Lane County. Seventy-three percent of population growth in Lane County between 1990 and 2000 was from in-migration. This figure remained at 73% for the 2000-2005 period.¹⁴

The U.S. Census collects information about migration patterns. Specifically, it asks households where their residence was in 1995 (5 years prior to the Census count). Table 5-9 shows place of residence in 1995 for Oregon, Lane County, and Springfield. The data show that Springfield residents are more mobile than Lane County and Oregon residents. Less than half of residents in Oregon, Lane County or Springfield lived in the same residence in 1995 as in 2000. Twenty-four percent of Oregonians, 20% of residents of Lane County and 19% of residents of Springfield lived in a different county in 1995. Eleven percent of residents of Springfield and 13% of residents of Lane County lived in a different state in 1995, compared with 12% of Oregonians.

Table 5-9. Place of residence in 1995, Oregon, Lane County, and Springfield, persons 5 years and over

	Oregon		Lane County		Springfield	
	Persons	Percent	Persons	Percent	Persons	Percent
Population 5 years and older	3,199,323	100%	304,463	100%	48,403	100%
Same house in 1995	1,496,938	47%	142,447	47%	20,023	41%
Different house in 1995	1,702,385	53%	162,016	53%	28,380	59%
Same county	863,070	27%	94,788	31%	18,610	38%
Different county	755,954	24%	61,639	20%	9,085	19%
Same state	356,626	11%	23,526	8%	3,599	7%
Different state	399,328	12%	38,113	13%	5,486	11%

Source: U.S. Census, 2000

Table 5-10 shows the number of persons of Hispanic or Latino origin for Oregon, Lane County, and Springfield for 1990 and 2000. Springfield has a lower proportion of Hispanic/Latino residents as Oregon and a higher proportion than Lane County. In 2000, Springfield's population was 6.6 % Hispanic/Latino, compared with 4.5% of residents in Lane County.

The Hispanic/Latino population grew faster in Springfield than in Lane County from 1990 to 2000. Springfield's Hispanic/Latino population grew by 168% between 1990 and 2000. During the same period, Lane County's

¹³ State of Oregon, Employment Department. 1999. *1999 Oregon In-migration Study*.

¹⁴ Portland State University, Population Research Center, 2005. *2005 Oregon Population Report and contents*

Hispanic/Latino population grew by 111% and Oregon' Hispanic/Latino population grew by 143%.

Table 5-10. Persons of Hispanic or Latino origin, Oregon, Lane County, and Springfield, 1990 and 2000

	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	273,938	14,488	3,475
Percent Hispanic or Latino	8.0%	4.5%	6.6%
Change 1990-2000			
Hispanic or Latino	161,231	7,636	2,176
Percent Hispanic or Latino	143%	111%	168%

Source: U.S. Census, 2000

Table 5-11 shows the number of Hispanic and Latino residents and the percent of Hispanic/ Latino residents as a percent of the total population between 1990 and 2000. The number of Hispanic and Latino residents is growing in all outlying areas, especially in Cottage Grove and Junction City, according to the US Census 1990 and 2000.

Table 5-11. Persons of Hispanic or Latino origin, outlying communities, 1990 and 2000

	1990		2000		Change	
	Number	Percent of total	Number	Percent of total	Number	Percent
Coburg	18	2%	29	3%	11	61%
Cottage Grove	162	2%	417	5%	255	157%
Creswell	109	4%	251	7%	142	130%
Eugene	3,051	3%	6,843	5%	3,792	124%
Junction City	73	2%	391	8%	318	436%
Oakridge	141	5%	158	5%	17	12%
Springfield	1,299	3%	3,651	7%	2,352	181%
Veneta	50	2%	115	4%	65	130%

Source: US Census 1990 and 2000

Table 5-12 shows household size by ethnicity for Oregon, Lane County, and Springfield. The number of people per household is similar for Oregon, Lane County, and Springfield for non-Hispanic households and Hispanic households. In each area, non-Hispanic households have a little less than 2.5 people per household. Households for Hispanic residents are larger, with between 3.2 and 3.9 people per household. The data show that Hispanic residents have between 0.7 and 1.4 additional people per household than non-Hispanic residents.

Table 5-12. Household size by ethnicity for Oregon, Lane County, and Springfield, 2000

	Oregon	Lane County	Springfield
Non-Hispanic/ Latino	2.42	2.39	2.49
Hispanic/ Latino	3.87	3.19	3.50

Source: U.S. Census, 2000

In conclusion: (1) Springfield residents are younger than residents of Lane County, even as county-wide age levels are trending older; (2) Springfield has a growing population of Hispanic/ Latino residents, whose higher average household size is larger than non-Hispanic/ Latino residents.

Household type and relationship also has implications for housing needs. For example, one-person households need smaller dwellings than family households with children. Table 5-13 shows household type and relationship in Springfield for 1990, 2000, and the 2005-07 period. The data show an increase in all household types during this period. With respect to share of household types, one-person households increased from 25% to 30% of Springfield households. A corresponding decrease in share occurred in two or more person households, with most of the decrease in share coming from married couple family households.

Table 5-13. Household type and relationship, Springfield, 1990, 2000 and 2005-07

Household Type	1990		2000		2005-07 ACS		Change 1990-2005/07		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Share
1-person household	4,346	25%	5,206	25%	6,646	30%	2,300	53%	5%
2 or more person household	13,101	75%	15,308	75%	15,707	70%	2,606	20%	-5%
Family households:	11,593	66%	13,479	66%	13,915	62%	2,322	20%	-4%
Married-couple family	8,572	49%	9,373	46%	9,832	44%	1,260	15%	-5%
Other family:	3,021	17%	4,106	20%	4,083	18%	1,062	35%	1%
Male householder, no wife present	658	4%	1,164	6%	1,017	5%	359	55%	1%
Female householder, no husband present	2,363	14%	2,942	14%	3,066	14%	703	30%	0%
Nonfamily households:	1,508	9%	1,829	9%	1,792	8%	284	19%	-1%
Total	17,447	100%	20,514	100%	22,353	100%	4,906	28%	

Source: U.S. Census, 1990, 2000. American Community Survey (2005-07)

Note: 2005-07 American Community Survey is based on pooled data from household surveys conducted in 2005, 2006 and 2007.

HOUSING TRENDS

Table 5-14 shows the total number of permitted dwellings (single-family and multi-family) by year for selected Lane County cities between 2000 and 2007. Table 5-14 shows that Eugene had the highest number of permitted units during the period, with Springfield and Creswell having the second- and third-highest. Junction City and Oakridge had the lowest number of permitted units. Most cities showed the highest numbers of permitted units over the time period either in 2004 or in 2005, although Springfield's highest total was in 2003.

Table 5-14. Total permitted dwellings (all types) by year, selected Lane County cities, 2000-2007

City	2000	2001	2002	2003	2004	2005	2006	2007	Total
Eugene	744	760	828	611	876	1,327	731	555	6432
Springfield	274	272	290	324	164	231	211	265	2031
Creswell	26	67	82	93	153	62	56	84	623
Cottage Grove	29	17	28	68	44	86	53	32	357
Junction City	15	12	12	13	10	13	8	78	161
Veneta	11	24	43	96	112	117	128	62	593
Oakridge	1	4	1	0	8	4	9	13	40
Total	1,100	1,156	1,284	1,205	1,367	1,840	1,196	1,089	10,237

Source: U.S. Census, Building permits data site, <http://censtats.census.gov/bldg/bldgprmt.shtml>
 Note: These numbers are different than those provided by the City of Springfield that were used for the historical density analysis. We believe the data provided by the City are more accurate.

Table 5-15 shows the permits issued for new single-family dwellings in selected Lane County cities between 1996 and 2007. Table 5-15 shows that Springfield's number of permits issued for single-family dwellings remained consistently between 220 and 245 between 1998 and 2003, and has recently fluctuated at lower levels.

Table 5-15. Permits issued for new single-family dwellings, selected Lane County cities, 1996-2007

City	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Eugene	845	721	665	656	619	633	673	559	583	756	528	297
Springfield	N/A	192	221	239	222	225	243	232	128	98	134	170
Coburg	12	9	11	10	3	1	7	6	2	6	4	1
Creswell	30	43	45	32	26	67	80	91	133	60	56	84
Cottage Grove	37	19	54	45	29	17	15	19	34	70	39	22
Junction City	53	19	13	28	15	12	34	13	10	13	8	78
Veneta	13	10	11	19	11	24	43	96	112	117	128	62
Oakridge	5	2	1	12	1	2	1	0	8	4	9	11
TOTAL	995	1,015	1,021	1,041	926	981	1,096	1,016	1,010	1,124	906	725

Source: www.city-data.com.

Table 5-16 shows the total permitted single-family and multifamily dwellings (aggregated) by year between 2000 and 2007 for selected Lane County cities. Table 5-16 shows that Eugene consistently issues permits for the most multifamily units among the cities shown, whereas Oakridge, Veneta, Junction City and Creswell only issue permits for the occasional multifamily unit. Springfield typically issues permits for around 50 multifamily units each year, although it issued permits for 133 units in 2005.

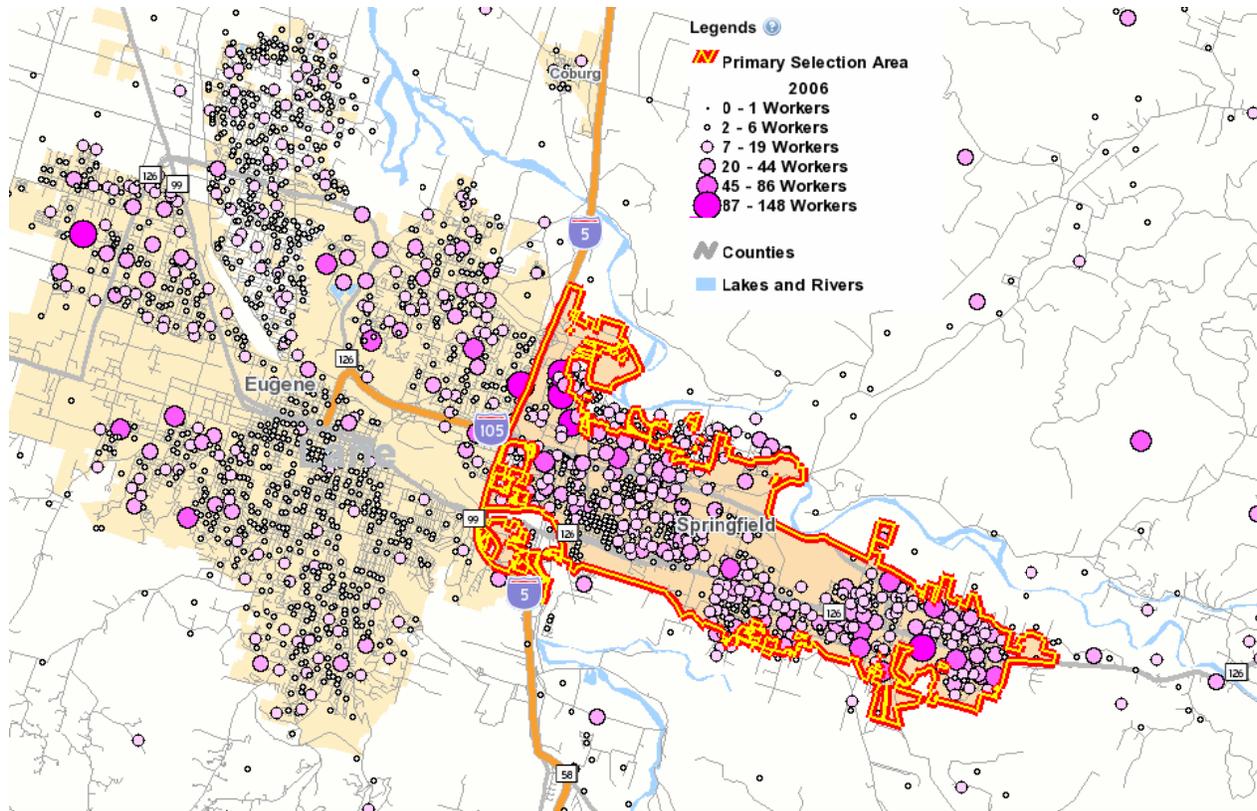
Table 5-16. Total permitted single-family and multifamily dwellings (aggregated) by year, selected Lane County cities, 2000-2007

City	2000	2001	2002	2003	2004	2005	2006	2007
Eugene								
Single family	619	633	673	559	583	756	528	297
Multifamily	125	127	155	52	293	571	203	258
Springfield								
Single family	222	225	243	232	128	98	134	170
Multifamily	52	47	47	92	36	133	77	95
Coburg								
Single family	N/A							
Multifamily	N/A							
Creswell								
Single family	26	67	80	91	133	60	56	84
Multifamily	0	0	2	2	20	2	0	0
Cottage Grove								
Single family	29	17	15	19	34	70	39	22
Multifamily	0	0	13	49	10	16	14	10
Junction City								
Single family	15	12	12	13	10	13	8	78
Multifamily	0	0	0	0	0	0	0	0
Veneta								
Single family	11	24	43	96	112	117	128	62
Multifamily	0	0	0	0	0	0	0	0
Oakridge								
Single family	1	2	1	0	8	4	9	11
Multifamily	0	2	0	0	0	0	0	2

Source: U.S. Census, Building permits data site, <http://censtats.census.gov/bldg/bldgprmt.shtml>

Figure 5-2 and Table 5-17 show where residents of Springfield worked in 2006. Figure 5-2 and Table 5-17 show that more than 80% of residents of Springfield worked in Lane County, with 26% of Springfield residents working in Eugene and 28% working in Springfield. About 27% of Springfield residents worked in unincorporated Lane County.

Figure 5-2. Places where residents in Springfield were employed, 2006



Source: US Census Bureau, LED Origin-Destination Data Base (2nd Quarter 2003)

Table 5-17. Places where residents of Springfield were employed, 2003

Location	Number	Percent
Lane County	18,706	81%
Springfield	6,512	28%
Eugene	6,034	26%
Other Lane County	6,160	27%
Linn County	641	3%
Washington County	619	3%
Multnomah County	488	2%
Marion County	468	2%
Douglas County	463	2%
All Other Locations	1,837	8%
Total	23,222	100%

Source: US Census Bureau, LED Origin-Destination Data Base (2nd Quarter 2003)

Note: Percent column adds to 101% due to rounding errors

The implication of the data presented in this section is that majority of Springfield’s workforce lives in Lane County, but many do not reside in the City of Springfield. Residents of Springfield are more likely to work in Eugene than in

Springfield. This analysis shows that businesses in Springfield have access to the labor force in parts of Lane County.

SUMMARY OF KEY DEMOGRAPHIC AND HOUSING TRENDS

Springfield has a larger share of young people than Lane County as a whole

- Springfield has a higher percentage of people under age 30 than Lane County.
- Between 2000 and 2006, Lane County experienced changes in the age structure of its residents. Age groups under age 25 experienced negative growth; the fastest growing age groups were people aged 45 to 64 and 65 and over. This indicates that retirees or people nearing retirement are moving to Lane County; Springfield's share of young people shows that its age structure is experiencing different age trends.

Migration is an important component of recent growth in Lane County and will continue to be a key factor in future population growth.

- In-migration accounted for 73% of population growth in Lane County between 1990 and 2000 and between 2000 and 2005.
- Springfield's population was more mobile than the County's as a whole. Only 41% of the residents of Springfield lived in the same house in 2000 as they did in 1995 compared to 47% for all of Lane County. A greater share of the population in Springfield moved within Lane County during that time period (38%) than for Lane County as a whole (31%).

Single-person households are increasing faster than other household types.

- Between 1990 and 2005/07 one-person households increased from 25% to 30% of Springfield households. A corresponding decrease in share occurred in two or more person households, with most of the decrease in share coming from married couple family households

Springfield is becoming more ethnically diverse.

- Springfield's Hispanic/Latino population grew by 168% (2,352 persons) between 1990 and 2000, compared with 111% growth in Lane County's Hispanic/Latino population during the same period.
- Other smaller communities near Springfield experienced significant growth in Hispanic/ Latino populations. The communities experiencing the largest increase in the Hispanic/ Latino populations were Eugene (3,792), Junction City (318), Cottage Grove (255), and Creswell (142).

Hispanic/Latino residents have larger, younger households.

- The birth rates for Hispanic/ Latino residents (1998 data) are 24.3 per 1,000 compared to 12.3 per 1,000 for non-Hispanic/ Latino residents.
- Hispanic/ Latino residents accounted for 17.4% of births and only 1.4% of deaths in Oregon in 2001.
- In 2000, 75.9% of Hispanic/ Latino Oregonians are under 35 compared to 45.7% of non-Hispanic/ Latino residents.
- The average size of a Hispanic/Latino household in 2000 in Lane County was 3.2 people, compared with 2.4 people in non-Hispanic households. Household sizes in Springfield were larger: 2.5 for non-Hispanic households and 3.5 for Hispanic/ Latino households.

Hispanic/Latino residents typically have lower incomes but become homeowners at younger ages than non-Hispanic/ Latino residents.

- Per capita income in Oregon in 2005 for Hispanic and Latino residents was only 44% of white per capita income/
- 56.7% of Hispanic/ Latino residents of Oregon under age 45 are homeowners, compared to 30.8% of non-Hispanic/ Latino residents

Springfield is part of a complex, interconnected regional housing market.

- Among selected Lane County cities, Springfield has the third-highest permit average permit valuation for 2005 (behind Coburg and Eugene) and average construction costs for 2005 were highest in Springfield.
- However, median sales prices for Springfield were lower between 1999 and 2007 than median prices in Lane County, and Springfield had the lowest median sales prices in 2007 among all of the selected cities.
- Commuting is typical throughout the region: Springfield's workforce lives in Lane County, but many do not reside in the City of Springfield.

Since 2000, housing starts in the selected cities within Lane County have been dominated by single-family types.

- The data show that new housing development in the 2000-2007 period was predominately single-family housing types. In fact, only 32% of all units for which building permits were issued in the 2000-2007 were for multifamily housing types.
- Springfield's number of permits issued for single-family dwellings remained consistently above 220 between 1998 and 2003, and dropped to below 135 per year between 2004 and 2007.

Housing types are trending towards larger units on smaller lots.

- Between 1997 and 2007 the median size of new single-family dwellings increased 15%, from 1,975 sq. ft. to 2,277 sq. ft. nationally and 18% in the western region from 1,930 sq. ft. to 2,286 sq. ft. Moreover, the percentage of units under 1,200 sq. ft. nationally decreased from 8% in 1997 to 4% in 2007. The percentage of units greater than 3,000 sq. ft. increased from 15% in 1997 to 26% of new one-family homes completed in 2007.
- In addition to larger homes, a move towards smaller lot sizes is seen nationally. Between 1994 and 2007 the percentage of lots under 7,000 sq. ft. increased by 13% from 29% of lots to 33% of lots. A corresponding 4% decrease in lots over 11,000 sq. ft. is seen.
- Even when controlling for income and savings, level of education, age, marital status, family size, the housing market in which the unit was located [and other factors], compared to whites both black families and Hispanic families had significantly lower likelihood of homeownership, lower house values (for owners) and lower rents (for renters).¹⁵
- Minority households have substantially lower rents than white households.¹⁶
- Hispanic households, particularly low-income families, have higher levels of mortgage debt than do white households, although their house values are lower than whites. This suggests a substantial difference in borrowing or loan terms for Hispanics.¹⁷

IMPLICATIONS OF DEMOGRAPHIC AND HOUSING TRENDS FOR HOUSING NEED

The purpose of the analysis thus far has been to give some background on the kinds of factors that influence housing choice, and in doing, to convey why the number and interrelationships among those factors ensure that generalizations about housing choice are difficult and prone to inaccuracies.

There is no question that age affects housing type and tenure. Mobility is substantially higher for people aged 20 to 34. People in that age group will also have, on average, less income than people who are older. They are less likely to have children. All of these factors mean that younger households are much more likely to be renters; renters are more likely to be in multi-family housing.

¹⁵ Boehm, Thomas P. and Alan M. Schlottmann, "Housing Tenure, Expenditure, and Satisfaction Across Hispanic, African American, and White Households: Evidence from the American Housing Survey." US Department of Housing and Urban Development, February 2006.

¹⁶ Boehm, Thomas P. and Alan M. Schlottmann, "Housing Tenure, Expenditure, and Satisfaction Across Hispanic, African American, and White Households: Evidence from the American Housing Survey." US Department of Housing and Urban Development, February 2006.

¹⁷ Boehm, Thomas P. and Alan M. Schlottmann, "Housing Tenure, Expenditure, and Satisfaction Across Hispanic, African American, and White Households: Evidence from the American Housing Survey." US Department of Housing and Urban Development, February 2006.

The data illustrate what more detailed research has shown and what most people understand intuitively: life cycle and housing choice interact in ways that are predictable in the aggregate; age of the household head is correlated with household size and income; household size and age of household head affect housing preferences; income affects the ability of a household to afford a preferred housing type. The connection between socioeconomic and demographic factors, on the one hand, and housing choice, on the other, is often described informally by giving names to households with certain combinations of characteristics: the "traditional family," the "never marrieds," the "dinks" (dual-income, no kids), the "empty nesters."¹⁸ Thus, simply looking at the long wave of demographic trends can provide good information for estimating future housing demand.

Thus, one is ultimately left with the need to make a qualitative assessment of the future housing market. Following is a discussion of how demographic and housing trends are likely to affect housing in Springfield for the next 20-years:

- *On average, future housing will look a lot like past housing.* That is the assumption that underlies any trend forecast, and one that allows some quantification of the composition of demand for new housing. As a first approximation, the next five years, and maybe the first 10 years, of residential growth will look a lot like the last five years.
- *If the future differs from the past, it is likely to move in the direction (on average) of smaller units and more diverse housing types.* Most of the evidence suggests that the bulk of the change will be in the direction of smaller average house and lot sizes for single-family housing. In summary, smaller households, an aging population, increasing housing costs, and other variables are factors that support the conclusion of smaller and less expensive units and a broader array of housing choices.
- *No amount of analysis is likely to make the long-run future any more certain: the purpose of the housing forecasting in this study is to get an approximate idea about the long run so policy choices can be made today.* It is axiomatic among economic forecasters that any economic forecast more than three (or at most five) years out is highly speculative. At one year one is protected from being disastrously wrong by the shear inertia of the economic machine. But a variety of factors or events could cause growth forecasts to be substantially different.

¹⁸ See *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* (June 1997).

STEP 4: DETERMINE THE TYPES OF HOUSING THAT ARE LIKELY TO BE AFFORDABLE TO THE PROJECTED POPULATION BASED ON HOUSEHOLD INCOME

Step four of the housing needs assessment results in an estimate of need for housing by income and housing type. This requires some estimate of the income distribution of future households in the community. ECO developed these estimates based on estimated incomes of households that live in Springfield.

INCOME AND AFFORDABILITY OF HOUSING

This section summarizes regional and local income trends and housing cost trends. Income is one of the key determinants in housing choice and households' ability to afford housing. A review of historical income and housing price trends provides insights into the local and regional housing markets.

Table 5-18 shows a set of inflation adjusted income indicators for Eugene, Springfield and Lane County. The results paint a mixed picture, but generally suggest that income (by most measures) decreased during the 1980s, and increased during the 1990s. Overall, median household and median family incomes remained relatively flat during the 20-year period between 1979 and 1999.

The data show that the percentage of persons below the poverty level increased in Springfield and Lane County, and decreased slightly in Eugene between 1979 and 1999.

Table 5-18. Inflation adjusted income indicators (in 1999 dollars), Eugene, Springfield and Lane County, 1979, 1989, and 1999

City	Year		
	1979	1989	1999
Eugene			
Median HH income	\$34,493	\$34,248	\$35,850
Median Family income	\$46,960	\$46,107	\$48,527
Per Capita Income	\$18,029	\$18,746	\$21,315
% Persons Below Poverty Level	14.7%	17.0%	14.4%
Springfield			
Median HH income	\$34,248	\$29,608	\$33,031
Median Family income	\$38,981	\$34,332	\$38,399
Per Capita Income	\$14,676	\$13,800	\$15,616
% Persons Below Poverty Level	15.2%	16.5%	17.1%
Lane County			
Median HH income	\$37,521	\$34,112	\$36,942
Median Family income	\$44,920	\$41,530	\$45,111
Per Capita Income	\$16,837	\$16,970	\$19,681
% Persons Below Poverty Level	12.8%	14.5%	17.9%

Source: U.S. Census.

Notes: All dollar amounts in 1999 dollars. 1979 income converted to 1999 dollars using 3.06 inflation factor. 1989 income converted to 1999 dollars using 1.35 inflation factor.

A typical standard used to determine housing affordability is that a household should pay no more than 30% of its total monthly household income for housing, including utilities. According to the U.S. Census, nearly 19,000 households in the region—about one-third—paid more than 30% of their income for housing in 2000.

One way of exploring the issue of financial need is to review wage rates and housing affordability. Table 5-19 shows an analysis of affordable housing wage and rent gap for households in Springfield at different percentages of median family income (MFI). The data are for a typical family of four. The results indicate that a household must earn about \$14.00 an hour to afford a two-bedroom unit according to HUD's market rate rent estimate.

Table 5-19. Analysis of affordable housing wage and rent gap by HUD income categories, Eugene-Springfield, 2007

Income Level	Number of HH	Percent	Affordable Monthly Housing Cost	Crude Estimate of Affordable Purchase Owner-Occupied Unit	Est. Number of Owner Units	Est. Number of Renter Units	Surplus (Deficit)	Notes
Less than \$10,000	2,240	12%	\$0 to \$250	\$0 to \$25,000	33	706	(1,501)	
\$10,000 to \$14,999	1,574	8%	\$250 to \$375	\$25,000 to \$37,000	14	825	(735)	
\$15,000 to \$24,999	3,254	17%	\$375 to \$625	\$37,500 to \$62,500	172	6,523	3,441	2007 HUD FMR studio: \$478; 1 bdrm: \$581; 2 bdrm: \$654
\$25,000 to \$34,999	2,870	15%	\$625 to \$875	\$62,500 to \$87,500	1,019	959	(892)	HUD FMR 2 bdrm: \$735
\$35,000 to \$49,999	3,625	19%	\$875 to \$1,250	\$87,500 to \$125,000	4,791	152	1,318	HUD FMR 3 bdrm: \$1028
\$50,000 to \$74,999	3,476	18%	\$1,250 to \$1,875	\$125,000 to \$187,500	2,938	42	(496)	
Lane County MFI: \$52,200			\$1,305	\$130,500				
\$75,000 to \$99,999	1,066	6%	\$1,875 to \$2,450	\$187,500 to \$245,000	495	9	(563)	
\$100,000 to \$149,999	573	3%	\$2,450 to \$3,750	\$245,000 to \$375,000	133	0	(440)	
\$150,000 or more	188	1%	More than \$3,750	More than \$375,000	56	0	(132)	
Total	18,865	100%			9,650	9,215	0	

Source: HUD, Oregon office; analysis by ECONorthwest
MFI: Median family income

The total amount a household spends on housing is referred to as cost burden. Total housing expenses are generally defined to include payments and interest or rent, utilities, and insurance. HUD guidelines indicate that households paying more than 30% of their income on housing experience “cost burden” and households paying more than 50% of their income on housing experience “severe cost burden.” Using cost burden as an indicator is consistent with the Goal 10 requirement of providing housing that is affordable to all households in a community.

Table 5-20 shows housing costs as a percent of income by tenure for Springfield households in 2000. The data show that about 26% of Springfield households experienced cost burden in 2000. The rate was much higher for homeowners (31%) than for renters (18%). This finding is unusual for Oregon cities—it is much more common for renters to experience higher rates of cost burden.

Table 5-20. Housing cost as a percentage of household income, Springfield, 2000

Percent of Income	Owners		Renters		Total	
	Number	Percent	Number	Percent	Number	Percent
Least than 20%	4,125	12%	11,965	64%	16,090	30%
20% - 24%	8,852	26%	1,238	7%	10,090	19%
25% - 29%	6,376	19%	1,018	5%	7,394	14%
30% - 34%	4,437	13%	989	5%	5,426	10%
35% - 49%	5,551	16%	1,338	7%	6,889	13%
50% or more	4,988	15%	2,036	11%	7,024	13%
Total	34,329	100%	18,584	100%	52,913	100%
Cost Burden	10,539	31%	3,374	18%	13,913	26%
Severe Cost Burden	4,988	15%	2,036	11%	7,024	13%

Source: 2000 Census

Table 5-21 shows a rough estimate of affordable housing cost and units by income levels for Springfield in 2000. Several points should be kept in mind when interpreting this data:

- Because all of the affordability guidelines are based on median family income, they provide a rough estimate of financial need and may mask other barriers to affordable housing such as move-in costs, competition for housing from higher income households, and availability of suitable units. They also ignore other important factors such as accumulated assets, purchasing housing as an investment, and the effect of down payments and interest rates on housing affordability.
- Households compete for housing in the marketplace. In other words, affordable housing units are not necessarily *available* to low income households. For example, if an area has a total of 50 dwelling units that are affordable to households earning 30% of median family income, 50% of those units may already be occupied by households that earn more than 30% of median family income.

The data in Table 5-21 indicate that in 2000:

- About 20% of Springfield households could not afford a studio apartment according to HUD's estimate of \$478 as fair market rent;
- Approximately 45% of Springfield households could not afford a two-bedroom apartment at HUD's fair market rent level of \$735;
- A household earning median family income (\$52,200) could afford a home valued up to about \$130,500.

Table 5-21. Rough estimate of housing affordability, Springfield, 2000

Income Level	Number of HH	Percent	Affordable Monthly Housing Cost	Crude Estimate of Affordable Purchase Owner-Occupied Unit	Est. Number of Owner Units	Est. Number of Renter Units	Surplus (Deficit)	Notes
Less than \$10,000	2,240	11.9%	\$0 to \$250	\$0 to \$25,000	33	706	-1,501	
\$10,000 to \$14,999	1,574	8.3%	\$250 to \$375	\$25,000 to \$37,000	14	825	-735	
\$15,000 to \$24,999	3,254	17.3%	\$375 to \$625	\$37,500 to \$62,500	172	6,523	3,441	2007 HUD FMR studio: \$478; 1 bdrm: \$581; 2 bdrm: \$654
\$25,000 to \$34,999	2,870	15.2%	\$625 to \$875	\$62,500 to \$87,500	1,019	959	-893	HUD FMR 2 bdrm: \$735
\$35,000 to \$49,999	3,625	19.2%	\$875 to \$1,250	\$87,500 to \$125,000	4,791	152	1,318	HUD FMR 3 bdrm: \$1028
\$50,000 to \$74,999	3,476	18.4%	\$1,250 to \$1,875	\$125,000 to \$187,500	2,939	42	-495	
Lane County MFI: \$52,200			\$1,305	\$130,500				
\$75,000 to \$99,999	1,066	5.7%	\$1,875 to \$2,450	\$187,500 to \$245,000	495	9	-563	
\$100,000 to \$149,999	573	3.0%	\$2,450 to \$3,750	\$245,000 to \$375,000	133	0	-440	
\$150,000 or more	188	1.0%	More than \$3,750	More than \$375,000	56	0	-132	
Total	18,866	100.0%			9,651	9,215	0	

Sources: 2000 Census, HUD Section 8 Income Limits, HUD Fair Market Rent. Based on Oregon Housing & Community Services. Housing Strategies Workbook: *Your Guide to Local Affordable Housing Initiatives*, 1993.

Notes: FMR-Fair market rent

The conclusion based on the data presented in Table 5-21 is that in 2000 Springfield had a significant deficit of more than 2,200 affordable housing units for households that earn less than \$15,000 annually. Housing prices have increased significantly in the past five years; the affordability gap for lower income households has probably increased considerably. The next section examines changes in housing cost since 2000.

Changes in housing cost

According to the Office of Federal Housing Enterprise Oversight, the average sales price of a single-family home in the Eugene-Springfield MSA increased 229% between 2000 and 2006. A key concern expressed by the City was that the housing needs analysis and runs of the HCS housing needs model reflect recent trends in the regional housing market. To quantify these trends, ECO analyzed data from two sources: (1) sales data from the Lane County Assessor; and (2) rental data from Duncan & Brown, an Eugene-based real estate analysis firm that conducts rent surveys for the Metropolitan Region.

The sales database provided to ECO by the City of Springfield included 34,680 property sales.¹⁹ For purposes of comparison, the database included Creswell, Cottage Grove, Eugene, Junction City, Springfield, and Veneta.

Table 5-22 shows sales prices for single-family dwellings for Lane County and Springfield between 1999 and 2006. Table 5-22 shows that Springfield median sales prices have been lower than median sales prices in Lane County over the entire time period. Median sales prices also increased at a slower rate in Springfield; percent change in median sales prices between 1999 and 2006 for Lane County was 73%; in Springfield it was 64%. Sales prices for single-family dwellings peaked in 2007 and had declined to about \$175,000 by the first quarter of 2009.

¹⁹ The sales data was obtained through queries of the Regional Land Information Database (www.rlid.org).

Table 5-22. Sales price for single-family dwellings, Lane County and Springfield, 1999-2006

Year	Lane County			Springfield		
	# of Sales	Average Sales Price	Median Sales Price	# of Sales	Average Sales Price	Median Sales Price
1999	3,940	140,564	127,900	843	118,520	112,745
2000	3,171	144,142	129,900	687	119,152	112,750
2001	3,808	149,252	133,000	881	122,700	118,450
2002	4,291	156,603	138,165	886	129,432	121,900
2003	4,761	168,780	149,000	1,042	135,719	128,000
2004	5,092	183,497	162,500	1,112	149,082	137,900
2005	5,326	222,835	194,000	1,157	177,260	165,000
2006	4,291	249,438	221,000	973	201,000	185,000
Change 1999-2006						
Number	351	108,874	93,100	130	82,480	72,255
Percent	9%	77%	73%	15%	70%	64%

Source: RLID, Analysis by ECONorthwest

Table 5-23 shows the average and median sales prices for single-family dwellings in selected Lane County cities between 1999 and 2006. Table 5-23 shows that median sales prices increased throughout the county during this period. In 2006, the highest median sales prices were in Eugene, the rest of the county, and Creswell. Lowest median sales prices in 2006 were in Springfield and Junction City. Prices increased the most in Creswell (87%) and Eugene (80%). Prices increased the least in Springfield (64%) and Junction City (67%).

Table 5-23. Average and median sales price, single-family dwellings, Lane County cities, 1999-2006

City	Year								Increase (1999-2006)	
	1999	2000	2001	2002	2003	2004	2005	2006	Dollars	Percent
Median Sales Price										
Cottage Grove	112,000	103,500	109,750	110,000	120,000	128,000	157,000	195,000	83,000	74%
Creswell	112,500	118,000	109,000	121,750	125,000	142,500	180,750	210,500	98,000	87%
Eugene	136,900	140,000	143,500	149,900	163,000	179,900	215,000	247,000	110,100	80%
Junction City	113,250	112,500	115,150	119,638	120,750	138,000	162,000	189,000	75,750	67%
Springfield	112,745	112,750	118,450	121,900	128,000	137,900	165,000	185,000	72,255	64%
Veneta	115,250	110,000	112,000	119,950	126,500	139,500	173,635	200,000	84,750	74%
Rest of County	111,000	108,750	110,000	121,250	127,750	160,000	212,500	216,000	105,000	95%
Average Sales Price										
Cottage Grove	118,112	106,767	113,150	116,152	122,298	134,854	168,828	193,157	75,045	64%
Creswell	115,662	121,697	114,497	130,475	129,891	162,095	200,008	223,307	107,645	93%
Eugene	152,872	159,920	165,366	173,351	188,484	202,750	246,272	275,674	122,802	80%
Junction City	120,218	116,282	120,164	131,761	130,170	149,294	169,287	191,574	71,356	59%
Springfield	118,520	119,152	122,700	129,432	135,719	149,082	177,260	201,000	82,480	70%
Veneta	121,039	111,754	111,961	118,976	134,297	148,313	178,916	213,220	92,181	76%
Rest of County	124,741	120,724	136,013	134,572	152,744	181,894	234,178	246,311	121,570	97%

Source: RLID, Analysis by ECONorthwest

Table 5-24 shows the median contract rent for Lane County cities. The highest median contract rents from the 2000 Census were in Eugene and Springfield. The lowest median contract rents were in Oakridge and Creswell.

Table 5-24. Median contract rent, Lane County cities, 1999

Location	Rent
Eugene	\$ 566
Springfield	\$ 518
Veneta	\$ 502
Coburg	\$ 498
Junction City	\$ 491
Cottage Grove	\$ 456
Creswell	\$ 417
Oakridge	\$ 384

Source: US Census 2000

Vacancy rates have generally decreased in Eugene-Springfield rental market since 2000. Vacancy rates for studio, 1- and 2-bedroom apartments all decreased from between 4.1-4.7% to between 1.1-2.1% between fall 2000 and 2006. Apartment rents have remained relatively stable, increasing between 4% and 10% between 2000 and 2005.²⁰

Table 5-25 shows average monthly cost of rental units in Springfield for the 2000 to 2005 period. Rental units were separated into two categories: (1) units built prior to 1988 and (2) units built since 1988. The majority of Springfield's units were built prior to 1988.

Rents increased based on the number of bedrooms. Rents ranged from \$392 for a studio unit in 2000 to \$646 for a three-bedroom unit in 2004. Rents for units with a similar number of bedrooms were higher for newer units. For instance, the average rental cost of a two-bedroom unit built prior to 1988 was \$529 compared to \$620 for a two-bedroom unit built since 1988, a difference of \$91 per month.

Over the six-year period, rents increased by between \$19 and \$56 per month. Monthly rental costs of two-bedroom units had the largest increases, \$34 per month for older units and \$56 per month for newer units. Rent for studio, one-bedroom, and three-bedroom units increased all increased by about \$20 per month.

²⁰ Duncan & Brown Apartment Report. Fall 2000-Fall 2006. Daniel J. Puffinburger, Corey S. Dingman, Duncan & Brown Real Estate Analysts

Table 5-25. Average rental monthly costs by unit type, Springfield, 2000 to 2005

Year	Units Built Prior to 1988				Units Built Since 1988			
	Studio	One Bedroom	Two Bedrooms	Three Bedrooms	Studio	One Bedroom	Two Bedrooms	Three Bedrooms
2000	\$392	\$428	\$514	\$594	--	--	\$588	--
2001	\$394	\$423	\$523	\$601	--	--	\$583	--
2002	\$389	\$431	\$526	\$619	--	\$575	\$615	--
2003	\$386	\$438	\$531	\$600	\$550	\$550	\$642	--
2004	\$388	\$437	\$533	\$633	--	\$575	\$646	--
2005	\$414	\$447	\$548	\$615	--	\$575	\$644	--
Change 2000 to 2005								
Amount	\$22	\$19	\$34	\$21	--	--	\$56	--
Percent	5.6%	4.4%	6.6%	3.5%	--	--	9.5%	--
AAGR	1.10%	0.87%	1.29%	0.70%	--	--	1.84%	--

Source: Duncan & Brown Apartment Rent Report, 2000 to 2005; Calculations by ECONorthwest
 Note: Blank values indicate that there were too few units in the survey to include in the summary.

Table 5-26 shows a comparison of change in rental costs during the 2000 to 2005 period for Springfield and Eugene. Rental costs were higher in Eugene than in Springfield. The difference in rental costs for all units, regardless when they were built, ranged from \$39 per month for a studio unit to \$211 per month for a three-bedroom unit, increasing with the number of bedrooms.

The difference in average rental costs was greater for newer and larger units. Newer one-bedroom units cost an average of \$74 per month more to rent in Eugene than Springfield. Newer two-bedroom units cost an average of \$166 more to rent in Eugene than Springfield.

Table 5-26. Comparison of average rental monthly costs by unit type, Springfield and Eugene, 2000 to 2005

	Studio	One Bedroom	Two Bedrooms	Three Bedrooms
Springfield				
Built prior to 1988	\$394	\$434	\$529	\$610
Built since 1988	--	\$569	\$620	--
All rentals	\$416	\$488	\$574	\$610
Eugene				
Built prior to 1988	\$400	\$483	\$611	\$719
Built since 1988	\$623	\$645	\$786	\$924
All rentals	\$456	\$564	\$699	\$822
Difference (Eugene minus Springfield)				
Built prior to 1988	\$6	\$49	\$82	\$109
Built since 1988	--	\$76	\$166	--
All rentals	\$40	\$74	\$124	\$211

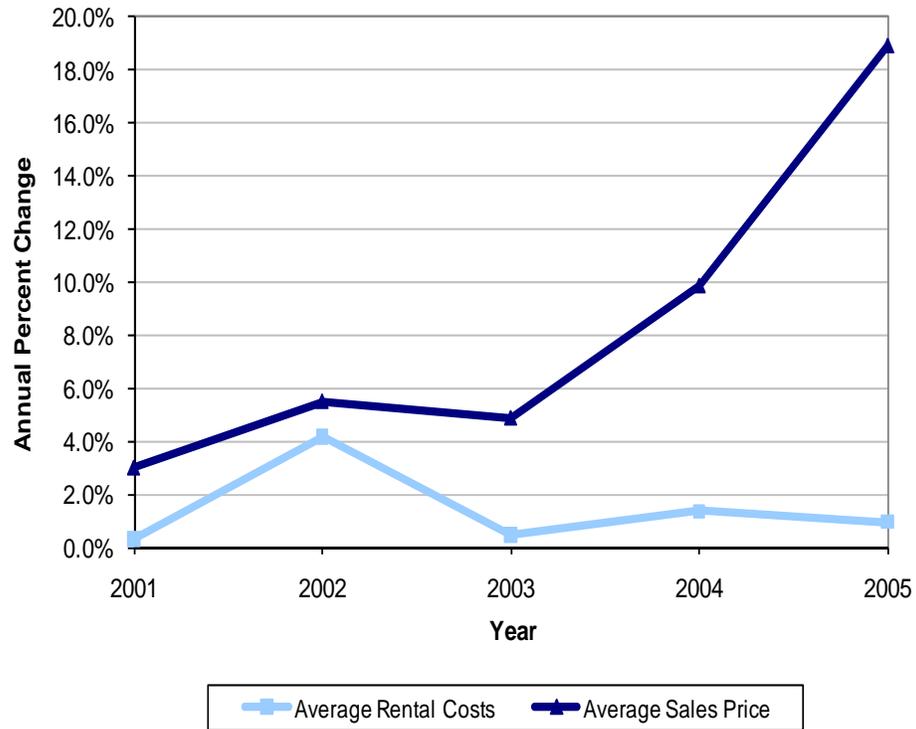
Source: Duncan & Brown Apartment Rent Report, 2000 to 2005; Calculations by ECONorthwest
 Note: Blank values indicate that there were too few units in the survey to include in the summary.

Figure 5-4 shows a comparison of change in average rental costs and average sales price in Springfield between 2000 and 2005. Over the five-year period average sales price increased by 46%, compared to a 7% change in average rental

costs. The greatest increases in average sales price occurred since 2003, while average rental costs remained relatively flat since 2003.

Since 2005, average sales prices have continued increasing at a faster rate than average rental costs. The increase in average sales price in Springfield between 2005 and 2006 was about 13%. According to the Fall 2006 Duncan & Brown Apartment Report, changes in average rental costs in Springfield were comparable to increases in recent years.²¹

Figure 5-4. Comparison of annual change in average rental costs and average sales price, Springfield, 2000 to 2005



Source: Duncan & Brown Apartment Rent Report, 2000 to 2005; RLID; Calculations by ECONorthwest

The analysis of housing starts, sales prices, and rents presented in this section leads us to several conclusions:

- The housing market peaked in 2007 and sales prices declined in 2008 and the first quarter of 2009. Springfield single-family housing starts have declined since 2003. The overall number of permits for new single-family residences issued regionwide has remained remarkably stable;

²¹ The Fall 2006 Duncan & Brown Apartment Report did not present average rent by unit type like they did in previous reports. As a result, we were not able to include 2006 average rents in this analysis.

- New construction costs are higher than regional averages. Springfield’s permit valuations and construction costs have generally been on or near the middle or towards the high end compared with selected Lane County cities;
- Price increases are lower than in other cities. Springfield’s median sales prices for single-family dwellings have increased the smallest amount compared with selected Lane County cities;
- Single-family development has dominated new construction. Multi-family dwelling units do not make up a high percentage of units constructed in Springfield and other selected Lane County cities;
- Sales prices increased much faster than rental rates. Over the five-year period between 2000 and 2005 average sales price increased by 46%, compared to a 7% change in average rental costs.

The implications of the data shown above are that ownership costs increased much faster than rents and incomes, but declined as the housing bubble burst in 2008. Table 5-27 underscores this trend for the Eugene-Springfield MSA.²² Between 1990 and 2000, incomes increased about 46% while median owner value increased 115%. Rents increased 44%—about the same as incomes. Since 2000, the data show housing costs have increased faster than incomes. The owner values include all units in the MSA; the sales data presented earlier in this section suggest that owner costs have increased much faster than the Census data suggest. Finally, the results show that the median owner value was 2.6 times median household income—a figure that increased to 4.7 by 2005.

Table 5-27. Comparison of income, housing value, and gross rent, Eugene-Springfield MSA, 1990, 2000, and 2005

Indicator	1990	2000	2005	Change	
				1990-2000	2000-2005
Median HH Income	\$25,268	\$36,942	\$37,290	46%	1%
Median Family Income	\$30,763	\$45,111	\$49,555	47%	10%
Median Owner Value	\$65,600	\$141,000	\$173,600	115%	23%
Median Gross Rent	\$418	\$604	\$683	44%	13%
Percent of Units Owned	61%	62%	63%		
Housing Value/Income					
Median HH Income	2.6	3.8	4.7		
Median Family Income	2.1	3.1	3.5		

Source: U.S. Census of Population and Housing, 1990 and 2000; American Community Survey, 2005

In summary, the data indicate that homeownership is increasingly expensive in Springfield and that the cost of homeownership is prohibitive for low- and

²² 2005 data from the American Community Survey is not available for Springfield.

moderate-income households. The data indicate that homeownership rates in the Metropolitan area and Springfield have increased, despite the rapid increase in sales prices. This is probably due in large part to a much broader array of financing options available to households than existed previously.

STEP 5: ESTIMATE THE NUMBER OF ADDITIONAL NEEDED UNITS BY STRUCTURE TYPE AND TENURE²³

Step five of the housing needs assessment results in an estimate of need for housing by income and housing type. This requires some estimate of the income distribution of future households in the community. ECO developed these estimates based on (1) secondary data from the Census, and (2) analysis by ECONorthwest.

The next step in the analysis is to relate income levels to tenure and structure type. Table 4-3 showed tenure by structure type from the 2000 Census. Table 5-28 shows an estimate of needed housing by structure type and tenure for the 2010-2030 planning period. The housing needs analysis suggests that a higher percentage of multifamily units will be needed, thus, the housing mix changes from approximately 63% single-family/37% multifamily during the 1999-July 2008 period to 60% single-family/40% multifamily.²⁴ The housing needs analysis also suggests the City will see a higher rate of homeownership in the future. Thus, the tenure split is increased from 54% owner-occupied/46% renter occupied to 57% owner-occupied/43% renter occupied.

Table 5-28. Estimate of needed dwelling units by type and tenure, Springfield, 2010-2030

Housing Type	Owner-Occupied		Renter-Occupied		Total	
	New DU	Percent	New DU	Percent	New DU	Percent
Needed Units, 2010-2030						
Single-family types						
Single-family detached	2,729	81%	351	14%	3,079	52%
Manufactured in Parks	53	2%	6	0%	59	1%
Single-family attached	340	10%	75	3%	414	7%
Subtotal	3,122	93%	431	17%	3,552	60%
Multi-family						
Multifamily	253	8%	2,115	83%	2,368	40%
Subtotal	253	8%	2,115	83%	2,368	40%
Total	3,374	101%	2,546	100%	5,920	100%

²³ Note: Manufactured dwellings are a permitted use in all residential zones that allow 10 or fewer dwellings per net buildable acre. As a result, Springfield is not required to estimate the need for manufactured dwellings on individual lots per OAR 660-024-0040 (7) (c).

²⁴ Single-family attached dwellings typically achieve densities closer to multifamily housing types. If these higher density housing types are included with multifamily, the housing mix is 53% lower density, and 47% higher density types.

The analysis (Table 5-28) indicated that Springfield needs 5,920 new dwelling units for the 2010-2030 period. The next step in estimating units by structure type is to evaluate income as it relates to housing affordability. Table 5-29 shows an estimate of needed dwelling units by income level for the 2010-2030 period. The analysis uses market segments consistent with HUD income level categories. The analysis shows that about 49% of households in Springfield could be considered high or upper-middle income in 2007 and that about 49% of the housing need in the 2010-2030 period will derive from households in these categories.

Table 5-29. Estimate of needed dwelling units by income level, Springfield, 2010-2030

Market Segment by Income	Income range	Number of Households	Percent of Households	Financially Attainable Products		
				Owner-occupied	Renter-occupied	
High (120% or more of MFI)	\$68,640 or more	1,804	30%	All housing types; higher prices	All housing types; higher prices	Primarily New Housing ↑
Upper Middle (80%-120% of MFI)	\$45,760 to \$68,640	1,129	19%	All housing types; lower values	All housing types; lower values	
Lower Middle (50%-80% of MFI)	\$28,600 to \$45,760	1,283	22%	Manufactured on lots; single-family attached; duplexes	Single-family attached; detached; manufactured on lots; apartments	Primarily Used Housing ↓
Low (30%-50% or less of MFI)	\$17,160 to \$28,600	748	13%	Manufactured in parks	Apartments; manufactured in parks; duplexes	
Very Low (Less than 30% of MFI)	Less than \$17,160	955	16%	None	Apartments; new and used government assisted housing	

Source: ECONorthwest

STEP 6: DETERMINE THE NEEDED DENSITY RANGE FOR EACH PLAN DESIGNATION AND THE AVERAGE NEEDED NET DENSITY FOR ALL DESIGNATIONS

This section summarizes the forecast of needed housing units in Springfield for the period 2010-2030. Table 5-30 shows the forecast of needed housing units in Springfield for the period 2010-2030. Springfield makes the following findings in support of the density assumptions used in Table 5-30:

- Springfield had an average residential density of 6.6 dwelling units per net acre or about 6,600 square feet of land per dwelling unit between 1999 and

2008 (Table 4-5). Average single-family detached density was 5.4 units per net acre. Manufactured homes averaged 4.6 dwelling units per net acre, while all multifamily housing types averaged 11.1 dwelling units per net acre.

- National homeownership rates increased to nearly 70% in 2006 before declining as the housing bubble burst. The homeownership rate in Springfield in 2000 was considerably lower at 54%. It is the policy of the City to provide homeownership opportunities to Springfield residents.
- National trends are towards larger units (both single-family and multifamily) on smaller lots.
- More than 28% of dwelling units in Springfield in 2000 were multifamily types.
- The “needed” density for single-family dwellings in the housing needs analysis is 5.5 dwelling units per net acre. This assumption is a slight increase over the historical density of 5.4 dwellings per net acre for single-family detached units. Increasing the average density of single-family detached dwellings should result in the provision of more affordable single-family detached units as a result of decreased lot sizes.
- Topography, lot configurations, and other factors typically reduce land use efficiency. The achieved density may be lower for single-family detached dwellings in areas with slopes.
- The City assumes an average multifamily density of 18.0 dwellings per net acre or a land area of about 2,420 square feet per dwelling unit. This assumption is an increase of about 62% over historical density of 11.1 dwellings per net acre for all multifamily types.
- The City assumes an average density for all housing types of 7.9 dwelling units per net acre. This is an increase of about 20% over the historical density of 6.5 dwelling units per net acre.

In summary, the City assumes that average densities will increase significantly (by about 20% over average historical densities) during the planning period, that ownership rates will increase, and that an increasing percentage of households will choose single-family attached housing types. These assumptions are consistent with the housing needs analysis presented in this chapter. These findings support the City’s overall density assumption of 7.9 dwelling unit per net acre.

The forecast indicates that Springfield will need about 745 net residential acres, or about 918 gross residential acres to accommodate new housing between 2010 and 2030. The forecast results in an average residential density of 7.9 dwelling units per net residential acre and of 6.5 dwelling units per gross residential acre. This represents a 20% increase in density over the historical average of 6.6 dwelling units per net acre.

Table 5-30. Forecast of new dwelling units and land needed by type, Springfield 2010-2030

Housing Type	New DU	Percent	Density (DU/net res ac)	Net Res. Acres	Net to Gross Factor	Gross Res. Acres	Density (DU/gross res ac)
Needed Units, 2010-2030							
Single-family types							
Single-family detached	3,079	52%	5.5	560	20%	700	4.4
Manufactured in parks	59	1%	8.0	7	18%	9	6.6
Single-family attached	414	7%	9.0	46	15%	54	7.7
Subtotal	3,552	60%	5.8	613		763	4.7
Multi-family							
Multifamily	2,368	40%	18.0	132	15%	155	15.3
Subtotal	2,368	40%	18.0	132		155	15.3
Total	5,920	100%	7.9	745		918	6.5

Source: ECONorthwest

Table 5-31 provides an allocation of housing units by Springfield’s three residential plan designations. Dwelling units were allocated to plan designations based, in part, on historic development trends within each plan designation and on the type of development allowed in each plan destination. Table 5-31 also provides an estimate of the gross acres required in each designation to accommodate needed housing units for the 2010-2030 period. The acreages are based on the gross density assumptions shown in Table 5-30. The residential land needs presented in Table 5-31 may change based on policy decisions related to land use efficiency measures, which may result in increased or decreased land need.

Based on the housing needs analysis, dwellings have been allocated by plan designation and type:

- The overall needed housing mix is 60% single-family (including manufactured and single-family attached units) and 40% multifamily.
- The density assumptions increase by plan designations as shown in Table 5-30.
- Fifty-six percent of needed dwelling units will locate in the Low Density residential designation, which allows single-family detached and manufactured homes. This designation also allows duplex, single-family attached, and some multifamily dwellings in conjunction with discretionary review.
- Thirty-one percent of needed dwellings will locate in the Medium Density residential designation, which allows single-family detached, single-family attached, manufactured home parks, townhomes, duplexes, and multifamily dwellings.
- Thirteen percent of needed dwelling units will locate in High Density or Mixed-Use residential designations, which allow single-family detached,

townhomes, manufactured (single detached and manufactured home parks), duplexes, and multifamily.

- Manufactured units in parks will locate in the Low-Density plan designation.

Table 5-31. Allocation of needed housing units by plan designation, Springfield 2010-2030

Housing Type	Plan Designation							
	Low Density		Medium Density		High Density/ Mixed-Use		Total	
	DU	Gross Ac	DU	Gross Ac	DU	Gross Ac	DU	Gross Ac
Single-family								
Single-family detached	3,079	700	0	-	0	-	3,079	700
Manufactured in parks	59	9	0	-	0	-	59	9
Single-family attached	178	23	236	31	0	-	414	54
Subtotal	3,316	732	236	31	0	-	3,552	763
Multi-family								
Multi-family	0	-	1,598	116	770	38	2,368	155
Subtotal	0	-	1,598	116	770	38	2,368	155
Total	3,316	732	1,835	147	770	38	5,920	918
Percent of Acres and Units								
Single-family								
Single-family detached	52%	76%	0%	0%	0%	0%	52%	76%
Manufactured in parks	1%	1%	0%	0%	0%	0%	1%	1%
Single-family attached	3%	3%	4%	3%	0%	0%	7%	6%
Subtotal	56%	80%	4%	3%	0%	0%	60%	83%
Multi-family								
Multi-family	0%	0%	27%	13%	13%	4%	40%	17%
Subtotal	0%	0%	27%	13%	13%	4%	40%	17%
Total	56%	80%	31%	15%	13%	4%	100%	100%

Source: ECONorthwest

In addition to the housing types shown in Table 5-31, Springfield needs to plan for additional group quarters. The analysis assumes the City will add 291 persons in group quarters between 2010 and 2012. The City will need to add a similar number of group quarter units during this period. Assuming that group quarters achieve densities comparable to multifamily units, the City will need approximately 19 gross residential acres for these units (291 divided by 15.3 units per gross acre). The majority of these units will probably be residential care facilities which are permitted as a discretionary use in the Low Density residential designation and a special use in the Medium- and High-Density designations.

Comparison of Supply and Demand

This chapter summarizes from data and analysis presented in Chapters 2 through 5 to compare “demonstrated need” for vacant buildable land with the supply of such land currently within the Springfield UGB and city limits. Chapter 2 described the policy framework, Chapter 3 described land supply, Chapter 4 described historical development patterns, and Chapter 5 described residential land needs.

The following section estimates land needed for other uses; the chapter concludes with a comparison of land supply and land demand for the 2010-2030 time period.

TOTAL RESIDENTIAL LAND NEED, 2010-2030

This section estimates total residential land need for the period between 2010 and 2030. In addition to land needed for new residential units, it estimates land needed for parks, public facilities, and other semi-public uses to arrive at an estimate of total need for land designated for residential purposes.

LAND NEEDED FOR NEW RESIDENTIAL DWELLING UNITS

Chapter 5 presented estimates of land needed for new residential dwellings (see Tables 5-30 and 5-31). Table 6-1 summarizes land needed for new housing by plan designation for the 2010-2030 period. Note that group quarters is a separate category that can locate in any plan designation.

Table 6-1. Land needed for new housing by plan designation, Springfield UGB, 2010-2030

Plan Designation	DU	Gross Ac
Low-Density Residential	3,316	732
Medium-Density Residential	1,835	147
High-Density Residential/Mixed-Use	770	38
Group Quarters	291	19
Total	6,211	936

Source: Table 5-31

LAND NEEDED FOR OTHER USES

Cities need to provide land for uses other than housing and employment. Public and semi-public facilities such as schools, hospitals, governments, utilities, churches, parks, and other non-profit organizations will expand as population increases. Many communities have specific standards for parks. School districts typically develop population projections to forecast attendance and need for additional facilities. All of these uses will potentially require additional land as a

city grows. Land needed for other uses was not addressed in the Springfield Economic Opportunities Analysis. Thus, all other land needs are addressed in this document, and allocated to plan designations. That allocation includes significant needs that will occur in non-residential plan designations—particularly the Parks and Open Space designation.

This section considers other uses that consume land and must be included in land demand estimates. Demand for these lands largely occurs independent of market forces. Many can be directly correlated to population growth. For the purpose of estimating land needed for other uses, these lands are classified into three categories:

- *Lands needed for public operations and facilities.* This includes lands for city offices and maintenance facilities, schools, state facilities, substations, and other related public facilities. Land needs are estimated using acres per 1,000 persons for all lands of these types.
- *Lands needed for parks and open space.* The estimates use a parkland standard of 14 acres per 1,000 persons based on the level of service standard established in the *Willamalane Park and Recreation Comprehensive Plan*, which projected need for parkland in Springfield between 2002 and 2022.
- *Lands needed for semi-public uses.* This includes hospitals, churches, non-profit organizations, and related semi-public uses. The analysis includes land need assumptions using acres per 1,000 persons for all lands of these types.

Table 6-2 shows land in public and semi-public uses by type. The data show a total of 1,636 acres in public and semi public uses in the Springfield UGB in 2009. This equates to 24.8 acres per 1,000 persons.

Table 6-2. Summary of public and semi-public land need by type, Springfield UGB, 2010-2030

Type of Use	Acres	Assumed		
		Acres / 1000 Persons	Need (Ac/1000 Persons)	Estimated Acres 2010-2030
Government	581	8.8	3.0	44
Utilities	134	2.0	2.0	30
Parks	563	8.5	14.0	357
Schools	277	4.2	0.9	14
Church/Charities/Other	81	1.2	1.2	18
Total	1,636	24.7	21.1	463

Source: City of Springfield GIS data; analysis by ECONorthwest

Table 6-2 shows that there will be an additional need of about 463 acres of land for all new public and semi-public uses or 21.1 acres per 1,000 people

between 2010 and 2030. The information in Table 6-2 is based on the following assumptions:

- Government land in 2007 includes a 271-acre site that is owned by the Bureau of Land Management (BLM) and the 115-acre Booth-Kelly mixed-use site. Not including these sites, Springfield has 195 acres of government land or 3.0 acres per 1,000 people. The assumed land need for 2010 to 2030 is 3.0 acres per 1,000 people, assuming that the City's land need will not include more sites like the BLM or Booth-Kelly site.
- Park land needs are based on the level-of-service established in Willamalane's parks plan of 14 acres per 1,000 persons, which will require 207 new acres of parkland. In addition, park land includes need for 150 acres of parkland for need identified in the *Park and Recreation Comprehensive Plan* and to serve residents that moved to Springfield between 2002 and 2008.²⁵
- School land needs are based on the fact that the Springfield School District will need to add one 14 acre site in the Jasper-Natron area over the planning period.²⁶ The land need of 0.9 acres per 1,000 persons was based on population growth and the District's need for one 14 acre site.
- Land needs for utilities, recreation, and churches/charities/other are based on maintaining the same ratio of acre to population as currently exists for these land uses.

The next step in determining other land needs is to allocate the land needs to plan designations. Table 6-3 shows existing public and semi-public land use in 2009 based on Springfield tax lot data and land use data from the Lane Council of Governments. The results show that categories of land use are spread across plan designations, but tend to cluster in the appropriate plan designations. For example, the majority of park lands (62%) are in the Parks and Open Space designation, or the majority of government lands (85%) are in the Government plan designation.

²⁵ According to Greg Hyde, the Planning and Development Manager with the Willamalane Park & Recreation District, Springfield acquired 37 acres of park land between 2002 and 2008. The *Park and Recreation Comprehensive Plan* identified a deficit of 130 acres to serve population in 2002 (at the 14 acres per 1,000 person level of service). That deficit was reduced to 93 acres with the addition of the 37 acres of parkland. In addition, Springfield's population grew by 4,095 people between 2002 and 2008, resulting in an additional need for 57 acres of parkland. Together, Springfield has a need for 150 acres of parkland to serve the City's population in 2008 at the 14 acres per 1,000 person level of service.

²⁶ According to Jeff DeFranco, the Springfield Public Schools Director of Communications and Facilities, the school district has one 14-acre site that will be sold (the Rainbow (Chase) Property). The City owns a 65-acre site in East Springfield has no services. The District owns a 15-acre site in the Clear Water area that is outside of the UGB, which will be developed when there is more residential development in the area.

Table 6-3. Summary of existing public and semi-public lands by plan designation and use, 2009

Plan Designation	Land Use					Total
	Schools	Government	Religious/ Charitable	Public (includes Parks)	Utilities	
Acres						
Low Density Residential	155	22	48	81	28	334
Medium Density Residential	9	1	7	0	1	18
High Density Residential	3	0	0	0	2	5
Parks & Open Spaces	0	66	5	361	43	475
Other Plan Designations (emp/govt)	94	490	20	141	59	804
Total	261	578	81	582	134	1636
Percent of Acres						
Low Density Residential	59%	4%	60%	14%	21%	20%
Medium Density Residential	3%	0%	9%	0%	1%	1%
High Density Residential	1%	0%	0%	0%	2%	0%
Parks & Open Spaces	0%	11%	6%	62%	32%	29%
Other Plan Designations (emp/govt)	36%	85%	25%	24%	44%	49%
Total	100%	100%	100%	100%	100%	100%

Source: City of Springfield GIS data; LCOG land use data; analysis by ECONorthwest

The data in Table 6-3 provides a basis for allocating public and semi-public land needs to plan designations. Table 6-4 shows the allocation of public and semi-public land need to plan designations. Based on the data in Table 6-3, the City assumes the following public and semi-public needs by plan designation:

- With the exception of parks, all public and semi-public land needs will follow the existing distribution by plan designation (as show in Table 6-3)
- Most parks will locate in the parks and open space designation. The allocation assumes that it is in the public interest for parks to mostly be located in the Park and Open Space designation, with a few smaller parks located in residential designations that service neighborhoods. The City assumes the following distribution for parks:
 - 80% will locate in the parks and open space designation
 - 14% will locate in low-density residential
 - 4% will locate in medium-density residential
 - 2% will locate in high-density residential

Table 6-4. Public and semi-public land needs by use and plan designation, 2010-2030

Public/semi-public use	Plan Designation					Total
	LDR	MDR	HDR	P/OS	Govt/Emp	
Government	2	0	0	5	37	44
Utilities	6	0	0	9	15	30
Parks	50	14	7	286	0	357
Schools	8	0	0	0	5	14
Church/Charities/Other	11	2	0	1	5	18
Total	77	17	7	300	62	463

Source: City of Springfield GIS data; LCOG land use data; analysis by ECONorthwest

BUILDABLE LAND INVENTORY AND CAPACITY

The capacity of residential land is measured in dwelling units and is dependent on densities allowed in specific zones as well as redevelopment potential. In short, land capacity is a function of buildable land and density.

The buildable lands inventory indicates that Springfield has about 1,447 acres of vacant and partially-vacant residential land and an additional 21 acres in the Glenwood mixed-use refinement plan area (these acres were included in the commercial and industrial lands inventory and are included here only for the purpose of estimating residential capacity).²⁷ This yields a total of 1,468 buildable acres.

Table 6-5 provides an estimate of how much housing could be accommodated by those lands based on the needed densities identified in Table 5-30 after making deductions for development constraints. It includes capacity for areas with approved master plans that were not included in the acreage estimates. This includes Marcola Meadows (518 dwellings in the MDR designation) and RiverBend (730 dwellings in the MDR designation). Total residential capacity includes capacity for redevelopment, which is assumed as 5% of needed new dwellings, or 296 dwellings. The basis for this assumption is presented in Chapter 4. Table 6-5 shows that Springfield has capacity for 9,018 dwelling units within the existing UGB.

²⁷ Capacity in the Glenwood mixed-use area was calculated as follows: 21 buildable acres (45% of the 47-acre site; the policy requires 30% to 60% of the site be used for housing) multiplied by 15 dwelling units per gross acre equals 317 dwelling units, minus 47 dwelling units that would be displaced from the River Bank Mobile Home Park equals 270 dwelling units.

Table 6-5. Estimated residential development capacity, Springfield UGB, 2009

Plan Designation	Buildable Acres	Residential Capacity (DU)	Percent of Capacity
Low Density Residential	1,301	5,379	60%
Medium Density Residential	128	2,718	30%
High Density Residential	18	355	4%
Mixed-Use (Glenwood)	21	270	3%
Redevelopment	na	296	3%
Total	1,468	9,018	100%

Source: City of Springfield residential BLI; analysis by ECONorthwest
 Note: Estimated residential development capacity includes sites with approved master plans (RiverBend – 730 DU and Marcola Meadows – 518 DU. All of this capacity is in the Medium Density Residential plan designation).

COMPARISON AND CONCLUSIONS

Table 6-6 shows the capacity for residential development by plan designation. The results show that, not considering other land needs (public and semi-public), Springfield has an overall surplus of residential land. The Springfield UGB has enough land for 9,018 new dwelling units. The housing needs forecast projects a need for 5,920 dwelling units and 291 group quarter dwellings, or 6,211 total dwellings. The 291 group quarter dwellings are evenly allocated between the Medium-Density and High-Density residential designations.

Table 6-6. Residential capacity for needed dwelling units by plan designation, Springfield UGB, 2010-2030

	1	2	3	4	5	6	7
Plan Designation	Need (DU)	Capacity (DU)	Surplus/Deficit (DU)	Needed Density (DU/GRA)	Housing Land Need (Gross Acres)	Housing Surplus/Deficit (Gross Ac)	
Low Density Residential	3,316	5,379	2,063	4.5	-455	455	
Medium Density Residential	1,982	3,136	1,154	12.5	-93	93	
High Density Residential	914	503	-411	20.0	21	-21	
Total	6,211	9,018	2,807		-527	527	

Source: ECONorthwest

Column Notes:

1. Plan designations
2. Needed dwellings by plan designation (table 5-30)
3. Capacity by plan designation (table 6-2); Note: MDR capacity includes capacity in master planned areas (Glenwood, Marcola Meadows, Riverbend); MDR and HDR includes capacity for redevelopment.
4. Capacity (column 3) minus Need (column 2); Note: a positive number denotes enough capacity within the existing UGB
5. Needed Gross Density (from bottom of page 62)
6. Total additional land needed (if a deficit exists). Equals -column 4 divided by column 5
7. Surplus/deficit gross acres (negatives mean a UGB expansion). Equals Column 4 divided by Column 5

The last step in the analysis is to add in public and semi-public land needs. Table 6-7 shows the reconciliation of land need and supply. The results show that Springfield has an overall surplus of residential land, but has deficits in the High-Density Residential and Parks and Open Space categories.

Table 6-7. Reconciliation of land need and supply, Springfield UGB, 2010

Plan Designation	Residential Land Surplus/Deficit (From Table 6-6)	Public/Semi-Public Land Need	Total Surplus/Deficit
Low Density Residential	455	77	378
Medium Density Residential	93	17	76
High Density Residential	-21	7	-28
Parks and Open Space		300	-300
Government/Employment		62	Met through land need in EOA
Total	527	463	126

Source: ECONorthwest

The results lead to the following findings:

- The Low Density Residential designation has a *surplus* of approximately 378 gross acres.
- The Medium Density Residential designation has a *surplus* of approximately 76 gross acres.
- The High Density Residential designation has a *deficit* of approximately 28 gross acres. At a minimum, the City will meet the deficit of 411 dwellings (21 acres) through land its redevelopment strategies in Downtown and Glenwood. The additional seven acres of public/semi-public land is intended to provide public open space for the higher density development, as well as any needed public facilities. This need could potentially be met through a variety of approaches—from designating seven additional acres high-density residential to ensuring that land designated park and open space is provided adjacent to high density residential developments.
- The Parks and Open Space designation has a *deficit* of 300 acres. This need does not imply that the City should expand the UGB for parks and open space. The City has a surplus of buildable lands in the low and medium density residential plan designations that can provide land for future parks within those designations, consistent with the objectives of the adopted Park and Recreation Comprehensive Plan. A portion of the parks and open space need can also be met on residentially designated land that has constraints and therefore is not counted as buildable acres (e.g., ridgeline trail systems). Since no surplus of land designated for high density residential uses exists, the 21-acre high density residential plan

designation deficit has been increased by seven (7) acres to provide parkland immediately adjacent to the proposed high density residential district.

- Government and employment land needs will be met through existing lands or land needs identified in the Springfield Economic Opportunities Analysis.

Context for Assessing Housing Needs

WHAT IS AFFORDABLE HOUSING?

The terms “affordable” and “low-income” housing are often used interchangeably. These terms, however, have different meanings:

- *Affordable housing* refers to households’ ability to find housing within their financial means. Households that spend more than 30% of their income on housing and certain utilities are considered to experience *cost burden*.²⁸ As such, any household that pays more than 30% experiences cost burden and does not have *affordable* housing. Thus, affordable housing applies to all households in the community.
- *Low-income housing* refers to housing for “low-income” households. HUD considers a household low-income if it earns 80% or less of median family income. In short, low-income housing is targeted at households that earn 80% or less of median family income.

These definitions mean that any household can experience cost burden and that affordable housing applies to all households in an area. Low-income housing targets low-income households. In other words, a community can have a housing affordability problem that does not include only low-income households.

It is important to underscore the point that many households that experience cost burden have jobs and are otherwise productive members of society. A household earning 80% of median family income in Springfield earns about \$39,000 annually—or about \$18.50 per hour for a full-time employee. The maximum affordable purchase price for a household earning \$39,000 annually is about \$120,000. Depending on household size, many of these households are eligible for government housing assistance programs.

In summary, any household can face housing affordability problems. Because they have more limited financial means, the incidence of cost burden is higher among low-income households. Statewide planning Goal 10 requires cities to adopt policies that encourage housing at price ranges commensurate with incomes. In short, state land use policy does not distinguish between households of different income levels and requires cities to adopt policies that encourage housing for all households.

²⁸ Cost burden is a concept used by HUD. Utilities included with housing cost include electricity, gas, and water, but do not include telephone expenses.

WHAT OBJECTIVES DO HOUSING POLICIES TYPICALLY TRY TO ACHIEVE?

The *Practice of State and Local Planning*²⁹ classifies goals that most government housing programs address into four categories:

- *Community life.* From a community perspective, housing policy is intended to provide and maintain safe, sanitary, and satisfactory housing with efficiently and economically organized community facilities to service it. In other words, housing should be coordinated with other community and public services. Although local policies do not always articulate this, they are implicit in most local government operations. Comprehensive plans, zoning, subdivision ordinances, building codes, and capital improvement programs are techniques most cities use to manage housing and its development. Local public facilities such as schools, fire and police stations, parks, and roads are usually designed and coordinated to meet demands created by housing development.
- *Social and equity concerns.* The key objective of social goals is to reduce or eliminate housing inadequacies affecting the poor, those unable to find suitable housing, and those discriminated against. In other words, communities have an obligation to provide safe, satisfactory housing opportunities to all households, at costs they can afford, without regard to income, race, religion, national origin, family structure, or disability.
- *Design and environmental quality.* The location and design of housing affect the natural environment, residents' quality of life, and the nature of community life. The objectives of policies that address design and environmental quality include neighborhood and housing designs that meet: household needs, maintain quality of life, provide efficient use of land and resources, reduce environmental impacts, and allow for the establishment of social and civic life and institutions. Most communities address these issues through local building codes, comprehensive land use plans, and development codes.
- *Stability of production.* Housing is a factor in every community's economy. The cyclical nature of housing markets, however, creates uncertainties for investment, labor, and builders. The International City Manager's Association suggests that local government policies should address this issue—most do not. Moreover, external factors (e.g. interest rates, cost of building materials, etc.) that bear upon local housing markets tend to undermine the effectiveness of such policies.

Despite the various federal and state policies regulating housing, most housing in the U.S. is produced by private industry and is privately owned. While the land

²⁹ *The Practice of Local Government Planning, 2nd Edition*, International City Managers Association, 1988.

use powers of local government have been an important factor in the production of housing, the role of local government has largely focused on regulation for public health and safety and provision of infrastructure. More recently, awareness has grown regarding the impact policies and regulations have had on the other aspects of community life such as costs of transportation and other infrastructure, access of residents to services and employment, and social interactions.

DEMAND VERSUS NEED

The language of Goal 10 and ORS 197.296 refers to housing *need*: it requires communities to provide needed housing types for households at all income levels. Goal 10's broad definition of need covers all households—from those with no home to those with second homes. State policy, however, does not make a clear distinction between need and demand. Following is our definition, which we believe to be consistent with definitions in state policy:

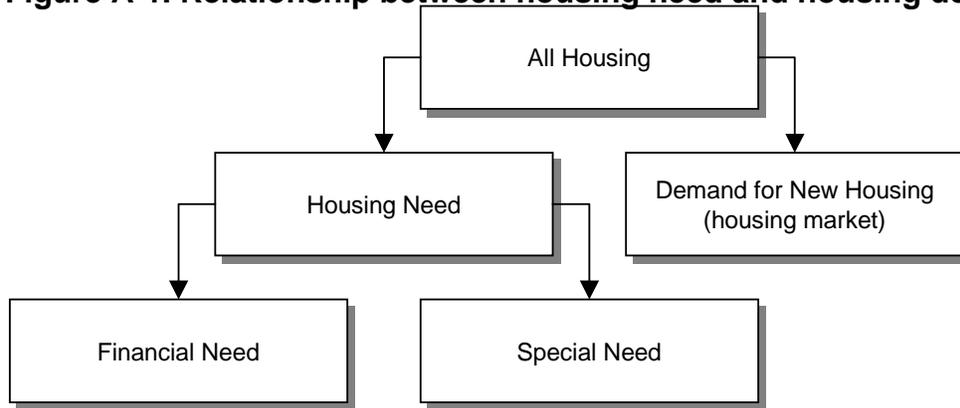
- *Housing need* can be defined broadly or narrowly. The broad definition is based on the mandate of Goal 10 that requires communities' plan for housing that meets the needs of households at all income levels. Thus, Goal 10 implies that everyone has a housing need because everyone needs housing. However, definition used by public agencies that provide housing assistance (primarily the Department of Housing and Urban Development – HUD, and the Oregon Housing and Community Services Department - HCS) is more narrow. It does not include most of the households that can purchase or rent housing consistent with the requirements of their household size for a price that is affordable. Households that cannot find and afford such housing have need: they are either unhoused, in housing of substandard condition, overcrowded, or paying more than their income and federal standards say they can afford.
- *Housing market demand* is what households demonstrate they are willing to purchase in the market place. Growth in population leads to a growth in households and implies an increase in demand for housing units that is usually met primarily by the construction of new housing units by the private sector based on developers' best judgments about the types of housing that will be absorbed by the market. ORS 197.296 includes a market demand component: buildable land needs analyses must consider the density and mix of housing developed over the previous five years or since their most recent periodic review, whichever is greater.

In short, a housing needs analysis should make a distinction between housing that people might need (housing needs) and what the market will produce (housing market demand).

Figure A-1 shows a schematic that distinguishes between housing needs that are unmet and those that are met via market transactions. All housing need is the total number of housing units required to shelter the population. In that sense, it is approximately the number of households: every household needs a dwelling place. But some of that need is met through market transactions without much

government intervention because households have the income to *demand* (purchase) housing services (as owners or renters). That demand is shown in the box on the right. Other households, however, have needs unmet, usually because they lack the resources to purchase housing services (financial need), but because of special needs as well (though, even here, the issue is still one of financial resources).

Figure A-1. Relationship between housing need and housing demand



Most housing market analyses and housing elements of comprehensive plans in Oregon make forecasts of new demand (what housing units will get built in response to market forces). Work by housing authorities is more likely address housing need for special classes, especially low-income. It is the role of cities under Goal 10 to adopt and implement land use policies that will encourage provision of housing units that meet the needs of all residents.

It is unlikely that housing markets in any metropolitan area in the US provide housing to meet the needs of every household. Even many upper-income households probably believe they "need" (want) more housing than their wealth and income allows them to afford. Goal 10 does not require communities address the housing "want" of residents.

More important, however, are more basic housing needs. At the extreme there is homelessness: some people do not have any shelter at all. Close behind follows substandard housing (with health and safety problems), space problems (the structure is adequate but overcrowded), and economic and social problems (the structure is adequate in quality and size, but a household has to devote so much of its income to housing payments that other aspects of its quality of life suffer). Location can also be a burden—households that live further from work and shopping opportunities will have to spend more money on transportation. Moreover, while some new housing is government-assisted housing, public agencies do not have the financial resources to meet but a small fraction of that need. New housing does not, and is not likely to, fully address all these needs because housing developers, like any other business, typically try to maximize their profits.

In fact, many of those needs are much more likely to be satisfied by existing housing: the older, used stock of structures that is usually less expensive per square foot than new housing. Thus, forecasting the type of new units that might be built in a region (by type, size, and price) is unlikely to bear any relationship to the type of housing to which most people with acute housing needs will turn to solve their housing problems. One key reason for this is the dynamics associated with housing construction. The cost of building new housing is largely prohibitive for building dwelling units affordable to low-income households. This “trickle-down” effect is well known among housing specialists. In most communities a quick comparison of new home prices with income distributions will underscore the fact that developers tend to focus on the move-up market and not on entry-level housing.

Viewed in the light of those definitions (e.g., housing demand and housing need), the requirements of Goal 10 need clarification. Goal 10 mandates that communities plan for housing that meets the needs of households at all income levels. Thus, Goal 10 implies that everyone has a housing need. As we have noted, however, it is hard to justify spending public resources on the needs of high-income households: they have the income to purchase (demand) adequate housing services in the housing market. The housing they can afford may not be everything they want, but most policymakers would agree that the difference does not classify as the same kind of need that burdens very-low-income households.

This study is not the place to resolve debates about definitions of housing need and the purposes of Goal 10. Here are our assumptions about the distinction between demand and need in the rest of this study:

- Our analysis of need addresses the Goal 10 requirements regarding financial need (ability to obtain housing) as they relate to future households and to those households whose circumstances suggest that they will have special problems in finding adequate and affordable housing services. That analysis occurs after, and largely independent of, the forecast of new housing that is likely to be built to supply effective demand.
- Our forecast includes a comparison of demand for new housing: what kind of housing of what type is likely to get built in the region over the next 20 years. The baseline forecast is the housing “demand” forecast, the alternative forecast is the housing “need” forecast.

In summary, Goal 10 intends that cities identify housing need and develop a land use policy framework that meets identified needs. One of the key issues that gets addressed in a housing needs analysis is to determine how much land is needed for different housing types, and therefore must be designated for different housing types. Providing sufficient land in the proper designations is one of the most fundamental land use tools local governments have to meet housing need.

National Housing Trends

The overview of national, state, and local housing trends builds from previous work by ECO and conclusions from *The State of the Nation's Housing, 2008* report from the Joint Center for Housing Studies of Harvard University. The Harvard report summarizes the national housing outlook for the next decade as follows:

“Housing markets contracted for a second straight year in 2007. The national median single-family home price fell in nominal terms for the first time in 40 years of recordkeeping, leaving several million homeowners with properties worth less than their mortgages. With the economy softening and many home loans resetting to higher rates, an increasing number of owners had difficulty keeping current on their payments. Mortgage performance—especially on subprime loans with adjustable rates—eroded badly. Lenders responded by tightening underwriting standards and demanding a higher risk premium, accelerating the ongoing slide in sales and starts.

“It is still uncertain how far, and for how long, the housing crisis will drive down household growth. Regardless, given the solid underpinnings of long-term demand—including the recent strength of immigration and the aging of the echo-boom generation into young adulthood—household growth will pick up again once the economy recovers. But if the nation suffers a prolonged economic downturn that results in lower immigration and more doubling up, household growth in 2010-2020 may fall short of the 14.4 million level currently projected.

This evaluation presents a bleak outlook for housing markets and for homeownership in the short-term brought on by the subprime mortgage crisis. However, the image painted of the future looks brighter, as the increase in housing demand is naturally induced by the growth of the population in the necessary age groups.

Long run trends in home ownership and demand

Last year (2007) was a continuation of the significant departure from the recent housing boom that had lasted for 13 consecutive years (1992-2005). While strength in early 2005 pushed most national housing indicators into record territory, the market began to soften and sales slowed in many areas in the latter half of 2005. By 2006, higher prices and rising interest rates had a negative impact on market demand. Investor demand, home sales and single-family starts dropped sharply. Growth in national sales prices also slowed. By 2007 and early 2008, housing market problems had reached the rest of the economy, resulting in a nationwide economic slowdown and fear of recession. After 12 successive years of increases, the national homeownership rate slipped in 2005, again in 2006 to 68.8%, and again in 2007 to 68.1%.

The Joint Center for Housing Studies concludes that the cooling housing market in 2006 had an immediate impact on homeownership. Increasing interest rates and decreasing housing affordability contributed to the recent market correction. Homebuilders could not react quickly enough to changing market conditions, resulting in an oversupply of housing and a rising inventory of unsold homes. The Joint Center for Housing Studies predicts that once the corrections made to work off the housing oversupply and prices start to recover, a return to traditional mortgage products and the strength of natural demand will invigorate the homeownership rate. The long-term market outlook shows that homeownership is still the preferred tenure. Over the next decade, 88% of net household growth is expected to come from gains in the number of homeowners. While further homeownership gains are likely during this decade, they are not assured. Additional increases depend, in part, on finding ways to ease the difficulties faced by low and moderate income households in purchasing a home. It also rests on whether the conditions that have led to homeownership growth can be sustained.

From 2000 to 2005 housing starts and manufactured home placements appeared to have been roughly in line with household demand. In 2005, with demand for homes falling but construction coming off record levels, the surplus of both new and existing homes was much higher than in recent years. In late 2007 and early 2008, the excess supply of new single-family homes retreated by about 12%, though the simultaneous drop in sales left the supply at 11 months, a figure not seen since the 1970s. This resulted in a strong buyer's market, leaving many homes lingering on the market and forcing many sellers to accept prices lower than what they were expecting. The Joint Center for Housing Studies predicts the oversupply will eventually balance as housing starts continue to fall, lower prices motivate unforeseen buyers, and the rest of the economy begins to recover.

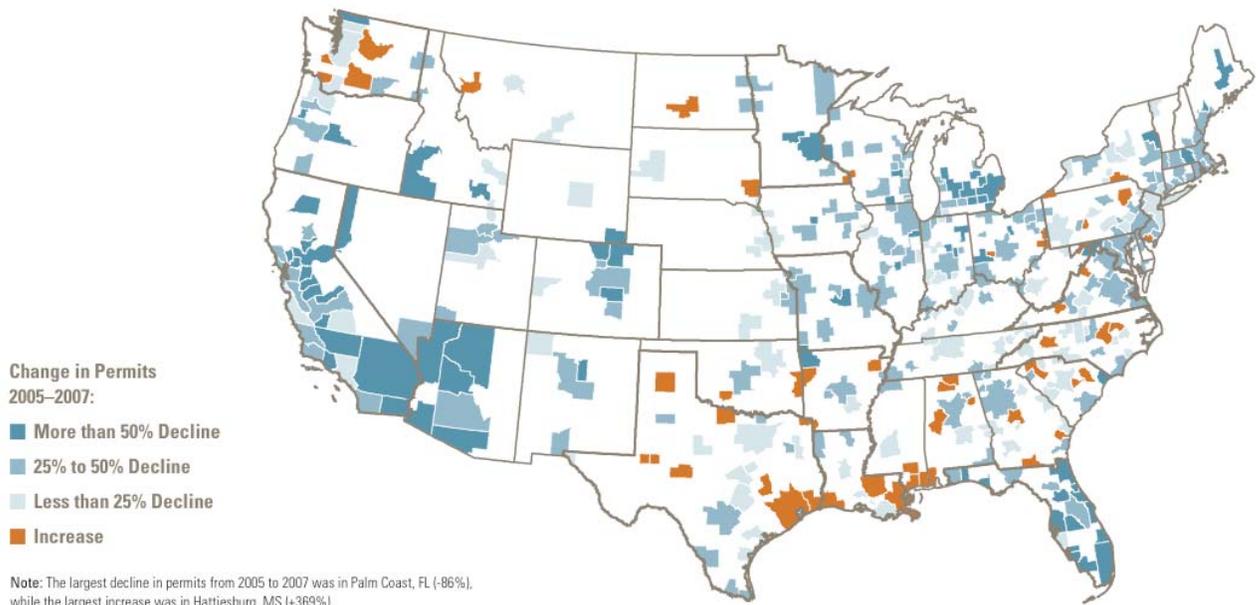
The Joint Center for Housing Studies indicates that demand for new homes could total as many as 14.4 million units nationally between 2010 and 2020. Nationally, the vast majority of these homes will be built in lower-density areas where cheaper land is in greater supply. People and jobs have been moving away from central business districts (CBDs) for more than a century: the number of the country's largest metropolitan areas with more than half of their households living at least 10 miles from the CBD has more than tripled from 13 in 1970 to 46 in 2000; in six metropolitan areas more than a fifth of households live at least 30 miles out. While people older than 45 years are generally continuing to move away from CBDs, younger people have begun to move nearer to CBDs.

The Joint Center for Housing Studies also indicates that demand for higher density housing types exists among certain demographics. They conclude that because of persistent income disparities, as well as the movement of the echo boomers into young adulthood, housing demand may shift away from single-family detached homes toward more affordable multifamily apartments, town homes, and manufactured homes. Supply-side considerations, however, outweigh these demographic forces.

Recent trends in home ownership and demand

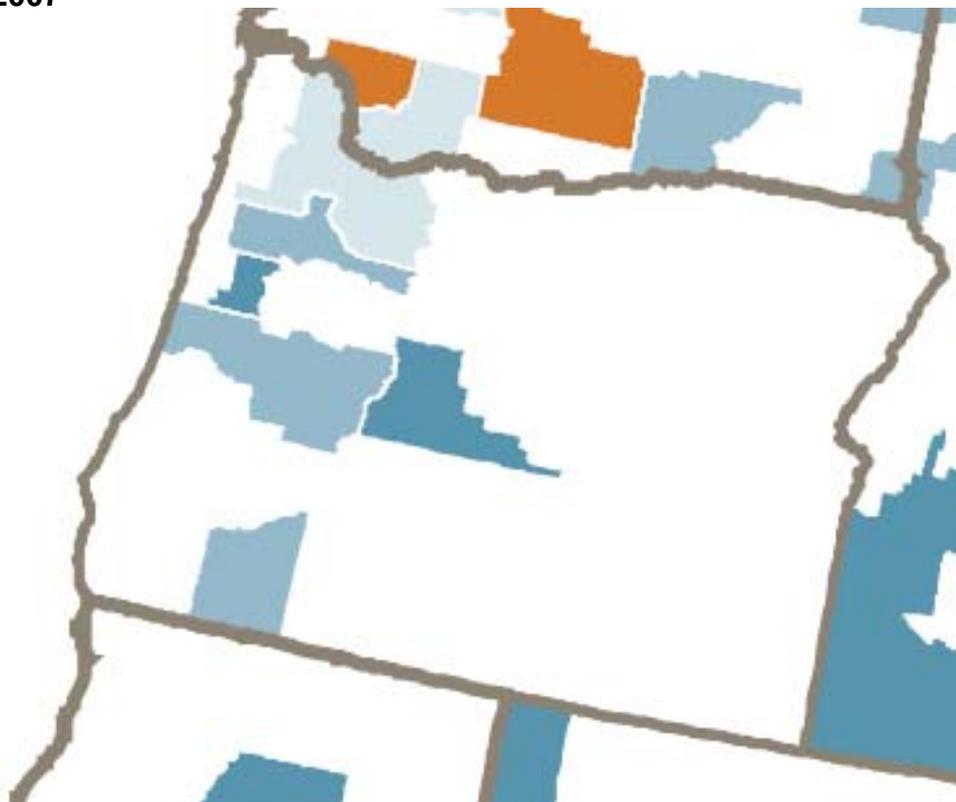
Conditions that had previously bolstered the housing market and promoted homeownership weakened in 2005 and eroded further in 2006 and 2007. Increasing interest rates and weakening housing prices combined to slow the housing market. In 2007, new home sales were down 40% from the record 2005 level, and existing home sales were down 20%. Regionally, using housing permits issued as a proxy for new home ownership, Lane County's issued housing permits fell between 25% and 50% between 2005 and 2007.

Figure B-1. Change in housing permits issued by county, U.S., 2005-2007



Source: Census Bureau, Construction Statistics, Building Permits by County. As cited in The State of The Nation's Housing, 2008, The Joint Center for Housing Studies of Harvard University, p. 8

Figure B-2. Change in housing permits issued by county, Oregon, 2005-2007



Source: Census Bureau, Construction Statistics, Building Permits by County. As cited in *The State of The Nation's Housing, 2008*, The Joint Center for Housing Studies of Harvard University, p. 8

Demographic trends in home ownership

According to the Joint Center for Housing Studies, immigration will play a key role in accelerating household growth over the next 10 years. Between 2000 and 2006, immigrants contributed to over 60% of household growth. Minorities will account for 68% of the 14.6 million projected growth in households for the 2005 to 2015 period. Immigrants now comprise a growing share of young adults and children in the United States. Twenty percent of Americans ages 25-34 are foreign born, and an additional 9% are second generation Americans. Members of this generation will probably earn more than their parents becoming an even greater source of housing demand in the coming decades.

The Joint Center for Housing Studies suggests that an aging population, and of baby boomers in particular, will drive changes in the age distribution of households in all age groups over 55 years. A recent survey of baby boomers showed that more than a quarter plan to relocate into larger homes and 5% plan to move to smaller homes. Second home demand among upper-income homebuyers of all ages also continues to grow. Households aged 50 to 69 are expected to account for the purchase of nearly half a million second homes between 2005 and 2015.

People prefer to remain in their community as they age.³⁰ The challenges that seniors face as they age in continuing to live in their community include: changes in healthcare needs, loss of mobility, the difficulty of home maintenance, financial concerns, and increases in property taxes.³¹ Not all of these issues can be addressed through housing or land-use policies. Communities can address some of these issues through adopting policies that:

- Diversify housing stock to allow development of smaller, comparatively easily maintained houses in single-family zones, such as single story townhouses, condominiums, and apartments.
- Allow commercial uses in residential zones, such as neighborhood markets.
- Allow a mixture of housing densities and structure types in single-family zones, such as single-family detached, single-family attached, condominiums, and apartments.
- Promote the development of group housing for seniors that are unable or choose not to continue living in a private house. These facilities could include retirement communities for active seniors, assisted living facilities, or nursing homes.
- Design public facilities so that they can be used by seniors with limited mobility. For example, design and maintain sidewalks so that they can be used by people in wheel chairs or using walkers.

Home rental trends

Nationally, the rental market continues to experience growth, adding 2 million rental households from 2004 to 2007. Demand strengthened in every region except the Northeast. Vacancy rates in the West continue to decline, leading to strong increases in rental rates. Over the longer term, the Joint Center for Housing studies expects rental housing demand to grow by 1.8 million households over the next decade. Minorities will be responsible for nearly all of this increased demand. The minority share of renter households grew from 37% in 1995 to 43% in 2005. The minority share is forecast to exceed 50% of renter households in 2015. Demographics will also play a role. Growth in young adult households will increase demand for moderately priced rentals, in part because echo boomers will reach their mid-20s after 2010. Meanwhile growth among those between the ages of 45 and 64 will lift demand for higher-end rentals. Given current trends in home prices and interest rates, conditions will become increasingly favorable for rental markets in the coming years.

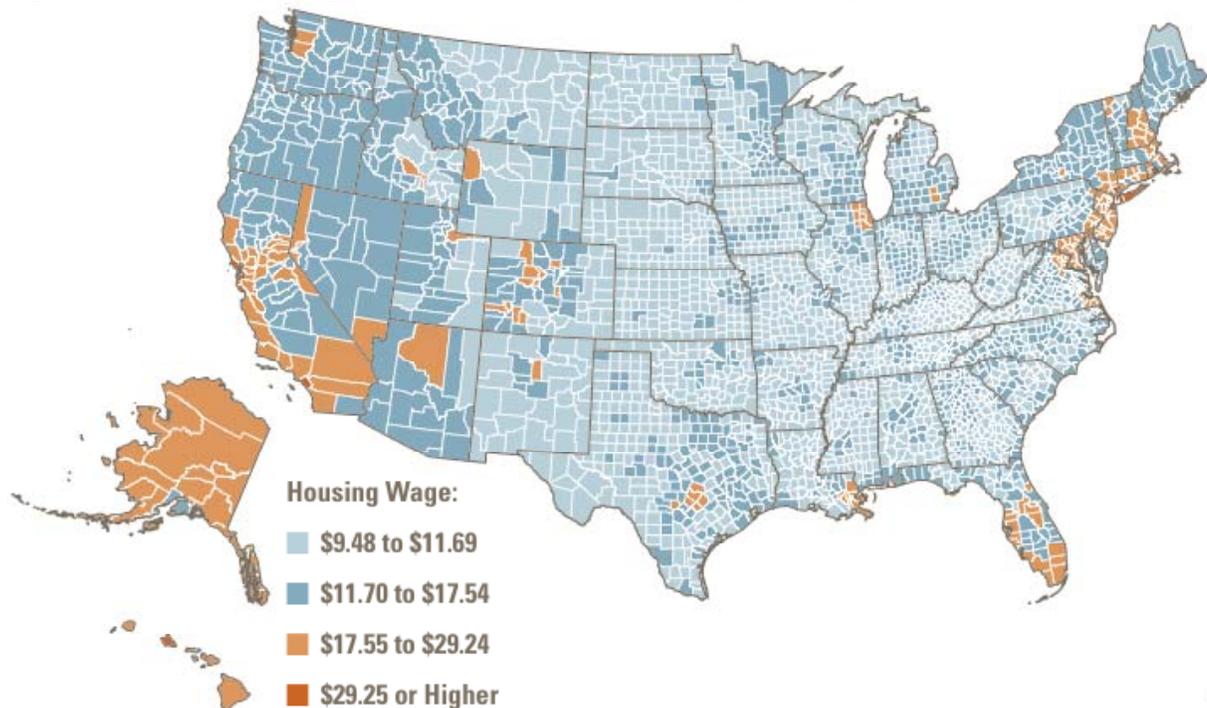
³⁰ A survey conducted by the AARP indicates that 90% of people 50 years and older want to stay in their current home and community as they age. See <http://www.aarp.org/research>.

³¹ "Aging in Place: A toolkit for Local Governments" by M. Scott Ball.

Despite only modest increases in rents in recent years, growing shares of low- and moderate-wage workers, as well as seniors with fixed incomes, can no longer afford to rent even a modest two-bedroom apartment anywhere in the country. In 2006, one in three American households spent more than 30% of income on housing, and more than one in seven spent upwards of 50%. The national trend towards increased rent to income ratios is mirrored regionally in that a salary of two to three times the 2007 Federal minimum wage of \$5.85 is needed to afford rents in Lane County (see Figure B-3).

According to the Joint Center for Housing Studies, these statistics understate the true magnitude of the affordability problem because they do not capture the tradeoffs people make to hold down their housing costs. For example, these figures exclude the 2.5 million households that live in crowded or structurally inadequate housing units. They also exclude the growing number of households that move to locations distant from work where they can afford to pay for housing, but must spend more for transportation to work. Among households in the lowest expenditure quartile, those living in affordable housing spend an average of \$100 more on transportation per month than those who are severely housing cost-burdened. With total average monthly outlays of only \$1,000, these extra travel costs amount to 10 percent of the entire household budget.

Figure B-3. Hourly wages needed to afford rent by county, U.S., 2008



Source: HUD's Fair Market Rents for 2008, based on methodology developed by the National Low Income Housing Coalition. As cited in *The State of The Nation's Housing, 2008*, The Joint Center for Housing Studies of Harvard University, p. 30

Note: Every county in Oregon had a housing wage between \$11.70 and \$17.54 in 2008.

Trends in housing affordability

Despite widespread falling house prices, affordability problems have not improved significantly. A median-priced single-family home under conventional terms in 2007 (10% downpayment and 30-year fixed rate loan) only costs \$76 per month and \$1,000 downpayment less than a house bought in 2006, the year in which the sales prices of single-family homes were at their highest real price in history. Only 17 of the 138 National Association of Realtors-covered metropolitan areas have lower costs in 2007 than they did in 2003 when interest rates were bottomed out.

With low-wage jobs increasing and wages for those jobs stagnating, affordability problems will persist even as strong fundamentals lift the trajectory of residential investment. The number of severely cost-burdened households (spending more than 50% of income on housing) increased by almost 4 million households from 2001 to 2006, to a total of nearly 18 million households in 2005. Nearly 40% of low-income households with one or more full-time workers are severely cost burdened, and nearly 60% of low-income households with one part-time worker are severely cost burdened. The Joint Center for Housing Studies points to widening income disparities and decreasing federal assistance as two factors exacerbating the lack of affordable housing. While the Harvard report presents a relatively optimistic long-run outlook for housing markets and for homeownership, it points to the significant difficulties low- and moderate-income households face in finding affordable housing, and preserving the affordable units that do exist.

Trends in Housing Characteristics

The U.S Bureau of Census Characteristics of New Housing Report presents data that show trends in the characteristics of new housing for the nation, state, and local areas. Several trends in the characteristics of housing are evident from the New Housing Report:

- Larger single-family units on smaller lots. Between 1997 and 2007 the median size of new single-family dwellings increased 15%, from 1,975 sq. ft. to 2,277 sq. ft. nationally and 18% in the western region from 1,930 sq. ft. to 2,286 sq. ft. Moreover, the percentage of units under 1,200 sq. ft. nationally decreased from 8% in 1997 to 4% in 2007. The percentage of units greater than 3,000 sq. ft. increased from 15% in 1997 to 26% of new one-family homes completed in 2007. In addition to larger homes, a move towards smaller lot sizes is seen nationally. Between 1994 and 2007 the percentage of lots under 7,000 sq. ft. increased by 13% from 29% of lots to 33% of lots. A corresponding 4% decrease in lots over 11,000 sq. ft. is seen.
- Larger multifamily units. Between 1999 and 2007, the median size of new multiple family dwelling units increased by 15%. The percentage of multifamily units with more than 1,200 sq. ft. increased from 26% to 47% in the western region and from 28% to 50% nationally. The

percentage of units with less than 600 sq. ft. stayed at 1% both regionally and nationally.

- More household amenities. Between 1994 and 2007 the percentage of single-family units built with amenities such as central air conditioning, fireplaces, 2 or more car garages, or 2 or more baths all increased. The same trend in increased amenities is seen in multiple family units.

A clear linkage exists between demographic characteristics and housing choice. This is more typically referred to as the linkage between life-cycle and housing choice and is documented in detail in several publications. Analysis of data from the Public Use Microsample (PUMS) in the 2000 Census to describe the relationship between selected demographic characteristics and housing choice. Key relationships identified through this data include:

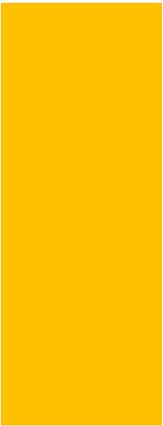
- Homeownership rates increase as income increases;
- Homeownership rates increase as age increases;
- Choice of single-family detached housing types increases as income increases;
- Renters are much more likely to choose multiple family housing types than single-family; and
- Income is a stronger determinate of tenure and housing type choice for all age categories.

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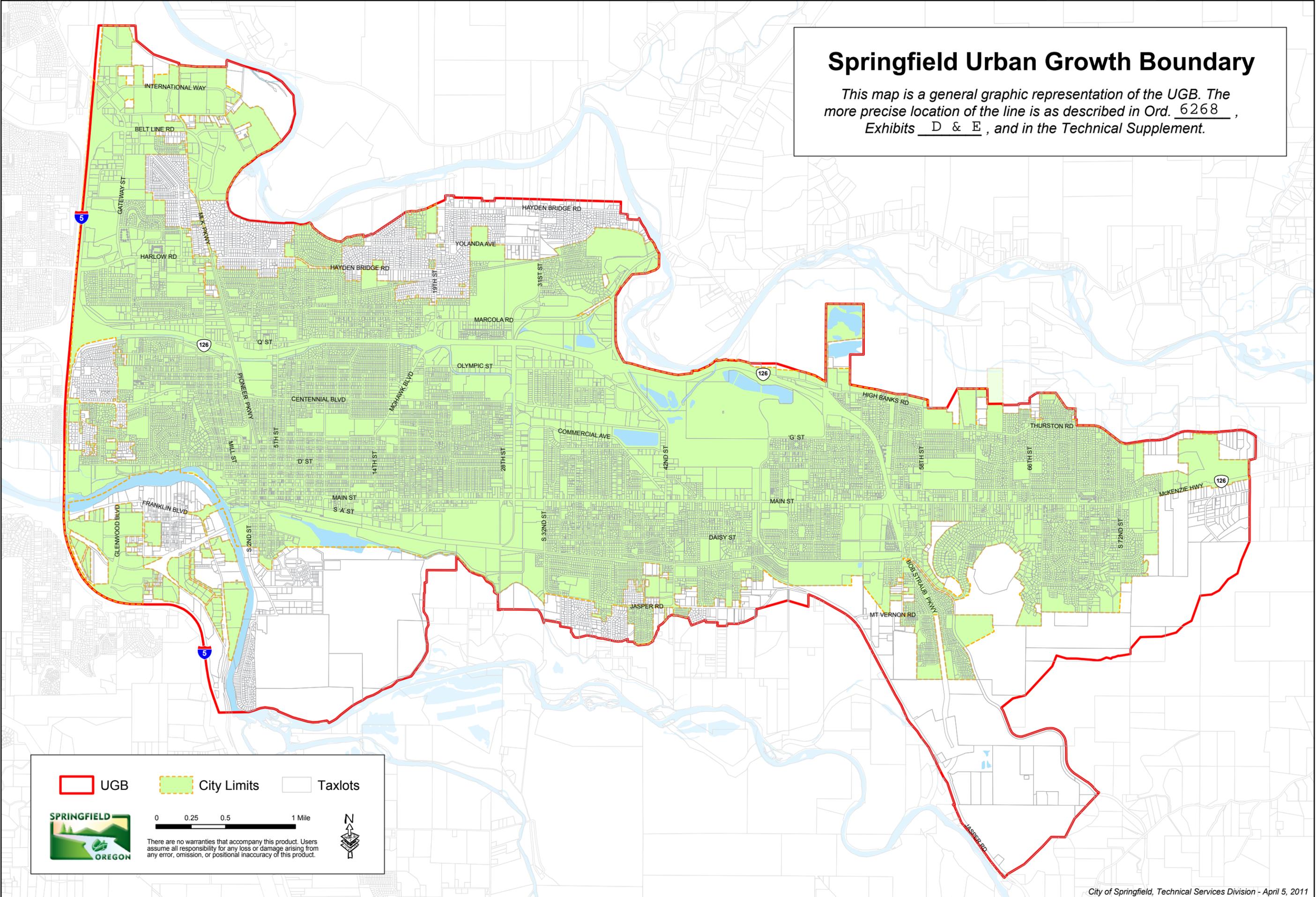


URBANIZATION ELEMENT



Springfield Urban Growth Boundary

This map is a general graphic representation of the UGB. The more precise location of the line is as described in Ord. 6268, Exhibits D & E, and in the Technical Supplement.



UGB City Limits Taxlots



0 0.25 0.5 1 Mile

There are no warranties that accompany this product. Users assume all responsibility for any loss or damage arising from any error, omission, or positional inaccuracy of this product.



List of tax lots that are adjacent to and inside, or split by the UGB

April 5, 2011

Tax lot #	Status	Description	Area	Note
17-02-19	inside UGB or split by UGB	If the tax lot is split by the UGB, where is the UGB located?	name of area containing split tax lots	Plat, Survey, or land use decision
1702190000101	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	Journal #94-02-32; plat #94-P0555; CS #32200
1702190000203	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000300	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000400	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000500	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000501	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000601	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000699	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000701	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	SUB2003-00014; Plat #2004- PO1787
1702190000800	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000900	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	Journal #87-03-20; CS #28405
1702190001000	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190001100	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190001200	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702194100101	in			
1702194100102	in			
1702194100200	in			
1702194100300	in			
1702194100800	in			
1702194100900	in			
1702194100901	in			
1702194100902	in			
1702194102900	in			
17-02-20				
1702200000500	in	tax lot line, city limits and UGB are coincident		
1702200000600	in	tax lot line, city limits and UGB are coincident		
1702200000700	in	tax lot line, city limits and UGB are coincident		
1702200000800	in	tax lot line, city limits and UGB are coincident		
1702200001301	in	tax lot line, city limits and UGB are coincident		

Tax lot #	Status	Description	Area	Note
17-02-27				
1702270000901	split	City limits and UGB are coincident	Highbanks	
1702270000902	split	City limits and UGB are coincident	Highbanks	
1702270001002	split	connect the most northerly NE corner of tax lot 1702342200100 to NW corner of tax lot 1702342100400.	Highbanks	
1702270001004	in			
1702270001101	split	UGB and city limits are coincident	Thurston	
1702270001102	in			
1702270002002	in			
1702270002100	in			
17-02-28				
1702280000101	split	UGB and city limits are coincident	Highbanks	split by city limits
1702280000102	in			
1702280000300	split	UGB and city limits are coincident	Highbanks	split by city limits
1702280000301	in			
1702280000302	in			
1702280000401	in	UGB, city limits and tax lot lines are coincident		
1702280000402	in			
1702280000405	in			
1702280000406	in	UGB, city limits and tax lot lines are coincident		
1702280000500	split	450' N of the N edge of Highbanks ROW, then coincident with city limits east of tax lot 1702280000600	Highbanks	
1702280000600	in	UGB, city limits and tax lot lines are coincident		
1702284300200	in			
1702284300202	in	UGB, city limits and tax lot lines are coincident		
1702284300203	in			
1702284301308	in	UGB, city limits and tax lot lines are coincident		
1702284301309	in	UGB, city limits and tax lot lines are coincident		
17-02-29				
1702290002800	split	450' N of Highbanks ROW on the eastern lot line; connect to NE corner of tax lot 1702290002900	Highbanks	
1702290002900	split	Multi-part tax lot. Extend the UGB from tax lot 2800 to the W, coincident with tax lot line 2900 until it intersects the N edge of the ROW of I-105	Highbanks	
1702290003100	split	UGB and city limits are coincident	Highbanks	
17-02-30				
1702300000100	in	UGB, city limits and tax lot lines are coincident		
1702300000101	in	UGB, city limits and tax lot lines are coincident		
1702300000200	in	UGB, city limits and tax lot lines are coincident		
1702300002500	in	UGB, city limits and tax lot lines are coincident		

Tax lot #	Status	Description	Area	Note
17-02-34				
1702341107900	in	UGB, city limits and tax lot lines are coincident		
1702341108000	in	UGB, city limits and tax lot lines are coincident		
1702341108100	in	UGB, city limits and tax lot lines are coincident		
1702341108200	in	UGB, city limits and tax lot lines are coincident		
1702341108300	in	UGB, city limits and tax lot lines are coincident		
1702341109000	in	UGB, city limits and tax lot lines are coincident		
1702341109100	in	UGB, city limits and tax lot lines are coincident		
1702341114900	in	UGB, city limits and tax lot lines are coincident		
1702341115000	in	UGB, city limits and tax lot lines are coincident		
1702341115100	in	UGB, city limits and tax lot lines are coincident		
1702341115200	in	UGB, city limits and tax lot lines are coincident		
1702341115300	in	UGB, city limits and tax lot lines are coincident		
1702341115400	in	UGB, city limits and tax lot lines are coincident		
1702341115500	split	split by city limits. Only "leg" portion is inside	Hayden Bridge	UGB formally interpreted in Levi Landing (#97-06-142); refer to plats of Levi Landing
1702341200100	in	UGB, city limits and tax lot lines are coincident		
1702341200500	split	Split by section line 170227 & 170234	Thurston	city limits outside UGB, Thurston Middle School
1702342100400	in	UGB, city limits and tax lot lines are coincident	Thurston	
1702342200100	in			
17-02-35				
1702352204801	in			
1702352204900	split	split by city limits	Thurston	
17-02-36				
1702362000403	in	UGB, city limits and tax lot lines are coincident on most easterly tax lot line		
1702362400102	in			
1702362400200	in			
1702363000100	in			
1702363002900	in			
1702363003200	in			
1702363003300	in			
1702363003400	in			
1702363003402	in			
17-03-14				
1703140000900	in			
1703140001100	in	Adjacent to McKenzie River. Refer to survey		Riverbend Phase 2 (survey)
1703140001900	in	Adjacent to McKenzie River. Refer to survey		Riverbend Phase 2 (survey)

Tax lot #	Status	Description	Area	Note
17-03-15				
170315	in	maple island slough, unknown lot #	Gateway	tax lot contains public drainage facility
1703150000801	split	City limits and UGB are coincident	Gateway	
1703150001000	in	UGB, city limits and tax lot lines are coincident		
1703154000100	in	UGB, city limits and tax lot lines are coincident		
1703154000200	in	UGB, city limits and tax lot lines are coincident		
1703154000400	split	split by city limits; mostly outside the UGB, only the "leg" portion is inside	Gateway	
17-03-22				
1703220003700	in	UGB, city limits and tax lot lines are coincident		
1703220004102	in	Adjacent to McKenzie River. Refer to plat.		Riverbend Phase 2 (survey)
17-03-23				
1703233200100	in			
1703233200200	in			
1703233200300	in			
1703233200400	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233202400	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233202600	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233202700	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233202800	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233203200	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203300	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203400	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203700	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203800	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203900	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233400100	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle
1703233400200	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle
1703233400300	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle
1703233400400	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle
1703233405400	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233405500	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233405600	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233405700	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233405800	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233405900	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233406000	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233406100	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233406200	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition

Tax lot #	Status	Description	Area	Note
1703233410800	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 2nd Addition
1703233410900	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 2nd Addition
1703233411000	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 2nd Addition
1703233411100	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 2nd Addition
1703234200100	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200200	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200300	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200400	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200500	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200600	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200700	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234300100	in			
1703234300200	in	UGB, city limits and tax lot lines are coincident		
1703234305500	in	UGB, city limits and tax lot lines are coincident		
1703234305600	in	UGB, city limits and tax lot lines are coincident		
1703234305700	in	UGB, city limits and tax lot lines are coincident		
1703234305800	in	UGB, city limits and tax lot lines are coincident		
1703234305900	in	UGB, city limits and tax lot lines are coincident		
1703234306000	in	UGB, city limits and tax lot lines are coincident		
1703234306100	in	UGB, city limits and tax lot lines are coincident		
1703234306200	in	UGB, city limits and tax lot lines are coincident		
1703234306300	in	UGB, city limits and tax lot lines are coincident		
1703234406000	in	UGB, city limits and tax lot lines are coincident		
1703234406100	in	UGB, city limits and tax lot lines are coincident		
1703234406200	in	UGB, city limits and tax lot lines are coincident		
1703234406300	in	UGB, city limits and tax lot lines are coincident		
1703234407900	in			PLA #94-11-222; CS #32540
1703234409300	in	UGB, city limits and tax lot lines are coincident		
1703234409400	in	UGB, city limits and tax lot lines are coincident		
1703234409500	in	UGB, city limits and tax lot lines are coincident		
1703234409600	in	UGB, city limits and tax lot lines are coincident		
1703234409700	in	UGB, city limits and tax lot lines are coincident		
1703234409800	in	UGB, city limits and tax lot lines are coincident		
1703234409900	in	UGB, city limits and tax lot lines are coincident		
1703234410000	in	UGB, city limits and tax lot lines are coincident		
1703234410100	in	UGB, city limits and tax lot lines are coincident		
1703234410200	in	UGB, city limits and tax lot lines are coincident		
17-03-24				
1703240000101	split	260' N of the N edge of Hayden Bridge Rd ROW	Hayden Bridge	Journal #94-02-28; Plat #94-PO567; CS #32260 & 32261

Tax lot #	Status	Description	Area	Note
1703240000102	in		Hayden Bridge	Journal #94-02-28; Plat #94-PO567; CS #32260 & 32261
1703240000103	split	260' N of the N edge of Hayden Bridge Rd ROW	Hayden Bridge	Journal #94-02-28; Plat #94-PO567; CS #32260 & 32261
1703240000104	in		Hayden Bridge	Journal #94-02-28; Plat #94-PO567; CS #32260 & 32261
1703240000300	split	375' N of the N edge of Hayden Bridge Rd ROW, include house	Hayden Bridge	
1703240000301	in			
1703240000401	split	375' N of the N edge of Hayden Bridge Rd ROW, include house	Hayden Bridge	
1703240000503	in			
1703240000507	in			
1703240000603	split	from the NE corner of the city limits on tax lot 1703243102000, then to a point 285' N of the N edge of Hayden Bridge ROW, on the east tax lot line of 1703240000603	Hayden Bridge	Journal #92-10-202 O'Niell; CS #33470 & 31021; Plat #92-P0306.
1703243100100	split	From NE corner of tax lot 1703243200301, to city limits on tax lot 1703243104000.	Hayden Bridge	
1703243100200	split	From NE corner of tax lot 1703243200301, to NW corner of city limits on tax lot 1703243100300.	Hayden Bridge	
1703243100300	split	From NE corner of tax lot 1703243200301, to NW corner of city limits on tax lot 1703243100300.	Hayden Bridge	
1703243100600	in			
1703243100701	in			
1703243100702	in			
1703243100704	in			
1703243100900	split	split by city limits	Hayden Bridge	
1703243102000	split	split by city limits, UGB and city limits are coincident	Hayden Bridge	
1703243104000	in	UGB, city limits and tax lot lines are coincident		
1703243104100	in	UGB, city limits and tax lot lines are coincident		
1703243104200	in	UGB, city limits and tax lot lines are coincident		
1703243200200	in			
1703243200301	in			
1703243200302	in			
1703243200303	in			
1703243200304	in			
1703243200305	in			
1703243200306	in			
1703243200307	in			
1703243200500	in			
1703243200600	in			
1703243200700	in			
1703243200800	in			

Tax lot #	Status	Description	Area	Note
1703243200900	in			
18-02-01				
1802010000100	split	follow ridgeline	SE Hills	
18-02-02				
1802020000100	split	follow ridgeline	SE Hills	
1802020000200	split	follow ridgeline	SE Hills	
1802020000300	split	follow ridgeline	SE Hills	
1802020000400	split	follow ridgeline	SE Hills	WEB
1802020000401	in		SE Hills	WEB
18-02-03				
1802030000600	in	follow ridgeline	SE Hills	
18-02-04				
1802040003000	split	approximately 450' S of Jasper Rd to a property corner, then W to a point on the W property line that is approximately 450' S of the Jasper Rd ROW. A drainage ditch on the W property line crosses the driveway at that point. The house and barn at 5119 Jasper Rd are inside the UGB.	Clearwater	
18-02-05				
1802050002600	split	Panhandle; 400' S of the S edge of the Jasper Rd. ROW	Clearwater	
1802050002800	split	E leg is split 450' S of the S edge of Jasper Rd ROW. W leg is split 220' S of the S edge of Jasper Rd ROW.	Clearwater	
1802050002801	split	On the E tax lot line, approximately 450' S of the S edge of Jasper Rd. ROW, then to the NW corner of the tax lot. The house (4855 Jasper Rd) is outside.	Clearwater	
1802051303501	in			
1802051303600	in			
1802051303700	in			
1802051303800	in			
1802051304100	in			
1802051304101	in			
1802051304200	in			
1802052300300	in			
1802052300400	in			
1802052300403	in			
1802052300500	in			
1802052300600	in			
1802052400100	in			Journal #1998-11-0255; Redwood Village plat

Tax lot #	Status	Description	Area	Note
1802052400200	in			Journal #1998-11-0255; Redwood Village plat
1802052401000	in			Journal #1998-11-0255; Redwood Village plat
1802052401100	in			Journal #1998-11-0255; Redwood Village plat
1802052401200	in			Journal #1998-11-0255; Redwood Village plat
1802052407900	in			Journal #1998-11-0255; Redwood Village plat
1802052408000	in			Journal #1998-11-0255; Redwood Village plat
1802052408100	in			Journal #1998-11-0255; Redwood Village plat
1802052408201	in			
1802052409400	in			Journal #1998-11-0255; Redwood Village plat
1802052409600	in			Journal #1998-11-0255; Redwood Village plat
1802052409700	in			Journal #1998-11-0255; Redwood Village plat
1802052409800	in			Journal #1998-11-0255; Redwood Village plat
1802052409900	in			Journal #1998-11-0255; Redwood Village plat
1802052410000	in			Journal #1998-11-0255; Redwood Village plat
1802052411000	in			Journal #1998-11-0255; Redwood Village plat
1802052412000	in			Journal #1998-11-0255; Redwood Village plat
1802052413000	in			Journal #1998-11-0255; Redwood Village plat
18-02-06				
1802060001006	in			
1802060001007	in			
1802060004600	in			
1802062403500	in			
1802062403501	in			
1802062403600	in			
1802064104902	in			

Tax lot #	Status	Description	Area	Note
1802064105700	in			
1802064105800	in			
1802064105900	in			
1802064106000	in			
1802064106100	in			
1802064106200	in			
1802064106300	in			
1802064114500	in			
1802064115900	in	UGB, city limits and tax lot lines are coincident; N bank of Jasper slough		filbert meadows, LRP2005-00010; SUB2005-00062
1802064200118	in			
1802064200119	in			
1802064200120	in			
1802064200121	in			
1802064200301	in			
1802064200500	in			
1802064200501	in			
1802064200503	split	connect SW corner of tax lot 1802064200800 to SE corner of tax lot 180206420600		
1802064200600	in			
1802064200800	in			
1802064200900	in			
18-02-09				
1802090000100	split	follow ridgeline from the most southerly NE corner of tax lot, to a point along Jasper Rd, 815' from the SW corner of the tax lot	SE Hills	WEB
1802090000600	split	panhandle; approximately 450' S of the S edge of Jasper Rd. ROW	Clearwater	
18-02-10				
1802100001600	in	UGB and tax lot lines are coincident	SE Hills	Weyerhauser Rd.
1802100000100	split	follow ridgeline to a point where the western tax lot line intersects north section line of 180210	SE Hills	WEB
18-02-11				
1802110000300	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)
1802110000400	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)
1802110001600	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)
1802110001700	split	interpretation with legal description	SE Hills	Weyerhauser Rd. Journal #1998-11-0256 contains legal description (attachment D)

<i>Tax lot #</i>	<i>Status</i>	<i>Description</i>	<i>Area</i>	<i>Note</i>
1802110002000	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)

Tax lot #	Status	Description	Area	Note
18-02-15				
1802150000100	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)
18-03-01				
1803010000701	in			
1803010001100	in			
1803010001301	in			
1803010003100	in			
1803010003200	in		willamette	
1803010003600	in			
18-03-02				
1803020000600	in			
18-03-11				
1803110000600	split	refer to description of UGB within I5 corridor	willamette	
1803110000700	split	refer to description of UGB within I5 corridor	willamette	
1803110001800	in			
18-03-12				
1803120000500	in			
ROW/other				
Jasper Rd.	in	UGB is the S edge of the Jasper Rd ROW, include entire ROW		
Mill Race	in	the Mill Race within 18-03-01 is entirely within the UGB, UGB is top of S bank		
I-105	in	I-105 within 17-02-29 and 17-02-30 is within the UGB		
17-02-35	in	UGB is the N edge of the Thurston Rd ROW, E of 69th Street to the E lot line of 1702362400200		
18-02-06-24	in	The ROW for Garden Ave and Kintzley Ave are within the UGB		
17-02-36	in	UGB is the N edge of the Thurston Rd ROW		
I5 description		refer to methodology in adopted ordinance		

Summary of Methodology Utilized to Refine the Location of the Springfield Urban Growth Boundary

Purpose of this action

1. To establish a tax lot-specific map of the acknowledged Metro Urban Growth Boundary, east of Interstate 5, in accordance with OAR 660-024-0020(2).
2. To establish a separate Urban Growth Boundary for the city of Springfield, as required by ORS 197.304.

Background & Findings

1. The Urban Growth Boundary (UGB) was originally acknowledged by the Land Conservation and Development Commission on August 19, 1982.
2. The existing map of the UGB was adopted by the Springfield City Council on May 17, 2004, by Ordinance No. 6087.
3. The tax lot-specific map of the acknowledged Metro Urban Growth Boundary, east of Interstate 5 establishes a more precise location of the UGB.
4. The methodology used to determine the precise location of the acknowledged UGB is based on the adopted policies contained in the Eugene-Springfield Metropolitan Area General Plan (Metro Plan).
5. As adopted, the UGB is only tax lot-specific where it is coterminous with city limits, where it has been determined through the annexation process, and where it falls on the outside edge of existing or planned rights-of-way. (Page II-G-14 of the Metro Plan).
6. Where it is not tax lot-specific, the UGB is approximately 200' wide. This is in accordance with the adopted policies in the Metro Plan as well as decisions by the Lane County Hearings Official.
 - a. Levi Landing (Journal #1997-06-142 & #1999-06-144) is the only area where a more precise location of the UGB east of I5 has been determined by the Lane County Hearings Official.
 - b. Letter from Steve Gordon, dated June 29, 1999.
 - c. The best evidence that identifies the location of the UGB in the SE Hills is:
 - i. The city attorney and city staff endorsed the location of the ridgeline separating the drainage basins, as proposed in Journal #2000-06-128, Dilbeck, and
 - ii. The Springfield Planning Commission found the legal description contained in Journal #1998-11-256, Smejkal, accurately describes a portion of the UGB in the southeast hills.

Methodology

1. OAR 660-024-0020(2): “The UGB and amendments to the UGB must be shown on the city and county plan and zone maps at a scale sufficient to determine which particular lots or parcels are included in the UGB. Where a UGB does not follow lot or parcel lines, the map must provide sufficient information to determine the precise UGB location.”
 - a. This OAR requires the UGB to be shown at a scale that identifies which particular tax lots are included in the UGB. If a tax lot is split by the UGB, there must be sufficient information to determine the precise UGB location.
 - b. Where the UGB does not follow tax lot lines, a written description shall provide sufficient information to determine the precise UGB location. This information is contained in the table called: “Tax lots Adjacent and Split by the UGB”
2. The UGB is coincident with tax lot lines unless the tax lot line is outside the 200’ wide area.
3. The UGB is coincident with tax lot lines when they are coterminous with the outside edge of rights-of-way, so the full width of the right-of-way is inside the UGB.
4. Roads and Rights of Way. The UGB shall lie along the outside edge of existing and planned rights-of-way that form a portion of the UGB so that the full right-of-way is within the UGB. Refer to Policy #2, Page II-C-4 of the Metro Plan.
5. The location of the UGB in relation to the Interstate 5 corridor is based on the policies contained in “Jurisdictional Responsibility” on Page II-D of the Metro Plan:

“The division of responsibility for metropolitan planning between the two cities is the Interstate 5 Highway. Lane County jurisdiction is between the urban growth boundary (UGB) and *Metro Plan* Plan Boundary (Plan Boundary); and the county has joint responsibility with Eugene between the city limits and UGB west of the Interstate 5 Highway and with Springfield between the city limits and UGB east of the Interstate 5 Highway. State law (1981) provides a mechanism for creation of a new city in the River Road and Santa Clara area. Refer to Metro Plan Chapter IV and intergovernmental agreements to resolve specific issues of jurisdiction.”

 - a. **General description.** The northbound lane is inside the Springfield UGB. The southbound lane is outside the Springfield UGB. For the area underneath the Willamette River Bridge, the UGB and the city limits are coincident.
 - b. **Northern terminus.** Extend the northern tax lot line of 1703150000100 to the west until it intersects the centerline of the Interstate 5 right-of-way.
 - c. **Southern terminus.** Extend the southernmost point of tax lot 180311001800 that is south of and adjacent to the Filbert Grove 5th Addition, to the W, to the intersection of the Interstate 5 centerline and the common section line of TRS 180311 and 180310. This point is approximately 275’ south of the northbound Interstate 5 on-ramp.
 - d. **Centerline.** For the purposes of the UGB location, the centerline is located within the area between the northbound and southbound travel lanes as they are currently located. A more precise location of the current centerline is included in the following metes and bounds description. If the travel lanes are shifted and

the metes and bounds description conflicts with the new travel lanes, the general description shall apply.

Beginning at the Northwest corner of the Ashley O. Stevens DLC no. 45 in Township 17 South, Range 3 West in the Willamette Meridian, thence South 83°17'27" East 1025.05 feet to the centerline of Pacific highway Interstate 5; thence North 6°38'21" East 1636.35 feet along said centerline to Engineers centerline station 402+01.88 being the **TRUE POINT OF BEGINNING** of the herein UGB line description; thence along the centerline of said Pacific Highway Interstate 5 the following courses: South 6°42'32" West 13,695.08 feet to Engineers centerline station 538+96.95 PS; thence along a spiral curve to the left (the long chord of which bears South 4°17'57" West 1213.40 feet) to Engineers centerline station 551+10.84 PT BK = 551+24.85 POT AH; thence South 1°53'22" West 3690.63 feet to Engineers centerline station 588+15.62 PS; thence along a spiral curve to the left (the long chord of which bears South 9°18'13" East 1505.42 feet) to Engineers centerline station 603+34.93 PT; thence South 20°29'48" East 15.13 feet to Engineers centerline station 603+34.93 POT BK = 202+88.88 POT AH; thence South 20°29'48" East 233.64 feet to Engineers centerline station 205+22.53 PS; thence along a spiral curve to the left (the long chord of which bears South 54°29'18" East 2982.07 feet) to Engineers centerline station 237+41.86 PT; thence South 88°28'48" East 738.65 feet to Engineers centerline station 244+80.54 PS; thence along a spiral curve to the right (the long chord of which bears South 47°03'03" East 2279.74 feet) to Engineers centerline station 266+63.16 PT; thence South 5°37'18" East 1049.33 feet to Engineers centerline station 277+12.49 PS; thence along a spiral curve to the left (the long chord of which bears South 9°31'54" East 1431.01 feet) to Engineers centerline station 287+45.82 PCS and there ending, all in Lane County, Oregon.

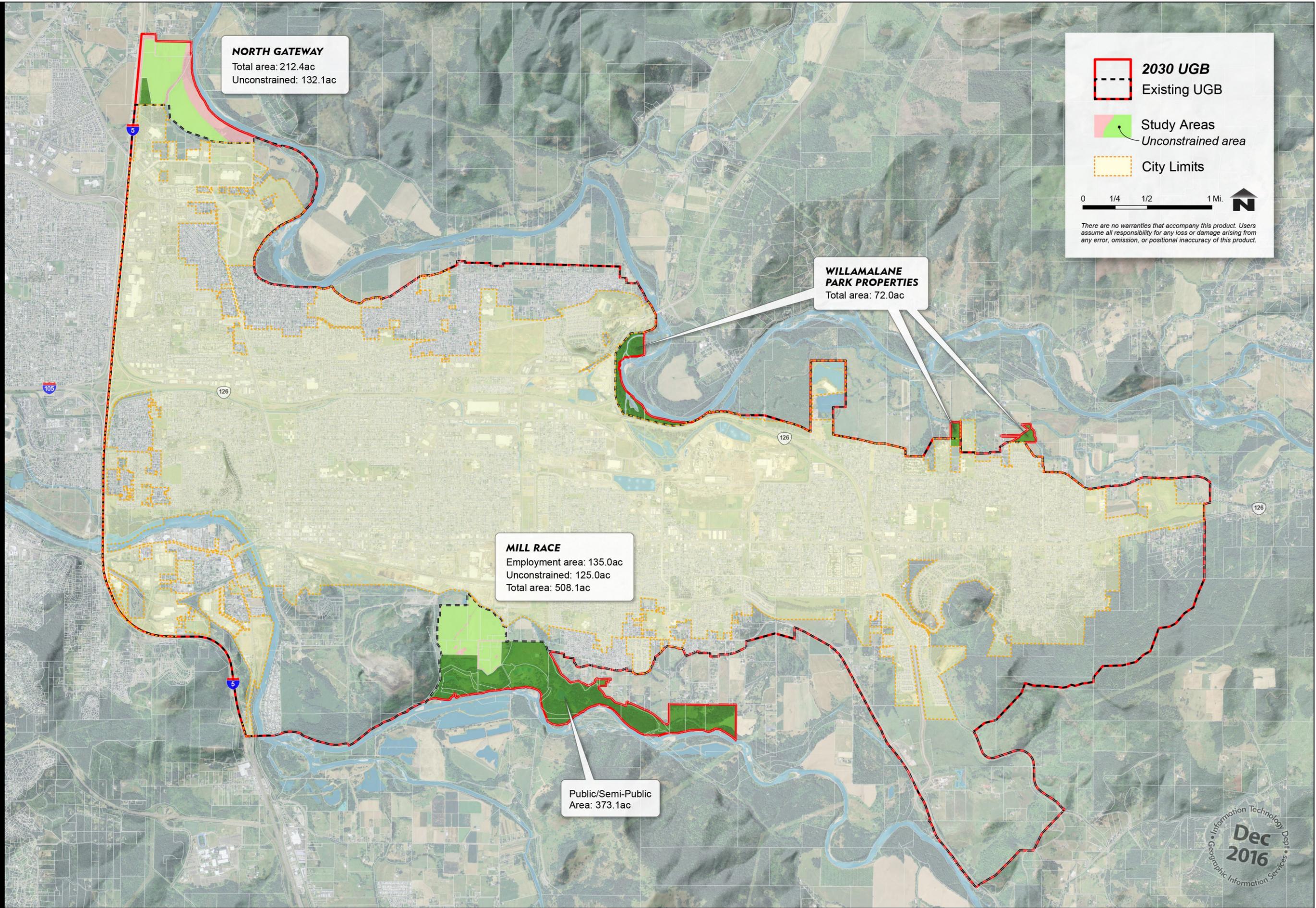
Basis of Bearings for this description is Oregon State Plane Coordinate System, South Zone, NAD 83/91 Datum.

6. Split Tax Lots. When the UGB is not coincident with tax lot lines, the criteria from the Metro Plan shall apply. The following criteria are from Page II-G-14 of the Metro Plan. The UGB shall follow the most appropriate feature:
 - a. Protection of Agricultural Lands
 - b. Protection of Forest Lands
 - c. Ridgeline (Drainage Basin)
 - d. Orderly and Economic Public Services
 - e. Floodway Fringe
 - f. Protection of Wetlands
 - g. Protection of Sand and Gravel Resources
 - h. Airport Protection
 - i. Existing Development and Services (City Limits)
 - j. Meet Economic Goals

7. The following areas contain tax lots that are split by the UGB. Refer to the detail maps in the technical supplement for further clarification.
- a. **Hayden Bridge Area Split Tax Lots:** The location of the UGB is a fixed distance (300') that is measured from the northern edge of the Hayden Bridge right-of-way, unless it has been previously determined as a result of a land use decision or annexation. The location of 300' north of the right of way was chosen since it included most of the existing dwellings and was within the 200' area. In addition, the land use decisions indicated the UGB was not intended to follow the Hayden Bridge right of way.
 - b. **High Banks Area Split Tax Lots.** The location of the UGB is either:
 - A fixed distance (450') that is measured from the northern edge of the High Banks right-of-way, or
 - Coincident with the city limits.
 - c. **North Gateway Area Split Tax Lots.** The UGB is coincident with the unnumbered tax lot that contains the public drainage facility. The tax lot is entirely within the UGB.
 - d. **Thurston Area Split Tax Lots.** The city limits extend outside the UGB on the tax lot that contains the Thurston Middle School. On that tax lot, the UGB is coincident with the section line.
 - e. **Southeast Hills Area Split Tax Lots.** The adopted policies indicate the UGB should follow the ridgeline (refer to the table "Metro Plan Urban Growth Boundary Map Key" from Page II-G-21 of the Metro plan). The line was originally drawn in 1982 and generally follows the ridgeline. The city's current mapping technology is able to more accurately follow the ridgeline. The letter from Steve Gordon, dated June 29, 1999, provides evidence of the intent to follow the ridgeline. Journal #1998-11-0256 is a land use decision that provided a legal description for a portion of this area.
 - f. **Clearwater Area Split Tax Lots:** When the UGB does not follow tax lot lines in this area, its location is based on aerial photo interpretation and proximity to the Jasper Rd. right of way. This effort also included a site visit and discussions with the landowner of 5119 Jasper Rd.
 - g. **Willamette Area Split Tax Lots:** Refer to the description of the UGB within the I5 corridor. The location is based on the policies contained in "Jurisdictional Responsibility" on Page II-D of the Metro Plan.



SPRINGFIELD COMPREHENSIVE PLAN: Proposed UGB Expansion Areas



NORTH GATEWAY
Total area: 212.4ac
Unconstrained: 132.1ac

MILL RACE
Employment area: 135.0ac
Unconstrained: 125.0ac
Total area: 508.1ac

**WILLAMALANE
PARK PROPERTIES**
Total area: 72.0ac

Public/Semi-Public
Area: 373.1ac

2030 UGB

Existing UGB

Study Areas
Unconstrained area

City Limits

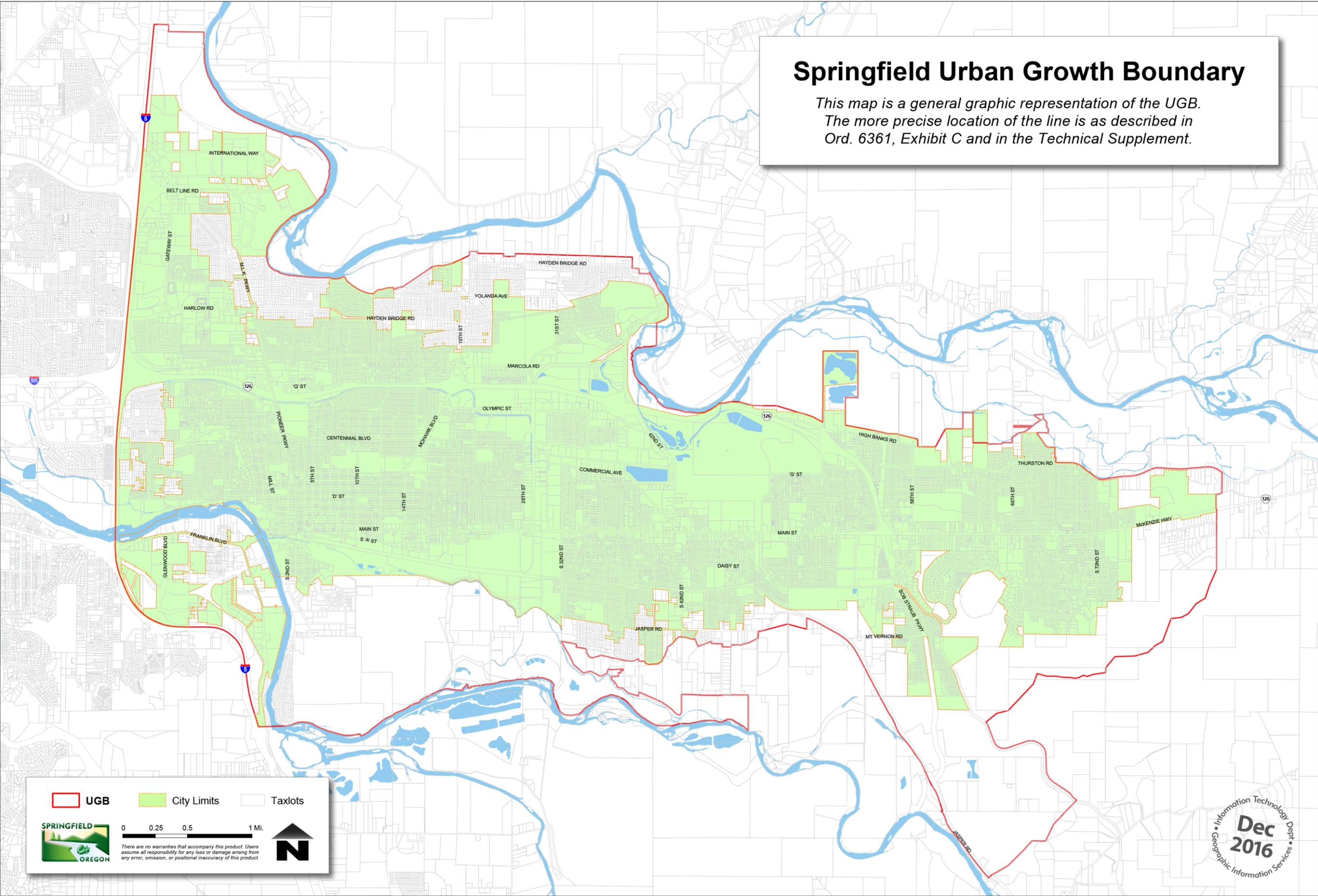
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There are no warranties that accompany this product. Users assume all responsibility for any loss or damage arising from any error, omission, or positional inaccuracy of this product.

Information Technology, Inc.
Dec 2016
Geographic Information Services, Inc.

Springfield Urban Growth Boundary

This map is a general graphic representation of the UGB. The more precise location of the line is as described in Ord. 6361, Exhibit C and in the Technical Supplement.



	maptaxlot	NET_AREA	PLAN DESIGNATION		ZONING	
			EXISTING	PROPOSED	EXISTING	PROPOSED
NORTH GATEWAY	1703100002300	0.05	Agriculture	UHA-E	E30	Agriculture
	1703100002400	22.84	Agriculture	UHA-E	E30	Agriculture
	1703100002400	3.43	Agriculture	Natural Resources	E30	Agriculture
	1703100002500	58.71	Agriculture	UHA-E	E30	Agriculture
	1703100002500	3.33	Agriculture	Natural Resources	E30	Agriculture
	1703150000800	0.77	Agriculture	Public/Semi-Public	E30	Public Land & Open Space
	1703150000801	8.94	Agriculture	Public/Semi-Public	E30	Public Land & Open Space
	1703154000400	55.03	Agriculture	UHA-E	E30	Agriculture
	1703154000400	46.58	Agriculture	Natural Resources	E30	Agriculture
MILL RACE	1802064201200	0.07	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1802064201201	0.55	Agriculture	Public/Semi-Public	E25	Public Land & Open Space
	1802060001300	39.12	Agriculture	Public/Semi-Public	E25	Public Land & Open Space
	1802070000801	4.52	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1802060001500	32.21	Agriculture	Public/Semi-Public	E25	Public Land & Open Space
	1802060001600	74.74	Agriculture	Public/Semi-Public	E25	Public Land & Open Space
	1802050001801	0.62	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1802060001606	5.29	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1802080000300	32.81	Parks	Public/Semi-Public	PR	Public Land & Open Space
	1802080000400	19.90	Parks	Public/Semi-Public	PR	Public Land & Open Space
	1802080000500	17.76	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1802080000600	29.40	Parks	Public/Semi-Public	SG	Public Land & Open Space
	1802060004501	7.48	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1802060004503	0.09	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1802080000602	5.78	Parks	Public/Semi-Public	SG	Public Land & Open Space
	1803010000500	0.13	Parks	UHA-E	E25	Agriculture
	1803010000501	22.10	Agriculture	UHA-E	E25	Agriculture
	1803010000502	20.55	Agriculture	UHA-E	E25	Agriculture
	1803010001199	3.41	Agriculture	UHA-E	E25	Agriculture
	1803010001300	8.32	Agriculture	UHA-E	E25	Agriculture
	1803010001302	21.51	Agriculture	Public/Semi-Public	E25	Public Land & Open Space
	1803010001400	9.94	Agriculture	UHA-E	E25	Agriculture
	1803010001500	0.67	Agriculture	UHA-E	E25	Agriculture

	1803010001600	0.34	Agriculture	UHA-E	E25	Agriculture
	1803010001700	10.03	Agriculture	UHA-E	E25	Agriculture
	1803010001701	5.03	Agriculture	UHA-E	E25	Agriculture
	1803010001702	5.26	Agriculture	UHA-E	E25	Agriculture
	1803010001800	1.71	Agriculture	UHA-E	E25	Agriculture
	1803010001801	1.44	Agriculture	UHA-E	E25	Agriculture
	1803010001900	0.95	Agriculture	UHA-E	E25	Agriculture
	1803010002000	2.48	Agriculture	UHA-E	E25	Agriculture
	1803010002100	0.91	Agriculture	UHA-E	E25	Agriculture
	1803010002300	5.86	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1803010002600	3.03	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1803010002700	19.05	Agriculture	Public/Semi-Public	E25	Public Land & Open Space
	1803010002800	3.16	Parks	Public/Semi-Public	PR	Public Land & Open Space
	1803010002900	1.85	Agriculture	Public/Semi-Public	E25	Public Land & Open Space
	1803010003000	22.20	Parks	Public/Semi-Public	PR	Public Land & Open Space
	1803010003201	14.72	Parks	Public/Semi-Public	PR	Public Land & Open Space
	1803010003500	3.98	Parks	Public/Semi-Public	SG	Public Land & Open Space
	1803010003700	39.18	Agriculture	UHA-E	E25	Agriculture
	1802064201000	2.19	Agriculture	Public/Semi-Public	E25	Public Land & Open Space
	1802064201100	0.30	Parks	Public/Semi-Public	E25	Public Land & Open Space
	1802064201101	0.69	Agriculture	Public/Semi-Public	E25	Public Land & Open Space
WILLAMALANE PARKS	1702270001101	6.44	Agriculture	Public/Semi-Public	E30	Public Land & Open Space
	1702270001502	9.99	Agriculture	Public/Semi-Public	E30	Public Land & Open Space
	1702290002901	7.50	Parks	Public/Semi-Public	E40	Public Land & Open Space
	1702300000401	42.75	Parks	Public/Semi-Public	E40	Public Land & Open Space

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 - b. Letter from Steve Gordon, dated June 29, 1999.
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 - ii. The Springfield Planning Commission found the legal description contained in Journal #1998-11-256, Smejkal, accurately describes a portion of the UGB in the southeast hills.
7. Where the UGB description refers to the "Line of Ordinary High Water", this means the line on the bank or shore to which the high water ordinarily rises annually in season. This definition is per ORS 274.005(3).

Methodology

1. OAR 660-024-0020(2): “The UGB and amendments to the UGB must be shown on the city and county plan and zone maps at a scale sufficient to determine which particular lots or parcels are included in the UGB. Where a UGB does not follow lot or parcel lines, the map must provide sufficient information to determine the precise UGB location.”
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2. The UGB is coincident with tax lot lines unless the tax lot line is outside the 200’ wide area.
3. The UGB is coincident with tax lot lines when they are coterminous with the outside edge of rights-of-way, so the full width of the right-of-way is inside the UGB.
4. Roads and Rights of Way. The UGB shall lie along the outside edge of existing and planned rights-of-way that form a portion of the UGB so that the full right-of-way is within the UGB. Refer to Policy #2, Page II-C-4 of the Metro Plan.
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 - a. **General description.** The northbound lane is inside the Springfield UGB. The southbound lane is outside the Springfield UGB. For the area underneath the Willamette River Bridge, the UGB and the city limits are coincident.
 - b. **Northern terminus.** Extend the southern tax lot line of 1703100001900 to the west until it intersects the centerline of the Interstate 5 right-of-way.
 - c. **Southern terminus.** Extend the southernmost point of tax lot 180311001800 that is south of and adjacent to the Filbert Grove 5th Addition, to the W, to the intersection of the Interstate 5 centerline and the common section line of TRS 180311 and 180310. This point is approximately 275’ south of the northbound Interstate 5 on-ramp.
 - d. **Centerline.** For the purposes of the UGB location, the centerline is located within the area between the northbound and southbound travel lanes as they are currently located. A more precise location of the current centerline is included in the following metes and bounds description. If the travel lanes are shifted and

the metes and bounds description conflicts with the new travel lanes, the general description shall apply.

Beginning at the Northwest corner of the Ashley O. Stevens DLC no. 45 in Township 17 South, Range 3 West in the Willamette Meridian, thence South $83^{\circ}17'27''$ East 1025.05 feet to the centerline of Pacific highway Interstate 5; thence North $6^{\circ}38'21''$ East 1636.35 feet along said centerline to Engineers centerline station 402+01.88; thence North $6^{\circ}42'32''$ East 2934.72 feet, more or less along said centerline to Engineers centerline station 372+67.16, said station being 277.25 feet southerly along said centerline from Engineers centerline station 369+89.91 PT, as depicted on Lane County Survey maps CSF 23305 and CSF 28681, records of the Lane County Surveyors Office, in Lane County, Oregon, being the **TRUE POINT OF BEGINNING** of the herein UGB line description; thence along the centerline of said Pacific Highway Interstate 5 the following courses: South $6^{\circ}42'32''$ West 16,629.80 feet, more or less to Engineers centerline station 538+96.95 PS; thence along a spiral curve to the left (the long chord of which bears South $4^{\circ}17'57''$ West 1213.40 feet) to Engineers centerline station 551+10.84 PT BK = 551+24.85 POT AH; thence South $1^{\circ}53'22''$ West 3690.63 feet to Engineers centerline station 588+15.62 PS; thence along a spiral curve to the left (the long chord of which bears South $9^{\circ}18'13''$ East 1505.42 feet) to Engineers centerline station 603+34.93 PT; thence South $20^{\circ}29'48''$ East 15.13 feet to Engineers centerline station 603+50.06 POT BK = 202+88.88 POT AH; thence South $20^{\circ}29'48''$ East 233.64 feet to Engineers centerline station 205+22.53 PS; thence along a spiral curve to the left (the long chord of which bears South $54^{\circ}29'18''$ East 2982.07 feet) to Engineers centerline station 237+41.86 PT; thence South $88^{\circ}28'48''$ East 738.65 feet to Engineers centerline station 244+80.54 PS; thence along a spiral curve to the right (the long chord of which bears South $47^{\circ}03'03''$ East 2279.74 feet) to Engineers centerline station 266+63.16 PT; thence South $5^{\circ}37'18''$ East 1049.33 feet to Engineers centerline station 277+12.49 PS; thence along a spiral curve to the left (the long chord of which bears South $9^{\circ}31'54''$ East 1431.01 feet) to Engineers centerline station 287+45.82 PCS and there ending, all in Lane County, Oregon.

Basis of Bearings for this description is Oregon State Plane Coordinate System, South Zone, NAD 83/91 Datum.

6. Split Tax Lots. When the UGB is not coincident with tax lot lines, the criteria from the Metro Plan shall apply. The following criteria are from Page II-G-14 of the Metro Plan. The UGB shall follow the most appropriate feature:
 - a. Protection of Agricultural Lands
 - b. Protection of Forest Lands
 - c. Ridgeline (Drainage Basin)
 - d. Orderly and Economic Public Services
 - e. Floodway Fringe
 - f. Protection of Wetlands

- g. Protection of Sand and Gravel Resources
 - h. Airport Protection
 - i. Existing Development and Services (City Limits)
 - j. Meet Economic Goals
7. The following areas contain tax lots that are split by the UGB. Refer to the detail maps in the technical supplement for further clarification.
- a. **Hayden Bridge Area Split Tax Lots:** The location of the UGB is a fixed distance (300') that is measured from the northern edge of the Hayden Bridge right-of-way, unless it has been previously determined as a result of a land use decision or annexation. The location of 300' north of the right of way was chosen since it included most of the existing dwellings and was within the 200' area. In addition, the land use decisions indicated the UGB was not intended to follow the Hayden Bridge right of way.
 - b. **High Banks Area Split Tax Lots.** The location of the UGB is either:
 - A fixed distance (450') that is measured from the northern edge of the High Banks right-of-way, or
 - Coincident with the city limits.
 - c. **North Gateway Area Split Tax Lots.** Refer to the description of the UGB within the I5 corridor. The location is based on the policies contained in "Jurisdictional Responsibility" on Page II-D of the Metro Plan.
 - d. **Thurston Area Split Tax Lots.** The city limits extend outside the UGB on the tax lot that contains the Thurston Middle School. On that tax lot, the UGB is coincident with the section line.
 - e. **Southeast Hills Area Split Tax Lots.** The adopted policies indicate the UGB should follow the ridgeline (refer to the table "*Metro Plan* Urban Growth Boundary Map Key" from Page II-G-21 of the Metro plan). The line was originally drawn in 1982 and generally follows the ridgeline. The city's current mapping technology is able to more accurately follow the ridgeline. The letter from Steve Gordon, dated June 29, 1999, provides evidence of the intent to follow the ridgeline. Journal #1998-11-0256 is a land use decision that provided a legal description for a portion of this area.
 - f. **Clearwater Area Split Tax Lots:** When the UGB does not follow tax lot lines in this area, its location is based on aerial photo interpretation and proximity to the Jasper Rd. right of way. This effort also included a site visit and discussions with the landowner of 5119 Jasper Rd.
 - g. **Willamette Area Split Tax Lots:** Refer to the description of the UGB within the I5 corridor. The location is based on the policies contained in "Jurisdictional Responsibility" on Page II-D of the Metro Plan.

Description of the Springfield UGB within the Interstate 5 corridor

The location of the UGB in relation to the Interstate 5 (I-5) corridor is based on the policies contained in "Jurisdictional Responsibility" on Page II-D of the Metro Plan. It states:

"The division of responsibility for metropolitan planning between the two cities is the Interstate 5 Highway. Lane County jurisdiction is between the urban growth boundary (UGB) and *Metro Plan* Plan Boundary (Plan Boundary); and the county has joint responsibility with Eugene between the city limits and UGB west of the Interstate 5 Highway and with Springfield between the city limits and UGB east of the Interstate 5 Highway. State law (1981) provides a mechanism for creation of a new city in the River Road and Santa Clara area. Refer to Metro Plan Chapter IV and intergovernmental agreements to resolve specific issues of jurisdiction."

General description

The northbound lane is inside the Springfield UGB. The southbound lane is outside the Springfield UGB. For the area underneath the Willamette River Bridge, the UGB and the city limits are coincident.

Northern terminus

Extend the southern tax lot line of 1703100001900 to the west until it intersects the centerline of the Interstate 5 right-of-way.

Southern terminus

Extend the southernmost point of tax lot 180311001800 that is south of and adjacent to the Filbert Grove 5th Addition, to the W, to the intersection of the I-5 centerline and the common section line of TRS 180311 and 180310. This point is approximately 275' south of the NB I-5 onramp.

Metes and bounds description

This is a metes and bounds description of the northern and southern terminus points of the Springfield UGB within the I-5 right of way.

For the purposes of the UGB location, the centerline is located within the area between the northbound and southbound travel lanes as they are currently located. A more precise location of the current centerline is included in the following metes and bounds description. If the travel lanes are shifted and the metes and bounds description conflicts with the new travel lanes, the general description shall apply.

Beginning at the Northwest corner of the Ashley O. Stevens DLC no. 45 in Township 17 South, Range 3 West in the Willamette Meridian, thence South 83°17'27" East 1025.05 feet to the

centerline of Pacific highway Interstate 5; thence North $6^{\circ}38'21''$ East 1636.35 feet along said centerline to Engineers centerline station 402+01.88; thence North $6^{\circ}42'32''$ East 2934.72 feet, more or less along said centerline to Engineers centerline station 372+67.16, said station being 277.25 feet southerly along said centerline from Engineers centerline station 369+89.91 PT, as depicted on Lane County Survey maps CSF 23305 and CSF 28681, records of the Lane County Surveyors Office, in Lane County, Oregon, being the **TRUE POINT OF BEGINNING** of the herein UGB line description; thence along the centerline of said Pacific Highway Interstate 5 the following courses: South $6^{\circ}42'32''$ West 16,629.80 feet, more or less to Engineers centerline station 538+96.95 PS; thence along a spiral curve to the left (the long chord of which bears South $4^{\circ}17'57''$ West 1213.40 feet) to Engineers centerline station 551+10.84 PT BK = 551+24.85 POT AH; thence South $1^{\circ}53'22''$ West 3690.63 feet to Engineers centerline station 588+15.62 PS; thence along a spiral curve to the left (the long chord of which bears South $9^{\circ}18'13''$ East 1505.42 feet) to Engineers centerline station 603+34.93 PT; thence South $20^{\circ}29'48''$ East 15.13 feet to Engineers centerline station 603+50.06 POT BK = 202+88.88 POT AH; thence South $20^{\circ}29'48''$ East 233.64 feet to Engineers centerline station 205+22.53 PS; thence along a spiral curve to the left (the long chord of which bears South $54^{\circ}29'18''$ East 2982.07 feet) to Engineers centerline station 237+41.86 PT; thence South $88^{\circ}28'48''$ East 738.65 feet to Engineers centerline station 244+80.54 PS; thence along a spiral curve to the right (the long chord of which bears South $47^{\circ}03'03''$ East 2279.74 feet) to Engineers centerline station 266+63.16 PT; thence South $5^{\circ}37'18''$ East 1049.33 feet to Engineers centerline station 277+12.49 PS; thence along a spiral curve to the left (the long chord of which bears South $9^{\circ}31'54''$ East 1431.01 feet) to Engineers centerline station 287+45.82 PCS and there ending, all in Lane County, Oregon.

Basis of Bearings for this description is Oregon State Plane Coordinate System, South Zone, NAD 83/91 Datum.

Springfield UGB within the Interstate 5 Corridor
Metes and Bounds Description (Revised August 20, 2015)

Beginning at the Northwest corner of the Ashley O. Stevens DLC no. 45 in Township 17 South, Range 3 West in the Willamette Meridian, thence South $83^{\circ}17'27''$ East 1025.05 feet to the centerline of Pacific Highway Interstate 5; thence North $6^{\circ}38'21''$ East 1636.35 feet along said centerline to Engineers centerline station 402+01.88; thence North $6^{\circ}42'32''$ East 2934.72 feet, more or less along said centerline to Engineers centerline station 372+67.16, said station being 277.25 feet southerly along said centerline from Engineers centerline station 369+89.91 PT, as depicted on Lane County Survey maps CSF 23305 and CSF 28681, records of the Lane County Surveyors Office, in Lane County, Oregon, being the **TRUE POINT OF BEGINNING** of the herein UGB line description; thence along the centerline of said Pacific Highway Interstate 5 the following courses: South $6^{\circ}42'32''$ West 16,629.80 feet, more or less to Engineers centerline station 538+96.95 PS; thence along a spiral curve to the left (the long chord of which bears South $4^{\circ}17'57''$ West 1213.40 feet) to Engineers centerline station 551+10.84 PT BK = 551+24.85 POT AH; thence South $1^{\circ}53'22''$ West 3690.63 feet to Engineers centerline station 588+15.62 PS; thence along a spiral curve to the left (the long chord of which bears South $9^{\circ}18'13''$ East 1505.42 feet) to Engineers centerline station 603+34.93 PT; thence South $20^{\circ}29'48''$ East 15.13 feet to Engineers centerline station 603+50.06 POT BK = 202+88.88 POT AH; thence South $20^{\circ}29'48''$ East 233.64 feet to Engineers centerline station 205+22.53 PS; thence along a spiral curve to the left (the long chord of which bears South $54^{\circ}29'18''$ East 2982.07 feet) to Engineers centerline station 237+41.86 PT; thence South $88^{\circ}28'48''$ East 738.65 feet to Engineers centerline station 244+80.54 PS; thence along a spiral curve to the right (the long chord of which bears South $47^{\circ}03'03''$ East 2279.74 feet) to Engineers centerline station 266+63.16 PT; thence South $5^{\circ}37'18''$ East 1049.33 feet to Engineers centerline station 277+12.49 PS; thence along a spiral curve to the left (the long chord of which bears South $9^{\circ}31'54''$ East 1431.01 feet) to Engineers centerline station 287+45.82 PCS and there ending, all in Lane County, Oregon.

Basis of Bearings for this description is Oregon State Plane Coordinate System, South Zone, NAD 83/91 Datum.

List of tax lots that are adjacent to and inside, or split by the UGB

4/5/2011 revised 10/8/2015

Tax lot #	Status	Description	Area	Note
17-02-19	inside UGB or split by UGB	If the tax lot is split by the UGB, where is the UGB located?	name of area containing split tax lots	Plat, Survey, or land use decision
1702190000101	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	Journal #94-02-32; plat #94-P0555; CS #32200
1702190000203	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000300	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000400	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000500	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000501	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000601	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000699	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000701	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	SUB2003-00014; Plat #2004- PO1787
1702190000800	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190000900	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	Journal #87-03-20; CS #28405
1702190001000	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190001100	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702190001200	split	300' N of N edge of Hayden Bridge ROW	Hayden Bridge	
1702194100101	in			
1702194100102	in			
1702194100200	in			
1702194100300	in			
1702194100800	in			
1702194100900	in			
1702194100901	in			
1702194100902	in			
1702194102900	in			
17-02-20				
1702200000500	in	tax lot line, city limits and UGB are coincident		
1702200000600	in	tax lot line, city limits and UGB are coincident		
1702200000700	in	tax lot line, city limits and UGB are coincident		
1702200000800	in	tax lot line, city limits and UGB are coincident		
1702200001301	in	tax lot line, city limits and UGB are coincident		

Tax lot #	Status	Description	Area	Note
17-02-27				
1702270000901	split	City limits and UGB are coincident	Highbanks	
1702270000902	split	City limits and UGB are coincident	Highbanks	
1702270001002	split	connect the most northerly NE corner of tax lot 1702342200100 to NW corner of tax lot 1702342100400.	Highbanks	
1702270001004	in			
1702270001101	in			
1702270001102	in			
1702270001502	in			
1702270002002	in			
1702270002100	in			
17-02-28				
1702280000101	split	UGB and city limits are coincident	Highbanks	split by city limits
1702280000102	in			
1702280000300	split	UGB and city limits are coincident	Highbanks	split by city limits
1702280000301	in			
1702280000302	in			
1702280000401	in	UGB, city limits and tax lot lines are coincident		
1702280000402	in			
1702280000405	in			
1702280000406	in	UGB, city limits and tax lot lines are coincident		
1702280000500	split	450' N of the N edge of Highbanks ROW, then coincident with city limits east of tax lot 1702280000600	Highbanks	
1702280000600	in	UGB, city limits and tax lot lines are coincident		
1702284300200	in			
1702284300202	in	UGB, city limits and tax lot lines are coincident		
1702284300203	in			
1702284301308	in	UGB, city limits and tax lot lines are coincident		
1702284301309	in	UGB, city limits and tax lot lines are coincident		
17-02-29				
1702290002800	split	450' N of Highbanks ROW on the eastern lot line; connect to NE corner of tax lot 1702290002900	Highbanks	
1702290002900	split	Multi-part tax lot. Extend the UGB from tax lot 2800 to the W, coincident with tax lot line 2900 until it intersects the N edge of the ROW of I-105	Highbanks	
1702290002901	in	all of the tax lot, including all adjacent side channels of the McKenzie River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the left bank (as facing downstream) of the main channel of the McKenzie River		
1702290003100	split	UGB and city limits are coincident	Highbanks	

Tax lot #	Status	Description	Area	Note
17-02-30				
1702300000401	in	all of the tax lot, including all adjacent side channels of the McKenzie River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the left bank (as facing downstream) of the main channel of the McKenzie River		
17-02-34				
1702341107900	in	UGB, city limits and tax lot lines are coincident		
1702341108000	in	UGB, city limits and tax lot lines are coincident		
1702341108100	in	UGB, city limits and tax lot lines are coincident		
1702341108200	in	UGB, city limits and tax lot lines are coincident		
1702341108300	in	UGB, city limits and tax lot lines are coincident		
1702341109000	in	UGB, city limits and tax lot lines are coincident		
1702341109100	in	UGB, city limits and tax lot lines are coincident		
1702341114900	in	UGB, city limits and tax lot lines are coincident		
1702341115000	in	UGB, city limits and tax lot lines are coincident		
1702341115100	in	UGB, city limits and tax lot lines are coincident		
1702341115200	in	UGB, city limits and tax lot lines are coincident		
1702341115300	in	UGB, city limits and tax lot lines are coincident		
1702341115400	in	UGB, city limits and tax lot lines are coincident		
1702341115500	split	split by city limits. Only "leg" portion is inside	Hayden Bridge	UGB formally interpreted in Levi Landing (#97-06-142); refer to plats of Levi Landing
1702341200100	in	UGB, city limits and tax lot lines are coincident		
1702341200500	split	Split by section line 170227 & 170234	Thurston	city limits outside UGB, Thurston Middle School
1702342100400	in	UGB, city limits and tax lot lines are coincident	Thurston	
1702342200100	in			
17-02-35				
1702352204801	in			
1702352204900	split	split by city limits	Thurston	
17-02-36				
1702362000403	in	UGB, city limits and tax lot lines are coincident on most easterly tax lot line		
1702362400102	in			
1702362400200	in			
1702363000100	in			
1702363002900	in			
1702363003200	in			
1702363003300	in			
1702363003400	in			

Tax lot #	Status	Description	Area	Note
1702363003402	in			
17-03-10				
1703100002400	split	split by I-5		
17-03-14				
1703140000900	in			
1703140001100	in	Adjacent to McKenzie River. Refer to survey		Riverbend Phase 2 (survey)
1703140001900	in	Adjacent to McKenzie River. Refer to survey		Riverbend Phase 2 (survey)
17-03-15				
1703154000400	in	all of the tax lot, including all adjacent side channels of the McKenzie River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the left bank (as facing downstream) of the main channel of the McKenzie River	Gateway	
17-03-22				
1703220003700	in	UGB, city limits and tax lot lines are coincident		
1703220004102	in	Adjacent to McKenzie River. Refer to plat.		Riverbend Phase 2 (survey)
17-03-23				
1703233200100	in			
1703233200200	in			
1703233200300	in			
1703233200400	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233202400	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233202600	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233202700	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233202800	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 1st Addition
1703233203200	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203300	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203400	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203700	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203800	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233203900	in	Adjacent to McKenzie River. Refer to plat.		McKenzie Manor 3rd Addition
1703233400100	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle
1703233400200	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle
1703233400300	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle
1703233400400	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle
1703233405400	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233405500	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233405600	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233405700	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233405800	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition

Tax lot #	Status	Description	Area	Note
1703233405900	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233406000	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233406100	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233406200	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 1st Addition
1703233410800	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 2nd Addition
1703233410900	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 2nd Addition
1703233411000	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 2nd Addition
1703233411100	in	Adjacent to McKenzie River. Refer to plat.		Royal Delle 2nd Addition
1703234200100	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200200	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200300	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200400	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200500	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200600	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234200700	in	Adjacent to McKenzie River. Refer to plat.		River Glen 3rd Addition
1703234300100	in			
1703234300200	in	UGB, city limits and tax lot lines are coincident		
1703234305500	in	UGB, city limits and tax lot lines are coincident		
1703234305600	in	UGB, city limits and tax lot lines are coincident		
1703234305700	in	UGB, city limits and tax lot lines are coincident		
1703234305800	in	UGB, city limits and tax lot lines are coincident		
1703234305900	in	UGB, city limits and tax lot lines are coincident		
1703234306000	in	UGB, city limits and tax lot lines are coincident		
1703234306100	in	UGB, city limits and tax lot lines are coincident		
1703234306200	in	UGB, city limits and tax lot lines are coincident		
1703234306300	in	UGB, city limits and tax lot lines are coincident		
1703234406000	in	UGB, city limits and tax lot lines are coincident		
1703234406100	in	UGB, city limits and tax lot lines are coincident		
1703234406200	in	UGB, city limits and tax lot lines are coincident		
1703234406300	in	UGB, city limits and tax lot lines are coincident		
1703234407900	in			PLA #94-11-222; CS #32540
1703234409300	in	UGB, city limits and tax lot lines are coincident		
1703234409400	in	UGB, city limits and tax lot lines are coincident		
1703234409500	in	UGB, city limits and tax lot lines are coincident		
1703234409600	in	UGB, city limits and tax lot lines are coincident		
1703234409700	in	UGB, city limits and tax lot lines are coincident		
1703234409800	in	UGB, city limits and tax lot lines are coincident		
1703234409900	in	UGB, city limits and tax lot lines are coincident		
1703234410000	in	UGB, city limits and tax lot lines are coincident		
1703234410100	in	UGB, city limits and tax lot lines are coincident		
1703234410200	in	UGB, city limits and tax lot lines are coincident		

Tax lot #	Status	Description	Area	Note
17-03-24				
1703240000101	split	260' N of the N edge of Hayden Bridge Rd ROW	Hayden Bridge	Journal #94-02-28; Plat #94-PO567; CS #32260 & 32261
1703240000102	in		Hayden Bridge	Journal #94-02-28; Plat #94-PO567; CS #32260 & 32261
1703240000103	split	260' N of the N edge of Hayden Bridge Rd ROW	Hayden Bridge	Journal #94-02-28; Plat #94-PO567; CS #32260 & 32261
1703240000104	in		Hayden Bridge	Journal #94-02-28; Plat #94-PO567; CS #32260 & 32261
1703240000300	split	375' N of the N edge of Hayden Bridge Rd ROW, include house	Hayden Bridge	
1703240000301	in			
1703240000401	split	375' N of the N edge of Hayden Bridge Rd ROW, include house	Hayden Bridge	
1703240000503	in			
1703240000507	in			
1703240000603	split	from the NE corner of the city limits on tax lot 1703243102000, then to a point 285' N of the N edge of Hayden Bridge ROW, on the east tax lot line of 1703240000603	Hayden Bridge	Journal #92-10-202 O'Niell; CS #33470 & 31021; Plat #92-P0306.
1703243100100	split	From NE corner of tax lot 1703243200301, to city limits on tax lot 1703243104000.	Hayden Bridge	
1703243100200	split	From NE corner of tax lot 1703243200301, to NW corner of city limits on tax lot 1703243100300.	Hayden Bridge	
1703243100300	split	From NE corner of tax lot 1703243200301, to NW corner of city limits on tax lot 1703243100300.	Hayden Bridge	
1703243100600	in			
1703243100701	in			
1703243100702	in			
1703243100704	in			
1703243100900	split	split by city limits	Hayden Bridge	
1703243102000	split	split by city limits, UGB and city limits are coincident	Hayden Bridge	
1703243104000	in	UGB, city limits and tax lot lines are coincident		
1703243104100	in	UGB, city limits and tax lot lines are coincident		
1703243104200	in	UGB, city limits and tax lot lines are coincident		
1703243200200	in			
1703243200301	in			
1703243200302	in			
1703243200303	in			
1703243200304	in			
1703243200305	in			
1703243200306	in			
1703243200307	in			
1703243200500	in			

Tax lot #	Status	Description	Area	Note
1703243200600	in			
1703243200700	in			
1703243200800	in			
1703243200900	in			
18-02-01				
1802010000100	split	follow ridgeline	SE Hills	
18-02-02				
1802020000100	split	follow ridgeline	SE Hills	
1802020000200	split	follow ridgeline	SE Hills	
1802020000300	split	follow ridgeline	SE Hills	
1802020000400	split	follow ridgeline	SE Hills	Refer to Webb survey
1802020000401	in		SE Hills	
18-02-03				
1802030000600	in	follow ridgeline	SE Hills	
18-02-04				
1802040003000	split	approximately 450' S of Jasper Rd to a property corner, then W to the drainage ditch on the W property line. The house and barn at 5119 Jasper Rd are inside the UGB.	Clearwater	
18-02-05				
1802050001801	in			
1802050002600	split	Panhandle; 400' S of the S edge of the Jasper Rd. ROW	Clearwater	
1802050002800	split	On the E lot line 450' S of the S edge of Jasper Rd. ROW. On the W tax lot line 220' S of the S edge of Jasper Rd. ROW.	Clearwater	
1802050002801	split	On the E tax lot line, approximately 450' S of Jasper Rd. to the natural drainage, then to the NW corner of the tax lot. The house (4855 Jasper Rd) is outside.	Clearwater	
1802051303501	in			
1802051303600	in			
1802051303700	in			
1802051303800	in			
1802051304100	in			
1802051304101	in			
1802051304200	in			
1802052300300	in			
1802052300400	in			
1802052300403	in			
1802052300500	in			
1802052300600	in			

Tax lot #	Status	Description	Area	Note
1802052400100	in			Journal #1998-11-0255; Redwood Village plat
1802052400200	in			Journal #1998-11-0255; Redwood Village plat
1802052401000	in			Journal #1998-11-0255; Redwood Village plat
1802052401100	in			Journal #1998-11-0255; Redwood Village plat
1802052401200	in			Journal #1998-11-0255; Redwood Village plat
1802052407900	in			Journal #1998-11-0255; Redwood Village plat
1802052408000	in			Journal #1998-11-0255; Redwood Village plat
1802052408100	in			Journal #1998-11-0255; Redwood Village plat
1802052408201	in			
1802052409400	in			Journal #1998-11-0255; Redwood Village plat
1802052409600	in			Journal #1998-11-0255; Redwood Village plat
1802052409700	in			Journal #1998-11-0255; Redwood Village plat
1802052409800	in			Journal #1998-11-0255; Redwood Village plat
1802052409900	in			Journal #1998-11-0255; Redwood Village plat
1802052410000	in			Journal #1998-11-0255; Redwood Village plat
1802052411000	in			Journal #1998-11-0255; Redwood Village plat
1802052412000	in			Journal #1998-11-0255; Redwood Village plat
1802052413000	in			Journal #1998-11-0255; Redwood Village plat
18-02-06				
1802060001500	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		

Tax lot #	Status	Description	Area	Note
1802060001600	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802060001606	in			
1802060004501	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802060004600	in			
1802062403500	in			
1802062403501	in			
1802064104902	in			
1802064105700	in			
1802064105800	in			
1802064105900	in			
1802064106000	in			
1802064106100	in			
1802064106200	in			
1802064106300	in			
1802064114500	in			
1802064115900	in	UGB, city limits and tax lot lines are coincident; N bank of Jasper slough		fillbert meadows, LRP2005-00010; SUB2005-00062
1802064200118	in			
1802064200119	in			
1802064200120	in			
1802064200121	in			
1802064200301	in			
1802064200500	in			
1802064200501	in			
1802064200503	split	connect SW corner of tax lot 1802064200800 to SE corner of tax lot 180206420600		
1802064200600	in			
1802064200800	in			
1802064200900	in			
1802064201000	in			
1802064201101	in			
1802064201201	in			
18-02-07				

Tax lot #	Status	Description	Area	Note
1802070000801	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
18-02-08				
1802080000300	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802080000400	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802080000500	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802080000600	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802080000602	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
18-02-09				
1802090000100	split	follow ridgeline from the most southerly NE corner of tax lot, to a point along Jasper Rd, 815' from the SW corner of the tax lot	SE Hills	
1802090000600	split	panhandle; approximately 450' S of the S edge of Jasper Rd. ROW	Clearwater	
18-02-10				
1802100001600	in	UGB and tax lot lines are coincident	SE Hills	Weyerhauser Rd.
1802100000100	split	follow ridgeline	SE Hills	Refer to Webb Survey
18-02-11				
1802110000300	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)
1802110000400	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)
1802110001600	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)

Tax lot #	Status	Description	Area	Note
1802110001700	split	interpretation with legal description	SE Hills	Weyerhauser Rd. Journal #1998-11-0256 contains legal description (attachment D)
1802110002000	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)
18-02-15				
1802150000100	in	interpretation with legal description	SE Hills	Journal #1998-11-0256 contains legal description (attachment D)
18-03-01				
1803010001100	in			
1803010002700	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1803010002800	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1803010003000	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1803010003100	in			
1803010003200	in		willamette	
1803010003201	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1803010003500	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
18-03-02				
1803020000600	in			
18-03-11				
1803110000600	split	refer to description of UGB within I5 corridor	willamette	
1803110000700	split	refer to description of UGB within I5 corridor	willamette	
1803110001800	in			
18-03-12				

Tax lot #	Status	Description	Area	Note
1803120000500	in			
ROW/other				
Jasper Rd.	in	UGB is the S edge of the Jasper Rd ROW, include entire ROW		
Mill Race	in	the Mill Race within 18-03-01 is entirely within the UGB, UGB is top of S bank		
I-105	in	I-105 within 17-02-29 and 17-02-30 is within the UGB		
17-02-35	in	UGB is the N edge of the Thurston Rd ROW, E of 69th Street to the E lot line of 1702362400200		
18-02-06-24	in	The ROW for Garden Ave and Kintzley Ave are within the UGB		
17-02-36	in	UGB is the N edge of the Thurston Rd ROW		
I5 description		refer to methodology in adopted ordinance		

**Summary of UGB List Revisions for Mill Race Area
Revised 10/8/2015**

<i>Tax lot #</i>	<i>Status</i>	<i>Description</i>	<i>Area</i>	<i>Note</i>
	inside UGB or split by UGB	If the tax lot is split by the UGB, where is the UGB located?	name of area containing split tax lots	Plat, Survey, or land use decision

Add the following section:

18-02-05				
1802050001801	in			

Remove the following Tax Lots from the "18-02-06" section:

18-02-06				
1802060001006	in			
1802060001007	in			
1802062403600	in			

And add the following to the "18-02-06" section:

18-02-06				
1802060001500	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802060001600	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802060001606	in			
1802060004501	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802064201000	in			
1802064201101	in			
1802064201201	in			

Add the following section:

18-02-07				
1802070000801	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		

Add the following section:

18-02-08				
1802080000300	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802080000400	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		

1802080000500	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802080000600	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1802080000602	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		

Remove the following Tax Lots from the "18-03-01" section:

18-03-01				
1803010000701	in			
1803010001301	in			
1803010003600	in			

And add the following to the "18-03-01" section:

18-03-01				
1803010002700	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1803010002800	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1803010003000	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1803010003201	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		
1803010003500	in	all of the tax lot, including all adjacent side channels of the Willamette River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the right bank (as facing downstream) of the main channel of the Willamette River		

**Summary of UGB List Revisions for North Springfield/Willamalane Parks Area
Revised 10/8/2015**

Tax lot #	Status	Description	Area	Note
	inside UGB or split by UGB	If the tax lot is split by the UGB, where is the UGB located?	name of area containing split tax lots	Plat, Survey, or land use decision

Remove the following Tax Lot from the "17-02-27" section:

17-02-27				
1702270001101	split	UGB and city limits are coincident	Thurston	

And add the following to the "17-02-27" section:

17-02-27				
1702270001101	in			
1702270001502	in			

Add the following to the "17-02-29" section:

17-02-29				
1702290002901	in	all of the tax lot, including all adjacent side channels of the McKenzie River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the left bank (as facing downstream) of the main channel of the McKenzie River		

The following section is removed:

17-02-30				
1702300000100	in	UGB, city limits and tax lot lines are coincident		
1702300000101	in	UGB, city limits and tax lot lines are coincident		
1702300000200	in	UGB, city limits and tax lot lines are coincident		
17023000002500	in	UGB, city limits and tax lot lines are coincident		

and replaced with the following section:

17-02-30				
1702300000401	in	all of the tax lot, including all adjacent side channels of the McKenzie River, <u>is inside</u> , as lies upland of the Line of Ordinary High Water of the left bank (as facing downstream) of the main channel of the McKenzie River		

