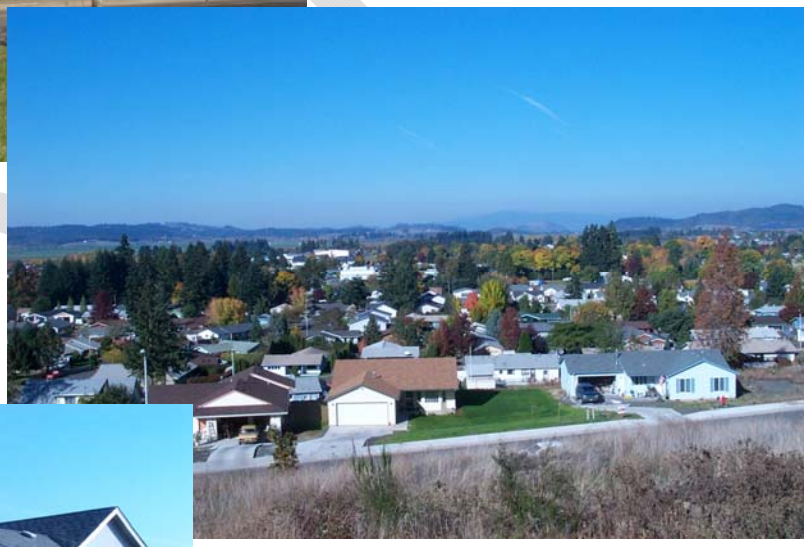
City of Creswell DRAFT Residential Buildable Lands Inventory



REVISED DRAFT - AUGUST 2007

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INTRODUCTION

This document summarizes the Residential Buildable Land Inventory analysis for the Creswell Urban Growth Boundary. It addresses Statewide Planning Goal 10, "To provide for the housing needs of citizens of the state." Goal 10, and its accompanying administrative rules set out a process to estimate future housing needs and to analyze the supply and demand for residential land needed to accommodate future growth. Cities are required to provide a 20-year supply of residential land within their UGB, based on a comprehensive housing needs assessment at periodic review or legislative review. Legislative review, which includes Creswell, applies when a governing body undertakes a formal analysis of its buildable lands and housing needs. This may, and does in Creswell's case, include a city council-approved work program and council consideration of the results of such tasks, as well as a public process to review and consider the results.

Creswell is required to comply with the requirements of HB 2709 because it has exceeded the state's growth rate for at least three of the past five years:

Table 1. Oregon, Lane County and City of Creswell Growth Rates 2002 – 2006

	2002	2003	2004	2005	2006*	Percent Change 2002-2006	AAGR 2002-2003	AAGR 2003-2004	AAGR 2004-2005	AAGR 2005-2006
Oregon	3,504,700	3,541,500	3,582,600	3,631,440	3,690,505	5.3 %	1.1%	1.2%	1.4%	1.6%
Lane County	328,150	329,400	333,350	336,085	339,740	3.5%	0.4%	1.2%	0.8%	1.1%
Creswell	**3,840**	**3,990**	**4,120**	**4,525**	**4,500****	**17.8%**	**3.9%**	**3.3%**	**9.8%**	**-0.6%**

* July 1, 2006
** The July 1, 2006 population estimate was revised after December 15.

In accordance with HB 2709, this document contains an analysis of existing buildable land, a housing needs analysis, and a comparison of the supply of buildable residential land with the forecasted housing demand. The housing need analysis forecasts housing demand to 2027. The supply analysis is based on buildable land information as of January 2007.

In reviewing the future needs for land and the current supply within the urban growth boundary, it has been determined that there is not a 20-year supply of buildable residential land.

Background and Purpose

The City of Creswell, located in the southern part of the Willamette Valley where the foothills of the coast and Cascade Ranges begin to merge, is approximately 10 miles south of the Eugene-Springfield metropolitan area along the Interstate 5 corridor. As Creswell has grown, it has evolved from a farming community into a dynamic city with pronounced ties to the metropolitan area.

The Urban Growth Boundary (UGB) for the City was initially acknowledged by the Department of Land Conservation and Development in 1982. The population following those decades has risen from 1,770 in 1980 to 4,500 in 2006, an increase of more than 150 percent. Creswell's growth rate outpaced both Lane County and the State of Oregon over that period. The significant population growth and the City's comparative advantages indicate that its role as an industrial, commercial, and residential core for the area south of the Eugene-Springfield metropolitan area will expand. Previous studies have indicated that the amount of land available for commercial and industrial development within the current Urban Growth Area is insufficient to meet future development needs[1] and the City would like to make a determination for residential land as well.

This purpose of this study is to determine whether there is a sufficient amount of suitable land to meet future housing demands within the existing UGB. In order to inform decisions regarding this primary question, the study identifies and discusses the amount, location and suitability of land potentially available for development – a Buildable Land Inventory. An analysis of the type of development that has been occurring and at what densities and land consumption rates is produced to inform projection of future needs – a Housing Type and Density Study. The final step combines the previous findings to determine whether there is enough supply to meet demand.

Steps in the Process

Buildable Land Inventory: Identify all types of vacant, potential infill, potential redevelopment and environmentally constrained land within the existing UGB for residential land.

Housing Type and Density Study: Determine types and densities of all new residential development within the UGB over the past six years and compare results to historical and possible future trends. Goal 10 Housing requirements are addressed. The *Planning for Residential Growth Workbook* is used as the primary guide.

Housing Needs Analysis: Determine the amount of land needed to meet future demand at appropriate types and densities based on historical and potential future development trends, population changes and growth projections, and economic factors. Address all Goal 10 Housing requirements. The *Planning for Residential Growth Workbook* is used as the primary guide.

Supply and Demand Comparison: Based on previous sections and their results, determines whether there is a deficit or surplus of land for residential needs

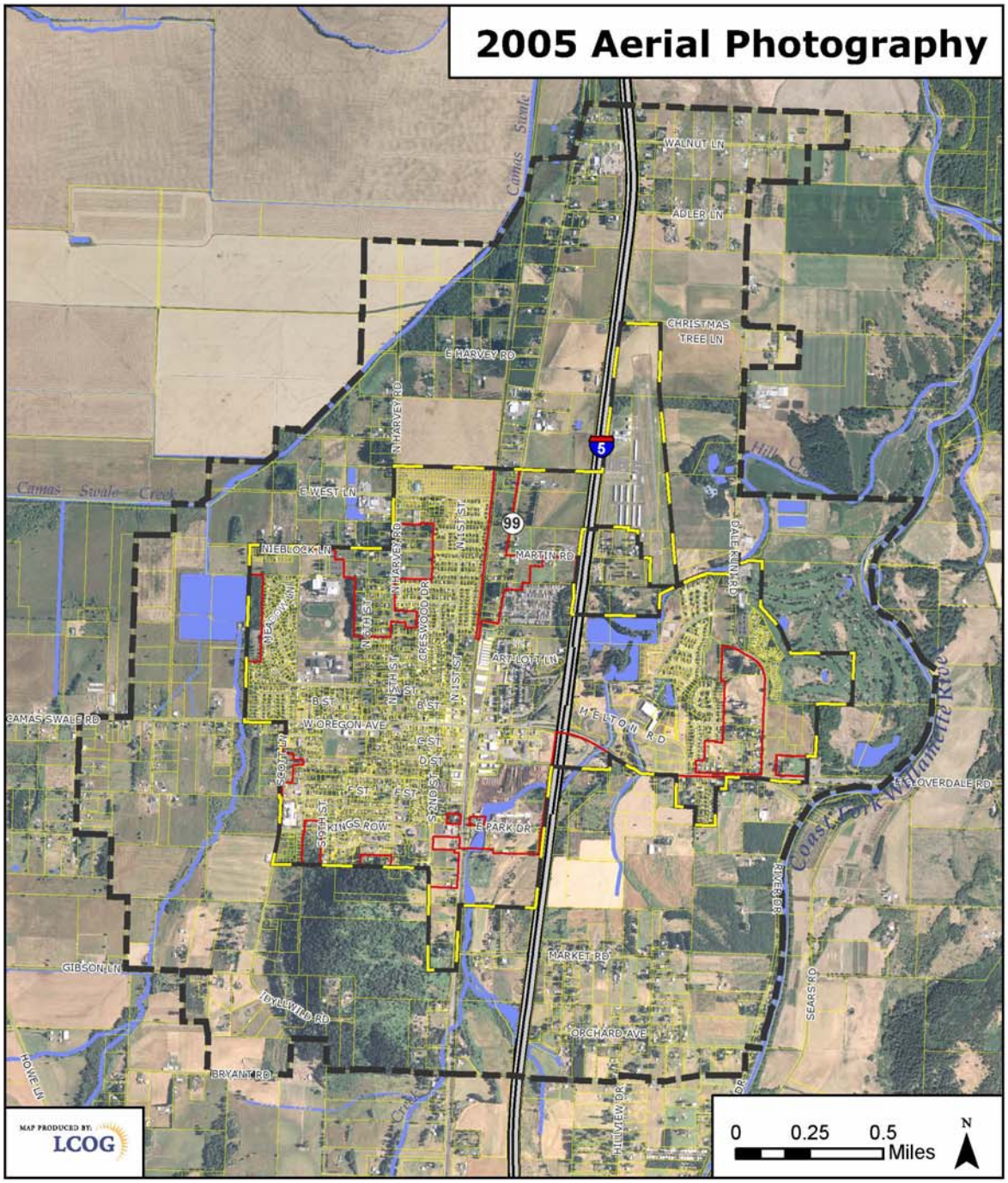
[1] Creswell Opportunities Analysis, March 2005

Assumptions made for the analyses within this Study include:

- Population will increase at an annual average growth rate of 1.84%
- The average household size will decline to 2.7 persons per household over the 20-year planning period.
- The population in group quarters will increase slightly to 2.0%.
- An average vacancy rate for owner- and renter-occupied units is projected at 4.4%.
- The relative mix of housing types will generally remain the same, with a slight increase in multi-family.
- The average age of the population will shift slightly toward an older age.
- The City will continue to grow at a faster rate than the county as a whole.
- As the City becomes larger, substantial growth will continue, but the overall rate of growth will slow somewhat.
- There will be a minor amount of growth outside the city limits. It is assumed that the city limits will be expanded to include most of the UGB during the 20-year time period therefore the projected growth for the city and UGB are similar.

Summary Results

- There are approximately 92.0 buildable acres of land designated for residential use within the existing UGB as of March 2007.
- Redevelopment potential adds 22.8 acres back into the supply for potential residential development.
- Infill potential adds 6.2 acres back into the supply for potential residential development.
- There will be a demand for 946 housing units by 2027, which translates into a demand for 150.8 acres including 25.1 acres for non-residential uses (20%).
- The analyses performed to produce this Preliminary Report indicate that the City has a deficit of approximately 29.8 acres in their residential land inventory to meet the needs of its projected population to the year 2027.

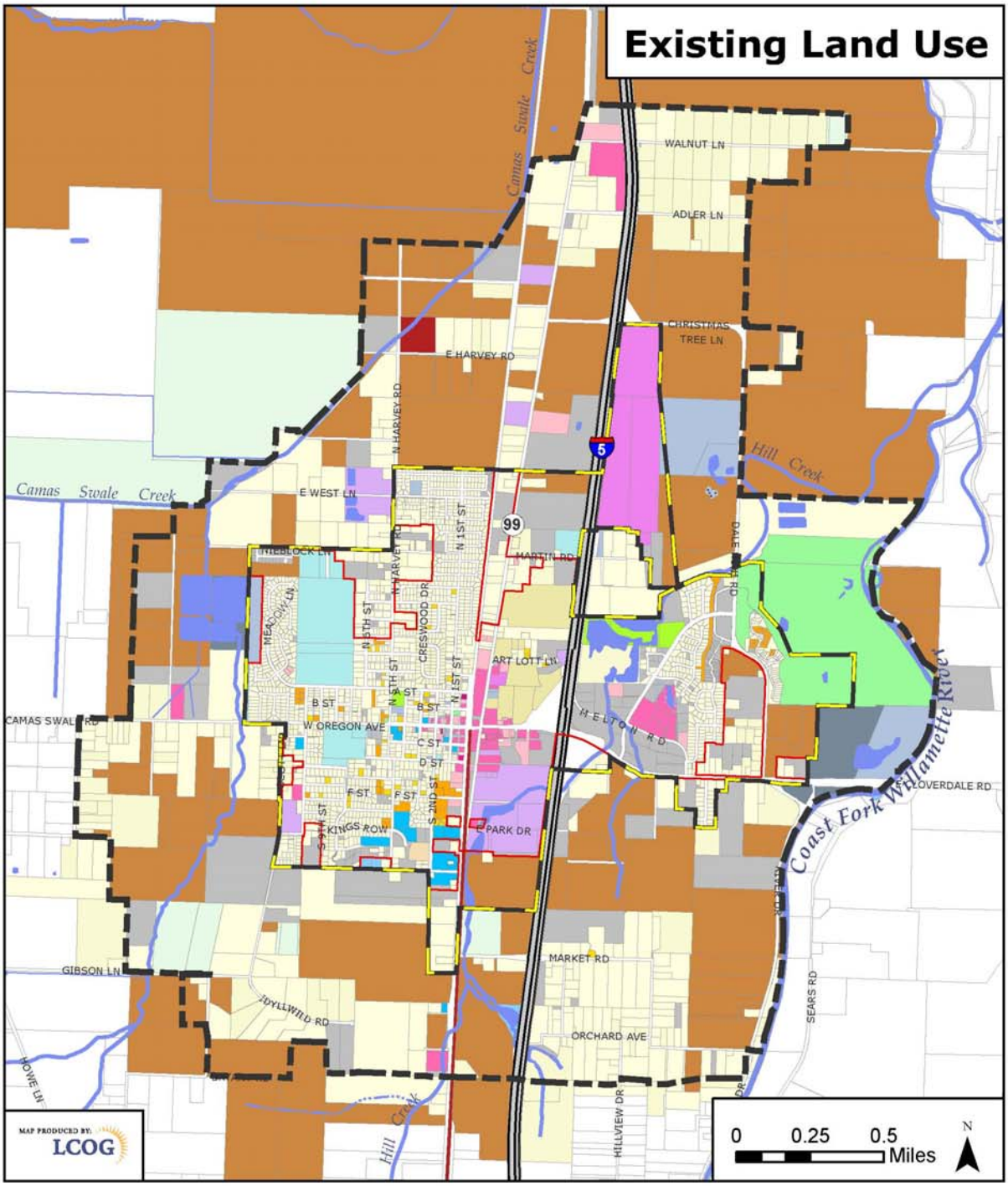


Legend

- Study Area
- Urban Growth Boundary
- City Limits
- Tax Lots

2005 National Agriculture Imagery Program

Printing Date: June 21, 2007



Legend

- Study Area
- Urban Growth Boundary
- City Limits
- Tax Lots

Land Use

Agriculture	Wholesale	General	Vacant
Railroad	Industrial	Park	Water
Communications	Religious / Charitable	Group Quarters	Alleyways, etc.
Duplex	Mobile Home Park	Retail	Road
Education	Recreation	Single Family	
Transportation Related	Multi-Family	Timber	
Government	Mobile Home on Lot	Utilities	

Printing Date: June 19, 2007

BUILDABLE LAND INVENTORY

This chapter summarizes the methodology, assumptions, and results of the City of Creswell's Residential Buildable Lands Inventory (BLI). The BLI inventories the *supply* of buildable land inside Creswell's urban growth boundary (UGB), both inside and outside the city limits. For the purposes of this inventory, buildable land includes vacant land, excluding land that is determined unbuildable or constrained by federal, state, or local regulations, and developed land that is likely to be redeveloped or infilled at least partly for residential use. Although this chapter inventories the *supply* of all buildable lands within the five Plan designations, the focus of this Study is buildable residential land therefore analysis and detailed results only apply to that Comprehensive Plan (Plan) designation. The inventory is important because it helps determine:

- Quantity and quality of vacant residential lands; and
- Capacity of the existing UGB to accommodate additional residential development.

The BLI will inventory lands by Creswell's Plan designations and will ultimately estimate the number of dwelling units that can be accommodated within the UGB.

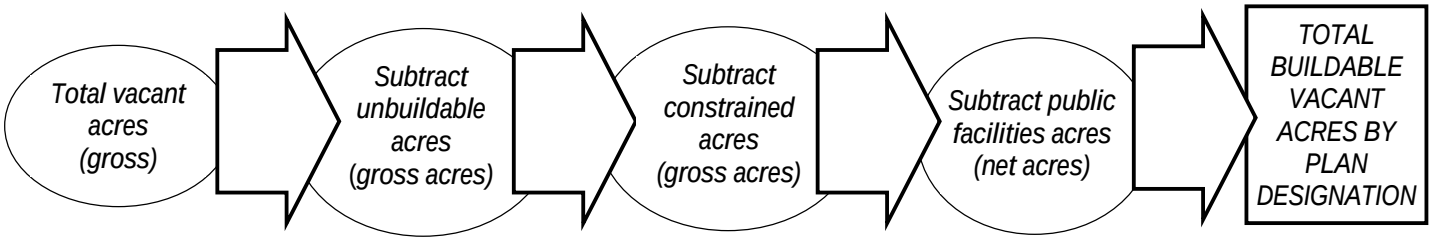
The City of Creswell has five Plan designations and four subzones/overlays. The Plan designations and associated zoning/land use districts include:

Comprehensive Plan Designation	**Applicable Land Use District(s)**
Residential	Low Density Residential (RL)
	Medium Density Residential (RM)
	Residential-Commercial (RC)
Commercial	Downtown Commercial (DC)
	General Commercial (GC)
Industrial	Industrial Commercial (IC)
	General Industrial (GI)
Parks, Recreation, Open Space	Park, Recreation, or Open Space (PRO-S) District
Public Facilities, Government	Public Facilities, Government
Subzone/Overlay Districts	Resort Commercial Subzone Floodplain Subzone Airport Subzone Riparian Protection and Wetland Overlay

Residential development is allowed in all the residential land use districts, although there may be some mixed use development that combines residential uses with permitted commercial and industrial development in Residential-Commercial or Industrial-Commercial land use districts.

Methodology, Assumptions, and Results

The BLI inventories buildable land inside the UGB according to the following process.

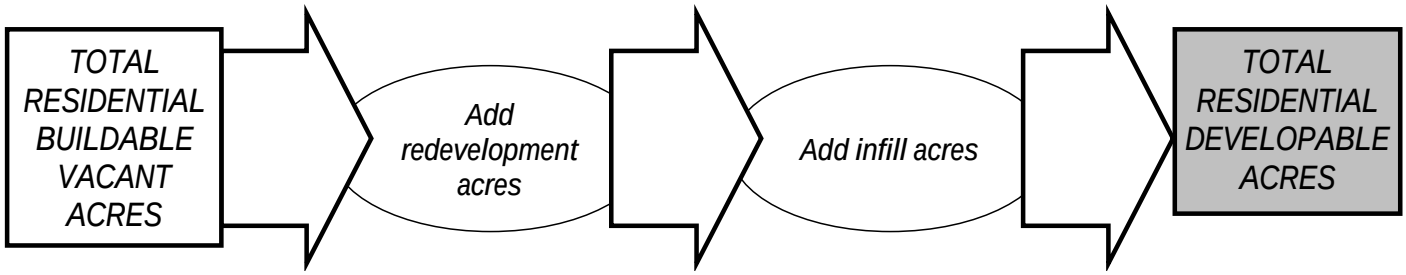


In narrative form, the process includes:

1. An update to existing land use and plan designations in the computer geographic information system (GIS). Using the most current data, a determination of gross vacant acres, including fully or partially vacant parcels is made
2. Determination acres of unbuildable land
3. Determination acres of constrained land
4. Determination percentage of acres needed for public facilities

This results in a total buildable vacant acres by Plan designation. Staff then carries the acreage for Residential forward and completes steps 5 and 6, also described in the flow chart that follows:

5. Determine residential redevelopment potential
6. Determine potential infill



Gross Vacant Acreage
Gross vacant acres include all fully vacant tax lots and the vacant portions of some partially developed lots. Vacant lands include land uses that are coded as agricultural, timber, or vacant. They do not contain any structures. Partially vacant tax lots have improvements but also have enough undeveloped land to accommodate additional development.

For more detailed information, in some cases partially vacant lots were field-checked to determine the extent and location of the residential improvements. The undeveloped portion of the lot was then added to the gross vacant acreage. When field checking was not practical, parcels over an acre in size were assigned one acre of residential use and the remainder assigned as vacant.

There are a total of 341.9 vacant acres within the five Plan designations. The Residential Plan designation totals 188.4 acres or 55.1% of the total vacant acreage. See Table 2 that follows.

Table 2. Total Percentage of Gross Vacant Land by Plan Designation

Plan Designation	Gross Vacant Acres	Percent of Total
Industrial	63.1	18.5%
Commercial	70.2	20.6%
Public Facilities, Government	15.9	4.7%
Park, Recreation, Open Space	4.3	1.3%
Residential	188.4	55.1%
Total	**341.9**	100.0%

Unbuildable and Constrained Land

Development of constrained land could affect the building cost, density, or other site-specific development factors. State policy gives jurisdictions the right to decide what is unbuildable based on local development policies. The following section describes how these lands were handled in the Buildable Lands Inventory.

Physical constraints such as parcel size, steep slopes, wetlands, and floodway areas must be accounted for in determining whether land is realistically available for future development. For the purposes of this analysis some physical constraints rendered land unbuildable or constrained, and these acres were subtracted from the inventory. Proportional reductions were made to lands affected by multiple constraints.

Unbuildable

- **Size:** There are some parcels in the data file that are too small to be developed. Per the Creswell Development Code, 3,000 square feet is the smallest lot size for a single-family detached home. About 0.7 acres are parcels within the UGB that are too small to be developed (0.2 acres of commercial and 0.5 acres of residential). These lands were considered unbuildable and were subtracted from the inventory. This represents about 0.2% of the total vacant land.
- **Slopes:** The majority of land in Creswell is not constrained by slopes. It is anticipated that up to 25% slope will be built on therefore slopes greater than 25% were removed from the inventory. All slopes greater than 25% within the UGB (excluding the very small percentage within ODOT's right-of-way on eastbound Oregon Avenue at the I-5 overpass) are located on Creswell Butte south of Kings Row, although most of Creswell Butte is outside the UGB and is not part of the inventory. Slopes greater than 25% accounted for about 2.9 vacant acres, all in the Residential Plan designation. This represents about 0.9% of the total vacant land.

Table 3 that follows shows the amount of acreage affected by unbuildable characteristics. Removing parcels too small to be developed and slopes greater than 25% accounted for 3.6 total acres of unbuildable land within the applicable Plan designations, 3.4 of which was Residential. None of the unbuildable parcels in size lots (under 3,000 square feet) are greater than 25% slope.

Table 3. Unbuildable Vacant Acres by Plan Designation

Plan Designation	Total Unbuildable Acres
Industrial	0
Commercial	0.2
Public Facilities, Government	0
Park, Recreation, Open Space	0
Residential	3.4
TOTAL	**3.6**

Constrained

- **Wetlands:** All wetland areas delineated on the U.S. Fish and Wildlife National Wetland Inventory map and hydric soils within the UGB were identified as 50% constrained (developed at 50% of the density of unconstrained lands). In addition, the Creswell Development Code applies a Riparian Protection and Wetland overlay zone based on average stream flow (50' for less than 1,000 cfs and 75' for 1,000 cfs or more), which also restricts development. About thirty-seven total acres of wetlands and lands with hydric soils were identified on vacant buildable land inside the UGB representing 10.8 % of the total gross vacant buildable land. Applying the 50% development constraint, 18 total acres were subtracted from the inventory. Of that total, seven acres of residential land were subtracted.
- **Floodway:** The Flood Insurance Study and accompanying Flood Insurance Map designate and regulate floodways. Development within the floodway requires significant engineering and typically will not be built out at full residential density. About twelve total acres of floodway lands were identified on vacant buildable lands inside the UGB representing 3.6% of the total gross vacant buildable land. Applying the 75% development constraint, 9.18 total acres were subtracted from the inventory. Of that total, 1.29 acres of residential land were subtracted.
- **Flood Hazard:** The Flood Insurance Study and accompanying Flood Insurance Map designate and regulate land within the 100-year floodplain (flood hazard area). These lands are not constrained and are considered developable at standard densities since the City allows residential development within the floodplain if certain floodproofing standards are met. About 64 total acres of 100-year floodplain lands were identified on vacant buildable lands inside the UGB representing 26% of the total gross buildable vacant acres. About 50% of the vacant buildable land designated for Resort Commercial use is in the floodplain. This constraint had no affect on the buildable lands inventory because land in the floodplain can be developed at the density of unconstrained land however, since it is regulated by federal FEMA standards, it is mentioned as a constraint.
- **Availability of Sewer Service:** A portion of residentially designated lands east of Interstate 5 within the UGB may be constrained due to the availability of sewer. Currently, the system is privately owned and it is assumed that residential lots requiring sewer service will be developed at 50% of the density of unconstrained land over the 20-year planning timeframe. About fifty-two total acres of lands constrained by sewer availability were identified on vacant buildable land inside the UGB representing 20.9% of the total gross vacant buildable land. Applying the 50% development constraint, 26 residential acres were subtracted from the inventory.
- **Slopes:** The majority of land in Creswell is not constrained by slopes. It is anticipated that parcels with 15% - 24% slopes will be developed at 50% of the density of

unconstrained land over the 20-year planning timeframe. Less than five acres of land constrained by slopes was identified on vacant buildable land inside the UGB representing 1.4 % of the total gross vacant buildable land. Applying the 50% development constraint, 2.3 acres of land were subtracted from the inventory, all of which was residential.

Table 4 that follows shows the amount of acreage affected by all the physical constraints. Removing a percentage of parcels containing wetlands, floodway, and sewer service restrictions accounted for 74.1 acres of constrained land within the five Plan designations, 62.3 of which were designated Residential.

Table 4. Constrained Vacant Acres by Plan Designation

Plan Designation	Total Constrained Deducted Acres
Industrial	8.7
Commercial	2.4
Public Facilities, Government	0.3
Park, Recreation, Open Space	0.5
Residential	62.3
TOTAL	**74.1**

Public Facilities Land Needs

This step is relevant for larger undeveloped parcels. When development occurs, a portion of the undeveloped parcel will be needed for roads, rights-of-way, and other public facilities. Smaller parcels generally have access to existing roadways. For this step, the percentage of land needed for public facilities was estimated and subtracted from the larger parcels throughout Creswell. This process of subtraction converts *gross acres* to *net acres.*

Vacant or partially vacant parcels greater than one acre had 25% of the vacant land removed from the inventory to account for streets and non-residential uses. For example, a ten-acre property with two acres of existing development would yield eight gross vacant acres. Subtracting 25% would yield six net vacant acres.

About 66.4 total acres were removed from the gross vacant buildable acreages to account for public facilities and non-residential uses. Approximately 30.8 acres of residential land were subtracted.

Table 5. Land Deducted for Public Facilities

Plan Designation	Public Facilities Land Deduction (acres)
Industrial	13.6
Commercial	17.2
Public Facilities, Government	3.9
Park, Recreation, Open Space	1.0
Residential	30.8
TOTAL	**66.4**

Summary of Total Buildable Vacant Acres by Plan Designation:

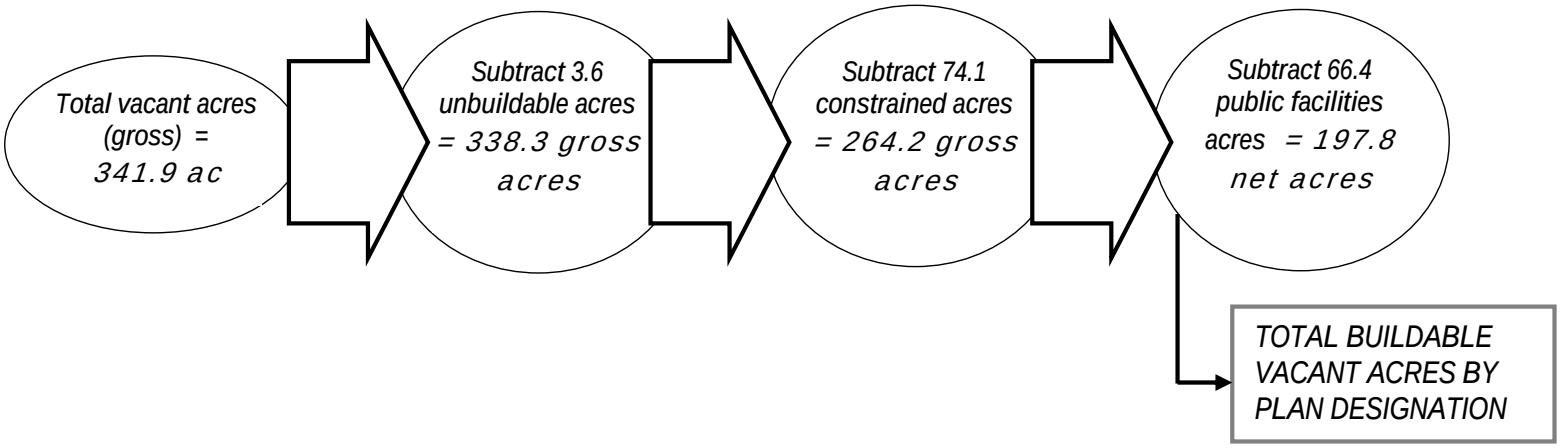


Table 6 that follows shows the acreages for the five plan designations. Table 7 includes residential only. Of the 197.8 total net buildable acres, approximately 92 acres are available for residential use. This is almost half of the net buildable acres by Plan designation.

Table 6. Total Gross and Net Buildable Acres by Plan Designation

Plan Designation	Gross Vacant Acres (from Table 1)	Total Unbuildable Acres (from Table 2)	Total Deducted Constrained Acres (from Table 3)	Total Gross Buildable Acres	Public Facilities Land Deduction (acres)	Total Net Buildable Acres
Industrial	63.1	0	8.7	54.3	13.6	40.7
Commercial	70.2	0.18	2.4	67.6	17.2	50.4
Public Facilities, Government	15.9	0	0.3	15.6	3.9	11.7
Park, Recreation, Open Space	4.3	0	0.5	3.8	1.0	2.8
Residential	188.4	3.32	62.3	122.8	30.8	92.0
TOTAL	**341.9**	**3.5**	**74.1**	**264.1**	**66.4**	**197.8**

Table 7. Gross and Net Buildable Acres by Residential Plan Designation

Plan Designation	Gross Vacant Acres (from Table 1)	Total Unbuildable Acres (from Table 2)	Total Deducted Constrained Acres (from Table 3)	Total Gross Buildable Acres	Public Facilities Land Deduction (acres)	Total Net Buildable Acres
Residential	188.4	3.32	62.3	122.8	30.8	92.0

Redevelopment and Infill

Redevelopable Residential Lands Analysis
Some demand for new residential development will be met by redevelopment and infill. Redevelopment refers to land already zoned or designated for residential use on which development has occurred but there is a strong likelihood that existing development will be converted to more intensive residential use. Property that is identified as having redevelopment potential, and is likely to be redeveloped, can be added to the inventory as buildable land. It is important to note that the discussion centers on "potential" redevelopment. The methodology identifies the quantity of redevelopment potential; it does not identify any specific properties, nor require redevelopment on any particular property. In Creswell there may be potential for redevelopment of residential parcels with existing uses that are less intense than the planned use; for example, a mobile home on land that allows for multi-family development.

For the purposes of this study, "redevelopable" residential tax lots were defined as:

- **Improvement value less than $100,000**. This indicates that the investment in the property is not so great that it precludes redevelopment.

AND

- **Improvement value less than land value**. If the improvement value (value of buildings and other improvements) is less than the land value, this would indicate a potential for redevelopment.

AND

- **Existing use is less intense than plan designation would allow**. The existing use is single-family, duplex, or mobile home.

OR

- **The existing building is unused**. Some buildings have been vacant for a period of time and the land use is coded as 'unused building.' This may indicate an opportunity for renovation of the building, or redevelopment of the property.

OR

- **Local knowledge of potential opportunities**. Some properties that did not meet the criteria mentioned above may still have potential for redevelopment, based on the knowledge of city staff.

The acreages identified for redevelopment potential are summarized at the end of this section.

Ten percent of commercial, industrial, and residential lands are expected to be redeveloped in the 20-year timeframe.

Table 8. Acreage of Potential Redevelopable Land[2]

Plan Designation	Potential Redevelopment Acres	Expected Total
Industrial	3.2	0.3
Commercial	36.4	3.6
Residential	228.1	22.8
TOTAL	**267.7**	**26.7**

Infill/Development of Partially Vacant Residential Land

Infill is defined as land that is vacant or partially vacant with the potential to be partitioned or subdivided. To develop an assumption as to how many infill lots will be created in the 20 year period, partition activity was reviewed between 1997 and 2006. During that ten-year period, there were 19 approved partitions on residential tax lots. These partitions created 18 new lots for an average of 1.8 new lots per year over this ten-year period. If this historical trend were projected into the future to the year 2027, there would be approximately 36 additional buildable lots created through the infill process in the coming 20 years. Based on the GIS land analysis described below, approximately 44 lots are expected to be developed as infill.

To determine the potential for infill on partially vacant residential land, the number of tax lots greater than or equal to 6,000 square feet with one existing single-family, or manufactured dwelling were identified and depending on their location, were checked for redevelopment potential (Medium Density Residential and Residential Commercial are allowed provided they have at least 50' of frontage on a collector or arterial streets with pedestrian facilities). This is based on the Creswell Development Code, which states that the minimum lot size for unattached single-family residences is 5,000 square feet in the Low Density Residential zoning district and 3,000 square feet for single-family attached dwellings in the Medium Density Residential and Residential-Commercial. Lot size averaging also allows for lot sizes to be reduced provided that the average for the entire development meets the minimum size required.

Development of partially vacant residential land was calculated for all developed parcels zoned residential less than one acre and greater than 10,000 square feet. The constrained area was removed and the remaining area of the lot was used to determine the number of potential new lots that could be created. Ten percent of potential infill on residential lands is expected to occur in the 20-year timeframe, which would total 6.2 acres. The number of potential infill lots per parcel is based on the minimum lot size and would potentially total 44 lots (10 percent of the 440 potential new lots).

The infill analysis does not identify where development is located on a lot and assumes 100% infill potential. Related parking, lot configuration, access to public right-of-way, and landscape/open space requirements can limit infill potential in the same manner as vacant land. Existing development on partially vacant properties may also impede development potential due

[2] Public Facilities/Government and Park/Recreation/Open Space were removed from the potential redevelopable lands

to their existing location, footprint or site arrangement. A lot-by-lot analysis of infill constraints was not conducted. However, infill may increase:

- the greater density that already exists,
- with the required minimum density in Medium Density Residential and Residential-Commercial land use districts, and
- with flexibility allowed with the current Creswell Development Code

Table 9. Residential Infill Potential

Number of Lots with Potential	Total Acres	Potential Infill Acreage	Expected Total Infill Acreage	Potential Number of New Lots	Expected Additional Lots
245	91.9	62.1	6.2	440	44

Buildable Land Supply

Table 10 shows total acres available for residential development when the redevelopment and infill acres are added to the Net Buildable Acres from Table 6. The chart that follows describes the process.

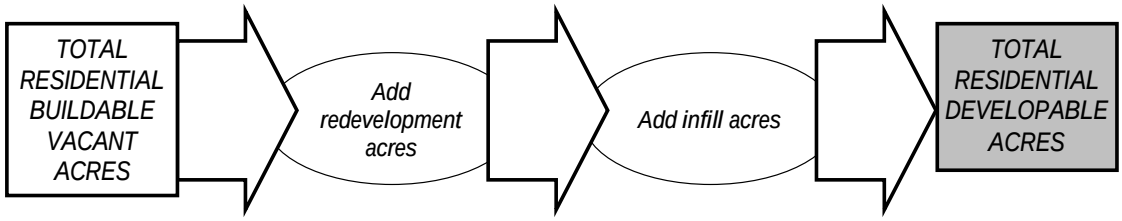
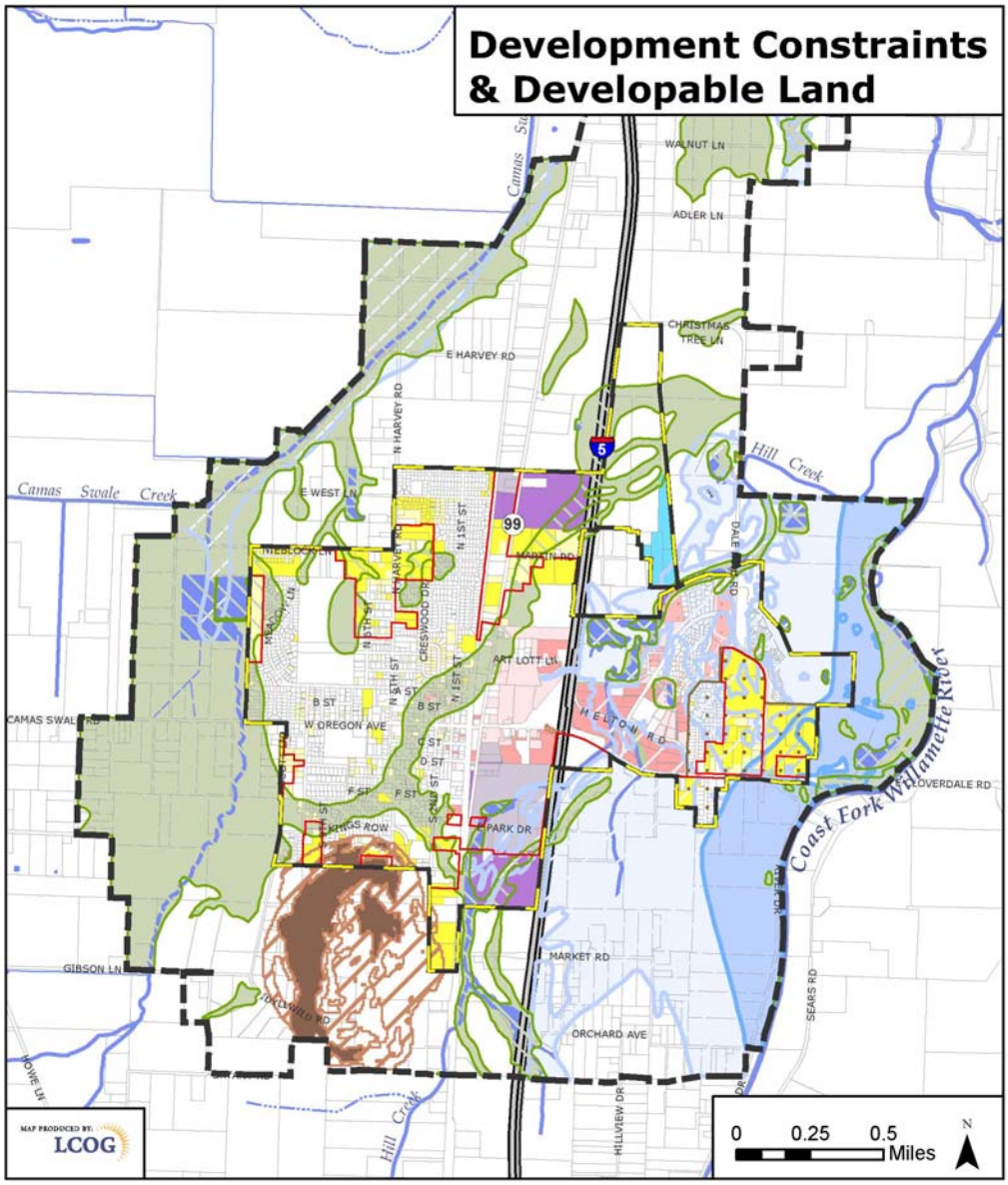


Table 10 that follows summarizes the total number of residential acres expected to be available for development after accounting for potential redevelopment and infill acres.

Table 10. Total Residential Developable Acres

Plan Designation	Total Net Buildable Acres (from Table 5)	Expected Redevelopment Acres	Expected Infill Acres	Total Acres
Residential	**92.0**	**22.8**	**6.2**	**121.0**



Legend

- Study Area
- Urban Growth Boundary
- City Limits
- Tax Lots

Developable Lands

Vacant Land
- Residential
- Commercial
- Commercial - Recreation Overlay
- Industrial
- Parks, Recreation, & Open Space
- Public

Potential Redevelopment
- Residential
- Commercial
- Industrial

Development Constraints
- Wetlands & Wetland Soils

Flood Hazard Zones
- 100-year Flood Zone
- Floodway
- Service Restriction

Steep Sopes
- 15% - 25%
- 25%+

Printing Date: June 21, 2007

HOUSING TYPE AND DENSITY STUDY

This section looks at the types of housing that has been developed in the City since 1990 to the end of 2006. It also looks at demographic and socioeconomic changes over the same time period to determine how housing, demographic and economic trends interact in the City. The state's *Planning for Residential Growth, A Workbook for Oregon's Urban Areas* methodology and seven steps to conduct a housing needs analysis are generally applied[3]:

1. Project the number of new housing units needed in the next 20 years (2027).
2. Identify relevant national, state and local demographic and economic trends and factors that may affect the 20-year projection of structure type mix.
3. Describe the demographic characteristics of the population and household trends that relate to demand for different types of housing.
4. Determine the types of housing that are likely to be affordable to the projected households based on household income.
5. Estimate the number of additional needed units by structure type.
6. Determine the needed density ranges for each plan designation and the average needed net density for all structure types.

Housing Growth: 1990 - 2005

Like the changes in population, the numbers of dwelling units in the City have increased continuously over the past decades. In terms of percentage, the population grew at a proportionally greater rate than the total number of dwelling units. Census figures indicate that between 1990 and 2000 the population grew by about 47.2%, while the total number of dwelling units grew by about 30.3%. Likewise, the persons per household also increased from 2.68 to 2.77 during this timeframe (see Table 16, Creswell Persons per Household.) The total number of housing units in Lane County increased by about 16%, during the 1990s.

The types of housing within jurisdictions are generally classified and counted during each decennial US Census. This data provides a general idea of the types of housing in the area and, through comparison, what if any changes in the mixture of types has occurred between decades. The following table shows data for the City of Creswell from 1990 and 2000 and the percent change of housing types.

[3] Pages 26-27

Table 11: Creswell Changes in Housing Type 1990-2000

Housing Type	1990	Percent of total	2000	Percent of total	Percent Increase, 1990 - 2000	Percent Change of total, 1990 - 2000	Number of additional units
Single-family detached	496	53.2%	669	50.0%	25.9%	-3.2%	173
Single-family attached	24	2.6%	77	5.8%	68.8%	3.2%	53
Multi-family							
2 to 4 units	102	10.9%	135	10.1%	24.4%	-0.8%	33
5 to 9 units	46	4.9%	57	4.4%	19.3%	-0.5%	11
10 or more units	47	5.0%	93	7.0%	49.5%	2.0%	46
Mobile home, trailer, other	218	23.4	308	23.0%	29.2%	-0.4%	90
TOTAL UNITS	**933**	**100%**	**1,339**	**100%**	**30.3%**		**406**

Source: 1990 and 2000 Decennial Census

The changes in housing types shown above indicate that while single-family detached dwellings were by far the greatest number of new units added, there was an increase in single-family attached and large multi-family dwelling units (10 or more units). This upswing in duplex and apartment construction over the decade indicates that the housing industry is responding to changing demographic and household trends (described in the following Housing Types and Housing Needs Analysis sections). In Creswell, duplexes are often constructed on corner lots of traditional single-family dwelling subdivisions.

As noted above, single-family dwellings dominate the housing types. The total number of multi-family units in buildings with two or more units created during the decade equals 285, compared to a total of 669 new single-family dwellings. Excluding mobile homes, trailers, and other, the percentage of new units constructed as single-family homes equals about 65%, and multi-family buildings containing two or more units are about 28%. One-unit attached dwellings accounted for 8% of dwelling unit construction.

The table that follows shows building permit activity from 2000 to 2006 and years in between. Single-family permits constitute the majority of permits. Since 2000, 93% of all units permitted were single-family detached dwellings and 2% were single-family attached dwelling. The number of permits increased annually and peaked in 2004. Only one multi-family permit (a triplex) was processed between 2000 and 2006, which may mean multi-family construction between 1990 and 2000 met market demand.

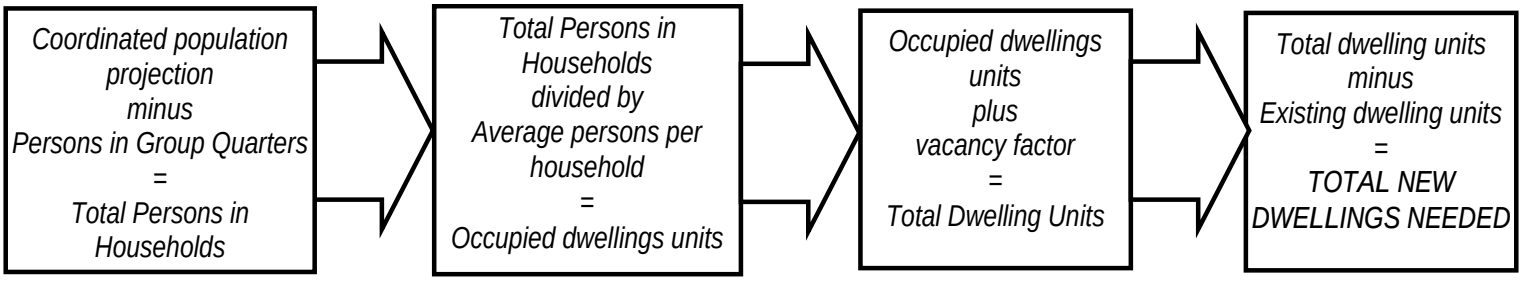
Table 12: Number of Residential Building Permits 2000 - 2006

Dwelling Unit Types	2000	2001	2002	2003	2004	2005	2006
Single-family detached	49	73	83	89	135	67	56
Single-family attached	2		1	1	6	2	
Multi-family							1
Mobile/Manufactured	3	4	5	1	4	5	4
Total housing units (591 total)	**54**	**77**	**89**	**91**	**145**	**74**	**61**

Source: City of Creswell

New Dwelling Units Needed, 2007 - 2027

The process for estimating new dwelling units is described in the following graphic. Each of the following sections provides the data to arrive at these numbers.



Population Trends

Based on the US Census population estimates for 1960, 1970, 1980, 1990, and 2000, the City's average annual growth rate (AAGR) has been robust over the last 40 years, consistently exceeding 3%. The AAGR between the last two Census years (1990-2000) was 3.9%. The City's growth rate outpaced other cities in the county, Lane County overall, and the state.

Table 13. Population Changes in Lane County and Cities

	1960	1970	1980	1990	2000	Percent Change 1990-2000	AAGR 1990-2000	AAGR 1980-2000	AAGR 1970-2000	AAGR 1960-2000
Oregon	1,768,687	2,091,533	2,633,105	2,842,321	3,421,432	20.4%	1.9%	1.3%	1.7%	1.7%
Lane County	162,890	215,401	275,226	282,912	322,977	14.2%	1.3%	0.8%	1.4%	1.7%
Eugene	50,977	79,028	105,664	112,669	137,893	22.4%	2.0%	1.3%	1.9%	2.5%
Springfield	19,616	26,874	41,621	44,683	52,864	18.3%	1.7%	1.2%	2.3%	2.5%
Cottage Grove	3,895	6,004	7,148	7,402	8,445	14.1%	1.3%	0.8%	1.1%	2.0%
Florence	1,642	2,246	4,411	5,162	7,263	40.7%	3.5%	2.5%	4.0%	3.8%
Junction City	1,614	2,373	3,320	3,670	4,721	28.6%	2.6%	1.8%	2.3%	2.7%
Oakridge	1,973	3,422	3,729	3,063	3,172	3.6%	0.4%	-0.8%	-0.3%	1.2%
Veneta		1,377	2,449	2,519	2,762	9.6%	0.9%	0.6%	2.3%	
Creswell	**760**	**1,199**	**1,770**	**2,431**	**3,579**	**47.2%**	**3.9%**	**3.6%**	**3.7%**	**3.9%**
Dunes City		976	1,124	1,081	1,241	14.8%	1.4%	0.5%	0.8%	
Lowell	503	567	661	785	880	12.1%	1.1%	1.4%	1.5%	1.4%
Coburg	754	713	699	763	969	27.0%	2.4%	1.6%	1.0%	0.6%
Westfir	312	278	280	0.7%	0.1%	-0.5%				

Source: U.S. Bureau of Census

Population Projections

Oregon Revised Statute 195.036 requires counties to establish and maintain "a population forecast for the entire area within its boundary for use in maintaining and updating comprehensive plans.[4]" The adopted average annual growth projection for the Creswell UGB is 2.53% between 2000-2025 (projected 7,300 population in 2025) and 2.42% between 2000-2030

[4] Lane County transferred the role of coordinating body to LCOG in 1974. LCOG completed allocations for Lane County cities (UGB) and the rural county for the years 2025 and 2030. These numbers were adopted in February 2005.

(projected 8,000 population in 2030). With a 20-year planning horizon for this study (2027), the population projection is 7,572. The population projections take into account the City's relatively steady growth rate over the last forty years, as well as the expectation that the growth is unlikely to continue at the same rate as the City becomes larger.

Creswell is likely to experience larger percentages of its overall population growth to continue to occur in the older age cohorts and households with lower numbers of persons. The large group of persons commonly known as the "baby-boomer" generation continues to move up in age, and many of them will be reaching retirement by 2027. Discussions of the changes in age groups and households over the past decade are presented in the following section.

Table 14. Creswell Coordinated Population Projection

Year	Creswell
1990	3,176
2000	3,909
2004	4,440
2025	7,300
2030	8,000
AAGR* 2000	2.10%
AAGR 2004	3.24%
AAGR 2000-2025	2.53%
AAGR 2000-2030	2.42%

*AAGR = average annual growth rate
Source: Lane County Coordinated Population Projections, adopted February 24, 2005. 1990 and 2000 population figures on based on Census data. 2004 figure is Portland State University Population Research Center population estimate.

Population Age Groups

The table that follows compares age groups of the City of Creswell, Lane County and state in 1990 and 2000 based on Census data. All three show positive population growth overall. The largest share of the overall population, persons 44 – 64, was also the only group to show relative increases between 1990 – 2000 for the City, Lane County and state. In all but the Under 20 age group, Creswell mirrors the relative population change of the state.

The City of Creswell had a median age of 31.7 years, younger than the County's 36.6 median age. This may be due in part to the high percentage of retirement age residents living in Florence, Dunes City, and other areas on the coast of Lane County.

Table 15: Change in Age Groups, 1990 – 2000

AGE – CITY of CRESWELL					
	1990	Percent of total	2000	Percent of total	Percent Change
TOTAL	2,431	100.0%	3,579	100.0%	
Under 20	817	33.6%	1,203	33.6%	32.1%
20 to 44	947	39.0%	1,323	36.9%	28.4%
45 to 64	337	13.9%	658	18.4%	48.8%
Over 65	330	13.6%	395	11.0%	16.5%
Median age			31.7		
AGE – LANE COUNTY					
	1990	Percent of total	2000	Percent of total	Percent Change
TOTAL	282,912	100.0%	322,959	100.0%	
Under 20	78,778	27.8%	84,921	26.3%	7.2%
20 to 44	115,618	40.9%	116,404	36.0%	0.7%
45 to 64	51,438	18.2%	78,680	24.4%	34.6%
Over 65	37,078	13.1%	42,954	13.3%	11.4%
Median age			36.6		
AGE – STATE of OREGON					
	1990	Percent of total	2000	Percent of total	Percent Change
TOTAL	2,842,321	100.0%	3,421,399	100.0%	
Under 20	802,516	28.2%	944,004	33.2	15.0%
20 to 44	1,115,537	39.2%	1,227,675	35.9%	14.2%
45 to 64	532,944	18.9%	811,543	23.7%	34.3%
Over 65	391,324	13.7%	438,177	12.8%	10.7%
Median age			36.3		

Between 1990-2000, the greatest increase in population in Creswell, Lane County and the state was in the 45 – 64 age group, reflecting an increase in the “baby boom” generation.

The decrease in persons aged 20-44 in Lane County (-4.9%) and City (-2.1%) is consistent with the state’s decrease (-3.3%). The City shows no change for non-adult populations, even though the County decreased in this population (-1.5%). These two age groups (Under 20, 20 to 44) accounted for 70.4% (City) and 62.3% (County) of the total population in 2000, which is a relative decline from 1990. This supports the transition to an older population.

Persons in Group Quarters

Group quarters include facilities such as assisted living facilities, dormitories, correctional institutions, group homes, boarding houses, military facilities juvenile institutions, and psychiatric hospitals. Persons in group quarters do not consume standard housing units therefore any forecasts of new people in group quarters is subtracted from the population projection for the purpose of estimating housing demand. The 2000 Census indicates 58 persons or 1.6% of the population resided in group quarter facilities in Creswell. About 2.3% of Lane County’s population resided in group quarters. *As the baby boomer population ages, it is projected that for future years the percentage of the population in group quarter facilities will increase slightly to 2.0%.*

Household Demographics
Average household size has been declining both nationally and locally over the past 30 years and is expected to continue to decline. This national trend is usually related to the general overall aging of the population, families generally having fewer children, and increasing numbers of single, divorced and widowed persons, along with single-parent families, particularly women with children. The negative growth for Lane County and state corresponds with the relatively greater percentages of older persons in Lane County, particularly the greater proportions of person aged 65 or older (0.2% increase between 1990 and 2000), who comprise a large number of the householders living alone.

The 2000 Census indicates that Creswell is somewhat of an exception to the national and local trend. The average household size has fluctuated over the last 30 years – in 2000 it was lower than in 1970, yet higher than in 1980 and 1990. It is likely that Creswell's lower median age, greater increase in population relative to dwelling units, and relative majority of single-family dwellings contribute to the higher household size. *As Creswell's population ages, it is projected that for future years the persons per household will decline slightly to 2.7 persons per household.*

Table 16. Creswell Persons per Household

Year	Persons per Household	Average Annual Growth Rate
1970	2.86	
1980	2.63	-0.8%
1990	2.68	0.2%
2000	2.77	0.3%
2027	2.70	-0.1%

Source: Decennial Census

Vacancy Rates
Determining the number of housing units for 2027 requires assumptions about vacancy rates. Vacancy rates vary by whether the house is owner- or renter-occupied, and represent the lag time between demand and the market's response to demand in additional dwelling units. In 2000, approximately 31% of households rented and 69% of households owned their homes in Creswell. This pattern is assumed to continue. *Based on the 2000 Census vacancy rates, an average vacancy rate of 4.4% is assumed.*

Table 17. Creswell Historical Tenure

Tenure	1980	1990	2000
Owner	64%	60%	69%
Vacancy rate			4.8%
Renter	36%	40%	31%
Vacancy rate			3.7%

Source: Decennial Census

Existing Number of Dwelling Units
The existing number of dwelling units as of January 1, 2007 was arrived at by summarizing building permit activity permit activity from 2000-2006. Building permits issued between 2000

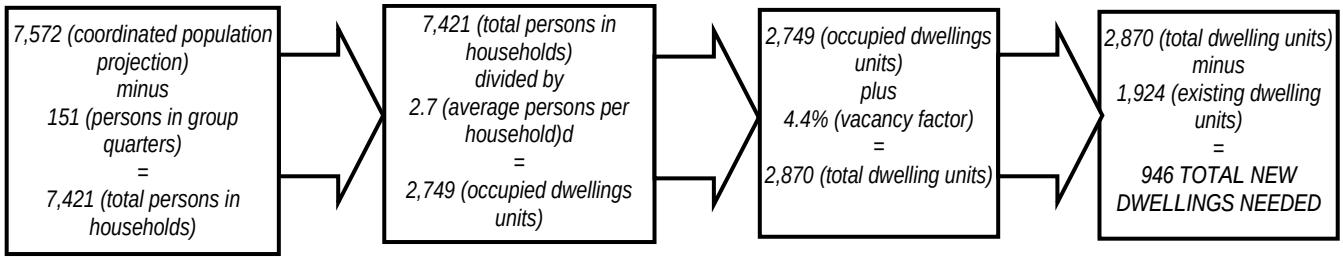
and 2006 were added to the total number of units tabulated from the 2000 Census. A total of 1,924 dwelling units exist.

Table 18. Total Number of Dwelling Units

Housing Units	2000 Census	Issued Permits 2000 - 2006	Multiplier for Number of Permitted Units	TOTAL Number of Dwelling Units
Single-family detached	669	552	(x1)	1,221
Single-family attached	77	12	(x2)	101
Multi-family	285	1	(x3)	288
Mobile/Manufactured, other	308	6	(x1)	314
Total	**1,339**	**571**	**---**	**1,924**

Projected Number of Dwelling Units

The projected number of 2027 needed dwelling units, 946, was arrived at by the following:



HOUSING NEEDS ANALYSIS

Oregon Statewide Planning Goal 10, Housing, requires cities to "encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type and density."

The practical requirements, regulations, standards and directives implementing Goal 10 are described in Oregon Administrative Rules (OAR). OAR Chapter 660, Division 8, Interpretation of Goal 10 Housing. OAR 660-008-0010 requires that "sufficient buildable land shall be designated on the comprehensive plan map to satisfy housing needs by type and density range as determined in the housing needs projection."

These Goal 10 policies and objectives are statutory. Oregon Revised Statutes (ORS) 197.296(3)(b) Requires cities to: "Conduct an analysis of housing need by type and density range…to determine the number of units and amount of land needed for each needed housing type for the next 20 years."

Developing a forecast of new housing units by type involves considering past trends, projecting these trends into the future, and then trying to predict housing needs for Creswell's future population. The following four steps outline the process:

- Project the number of new housing units needed in the next 20 years (see previous section)
- Project the housing mix in the next twenty years
- Estimate the number of additional housing units needed by type
- Estimate the expected net density

Historically, Creswell had one Residential zoning district and Comprehensive Plan designation, with multi-family allowed with a conditional use permit. As noted in Table 11, excluding mobile homes, trailers, and other, the percentage of new units constructed as single-family detached homes equals about 65%, and multi-family buildings containing two or more units are about 28%. Single-family attached accounted for 8% of dwelling unit construction. According to building permit data provided by the City, since 2000 there has been very little multi-family construction. The new Creswell Development Code, adopted in February 2007, allows more flexibility in residential development, including:

- More diversity in allowed housing types
- Smaller lot size
- Lot size averaging
- Multiple residential zoning districts—low density residential, medium density residential and residential commercial (mixed use)
- Mid-block duplexes

Although developers may take advantage of the ability to create more diverse types of housings, recent permitting data indicates a strong preference for single-family dwellings. It is projected that the mix of housing will remain similar to existing with a slight increase in multi-family. It is projected that the mix of housing will include 60% single-family residential, 25% multi-family, 10% one-unit attached (duplex) and 5% mobile/manufactured homes in parks (see also Table 19 that follows).

Table 19. Projected Housing Mix

Housing Type	Percentage
Single-family detached	60%
Single-family attached	10%
Multi-family	25%
Mobile/Manufactured in park	5%
Total	**100%**

National, State, and Local Demographic and Economic Trends

The State of the Nation's Housing 2003 report summarizes the national housing outlook for the next decade as follows[5]:

> "When the economy regains momentum and the lingering effects of the recession subside, housing is well-positioned for another solid decade. Median incomes and wealth for all age groups are higher today than ten years ago. These gains, together with continued strong immigration, should lift household growth and housing investment above 1990s levels. Nevertheless, both low- and moderate-income households will continue to have difficulty finding affordable housing."

While this presents a relatively optimistic outlook for housing in the next decade, a number of national factors identified in *The State of the Nation's Housing 2003* will affect housing trends in Oregon:

- Over the next ten years, the aging baby-boomers will continue to support the trade-up market, increase spending on professional remodeling projects, and create demand for more expensive rentals. As the echo boomers move into their 20s, they will generate demand for smaller apartments and starter homes. At the same time, housing providers and the financial system will face the growing challenge of supplying units to low-income and minority households.

- The aging of the population, and of the baby boomers in particular, will drive changes in the age distribution of households in all age groups over 55 years. Baby boomers, however, do not appear to be in a rush to downsize. While more than half of the *oldest* boomers (aged 45 to 54 in 2000) moved during the 1990s, they typically traded up to newer homes with more amenities.

- Because of the persistent disparities between rich and poor households and between white and minority households, as well as the movement of the echo boomers into young adulthood, housing demand may shift away from single-family detached homes toward more affordable multifamily apartments, town homes, and manufactured homes. Supply-side considerations such as capital availability and zoning may, however, outweigh these demographic forces. In this case, production could tilt even more toward single-family detached homes despite growing pressure for higher-density, lower-cost housing.

[5] The Joint Center for Housing Studies of Harvard University, summarized by ECONorthwest, 2004

- While further homeownership gains are likely during this decade, they are not assured. Additional progress depends in part on preserving the recent increases achieved by low-income households. It also rests on whether the conditions that have fueled homeownership growth can be sustained.

- The past ten years have established a momentum that should keep homeownership rates—especially among minorities—headed higher. If conditions remain favorable and the momentum persists, as many as 11.0 million more households will join the homeowner ranks between 2000 and 2010.

- Over the longer term, rental housing demand should grow even if the national homeownership rate continues its steady ascent.

- Growth in young adult households will increase demand for moderate rentals, especially when the echo boomers reach their mid-20s after 2010. Meanwhile growth among those between the ages of 45 and 64 will lift demand for higher-end rentals.

Population Demographic Characteristics and Housing Trends
Data from the U.S Bureau of Census *Current Construction Reports* is used to identify national trends in the characteristics of new housing. Nationally, several shifts in the characteristics of housing are evident[6]:

- *Larger single-family units on smaller lots*. Between 1992 and 2002 the median size of new single-family dwellings increased 11%, from 1,890 square feet to 2,127 square feet in the Western Region. Moreover, the percentage of units under 1,200 square feet decreased from 8% in 1992 to 4% in 1997. The percentage of units greater than 2,500 square feet increased from 28% in 1992 to 39% in 2002.

- *Larger multifamily units*—between 1994 and 2002, the median size of new multi-family dwelling units in the Western Region increased 15%, from 920 square feet to 1,055 square feet. Moreover, the percentage of units with less than 600 square feet decreased from 6% to 1%, while the percentage with more than 1,200 square feet increased from 11% to 30%.

- *More household amenities*—between 1992 and 2002 the percentage of single-family units built with amenities such as central air conditioning, fireplaces, brick exteriors, two or more car garages, or 2-½ or more baths increased. The same trend is seen in multi-family units.

Demographic characteristics expected to change regionally and throughout the state, as minority populations, specifically Hispanic, increase and comprise a greater percent of the population growth[7]. New residents in Creswell will probably be more diverse in socio-economic and demographic characteristics than current residents.

Public Use Microsample data from the 2000 Census is used to describe the relationship between selected demographic characteristics and housing choice.[8] This analysis identified several key relationships:

[6] Summarized by ECONorthwest, 2004
[7] *Changing Demographics, Impacts to Oregon and the U.S.*, Richard Bjelland, presenter
[8] 5% Public Use Microsample (PUMS) data set, summarized by ECONorthwest, 2004

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

Housing Affordability

Determining the types of housing that are likely to be affordable to the projected household is based on household income. Higher income is correlated with higher rates of ownership and single-family housing.[9] According to the U.S. Census, the median household income and per capita income in Creswell were less than Lane County and the state.

Table 20. Median Household and Per Capita Income

Area	Median Household Income	Per Capita Income
Creswell	$34,053	$13,736
Lane County	$36,942	$19,681
Oregon	$40,916	$21,587

Source: 2000 Census

According to the 2000 Census, Creswell's median family income was $40,709. Median family incomes are typically higher than median household incomes, as is with Creswell. Despite Creswell's lower family, household, and per capita income, Creswell's home ownership rate (69%) is higher than Lane County (62%) and the state (64%). This may be a result of:

- More affordable housing in Creswell. The median value of owner-occupied units in Creswell ($120,400) was less than Lane County ($141,000) and the state ($152,100)[10]
- An increase in family households (70.4% to 71.7%) between 1990 and 2000.[11] Families with children are more likely to own their home.[12]
- An aging population. Older households are more likely to own their home.[13]

A typical standard used to determine housing affordability is that a household should pay no more than 30% of its total monthly household income for housing, including utilities. Household income has generally increased, although it has not kept pace with housing prices or rents. More households are spending in excess of the recommended 30% of their income on housing. In addition, housing cost is increasing at 9% while household income is increasing at a 2% annual rate.[14] Table 21 below indicates that about 27% of owner households in Creswell and about 42% of renter households paid more than 30% of their income for housing in 2000. Combined, 32.8% paid more than 30% of their income for housing.

[9] Planning for Residential Growth Workbook, Appendix C, page C-12
[10] 2000 Census
[11] 1990 and 2000 Census
[12] Planning for Residential Growth Workbook, Appendix C, page C-19
[13] Ibid, page C-19
[14] Ibid, page C-2

Table 21. Owner and Renter Costs as a Percentage of Income

Percent of Income	Owner		Renter		Total	
	Costs by Number	Costs by Percent	Costs by Number	Costs by Percent	Costs by Number	Costs by Percent
Less than 15%	115	19.5%	55	14.1%	170	17.4%
15% - 19.9%	149	25.3%	41	10.5%	190	19.4%
20.0% - 24.9%	120	20.4%	78	20.1%	198	20.3%
25.0% – 29.9%	41	7.0%	26	6.7%	67	6.9%
30.0% – 34.9%	31	5.3%	32	8.2%	63	6.5%
35.0% or more	125	21.2%	132	33.9%	257	26.3%
Not computed	8	1.4%	25	6.4%	33	3.4%
Total	**588**	**100%**	**389**	**100%**	**977**	**100%**

Source: 2000 Census

Table 22 that follows estimates affordable housing costs and units by income levels for Creswell in 2000. The data indicate that:

- About 23% of Creswell households cannot afford a studio apartment according to HUD's estimate of $398 as fair market rent
- More than 34% of Creswell's households cannot afford a two-bedroom apartment at HUD's fair market rent level of $612
- A household earning median family income ($40,709) can afford a home valued up to about $101,750

Table 22. Housing Affordability Costs and Income

Income Level	Income, Number of Households	Income, Percent of Households	Affordable Monthly Housing Cost	Crude Estimate of Affordable Purchase Owner-Occupied Unit
Less than $10,000	201	15.5%	$0 to $250	$0 - $25,000
$10,000 - $14,999	77	5.0%	$250 to $375	$25,000 - $37,000
$15,000 - $24,999	190	14.6%	$375 to $625	$37,000 - $62,500
$25,000 - $34,999	207	15.9%	$625 to $875	$62,500 - $87,500
$35,000 - $49,999	236	18.2%	$875 to $1,250	$87,500 - $125,000
Lane County median household income $36,942; Creswell $34,053				
$50,000 - $74,999	294	22.6%	$1,250 to $1,875	$125,000 - $187,500
$75,000 - $99,999	58	4.5%	$1,875 to $2,450	$187,500 - $245,000
$100,000 - $149,999	37	2.0%	$2,450 to $3,750	$245,000 - $375,000
$150,000 or more	0	0%	More than $3,750	More than $375,000
Total	**1,300**	**100%**		

Sources: 2000 Census, Oregon Housing & Community Services Housing Strategies Workbook, 1993

Density

The 1982 Comprehensive Plan notes that the 1981 population of 1,880, residing on a total of 135 residential acres, resulted in population density of 13.9 persons per acre.[15] The Creswell Comprehensive Plan includes one plan designation for residential uses. However, the new Creswell Development Code includes three residential land use districts—Low Density

[15] Page 36

Residential, Medium Density Residential and Residential Commercial (mixed use). Historically, residential development has happened within the Resort Commercial overlay and will likely continue with about 50% residential uses. Table 23 shows an average residential lot size and the net density[16].

Table 23. Net Densities and Average Lot Sizes

Net Density (units per net acre)	Average Lot Size (square feet)
2	21,780
4	10,890
5.45	8,000
6	7,260
7.26	6,000
8	5,445
10	4,356

Densities of single-family detached units are projected to increase:

- Historically, much of Creswell developed in a rural pattern. New development is more likely to be constructed at urban densities in the areas where city services are available
- Densities are likely to increase as land and housing prices increase; average lot size will decrease as a way of keeping single-family homes affordable.
- The new Creswell Development allows more flexibility in residential development and smaller lot sizes

Densities of single-family attached housing (duplexes) are projected to stay the same. Multi-family units are expected to be mostly four-plex and six-plex buildings based on Creswell's population and historical construction. These densities are less than the larger structures with ten or more units.

The existing average density for manufactured home parks is 7.6. However, new parks and expansions to existing parks generally cater to double- and triple-wide manufactured homes. It is difficult to buy a new single-wide home. Therefore, the projected density for new manufactured homes in parks is projected to decrease slightly to 7 units per net acre, slightly higher than that for single-family detached homes. The following table shows the existing and projected housing unit densities by structure type.

Table 24. Residential Densities (Units/Net Acre) and Projected Housing Mix

Structure Type	Existing Densities	Projected Densities	Projected mix of types
Single-Family detached	5.7	6.0	60%
Single-Family attached	10.0	10.0	10%
Multi-family	16.0	16.0	25%
Mobile/Manufactured homes in parks	7.6	7.0	5%
Overall Density	**7.0**	**8.4**	**100%**

[16] Net density is defined as the number of dwelling units per acre of land excluding dedicated streets, parks, sidewalks and public facilities. For the same total area of land, net density will result in higher units per acre than gross density.

Land for Non-Residential Purposes
If it is assumed that new streets would be required for the vast majority of new development, the gross acres should be increased by adding results from using a selected multiplier to arrive at a total net acre estimate. It is assumed 20% of total gross acres will be needed for non-residential uses. See Table 25 for the estimated land needs for the planning period:

SUPPLY AND DEMAND COMPARISON

The buildable lands supply has been estimated as well as the projected need for housing. As shown in the Future Housing Needs section, there is a need for **946** housing units and a total of **150.8** acres in the year 2027. The majority of the needed units are for single-family detached units at 568 and multi-family units at 237.

Table 25: Estimated Land Needed for Future Residential Development

2027 Estimated Housing Mix	# of Future Housing Units Needed	Density (units per acre)	Acres Needed	Acres Needed for Non-Residential Uses (20%)	Net Acres Needed
Single Family detached	568	6.0	94.7	18.9	113.6
Single Family attached	95	10.0	9.5	1.9	11.4
Multi-family	237	16.0	14.8	3.0	17.8
Mobile/Manufactured homes in parks	47	7.0	6.7	1.3	8.0
Total	**946**	**8.4**	**125.7**	**25.1**	**150.8**

Table 10, Total Residential Developable Acres, shows that **121.0** total acres are available for residential uses once total net buildable acres (92.0), expected redevelopment acres (22.8) and infill acres (6.2) are accounted for.

Table 10. Total Residential Developable Acres

Plan Designation	Total Net Buildable Acres (from Table 5)	Expected Redevelopment Acres	Infill Acres	Total Acres
Residential	**92.0**	**22.8**	**6.2**	**121.0**

Based on the projected demand and need for housing by type, and the expected net densities by type, approximately 150.8 acres of residential land would be needed to meet the demand for housing over the next 20 years. Approximately 121.0 net buildable residential acres are available within the Creswell UGB. This results in a deficit of approximately 29.8 acres.