#### Sutherlin Buildable Lands Inventory and Economic Opportunities Analysis

Prepared for

City of Sutherlin

by

#### **ECONorthwest**

99 W. Tenth, Suite 400 Eugene, OR 97401 (541) 687-0051

#### FINAL REPORT

June 2005

This report was funded by a Department of Land Conservation and Development Technical Assistance Grant

# **Table of Contents**

	Page
CHAPTER 1: INTRODUCTION BACKGROUND	<b>1-1</b> 1-1
PURPOSE AND METHODS	1-1
ORGANIZATION	1-3
CHAPTER 2: POPULATION AND EMPLOYMENT FORECASTS	2-1
STRUCTURE OF THIS EVALUATION	2-1
SMALL AREA FORECASTS	2-2
POPULATION FORECAST	2-4
EMPLOYMENT FORECAST	2-7 2-12
EVALUATION OF FORECASTS SUMMARY	2-12 2-12
CHAPTER 3: BUILDABLE LANDS INVENTORY	3-1
METHODS, DEFINITIONS, AND ASSUMPTIONS	3-1
RESULTS	3-2
Land base	3-2
Vacant buildable land	3-8
Redevelopment potential	3-13
RESIDENTIAL CAPACITY	3-16
CHAPTER 4: ECONOMY	4-1
OVERVIEW OF SUTHERLIN ECONOMY	4-3
CONTEXT FOR ECONOMIC GROWTH IN SUTHERLIN FACTORS AFFECTING FUTURE ECONOMIC DEVELOPMENT IN SUTHERLIN	4-5 4-8
LIKELY GROWTH INDUSTRIES IN SUTHERLIN	4-0 4-16
EMPLOYMENT FORECASTS	4-16
IMPLICATIONS FOR LAND DEMAND	4-17
CHAPTER 5: COMPARISON OF NON-RESIDENTIAL LAND SUPPLY AND	E 4
	5-1
POPULATION AND EMPLOYMENT FORECASTS LAND NEEDED FOR OTHER USES	5-1 5-2
Summary of land need and demand	5-2 5-5
	0-0

The Sutherlin Buildable Lands Inventory and Economic Opportunities Analysis is intended to provide technical analysis supporting the 2005 update of the Sutherlin Comprehensive Plan as well as factual data supporting an Urban Growth Boundary (UGB) expansion. This report also provides data needed to update the Population, Buildable Lands Inventory, Goal 9, and Goal 14 factual components of the Sutherlin Comprehensive Plan.

#### BACKGROUND

The City of Sutherlin has not updated components of its Comprehensive Land Use Plan since the early 1980s. As a rural Oregon community with high unemployment and low average household income, Sutherlin wants to attract family wage jobs through more effective economic development strategies and actions. In short, the economic element of the Sutherlin Comprehensive Plan does not reflect the City's current challenges, opportunities, and employment needs. Despite little job growth, Sutherlin has experienced considerable housing development. As a result, a lot of the most desirable residential land in the City has been developed. Like the economic element of the City's Comprehensive Plan, the residential element has not been updated since the early 1980s.

In 2004, Sutherlin received a grant from the Department of Land Conservation and Development (DLCD) to update some elements of its Comprehensive Plan. Components of the City's work program include an update of the buildable lands inventory (BLI) and an economic opportunities analysis (EOA).

#### **PURPOSE AND METHODS**

This report, titled the *Sutherlin Buildable Lands Inventory and Economic Opportunities Analysis* is essentially an employment Land Needs Assessment. In general, a Land Need Assessment contains a *supply* analysis (buildable and redevelopable land by type) and a *demand* analysis (population and employment growth leading to demand for more built space: residential and non-residential development). The geographic scope of the Land Need Assessment is all land inside the Sutherlin Urban Growth Boundary.

#### **BUILDABLE LANDS**

The general structure of the supply analysis is based on the DLCD HB 2709 workbook "*Planning for Residential Growth – A Workbook for Oregon's Urban Areas*," which specifically addresses residential lands. The methods described in the DLCD Workbook are also appropriate for inventorying non-residential lands. The steps and sub-steps in the supply inventory are:

• Calculate the gross vacant acres by plan designation, including fully vacant and partially vacant parcels.

- Calculate gross buildable vacant acres by plan designation by subtracting unbuildable acres from total acres.
- Calculate net buildable acres by plan designation, subtracting land for future public facilities from gross buildable vacant acres.
- Calculate total net buildable acres by plan designation by adding redevelopable acres to net buildable acres.

The supply analysis builds from a parcel-level database to estimates of buildable land by plan designation (i.e., single-family residential and mixed-density residential, etc.).<sup>1</sup> For other generalized land use types, each parcel was classified into one of the following categories:

- Vacant land
- Partially vacant land
- Undevelopable land
- Developed land
- Potentially redevelopable land

The constrained lands analysis initially considered wetlands, steep slopes, floodplains and floodways, and riparian areas. After consultation with City staff, ECO determined that Sutherlin identifies areas in steep slopes and protected riparian areas as constrained lands. Additionally, lands identified for stormwater management were removed from the inventory. These areas were deducted from lands that were identified as vacant or partially vacant. Definitions of these characteristics and the results of the buildable residential lands inventory are presented in Chapter 3.

#### **ECONOMY**

Oregon Planning Goal 9 and its Administrative Rule requires jurisdictions to provide an adequate supply of buildable lands for a variety of commercial and industrial activities. In addition, Goal 9 requires plans to be based on an analysis of the comparative advantages of a planning region. Comparative advantage is defined in terms of the relative availability of factors that affect the costs of doing business in the planning region, and specify many geographic, economic, and institutional factors that an analysis of comparative advantage should consider.

The analysis of comparative advantage in this report includes the locational factors specified by Goal 9. It assesses qualitatively the availability of these factors in Sutherlin relative to Douglas County as a whole, and to Oregon.

<sup>&</sup>lt;sup>1</sup> The parcel-level database was based on information provided by the City of Sutherlin. The base data was supplemented with additional land use data and field work provided by City staff.

#### ORGANIZATION

The remainder of this report is organized as follows:

**Chapter 2, Context for Growth in Sutherlin: Population and Employment Forecasts**, presents 2005 - 2025 and 2025-2050 population and employment forecasts for the Sutherlin urban growth boundary.

**Chapter 3, Buildable Lands Inventory** presents the results of ECO's analysis of buildable lands in Sutherlin.

**Chapter 4, Economic Opportunities Analysis** describes the economic characteristics of Sutherlin and presents a forecast of employment. It also evaluates the locational advantages of Sutherlin.

**Chapter 5, Comparison of Land Supply and Demand** uses information from chapters 2, 3, and 4 to evaluate whether Sutherlin has enough land to accommodate all types of development over the next 20 years.

# Context for Growth in Sutherlin: Population and Employment Forecasts

Chapter 2:

This chapter presents information on the primary variables that affect land use: population and employment. The Sutherlin EOA and housing needs analysis uses the year 2025 for the planning horizon—or a 20-year planning period. It begins with a summary of the City's coordinated population forecast. It then presents an employment forecast. The chapter concludes with a summary of the forecasts and a discussion of the implications of population and employment growth in Sutherlin.

#### **S**TRUCTURE OF THIS EVALUATION

A forecast of population growth in Sutherlin is essential to estimate the demand for buildable land and to assess housing needs. Expected population growth will also influence economic opportunities and employment growth in Sutherlin. Employment growth can affect the rate of population growth. Because population and employment have complex interrelationships, it is important to consider the implications of both forecasts.

ORS 195.036 requires cities adopt "coordinated" population forecasts. Population forecasts must be coordinated by a designated "coordinating" agency—in this case Douglas County. The combined sum of forecasts for incorporated cities and rural areas must roughly equal the forecast for the county as a whole (the county "control total").<sup>2</sup> The control total usually comes from the long-term population and employment forecasts developed by the Office of Economic Analysis of the State Department of Administrative Services.<sup>3</sup> The original OEA forecasts were developed in 1997. The OEA released revised longterm County forecasts in 2004.

State law does not require employment forecasts to be coordinated with the State forecast for total employment by county. Any employment forecast adopted by Sutherlin, however, will be somewhat tied to the coordinated population forecast by the need to maintain a balance between jobs and housing to reduce commuting and automobile use.

<sup>&</sup>lt;sup>2</sup> The forecasts for incorporated cities includes all lands within the existing Urban Growth Boundaries (UGBs) of those cities. In short, the forecasts are for growth in the UGBs.

<sup>&</sup>lt;sup>3</sup> While most coordinating bodies use the OEA forecasts as the basis for coordination, there is no statutory requirement that the OEA forecasts be used.

The remainder of this chapter is organized as follows:

- The **Small Area Forecasts** section describes issues associated with developing accurate population and employment forecasts for small jurisdictions.
- The **Population Forecast** section presents coordinated population forecast for Sutherlin. This section also presents the population forecasts for Roseburg, Douglas County, and Oregon to provide a context for growth in Sutherlin. This section identifies the methods and assumptions used to develop these forecasts.
- The **Employment Forecast** section presents a range of employment growth alternatives for Sutherlin and identifies the methods and assumptions used to develop these alternatives.
- The **Evaluation** section evaluates the potential for actual population and employment growth in Sutherlin to vary from the forecasts. This section concludes with recommended population and employment forecasts that will be used in the remainder of the Sutherlin Urbanization Study.

#### **SMALL AREA FORECASTS**<sup>4</sup>

Planning implies forecasting. To use policies to change the future in ways that decision makers think their constituents would find beneficial, one must first have an idea of what could or is likely to occur in the absence of those policy changes.

Forecasting is usually better, and better received, if it is based on a model of how the world works. In the context of housing and economic development, that understanding must certainly include how households and businesses make decisions about where to locate, and what types of buildings to occupy.

In the context of land use and growth management, the main variables that one must forecast are population and employment, which are then used to forecast the demand for new built space (housing, offices, warehouses, retail stores, and so on). The demand for built space creates a derived demand for land on which to build that space.

The amount of land needed depends on the type and density of space that will be built to accommodate population and employment growth. The type and density of development will be a function of market factors (demand and supply conditions) and public policy (especially about density and infrastructure, but also about transportation, economic development, environmental protection, and so on). This function of forecasting is central to Sutherlin: the Urbanization analysis will determine how much land the city needs for different types of development.

<sup>&</sup>lt;sup>4</sup> The discussion in this section builds from previous work on population and employment forecasts by ECONorthwest.

The main point is that (1) forecasting growth requires a consideration of many variables that interact in complicated ways, and (2) any forecast of a single future is bound to be wrong—there are many possible futures that are more or less likely depending on one's assessment of the likelihood of the assumptions.

Before presenting our discussion of the coordinated population forecast for Sutherlin, it is useful to describe the limitations of small area forecasts. Following is a discussion of why small area forecasts are highly uncertain:

- Population and employment forecasts for most communities are simple projections of past growth rates into the future. Such a forecast implicitly assumes that the underlying factors driving growth will remain relatively constant. The longer the forecast period, however, the greater the chances that some underlying factors will change in ways that could affect growth. Examples of underlying conditions that could affect population growth in Sutherlin include public policy, economic conditions, birth and death rates, transportation costs, and consumer preferences for housing.
- Even if planners had a sophisticated model that explicitly included all of the important underlying factors together (which they do not), they would still face the problem of having to forecast the future of these factors. In the final analysis, all forecasting requires making *assumptions* about the future.
- Comparisons of past population and employment projections to subsequent population counts have revealed that even much more sophisticated methods than the ones used in Sutherlin "are often inaccurate even for relatively large populations and for short periods of time."<sup>5</sup> The smaller the area and the longer the period of time covered, the worse the results for any statistical method.
- Small areas start from a small base. Single unforeseen events in a small community, such as development of a new subdivision, can cause population to significantly diverge from forecast levels. A new subdivision of 200 homes inside the Portland Urban Growth Boundary has a relatively small effect on total population. That same subdivision in Sutherlin would increase the community's housing stock and population by about 7%.
- Especially for small cities in areas that can have high growth potential (e.g., because they are near to concentrations of demand in neighboring metropolitan areas, or because they have high amenity value for recreation or retirement), there is ample evidence of very high growth rates in short-term; there are also cases (fewer) of high growth rates sustained over 10 to 30 years.

<sup>&</sup>lt;sup>5</sup>Murdock, Steve H., *et. al.* 1991. "Evaluating Small-Area Population Projections." *Journal of the American Planning Association*, Vol. 57, No. 4, page 432.

In this context, there is a wide range of possible population and employment growth levels in Sutherlin that could be justified by reasonable assumptions about future conditions.

Because of the uncertainty associated with small area forecasts, many forecasts present ranges of future population. ORS 195.036 is not explicit on the issue of range versus point forecasts. The OEA forecasts, however, are point forecasts (e.g., the reflect one rate and a single future population) as are coordinated forecasts at the city level.<sup>6</sup> City's have many reasons to use point forecasts: among the most important are projections of future revenues, need for infrastructure, and need for land. These factors provide sufficient rational for cities to develop and adopt point forecasts. That fact, however, does not mean they are any more accurate.

In summary, the longer the forecast, the greater the potential that actual population growth will vary from the forecast. This implies that cities should closely monitor actual population growth so that either (1) plans can be modified to account for variations, or (2) policies can be implemented that increase the likelihood of achieving the population growth.

One final comment on forecasts: population forecasts are often viewed as "self-fulfilling prophecies." In many respects they are intended to be; cities create land use, transportation, and infrastructure plans to accommodate the growth forecast. Those planning documents represent a series of policy decisions. Thus, how much population a city chooses to accommodate is also a policy decision. In short, the forecast and the plans based on the forecast represent the city's future vision.

#### **POPULATION FORECAST**

The City requested that ECONorthwest conduct an independent review of its coordinated population forecast and the assumptions underlying the forecast. This evaluation includes a review of the countywide population forecast as well as the forecast for Sutherlin. Both forecasts were developed by County staff in consultation with staff from the county's incorporated cities and the Department of Land Conservation and Development (DLCD).

This section describes the coordinated population forecast for the Sutherlin UGB for the period 2004 through 2025.<sup>7</sup> The forecasts were developed by Douglas County. Specifically, this section addresses: (1) historical growth trends and factors affecting growth in Douglas County and Sutherlin; and (2) review of City of Sutherlin coordinated population forecast.

<sup>&</sup>lt;sup>6</sup> ECO is unaware of any coordinated forecasts that present ranges. It is not uncommon, however, for cities to consider ranges of population and employment during planning exercises.

<sup>&</sup>lt;sup>7</sup> While this section describes forecasts for the 2004-2025 period, Sutherlin is also considering very long-range (to 2050) forecasts as part of its planning efforts.

Table 2-1 shows that Sutherlin's population has grown faster than Roseburg, Douglas County, and Oregon. Table 2-1 shows that Sutherlin's population grew by an average annual growth rate (AAGR) of 1.0% in the period from 1980 to 1990. The rate of growth has increased since 1990. The period from 1990 to 2000 had a higher AAGR of 2.9%. Sutherlin grew at an AAGR of 2.0% over the entire period from 1980 to 2004.

			Douglas	
	Sutherlin	Roseburg	County	Oregon
Population				
1980	4,560	16,644	93,748	2,633,105
1990	5,020	17,032	94,649	2,842,321
2000	6,669	20,017	100,399	3,421,399
2001	6,990	20,200	101,200	3,471,700
2002	7,180	20,170	101,300	3,504,700
2003	7,300	20,480	101,800	3,541,500
2004	7,360	20,530	102,350	3,582,600
Average Ar	nnual Growth	Rates		
1980-1990	1.0%	0.2%	0.1%	0.8%
1990-2000	2.9%	1.6%	0.6%	1.9%
2000-2004	2.5%	0.6%	0.5%	1.2%
1980-2004	2.0%	0.9%	0.4%	1.3%

### Table 2-1. Historical population in Sutherlin,Roseburg, Douglas County, and Oregon, 1990–2004

Sources: U.S. Census 2000 Summary File 1 and Center for Population Research and Census, Portland State University. Average annual growth rates calculated by ECONorthwest.

Migration is a significant component of population growth in Sutherlin. The U.S. Census collects data on migration patterns. It asks individuals their place of residence in 1995 (five years prior to the count for the 2000 Census). Table 2-2 shows place of residence in 1995 for Douglas County and Sutherlin.

	Douglas	s County	Sutherlin	
	Persons	Percent	Persons	Percent
Population 5 years and over	94,748	100%	6,115	100%
Same house in 1995	49,449	52%	2,677	44%
Different house in 1995	45,299	48%	3,438	56%
Same county	26,778	28%	2,359	39%
Different county	17,954	19%	1,064	17%
Same state	7,227	8%	414	7%
Different state	10,727	11%	650	11%

# Table 2-2. Place of residence in 1995, Douglas County and Sutherlin, persons 5 years and over

Source: U.S. Census 2000 Summary File 3.

The data show that the population of Sutherlin is slightly more transitory than that of the County. In 2000 only 44% of individuals in Sutherlin lived in the same residence in 1995, with just over half, or 52% of individuals in Douglas County.

Census data show that Sutherlin grew by 1,649 persons between 1990 and 2000, which is a 32.8% increase. Characteristics of the population, including age and household composition, are indicators of how population has grown in the past and provide insight into factors that may affect future growth.

The age breakdown shows that Sutherlin and Douglas County experienced changes in the age structure of its residents during the 1990s. Tables 2-3 and 2-4 show population by age for the City of Sutherlin and for Douglas County for 1990 and 2000.

	19	90	20	000	Cha	inge
Age Group	Number	Percent	Number	Percent	Number	Percent
Under 5 years	462	9.2%	434	6.5%	(28)	-6.1%
5 to 19	1,102	22.0%	1,363	20.4%	261	23.7%
20 to 39	1,377	27.4%	1,573	23.6%	196	14.2%
40 to 64	1,239	24.7%	1,879	28.2%	640	51.7%
65 and over	840	16.7%	1,420	21.3%	580	69.0%
Total	5,020	100.0%	6,669	100.0%	1,649	32.8%

 Table 2-3. Population by age, City of Sutherlin, 1990 and 2000

Sources: U.S. Census 2000 Summary File 1 and 1990 Summary Tape File 1.

	•	, 0,	U			
	19	990	20	000	Cha	inge
Age Group	Number	Percent	Number	Percent	Number	Percent
Under 5 years	6,691	7.1%	5,629	5.6%	(1,062)	-15.9%
5 to 19	21,188	22.4%	21,035	21.0%	(153)	-0.7%
20 to 39	25,394	26.8%	21,626	21.5%	(3,768)	-14.8%
40 to 64	26,813	28.3%	34,221	34.1%	7,408	27.6%
65 and over	14,563	15.4%	17,888	17.8%	3,325	22.8%
Total	94,649	100.0%	100,399	100.0%	5,750	6.1%

Sources: U.S. Census 2000 Summary File 1 and 1990 Summary Tape File 1.

While Sutherlin experienced an increase in population for every age group except those under 5, Douglas County experienced an overall decrease in population for all age groups under 40 years old. This suggests that younger people are moving out of Douglas County overall, but of those who remain or move to the County, many are choosing to live in Sutherlin. The data also show that Sutherlin has a higher percentage of its population in the age group 65 and over and that the group grew significantly in the 1990s. This suggests that Sutherlin is attracting seniors and retirees.

The Douglas County coordinated population forecasts resulted in a *coordinated population growth rate*. Most counties use a coordinating method that results in a point estimate for a specific forecast year. While this approach is unusual, it was affirmed in a LUBA appeal (LUBA 98-119; November 1999).

Table 2-5 shows the population forecast for the Sutherlin UGB for the 2004-2025 period. The coordinated annual growth rate for the City of Sutherlin is 2.7%. ECO used the most recent population estimate for Sutherlin—July 1, 2004.<sup>8</sup> The 2004 PSU estimate was 7,360 persons. Using the 2004 base, and an average annual growth rate of 2.7%, Sutherlin will grow to 12,878 persons in 2025. This represents an increase of 5,518 persons—or 75%.

		Change		
Year	Population	Number	Percent	
2004	7,360	-	-	
2005	7,559	199	2.7%	
2010	8,636	1,077	14.2%	
2015	9,866	1,231	14.2%	
2020	11,272	1,406	14.2%	
2025	12,878	1,606	14.2%	
Change (2	004-2025)			
Number	5,518			
Percent	75.0%			
AAGR	2.7%			

# Table 2-5. Population forecast for SutherlinUGB, 2004-2025

Source: Douglas County Coordinated population forecast; calculations by ECONorthwest

#### **EMPLOYMENT FORECAST**

To provide for an adequate supply of commercial and industrial sites consistent with plan policies, Sutherlin needs to have an estimate of the amount (e.g., the number of acres) 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 Sutherlin. The level of this business expansion activity can be measured by employment growth in Sutherlin. This section presents a projection of future employment levels in Sutherlin for the purpose of estimating demand for commercial and industrial land.

The projection of employment in this chapter has three steps:

1. Establish base employment for the projection. We start with the estimate of covered employment in Sutherlin's UGB. Covered employment does not include all workers, so we adjust covered employment to reflect total employment in Sutherlin. Employment by sector will be summarized into employment by land use type for the purposes of estimating land demand by type.

<sup>&</sup>lt;sup>8</sup> The Center for Population Research at Portland State University develops annual population estimates for all Oregon counties and incorporated cities.

- 2. **Project total employment.** The projection of total employment will consider a variety of factors, including historical growth rates and projections for population and employment in Douglas County.
- 3. Allocate future employment to land use types. This allocation will use assumptions based on expected trends in employment growth by land use type.

The remainder of this chapter is organized by headings that correspond to these three major steps for the projection.

#### **EMPLOYMENT BASE FOR PROJECTION**

The level of covered employment by sector in the Sutherlin UGB was estimated using confidential ES-202 employer records provided by the Oregon Employment Department. This data shows the name, location, industry (by North American Industrial Classification System), monthly covered employment, and quarterly payroll for every employer in the 97479 zip code area. The 97479 zip code area includes Sutherlin and the surrounding rural area, but does not include the community of Oakland, Roseburg, or other urbanized areas.

Covered employment refers to employment that is covered by unemployment insurance laws. Covered employment does not include jobs that are not covered by unemployment insurance laws, primarily self-employed proprietors. To estimate the share of total employment in Sutherlin that is not included in covered employment, we compared estimates for total and covered employment for Douglas County. The U.S. Department of Commerce, Bureau of Economic Analysis provides estimates of total employment by county that include selfemployed proprietors and other workers not covered by unemployment insurance. We compared the estimates of total employment from the BEA to covered employment reported by the Oregon Employment Department for Douglas County. The resulting percent of total employment included in covered employment in shown in Table 2-6.

Land Use Type	Covered	Covered %	Total	% of Total
Sector	Emp	of Total	Emp	Emp
Industrial	908	84%	1,082	41%
Agriculture, Forestry, Fishing, Hunting	61	64%	96	4%
Construction	104	55%	191	7%
Manufacturing	686	95%	722	27%
Wholesale Trade	10	79%	13	0%
Transportation and Warehousing	47	78%	60	2%
Commercial	858	67%	1,278	49%
Retail Trade	313	74%	422	16%
Finance and Insurance	45	59%	76	3%
Real Estate, Rental, and Leasing	27	21%	130	5%
Professional, Scientific, and Technical Services	29	51%	57	2%
Health Care and Social Assistance	74	75%	99	4%
Arts, Entertainment, and Recreation	28	44%	64	2%
Accommodation and Food Service	260	89%	294	11%
Other Services	82	60%	136	5%
Public	255	96%	266	10%
Government	255	96%	266	10%
Total Covered Employment	2,021	77%	2,626	100%

Source: Covered employment from confidential ES-202 employment data provided by the Oregon Employment Department; employment by sector in the Sutherlin UGB summarized by ECONorthwest. Covered % of total employment calculated by ECONorthwest from comparison of total employment estimates by the U.S. Department of Commerce, Bureau of Economic Analysis (CA25) and covered employment data from the Oregon Employment Department for Douglas County. Total employment estimates by ECONorthwest.

Table 2-6 shows that covered employment includes 77% of total employment in Sutherlin, based on the ratio of covered to total employment by sector in Douglas County applied to covered employment by sector in the Sutherlin UGB. The share of the County's covered employment included in total employment varies by sector, from a low of 21% in Real Estate, Rental, and Leasing to a high of 96% in Government. The ratios of covered to total employment shown in Table 2-6 correspond with our expectation that sectors with a higher share of selfemployed proprietors, like Real Estate, Professional Services, or Construction, have a lower share of covered employees than sectors where most employees earn a wage or salary, such as Manufacturing or Accommodation & Food Service. The conversion of covered employment to total employment increases employment in Sutherlin by 605 jobs or about 30%, from 2,021 covered jobs to 2,626 total jobs.

Table 2-6 also classifies sectors by land use type. These land use types are the categories that will be used to project employment growth for the purposes of estimating land demand in the Sutherlin UGB. Sectors with similar land use types are grouped together in Table 2-6. For example, Wholesale Trade is included in the Industrial land use type because these firms typically have large buildings with low employment densities located in industrial areas. Table 2-6 shows that almost half (49%) of employment in Sutherlin is in sectors that typically use Commercial land, with another 41% in sectors that use Industrial land, and 10% in the Government sector which uses land designated for Public use.

#### **PROJECTION OF TOTAL EMPLOYMENT IN SUTHERLIN**

The projection of total employment growth in the Sutherlin UGB is based on consideration of a variety of factors:

- Table 2-1 shows that population in Sutherlin has grown faster than in Roseburg, Douglas County, or Oregon in every decade since the 1980s. This pattern is expected to continue into the future—the County forecasts population in Sutherlin to grow at an average of 2.7% per year over the next twenty years, while the State expects Douglas County to grow at an average of 1.2% and Oregon to grow at an average of 1.0% over the same period.<sup>9</sup>
- Covered employment in the Sutherlin UGB grew by 345 or 21% between 1998 and 2003, compared to growth of only 2050 or less than 1% in Douglas County as a whole.
- Nonfarm covered employment in Douglas County is expected to grow by 4,410 or 11.8% between 2002 and 2012 (an average annual rate of 1.1%) according to a forecast by the Oregon Employment Department.<sup>10</sup>
- 2000 Census data shows that 49.8% of Sutherlin's population was in the labor force (working or looking for work). Applying this percentage to Sutherlin's 2003 population implies that the City has 3,635 people in the labor force. Table 2-6 shows that the Sutherlin area has about 2,630 jobs. This suggests that Sutherlin has a net out-commute of residents that work outside of the City (that is, more workers commute *out* of Sutherlin for work than commute *into* Sutherlin for work). Expected population growth in the Sutherlin UGB will support more business activity, helping bring population and employment more into balance.

Based on these factors, we expect employment in Sutherlin to grow faster than the 2.7% per year rate forecast for Sutherlin's population over the next twenty years. This pattern of growth will bring employment and population in Sutherlin more into balance and will continue the historical trend of more rapid growth in Sutherlin than in the County.

An aging population will reduce the share of population in the labor force in the future. Sutherlin had 49.8% of its population in the labor force in 2000. If this falls to 40% in 2025, applying that percentage to the forecast of Sutherlin's population in 2025 implies a labor force of 5,151 in 2025. If Sutherlin's population and jobs are in balance in 2025, that implies an average annual employment growth rate of 3.1% between 2003 and 2025.

<sup>&</sup>lt;sup>9</sup> Douglas County and Oregon population growth forecast by the State of Oregon, Office of Economic Analysis. 2004. *Forecasts of Oregon's County Populations and Components of Change*, 2000–2040.

<sup>&</sup>lt;sup>10</sup> State of Oregon, Oregon Employment Department. 2004. *Employment Projections by Industry 2002–2012*.

#### **ALLOCATION OF FUTURE EMPLOYMENT TO LAND-USE TYPES**

All employment sectors will not grow at the same rate; some will grow faster than others, causing them to have an increasing share of employment in Sutherlin. To account for expected variations in growth rates by sector, ECO applied assumptions about the future share of employment by land use type. These assumptions are based on the potential growth industries identified in this chapter and the analysis of comparative advantages later in this report:

- Sutherlin should be attractive to a range of firms engaged in specialty Manufacturing, and residential growth should maintain employment in Construction. These sectors, however, are expected to grow more slowly than other sectors in the economy. We assume that the share of Industrial employment in the Sutherlin UGB should decrease slightly, from 41% in 2003 to 35% in 2025.
- We expect Retail Trade to grow in Sutherlin to serve the growing local population. Sectors in Douglas County with the highest expected growth rates in the future include Retail Trade, Business & Professional Services, Health Services, and Other Services. We expect more businesses in these sectors to locate in Sutherlin to serve the local population. Businesses in these sectors typically use land designated for Commercial use, so we assume that the share of employment in the Sutherlin UGB in Commercial uses will increase over the planning period, from 49% in 2003 to 55% in 2025.
- In Sutherlin we expect population growth to drive demand for employment in education and other government services. Due to economies of scale, however, we assume that the share of Public employment in the Sutherlin UGB will remain the same over the planning period, 10%.

The result of these assumptions for the share of employment by land use type and the overall average annual growth rate for total employment is shown in Table 2-7. This table shows that employment is expected to grow by over 2,500 jobs or 96% between 2003 and 2025, assuming a 3.1% average annual growth rate. Employment growth by land use type will be led by Commercial (1,549 jobs), followed by Industrial (717 jobs), and Public (248 jobs), based on the assumptions of employment by land use type described above.

Land Use	200	)3	202	25	2003-2	2025
Туре	Emp	Percent	Emp	Percent	Growth	Percent
Industrial	1,082	41%	1,799	35%	717	66%
Commercial	1,278	49%	2,827	55%	1,549	121%
Public	266	10%	514	10%	248	93%
Total	2,626	100%	5,140	100%	2,514	96%

# Table 2-7. Projected employment growth by land use type in the Sutherlin UGB, 2003–2025

Source: ECONorthwest.

#### **EVALUATION OF FORECASTS**

Several factors related to Sutherlin's situation could have a substantial effect on forecast or actual population and employment growth:

- Sutherlin's proximity to Roseburg and in the I-5 corridor make it attractive to households looking for a smaller community.
- Access to Interstate 5 makes Sutherlin an attractive location for employers that require freeway access.
- In a similar fashion, attracting a small percentage of employment growth from Roseburg could significantly increase the level of employment in Sutherlin.
- Public policies in Sutherlin to encourage or discourage growth, or that affect the price of land, could result in more or less population growth. In the future, however, Sutherlin officials may adopt policies that could result in more or less population growth than forecasted.

Given these factors, it is possible that Sutherlin will exceed the county coordinated growth rate of 2.7% annually. Other factors, however, could contribute to lower growth rates. Given the various information we reviewed, ECO concludes that the county coordinated rate of 2.7% annually is a reasonable rate for the 2004-2025 period.

#### SUMMARY

Sutherlin is growing. The coordinated population forecasts for the Sutherlin UGB adopted by the County in 2004 indicate that population will increase by more than 5,500 persons between 2004 and 2025.

Table 2-8 summarizes historical and forecast population and employment in the Sutherlin UGB. The 2003 data show that while Sutherlin has a strong employment base, it is still a net exporter of employment. In other words, Sutherlin is somewhat of a bedroom community to the regional employment center in Roseburg. This is not necessarily a trend that will continue; it is the City's policy to attract employment growth. Consistent with the City's vision, ECO forecasts employment will grow at a rate faster than population between 2003 and 2025.

Year	Population	Employment	Pop/Emp			
2000	6,669	na -				
2003	7,287	2,626	2.78			
2005	7,559	2,791	2.71			
2010	8,636	3,252	2.66			
2015	9,866	3,788	2.60			
2020	11,272	4,413	2.55			
2025	12,878	5,140	2.51			
Change (2	003-2025)					
Number	5,591	2,514	2.22			
Percent	77%	96%				
AAGR	2.7%	3.1%				

# Table 2-8. Historical and forecast population andemployment, Sutherlin, 2000-2025

Source: U.S. Census, City of Sutherlin, Employment Security 202 data;

2000 – U.S. Census Data

2003 - PSU Estimate

2025 – Population and Employment forecasts by ECONorthwest

Sutherlin is also interested in planning for very long-term growth—through 2050. Table 2-9 shows long-range population and employment forecasts for the Sutherlin UGB using a range of growth rates between 1.5% and 2.5%. ECO used rates between 1.5% and 2.5% because: (1) the low range is close to the long-range rate developed by OEA for the County, and (2) the high range reflects continued policies that support growth in Sutherlin.

Table 2-9. Long-range population and e	employment forecast,
Sutherlin, 2025-2050	

		Population		Employment		
_	Low	Medium	High	Low	Medium	High
Year	1.5%	2.0%	2.5%	1.5%	2.0%	2.5%
2025	12,878	12,878	12,878	5,140	5,140	5,140
2030	13,874	14,218	14,570	5,537	5,675	5,815
2035	14,946	15,698	16,485	5,965	6,266	6,580
2040	16,101	17,332	18,651	6,426	6,918	7,444
2045	17,345	19,136	21,102	6,923	7,638	8,422
2050	18,686	21,128	23,875	7,458	8,433	9,529
Change (20	25-2050)					
Number	5,807	8,250	10,997	2,318	3,293	4,389
Percent	45.1%	64.1%	85.4%	45.1%	64.1%	85.4%

Source: Estimates by ECONorthwest

The buildable 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 buildable lands inventory for the City of Sutherlin. The results are based on analysis of Geographic Information System data provided by the City of Sutherlin. The analysis also used aerial orthophotographs and building footprint data to verify land classifications.

#### **METHODS, DEFINITIONS, AND ASSUMPTIONS**

The first step in the inventory is 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. ECO followed up the database work with field verification and discussions with City staff.

ECO began the buildable lands analysis with a tax lot database provided by the City of Sutherlin. The tax lot database originated from the Douglas County Assessor and was current as of January 2005. The supply analysis builds from the tax lot-level database to estimates of buildable land by plan designation.

ECO initiated the process by reviewing the GIS data. The base data required several modifications including changes to the UGB and modifications to zoning and plan designations. ECO also assembled constraints data into a single layer that included steep slopes (slopes over 25%), wetlands, and riparian areas.

The next step in the buildable lands analysis was to classify each tax lot into a set of mutually exclusive categories. ECO developed a set of working definitions that specify the rules with input from City staff. Consistent with the *Residential Lands Workbook*, we classified all tax lots in the UGB into one of the following categories:

- *Vacant land.* Tax lots that have no structures or have buildings with very little value. For the purpose of this inventory, residential lands with improvement values under \$10,000 are considered vacant (not including lands that are identified as having mobile homes).
- *Partially vacant land.* Partially vacant tax lots are those occupied by a use but which contain enough land to be further subdivided without need of rezoning. Partially vacant residential tax lots must be at least 20,000 square feet in area. ECO used the 20,000 square foot threshold as a preliminary indicator for partially-vacant land, and then reviewed improvement values, aerial photos, and building footprints to verify lands

Chapter 3

classified as partially-vacant. Partially vacant commercial and industrial tax lots were identified by analysis of GIS data, aerial photographs, building footprints, and fieldwork.

- Undevelopable land. Land that is under the minimum lot size for the underlying zoning district, land that has no access or potential access, or land that is already committed to other uses by policy. ECO used a threshold of about 2,500 square feet to identify undevelopable land in combination with aerial photos and building footprints.
- *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.
- *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. Redevelopable land includes lands designated for commercial and industrial uses with improvement to land value ratios of less that 1:1. Redevelopable land is a subset of developed land.
- *Public land.* Lands in public or semi-public ownership are considered unavailable for residential development. This includes lands in Federal, State, County, or City ownership as well as lands owned by churches and other semi-public organizations. ECO identified such lands using property ownerships.

The land classifications result in identification of lands that are vacant or partially vacant. The inventory includes all lands within the Sutherlin UGB. Public and semi-public lands are generally considered unavailable for development.

#### RESULTS

#### LAND BASE

Table 3-1 shows the number of tax lots and acres within the Sutherlin city limits, urban growth area, and urban growth boundary in 2005.<sup>11</sup> Sutherlin has 3,234 tax lots within the UGB and city limits that include 3,833 acres. The majority of tax lots and land area is within the city limits. The City also has three lots with 318 acres that are within the city limits but outside the UGB. These tax lots must be included in the UGB before they can be developed.

<sup>&</sup>lt;sup>11</sup> We use this classification because Sutherlin has land in the city limits that is outside the UGB. The urban growth area includes areas within the UGB and outside the city limits.

Area	Number of Tax Lots	Acres in Tax Lots
City Limits	3,057	3,421.1
In City Limits/Outside UGB	3	318.2
Urban Growth Area	209	412.1
Urban Growth Boundary	3,266	3,514.9
Total	3,269	3,833.1

# Table 3-1. Acres by area in Sutherlin UGB and City Limits, June 2005

Source: City of Sutherlin GIS data; analysis by ECONorthwest Note: Tax lot count includes lots split by zoning; 35 tax lots had split zoning

The data in Table 3-1 include the category "In City Limits/Outside UGB." The three tax lots in this category are technically not available for development until they are brought into the UGB. Because the tax lots are unavailable for development, they are not included in the remainder of the tables in this chapter.<sup>12</sup>

Table 3-2 summarizes acres by plan designation for lands within the Sutherlin UGB (not including the three tax lots in the City Limits but outside the UGB). Almost 10% percent of land (345 acres) is designated for commercial uses, while about 21% is designated for industrial uses. About 67% of the land (2,362 acres) is designated for residential uses, with the remaining 2% designated for public use.

About 48% of all residential land is designated Residential Hillside (RH), while about 39% is designated Low Density Residential (R-1). About 3% of residential land is designated High Density Residential (R-3).

<sup>&</sup>lt;sup>12</sup> The three tax lots are: 25052100800 (119.1 ac); 25061400900 (121.6 ac); and 25061300800 (77.6 ac).

	Number		
	of Tax		Percent
General Plan Designation	Lots	Acres	of Acres
Commercial			
Central Business District	168	30.9	0.9%
Community Commercial	232	314.4	8.9%
Subtotal	400	345.3	9.8%
Industrial			
Heavy Industrial	61	578.2	16.4%
Light Industrial	91	171.1	4.9%
Subtotal	152	749.2	21.3%
Residential			
High Density Residential	138	79.0	2.2%
Medium Density Residential	614	228.2	6.5%
Low Density Residential	1,402	927.4	26.4%
Residential Hillside	506	1,127.6	32.1%
Subtotal	2,660	2,362.3	67.2%
Public	54	58.1	1.7%
Total	3,266	3,514.9	100.0%

# Table 3-2. Land by plan designation,Sutherlin UGB and City Limits, June 2005

Source: City of Sutherlin GIS data; analysis by ECONorthwest

Note: Tax lot count includes lots split by zoning; 35 tax lots had split zoning

Table 3-3 shows land by plan designation and location for tax lots within the Sutherlin UGB. The data show that more than half of the land (210 acres) outside the City Limits is designated Low-Density Residential, with about 27% designated for Residential Hillside (111 acres).

Table 3-3. Land by plan de	signation and location, S	Sutherlin UGB and
City Limits, June 2005		

	City Li	mits	Urban Gro	wth Area	Tot	al
	Number		Number		Number	
	of Tax		of Tax		of Tax	
Plan Designation	Lots	Acres	Lots	Acres	Lots	Acres
Central Business District	168	30.9			168	30.9
Community Commercial	211	293.1	21	21.2	232	314.4
Heavy Industrial	56	507.9	5	70.3	61	578.2
Light Industrial	91	171.1			91	171.1
High Density Residential	138	79.0			138	79.0
Medium Density Residential	614	228.2			614	228.2
Low Density Residential	1,242	717.8	160	209.7	1,402	927.4
Residential Hillside	483	1,016.7	23	110.9	506	1,127.6
Public	54	58.1			54	58.1
Total	3,057	3,102.8	209	412.1	3,266	3,514.9

Source: City of Sutherlin GIS data; analysis by ECONorthwest

Note: City limits does not include the three tax lots outside the UGB. Tax lot count includes lots split by zoning; 35 tax lots had split zoning

Table 3-4 shows tax lots and acres by classification and plan designation for the Sutherlin UGB in 2005. The data show that about 81% of the tax lots are developed; however, only 47% of the land area is in the developed tax lots. About 18% of the tax lots are classified as vacant or partially vacant, accounting for 50% of total acres. It is important to note that not all vacant and partially vacant acres are buildable—some areas of partially vacant lots are developed and some vacant areas have development constraints (e.g., steep slopes, wetland and riparian areas).

		Land	Classificatior	1				
	In							
		Development	Undevelop	Partially-				
Plan Designation	Developed	Review	able	Vacant	Vacant	Total		
Number of Tax Lots								
Central Business District	152				16	168		
Community Commercial	186			13	33	232		
Heavy Industrial	16	1		10	34	61		
Light Industrial	54			15	22	91		
High Density Residential	128	1		4	5	138		
Medium Density Residential	546	1		15	52	614		
Low Density Residential	1213	8	2	50	129	1402		
Residential Hillside	288	26	1	55	136	506		
Public	48			1	5	54		
Total	2,631	37	3	163	432	3,266		
Total Acres in Tax Lots								
Central Business District	25.8				5.1	30.9		
Community Commercial	231.2			32.9	50.3	314.4		
Heavy Industrial	136.2	2.5		44.9	394.5	578.2		
Light Industrial	42.5			52.1	76.5	171.1		
High Density Residential	128.0	1.0		4.0	5.0	138.0		
Medium Density Residential	170.8	0.2		22.1	35.1	228.2		
Low Density Residential	598.0	32.7	3.1	140.2	153.5	927.4		
Residential Hillside	284.6	75.6	0.0	313.1	454.3	1,127.6		
Public	44.4			6.9	6.8	58.1		
Total	1,661.5	111.9	3.1	616.2	1,181.1	3,573.9		
Percent of Tax Lots Percent of Total Acres	80.6% 46.5%	1.1% 3.1%	0.1% 0.1%	5.0% 17.2%	13.2% 33.0%	100.0% 100.0%		

## Table 3-4. Land by classification and plan designation, Sutherlin UGB, June 2005

Source: City of Sutherlin data; analysis by ECONorthwest

Notes: Partially Vacant classification includes both developed and vacant acres in tax lots.

Tax lot count includes lots split by zoning; 35 tax lots had split zoning

"Undevelopable" category includes tax lots classified as undevelopable due to size or access. Table 3-4 does not show areas within tax lots that are undevelopable due to physical constraints (steep slopes and wetlands). Such lands are identified as "constrained" in subsequent tables.

Table 3-5 shows land by classification and area for the Sutherlin City Limits and UGB. The data show that of the 3,515 acres within the UGB, 1,059 are constrained, and 1,466 are developed. This leaves 990 vacant buildable acres (i.e., acres free from constraints and potentially available for development). Of total buildable acres, about 850 are inside the City Limits. About 111 acres had pending development applications at the time this study was completed.

	Number of	Total	Constrained	Developed	Buildable
Classification	Tax Lots	Acres	Acres	Acres	Acres
City Limits					
Developed	2,512	1446.9	224.7	1222.2	0.0
Undevelopable	3	3.1	1.2	2.0	0.0
In Development Review	34	92.9	34.7	3.8	54.4
Partially Vacant	127	516.5	246.2	97.6	172.9
Vacant	381	1043.4	421.5	0.0	621.9
Subtotal	3,057	3,102.8	928.2	1,325.6	849.2
Urban Growth Area					
Developed	119	148.1	33.4	114.6	0.0
Undevelopable					
In Development Review	3	18.2	7.3	2.0	8.9
Partially Vacant	36	108.0	26.5	23.7	57.7
Vacant	51	137.8	63.5	0.0	74.3
Subtotal	209	412.1	130.9	140.3	140.9
UGB/City Limits					
Developed	2,631	1,595.0	258.2	1,336.8	0.0
Undevelopable	3	3.1	1.2	2.0	0.0
In Development Review	37	111.1	42.0	5.8	63.3
Partially Vacant	163	624.5	272.7	121.3	230.6
Vacant	432	1,181.2	485.0	0.0	696.2
Total	3,266	3,514.9	1,059.1	1,465.9	990.1

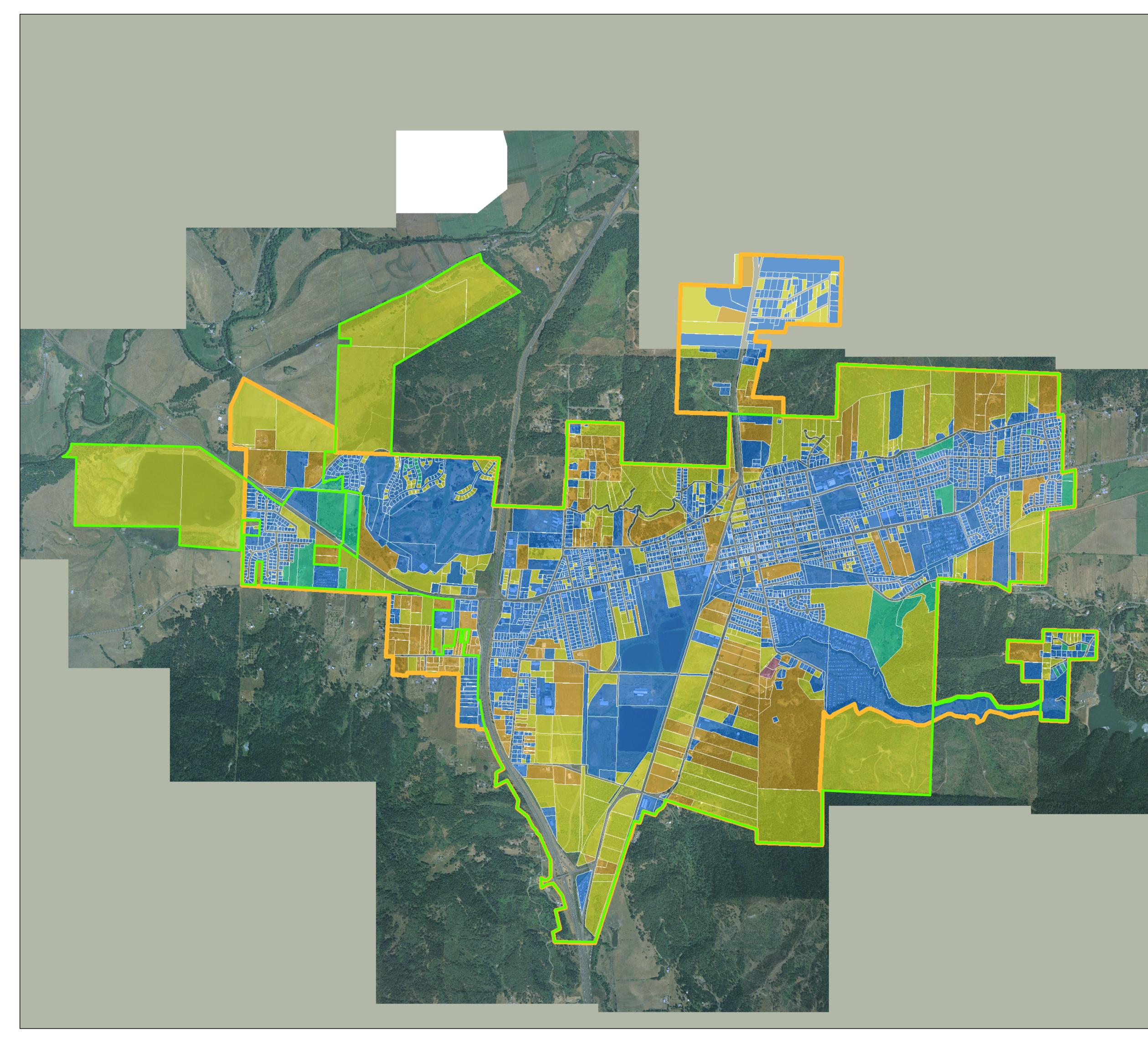
Table 3-5. Acres by classification and location, Sutherlin UGB, June2005

Source: City of Sutherlin GIS data; analysis by ECONorthwest

Note: City Limits + Urban Growth Area does not added to UGB/City Limits because 3

tax lots with 317 acres are inside the City Limits and Outside the UGB.

Map 3-1 shows land by classification within the Sutherlin City Limits and UGB as of June 2005.



# 3.1 Tax Lots by Classification Buildable Land Inventory City of Sutherlin Oregon

oregon



0	3,200	6,400
	Feet	

UO InfoGraphics lab, Deptartment of Geography Cartography/GIS: Ken Kato, June 2005.

#### VACANT BUILDABLE LAND

The next step in the buildable land inventory is to net out portions of vacant and partially 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 wetlands, areas with slopes over 25%, and areas in the riparian zones).

Table 3-6 shows vacant and partially vacant land by development and constraint status. The inventory shows Sutherlin has about 990 buildable acres within lots classified as vacant, partially vacant, and in development review (Table 3-5). For the purpose of the buildable lands inventory, the City is interested only in lands classified as vacant or partially-vacant (lands in development review will be soon developed).

The inventory shows that Sutherlin has 927 buildable acres within the UGB (not including lands outside the UGB and within the City Limits). The majority of buildable land is within the City Limits—795 acres.

	Number				
	of Tax	Total	Constained	Developed	Buildable
Plan Designation	Lots	Acres	Acres	Acres	Acres
City Limits					
Central Business District	16	5.1	2.7	0.0	2.4
Community Commercial	45	82.0	49.8	7.1	25.1
Heavy Industrial	39	369.2	97.3	6.4	265.8
Light Industrial	37	128.6	51.9	16.0	60.7
High Density Residential	9	17.4	2.9	3.5	11.0
Medium Density Residential	67	57.2	9.7	7.5	40.0
Low Density Residential	109	183.8	83.3	8.7	91.8
Residential Hillside	180	702.9	367.1	46.5	289.3
Public	6	13.7	3.0	2.0	8.8
Total	508	1,559.9	667.7	97.6	794.8
Outside City Limit but Inside U	GB				
Central Business District					
Community Commercial	1	1.2	0.0	0.0	1.2
Heavy Industrial	5	70.3	31.4	1.3	37.6
Light Industrial					
High Density Residential					
Medium Density Residential					
Low Density Residential	70	109.8	23.2	13.1	73.6
Residential Hillside	11	64.5	35.4	9.4	19.7
Public					
Total	87	245.8	90.1	23.7	132.0
All Land in UGB					
Central Business District	16	5.1	2.7	0.0	2.4
Community Commercial	46	83.2	49.8	7.1	26.3
Heavy Industrial	44	439.5	128.7	7.6	303.4
Light Industrial	37	128.6	51.9	16.0	60.7
High Density Residential	9	17.4	2.9	3.5	11.0
Medium Density Residential	67	57.2	9.7	7.5	40.0
Low Density Residential	179	293.7	106.6	21.7	165.4
Residential Hillside	191	767.5	402.5	56.0	309.0
Public	6	13.7	3.0	2.0	8.8
Total	595	1,805.7	757.7	121.3	926.8

Table 3-6. Vacant and partially vacant land by plan designation, Sutherlin UGB and City Limits, June 2005

Source: City of Sutherlin GIS data; analysis by ECONorthwest

Table 3-7 shows buildable acres by plan designation and location. About 230 acres within partially vacant tax lots are buildable, with 696 acres within vacant tax lots identified as buildable. About 62 buildable acres were pending development review at the time the inventory was completed.

Table 3-7. Buildable acres by plan d	lesignation,	classification, and loc	ation,
Sutherlin City Limits and UGB, Mar	ch 2005		

	Partially	Vacant	Vac	Vacant		In Development Review		Total	
	Number of	Buildable	Number of	Buildable	Number of	Buildable	Number of	Buildable	
Plan Designation	Tax Lots	Acres	Tax Lots	Acres	Tax Lots	Acres	Tax Lots	Acres	
City Limits									
Central Business District			16	2.4			16	2.4	
Community Commercial	13	8.9	32	16.3			45	25.1	
Heavy Industrial	8	11.1	31	254.7	1	2.0	40	267.8	
Light Industrial	15	19.3	22	41.4			37	60.7	
High Density Residential	4	6.6	5	4.3	1	0.2	10	11.1	
Medium Density Residential	15	13.2	52	26.8	1	0.2	68	40.2	
Low Density Residential	22	22.5	87	69.3	8	23.6	117	115.4	
Residential Hillside	49	89.3	131	200.0	23	28.4	203	317.7	
Public	1	2.0	5	6.8			6	8.8	
Total	163	230.6	416	696.2	37.0	63.3	542	849.2	
Outside City Limit but Inside	UGB								
Central Business District							0	0.0	
Community Commercial			1	1.2			1	1.2	
Heavy Industrial	2	2.9	3	34.7			5	37.6	
Light Industrial							0	0.0	
High Density Residential							0	0.0	
Medium Density Residential							0	0.0	
Low Density Residential	28	41.1	42	32.5			70	73.6	
Residential Hillside	6	13.8	5	5.9	3	8.9	14	28.5	
Public							0	0.0	
Total	36	57.7	51	74.3	3.0	8.9	90	140.9	
All Land in UGB									
Central Business District			16	2.4			16	2.4	
Community Commercial	13	8.9	33	17.4			46	26.3	
Heavy Industrial	10	14.0	34	289.4	1	2.0	45	305.4	
Light Industrial	15	19.3	22	41.4			37	60.7	
High Density Residential	4	6.6	5	4.3	1	0.2	10	11.1	
Medium Density Residential	15	13.2	52	26.8	1	0.2	68	40.2	
Low Density Residential	50	63.5	129	101.9	8	23.6	187	189.0	
Residential Hillside	55	103.1	136	205.9	26	37.3	217	346.3	
Public	1	2.0	5	6.8			6	8.8	
Total	163	230.6	416	696.2	37.0	63.3	632	990.1	

Source: City of Sutherlin GIS data; analysis by ECONorthwest

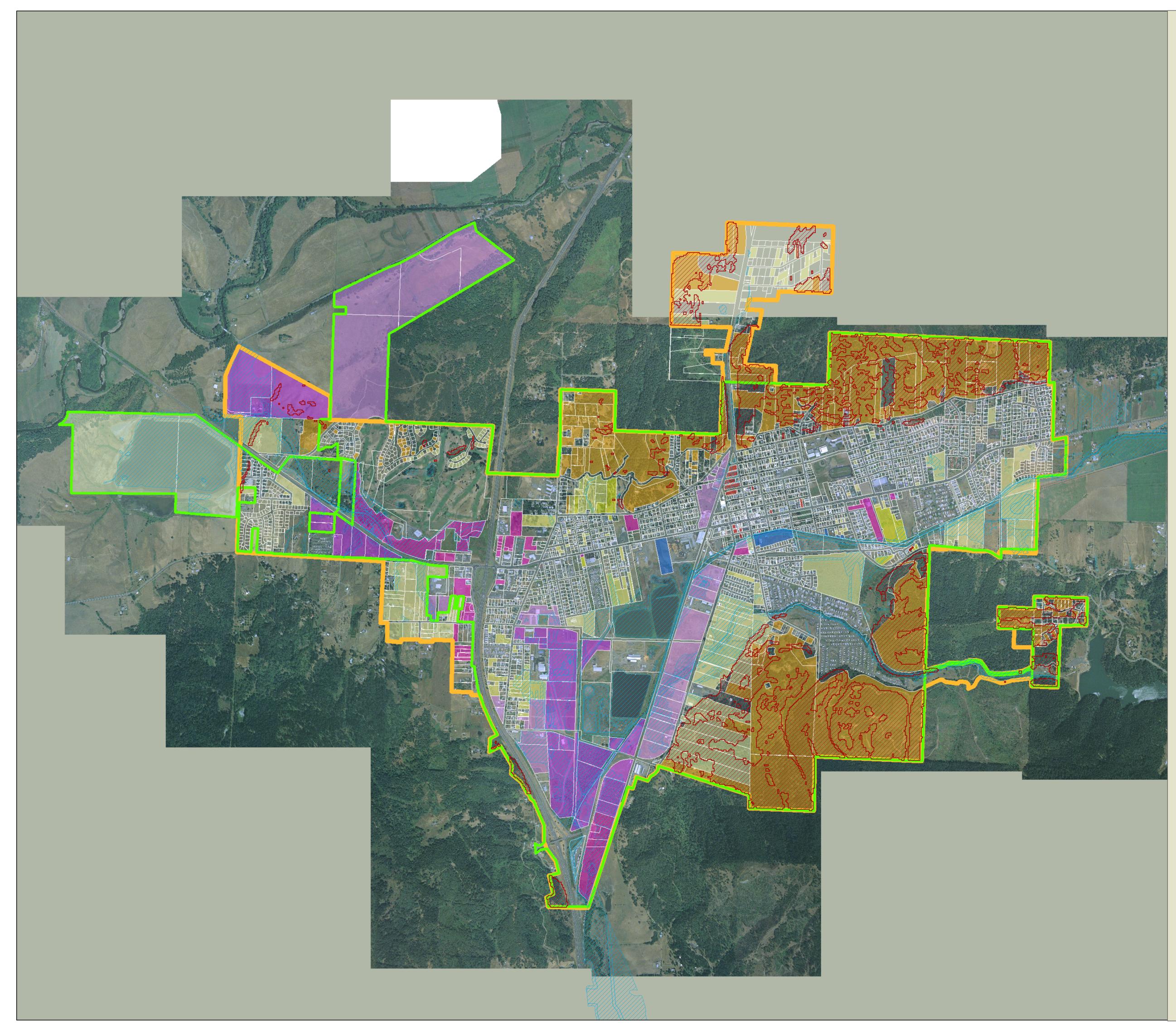
Table 3-8 shows vacant land by plan designation by parcel size. This analysis is useful in that it shows the distribution of vacant land by parcel size, which allows an evaluation of whether a sufficient mix of parcels is available. More than 75% of the vacant tax lots are less than 1 acre in size. Tax lots smaller than 1-acre account for 13% of the total vacant land. By contrast, only 2% of the tax lots (19 tax lots) are larger than 10 acres, but account for 46% of the vacant land.

-						Tax Lots			<u> </u>		
Plan Designation	<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- 49.99	50.00 or more	Total	Percent
Number of Tax Lots	<b>NU.20</b>	0.43	0.55	1.55	4.55	5.55	13.33	40.00	more	Total	rereent
Within City Limits and UGB											
Central Business District	13	1	1							15	3.5%
Community Commercial	13	6	3	5	1					32	7.5%
Heavy Industrial	3	5	3	5	6	3		3	1	32	7.5%
Light Industrial	4	5	6	4	4	3 1	1	3	1	30 21	4.9%
-	4	1	2	4	4	1	1			5	4.97
High Density Residential	2 32	4	2	4	3					51	12.0%
Medium Density Residential			8 4	4	3	4		4		51 87	20.5%
Low Density Residential	58	12	-		-	1 7	2	1		-	
Residential Hillside	59	22	14	6	17	1	3			128	30.1%
Public	2	1			2	40				5	1.2%
Subtotal	190	52	41	32	38	12	4	4	1	374	88.0%
Outside City Limits, Within UGE	5										0.00
Central Business District											0.0%
Community Commercial				1			0	0		1	0.2%
Heavy Industrial		1				1	0	0	1	3	0.7%
Light Industrial											0.0%
High Density Residential											0.0%
Medium Density Residential	_			_				_			0.0%
Low Density Residential	9	14	12	6		1	0	0		42	9.9%
Residential Hillside	1	1	1	1	1		0	0		5	1.2%
Public											0.0%
Subtotal	10	16	13	8	1	2	0	0	1	51	12.0%
Total	200	68	54	40	39	14	4	4	2	425	100.0%
Buildable Acres in Vacant Tax Lo	ts										
Within City Limits and UGB											
Central Business District	1.5	0.3	0.6							2.4	0.3%
Community Commercial	2.2	2.3	2.2	6.8	2.8					16.3	2.3%
Heavy Industrial	0.1	2.1	2.5	9.5	21.4	19.9		113.9	85.4	4.3	0.6%
Light Industrial	0.6	0.3	4.2	6.6	10.2	8.3	10.6			69.3	10.0%
High Density Residential	0.5		1.2		2.6					40.8	5.9%
Medium Density Residential	4.7	1.2	6.1	5.5	9.3					6.8	1.0%
Low Density Residential	8.4	3.9	2.8	10.3	13.6	5.0		25.4		26.8	3.9%
Residential Hillside	8.5	7.3	10.8	9.3	57.5	49.3	57.3			0.0	0.0%
Public	0.4	0.3			6.1					200.0	28.7%
Subtotal	26.7	17.6	30.5	47.9	123.6	82.5	67.9	139.2	85.4	621.3	89.3%
Outside City Limits, Within UGE	3										
Central Business District											0.0%
Community Commercial				1.2			0.0	0.0		1.2	0.2%
Heavy Industrial		0.3				7.8	0.0	0.0	26.7	8.0	1.2%
Light Industrial											0.0%
High Density Residential											0.0%
Medium Density Residential											0.0%
Low Density Residential	0.8	5.7	8.3	9.3		8.3	0.0	0.0		32.5	4.7%
Residential Hillside	0.1	0.3	0.8	1.2	3.5		0.0	0.0		5.9	0.8%
Public											0.0%
Subtotal	1.0	6.3	9.2	11.7	3.5	16.1	0.0	0.0	26.7	74.3	10.7%
Total	27.7	23.9	39.7	59.6	127.0	98.6	67.9	139.2	112.1	695.6	100.0%
Percent of tax late	470/	160/	130/	00/	00/	20/	40/	40/	00/	1000/	
Percent of tax lots	47%	16%	13%	9% %	9%	3%	1%	1%		100%	
Percent of Acres	4%	3%	6%	9%	18%	14%	10%	20%	16%	100%	
Average lot size (ac)	0.14	0.35	0.73	1.49	3.26	7.04	16.97	34.81	56.03	1.64	

# Table 3-8. Vacant land by plan designation and parcel size, Sutherlin City Limits and UGB, March 2005

Source: City of Sutherlin data; analysis by ECONorthwest

Note: Table only includes tax lots classified as Vacant.



# 3.2 Vacant/Partially Vacant Lots by Plan Designation Buildable Land Inventory City of Sutherlin Oregon

No Designation
Central Business District
Community Commercial
Light Industrial
Heavy Industrial
Low Density Residential
Medium Density Residential
High Density Residential
Residential Hillside
Residential-Agriculture/Forest
Public
City Limits
UGB
Tax Lots

0	3,250	6,500
	Feet	

UO InfoGraphics lab, Deptartment of Geography Cartography/GIS: Ken Kato, May 2005.

#### **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. 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 these criteria for redevelopment *potential* will be assumed to redevelop during the planning period. The issue of *how much* land might redevelop over the planning period is discussed in Chapter 5.

Table 3-9 shows a summary of potentially underdeveloped parcels by plan designation. A ratio of less than 1:1 is a typical, but arbitrary, standard for identifying lands with redevelopment potential. About 350 acres of land classified as developed have an improvement to land value ratio of less than 1:1. Nearly 58% of this land (168 acres) is designated for low-density residential uses. A significant portion of land with an improvement to land value ratio of less than 1:1 falls within the Sutherlin Golf Course and should not be considered available for redevelopment at this time.

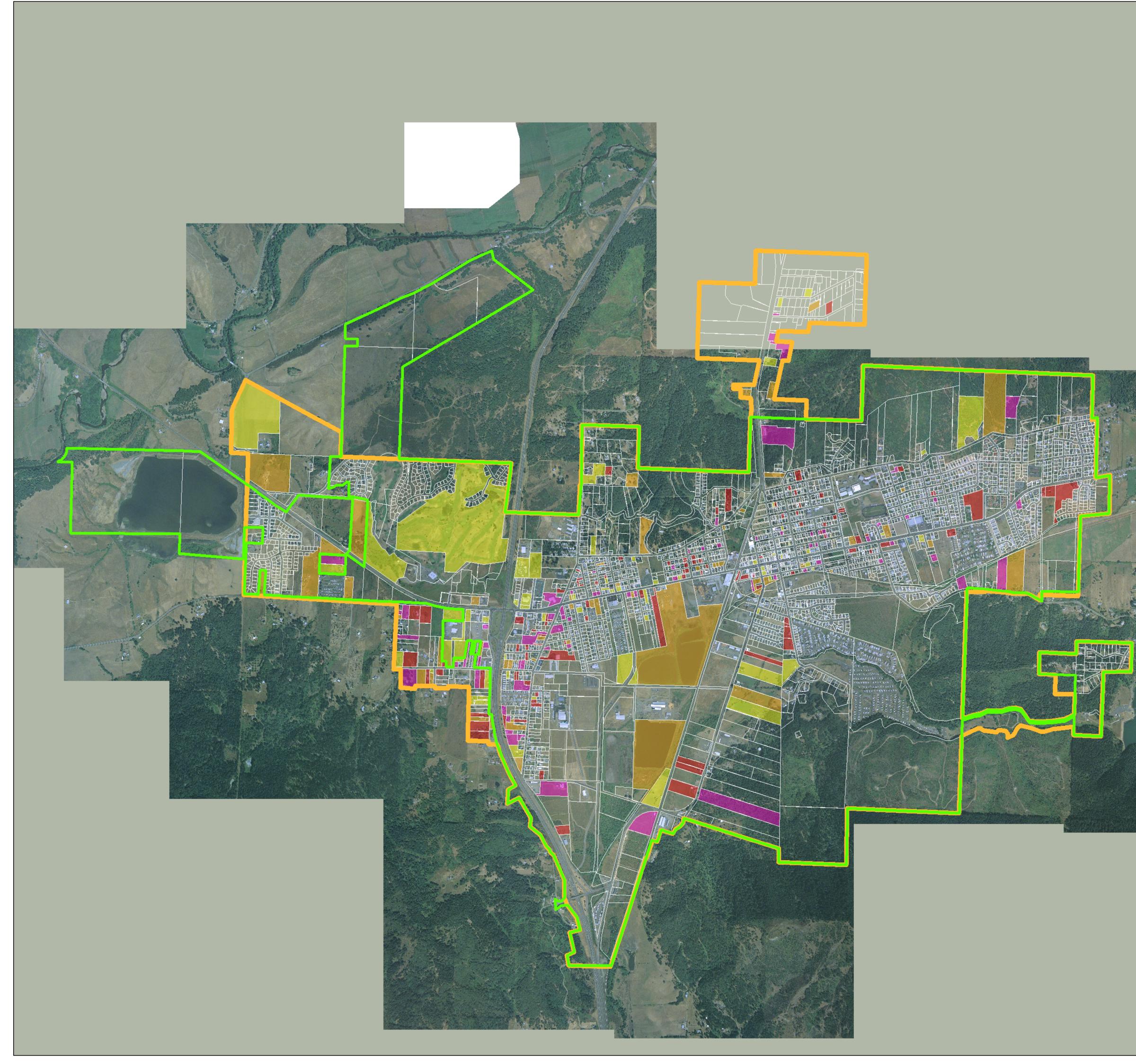
# Table 3-9. Improvement to land value ratio of developed tax lots, Sutherlin City Limits and UGB

				Improvement to Land Value Ratio						
	-	0.01.0.24.0	0.25-0.49 0	50 0 74 0	75 0 00	1.00-1.99	2.00-2.99	3.00 or more	no data	Total
lumber of Tex Lete	0								no data	Total
Number of Tax Lots Hig Inside City Limits			Redevelop	ment Pote	nua	Lower Rec	levelopment	Fotential		
Central Business District	29	11	4	8	4	44	27	38	3	16
	29 55		4 11	0 15	4 15	44	21	25	8	21
Community Commercial							21 1			
Heavy Industrial	37		3	2	1	3	-	4		5
Light Industrial	30		6	3	7	14	10	15		9
High Density Residential	18		1	1	2	11	28	17		13
Medium Density Residential	66		14	21	36	214	153	57	42	61
Low Density Residential	148		6	11	24	345	531	70		124
Residential Hillside	216		7	4	4	36	76	108	28	48
Public	12		1			12	5	6		5
Subtotal	611	59	53	65	93	720	852	340	262	305
Urban Growth Area (UGA) Central Business District										
Community Commercial	7		2	1	4	3				2
Heavy Industrial	2	1					1	1		
Light Industrial										
High Density Residential Medium Density Residential										
Low Density Residential	39	7	9	9	8	26	13	9	40	10
Residential Hillside Public	5		2			7	2		7	:
Subtotal	53	12	13	10	12	36	16	10	47	20
Total	664	71	66	75	105	756	868	350	309	326
cres										
Inside City Limits										
Central Business District	6.7	1.8	0.3	1.3	0.8	8.2	5.5	5.5	0.8	30
Community Commercial	67.9	30.0	69.8	8.1	5.0	27.5	9.3	61.8	13.8	293
Heavy Industrial	19.8	0.2	1.1	1.4	0.4	3.1	16.0	11.4	25.5	79
Light Industrial	81.2	13.3	3.5	5.8	13.5	21.5	9.4	15.1	7.8	171
High Density Residential	19.8	0.2	1.1	1.4	0.4	3.1	16.0	11.4	25.5	79
Medium Density Residential	37.1	4.3	6.1	8.0	13.1	47.9	60.7	38.7	12.3	228
Low Density Residential	179.5	113.7	26.0	7.8	20.7	108.8	141.5	67.1	52.8	717
Residential Hillside	589.7	20.3	27.7	25.1	3.9	160.1	71.2	50.4	68.3	1016
Public	26.7		0.1			8.8	1.8	16.8	4.0	58
Subtotal	852.8	138.6	61.0	42.3	38.0	328.7	291.2	184.4	162.9	2099
Urban Growth Area (UGA)										
Central Business District										0
Community Commercial	3.8	3.5	1.7	1.2	7.7	3.3				21
Heavy Industrial	32.7						0.6	6.3		70
Light Industrial	02	0010					0.0	0.0		0
High Density Residential										0
Medium Density Residential										0
Low Density Residential	60.3	7.8	27.7	12.1	10.3	18.4	10.7	8.6	53.9	209
Residential Hillside	26.2		13.2	12.1	10.0	30.6	13.4	0.0	27.6	110
Public	20.2		10.2			50.0	13.4		21.0	0
Subtotal	86.4	7.8	40.8	12.1	10.3	48.9	24.1	8.6	81.5	320
Total	939.2		101.8	54.4	48.3	377.6	315.2	192.9	244.4	2420

Source: City of Sutherlin data; analysis by ECONorthwest

Note: "0" column denotes land that was classified as developed but did not have any improvement value listed in the assessment database. Many of these parcels are probably in mobile home uses.

Map 3-3 shows tax lots with improvement to land value ratios of less than 1:1.



3.3 Tax Lots with
Improvement to Land
Value Ratios LessThan 1:1
Buildable Land Inventory
City of Sutherlin
Oregon



>0 - <.25
>.25 - <.50
>.50 - <.75
>.75 - <1.0
City Limits
UGB
Tax Lots

0	3,250	6,500
	Feet	

# **RESIDENTIAL CAPACITY**

As a final step in the Buildable Lands Inventory, ECO estimated the capacity of buildable residential lands within the Sutherlin City Limits and UGB. This analysis is intended to inform the City's Housing Needs Analysis and allow a determination of how much residential land the City should designate to meet identified housing needs for the 2005-2025 period.

The residential capacity analysis is not as simple as applying an overall density assumption to the amount of vacant land. Such an analysis should consider density differentials by residential plan designations. It should also consider the capacity of individual tax lots. For example, a 6,000 square foot lot and an 11,000 square foot lot in a zone that has a minimum lot size of 6,000 square feet both have capacity for one dwelling unit. In short, the analysis should consider thresholds for lot divisions.

Moreover, it is important to make a distinction between theoretical capacity and probable capacity. Land rarely gets developed at theoretical capacity for a variety of reasons. Constraints can limit density, lot geometry may limit plat configurations, and infrastructure requires land. The analysis that follows used the following assumptions:

- Gross to net factor: 20% for streets and other public right-of-way
- Density assumptions:
  - Low Density Residential: 5 dwelling units per net acre
  - Medium Density Residential: 9 dwelling units per net acre
  - High Density Residential: 15 dwelling units per net acre
  - Residential Hillside: 2 dwelling units per net acre

ECO made two further adjustments to residential capacity. The first was to exclude all tax lots in the Union Gap area. According to City staff, the Union Gap area does not have additional sewer capacity and future development is constrained by the lack of services. The second adjustment was that a land use efficiency factor of 20% was applied to all residential designations to account for constraints, parcelization patterns and other issues that will reduce the amount of development.

The following example demonstrates the difference between estimating capacity in the aggregate and at the tax lot level. Sutherlin has about 525 gross acres of buildable residential land. If we deduct 20% of that land for streets, Sutherlin has about 420 net buildable residential acres. If we assume the City achieves an average density of 5 dwelling units per net residential acre, then the City has capacity for 2,100 dwelling units. This figure, however, is inflated because it does not consider the land use inefficiencies described above.

Table 3-10 summarizes the residential capacity analysis. Based on the assumptions described above, ECO estimates the City of Sutherlin has capacity for 1,214 dwelling units on buildable residential lands. About 84% of residential capacity is within the City Limits.

About 11% of total residential capacity is in lands designated for high density residential. An additional 20% exists in lands designated for medium density residential.

Plan Designation	Capacity (Dwelling Units)	Percent of Capacity
City Limits		
High Density Residential	128	10.5%
Medium Density Residential	244	20.1%
Low Density Residential	241	19.9%
Residential Hillside	409	33.7%
Subtotal	1,022	84.2%
Urban Growth Area		
High Density Residential	0	0.0%
Medium Density Residential	0	0.0%
Low Density Residential	182	15.0%
Residential Hillside	10	0.8%
Subtotal	192	15.8%
All Areas		
High Density Residential	128	10.5%
Medium Density Residential	244	20.1%
Low Density Residential	423	34.8%
Residential Hillside	419	34.5%
Total	1,214	100.0%

# Table 3-10. Estimated residential capacity, vacant and partially-vacant lands, Sutherlin City Limits and UGB, March 2005

Source: Estimates by ECONorthwest

# Chapter 4 Economic Opportunities Analysis

The content of this chapter is designed to meet the requirements of Oregon Statewide Planning Goal 9 and the administrative rule that implements Goal 9 (OAR 660-009). The framework for economic development planning in Oregon is defined by OAR 660-009, which requires three key elements:

- 1. *Economic Opportunities Analysis (OAR 660-009-0015).* The Economic Opportunities Analysis (EOA) requires communities to review national and state trends, assess community economic development potential, identify industries reasonably expected to expand or locate in the area, and identify site requirements of these industries. The EOA must also include an inventory of lands available for commercial and industrial development.
- 2. Industrial and commercial development policies (OAR 660-009-0020). Cities with a population over 2,500 are required to develop industrial and commercial development policies based on the EOA. The policies must include community development objectives and identify categories or particular types of industrial and commercial uses desired by the community. Cities must also ensure necessary public facilities through the public facilities plan for the planning area.
- 3. Designation of lands for industrial and commercial uses (OAR 660-009-0025). Cities must take adequate measures to ensure a long-term supply of buildable land for industrial and commercial uses, consistent with community development objectives. An adequate supply of buildable land includes sites of suitable sizes, types, and locations for desired and likely industrial and commercial uses over the planning period.

Appropriate steps to designate an adequate supply of lands include: (1) identification of needed sites over a 20-year planning period; (2) an inventory of buildable sites designated for commercial and industrial use; (3) an evaluation of the short-term supply of serviceable sites; (4) designation of land suitable to meet the long- and short-term site needs for commercial and industrial uses over the planning period. Designations of commercial or industrial lands that involve amendments to the urban growth boundary must meet the requirements of Goal 14.

The Economic Opportunities Analysis in this chapter addresses the first key element required by Goal 9. This EOA reviews economic conditions and local characteristics to make a forecast of likely employment growth by land use type in the Sutherlin area. Forecast employment growth is the basis for estimating demand for buildable commercial and industrial land over the planning period, and the type of expected employment growth will have implications for the site needs of expanding and new businesses in Sutherlin. The inventory of buildable land required by OAR 990 is presented in Chapter 3 of this report. Chapter 5 will compare the available supply of buildable commercial and industrial land to the estimated demand for buildable land based on employment growth. This comparison will identify the amount of additional land—if any—that is needed to meet the Goal 9 requirement for an adequate supply of buildable commercial and industrial land. The rest of this chapter is organized to provide an assessment of economic trends and likely future conditions in Sutherlin:

- **Overview of Sutherlin's Economy** describes recent trends in population and employment growth in Sutherlin, including an estimate of employment growth by industry.
- **Context for Economic Growth in Sutherlin** describes recent population, employment, and business trends in Douglas County.
- Factors Affecting Future Economic Development in Sutherlin discusses the condition of these factors in Sutherlin and how this compares with other locations in the region. The factors included in this chapter are location, buildable land, labor force, housing, public services, transportation, renewable and non-renewable resources, and quality of life. This chapter ends with a discussion of Sutherlin's comparative advantages for economic development.
- Likely Growth Industries in Sutherlin presents a rough analysis of the types of businesses that are most likely to locate or expand in Sutherlin.
- **Employment Forecast** revisits the employment forecast for Sutherlin presented in Chapter 2 based on expected economic conditions at the national, state, and regional level; current forecasts for growth in Sutherlin; and local factors affecting economic development.
- **Implications for Land Demand** translates expected employment growth to demand for commercial and industrial land in Sutherlin.

## **OVERVIEW OF SUTHERLIN'S ECONOMY**

Sutherlin is a community of 7,360 residents in Douglas County, Oregon. Sutherlin is located about 10 miles north of Roseburg, the economic center and seat of Douglas County, which has a population of 20,530. Chapter 2 describes population growth in Sutherlin, Roseburg, Douglas County, and Oregon between 1980 and 2004 period. Population has grown faster in Sutherlin than in Roseburg, Douglas County, or Oregon in every decade since 1980.

Population growth in Sutherlin accelerated in the 1990s, with annual average growth of 2.9% during this period. Sutherlin's population increased from 5,020 in 1990 to 6,669 in 2000, an increase of 1,649 persons or 33% over this decade. Population growth in Sutherlin has remained strong, with growth averaging 2.5% per year since 2000. Sutherlin has added another 691 residents since 2000, reaching a population of 7,360 in 2004.

Table 4-1 shows that covered employment<sup>13</sup> in the Sutherlin area was just over 2,000 jobs in 2003, with employment concentrated in the Manufacturing, Retail Trade, Accommodation and Food Service, Government, and Construction sectors. Together these sectors have just over 1,600 jobs or 80% of total covered employment in the Sutherlin area.

Table 4-1 shows that employment in the Sutherlin area increased by 345 jobs between 1998 and 2003, an increase of 21% or an average increase of 3.8% per year over this five-year period. Employment growth was led by the Manufacturing and Accommodations and Food Service sectors, which together added 231 jobs or 2/3 of total employment growth in Sutherlin over the period.

Data in Table 4-1 is summarized by *Sector*, each of which includes several individual *Industries*. For example, Manufacturing includes Food Processing, Textile Mills, Wood Products, and other manufacturing industries. Data for most industries is not shown in Table 4-1 in order to maintain the confidentiality of businesses in industries with few firms, or where the industry data does not add much more detail.

	1998				20	03	1998-2003	
Sector/Industry	Est	Emp	Payroll	Est	Emp	Payroll	Emp	Percent
Agriculture, Forestry, Fishing, Hunting	13	53	\$1,555,409	11	61	\$1,952,886	8	15%
Construction	31	67	\$1,198,563	32	104	\$2,739,539	37	55%
Manufacturing	17	536	\$15,580,266	17	686	\$26,249,937	150	28%
Wood Product Manufacturing	5	304	\$8,369,330	6	429	\$15,141,864	125	41%
Wholesale Trade	6	12	\$231,590	4	10	\$235,184	-2	-17%
Retail Trade	36	288	\$4,157,620	35	313	\$5,942,933	25	9%
Motor Vehicle and Parts Dealers	5	14	\$242,753	6	34	\$834,490	20	143%
Building Material and Garden Equipment and Supp	3	14	\$168,888	4	17	\$198,495	3	21%
Food and Beverage Stores	11	124	\$1,691,154	10	124	\$2,111,402	0	0%
Gasoline Stations	8	53	\$476,271	5	52	\$609,597	-1	-2%
Transportation and Warehousing	4	10	\$272,106	15	47	\$1,097,274	37	370%
Finance and Insurance	6	23	\$395,364	10	45	\$1,026,933	22	96%
Real Estate, Rental, and Leasing	16	30	\$339,540	15	27	\$382,224	-3	-10%
Professional, Scientific, and Technical Services	6	26	\$349,068	7	29	\$481,892	3	12%
Health Care and Social Assistance	21	71	\$1,220,071	20	74	\$1,915,465	3	4%
Arts, Entertainment, and Recreation	3	13	\$121,420	3	28	\$357,941	15	115%
Accommodation and Food Service	23	179	\$1,494,366	28	260	\$2,941,320	81	45%
Accommodation	5	29	\$262,933	5	33	\$428,059	4	14%
Food Services and Drinking Places	18	150	\$1,231,433	23	227	\$2,513,261	77	51%
Other Services	28	109	\$2,545,001	34	82	\$1,663,482	-27	-25%
Government	5	255	\$7,188,844	12	255	\$8,573,983	0	0%
Total Covered Employment	215	1,672	\$36,649,228	243	2,017	\$55,560,993	345	21%

#### Table 4-1. Covered employment in 97479 (Sutherlin) zip code area, 1998 and 2003

Source: ES-202 employment data provided to ECONorthwest by the Oregon Employment Department.

Establishments, employment, and payroll by sector summarized by ECONorthwest.

Notes: 97479 zip code area includes Sutherlin and the surrounding rural area. Employment data for most

industries is not shown to maintain the confidentiality of individual businesses.

Industries with a substantial level of employment include Food Service and Drinking Places (227 jobs in 2003), Wood Products Manufacturing (429), Food and Beverage Stores (124), and Machinery Manufacturing (data not reported to

<sup>&</sup>lt;sup>13</sup> 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.

maintain confidentiality). The Food Service and Drinking Places and Wood Products Manufacturing industries together added 202 jobs or almost 60% of the employment growth in Sutherlin between 1998 and 2003.

Table 4-2 shows the number and distribution of households in Sutherlin by household income and median household income in 1999. The distribution of households by income and median household income in Douglas County and Oregon are shown for comparison. Table 4-2 shows that the median household income in Sutherlin and Douglas County was below that for Oregon as a whole. Both Sutherlin and Douglas County had larger shares than Oregon of households with an annual income below \$35,000 in 1999.

Douglas					
Su	Sutherlin County				
309	12%	11%	9%		
389	15%	9%	7%		
437	17%	17%	13%		
450	17%	16%	14%		
502	19%	18%	18%		
414	16%	18%	20%		
84	3%	7%	10%		
44	2%	3%	7%		
2	0%	1%	2%		
2	0%	1%	2%		
2,633	100%	100%	100%		
\$29,068		\$33,223	\$40,916		
	309 389 437 450 502 414 84 44 2 2 2,633	$\begin{array}{cccc} 309 & 12\% \\ 389 & 15\% \\ 437 & 17\% \\ 450 & 17\% \\ 502 & 19\% \\ 414 & 16\% \\ 84 & 3\% \\ 444 & 2\% \\ 2 & 0\% \\ 2 & 0\% \\ 2,633 & 100\% \end{array}$	Sutherlin         County           309         12%         11%           389         15%         9%           437         17%         17%           450         17%         16%           502         19%         18%           414         16%         18%           44         2%         3%           2         0%         1%           2         0%         1%           2,633         100%         100%		

Table 4-2. Households by income range in Sutherlin, DouglasCounty, and Oregon, 1999

Source: U.S. Census.

### **CONTEXT FOR ECONOMIC GROWTH IN SUTHERLIN**

Economic growth in Sutherlin will be affected by economic conditions in the U.S. and Oregon. Table 2-1 in Chapter 2 shows population growth in Oregon, Douglas County, Roseburg, and Sutherlin over the 1980–2004 period. This table shows that the rate of population growth in Douglas County as a whole and in Roseburg has lagged behind the rate of population growth in Oregon over the last 24 years. The rate of population growth in Sutherlin, however, has exceeded that in other areas—population in Sutherlin grew at an average rate of 2.0% per year between 1980 and 2004, compared to 0.9% in Roseburg, 0.4% in Douglas County, and 1.3% in Oregon.

Counties in the Willamette Valley<sup>14</sup> compose 70% of Oregon's population, and the share of Oregon's population in the Willamette Valley increased slightly between 1980 and 2004. The share of Oregon's population in Douglas County, however, fell from 3.6% in 1980 to 2.9% in 2004. Population growth in Sutherlin outpaced that in Oregon despite relatively slower growth in Douglas County, but

<sup>&</sup>lt;sup>14</sup> The Willamette Valley consists of Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties.

with its small population Sutherlin represents only 0.2% of Oregon's population in 2004.

Historical growth suggests that population growth in Sutherlin will continue to outpace that in Douglas County and Oregon in the future. Population and employment are expected to continue to grow in Oregon and Douglas County. Table 4-3 shows population in Oregon and Douglas County forecast by the Oregon Office of Economic Analysis for the 2005–2025 period. Table 4-3 shows that population is expected to increase by over 1 million or 28% in Oregon as a whole, and by over 20,000 or 20% in Douglas County over the twenty-year period.

#### Table 4-3. Forecast population in Oregon and Douglas County, 2005–2025

Year	Oregon	Douglas County
2005	3,618,200	102,958
2015	4,095,708	112,043
2025	4,626,015	123,341
Growth 20	005Š2025	
Amount	1,007,815	20,383
Percent	28%	20%
AAGR	1.2%	0.9%

Source: State of Oregon, Office of Economic Analysis. 2004. Forecasts of Oregon's County Populations and Components of Change, 2000–2040.

Table 4-4 shows the most recent ten-year forecast of employment by industry from the Oregon Employment Department for Oregon and Douglas County. Table 4-4 shows that employment in Oregon is expected to increase by 214,800 between 2002 and 2012, an increase of 14%. Employment in Douglas County is expected to grow by 4,410 or 12% in the same period. Employment growth in Douglas County is expected to be led by the Services, Retail Trade, and Government sectors, which are expected to add 3,360 jobs or 75% of the total employment growth forecast for Douglas County.

		Oreg	on			Douglas	s County	
Sector/Industry	2002	2012	Growth	% Growth	2002	2012	Growth	% Growth
Construction & Mining	78,300	86,000	7,700	9.8%	1,530	1,820	290	19.0%
Manufacturing	219,900	231,700	11,800	5.4%	7,950	8,080	130	1.6%
Durable Goods	160,900	171,300	10,400	6.5%	7,480	7,590	110	1.5%
Lumber & Wood Products	44,900	43,400	-1,500	-3.3%	6,180	5,970	-210	-3.4%
Other Durable Goods	116,000	127,900	11,900	10.3%	1,300	1,620	320	24.6%
Nondurable Goods	59,000	60,400	1,400	2.4%	470	490	20	4.3%
Food & Kindred Products	23,200	22,000	-1,200	-5.2%	200	200	0	0.0%
Other Nondurable Goods	35,800	38,400	2,600	7.3%	270	290	20	7.4%
Transportation & Public Utilities	75,900	83,400	7,500	9.9%	1,780	1,990	210	11.8%
Wholesale Trade	85,200	99,800	14,600	17.1%	1,370	1,580	210	15.3%
Retail Trade	299,300	341,500	42,200	14.1%	6,920	8,180	1,260	18.2%
Finance, Insurance, & Real Estate	95,500	109,300	13,800	14.5%	1,380	1,590	210	15.2%
Services	445,100	542,300	97,200	21.8%	8,160	9,690	1,530	18.8%
Government	274,000	294,000	20,000	7.3%	8,330	8,900	570	6.8%
Federal Government	30,000	31,500	1,500	5.0%	1,650	1,760	110	6.7%
State Government	61,700	64,700	3,000	4.9%	600	630	30	5.0%
Local Government	182,300	197,800	15,500	8.5%	6,080	6,510	430	7.1%
Education	104,200	110,400	6,200	6.0%	3,220	3,390	170	5.3%
Other Local	71,200	79,700	8,500	11.9%	2,860	3,120	260	9.1%
Total Nonfarm Payroll Employment	1,573,200	1,788,000	214,800	13.7%	37,420	41,830	4,410	11.8%

# Table 4-4. Employment Projections by Industry, Oregon and Douglas County,2002-2012

Source: State of Oregon, Employment Department Employment. 2004. Projections by Industry 2002-2012, Oregon and Regional Summary.

State law, and common sense, requires that the City to take into consideration expansion plans of major employers when determining the need for land and infrastructure.

ECONorthwest interviewed eight major employers in Sutherlin. Of the eight firms interviewed, one firm has expansion plans and expects to add between 100 and 200 jobs. The School District and City of Sutherlin may expand their facilities and employment, depending on the amount of population growth. While most of the other firms do not have plans for a physical expansion of their facilities, several have plans for adding a few jobs. The following is a list of major employers interviewed, the level of employment that they reported, and their responses regarding firm expansion plans.

- **Murphy Plywood (320+ employees).** Murphy Plywood is in the process of building office space to consolidate their administrative functions. They do not have plans for other expansion in the near future. They anticipate expanding employment over the next five years but are uncertain how many people they will hire.<sup>15</sup>
- Orenco Systems, Incorporated (250+ employees). Orenco Systems has recently completed building a 20,000 square foot plant. They are currently building new office facilities that will increase the amount of space for administrative functions. They expect to add between 100 to 200 jobs over the next two to five years.

<sup>&</sup>lt;sup>15</sup> The Murphy Mill burned down in July 2005. It appears likely that the company will rebuild their facility in Sutherlin. Press accounts suggest that reconstruction could take 9-12 months.

The company may build another 20,000 square foot plant in within the next five years. They expect to build this plant on their current site, which is 22 acres and currently includes 10 acres of undeveloped land.

The company representative expressed concerns that their future expansion may be limited because the land next to their current site is designated as wetlands, which could limit the company's ability to purchase this land for expansion.

• Sutherlin School District (180+ employees). The School District has no immediate plans for expansion or adding jobs. If the number of children enrolling in school continues to grow, they have plans to add teachers and build new facilities as needed.

The School District has acquired land for future expansions and would not need to purchase additional land. They have one 33-acre site where they expect to build the next new school. In addition, they have another 16 undeveloped acres as a 28-acre school site.

If school enrollment continues at the current pace, they may need to purchase an additional 25-acre site by 2025. The representative was concerned about the long-term availability of land within the City limits. If land is unavailable within the City limits, the School District might site a new school in a part of the District located outside the City limits.

• **City of Sutherlin (55+ employees).** The City has plans to expand the Library from 3,500 square feet to 10,000 square feet. They expect to expand their water treatment and sewer facilities. If population grows, they may expand the fire hall. The City has excess office capacity and will not need to expand administrative office space. The City would like to add five employees, contingent on funding.

The City will use land it currently owns for planned expansions. The expansion of their water treatment and sewer facilities will be accomplished on the current sites through use of new technologies that require less land.

They may need to purchase additional land for parks in the future. They expect to need about 100 acres, located both inside and outside the City limits.

• Garden Valley Corporation (10 employees). They have no immediate plans for a physical expansion, but they plan to add five to ten employees over the next few years.

- **PremierWest (7 employees).** They have no plans for physical expansion and minimal plans for adding employment (two employees over the next five years).
- **Struble Manufacturing (6 employees).** They have excess capacity at their current facility and do not expect to expand their facility. Over the next few years, they hope to add three jobs.
- **Rife's Furniture (5 employees).** They have no expansion plans but would like to expand into vacant retail space next to their current store. They plan to add five jobs over the next few years.

## FACTORS AFFECTING FUTURE ECONOMIC DEVELOPMENT IN SUTHERLIN

Economic development will be affected by local conditions in Sutherlin as well as the national and regional economic conditions. Local factors affecting future economic development in Sutherlin include its location, supply of buildable land, labor force, housing, public services, transportation, natural resources, and quality of life. Sutherlin's comparative advantage for economic development consists of its supply of local economic factors relative to factors present in other portions of the Umpqua Basin.

There is little that Sutherlin can do to influence national and regional conditions that affect economic development. Sutherlin, however, can influence local factors that affect economic development. This section provides an overview of local factors that may affect economic development in Sutherlin and any advantages, opportunities, disadvantages, and constraints these factors may present. This section ends with a discussion of the comparative advantages of Sutherlin relative to other communities in its region, based on the mix of economic factors present in Sutherlin. The review of local factors in this chapter will form a basis for projecting employment growth and developing economic development strategies for Sutherlin later in this study.

#### LOCATION

Location plays a key role in the development of Sutherlin in several ways. First, Sutherlin's location on I-5 provides crucial support for economic development by allowing businesses in Sutherlin to have access to workers, suppliers, and markets. Second, Sutherlin's proximity to Roseburg helps support economic development by providing jobs and urban services for Sutherlin residents. In addition, Sutherlin is closer to cities in the southern Willamette Valley (Eugene, Springfield, Cottage Grove) than Roseburg, which makes Sutherlin a good location for two-income families that work in cities to the north and south. Finally, Sutherlin's location on provides a broad area of relatively flat land for urban development, which is a relatively scarce commodity along the portions of I-5 south of Cottage Grove.

#### **BUILDABLE LAND**

The buildable lands inventory identified about 392 acres of buildable commercial and industrial land. Of this, about 28 acres are designated for commercial uses and 364 for industrial use. With respect to industrial use, about 220 of the 364 acres are in the industrial opportunity site on the west side of I-5. Chapter 3 provides more detail on the buildable lands inventory.

Many of the industrial sites in Sutherlin are impacted by wetlands or riparian areas. While lands outside of these constrained areas are technically available for development, such constraints add complexity to the development process and make sites less desirable to developers.

#### **PUBLIC SERVICES**

#### WATER

The City of Sutherlin provides water service in the community. According to Randy Harris, the Lead Operator for water treatment with the City of Sutherlin, the City relies on Calapooya Creek and Cooper Creek Reservoir for its water supply. These sources have the capacity to provide 3 million gallons/day. The City's water treatment plants can process up to 3.2 million gallons/day. The plants currently processes about 1 million gallons/day in the winter and 2.5 million gallons/day in the summer.

While the City is currently able to meet the demand for water, they are in the process of planning an expansion of their treatment facilities to supply enough water for expected residential and industrial growth in Sutherlin over the next 20 years. In addition to increasing water treatment capacity, the City expects to provide additional water by exercising existing unused water rights. They may encounter a problem in exercising their water rights on one fork of the Calapooya Creek, which may have more water rights promised than water to supply those rights. Even with this potential problem, the City expects to have sufficient water rights and treatment capacity to provide sufficient water for growth over the next 20 years.

#### WASTEWATER

The City of Sutherlin provides wastewater collection and treatment service. According to Kyle Woodward, Lead Operator at the City's wastewater treatment facility, the treatment capacity is a limiting factor of the wastewater system in Sutherlin. The treatment plant is rated for 1.3 million gallons/day. The plant treats about 800,000 gallons/day in the summer. In the winter, the plant treats up to 2 million gallons/day as a result of rainwater infiltration into the sewer system. The treatment plant is able to treat the additional volume and meet their permit requirements from the State Department of Environmental Quality.

The City is working with an engineering firm, Dyer Partnership, on a facilities study to expand the treatment plant's capacity to accommodate growth over the next 25 years. The study anticipates that Sutherlin will increase from

approximately 7,400 residents to 14,400 residents by 2029. Although the facilities study is not complete, the City expects to increase the wastewater treatment facility's capacity by about 50% to meet demand over the next 25 years.

We assume that the City will be able to expand its treatment capacity and address infiltration issues to provide adequate wastewater services. Thus, wastewater treatment should not be a constraint to future employment growth in Sutherlin.

#### TRANSPORTATION

Sutherlin is located on Interstate 5, the major north-south freeway on the west coast of the United States. I-5 provides businesses in Sutherlin with access to workers and customers living in the freeway corridor and freight services for shipping supplies and products. I-5 also provides a flow of traffic to support freeway-related businesses; traffic on I-5 currently averages over 20,000 vehicles per day.

Sutherlin is also located on Highway 138, which provides a connection from I-5 west to Highway 38 at Elkton. Highway 38 is a major connection between I-5 and the Oregon Coast south Eugene. Highway 138 provides a connection for northbound traffic on I-5 to Highway 38 (and vice-versa), generating some traffic through Sutherlin. Traffic volumes on Highway 138 average over 2,000 vehicles per day.

Sutherlin is also served by the Central Oregon and Pacific Railroad (CORP), which operates the north-south Siskiyou Line from Eugene to Black Butte, California. The Siskiyou Line roughly parallels the route of I-5 and provides connections to the Union Pacific and Burlington Northern Santa Fe railroads.

#### HOUSING

Data from the 2000 Census shows that housing in Sutherlin is relatively affordable. Table 4-5 shows monthly housing costs for owner and renter-occupied housing in Sutherlin, Douglas County, and Oregon in 2000. Table 4-5 shows that Sutherlin had a lower median monthly housing cost than Douglas County and Oregon for owner-occupied housing. Median monthly housing costs for renters in Sutherlin was higher than in Douglas County, but both were more than \$100 below the median for Oregon as a whole.

			Douglas	
Monthly housing cost	Su	therlin	County	Oregon
Owner-occupied units	1,122	100%	100%	100%
With a mortgage	873	78%	64%	74%
Less than \$300	0	0%	1%	0%
\$300 to \$499	141	13%	7%	3%
\$500 to \$699	291	26%	16%	8%
\$700 to \$999	280	25%	22%	19%
\$1,000 to \$1,499	156	14%	14%	27%
\$1,500 to \$1,999	5	0%	4%	11%
\$2,000 or more	0	0%	2%	7%
Median (dollars)	\$704		\$808	\$1,125
Not mortgaged	249	22%	36%	26%
Median (dollars)	\$233		\$244	\$303
Renter-occupied units	742	100%	100%	100%
Less than \$200	25	3%	7%	4%
\$200 to \$299	29	4%	8%	4%
\$300 to \$499	268	36%	34%	19%
\$500 to \$749	308	42%	34%	42%
\$750 to \$999	61	8%	8%	18%
\$1,000 to \$1,499	17	2%	2%	8%
\$1,500 or more	0	0%	1%	2%
No cash rent	34	5%	7%	4%
Median (dollars)	\$522		\$489	\$620

Table 4-5. Monthly housing costs by tenure inSutherlin, Douglas County, and Oregon, 2000

Source: U.S. Census.

Lower monthly housing costs in Sutherlin appears to reflect lower household income levels. The share of owner and renter-occupied households paying more than 30% of their income for housing costs in Sutherlin is roughly similar to the levels in Douglas County and Oregon. Census data shows other key characteristics of Sutherlin's housing market:

- 72% of housing units in Sutherlin and Douglas County are owneroccupied, compared to 64% in Oregon.
- 53% of housing units in Sutherlin are 1 unit detached, compared to 63% in both Douglas County and Oregon.
- Less than 10% of housing units in Sutherlin are in multi-family structures with 3 or more units, compared to about 25% in Oregon.
- Sutherlin has a relatively large share of units that are classified as a mobile home—27% compared to 22% in Douglas County and 10% in Oregon.
- Over 75% of housing units in Sutherlin were built since 1990, compared to only about 20% in Douglas County and Oregon.

This housing data suggests that the housing stock in Sutherlin is relatively new and affordable, with a larger share of households in Sutherlin opting to purchase a home.

#### LABOR FORCE

The labor force available to businesses in Sutherlin is not limited to residents of Sutherlin alone, but includes all workers living within driving distance to Sutherlin. This area certainly includes Roseburg and smaller cities south on I-5 to about Canyonville, and also includes cities north on I-5 to about Cottage Grove. Since most of the population in Douglas County is concentrated in the cities along the I-5 corridor, we will use Douglas County as the geographic proxy to represent the labor force available in Sutherlin.

The Oregon Department of Labor reports that Douglas County had a labor force<sup>16</sup> of 47,300 in May 2005, with an unemployment rate of 7.7%. For comparison, the unemployment rate in Oregon at the same time was 6.2%. The labor force in Douglas County is relatively small compared to that in counties north and south—Lane County has a labor force of 175,000 and Jackson County has a labor force of about 100,000. Thus, availability of labor may be an issue affecting economic development in Sutherlin.

Table 4-6 shows population by age in Sutherlin and Douglas County in 2000. This table shows that Sutherlin had a working age population of about 3,450, with roughly equivalent numbers in the working population age groups of 20 to 39 and 40 to 64. Douglas County had about 55,800 people in these age groups, but about 60% of this population was in the older (40 to 64) age group.

	Suth	nerlin	Doug	las Co.
Age Group	Number	Percent Number		Percent
Under 5 years	434	6.5%	5,629	5.6%
5 to 19	1,363	20.4%	21,035	21.0%
20 to 39	1,573	23.6%	21,626	21.5%
40 to 64	1,879	28.2%	34,221	34.1%
65 and over	1,420	21.3%	17,888	17.8%
Total	6,669	100.0%	100,399	100.0%

Table 4-6. Population by age in Sutherlin andDouglas County, 2000

Source: U.S. Census.

Data on educational attainment of the population can indicate the relative education of the workforce. Table 4-7 shows educational attainment of the population aged 25 and over in Sutherlin, Douglas County, and Oregon in 2000. Table 4-7 shows that the educational attainment of residents in Sutherlin and Douglas County is not as high as in Oregon. While about 80% to 85% of each

<sup>&</sup>lt;sup>16</sup> The labor force includes all people either working or actively looking for a job.

area had graduated from high school, only 8% of Sutherlin and 13% of Douglas County residents have a bachelor's degree or higher compared to 25% in Oregon.

		Sutherlin	Douglas	County	Oregon
Population 25 years and over	4,416	100%	68,783	100%	100%
Less than 9th grade	216	5%	3,216	5%	5%
9th to 12th grade, no diploma	714	16%	9,869	14%	10%
High school graduate (includes equivalency)	1,672	38%	23,836	35%	26%
Some college, no degree	1,208	27%	18,276	27%	27%
Associate degree	242	5%	4,441	6%	7%
Bachelor's degree	245	6%	5,754	8%	16%
Graduate or professional degree	119	3%	3,391	5%	9%
Percent high school graduate or higher		79%		81%	85%
Percent bachelor's degree or higher		8%		13%	25%

Table 4-7. Educational attainment in Sutherlin, Douglas County, and Oregon, 2000

Source: U.S. Census.

Table 4-8 shows the workers in Sutherlin, Douglas County, and Oregon by occupation in 2000. This table shows that Sutherlin and Douglas County had a relatively larger share of workers in Production, Transportation, and Material Moving occupations compared to Oregon. Sutherlin and Douglas County also have a correspondingly lower share of workers in Management, Professional, and related occupations compared to Oregon.

Table 4-8. Workers by occupation in Sutherlin, Douglas County, andOregon, 2000

	Si	utherlin		Douglas County	-
Employed population 16 years and over	2,322	100%	41,670	100%	100%
Management, professional, and related	411	18%	10,634	26%	33%
Services	413	18%	7,574	18%	15%
Sales and office	603	26%	9,670	23%	26%
Farming, fishing, and forestry	67	3%	1,182	3%	2%
Construction, extraction, and maintenance	254	11%	4,075	10%	9%
Production, transportation, and material moving	574	25%	8,535	20%	15%

Source: U.S. Census.

#### **RENEWABLE AND NON-RENEWABLE RESOURCES**

Other sections of this chapter have addressed the ability of Sutherlin to provide buildable land, water service, and wastewater service to support economic development and employment growth.

Sutherlin is located near substantial areas of timber in public and private ownership. Sutherlin's location near substantial timber supplies helps support several businesses related to the production of wood products, including Murphy Plywood and Holley Molding.

Declining timber harvests in the 1990s, particularly on public land, were accompanied with declining employment in the lumber and wood products

industries. The overall level of timber harvest in western Oregon has stabilized, but the Oregon Employment Department forecasts declines in lumber and wood products activity employment in Oregon and Douglas County over the next ten years (see Table 4-3). Declining employment in the lumber and wood products industry stems primarily from increased labor productivity due to technological improvements.

Remaining lumber and wood product mills are generally those with low production costs and that are located near primary transportation facilities. Sutherlin's location near supplies of timber should continue to support some activity in lumber and wood products manufacturing, but this industry is unlikely to generate substantial employment growth in Sutherlin due to consolidation and technological improvements in the industry.

#### **PUBLIC POLICY**

Public policy supports economic growth in Sutherlin. The City's Comprehensive Plan includes goals and policies related to economic development of the community. The single goal stated in the population and economy element is: "To broaden, improve, and diversify the economy of Sutherlin while enhancing the environment." Stated policies relevant to buildable lands and land needs include:

- The city shall supply an adequate amount of land with suitable soil and drainage qualities in order to accommodate projected industrial and commercial needs (Policy 3).
- The city shall diversify the manufacturing sector of the local economy by encouraging the establishment of low-polluting, low-energy using industrial activities (Policy 5).
- The city shall identify and preserve sites for future industrial development (Policy 7).
- The city shall maintain and expand the capacity of its water, drainage, sewerage, and transportation systems to ensure that a proper infrastructure attractive to industry is in place (Policy 9).
- The city shall support the Sutherlin/Oakland enterprise zone (Policy 10).
- The city shall ensure that adequate land areas are designated for development of regional community retail trade and services (Policy 15).
- The city shall encourage the revitalization of Sutherlin's central business district through a program designed to attract and retain a greater proportion of the area's retail trade (Policy 18).
- The city shall take an active role in promoting the area as a desirable retirement community through advertisement and enhancement of

housing, recreation, health, and transportation opportunities for senior citizens (Policy 19).

Sutherlin is in one of 49 areas in Oregon designated as Enterprise Zones that allow property tax exemptions businesses that locate or expand in the zone. Enterprise Zone benefits are generally limited to manufacturing and wholesale distribution businesses, but the Sutherlin/Oakland Enterprise Zone benefits also apply to hotels, destination resort facilities, and retail establishments associated with such facilities. The Sutherlin/Oakland Enterprise Zone also includes the City of Oakland and industrial lands in the Wilber and Winchester areas just north of Roseburg.

The length of the property tax exemption in an Enterprise Zone is 3 to 5 years. To receive a property tax exemption, firms must meet criteria that include making investment in property in the Enterprise Zone and creating new jobs. The length of the property tax exemption depends in part on the wage level of jobs created by the firm. In addition, the Sutherlin Enterprise Zone offers waived and discounted development fees for new manufacturing firms.<sup>17</sup>

#### **SUTHERLIN'S COMPARATIVE ADVANTAGES**

Comparative advantage is the mix of attributes in Sutherlin relative to other communities in the Umpqua Basin area that make Sutherlin attractive as a place for businesses and residents. The Umpqua Basin is the relevant geographic area for comparison because Sutherlin shares the characteristics of the Basin with other communities in the area. The advantages of communities in the Umpqua Basin area will affect the location decisions of those businesses that are willing to expand or locate in the area.

From the review in this chapter, the comparative advantages of Sutherlin appears to be its small-town and semi-rural character, location on I-5, proximity to Roseburg and cities in the Willamette Valley, relatively low cost of living, Enterprise Zone, affordable housing stock, and relatively blue-collar workforce. This combination of qualities has made Sutherlin attractive for households in or near their retirement years as well as businesses engaged in manufacturing and freeway-related accommodations and food service. Population growth in Sutherlin has driven employment in Retail Trade and Construction.

### LIKELY GROWTH INDUSTRIES IN SUTHERLIN

Given Sutherlin's comparative advantages and expected market conditions in Oregon and Douglas County, industries with potential to generate employment growth in Sutherlin include:

<sup>&</sup>lt;sup>17</sup> See the Oregon Community and Economic Development Department, <u>http://www.econ.state.or.us/enterthezones/index.htm</u> for more information on enterprise zones.

- Specialty manufacturing for regional, national, and international markets, particularly in wood products, industrial machinery, electrical and electronic equipment, and transportation equipment.
- Construction supported by continued population growth and development activity in the region.
- Retail trade, financial, and personal services to serve a growing population.

### **EMPLOYMENT FORECASTS**

To provide for at least an adequate supply of commercial and industrial sites consistent with plan policies, Sutherlin needs to have 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 Sutherlin. The level of this business expansion activity can be measured by employment growth in Sutherlin. The methods used to develop the employment forecast are described in detail in Chapter 2 of this report.

Based on the analysis in Chapter 2, we expect employment in Sutherlin to grow faster than the 2.7% per year rate forecast for Sutherlin's population over the next twenty years. This pattern of growth will bring employment and population in Sutherlin more into balance and will continue the historical trend of more rapid growth in Sutherlin than in the County.

The result of these assumptions for the share of employment by land use type and the overall average annual growth rate for total employment is shown in Table 4-9. This table shows that employment is expected to grow by over 2,500 jobs or 96% between 2003 and 2025, assuming a 3.1% average annual growth rate. Employment growth by land use type will be led by Commercial (1,549 jobs), followed by Industrial (717 jobs), and Public (248 jobs), based on the assumptions of employment by land use type described above.

# Table 4-9. Projected employment growth by land use type in theSutherlin UGB, 2003–2025

Land Use	200	2003 2025			2003-2	2025
Туре	Emp	Percent	Emp	Percent	Growth	Percent
Industrial	1,082	41%	1,799	35%	717	66%
Commercial	1,278	49%	2,827	55%	1,549	121%
Public	266	10%	514	10%	248	93%
Total	2,626	100%	5,140	100%	2,514	96%

Source: ECONorthwest.

## IMPLICATIONS FOR LAND DEMAND

Employment growth in the Sutherlin UGB will drive demand for industrial, commercial, and public land. To estimate the demand for land generated by

employment growth, we used factors for the number of employees per acre for each of the three land use types used in the employment forecast. ECO began this step by making a 10% deduction from total new employment. This deduction accounts for:

- Percent of total employment growth that requires no commercial or industrial built space or land. Some new employment will occur outside commercial and industrial built space or land. For example, some construction contractors may work out of their homes, with no need for a shop or office space on non-residential land.
- Percent of employment growth on non-residential land currently developed. Some employment growth will be accommodated on existing developed or redeveloped land, as when an existing firm adds employees without expanding space.

The deduction is offset by a 5% vacancy rate assumed for all land use types except public. Interviews with local realtors suggest that vacancy rates in Sutherlin, as elsewhere, are cyclical. A 5% vacancy rate is relatively low for commercial and industrial space, but based on interviews and knowledge of Sutherlin and the other cities in Douglas County, this is a reasonable long-term assumption.

The final assumption needed to estimate non-residential land need is employees per acre (EPA). This variable is defined as the number of employees per acre on non-residential land that is developed to accommodate employment growth. There are few empirical studies of the number of employees per acre, and these studies report a wide range of results. Ultimately the employees/acre assumptions reflect a judgment about average densities and typically reflect a desire for increased density of development. High and low EPA assumptions were used to reflect the high level of variation that exists in employment densities.

To develop an estimate of employment densities in Sutherlin, ECO identified developed lands designated for commercial and industrial uses. We then divided the amount of employment shown in Table 4-10 by the acreages to estimate employees per acre. Table 4-10 shows the employee per acre figures for Sutherlin. The results show that Sutherlin has an aggregate EPA of 3.0. Commercial lands had an average EPA of about 5.0, while industrial lands had an average EPA of 1.9. The higher total estimate is due to public employment—we did not attempt to identify public lands that have employment (such as schools).<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> The affect of including such lands would be to *lower* the overall average employees per acre.

	Developed		
Land Use	Acres	Employment	EPA
Commercial	257	1,278	5.0
Industrial	618	1,082	1.8
Public	-	266	na
Total	875	2,626	3.0

Table 4-10. Employees per acre, Sutherlin UGB, 2004

Source: ECONorthwest

Table 4-11 shows the employee per acre assumptions and the land demand estimates. ECO used a range of EPA assumptions to reflect the wide variation in employment densities that exists in commercial and industrial uses. The EPA assumptions are generally higher than the observed densities shown in Table 4-10. The higher assumptions are reasonable because (1) ECO was unable to control for site constraints, (2) observed densities of commercial and industrial employment in other communities is higher on average, and (3) the assumptions are in the range of those used in similar analyses.

The 2003-2025 change of employment by land use type shown in Table 4-11 was applied to the distribution of employment to estimate total employment by land use type in 2025. Table 4-11 shows employment and land demand by employment sector for the Sutherlin UGB for the period 2003-2025. The results show that Sutherlin will need between 161 and 354 gross buildable acres to accommodate new employment between 2003 and 2025. Between 72% and 79% of this land will be needed for commercial uses depending on the assumptions applied.

2025		,,,,,,,	· · · · · · · · · · · · · · · · · · ·	
	Assumptions	Builda	able Land Need	
	Emp that	Gross	Gross	

Table 4-11. Employment growth and land demand. Sutherlin UGB. 2003–

Land Use Type	Total emp growth	Emp that requires vacant non- res land	EPA (Low)	EPA (High)	Gross Buildable Acres (low EPA)	Percent of Acres	Gross Buildable Acres (high EPA)	Percent of Acres
Industrial	717	645	12.0	20.0	56.6	16%	34.0	21%
Commercial	1,549	1,394	5.0	12.0	278.8	79%	116.2	72%
Public	248	223	12.0	20.0	18.6	5%	11.2	7%
Total	2,514	2,263	6.4	14.0	354.0	127%	161.3	100%

Source: ECONorthwest.

EPA – Employees per acre

It is worth noting that the employment forecasts and land need estimates presented in this chapter do not take into account a major increase in employment that could result from the location of one or more large employers in the community during the planning period such as the new 200-acre Stearns Lane industrial site. This could take place if the City were successful in its recruitment efforts, either on its own and/or in conjunction with the Governor's Initiative to bring new industry to the State. Such a major change in 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 predict in a study of this nature. The implications, however, are relatively predictable: more demand for land (of all types) and public services.

# Comparison of Non-Residential Supply and Demand

**Chapter 5** 

This chapter summarizes from data and analysis presented in Chapters 2 and 3 to compare "demonstrated need" for vacant buildable commercial and industrial land with the supply of such land currently within the Sutherlin UGB and city limits. Chapter 2 described land supply, and Chapter 3 described land needed for employment.

This chapter begins by reiterating the population and employment forecasts. Moreover, other facilities such as parks, schools, and other public and semi-public uses will require land. Thus, the next section estimates land needed for public and semi-public uses. It then compares the capacity of commercial and industrial lands to the employment forecast to determine whether Sutherlin has sufficient land available for employment.

#### **POPULATION AND EMPLOYMENT FORECASTS**

Sutherlin is growing. The coordinated population forecasts for the Sutherlin UGB adopted by the County in 2004 indicate that population will increase by more than 5,500 persons between 2004 and 2025.

Table 5-1 summarizes historical and forecast population and employment in the Sutherlin UGB. The 2003 data show that while Sutherlin has a strong employment base, it is still a net exporter of employment. In other words, Sutherlin is somewhat of a bedroom community to the regional employment center in Roseburg. This is not necessarily a trend that will continue; it is the City's policy to attract employment growth. Consistent with the City's vision, ECO forecasts employment will grow at a rate faster than population between 2003 and 2025.

	,	,	
Year	Population	Employment	Pop/Emp
2000	6,669	na -	
2003	7,287	2,626	2.78
2005	7,559	2,791	2.71
2010	8,636	3,252	2.66
2015	9,866	3,788	2.60
2020	11,272	4,413	2.55
2025	12,878	5,140	2.51
Change (20	003-2025)		
Number	5,591	2,514	2.22
Percent	77%	96%	
AAGR	2.7%	3.1%	

Table 5-1. Historical and forecast population andemployment, Sutherlin, 2000-2025

Source: U.S. Census, City of Sutherlin, Employment Security 202 data; 2000 – U.S. Census Data

2003 – PSU Estimate

2025 - Population and Employment forecasts by ECONorthwest

# LAND NEEDED FOR OTHER USES

Cities need to provide land for uses other than housing and employment. Public facilities such as schools, hospitals, governments, churches, parks, and other non-profit organizations will expand as population increases. Many communities—including Sutherlin—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.

Chapter 4 estimated land demand for employment; 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, ECO classified these lands 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. We calculated land needs using acres per 1,000 persons for all lands of these types.
- Lands needed for parks and open space. The Sutherlin Parks and Open Space Plan adopted in June 2005 establishes level of service standards for neighborhood and community parks. The standard for neighborhood parks is 3 acres per 1000 population up to 10,000 persons and 2 acres per 1000 persons thereafter. The standard for community parks is 10 acres per 1,000 population up to 10,000 persons; 7 acres per 1,000 persons thereafter. For

the purpose of estimating future park needs, ECO assumed an aggregate standard of 12 acres per 1,000 persons through 2025.

• Lands needed for semi-public uses. This includes hospitals, churches, nonprofit organizations, and related semi-public uses. ECO calculated land needs using acres per 1,000 persons for all lands of these types.

Public and semi-public uses occur in most plan designations in Sutherlin. Table 5-3 shows public and semi-public land uses by generalized plan designation. The data show that 43% of the City's public and semi-public uses occur within lands designated for residential uses. Another 38% occurs in lands designated for industrial uses while 11% is in lands designated for commercial uses.

	Number		
Generalized Plan	of Tax		Percent
Designation	Lots	Acres	of Acres
Commercial	36	44.4	11%
Industrial	27	149.0	38%
Public/Open/Conservation	11	28.9	7%
Residential	69	169.5	43%
Total	143	391.7	100%

# Table 5-3. Summary of public and semi-publicuses by generalized plan designation, Sutherlin 2004

Source: City of Sutherlin GIS data, analysis by ECONorthwest

Table 5-4 shows land in public and semi-public uses by type. The data show that Sutherlin had a total of 392 acres in 143 tax lots in public and semi-public uses in 2005. This equates to about 53 acres per 1000 persons. The largest uses were Douglas County and the Sutherlin School District.

Table 5-4 also shows assumed need for public and semi-public land. The assumed need will be applied to population to estimate future lands needed for public and semi-public uses. Not all types of uses have assumed land needs. For example, we did not allocate any land need to County, Federal, and State uses. Thus, the assumed need is 0 for those uses. The aggregate assumption for public and semi-public uses is 38.7 acres per 1,000 persons.

The estimates in Table 5-4 suggest that Sutherlin will need more than 213 acres for public and semi-public uses between 2004 and 2025. The results suggest that the Sutherlin School District will need about 66 acres for new schools. Additionally, Sutherlin will need 66 acres of parkland to meet the 12-acre per 1000 person standard. Finally, the City will need about 33 acres for churches.

Type of Public Use	Number of Tax Lots	Acres	Acres/ 1000 persons	Land Need/1000 Persons	Acres Needed 2003-2025
City					
Park	8	23.5	3.2	12.0	66.2
Other	43	56.8	7.7	2.0	11.0
County	21	135.5	18.4	0.0	0.0
Federal	1	4.0	0.5	0.0	0.0
Fraternal	10	2.0	0.3	0.5	2.8
Health	1	6.9	0.9	1.0	5.5
Other	6	1.8	0.2	0.2	1.1
Religious	28	39.0	5.3	6.0	33.1
School	10	85.3	11.6	12.0	66.2
State	2	1.8	0.2	0.0	0.0
Utility	13	35.2	4.8	5.0	27.6
Total	143	391.7	53.2	38.7	213.5

Table 5-4. Summary of public and semi-public uses by type, and
estimated land needs, Sutherlin, 2004-2-025

Source: City of Sutherlin GIS data; analysis by ECONorthwest Public and semi-public land uses occur in all plan designations.

### LAND NEEDED FOR EMPLOYMENT

Table 5-5 shows a comparison of buildable commercial and industrial land, employment capacity, and the 2003-2025 employment forecast by generalized land use. The buildable lands inventory identified about 393 vacant buildable acres designated for commercial and industrial uses within the Sutherlin UGB. The capacity analysis identified capacity for about 2,718 jobs on that land. The employment forecast projects 2,514 new jobs between 2003 and 2025.

The comparison of employment capacity for buildable commercial and industrial lands in the Sutherlin UGB and the employment forecast shows a capacity surplus of 204 jobs. The surplus, however, is primarily in land designated for industrial uses—the capacity analysis shows a surplus of 1,649 jobs in industrial lands. A lot of the industrial capacity is on the Industrial Opportunity Site along Stearns Lane in west Sutherlin. The capacity analysis shows a deficit of commercial lands of 1,197 jobs. This figure probably overstates the deficit—some commercial uses can locate on lands designated for light industrial uses.

ECO draws the following conclusions from this analysis:

- The City has a surplus of industrial land. Considering regional development trends and state and city policies concerning economic development, we recommend the City maintain its industrial land base.
- Some office uses will probably locate on land designated for light industrial uses.

- The City has a deficit of commercial lands—in all designations. Our evaluation of the land capacity analysis is that the City should expand both the central business district and community commercial zones. The City should also consider identifying areas in close proximity to housing where neighborhood commercial services could be located. In addition, the City should consider establishing a business park designation that could accommodate office uses as well as certain light manufacturing uses.
- The City may choose to expand the downtown area, but expanding the Central Business designation will not require land outside the Urban Growth Boundary.
- A considerable amount of the city's industrial land has constraints wetlands or riparian areas. These constraints make the lands less desirable for development.
- Assuming an aggregate employment density of 12 employees per acre, Sutherlin will need about 100 additional acres in its UGB to accommodate commercial (retail and office) uses over the next 20 years.
- The analysis shows a capacity deficit of nearly 250 employees for public uses; some of this employment is already addressed through the public land needs analysis (such as schools). Given the findings of the Economic Opportunities Analysis in Chapter 4, the City can probably accommodate the additional employment on lands within the existing UGB.

Plan Designation	Buildable Acres	EPA Assumption	Emp. Capacity	Emp. Forecast	Capacity Surplus (Deficit)
Central Business District	2.4	15.0	36		
Community Commercial	26.3	12.0	316		
Subtotal	28.7	12.2	352	1,549	(1,197)
Heavy Industrial	303.4	6.0	1,820		
Light Industrial	60.7	9.0	546		
Subtotal	364.0	6.5	2,366	717	1,649
Public	na		na	248	(248)
Total	392.7		2,718	2,514	204

# Table 5-5. Buildable commercial and industrial land, employment capacity, and employment forecast, Sutherlin

Source: ECONorthwest