Chapter 5 Implications

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

COMPARISON OF LAND CAPACITY AND DEMAND

Chapter 4 presented an analysis of site needs for the 2009 to 2029 period and for the 2029 to 2059 period (Table 4-6). This section presents a comparison of employment land supply and demand for these periods in two sections.

SITE AND LAND NEEDS FOR 2009 TO 2029

Chapter 2 presents an inventory of suitable employment sites by site size (Table 2-7). Chapter 4 presents an analysis site needs (Table 4-6). Table 5-1 shows a summary of suitable employment sites and site needs. Table 5-1 compares the supply of sites with the demand for sites to show the need for employment sites in Junction City for the 2009 to 2029 period. The results show that Junction City has a deficit of the following land types for the 2009 to 2029 period:

- **Industrial land.** Junction City has a deficit of three industrial sites smaller than one acre and one industrial site larger than 50 acres. Junction City has a surplus of seven industrial sites two to five acres and two industrial sites between 10 and 50 acres. Junction City's supply of industrial sites includes four sites that are 10 acres or larger, which are located along Highway 99, between the two rail lines. These sites have a number of disadvantages that may make them unattractive for some uses: (1) they are long, thin sites; (2) access to Highway 99 is limited to the existing at-grade rail crossings because ODOT Rail does not generally allow new at-grade rail crossings; (3) the sites have wetlands, with one site nearly entirely covered by wetlands; (4) access to City water and sewer lines will require crossing Highway 99; and (5) limited vehicle stacking distances. These sites may attract industrial firms that prefer to locate away from other urban uses. The City should evaluate the market for these sites and the limitations for these sites when the City establishes urban reserves for employment land.

- **Commercial sites.**[20] Junction City a deficit of 47 commercial sites smaller than 10 acres, more than half of which are for site smaller than one acre. Junction City has a surplus of one 10 to 20 acre commercial site.
- **Government.** Junction City has a deficit of two government sites: one 20 to 50 acres and one larger than 50 acres.

Table 5-1. Comparison of vacant land supply and site needs, industrial and other employment land, Junction City UGB, 2009-2029

	Site Size (acres)							
	Less than 1	1 to 2	2 to 5	5 to 10	10 to 20	20 to 50	Greater than 50	Total Sites
Inventory of Suitable Sites								
Industrial	1	9	4	3	0	2	1	20
Commercial	25	2	0	0	1	2	0	30
Total Suitable Sites	**26**	**11**	**4**	**3**	**1**	**4**	**1**	**50**
Site Needs								
Industrial	3	3	3	2	1	2	1	15
Commercial	39	11	8	2	0	0	0	60
Total sites needed	**42**	**14**	**11**	**4**	**1**	**2**	**1**	**75**
Surplus (deficit) of sites								
Industrial	(2)	6	1	1	(1)	0	0	
Commercial	(14)	(9)	(8)	(2)	1	2	0	

Source: ECONorthwest
Note: Commercial land includes land in the following plan designations: Commercial, Commercial/Residential, and Professional Technical.

Converting from the site needs shown in Table 5-1 to an estimate of land needs requires making assumptions about average site sizes needed in Junction City. Table 5-2 shows average site sizes based on the average size of developed sites in Junction City.

Table 5-2. Average employment site size, Junction City UGB, 2008

	Site Size (acres)						
	Less than 1	1 to 2	2 to 5	5 to 10	10 to 20	20 to 50	Greater than 50
Industrial sites	0.5	1.5	3	10	20	50	75
Commercial sites	0.3	1.5	3	10	20	40	50

Source: ECONorthwest

Table 5-3 shows sites needed (from Table 5-1) and land need (based on number of sites needed in Table 5-1 and average site size in Table 5-2). The results show that Junction City has a deficit of the following land types for the 2009 to 2029 period:

[20] Commercial sites in Table 5-1includes land in the following plan designations: Commercial, Commercial/Residential, and Professional Technical

- **Industrial land.** Junction City has a **need for 21 acres** of industrial land, including one 20-acre site. As discussed below, this need can be met through development of vacant land within the UGB (e.g., on one of the vacant 20 to 50 acre sites or on land designated for Professional Technical uses) or through redevelopment.
- **Commercial sites.** Junction City has a **need for 62 acres** of commercial land, 20 of which will be on sites 5 to 10 acres. The determination of whether this need within the UGB (through redevelopment or redesignation or land) will be determined when residential land needs are considered in Phase 2.

Table 5-3. Comparison of employment land supply and site needs, Junction City UGB, 2009-2029

	Site Size (acres)							
	Less than 1	1 to 2	2 to 5	5 to 10	10 to 20	20 to 50	Greater than 50	Total
Industrial								
Sites needed	2	none	none	none	1	none	none	2
Land need (acres)	1	--	--	--	20	--	--	21
Commercial								
Sites needed	14	9	8	2	none	none	none	33
Land need (acres)	4	14	24	20	--	--	--	62
Total sites needed	**16**	**9**	**8**	**2**	**1**	**--**	**--**	**36**
Total acres needed	**5**	**14**	**24**	**20**	**20**	**--**	**--**	**83**

Source: ECONorthwest

The comparison of site needs with land supply in Table 5-3 does not tell the entire story of site needs in Junction City.

- **Land for government uses.** Table 5-3 does not include the need for public land, including land for the State Prison and Hospital or expansion of the City's wastewater system. Both of these sites have gone through an extensive public siting process and have been purchased by the Department of Corrections (DOC) specifically for these institutional uses. Thus, the future location of – and uses for – these sites are known.
    - The State has identified an approximately 235 acre site at the south end of Junction City's UGB as the site of the State Prison and Hospital. A portion of this site is already in the UGB.
    - In addition, the City expects to need 80 acres to expand its wastewater facility to provide services to the State Prison and Hospital. The City has identified two sites for this expansion, both about 40 acres, one of which is currently within the existing UGB and the other is outside the UGB.

These sites are adjacent to the current wastewater treatment facility.

- **A site for Grain Millers.** Grain Millers needs an industrial site that is at least 50 acres in size and access to the two rail lines. The site needs analysis in Table 4-6 (and Table 5-1) show this as a need for one 20 to 50 acre industrial site. The vacant 20 to 50 acre industrial sites in the UGB are located along Highway 99 between the two rail tracks. These sites are about 25 acres each and have a long, thin shape. The characteristics of a needed site for Grain Millers are described in detail the section "Characteristics of Needed Sites." **Neither of these large industrial sites meets the characteristics needed by Grain Millers.**

- **Industrial land need for a 20-acre site.** Table S-3 identifies a need for one 20 acre industrial site. **This need may be accommodated on one of the 20 to 50 acre industrial sites within the UGB or on the Professional Technical site.** Neither of these sites meets the requirements of a site for Grain Millers, as described above.

- **Land-use efficiencies.** The data in Table 5-3 address employment needs on vacant and partially vacant land. Some employment in Junction City will not require new land but will locate on land that is currently used. Junction City identified economic development strategies of encouraging redevelopment, especially in downtown. Some of the land need identified in Table 5-3 can be accommodated through redevelopment within the existing UGB:

  - ~~-~~ **Commercial land needs and redevelopment.** Table 5-3 shows that Junction City has a need for about 62 acres of commercial land, all on sites 10 acres or smaller. The City will need to demonstrate how it will meet these needs. OAR 660-025-0050(4) requires the City consider land use efficiency measures before expanding the UGB.[21] The City will address land use efficiency measures on commercial land when residential land needs are considered in Phase 2 of the customized periodic review work program .

[21] Specifically, it states (emphasis added):

> (4) If the inventory demonstrates that the development capacity of land inside the UGB is inadequate to accommodate the estimated 20-year needs determined under OAR 660-024-0040, the local government must amend the plan to satisfy the need deficiency, either by increasing the development capacity of land already inside the city or by expanding the UGB, or both, and in accordance with ORS 197.296 where applicable. **Prior to expanding the UGB, a local government must demonstrate that the estimated needs cannot reasonably be accommodated on land already inside the UGB.** If the local government determines there is a need to expand the UGB, changes to the UGB must be determined by evaluating alternative boundary locations consistent with Goal 14 and OAR 660-024-0060.

~~. Junction City can address commercial land needs through development of vacant land[22], such as the Professional Technical site, or through infill and redevelopment.~~

- ~~Table 5-3 shows that Junction City has a "surplus" of three commercial sites, one that is 10 to 20 acres and two that are 20 to 50 acres. These sites are a suitable 15 acre commercial site and about 70 suitable acres of land in the Professional Technical plan designation.~~ **~~These vacant sites provide enough commercial land to meet Junction City's commercial land needs over the 20-year period.~~**

  ~~In addition, Junction City has land with redevelopment potential, especially in Downtown. The City has 17 acres of land with significant redevelopment potential and 11 acres of land with moderate redevelopment potential. Some of these sites may have attributes (site size, location within Junction City, or access to Highway 99) that may be attractive to retailers, such as grocery stores or big box stores, or other commercial uses, such as office space, overnight accommodations, or restaurants.~~

  ~~Assuming that the City redesignates the Professional Technical site to allow a mixture of commercial and light industrial uses and that some of redevelopment occurs over the planning period,~~ **~~Junction City has enough commercial land within the existing UGB to accommodate expected commercial growth over the 2009 to 2029 period.~~**

- ~~**Industrial redevelopment.** ECO also assumed that industrial land needs for sites smaller than twenty acres would be addressed through redevelopment of existing industrial sites and development on the Professional Technical site, which will continue to allow light industrial uses. Junction City has about 55 acres of industrial land with significant redevelopment potential and 31 acres of industrial land with moderate redevelopment potential. While we do not assume all of this land will redevelop, it is likely that some of it will redevelop over the planning period.~~

Junction City has enough land within the UGB to accommodate ~~commercial and~~ industrial growth, except for need for sites with special

~~[22] Table 5-3 also assumes that vacant commercial sites smaller than 2 acres (approximately 6.5 acres of land) will develop over the planning period.~~

requirements. In summary, Junction City's will need to provide suitable land to meet the following Year 2009-2029 site needs by expanding the UGB:

- **One industrial site with at least 50 suitable acres** for Grain Millers or another rail-loop served bulk processor. Other needed characteristics of this site are described in "Characteristics of Needed Land" section below.
- **One approximately 235-acre site** for the State Prison and Hospital. The DOC has identified the site for the State institutional facilities.
- **One 40 acre** site for a wastewater facility expansion. The City has identified the site for the wastewater facility expansion.

SITE AND LAND NEEDS FOR 2029 TO 2059

Table 5-4 shows the need for employment sites in Junction City for the 2029 to 2059 period. The analysis in Table 5-4 is based on the need for sites over the 2029 to 2059 period (Table 4-6), the supply of suitable employment land, and the site needs for the 2009 to 2059 period (Table 5-1). The results show that Junction City has a deficit of the following land types for the 2029 to 2059 period:

- **Industrial sites.** Junction City has a **deficit of 21 industrial sites**: 16 sites 5 acres or smaller, three sites 5 to 20 acres, and two sites larger than 20 acres.
- **Commercial sites** Junction City has a **deficit of 90 commercial sites**: 84 sites 5 acres or smaller and six sites 5 to 20 acres.
- **Government.** Junction City has a **deficit of two government sites**, both 5 acres or smaller.

Table 5-4. Site needs, Junction City UGB, 2029-2059

Surplus (deficit) of sites	Site Size (acres)						
	Less than 1	1 to 2	2 to 5	5 to 10	10 to 20	20 to 50	Greater than 50
Industrial	(10)	(2)	(4)	(1)	(2)	(1)	(1)
Commercial	(50)	(22)	(12)	(5)	(1)	0	0
Government	0	(1)	(1)	0	0	0	0

Source: ECONorthwest
Note: We assumed that the Professional Technical site would develop over the 2009 to 2029 period.

Table 5-5 shows sites (from Table 5-4) and land need (based on number of sites needed in Table 5-4 and average site size in Table 5-2). The results show that Junction City has a deficit of sites for the 2029 to 2059 period. This need is for sites outside of the existing UGB:

- **Industrial land.** Junction City has a **need for 195 acres** of industrial land, with 20 acres needed on sites smaller than 5 acres, 50 acres needed on sites 5 to 20 acres and 125 acres needed on sites larger than 50 acres.
- **Commercial sites.** Junction City has a **need for 154 acres** of commercial land, with 84 acres needed on sites smaller than 5 acres, and 70 acres needed on sites 5 to 20 acres.
- **Government.** Junction City has a **need for five acres** of government land on sites 5 acres and smaller.

Table 5-5. Employment site and land needs outside of the existing Junction City UGB, 2029-2059

	Site Size (acres)							
	Less than 1	1 to 2	2 to 5	5 to 10	10 to 20	20 to 50	Greater than 50	Total
Industrial								
Sites needed	10	2	4	1	2	1	1	21
Land need (acres)	5	3	12	10	40	50	75	195
Commercial								
Sites needed	50	22	12	5	1	none	none	90
Land need (acres)	15	33	36	50	20	--	--	154
Government								
Sites needed	none	1	1	none	none	none	none	2
Land need (acres)	--	2	3	--	--	--	--	5
Total sites needed	**60**	**25**	**17**	**6**	**3**	**1**	**1**	**113**
Total acres needed	**20**	**38**	**51**	**60**	**60**	**50**	**75**	**354**

Source: ECONorthwest
Note: Table 5-5 assumes that the average site size for the 1 to 2 acre and 2 to 5 acre government sites are the same as average site sizes for commercial sites in Table 5-2.

CHARACTERISTICS OF NEEDED SITES

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

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

Tables 5-1 and 5-4 identified site and land needs for industrial and commercial sites in the next 20-years, as well as for the next 50-years. Some of Junction City's employment land deficits for the 2009 to 2029 period will be addressed through redevelopment. Junction City has the need for one approximately 50-acre industrial site one approximately 200-acre government site, and one 40 acre government site over the 2009 to 2029 period. The following section describes the characteristics of the needed sites.

INDUSTRIAL

Junction City's identified need for an industrial site is for use by a bulk ag-processor such as Grain Millers, which currently has a manufacturing facility in downtown Eugene. Grain Millers is looking for a new site to expand its operations on because the facility in downtown Eugene does not have room for expansion. Illustrating advances for the industry related to handling bulk product efficiently, Grain Millers requirements for a new site are:

- **Site size.** Grain Millers needs a site that has at least 45 acres of suitable land (e.g., buildable land after constrained areas are discounted or mitigated) and 5 acres for outdoor test plots. Grain Millers requires a site with 30 acres of suitable land for development when it moves its facility, 15 acres of land for expansion of their facility over the planning period, and five acres of land for test plots. The site must have a minimum development width of 750 feet.

- **Rail access.** Grain Millers requires a site that has immediate rail access with the ability to incorporate an inbound and outbound rail switch. The company's rail requirements are:
    - The rail service must have the ability to accommodate 3,250 linear feet of track (without use of an on-site rail switch) for storage space of up to 50 car unit trains. Grain Millers has a preference for a site that can accommodate an additional 2,450 linear feet of track, with a maximum of two on-site switches, for maneuvering railcars for loading and unloading.
    - The on-site turning radiuses cannot be less than 604 feet.
    - On-site rail cannot impede inbound and outbound vehicular traffic to the site.
    - The ideal site would be located between two railroads to allow for build-out of rail infrastructure.
- **Other transportation access.** The site must have immediate access to Highway 99 for freight movement. The freight traffic from industrial sites should not be routed through residential neighborhoods. Grain Millers also needs access to an airport for air transportation.
- **Topography.** The site should be very flat, with a slope not greater than 1% to best suit the rail uses.
- **Access to services.** The site will need to have access to services: (1) electricity service of 6 megawatts, with the ability to expand to 9 megawatts; (2) service for about 800,000 therms of natural gas; (3) municipal water service for about 13,000,000 gallons annually; and (4) sanitary sewer service for 5,000,000 gallons annually.
- **Land ownership.** A site with a single owner is strongly preferred, to reduce the cost of land assembly.
- **Surrounding land uses.** The site should be located near compatible uses, such as other industrial uses, some types of commercial uses, such as a business park, or compatible government uses. The site should not be located adjacent to an urban residential area.

Grain Millers strongly prefers a site located in the Southern Willamette Valley for the following reasons:

- **Availability of workers.** Grain Millers regards its labor force as the company's most significant asset and employee retention is an important factor in site selection. In addition, Grain Millers benefits

from access to the regional pool of skilled labor and access to Oregon State University, a nationally premier agricultural school.

- **Access to markets and customers.** Forty percent of Grain Miller's sales are to companies located in Oregon, 20% are to companies in California, and 20% are to companies in Washington, Idaho, and Vancouver, BC. In addition, three of Grain Millers largest customers are located within 15 miles of Junction City. A location in the Southern Willamette Valley provides Grain Millers with comparatively low transportation costs to its customers.

- **Access to materials.** A significant amount of the raw agricultural materials used by Grain Millers is grown in Oregon, Washington, Idaho, and California. In addition, Grain Millers prefers a site with proximity to a port capable of economy-of-scale deliveries from Pacific Rim countries that grow grains compatible with Grain Millers' processing

- **Support from regional market clusters.** The local pulp and paper industry built an infrastructure necessary for mills, such as fabrication, repair, and other services. Grain Millers prefers a location that allows it to access this industrial infrastructure.

GOVERNMENT

Table 5-3 does not include need for sites for government uses because the location of – and uses for – these sites is already known. This section summarizes the site characteristics of the sites for the State Prison and Hospital and the expansion of the wastewater treatment facility. Junction City has need for two sites for government uses: one 235 acre site for the State Prison and Hospital and one 40 acre site for expansion of the City's wastewater facility, which is needed to provide wastewater services to the State Prison and Hospital.

Site for the State Prison and Hospital

The State of Oregon plans to develop a State Prison and Hospital on an approximately 235 acre site that is located at the south end of Junction City's UGB. About 71 acres of the site is within the current UGB and 165 acres is located outside the UGB.

The State identified the Milliron Road site in Junction City as a preferred site for a State Prison.[23] The needed characteristics of a site for the State Prison, as determined through a comprehensive, statewide siting process, are:

- **Site size.** The State identified need for a site between 200 to 300 acres, with space to accommodate setbacks around the perimeter of the facility. The preferred site configuration is generally rectilinear.
- **Land ownership.** ORS 270.100 requires that the State consider siting facilities on state-owned property prior to state acquisition of private land.
- **Topography.** The site should be flat to minimize earthwork, foundation, and construction costs and surface/subsurface drainage construction costs.
- **Natural hazards.** The site should not be subject to natural hazards that cannot be mitigated for. For example, the site should not be located in a designated tsunami inundation zone and should not be unduly prone to liquefaction due to seismic activity. If the site is located with the 100-year floodplain or other flooding hazards, the site should be big enough to locate the building away from the flooding hazard and/or mitigation of flooding hazards should be possible through raising site grades or providing positive drainage features.
- **Street access.** The site should be served by a road and road system capable of supporting the prison. The site should have access to a state Highway and be close to I-5.
- **Access to services.** The site should be serviceable for water, sanitary sewer, stormwater, telecommunications, electricity, and natural gas, oil, or propane.
- **Surrounding uses.** The surrounding uses should be compatible with a prison. Preferred surrounding uses natural features (e.g., a lake), industrial uses, or agricultural uses. The State prefers that adjacent uses not include housing and does not allow siting adjacent to a school.

The State plans to replace the existing Oregon State Psychiatric Hospital with a hospital in the Salem area and a hospital in the Southern

[23] The needed site characteristics are based on information documented in: "Findings, Conditions an Decision: Milliron Road and Stimpson Gulch: Sites Selected by the Siting Authority of Men's Medium Security Prison Complex," May 20, 1997.

Willamette Valley. The State's preferred site is the northern part of the Department of Correction site, which is located at the southern boundary of Junction City's UGB.[24] The State identified the following criteria as necessary for siting the new State Hospital:

- **Land ownership.** ORS 270.100 requires that the State consider siting facilities on state-owned property prior to state acquisition of private land.
- **Site size.** The site should be large enough to accommodate the Hospital and provide opportunities for future expansion of the hospital.
- **Site buildability and configuration.** The shape of the site should not inhibit development and the site should be contiguous (without any gaps or barriers) The unusable land (wetlands, utility easements, etc.) would be as minimal as possible.
- **Topography.** The site should be relatively flat, with no steep or unbuildable slopes.
- **Street access.** The site should be served by a road and road system capable of supporting the prison. It is preferable that the site have access to a State Highway and be within close proximity to I-5.
- **Access to services.** The site should be serviceable for water, sanitary sewer, stormwater, telecommunications, electricity, and natural gas, oil, or propane.
- **Surrounding uses.** The surrounding uses should be compatible with a State Hospital. Preferred surrounding uses natural features (e.g., a lake), industrial uses, or agricultural uses. The State prefers that adjacent uses not include housing and does not allow siting adjacent to a school.

Site for expansion of the wastewater system

The City needs a site for the expansion of the wastewater facilities to support the State Prison and Hospital. Based in preliminary plans, expansion site may include: a mechanical (activated sludge process) wastewater treatment plant, a facultative lagoon, a facultative sludge lagoon to process biosolids from the mechanical wastewater treatment plant, and a site for final effluent disposal. The site needs for the City's wastewater system are:

[24] The site needs for the State Hospital are described in the document" Oregon State Psychiatric Hospital Replacement: Site Recommendations." This document can be found at: https://apps.dhs.state.or.us/cfmx/oshrp/documents/recommendations.pdf

- **Location.** The site must be located adjacent to the City's existing wastewater facility.
- **Site size.** The City needs approximately contiguous 80 acres for new wastewater facilities..
- **Land ownership.** The City prefers land that is in City ownership.
- **Street access.** The wastewater system will not generate significant traffic but may have occasional large vehicles on the site. The site needs to be accessible through the local road network. Locating the site on a state highway is not an advantage and may be a disadvantage to the City's economic development efforts.
- **Topography.** Mildly sloping land (about 1% slope) is generally the most cost effective to construct wastewater improvements on.

CHARACTERISTICS OF NEEDED SITES FOR THE 2029 TO 2059 PERIOD

Describing the characteristics of needed sites for the 30 to 50 year period is difficult because the types of businesses that may want to locate in Junction City in 2059 are likely to be different from those located in the City now. Table 5-5 shows that Junction City has need for 11 sites larger than 5 acres over the 2029 to 2059 period. Five of the sites are industrial and will require about 175 acres of land. Six of the sites are commercial and require 70 acres of land. The following section provides characteristics of needed industrial and commercial sites over five acres.

Industrial

Based on the analysis of land supply and site needs in Table 5-5, Junction City will need five sites five acres and larger for general industrial over the 2029 to 2059 period. Industrial sites may be used for one firm or may be used for an industrial park, to provide space for multiple, smaller firms.

- **Site size.** Junction City will need two sites 5 to 10 acres, one site 10 to 20 acres, one 20 to 50 acre site, and one site larger than 50 acres.
- **Street access.** Industrial sites should be located within one-half mile of Highway 99. The freight traffic from industrial sites should not be routed through residential neighborhoods.
- **Rail access.** Some industrial uses may benefit from rail access, especially businesses that ship bulky, inexpensive items over long distances. Access to a rail line, or the possibility of developing a rail spur, may be an advantage for some businesses.

- **Topography.** Industrial sites should be relatively flat, preferably not more than 5% slope and not more than 10% slope.
- **Unconstrained land.** Sites should not be constrained by the floodway or wetlands.
- **Access to services.** City services should be accessible to the site, including arterial street access, sanitary sewer, and municipal water. Other services that office sites will need are: electricity, phone, and high-speed telecommunications. Some businesses may need higher capacity water or wastewater services (such as food processors) or higher capacity electricity (such as high-tech firms). If the site has access to services, the need for higher capacity services could be addressed when a business chooses to locate at the site.
- **Land ownership.** Sites with a single owner are strongly preferred, to reduce the cost of land assembly.
- **Surrounding land uses.** General industrial sites should be located near compatible uses, such as other industrial uses, warehousing and distribution, or some types of commercial uses, such as a business park.

Commercial

Based on the analysis of land supply and site needs in Table 5-5, the majority of commercial sites (84 sites) will be smaller than 5 acres. Junction City will need six sites 5 acres and larger for commercial uses over the 2029 to 2059 period. These larger commercial sites could have a variety of uses: a campus site for a large business, a business park, large format retail, a grocery store or other grouping of retail stores, or other groupings of office and retail buildings.

- **Site size.** Junction City will need six sites five acres and larger for commercial uses:
    - Junction City will need five sites between 5 and 10 acres.
    - Junction City will need one site between 10 and 20 acres.
- **Street access.** Office sites should be located on an arterial or collector streets. Retail sites should be located along Highway 99, with access within one-half mile of Highway 99. Traffic from commercial sites should not be routed through residential neighborhoods.
- **Topography.** Commercial sites should be relatively flat, preferably not more than 15% slope.

- **Unconstrained land.** Sites should not be constrained by the floodway or wetlands.
- **Access to services.** City services should be accessible to the site, including street access, sanitary sewer, and municipal water. Other services that commercial sites will need are: electricity, phone, and high-speed telecommunications.
- **Land ownership.** Sites with a single owner are strongly preferred, to reduce the cost of land assembly.
- **Surrounding land uses.** Commercial uses may be compatible with light industrial uses, other services, or high-density residential uses.
- **Visibility.** Retailers will need sites that are highly visible from Highway 99.

IMPLICATIONS

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

- *Economic growth.* Decision makers and community members that participated in the economic opportunities analysis agreed that economic growth is desirable over the planning period. The employment forecast indicates Junction City will add 3,345 new employees between 2009 and 2029 using the OAR 660-024-0040(8)(a)(ii) methodology and adding in new employment at the State Prison and Hospital. The economic opportunities analysis assumes that Junction City will have employment growth in a wide variety of businesses, from the State facilities to services and retail for residents to industrial development. The City wants to diversify its economy and attract higher wage and professional jobs.
- *Buildable lands.* Junction City has 810 acres that are designated for industrial and other employment use. More than one-half of the land designated for employment within Junction City's UGB is considered developed and is not expected to redevelop over the 20 year planning period. Junction City has 251 acres of suitable vacant commercial and industrial land, with 157 acres of suitable industrial land, 20 acres of suitable commercial land, 70 acres of suitable Professional Technical land, two suitable acres of Commercial Residential land, and three acres of suitable public land.
- *Large sites.* Junction City's unmet employment land needs are for three larger sites: one 50 acre industrial site (with 45 suitable acres), one 40 acre site for expansion of the City's wastewater facilities, and one 235 acre site for the State Prison and Hospital.

~~• *Land use efficiencies.* The City can accommodate some employment land need through more efficient use of land within the existing UGB. There are several reasons to consider policies that would increase land use efficiency. A community goal is to revitalize downtown and encourage firms to locate there. Redevelopment uses existing infrastructure (such as streets or sanitary sewer), decreasing the need to expand infrastructure to accommodate new businesses. In addition, encouraging the location of small commercial uses (especially retail uses) at the urban fringe is likely to result in decreased transportation efficiency, especially if the commercial uses are scattered around the urban fringe.~~

~~o *Professional Technical site.* Junction City has 70 acres of suitable land designated for Professional Technical uses.~~

The City may want to consider redesignating land in the Professional Technical plan designation to allow a commercial uses and light industrial uses.

The purpose of the Professional Technical plan designation is to allow a mixture of office and manufacturing uses. Junction City's one site in this designation has not yet developed, despite being available for more than a decade. One possible reason that this site has not developed is that it does not have direct access to either Highway 99 or the railroad and is adjacent to existing residential development.

The site may be more likely to develop if it is designated for commercial and light industrial uses because it has good access to the City's street grid. The City should consider requiring a master planning process for development of this site, which would determine the appropriate mixture commercial and light industries, as well as identifying compatible commercial uses.

The 70 acres of suitable land on the Professional Technical site can accommodate the majority of commercial land needs in Junction City. Some retail uses related to the employment uses on the site may locate on the Professional Technical site. Other retail uses may locate in Downtown, on vacant or redevelopable sites.

- *Redevelopment potential*. Junction City has an economic development objective of revitalizing downtown. The City expects that that some land need for sites smaller sites may be addressed through redevelopment. The majority of redevelopment in downtown is likely to be sites smaller than two acres.

  The City will need to make strategic investments that support redevelopment and to continue supporting redevelopment through City policies. One way to support redevelopment, especially in downtown, is through creation of an urban renewal district, which can provide funds for infrastructure improvements, street beautification, and other efforts to promote downtown revitalization.

  The City may have additional opportunities for redevelopment within the next few years as a result of business changes because of the current recession. Some

developed commercial sites may become available for redevelopment for new commercial uses over the planning period. Some of these sites may have attributes (site size, location within Junction City, or access to Highway 99) that may be attractive to retailers, such as grocery stores or big box stores, or other commercial uses, such as office space, overnight accommodations, or restaurants.

- *Opportunities for reuse of underused industrial land.* There may be opportunity to redesignate some industrial land for commercial uses. The sites that might benefit most from redevelopment are industrial areas that are adjacent to existing commercial or residential uses and have limited access to transportation (Highway 99 and the train).

- *Professional Technical site.* Junction City has 70 acres of suitable land designated for Professional Technical uses. The City may want to consider redesignating land in the Professional Technical plan designation to allow a commercial uses and light industrial uses.

  The purpose of the Professional Technical plan designation is to allow a mixture of office and manufacturing uses. Junction City's one site in this designation has not yet developed, despite being available for more than a decade. One possible reason that this site has not developed is that it does not have direct access to either Highway 99 or the railroad and is adjacent to existing residential development.

  The site may be more likely to develop if it is designated for commercial and light industrial uses because it has good access to the City's street grid. The City should consider requiring a master planning process for development of this site, which would determine the appropriate mixture commercial and light industries, as well as identifying compatible commercial uses.

  The 70 acres of suitable land on the Professional Technical site can accommodate the majority of commercial land needs in Junction City. Some retail uses related to the employment uses on the site may locate on the Professional Technical site. Other retail uses may locate in Downtown, on vacant or redevelopable sites.

- *Market for sites between the two railroad tracks.* Four of Junction City's six industrial sites larger than 10 acres are located in Junction City along Highway 99, between the two rail lines. These sites have a number of disadvantages that may make them unattractive for most uses: (1) they are long, thin sites; (2) access to Highway 99 is limited to the existing at-grade rail crossings because ODOT Rail does not generally allow new at-grade rail crossings; (3) the sites have wetlands, with one site nearly entirely covered by wetlands; (4) access to City water and sewer lines will require crossing Highway 99; and (5) limited vehicle stacking distances. These sites may attract industrial firms that prefer to locate away from other urban uses. The City should evaluate the market for these sites and the limitations for these sites when the City establishes urban reserves for employment land.

Appendix A National, State, County, and Local Trends

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

NATIONAL, STATE, AND REGIONAL TRENDS

NATIONAL TRENDS

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

- **The aging of the baby boom generation, accompanied by increases in life expectancy.** The number of people age 65 and older will more than double by 2050, while the number of people under age 65 with grow only 22 percent. The economic effects of this demographic change include a slowing of the growth of the labor force, an increase in the demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.[25]

  Baby boomers are expecting to work longer than previous generations. An increasing proportion of people in their early to mid-50s expect to work full-time after age 65. In 2004, about 40% of these workers expect to work full-time after age 65, compared with about 30% in 1992.[26] This trend can be seen in Oregon, where the share of workers 65 years and older grew from 2% of the workforce

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

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

in 1992 to 3% of the workforce in 2002, an increase of 64%. Over the same ten-year period, workers 45 to 64 years increased by 70%.[27]

- **Tightening labor force.** Growth in the labor force is projected to slow over the 2006-2016 period as a result of: (1) aging and retirement of the baby boomer generation and (2) the labor force participation by women has peaked. Job growth is expected to outpace population growth, with a 10% increase in employment (15.6 million jobs) compared to a 9% increase in civilian noninstitutional population 16 years and older (22 million people).[28]

- **Need for replacement workers.** The need for workers to replace retiring baby boomers will outpace job growth. According to the Bureau of Labor Statistics, net replacement needs will be 33.4 million job openings over the 2006-2016 period, more than twice the growth in employment of 15.6 million jobs. Management occupations and teachers will have the greatest need for replacement workers because these occupations have older-than-average workforce.[29]

- **Increases in labor productivity.** Productivity, as measured by output per hour, increased over the 1995 to 2005 period. The largest increases in productivity occurred over the 1995 to 2000 period, led by industries that produced, sold, or intensively used information technology products. Productivity increased over the 2000 to 2005 period but at a slower rate than during the later half of the 1990's. The sectors that experienced the largest productivity increases over the 2000 to 2005 period were: Information, Manufacturing, Retail Trade, and Wholesale Trade. Productivity in mining decreased over the five-year period. [30]

- **Continued trend towards domestic outsourcing.** Businesses continue to outsource work to less expensive markets. Outsourcing generally falls into two categories: (1) moving jobs from relatively expensive areas to less expensive areas within the U.S. and (2)

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[27] "Growing Numbers of Older Workers in Oregon," Oregon Employment Department.

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

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

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

moving jobs outside of the U.S. to countries with lower labor costs. About three-quarters of layoffs in the U.S. between 1995 and 2004 were the result of domestic relocation, involving movement of work within the same company. The industries with the largest amounts of domestic outsourcing were: manufacturing, retail trade, and information.[31]

- **Continued growth in global trade and the globalization of business activity.** With increased global trade, both exports and imports rise. Faced with increasing domestic and international competition, firms will seek to reduce costs through implementing quality- and productivity-enhancing technologies, such as robotics or factor automation. In addition, some production processes will be outsourced offshore.[32]

- **Continued shift of employment from manufacturing and resource-intensive industries to the service-oriented sectors of the economy.** Increased worker productivity and the international outsourcing of routine tasks lead to declines in employment in the major goods-producing industries. Projections from the Bureau of Labor Statistics indicate that U.S. employment growth will continue to be strongest in healthcare and social assistance, professional and business services, and other service industries. Construction employment will also grow but manufacturing employment will decline.[33]

- **The importance of high-quality natural resources.** The relationship between natural resources and local economies has changed as the economy has shifted away from resource extraction. Increases in the population and in households' incomes, plus changes in tastes and preferences, have dramatically increased demands for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such amenities contribute to a

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

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

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

region's quality of life and play an important role in attracting both households and firms.[34]

- **Continued westward and southward migration of the U.S. population.** Although there are some exceptions at the state level, a 2006 U.S. Census report documents an ongoing pattern of interstate population movement from the Northeast and Midwest to the South and West.[35]
- **The growing importance of education as a determinant of wages and household income.** According to the Bureau of Labor Statistics, a majority of the fastest growing occupations will require an academic degree, and on average they will yield higher incomes than occupations that do not require an academic degree. The fastest growing of occupations requiring an academic degree will be: computer software application engineers, elementary school teachers, and accountants and auditors. Occupations that do not require an academic degree (e.g., retail sales person, food preparation workers, and home care aides) will grow, accounting for about half of all jobs by 2016. These occupations typically have lower pay than occupations requiring an academic degree. [36]

  The national median income in 2006 was about $32,000. Workers without a high school diploma earned $13,000 less than the median income and workers with a high school diploma earned $6,000 less than median income. Workers with some college earned slightly less than median and workers with a bachelor's degree earned $13,000 more than median. Workers in Oregon experience the same patterns as the nation but pay is generally lower in Oregon than the national average.[37]

- **Continued increase in demand for energy.** Energy prices are forecast to remain at relatively high levels, as seen in the 2006 to 2008 period, possibly increasing further over the planning period.

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[34] For a more thorough discussion of relevant research, *see,* for example, Power, T.M. and R.N. Barrett. 2001. *Post-Cowboy Economics: Pay and Prosperity in the New American West.* Island Press, and Kim, K.-K., D.W. Marcouiller, and S.C. Deller. 2005. "Natural Amenities and Rural Development: Understanding Spatial and Distributional Attributes." *Growth and Change* 36 (2): 273-297.

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

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

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

Output from the most energy-intensive industries is expected to decline, but growth in the population and in the economy is expected to increase the total amount of energy demanded. Energy sources are expected to diversify and the energy efficiency of automobiles, appliances, and production processes are projected to increase. Despite increases in energy efficiency and decreases in demand for energy by some industries, demand for energy is expected to increase over the 2008 to 2030 period because of increases in population and economic activity. [38]

- **Impact of rising energy prices on commuting patterns.** Energy prices may continue to be high (relative to historic energy prices) or continue to rise over the planning period.[39] The increases in energy prices may impact willingness to commute long distances. There is some indication that increases in fuel prices have resulted in decreased suburban housing price (i.e., housing demand), especially in large urban areas (e.g., Los Angeles or Chicago) and suburbs far from the center city. If this pattern continues, the area in Oregon most likely to be most impacted is Portland, which has the largest area of urban and suburban development in the state.[40]

- **Possible effect of rising transportation and fuel prices on globalization.** Increases in globalization are related to the cost of transportation: When transportation is less expensive, companies move production to areas with lower labor costs. Oregon has benefited from this trend, with domestic outsourcing of call centers and other back office functions. In other cases, businesses in Oregon (and the nation) have "off-shored" employment to other countries, most frequently manufacturing jobs.

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

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

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

[40] Cortright, Joe. "Driven to the Brink: How the Gas Price Spike Popped the Housing Bubble and devalued the Suburbs," May 2008.

This effect occurs incrementally over time and it is difficult to measure the impact in the short-term. If fuel prices and transportation costs decrease over the planning period, businesses may not make the decision to relocate (based on transportation costs) because the benefits of being closer to suppliers and markets may not exceed the costs of relocation.

- **Growing opportunities for "green" businesses.** Businesses are increasingly concerned with "green" business opportunities and practices. These business practices are concerned with "the design, commercialization, and use of processes and products that are feasible and economical while reducing the generation of pollution at the source and minimizing the risk to human health and the environment."[41]

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

  - *Producing green products.* Green products perform the function of regular products, but do it in a way that uses fewer resources or creates less pollution. For example, hybrid vehicles are green because they use less gasoline to operate and add fewer pollutants to the air while serving the same function as non-hybrid cars. Another example is bamboo fencing and lumber. Bamboo is a green product because it is more renewable than traditional lumber and has the strength necessary for building.

  - *Providing education about green practices or products.* Green education is often closely related to producing green products and is often done by consultants or nonprofits. Examples of companies involved in green education include the U.S. Green Building Council, which certifies buildings as green (LEED certification), or a consulting firm that writes a green (or sustainable) plan for a city or business.

  - *Using green business practices.* Green business practices are alternative methods of doing business that promote resource conservation, prevent or reduce pollution, or have other

[41] Urban Green Partnership at urbangreenpartnership.org

beneficial environmental effects. Examples of green business processes include: buying products locally to reduce shipping distance, recycling waste products (where possible), or maximizing the use of natural lighting to reduce use of electricity and light bulbs.

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

- **Potential impacts of global climate change.** There is growing support for but not a consensus about whether global climate change is occurring as a result of greenhouse gas emissions. There is a lot of uncertainty surrounding global climate change, including the pace of climate change and the ecological and economic impacts of climate changes. Climate change may result in the following changes in the Pacific Northwest: (1) increase in average temperatures, (2) shift in the type of precipitation, with more winter precipitation falling as rain, (3) decrease in mountain snow-pack and earlier spring thaw and (4) increases in carbon dioxide in the air.[42] Assuming that global climate change is occurring and will continue to occur over the next 20-years, a few broad, potential economic impacts for the nation and Pacific Northwest include:[43]

  - *Potential impact on agriculture and forestry.* Climate change may impact Oregon's agriculture through changes in: growing season, temperature ranges, and water availability.[44] Climate change may impact Oregon's forestry through increase in wildfires, decrease in the rate of tree

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

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

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

growth, change in mix of tree species, and increases in disease and pests that damage trees.[45]

- *Potential impact on tourism and recreation.* Impacts on tourism and recreation may range from: (1) decreases in snow-based recreation if snow-pack in the Cascades decreases, (2) negative impacts to tourism along the Oregon Coast as a result of damage and beach erosion from rising sea levels,[46] (3) negative impacts on availability of water summer river recreation (e.g., river rafting or sports fishing) as a result of lower summer river flows, and (4) negative impacts on the availability of water for domestic and business uses.

- *Potential changes in government policies.* There is currently no substantial national public policy response to global climate change. States and regional associations of states are in the process of formulating policy responses to address climate change including: increasing renewable energy generation, selling agricultural carbon sequestration credits, and encouraging energy efficiency.[47] Without clear indications of the government policies that may be adopted, it is not possible to assess the impact of government policies on the economy.

Global climate change may offer economic opportunities. The search for alternative energy sources may result in increased investment and employment in "green" energy sources, such as wind, solar, and biofuels. Firms in the Northwest are well positioned to lead efforts on climate change mitigation, which may result in export products, such as renewable technologies or green manufacturing. [48]

Short-term national trends will also affect economic growth in the region, but these trends are difficult to predict. At times these trends may run counter to the long-term trends described above. A recent example is the downturn in economic activity in 2007 following declines in the housing

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

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

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

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

market and the mortgage banking crisis. The result of the economic downturn has been a decrease in employment related to the housing market, such as construction and real estate. Employment in these industries will recover as the housing market recovers and will continue to play a significant role in the national, state, and local economy over the long run. This report takes a long-run perspective on economic conditions (as the Goal 9 requirements intend) and does not attempt to predict the impacts of short-run national business cycles on employment or economic activity.

STATE TRENDS

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

- **Continued in-migration from other states.** Oregon will continue to experience in-migration from other states, especially California and Washington. According to a U.S. Census study, Oregon had net interstate in-migration (more people moved *to* Oregon than moved *from* Oregon) during the period 1990-2004.[49] Oregon had an annual average of 26,290 more in-migrants than out-migrants during the period 1990-2000. The annual average dropped to 12,880 during the period 2000-2004.[50] Most in-migrants come from California, Washington, and other western states.[51]

- **Concentration of population and employment in the Willamette Valley.** Nearly 70% of Oregon's population lives in the Willamette Valley. About 10% of Oregon's population lives in Southern Oregon and 9% lives in Central Oregon. The Oregon Office of Economic Analysis (OEA) forecasts that population will continue to be concentrated in the Willamette Valley through 2040, increasing slightly to 71% of Oregon's population.

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

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

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

Employment growth generally follows the same trend as population growth. Employment growth varies between regions even more, however, as employment reacts more quickly to changing economic conditions. Total employment increased in each of the state's regions over the period 1970-2006 but over 70% of Oregon's employment was located in the Willamette Valley.

- **Change in the type of the industries in Oregon.** As Oregon has transitioned away from natural resource-based industries, the composition of Oregon's employment has shifted from natural resource based manufacturing and other industries to service industries. The share of Oregon's total employment in Service industries increased from its 1970s average of 19% to 30% in 2000, while employment in Manufacturing declined from an average of 18% in the 1970s to an average of 10% in 2005.

- **Shift in manufacturing from natural resource-based to high-tech and other manufacturing industries.** Since 1970, Oregon started to transition away from reliance on traditional resource-extraction industries. A significant indicator of this transition is the shift within Oregon's manufacturing sector, with a decline in the level of employment in the Lumber & Wood Products industry and concurrent growth of employment in other manufacturing industries, such as high-technology manufacturing (Industrial Machinery, Electronic Equipment, and Instruments), Transportation Equipment manufacturing, and Printing and Publishing. [52]

- **Continued importance of manufacturing to Oregon's economy.** Revenue from exports totaled $16.5 million in 2007, an increase of $5.1 million or 45% since 2000. Four of the five industries that accounted for more than three-quarters of revenue from exports in 2007 ($12.6 million) were manufacturing industries: Computers and Electronic Production ($6.3 million); Crop Production ($2.2 million); Transportation Equipment ($1.7 million); Machinery Manufacturers ($1.7 million); and Chemical Manufacturers ($0.7 million).Manufacturing employment is concentrated in five counties in the Willamette Valley or Portland area: Washington, Multnomah, Lane, Clackamas, and Marion Counties. Average wages for employees of manufacturing firms in these counties in

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

2006 ranged from $71,500 to $34,200 and were generally above the state's average (about $38,000) [53]

- **Small businesses continue to account for over 50% of employment in Oregon.** Small business, with 100 or fewer employees, account for 51% of private sector employment in Oregon, up from about 50.2% of private employment in 2000 and down from 52.5% in 1996. Workers of small businesses typically had lower wages than the state average, with average wages of $33,130 compared to the statewide average of about $38,000 in 2006.

- **Continued lack of diversity in the State Economy.** While the transition from Lumber and Wood Products manufacturing to high-tech manufacturing has increased the diversity of employment within Oregon, it has not significantly improved Oregon's diversity relative to the national economy. Oregon's relative diversity has historically ranked low among states. Oregon ranked 35th in diversity (1st = most diversified) based on Gross State Product data for 1963-1986, and 32nd based on data for the 1977-1996 period.[54] A recent analysis, based on 2006 data, ranked Oregon 31st.[55] These rankings suggest that Oregon is still heavily dependent on a limited number of industries. Relatively low economic diversity increases the risk of economic volatility as measured by changes in output or employment.

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

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[53] OECDD, *"Economic Data Packet, March 2008."*

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

[55] CFED, 2007, The Development Report Card for the States, http://www.cfed.org.

ECONOMIC TRENDS IN LANE COUNTY AND JUNCTION CITY

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

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

POPULATION AND DEMOGRAPHIC CHARACTERISTICS

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

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

Lane County grew slower than the State average between 1990 and 2007, growing at 1.1% annually and adding more than 60,000 people. More than 60% of the County's population lived in the Eugene-Springfield area in 2007, with about 1.5% of the County's population in Junction City. Junction City's population grew faster than the County average, at 2.0% annually, adding 1,465 residents over the seventeen-year period.

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

	Population			Change 1990 to 2007		
	1990	2000	2007	Number	Percent	AAGR
U.S.	248,709,873	281,421,906	301,621,157	52,911,284	21%	1.1%
Oregon	2,842,337	3,421,399	3,745,455	903,118	32%	1.6%
Willamette Valley	1,962,816	2,380,606	2,602,790	639,974	33%	1.7%
Lane County	282,912	322,959	343,140	60,228	21%	1.1%
Junction City	3,670	4,721	5,135	1,465	40%	2.0%

Source: U.S. Census, the Population Research Center at Portland State University.
Notes: Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties represent the Willamette Valley Region.

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

The average age of Junction City residents is increasing. Table A-2 shows the change in age distribution for Junction City between 2000 and 2008. Population increased in age groups over 25 years. The age group that increased the most was people aged 45 to 64, which grew by 166 people (18%). This age group's proportion of the total population increased from 20% to 22% during this time period. The largest percentage decrease was in people aged 18 to 24, which shrunk by 36 people (7%).

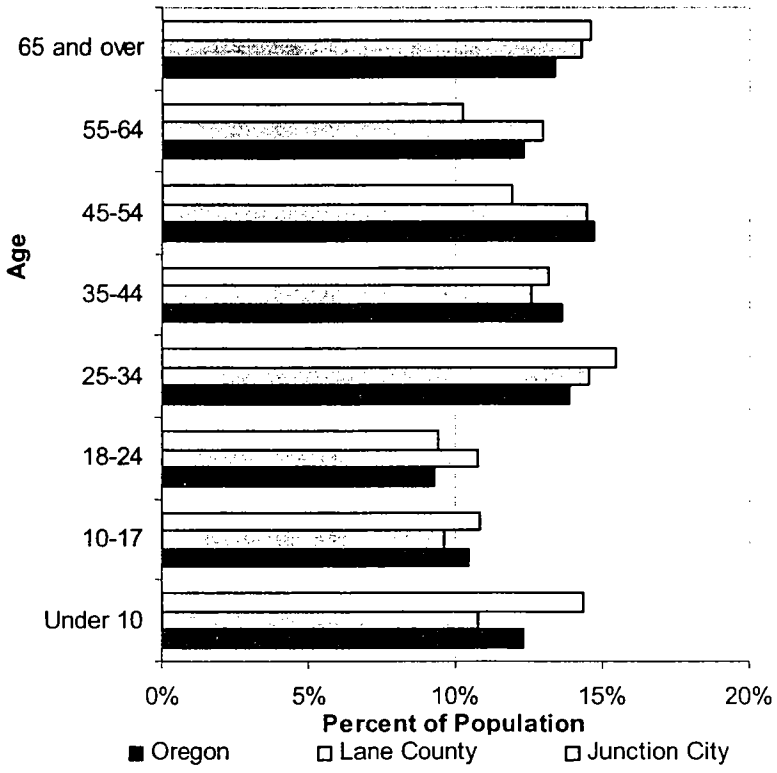
Table A-2. Change in age distribution, Junction City, 2000-2008

	2000		2008		Change 2000 to 2008		
Age Group	Number	Percent	Number	Percent	Number	Percent	Share
Under 5	355	8%	356	7%	1	0%	0%
5-17	925	20%	879	18%	-46	-5%	-2%
18-24	497	11%	461	9%	-36	-7%	-1%
25-44	1,317	28%	1,402	29%	85	6%	1%
45-64	923	20%	1,089	22%	166	18%	3%
65 and over	704	15%	715	15%	11	2%	0%
Total	**4,721**	**100%**	**4,902**	**100%**	**181**	**4%**	**0%**

Source: U.S. Census 2000, Claritas 2008

Junction City's population was mostly similar to the County and State averages in 2008. Figure A-1 shows the age structure for Oregon, Lane County, and Junction City in 2008. Junction City had a greater proportion of its population under 44 years of age (63%) than Lane County (58%) or Oregon (60%). Junction City also had a smaller share of population aged 55 and older, 25% of Junction City's population, compared to 27% in the County and 26% in the State.

Figure A-1. Population by age, Oregon, Lane County, and Junction City, 2008



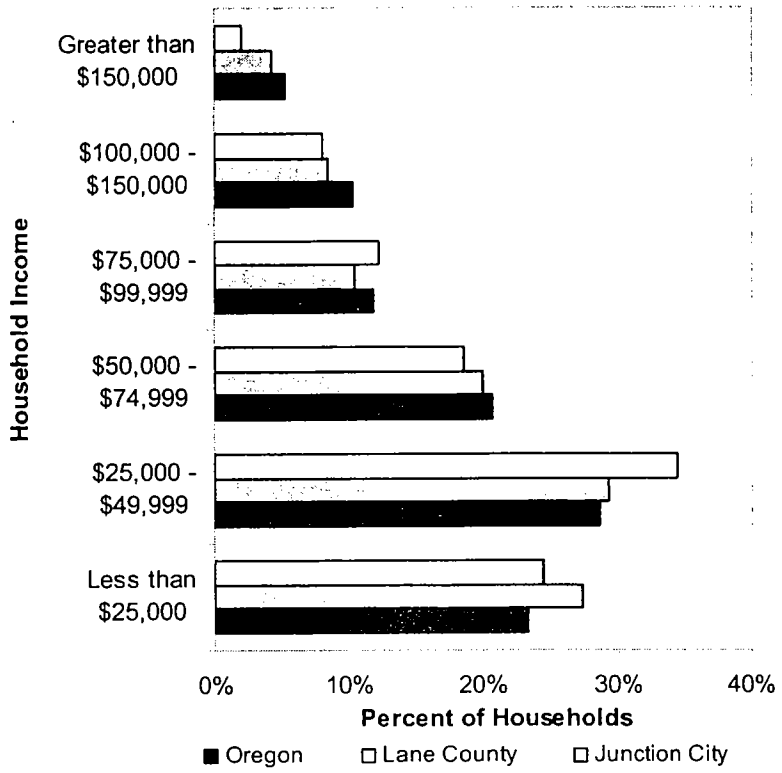
Source: Claritas 2008, percentages calculated by ECONorthwest.

HOUSEHOLD AND PERSONAL INCOME

Income in Lane County and Junction City has historically been lower than the State or national averages. Lane County's median household income in 2006 was $42,127, compared with $46,230 for Oregon and the national average of $48,451. The median household income in Junction City in 1999 was $35,347, or 96% of the County average of $36,942.

Lane County's median household income in 2006 was $42,127, compared with $46,230 for Oregon and the national average of $48,451. Figure A-2 shows the distribution of household income in Oregon, Lane County, Junction City, and Eugene in 2008. Figure 3-2 shows that a larger share of households in Junction City (53%) had an income between $25,000 and $50,000, compared to Lane County or the State (both 49%). Junction City also has a lower share of households with income above $75,000 (22%), compared to the County (23%) or the State (27%).

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

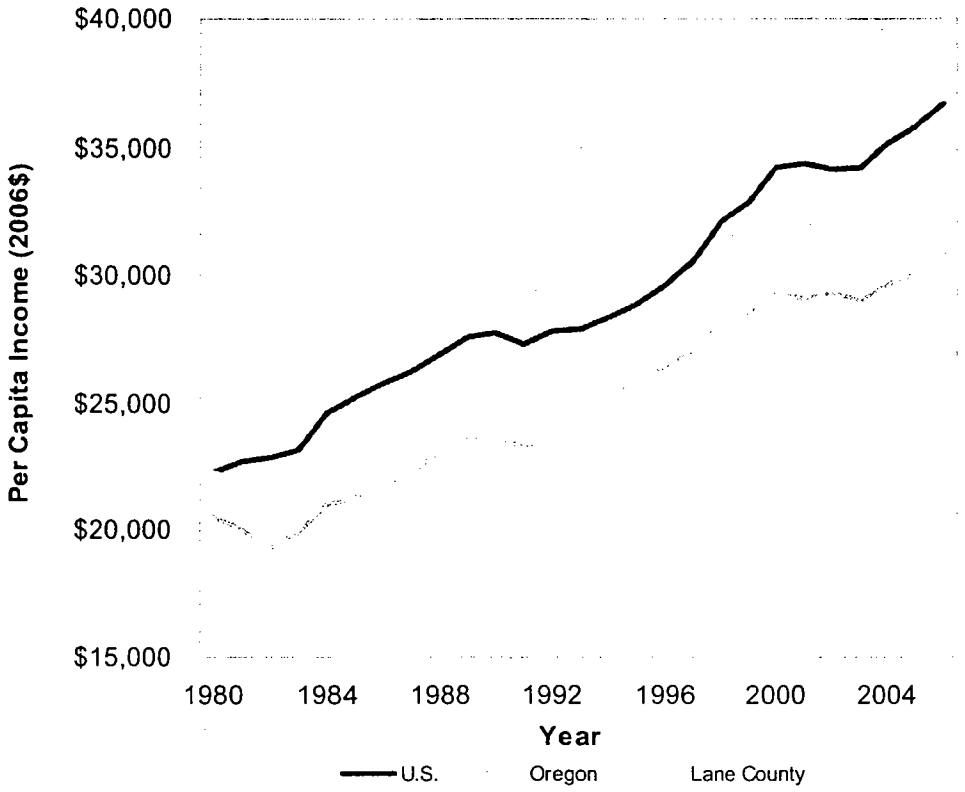


Source: Claritas 2008

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

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

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

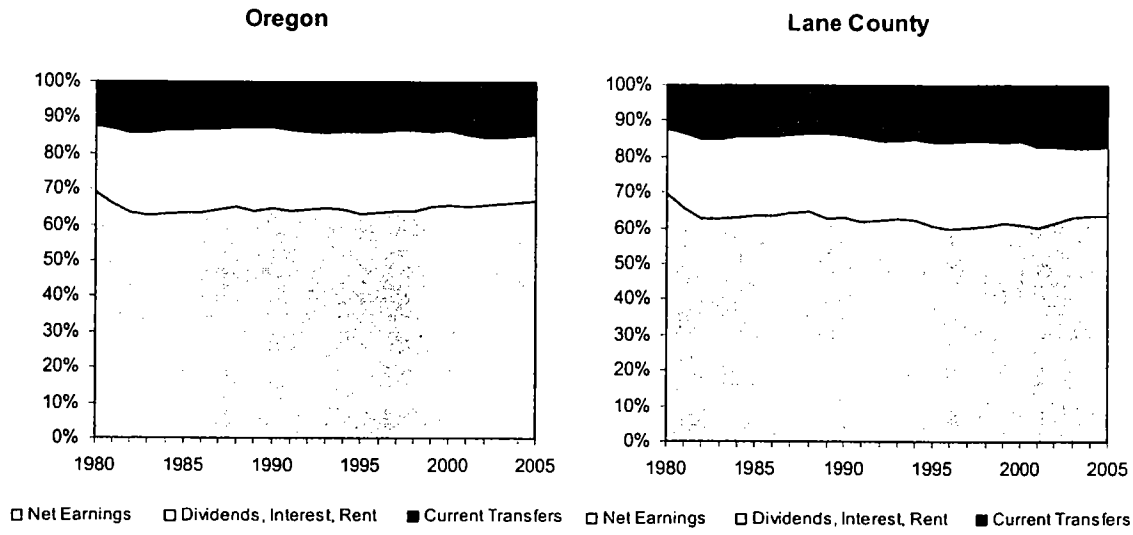


Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce

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

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

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



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

Table A-3 shows average annual pay per employee in the U.S., Oregon, and Lane County for 2000 to 2007. The national average wage grew faster than State or County averages. The average U.S. wage increased by 26% ($9,127), compared to the State increase of 21% ($6,790) or the County increase of 23% ($6,450). Wages in Lane County relative to the U.S. decreased by 2% over the seven-year period.

Lane County's average annual wage has increased by 23% (more than $6,450) from $27,878 to $34,328 over the 2000 to 2007 period. Lane County's average pay has grown faster than the State average, increasing from 85% of the State average in 2000 to 87% in 2006.

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

Year	U.S.	Oregon	Lane County	Lane County % of U.S.	Lane County % of State
2000	$35,323	$32,776	$27,878	79%	85%
2001	$36,219	$33,202	$28,982	80%	87%
2002	$36,764	$33,685	$29,427	80%	87%
2003	$37,765	$34,455	$30,325	80%	88%
2004	$39,354	$35,627	$31,339	80%	88%
2005	$40,677	$36,593	$32,302	79%	88%
2006	$42,535	$38,070	$33,240	78%	87%
2007	$44,450	$39,566	$34,328	77%	87%
Change 2000 to 2007					
Nominal Change	$9,127	$6,790	$6,450		
Percent Change	26%	21%	23%		

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

LANE COUNTY EMPLOYMENT TRENDS

Tables A-4 and A-5 present data from the Oregon Employment Department that show changes in covered employment[56] for Lane County between 1980 and 2005. The changes in sectors and industries are shown in two tables: (1) between 1980 and 2000 and (2) between 2001 and 2005. The analysis is divided in this way because of changes in industry and sector classification that made it difficult to compare information about employment collected after 2001 with information collected prior to 2000.

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

Table A-4 shows the changes in covered employment by sector in Lane County between 1980 and 2000. Covered employment in the County grew from 97,598 to 139,696, an increase of 43% or 42,096 jobs. Every sector added jobs during this period, except for Mining. The sectors with the greatest change in employment were Services and Retail Trade, adding a total of 29,423 jobs or about 70% of all new jobs.

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

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

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

Sector	2001	2007	Change 2001 to 2007 Difference	Percentage	AAGR
Natural Resources and Mining	2,338	2,062	-276	-12%	-2.1%
Construction	6,366	8,034	1,668	26%	4.0%
Manufacturing	19,697	19,864	167	1%	0.1%
Wholesale	5,300	6,071	771	15%	2.3%
Retail	17,912	19,755	1,843	10%	1.6%
Transportation, Warehousing, and Utilities	2,757	3,047	290	11%	1.7%
Information	3,729	3,901	172	5%	0.8%
Finance and Insurance	3,963	4,313	350	9%	1.4%
Real Estate Rental and Leasing	2,508	2,530	22	1%	0.1%
Professional, Scientific, and Technical Services	5,571	5,658	87	2%	0.3%
Management of Companies	1,818	1,901	83	5%	0.7%
Admin and Support, Waste Mgmt and Remediation	6,399	8,738	2,339	37%	5.3%
Education	1,067	1,389	322	30%	4.5%
Health and Social Assistance	16,871	18,966	2,095	12%	2.0%
Arts, Entertainment, and Recreation	1,542	2,163	621	40%	5.8%
Accommodations and Food Services	11,746	12,737	991	8%	1.4%
Other Services	5,552	5,674	122	2%	0.4%
Private Non-Classified	49	45	-4	-8%	-1.4%
Government	22,398	24,133	1,735	8%	1.3%
Total	**137,583**	**150,982**	**13,399**	**10%**	**1.6%**

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