Appendix A COMMERCIAL AND INDUSTRIAL BUILDABLE LANDS INVENTORY

The following appendix presents the Salem-Keizer Metropolitan Area Economic Opportunities Analysis Buildable Lands Inventory, completed by the Mid-Willamette Valley Council of Governments, February 2011.

Background

Cities complete buildable land inventories in order to determine whether or not there is an adequate supply of land available for development over the planning horizon. A buildable land inventory answers the question, "How much land is available for development?" by analyzing the amount of vacant and developed land within the planning area.

In June 2009, the Mid-Willamette Valley Council of Governments (MWVCOG) began work on a regional buildable land inventory for the Salem Keizer Metropolitan Area. The preliminary inventory work completed during Phase One of the Salem-Keizer Metropolitan Area Economic Opportunities Analysis (EOA) built upon existing land inventory work recently completed for the Salem Urban Area in July 2008[1]. Using the same methodologies and base land use inventory found in the City of Salem Buildable Land Inventory Report and Documentation (2008), MWVCOG extended the buildable land inventory to include all properties in the EOA planning area, also known as the Salem Keizer Area Transportation Study Area (SKATS). The draft buildable land inventory completed as part of Phase One identified whether land within the planning area was vacant or developed.

Phase Two of the Regional EOA includes an analysis of constrained land that is not considered buildable due to one or more limitations to development. These lands were deducted from the buildable land inventory in order to identify the total supply of buildable land within the planning area. Subsequent phases of the EOA will consider site suitability concerns, public land needs and constraints affecting the short-term land supply.

Statewide Planning Requirements

Statewide Planning Goals 9 (Economy) and 14 (Urbanization), require cities to conduct buildable lands inventories and to provide a 20-year supply of sites suitable for employment. Goal 9 provides the following definitions that apply to buildable land inventories as found in Oregon Administrative Rules (OAR) 660-009-0005:

> *(1) "**Developed Land**" means non-vacant land that is likely to be redeveloped during the planning period.*
>
> *(2) "**Development Constraints**" means factors that temporarily or permanently limit or prevent the use of land for economic development. Development constraints include, but are not limited to, wetlands, environmentally sensitive areas such as habitat, environmental contamination, slope, topography, cultural and archeological resources, infrastructure deficiencies, parcel fragmentation, or natural hazard areas.*
>
> *(10) "**Short-term Supply of Land**" means suitable land that is ready for construction within one year of an application for a building permit or request for service extension.*

[1] City of Salem Buildable Land Inventory Report and Documentation. MWVCOG, July 2008.

Engineering feasibility is sufficient to qualify land for the short-term supply of land. Funding availability is not required. "Competitive Short-term Supply" means the short-term supply of land provides a range of site sizes and locations to accommodate the market needs of a variety of industrial and other employment uses.

*(12) "**Suitable**" means servicable land designated for industrial or other employment use that provides, or can be expected to provide the appropriate site characteristics for the proposed use.*

*(13) "**Total Land Supply**" means the supply of land estimated to be adequate to accommodate industrial and other employment uses for a 20-year planning period. Total land supply includes the short-term supply of land as well as the remaining supply of lands considered suitable and servicable for the industrial or other employment uses identified in a comprehensive plan. Total land supply includes both vacant and developed land.*

*(14) "**Vacant Land**" means a lot or parcel:*

(a) Equal to or larger than one half-acre not currently containing permanent buildings or improvements; or

(b) Equal to or larger than five acres where less than one half-acre is occupied by permanent buildings or improvements.

Goal 9 also provides the requirements for buildable land inventories as found in OAR 660-009-0015:

(3) Inventory of Industrial and Other Employment Lands. Comprehensive plans for all areas within urban growth boundaries must include an inventory of vacant and developed lands within the planning area designated for industrial or other employment use.

(a) For sites inventoried under this section, plans must provide the following information:

(A) The description, including site characteristics, of vacant or developed sites within each plan or zoning district;

(B) A description of any development constraints or infrastructure needs that affect the buildable area of sites in the inventory; and

(C) For cities and counties within a Metropolitan Planning Organization, the inventory must also include the approximate total acreage and percentage of sites within each plan or zoning district that comprise the short-term supply of land.

(b) When comparing current land supply to the projected demand, cities and counties may inventory contiguous lots or parcels together that are within a discrete plan or zoning district.

(c) Cities and counties that adopt objectives or policies providing for prime industrial land pursuant to OAR 660-009-0020(6) and 660-009-0025(8) must identify and inventory any vacant or developed prime industrial land according to section 3(a) of this rule.

In addition to the requirements found in Goal 9, Goal 14 provides "safe harbors" for buildable land inventory work, which can serve as, "an optional course of action that a local government may use to satisfy a requirement of Goal 14. A safe harbor is not the only way or necessarily the preferred way to comply with a requirement and it is not intended to interpret the requirement for any purpose other than applying a safe harbor within this division." (OAR 660-024-0005(2)).

Goal 9 (OAR 660-0024-0005) provides the following safe harbor provisions related to buildable land inventory work:

(3) As safe harbors when inventorying land to accommodate industrial and other employment needs, a local government may assume that a lot or parcel is vacant if it is:

(a) Equal to or larger than one-half acre, if the lot or parcel does not contain a permanent building; or

(b) Equal to or larger than five acres, if less than one-half acre of the lot or parcel is occupied by a permanent building.

Methodology

A review of the buildable land inventory methodology and definitions used for the Salem Keizer Metropolitan Area EOA is provided as follows.

The buildable land inventory was conducted in two (2) phases. Phase One of the analysis included classifying all land into one of two categories - vacant or developed land. Phase Two of the analysis included an analysis of development constraints that were deducted as unbuildable land from the inventory.

The buildable land inventory was completed primarily using Geographic Information Systems (GIS) technology. Data was gathered and analyzed at the parcel (tax lot) level using a combination of existing parcel-based land use inventory data, County Assessor's records, building permit data through December 31, 2009, and aerial photographs. The output of this analysis is a database of land inventory information by plan designation, which are summarized in both tabular and map format in this report.

The buildable land inventory was also verified to ensure accuracy using aerial photo analysis and agency staff review.

Although data for the inventory was gathered and evaluated at the parcel level, the inventory does not represent a parcel-level analysis of lot availability and suitability. The inventory does not take into account all of the specific factors needed to determine whether or not an individual lot is suitable and available for development. The results of the BLI have been aggregated by Comprehensive Plan designations, consistent with state planning requirements. As such, the BLI is intended to be considered accurate in the aggregate only and not at the parcel-level.

More information on the specific assumptions and technical analysis used to develop the buildable land inventory is included at the end of this report in the City of Salem Buildable Land Inventory Report and Documentation dated July 2008, Appendix A-1.

A buildable land inventory was also completed for residential uses as part of the Salem Keizer Housing and Residential Land Needs Analysis Study completed in 2011.

Definitions

For the purposes of this study, the following definitions were used:

Vacant Land -

1. Properties with no current development[2] and available for future employment use; or

2. Properties with a commercial or industrial plan designation with a Floor Area Ratio (FAR) of .10 or less; and commercial lots one-half acre or greater in size, or industrial lots five (5) acres or greater in size. Of these selected lots, the estimated vacant portion is 30% of the lot.

Developed Land – Land that contains existing development and is not classified as vacant under the above definitions.

The definition for vacant land in this study is more inclusive and differs somewhat from that outlined in the statewide planning goals under OAR 660-009-0005. All vacant commercial and industrial land, regardless of size, is initially categorized as vacant, whereas state guidelines include only vacant parcels greater than ½ acre. Commercial property with an existing structure is considered partially vacant with a FAR of less than 0.10 and a lot size greater than ½ acre. The statewide planning definition is similar, but with a lot size threshold greater than 5 acres. This study then assumes 30% of the parcel is vacant, based on a survey of existing properties and the feasibility for access and parking requirements to be met in compliance with development codes.

This study used the existing building footprint without the building height. All properties with

[2] Vacant land has no permanent building structure. Sheds, storage buildings or garages may be present.

the footprint ratio of less than 0.10 were included, even if the actual FAR is higher. For example, a parcel may have an existing 2 or 3 story building, yet is still included in the partially vacant determination. Finally, after environmental constraints were applied to the vacant land inventory using the GIS, parcels or partial tax lots less than 5,000 square feet in size were excluded from the vacant inventory. This threshold was determined as it is difficult to fulfill access and parking requirements for development on very small lots. The total amount of land excluded under this definition was 8.6 acres in the study area, of which, 58 parcels or partial parcels were between 3,000 and 5,000 square feet in size.

MWVCOG and ECONorthwest also helped each jurisdiction in the planning area complete an analysis of ***Redevelopable Lands***, which for the purposes of Goal 9 are included under the "Developed Land" category. In general, redevelopable lands were identified as properties with the potential to redevelop or change their land use over the twenty year planning period, based upon local redevelopment policies.

The definitions used for this study are similar to the definitions for "vacant" and "developed land" described in Goal 9 and the safe harbor method provisions found in OAR 660-024-0005(3). The definition of "vacant land" however, deviates somewhat to provide a more inclusive definition that is not restricted by a minimum parcel size of one-half acre. The more inclusive definition of vacant land provides a more accurate description of vacant land within the planning area by identifying smaller vacant infill parcels within established employment areas.

ECONorthwest, the lead consultant for the EOA project, conducted a review of the draft buildable land inventory as part of Phase One. In a memorandum to MWVCOG dated May 27, 2009, ECONorthwest noted "many cities choose to use definitions and methods that exceed the state requirements" and that in general, the MWVCOG methods appear to follow accepted approaches for completing buildable land inventories.

Planning Area

The planning area for the Salem Keizer Metropolitan Area EOA includes land within the Metropolitan Planning Organization (MPO) boundary known as, the Salem Keizer Area Transportation Study (SKATS) Area. There are approximately 86,700 acres inclusive in the Salem Keizer MPO planning area.

There are a total of five (5) jurisdictions located within the planning area as listed below and shown in Figure 1:

Salem: the area within Salem city limits (comprehensive planning area jurisdiction within Salem's portion of the UGB);

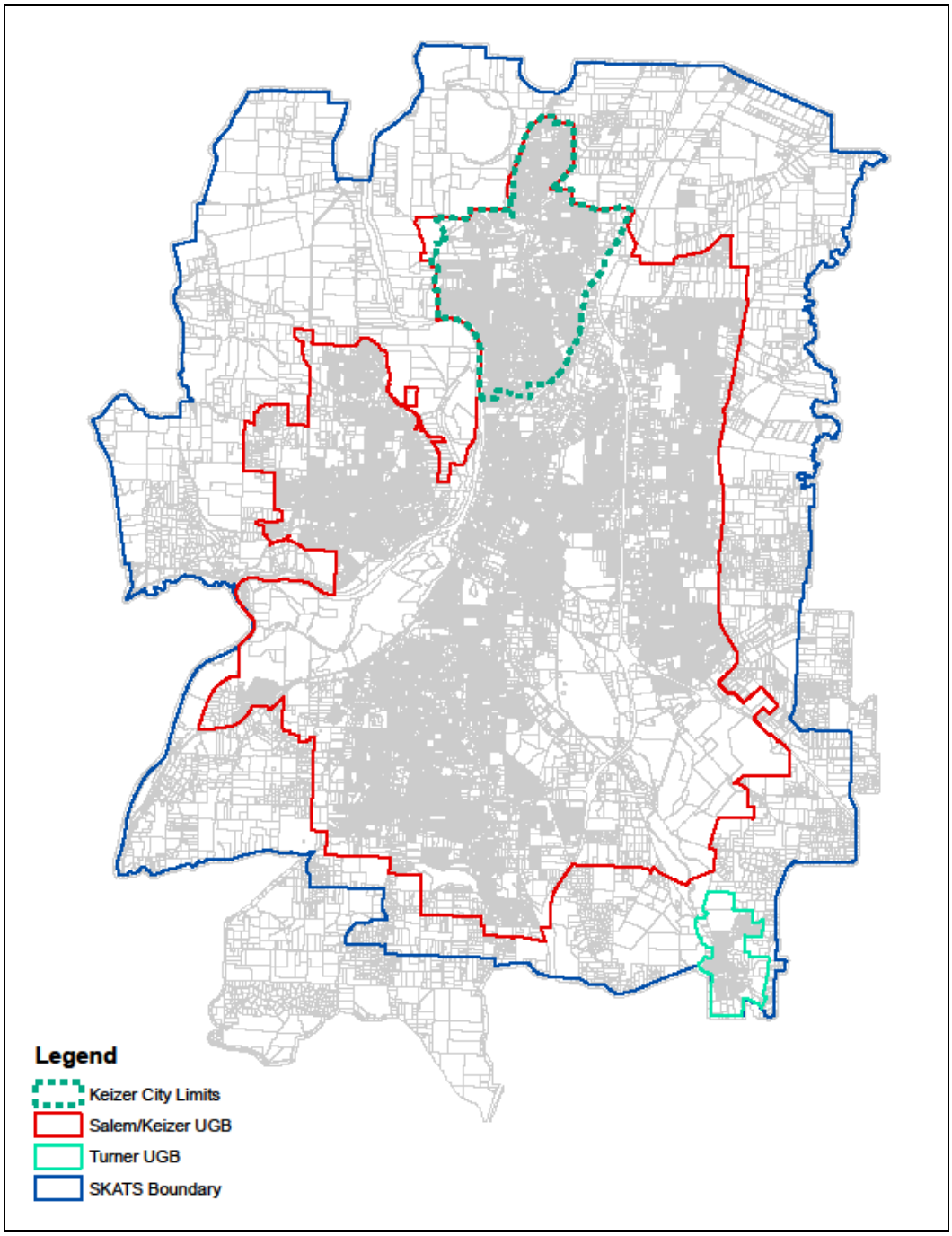
Keizer: the area within Keizer city limits (comprehensive planning area jurisdiction within Keizer's portion of the UGB);

Turner: the area within Turner's UGB/city limits;

Marion: the unincorporated area of Marion County outside of city limits out to the SKATS/TAZ boundary;

Polk: the unincorporated area of Polk County outside of city limits out to the SKATS/TAZ boundary.

Figure 1: Salem Keizer Metropolitan Area EOA Planning Area



Employment Lands

The Buildable Land Inventory for the EOA includes a review of the following employment Comprehensive Plan designations:

Salem
Commercial (Central Business District - CB, Commercial - COMM)
Industrial (Industrial - IND, Employment Center - EC, Industrial Commercial - IC)
Public (Community Services – CS)
River Oriented Use (ROM)
Mixed Use (MU)

Keizer
Commercial (C)
Industrial (General Industrial - GI, Campus Light Industrial - CLI)
Mixed Use (MU)
Public (Civic – CI, Elementary School – ES, Middle School – MS, High School – HS)
Special Policy Area (SPA)
Special Planning District (SPD)

Turner
Commercial (C-1)
Industrial (M-1, MAR)
Public (C-1/P; R-1/P; and R-11/P)

Marion County
Commercial (C)
Industrial (I)
Public (Public and Semi Public – P)

Polk County
Commercial (Unincorporated Community Commercial - UCC, Farm Forest/Unincorporated Community Commercial - FF/UCC)
Industrial (Unincorporated Community Industrial - UCI)
Public (P)

Table 1 shows the total number of employment acres by plan designation within the planning area.

Table 1: Gross acres of employment land by plan designation

	Ag/Indust	Commercial	Industrial	Mixed Use	ROM	Total
Keizer	306.88	286.15	119.45	174.00		886.48
Marion		54.06	116.57			170.62
Polk		74.05	42.33			116.38
Salem		2122.72	4898.72	277.34	128.85	7427.62
Turner		30.33	128.59			158.93
Total	306.88	2567.31	5305.67	451.34	128.85	8760.04

No exclusions or deductions are taken, table represents the summation of all tax lots by comprehensive plan designation, all mixed use property is included.

Table 1A and 1B below show the number of gross acres of public land by jurisdiction.

Table 1A: Gross acres of public land by jurisdiction and plan designation (Keizer, Marion County, Polk County and Turner)

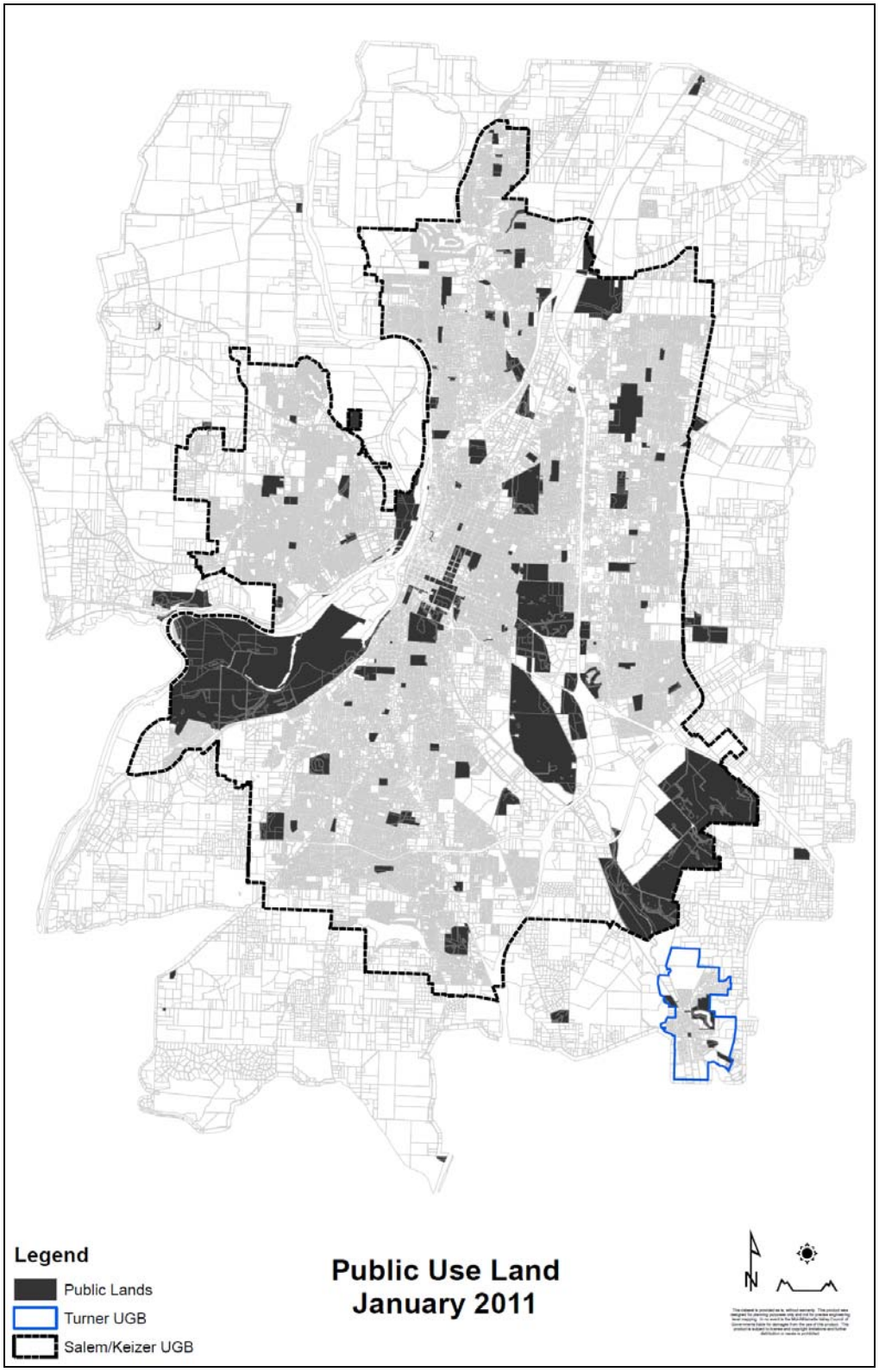
	ES	MS	HS	CI	P	C-1/P	R-1/P	R-11/P	Total
Keizer	94.0	24.1	30.7	12.2	81.3				242.4
Marion					189.5				189.5
Polk					134.2				134.2
Turner						3.2	65.7	17.0	85.9
Total									652.0

Table 1B: Gross acres of public land by Salem plan designation

	CS	CSA	CSC	CSE	CSG	CSH	CSS	POS	Total
Salem	3.3	668.8	119.2	1,329.0	1,798.1	123.7	132.9	2,834.2	7,009.3
Total									

A map of public land within the Salem Keizer EOA planning area is shown in Figure 1A below.

Figure 1A: Map of gross acres of public land within the Salem Keizer EOA Planning Area



Vacant Land

For the purposes of this study, ***Vacant Land*** is defined as:

1. Properties with no current development and available for future employment use; or

2. Properties with a commercial or industrial plan designation with a Floor Area Ratio (FAR) of .10 or less; and commercial lots one-half acre or greater in size, or industrial lots five (5) acres or greater in size. Of these selected lots, the estimated vacant portion is 30 percent* of the lot.

   *Note: The use of 30% was based on the evaluation of commercial and industrial properties that was done in the initial buildable land work for the City of Salem. At that time, a review of properties using a range of FARs and aerial photos was done in GIS. With staff input, the value of 30% availability was selected as the most reasonable based on site development requirements including parking, access, lot coverage, landscaping and other considerations.

Table 2 and Figure 2 below identify the total amount of vacant employment land within the planning area.

Table 2: Total gross acres of vacant employment land by Comprehensive Plan designation and jurisdiction

	Commercial	Industrial	Mixed Use	ROM	Total
Keizer	17.05	30.58	11.76		59.39
Marion	5.14	31.71			36.85
Polk	10.85	8.87			19.72
Salem	287.09	1418.2	18.7	9.14	1733.13
Turner	3.03	81.8			84.83
Total	323.16	1571.16	30.46	9.14	1933.92

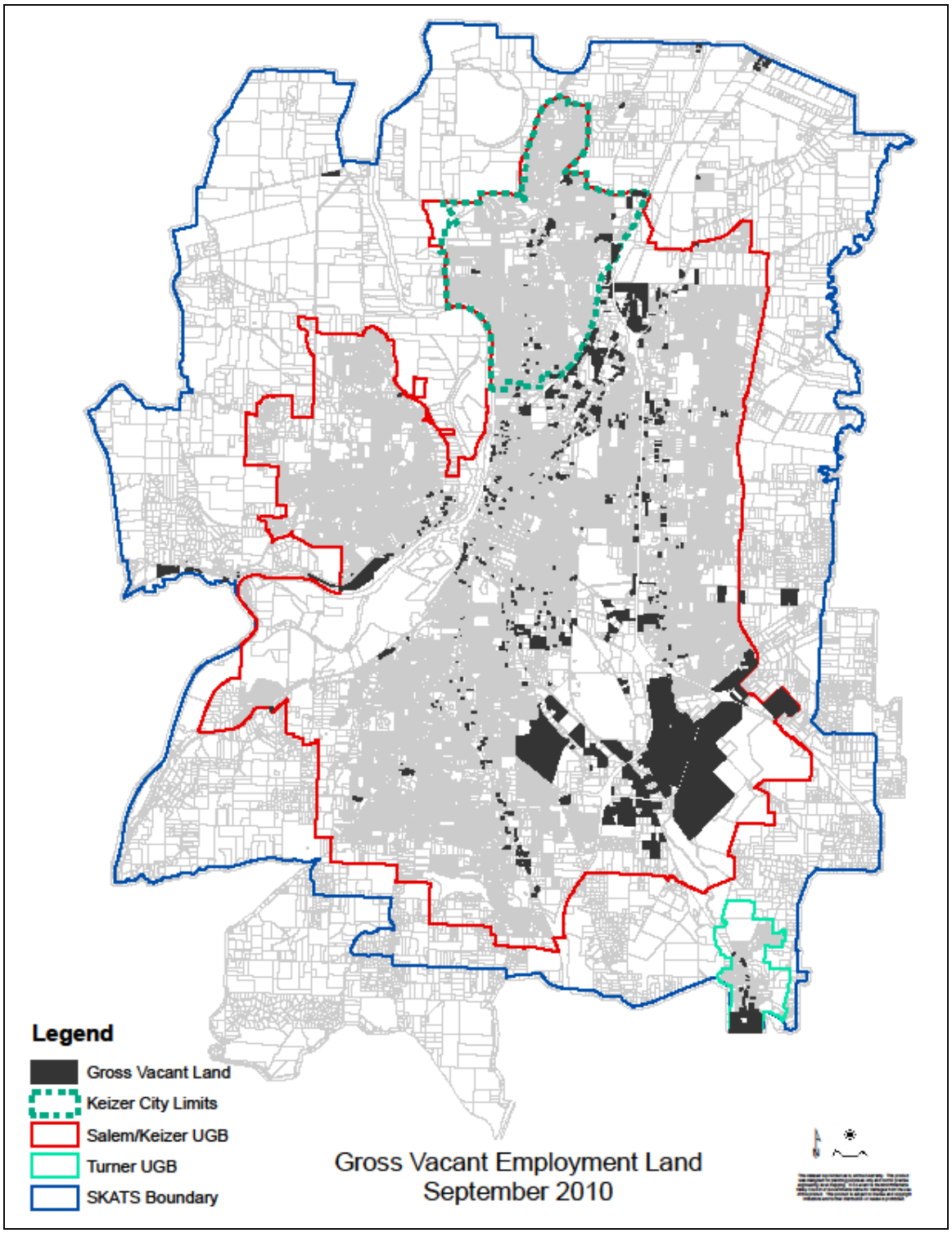
Footnotes:

1. Total Vacant Mixed Use in Salem is 268.96 in Fairview/Pringle, of which 18.7 acres will be commercial/retail. Total Vacant Mixed Use in Keizer is 27.26 acres, of which 11.76 acres is likely to develop as commercial use.
2. Data reflects land uses, and Comprehensive Plan designations through Mid-2007, known major plan changes have been updated. The inventory was updated with building permit data through December 31, 2009. Former Pictsweet property now commercial and residential use.
3. Vacant land was identified in the land use inventory which served as a basis for this buildable land inventory. The definition of vacant land includes two different types of land: 1.) Vacant land that has no permanent building (structure, sheds, storage or garages may be present). 2.) Lots with a Floor Area Ratio (FAR) of 0.10 or less; commercial lots greater than or equal to one-half acre, and industrial lots five acres or greater in size. Of these partially vacant lots, the estimated vacant portion is 30

percent and is included here. If summary tables are added together, totals may not match due to the 30% calculation.

4. For Keizer, SPD (Special Planning District) land is included in the Commercial summary.
5. Keizer planning staff reviewed the details of land classifications for areas of special development within the city. In this report the areas of Keizer Station are currently reflected as follows:
   The Keizer Station Area Master Plan designates four (4) development areas. The individual tax lots are included in the summary tables here, based on their existing land uses and current Comprehensive Plan designations. Keizer Station's Area C is included in a Mixed Use Comprehensive Plan designation, with most of the area vacant. Area B is currently vacant with a Commercial designation, and Area D is vacant with an Industrial designation. Keizer Village (Area A) is primarily developed, with some vacant lots north of the stadium, with an Industrial Comprehensive Plan designation.

Figure 2: Gross Vacant employment lands in the SKATS Area



Developed Land

Developed land includes non-vacant employment land that has not been excluded during Phase One. A description of excluded land is provided under the Constraints Section below.

Table 3 and Figure 3 below identify the total amount of developed employment land within the planning area.

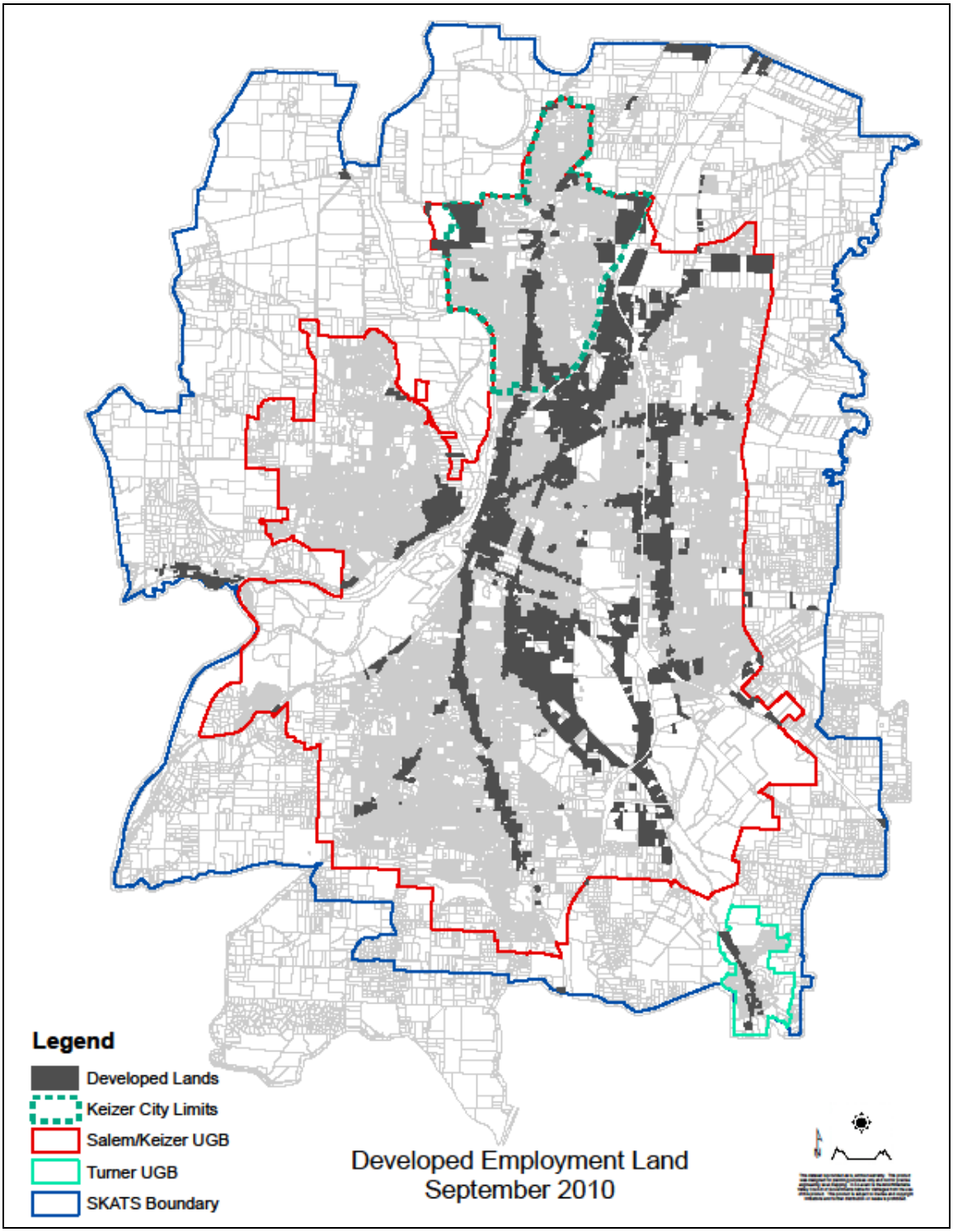
Table 3: Gross acres of developed employment land by Comprehensive Plan designation and jurisdiction

	Ag/Indust	Commercial	Industrial	Mixed Use	ROM	Total
Keizer	174.96	265.23	64.86	98.67		603.72
Marion		40.58	77.10			117.68
Polk		50.38	29.90			80.28
Salem		1748.74	2299.31	7.62	54.53	4110.20
Turner		26.08	44.84			70.92
Total	174.96	2131.01	2516.01	106.29	54.53	4982.80

Footnotes:

1. Developed land has an existing use occupying the property.
2. Developed land includes redevelopable lands.
3. Keizer's Special Policy Area (SPA) is in the Ag/Indust category. The SPA is approximately 300 acres, of which 130 acres are occupied by the wastewater facility and treatment plant. The remaining acres currently have farm uses, a nursery, some residences, and a golf range.
4. Mixed Use includes lands developed with commercial or residential uses.

Figure 3: Developed employment lands in the SKATS Area



Redevelopable Land

Redevelopable land is considered "Developed Land" that has the potential to be more fully utilized for employment purposes over the twenty year planning horizon.
The process of redevelopment generally increases the capacity or density of development, thereby reducing the demand for new employment lands and utilities needed to support employment growth in the future. Many local governments use redevelopment strategies to revitalize blighted or underutilized areas and attract further private investments in areas with redevelopment potential.

Statewide Planning Goals 9 and 14 require cities to consider redevelopment opportunities when determining whether or not there is an adequate supply of commercial and industrial land within their urban growth boundaries (UGB). Before a city may expand their UGB, Goal 14 requires them to demonstrate that employment land needs cannot be reasonably accommodated on existing land already located inside the UGB (OAR 660-024).

Over the course of the study, the project advisory committees reviewed several different approaches commonly used to identify redevelopable lands. Each local jurisdiction then considered and selected an approach to identifying redevelopable lands based upon the approach that best suited local conditions, needs and policies. The two basic approaches used to identify redevelopable lands, as described in a memorandum from ECONorthwest dated June 23, 2010[3], include:

- **Programmatic approach**. Many cities already have specific policies, programs and staff dedicated to increasing opportunities for redevelopment. Examples of these policies and programs include: the creation of urban renewal areas, and plans or policies that target the redevelopment of specific areas. The programmatic approach documents these existing economic development policies by describing: (1) what the redevelopment program is designed to accomplish; (2) what redevelopment the city thinks can reasonably be accomplished over the planning period; and (3) what makes the redevelopment goals for the planning period likely.

- **Empirical analysis**. An empirical analysis considers land's redevelopment potential based on existing data available within the planning area. Geographic Information Systems (GIS) may be used to analyze and sort data based upon specific parameters used to identify land with a higher redevelopment potential. Examples of parameters that can be used include: nonconforming uses (properties with development that does not conform to the current Plan designation, e.g. single family dwelling on an industrial lot); the ratio between improvement and land values; floor area ratios and employment densities. While each of these methods have their limitations, they can provide an estimate of land that may be available for redevelopment purposes over the planning horizon.

A summary of each jurisdiction's approach to redevelopment is provided as follows.

[3] Memorandum from ECONorthwest dated June 23, 2010 "Quantifying Redevelopment Potential in the Salem-Keizer Metropolitan Region."

Salem

To determine the percentage of potential redevelopable land within the City of Salem, City staff first reviewed information on its Urban Renewal Areas, however, there was not enough building permit data before 2005 to accurately determine a redevelopment rate for these areas. A longer time line would be required due to the complexity of redevelopment work; ranging from demolition, site cleanup and preparation, land assembly and lot line adjustment, and planning and zoning to the construction of new, higher density redevelopment.

The focus then shifted to determine the relationship between building permits and demolition permits within non residential zones. Five years of data between the years of 2004 to 2009 were analyzed and staff discovered that only 12 of the 122 total permits had corresponding demo permits issued and could be categorized as redeveloment. Given the anomaly of the 2008 recession, and based on the limited information available over a fairly short period of time, staff determined that a conservative redevelopment rate of 10 percent over the next twenty years was appropriate.

This redevelopment rate is supported by an ECONorthwest study that was completed in September of 2000. ECONorthwest staff looked at a potential redevelopment rate for Salem in a 50 year planning period and determined that 10 percent was a reasonable assumption for commercial and industrial development. As they discussed, the data to track past redevelopment does not exist and cannot be tracked through building permit data. The scope of the work in 2000 was for a different project (Salem Futures) but is similar enough to use as a comparison to the work being done for the Economic Opportunities Analysis.

In addition to the information gleaned from the building permit data, staff met with three local developers and/or brokers to review specific properties that the Buildable Lands Inventory designated as 'partially vacant' or 'redevelopable.' The purpose of these meetings was to ask the developer or broker their opinion regarding the likelihood of these specific properties redeveloping in the next 20 years. Some of the properties were within an Urban Renewal Area and some were not. Although this information is subjective, the overall consensus is that the development rate will be between 10-20 percent.

Based on all of the above, a 10% redevelopment rate assumption for the City is reasonable for the forecast period.

Keizer

Keizer reviewed permit activity from 2001 to 2010 and identified those developments which were redevelopment or infill projects. Permits were then mapped and tax lots areas summarized. Redevelopment occurred on seven (7) percent of all commercial comprehensive planned land over the past 10 years. Keizer estimates that redevelopment potential is comparable to Salem's potential, with ten (10) percent of new commercial and industrial development over the 20-year period being accommodated through redevelopment. Some of

Keizer's redevelopment may occur in Keizer Station, with the conversion of some land with industrial plan designations and uses to commercial or mixed-use.

Turner

For the City of Turner, staff reviewed parcel maps and specifically identified lots and areas most likely for redevelopment based upon a recently completed Downtown Improvement Plan. Redevelopable employment lands within the City of Turner are summarized in Table 4 and Figure 4 below.

Marion and Polk County

For both Marion and Polk county, parcel maps were also created showing non-conforming uses, or underutilized lots, which were then reviewed by staff to identify as redevelopable.

Table 4 below reflects properties currently developed with a single family or farm use that have a Commercial or Industrial Comprehensive Plan designation within the planning area, or properties identified by planning staff as potentially redevelopable

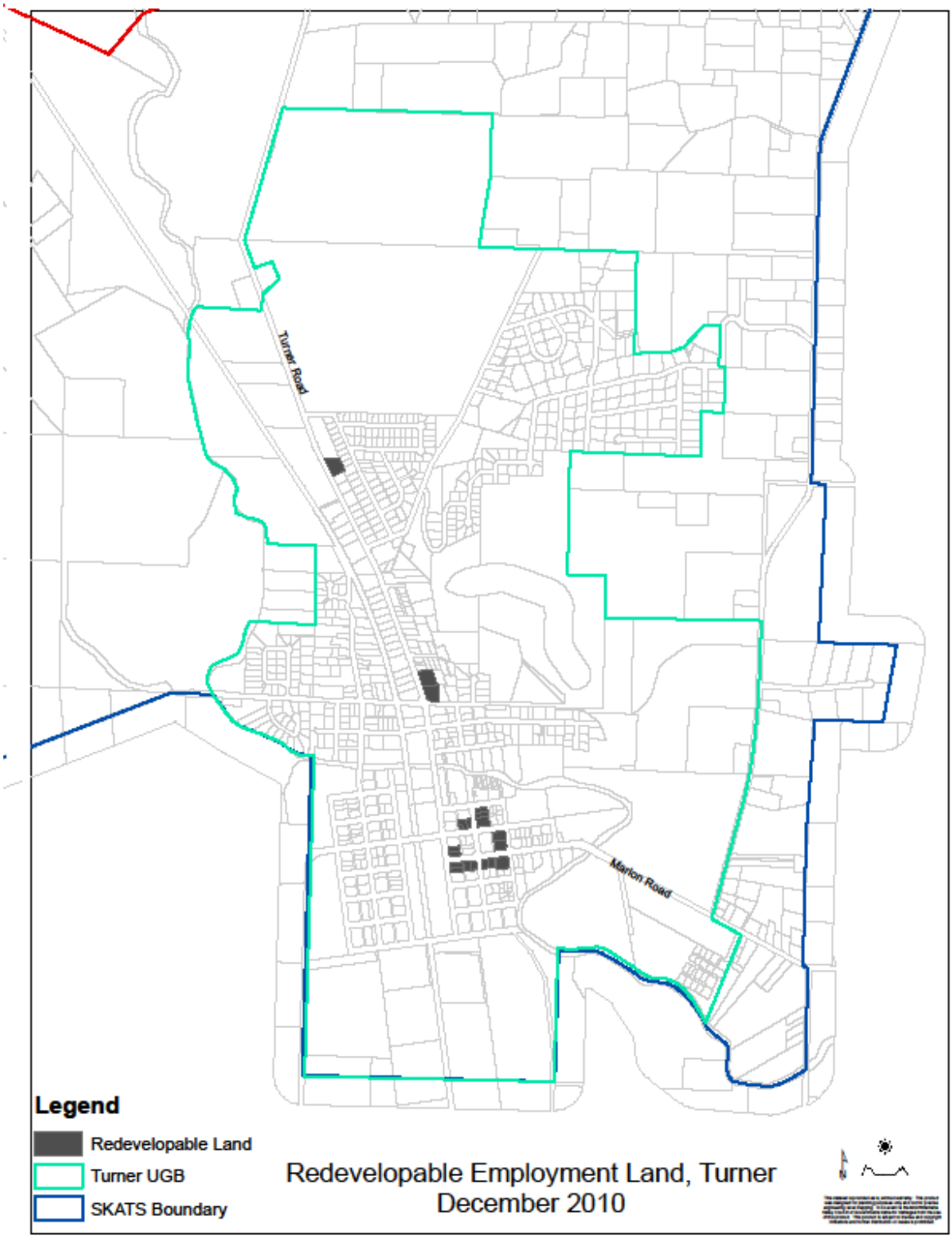
Table 4: Gross acres of redevelopable employment land by jurisdiction

	Acres
Marion	6.87
Polk	13.20
Turner	4.70
Total	24.77

Footnotes:

1. *Redevelopable Industrial land includes properties with an Industrial Comprehensive Plan designation with an existing farm use (all of the tax lot area included), or residential use with a lot size greater than one acre.*
2. *Redevelopable* Commercial land includes properties with a current single-family residential use with a Commercial Comprehensive Plan designation and a lot size greater than one-half acre, some smaller lots have been included by Turner.

Figure 4: Map of Turner Redevelopment Land



Constrained Land

Constrained land includes land that is not available for development based on one or more factors such as environmental protections, or other development constraints such as, land committed for public use. Constrained land is deducted from the buildable land inventory to determine the amount of "buildable acres" available for development over the planning horizon.

Excluded Land

Phase One of the EOA included an initial screening of constrained land that was excluded from the inventory of vacant and developed land. Land excluded during Phase One of the analysis included properties where the existing land use excludes or essentially precludes any future development. Examples include some publicly owned lands not designated for employment use; designated open spaces; GIS parcels representing water bodies; power lines, electrical substations, water towers or reservoirs, etc.; the airport; the Minto Brown Island properties with a Comprehensive Plan of Industrial.

Table 5 includes a summary of land excluded from the buildable land inventory during Phase One of the EOA.

Table 5: Gross acres of excluded land by Comprehensive Plan designation and jurisdiction

	Ag/Indust	Commercial	Industrial	Mixed Use	ROM	Grand Total
Keizer	131.92	0.46	24.01	30.80		187.18
Marion		0.13	2.37			2.50
Salem		7.76	497.28	0.75	60.24	566.04
Turner		0.50				0.50
Total	131.92	8.85	523.66	31.56	60.24	756.22

Footnotes:

1. The exclude category includes any whole tax lots under power lines, water, substations and power plants. Further exclusions will be applied when environmental constraints are addressed in the next step.
2. In Keizer's Special Policy Area (SPA) the wastewater facility and treatment plant is excluded.
3. Mixed Use includes excluded lands with commercial or residential uses.

Environmental Constraints

Phase Two of the EOA includes a review of lands reserved to protect natural resources or lands impacted by the presence of severe natural hazards. The following environmental constraints were agreed on by the TAC and are fully excluded from the buildable land inventory:

- **Federal Emergency Management Agency (FEMA) Floodways:**
  - Area of the property mapped as "floodway", and "areas of special consideration" are prohibitive.
  - Data source: FEMA DFIRM data (2006) for Marion and Polk counties base data updated by the Salem Public Works Department, including amendments , April 2010

- **Wetlands:**
  - **Designated Wetland areas in Salem, Keizer, Turner and the counties are prohibited.**
  - Data sources:
    - Salem-Keizer Local Wetland Inventory (LWI), as updated by the Salem Public Works Department, April 2010
    - Turner LWI (MWVCOG GIS, 2000)
    - National Wetland Inventory outside the Salem-Keizer UGB, from the NWI website, April 2010.

- **Water bodies/features not previously excluded in Phase One:**
  - **Ponds and other water bodies**
  - Data sources:
    - Salem-Keizer LWI , April 2010
    - Marion County Hydrology GIS data layer, 2004

- **Riparian Corridors:**
  - 25 feet* on either side of open mapped waterways.
  - Data sources:
    - City of Salem Public Works Designated Waterways GIS Map, March 2010

  * Note: A 25 foot riparian buffer on either side of mapped waterways was selected by the TAC as a reasonable standard based upon an analysis of existing development patterns, riparian protections required by Department of State Lands (DSL), the presence of utility easements adjacent waterways, existing local ordinances that protect riparian vegetation (Salem Revised Code Chapter 68), and pending revisions to stormwater ordinances which, would provide increased protections for riparian areas in order to reduce stream temperatures and comply with Department of Environmental Quality (DEQ) water quality requirements.

- **Slopes:**
  - **Slope areas greater than 20%**
  - Data source: Slope layer created in GIS by MWVCOG from elevation and contour data.

Note: Only the portion of the property containing an environmental constraint is removed from the buildable land inventory unless the constraint covers the entire tax lot.
The TAC held various discussions about further screening what remains buildable after the constraints have been applied to the inventory. With input from ECONorthwest, and reviewing the resulting data, the following thresholds and the order in which they were applied are described as follows:

Vacant Land

1. Vacant Land – for commercial, industrial and public employment land
    a. All commercial land, regardless of size
    b. All industrial land, regardless of size
    c. All public employment land, regardless of size
    d. Apply constraints
    e. Exclude from summary tables any resulting sliver/small lots less than (LT) 5,000 sq. feet

2. Floor Area Ratio (FAR) less than 0.10
    a. Commercial , started with one-half (½) acre lots or greater
    b. Industrial , started with five (5) acres lots or greater
    c. Apply constraints
    d. 30% of resulting area is considered buildable
    e. Exclude from BLI if the area considered buildable is less than 30% of the original size threshold, for Industrial if less than 1.5 acres, for Commercial lands if less than 0.15 acres.

Redevelopable Land (For Turner and the county lands)

3. Non- conforming
    a. Commercial, started with one-half (½) acre or greater
    b. Industrial, ALL non-conforming uses regardless of size
    c. Apply constraints
    d. Resulting unconstrained area considered buildable
    e. Exclude any summary tables any resulting sliver/small lots LT 5,000 sq.feet

    *Some exceptions of specific properties identified for redevelopment in Turner by the city that are smaller than 5,000 square feet,

The size threshold of 1.5 acres for industrial land, and 0.15 acres for commercial land, with the FAR evaluation method, is a refinement from the TAC meetings. In addition, although there is not a minimum lot size for commercial or industrial development, developing land smaller than 5,000 square feet in size for employment uses would be difficult. Parking and access requirement for development make small lots much less feasible for development. Excluding these lots also removes any “sliver” or small oddly shape areas.

Figure 5: Map of the environmental constraints

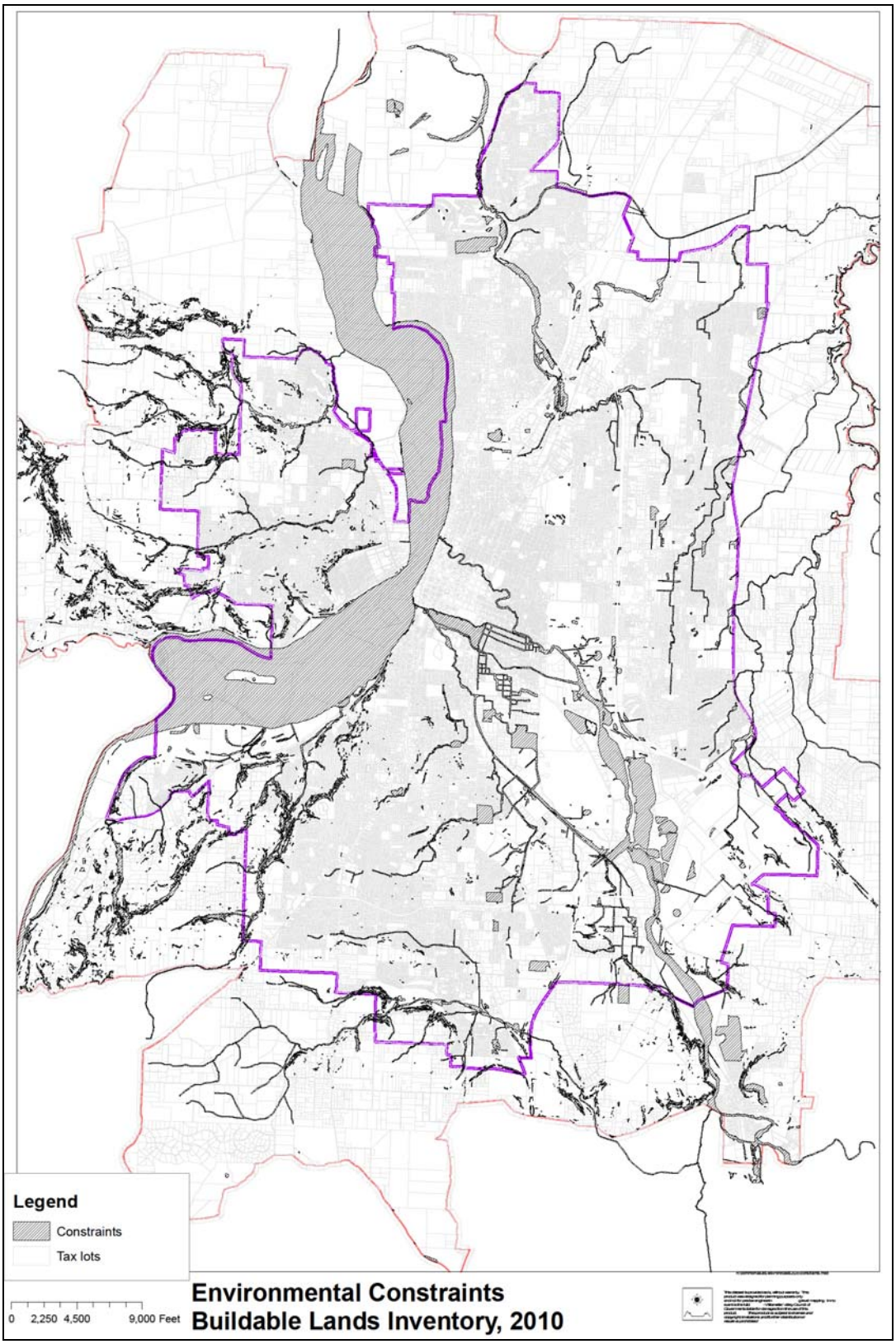


Table 6 is a summary of acres of land falling under a development constraint. All land uses are included here, vacant or developed.

Table 6: Acres under development constraints

	Ag/Indust	Commercial	Industrial	Mixed use	ROM	Total
Keizer	8.03	1.78	0.55	40.88		51.25
Marion		0.01	1.97			1.98
Polk		0.98	0.29			1.27
Salem		56.56	1069.90	13.13	60.96	1200.55
Turner		1.30	14.50			15.80
Total	8.03	60.62	1087.22	54.01	60.96	1270.85

Footnote:

1. Mixed Use includes all residential or commercial uses falling under an environmental constraint.

Table 7 is subset of the information in table 6, providing a summary of only vacant land falling under development constraints

Table 7: Acres of constrained vacant land

	Commercial	Industrial	Mixed Use	ROM	Total
Keizer	0.08	0.30	1.69		2.07
Marion		0.85			0.85
Polk	0.09	0.00			0.09
Salem	16.60	454.40	12.79	6.59	490.38
Turner	0.52	13.18			13.70
Total	17.29	468.73	14.49	6.59	507.09

Footnote:

1. This table includes the portion of the tax lot that falls under a constraint. These are lots that were identified as vacant or partially vacant. No 30% deduction was applied to the partially vacant lots.
2. Total constrained vacant Mixed Use in Keizer is 1.69 acres, of which .96 is likely to develop as commercial use.
3. Total constrained vacant Mixed Use in Salem is 12.79 acres, which is likely to develop as residential in Fairview.

The following map and tables summarize the final steps of the Buildable Land Inventory, having applied the constrained layers to the inventory. Table 8 includes a summary of vacant employment land after the deduction of the applied constraint layers as indicated above, by specific jurisdiction and individual comprehensive plan designations.

Figure 6: Unconstrained vacant employment land

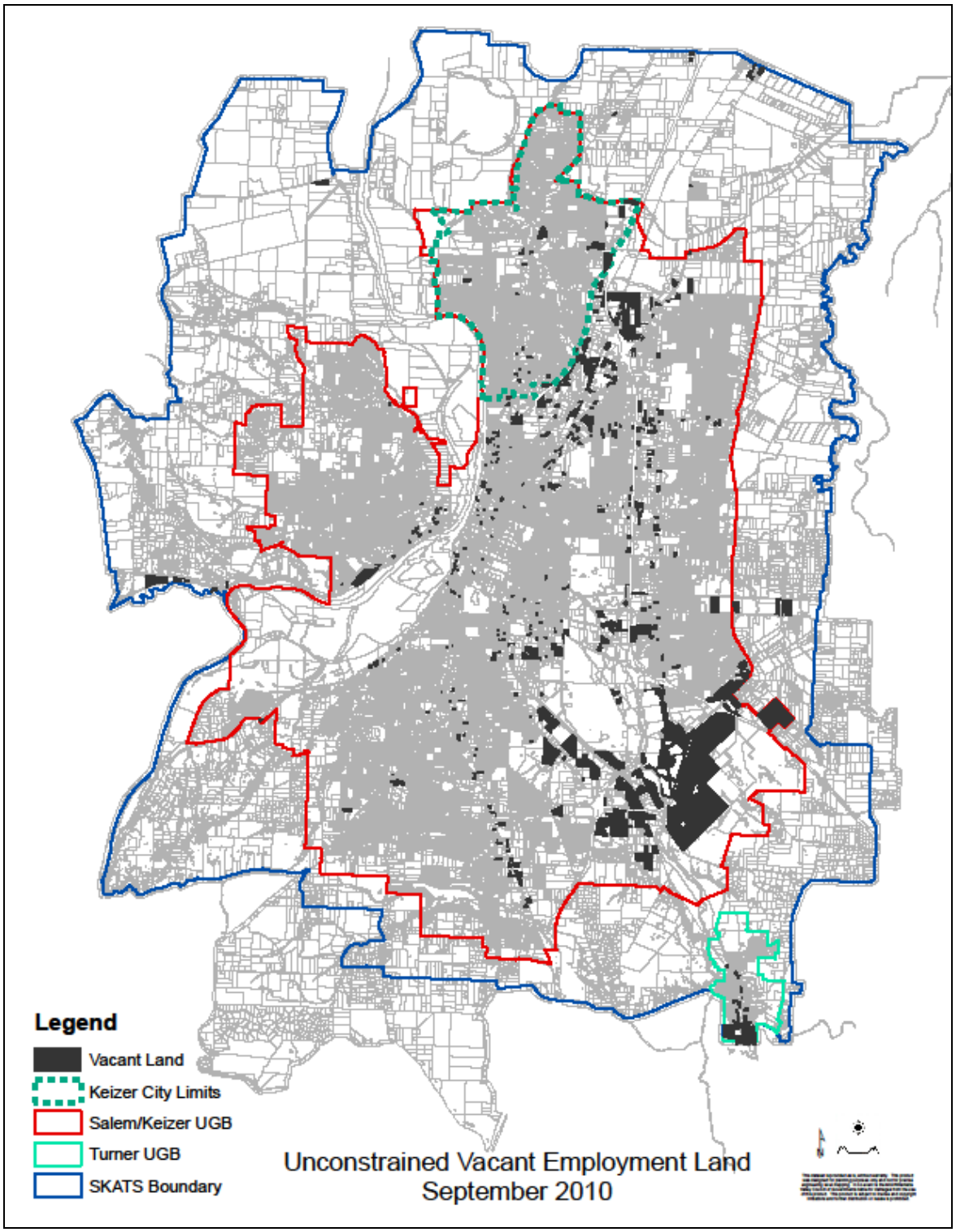


Table 8: Unconstrained Vacant land by specific comprehensive plan designation by jurisdiction

Jurisdiction	Plan Designation							
	CB	**COM**	**EC**	**IC**	**IND**	**MU**	**ROM**	**Total**
Salem	1.69	250.60	441.05	104.89	660.22	18.70	3.26	1480.41
	C	**CLI**	**GI**	**MU**	**SPD**			**Total**
Keizer	15.45	29.31	0.98	11.02	1.47			58.23
	C-1	**M-1**						**Total**
Turner	3.66	66.43						70.09
	C	**I**						**Total**
Marion	5.08	30.80						35.88
	FF/UCC	**UCC**	**UCI**					**Total**
Polk	4.90	5.86	8.75					19.51

Footnotes:

1. In Salem, Fairview's master plan designates 18 acres of Mixed use for commercial and retail development, and .7 acres in Pringle.
2. Total unconstrained vacant mixed use in Keizer is 24.32 acres, of which 11.02 is likely to develop as commercial use.
3. Vacant land was identified in the land use inventory which served as a basis for this buildable land inventory. The definition of vacant land includes two different types of land: 1.) Vacant land that has no permanent building (structure, sheds, storage or garages may be present). 2.) Lots with a Floor Area Ratio (FAR) of 0.10 or less; commercial lots greater than or equal to one-half acre, and industrial lots five acres or greater in size. Of these partially vacant lots, the estimated vacant portion is 30 percent and is included here. If summary tables are added together, totals may not match due to the 30% calculation.
4. In Turner, 2.4 acres currently zoned Industrial will likely be commercial and has been placed in vacant commercial land.
5. Pictsweet property has designation of IND, but will change and develop as commercial.

Table 8A and Figure 6A below show unconstrained vacant public employment lands by specific comprehensive plan designation by jurisdiction. For the purposes of this analysis, public employment land excludes parks and open space lands.

Table 8A: Unconstrained Vacant public employment land by specific comprehensive plan designation and jurisdiction

Jurisdiction	Plan Designation C-1/p	CSE	CSG	CSS	P	Total
Keizer					0.13	0.13
Marion					9.54	9.54
Polk					46.43	46.43
Salem		10.17	118.49	110.28		238.94
Turner	.08					0.08
Total	.08	10.17	118.49	110.28	56.1	295.12

Figure 6A: Unconstrained vacant public employment land

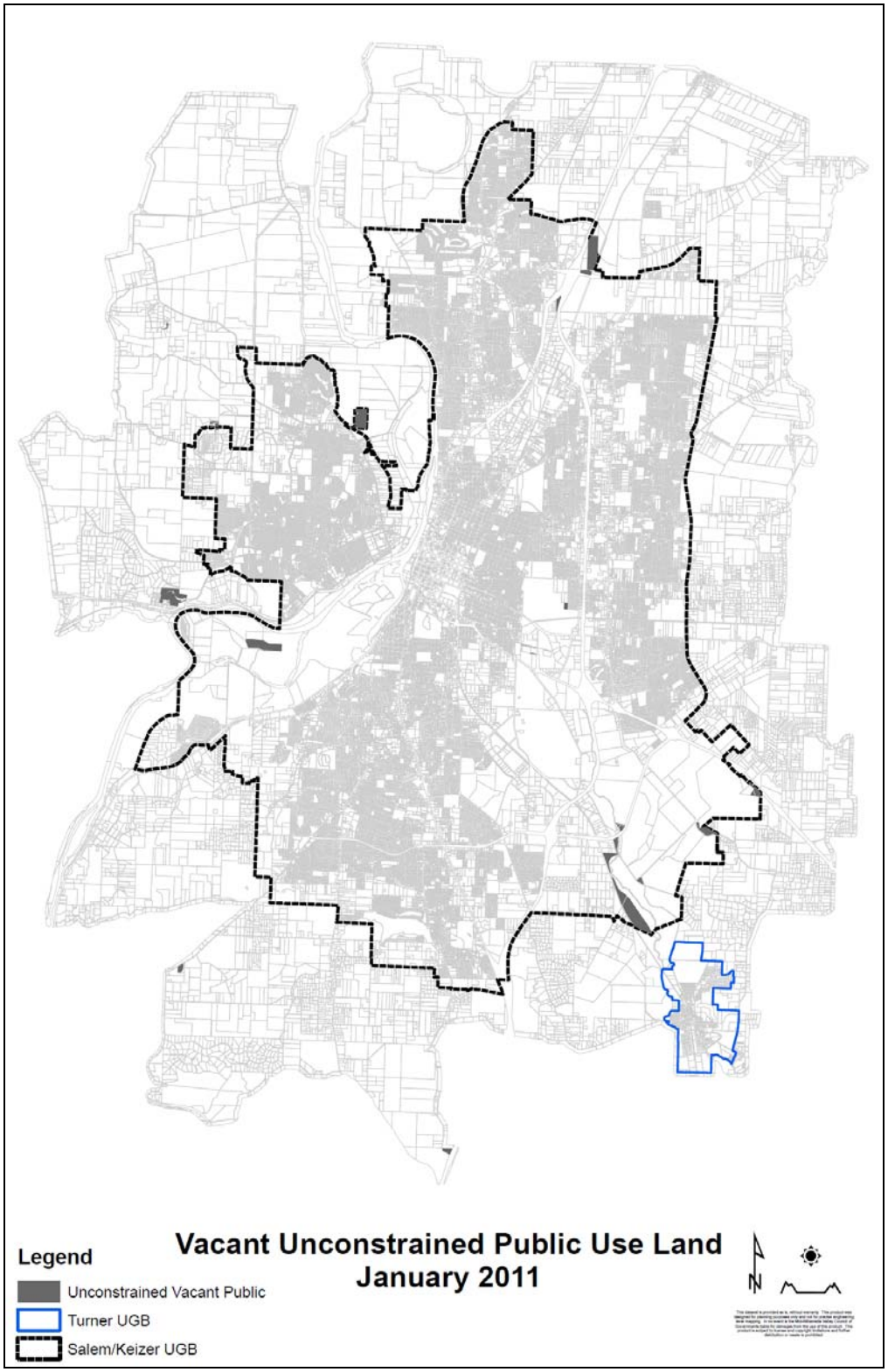


Table 9: Acres of Vacant Commercial Parcels, by Size and Comprehensive Plan Designation:

	Less than 1 acre	**1-2 acres**	**2-5 acres**	**5-10 acres**	**10-20 acres**	**Total**
Keizer	7.48	2.93	10.33	7.21		**27.94**
C	3.67	1.45	10.33			15.45
MU	3.81			7.21		11.02
SPD		1.47				1.47
Marion	3.65	1.43				**5.08**
C	3.65	1.43				5.08
Polk	1.06	4.8	4.9			**10.76**
FF/UCC			4.9			4.9
UCC	1.06	4.8				5.86
Salem	95.24	17.28	67.36	33.5	75.47	**288.86**
CB	1.69					1.69
COM	89.59	17.28	62.54	23.72	57.47	250.61
IND			4.82	9.78		14.6
MU	0.7				18	18.7
ROM	3.26					3.26
Turner	3.66					**3.66**
C-1	3.66					3.66
Total	**111.09**	**26.44**	**82.59**	**40.71**	**75.47**	**336.3**

- IND land is Pictsweet property, currently industrial, likely to be commercial.

Table 10: Number of Vacant Commercial Parcels, by Size and Comprehensive Plan Designation:

	Less than 1 acre	1-2 acres	2-5 acres	5-10 acres	10-20 acres	Total
Keizer	21	2	3	1		**27**
C	14	1	3			**18**
MU	7			1		**8**
SPD		1				**1**
Marion	10	1				**11**
C	10	1				**11**
Polk	3	3	1			**7**
FF/UCC			1			**1**
UCC	3	3				**6**
Salem	270	13	19	5	5	**312**
CB	9					**9**
COM	249	13	18	4	4	**288**
IND			1	1		**2**
MU	1				1	**2**
ROM	11					**11**
Turner	8					**8**
C-1	8					**8**
Total	**310**	**19**	**19**	**6**	**5**	**365**

Table 11: Acres of Vacant Industrial Parcels, by Size and Comprehensive Plan Designation:

	Less 1 acre	1-2 acres	2-5 acres	5-10 acres	10-20 acres	20-50 acres	50 or more	Total
Keizer	1.2		7.08	6.27	15.73			**30.28**
CLI	0.23		7.08	6.27	15.73			29.31
GI	0.98							0.98
Marion	0.93		2.31	8.9	18.67			**30.8**
I	0.93		2.31	8.9	18.67			30.8
Polk		1.53	7.22					**8.75**
UCI		1.53	7.22					8.75
Salem	61.43	61.94	147.18	238.77	179.25	215.99	287	**1,191.56**
EC	1.27		4.35	9.27	51.11	88.04	287	441.05
IC	20.59	16.87	25.73	16.12		25.58		104.89
IND	39.57	45.06	117.09	213.38	128.14	102.37		645.62
Turner	2.66	4.17	13.3	16.02	30.28			**66.43**
M-1	2.66	4.17	13.3	16.02	30.28			66.43
Total	**66.22**	**67.64**	**177.09**	**269.96**	**243.93**	**215.99**	**287**	**1,327.82**

Table 12: Number of Vacant Industrial Parcels, by Size and Comprehensive Plan Designation:

	Less 1 acre	1-2 acres	2-5 acres	5-10 acres	10-20 acres	20-50 acres	50 or more	Total
Keizer	8		2	1	1			**12**
CLI	1		2	1	1			5
GI	7							7
Marion	4		1	1	1			**7**
I	4		1	1	1			7
Polk		1	2					**3**
UCI		1	2					3
Salem	158	43	42	32	13	7	4	**299**
EC	3		1	1	3	2	4	14
IC	57	12	8	2		1		80
IND	98	31	33	29	10	4		205
Turner	12	2	3	2	2			**21**
M-1	12	2	3	2	2			21
Total	**182**	**46**	**50**	**36**	**17**	**7**	**4**	**342**

Other Development Constraints

Additional development constraints were discussed at the TAC meetings and the following recommendations were reached:

- **Unserviceable Areas**
  - Any area inside the Urban Growth Boundary should be considered serviceable, and therefore there are no serviceability constraints.

- **FEMA 100-Year Floodplain**
  - Historically development has not been prohibited due to floodplain issues. Floodplain issues and requirements may be addressed in development, but not considered a constraint.
  - Data source: FEMA DFIRM data 2006.

- **Landslide Hazards:**
  - The majority of "High risk" zones fall on residential properties in the foothills of the study area. GIS queries show only 23 commercial or industrial properties that intersect slightly "High risk" areas. Slope data was a primary input in the creation of the landslide data and these properties will be better evaluated by looking at slope exclusions.
  - Data sources:
    - IT Planning Community Development (2002)
    - Marion County Development Limitations GIS data layer

Capacity Limiting Development Constraints

The following development constraints were identified as potentially decreasing or limiting the development capacity of land. Due to the specific and individual nature of each of these parameters, there is not a general reduction or rule that has been applied as a constraint. Instead, the constraints are noted here, but not quantified as a reduction of the buildable lands.

- **Willamette River Greenway**
  - Additional development standards may limit development subject to the permitting and review process of the City of Salem.
  - 10 vacant properties fall inside the Greenway zone, 36.7 acres of commercial land and 27.1 acres of industrial land (before any reductions of constraints)
  - Data source: Willamette Greenway Compatibility Review Boundary City of Salem GIS layer

- **Mineral and Aggregate Resources**
  - There is one (1) sand and gravel locations within the Salem Keizer UGB. Currently this site is on Industrial land, and considered vacant. (partially vacant)
  - Reductions due to floodway and wetlands constraints will be significant, and the remaining land (approximately 180 acres) will be subject to reclamation or other improvement steps before development is possible.

- **Brownfields**
  - There are 23 properties that intersect with the City of Salem, or the DEQ site locations. Of these, 12 are on vacant land, and 11 are on redevelopable land. These reporting sites vary from recommended site screening, to identifying gas and oil tank locations. As each site is specific and not necessarily an absolute deterrent to development, they are not considered a constraint. Each would be individually considered if and when the property develops. Review of the Polk county hazardous materials locations show they are not contaminant sites, but references regarding commercial and industrial activity with possible hazardous materials on site.
  - Data source: City of Salem, cityhaz and hazpoly shapefiles, and DEQ Brownfield data, geocoded 2009. Polk county Hazmat shapefile.

- **Historical Resources and Districts**
  - There are 3 properties that are within the City of Salem's historical districts designations, .3 vacant acres in the Downtown Historic District, and .16 vacant and .6 redevelopable in the Gaiety Hill-Bush's Pasture Park District. Development here may be subject to restrictions of the Historical District classification.
  - One redevelopable taxlot is a property on the Salem Historic Landmarks Commission's Historic Property List, 528 Cottage Street NE, subject to any review the commission may have.
  - There are no National Historic Landmarks in the study area.

- There are employment lands on Marion county's historic areas.

- **Significant Resources**
  - Polk County's inventory of Significant resources includes wildlife, mineral, natural area, open space, and archeological sites. Three properties in West Salem are in proximity to a Bird habitat along the Willamette River. As the specific site is generalized, the impact for development, if any, is hard to quantify.
  - Data sources: Polk County: Significant Resources layer.

Development Constraints Not Present on Employment Lands

The following development constraints were reviewed and not found to be present on employment lands within the planning area:

- Federal wild and scenic rivers
- State scenic waterways
- Wilderness areas
- Heritage trees

Development Constraints with Insufficient Data

The following constraints were not deducted from the buildable land inventory due to the lack of available data:

- Oregon White Oaks,
- Significant wildlife habitat areas,
- Energy sources,
- Wildfire hazard areas,
- Groundwater resources,
- Airport buffer zones (data not available in GIS format), and
- Scenic views and sites.
- Earthquake hazards areas
- Approved Oregon recreation trails

Appendix A-1

City of Salem
Buildable Land Inventory
Report and Documentation

July 2008

Mid-Willamette Valley Council of Governments
105 High St SE, Salem, Oregon 97301-3667

Overview:
The City of Salem contracted with the Mid-Willamette Valley Council of Governments (MWVCOG) to assist in developing a process for and the creation of a buildable lands inventory. This report addresses the work completed to date; the data produced, and provides a preliminary summary of buildable acres of land by development category. A future phase of the buildable land inventory will apply environmental and other constraints as reduction factors to this preliminary buildable inventory.

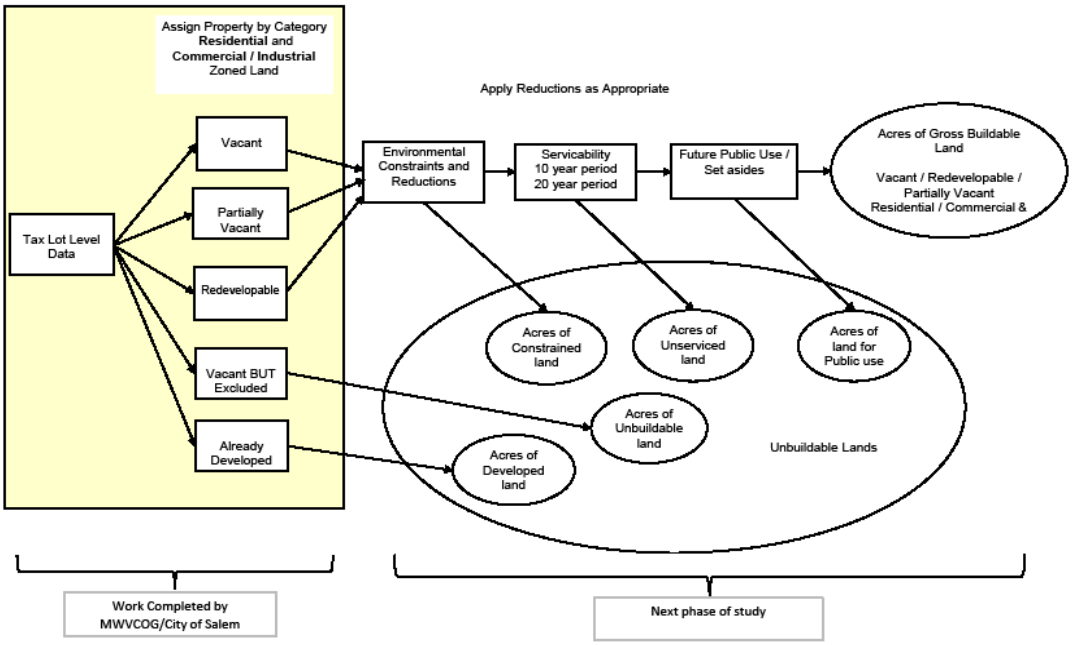
Background:
Future land development can occur in a number of fashions. There is development on vacant land; large partially developed land that may or may not be partitioned and further developed; small partitions of developed land usually described as infill; and redevelopment, where the initial use is replaced often at a higher density or intensity. For this summary, all of these development avenues have been evaluated.

In this document there are references to "baseline inventories" and "buildable land inventories":

> "***Baseline inventories"*** are simply an expression of the land uses that exist at a given point in time, where each land use is given a code (e.g. Office (4300) or Single Family Residential (5100)) representing the existing land uses (in this case, as of June 30, 2007). Appendix F contains the land use codes used for the baseline inventory and Appendix H and I the existing acres for each land use by Salem's Comprehensive Plan designations.
>
> In contrast, a ***"buildable land inventory"*** is a description and measure of potential future residential and non-residential development on both vacant and non-vacant properties, which uses the baseline inventory as its "starting point". The buildable land inventory uses assumptions of future subdivisions and land partitions; commercial and industrial development intensities and constraints; expectations for land reserved for open space, parks, and public infrastructure; and other assumptions developed as part of the inventory analysis.

Process, Data and Baseline Inventory:
A review of the Buildable Lands process was conducted with Salem's Community Development staff. The work from September to December 2007 laid out the required elements of this process and began an initial evaluation of the data. Guidelines and recommendations of the OARs were collected and reviewed resulting in an initial matrix of desired definitions needed in determining buildable lands. The date of June 30, 2007 was chosen for the base inventory for this work; in other words, the inventory and subsequent available buildable lands are based on conditions as of June 30, 2007.
The following diagram illustrates a broad overview of the steps needed to complete a full Buildable Lands inventory. The first step is to update the land

use codes in the "baseline inventory", using the Marion and Polk county assessor files, aerial photos and other sources of information. Then using a process developed by the study team, all individual tax lots are assigned a designation of Vacant, Partially Vacant, Redevelopable, Excluded or Developed. This is the stage of work that MWVCOG and the city completed as of June 2008. Later steps would then review and apply additional environmental constraints or reductions, serviceability reductions, and future public use reductions on the buildable inventory.



Updated Land Uses in the Baseline Inventory

In the past, MWVCOG developed baseline land use inventories for the Salem and Keizer area for the years 1997, 2000 and most recently for December 31 2006 time points. For this study, MWVCOG updated the 2006 land use inventory to reflect a project baseline of June 30, 2007. As part of this update, any partitions or subdivisions since the start of 2007 were updated in the GIS. . Commercial and Residential building permit data was assembled and geo-coded for permits issued up to June 30, 2007. The issued building permits were matched to tax lots. Land uses were compared to the assessor's data records, and updated if necessary. In addition, current zoning and comprehensive plan designations were added to the land use layer. The resulting GIS layer serves as the June 30, 2007 baseline inventory, and as the "starting point" for developing a buildable land inventory.

City-wide Committee and Buildable Land Categories

Having outlined a basic process involved in developing a buildable land inventory, the definitions and details of what specific factors should be used for each buildable land

designation had to be determined. To assist with these factors, input from many city departments was needed. Community Development formed a City wide committee as a resource to discuss issues and recommendations pertinent to the development of the Buildable Land inventory. The committee included staff from public works, parks, building and safety, information technology, legal, and the city manager's office, who are familiar with land use issues, trends, and development in the city. DLCD Community Service division and the Salem-Keizer school district also were represented.

The initial meeting discussed the role of the committee and the scope of work in developing a buildable land inventory. Subsequent meetings focused on a review of existing land use data and examples of future potential development to help build consensus on definitions to use for Vacant, Partially Vacant, Redevelopable, Excluded, or Developed designations. The committee had time to review residential and commercial definitions, but not industrial or River Oriented Mixed Use (ROM) definitions. The Community Development and COG staff chose the remaining definitions to apply to industrial and ROM designated land, as well as finalize the choice of the partially vacant parameters discussed with the city wide committee. These definitions are outlined in the tables at the end of this document, and in the footnotes.

At this time, the determination of the environmental, serviceable and public use criteria that will be applied to the preliminary identification of buildable land will be addressed with the city's resumption of this project at a later date.

Buildable Land Summary Data, Salem Area:
Based on the input from the city-wide committee or staff, the definitions for each buildable land designation were applied to the land use inventory data in the GIS. The most recent Comprehensive Plan designations were added to the GIS to summarize land by Residential, Commercial, Industrial, or ROM categories. Within each of these categories, tax lots were then summarized into Vacant, Partially Vacant, Redevelopable, Excluded, or Developed designations. These designations can be generally defined as follows (see Appendix A for more specific information on these definitions):

Vacant – properties with no current development and available for future residential, commercial or industrial development.

Partially Vacant – properties that are partially developed in the baseline inventory with a residential, commercial, or industrial use and by the criteria developed for this study could support additional development.

Re-developable – properties with the potential to change their land use, based on the underlying Comprehensive Plan designation. Examples include: the development of new multi-family units in place of an existing single family residence (property has a Comprehensive Plan of "MF"); new commercial or industrial use in place of an existing farm or single family (where property has a Comprehensive Plan of "Industrial")

Excluded – properties where the existing land use excludes or essentially precludes any future development. Examples include publicly owned lands; designated open

spaces; GIS parcels representing water bodies; power lines, electrical substations, water towers or reservoirs, etc.; airport expansion areas; the Minto Brown Island properties with a Comprehensive Plan of Industrial.

Developed – properties that were fully developed as of June 30, 2007 and based on the criteria of this study could not support additional development.

The result of the buildable land inventory is as follows:

- **Table 1** shows total acres of land by each designation and Comprehensive Plan[4]. This table is the principle results of this study to date. Again, these totals have not taken into account additional environmental constraints or reductions, serviceability reductions, and future public use reductions on the buildable inventory. Footnotes below the table provide additional details.
- **Table 2** shows the total for properties designated Partially Vacant Residential that are over of 1 acre in size. Subtracting ¼ acre for each existing housing unit, the remaining land totals 2,645.21 acres that could potentially be developed.
- **Table 3** shows details for Partially Vacant residential land, for 4015 lots which currently have one residence and are less than one acre in size. Based on input from the city committee, this study assumed lots between 13,000 to 20,000 square feet could potentially be partitioned into two lots (i.e.: one for the existing unit, one for a new housing unit); lots 20,001 to 29,000 could be partitioned into three lots (i.e.: one for the existing unit, two lots for two new units); and so on as shown in the table. These results show the potential for residential in-fill development within Salem by partitioning these 4015 properties is an additional 5910 new buildable lots[5]. It must be emphasized that this shows only the potential for infill, as an unknown portion of the original lots may have dimensional constraints or other constraints that would prohibit a partition, and time was not available to review these 4015 lots individually. An example of a dimensional constraint might be a wedge-shaped property over 13,000 square feet at the end of a cul-de-sac that could not effectively be partitioned because of local government code requirements of street frontage.
- **Table 4** shows details for two properties with a Comprehensive Plan of Multifamily considered partially vacant, with a potential of 288 multi-family units.

[4] The official Salem Area Comprehensive Plan designations were aggregated into the general categories of Residential, Commercial, and Industrial. See Appendix E for more information.
[5] If these 5910 new lots are assume to be 6000 square feet in size, then their total acreage would be 814.05 acres.

Table 1: Acres of land by development designation, by aggregated Comprehensive plan, for the Salem area inside the UGB:

Development Designations

Comprehensive Plan	Vacant	Partially Vacant Land (6)	Redevelopable	Excluded (7)	Developed	**Total**
Commercial	256.87	107.30	20.10	7.13	1447.94	1839.34
Industrial (1,2,4,5)	1440.68	275.34	246.44	472.41	1944.69	4379.56
ROM (8)	7.02	2.12	0	60.24	54.53	123.91
Residential (3,9)	3055.30	3477.75	148.10	526.82	9548.67	16756.64
Total	**4759.86**	**3862.51**	**414.64**	**1066.60**	**12995.83**	**23099.44**

Total acres, all Comprehensive Plan designations, for the Salem area inside the UGB (10,11) 33,378.03.

Footnotes:

1. There are several sand and gravel locations within the Urban Growth Boundary. All of these sites total 520 acres, inclusive of land and drainage ponds. They are categorized under the partially vacant land, as they are not fully vacant, but currently are an industrial use with some building structures. It was decided to assume 30% of these 520 acres would be characterized as partially vacant, resulting in 156 acres of the 275.34 partially vacant industrial lands in the above table. There will also be environmental concerns with these properties not addressed at this stage of the buildable lands study. Wetland and floodplain exclusions will likely affect these properties with the environmental reductions.
2. Redevelopable Industrial includes land with a current farm use but also have a comprehensive plan of Industrial. These farm-to-industrial properties total approximately 168 acres.
3. Redevelopable residential includes land with a single family house on comprehensive plan land of Multi-family, on lots greater than ½ acre.
4. Land on Minto Island owned by Boise Cascade and the Audubon Society with a comprehensive plan of Industrial (IND) was categorized as excluded. This property, totaling 324 acres is expected to remain open space, even though the current comprehensive plan is Industrial.
5. In the Mill Creek area, the comprehensive plan is Employment Center (EC). In the above table, EC land is included with other industrial land. All except one track of 66 acres is vacant. Currently, the Corrections Department has warehousing and storage use on this track across the street from the Mill Creek Correctional facility. Therefore, this 66-acre lot falls into the Partially Vacant category.
6. Commercial and industrial partially vacant land were screened and identified by Floor Area Ratio (FAR) and minimum size. First, only lots with a FAR of .20 or less were selected; in other words, the size of the building footprint compared to the tax lot had

to be 0.20 or less. Next, commercial lots had to be ½ acre or larger, and industrial lot had to be 5 acres or larger. Finally, of these selected lots, the estimated vacant portion is 30%. The acres listed here are the 30% calculation of the partially vacant lots. See footnote #9 for residential partially vacant details.

7. Further exclusions should be applied when more GIS data is made available. Specifically, an overlay of powerlines, and future arterials and collectors should be done to the base tax lots to exclude those portions of existing tax lots. For this process, any whole tax lots under power lines were excluded, however portions of tax lots were not. Future arterials and collectors that affect parts of tax lots were not excluded.
8. No River Oriented Mixed Use (ROM) tax lots larger than ½ acre with a Single family use currently exist, so there is no residential land that could redevelop to a higher intensity use, base on this size threshold. Excluded ROM lands are parks and open space along the river.
9. Partially Vacant residential land was determined by three methods:
    a. First, for lots greater than 1 acre, ¼ acre was deducted for each existing dwelling unit, and the rest is considered developable. The result is 2645 acres. See table 2 for more details.
    b. Second, potential new partitions were estimated for lots sizes less than 1 acre in size. That total of 5,910 new lots was multiplied by 6,000 square feet, resulting in 814 acres. Minimum lots sizes in Salem are 4,000 square feet, or 5,500 for a flag lot partition. The figure of 6,000 was chosen as an estimate. See table 3 for more details.
    c. Third, 2 multifamily lots were identified and measured in GIS for an additional 18.5 acres of available land. See table 4 for more details.
10. The land area total (**23,099 acres**) in Table 1 is smaller than the summation of all taxlots (**33,378 acres**) as they reflect only Commercial, Industrial and Residential comprehensive land designations. Community Service, Parks, and Open space designated land is not included in the buildable land summary in Table 1. In addition, the partially vacant summaries are the estimate of only what portion of each tax lot may be considered vacant, not the whole tax lot. These two factors account for the difference in the totals.
11. Summing all taxlots in the assessor's GIS file within Salem's portion of the urban growth boundary gives as total of **33,378 acres**. Each tax lot in the baseline inventory was assigned a land use code; however it must be noted that some tax lots in the GIS are roads, or water bodies. **Appendices H,I, and J** show the acres by baseline inventory land use codes and comprehensive plan designation of all these tax lots. A second figure for area comparison uses the GIS shapefile of the urban growth boundary with a total of **38,712 acres**. This total represents the entire area inside the boundary whether a tax lot or not (i.e, this total includes all the non-taxlot areas such as roads that are not represented by polygons). Both these totals exclude 155.5 acres in West Salem with a Comprehensive Plan designation of FRM that is inside the city limits but lies outside the UGB.

Table 2: Partially Vacant Residential land, tax lots over 1 acre in size, for the Salem area inside the UGB:

796 tax lots yields 2,645.21 acres of developable land

Footnote:

1. ¼ acre deducted from each tax lot with 1 housing unit, remaining area considered developable.
2. ½ acre deducted from lots with 2 housing units, remaining area considered developable.
3. ¾ acre deducted from lots with 3 housing units, remaining area considered developable.

Table 3: Partially Vacant Residential tax lots less than 1 acre in size, number of partitions based size, for the Salem area inside the UGB:

Existing Lot size (sq ft)	Number of lots as of 7/1/07	Potential **new** tax lots, after partitions
13,000 – 20,000	2783	2783
20,001 – 29,000	785	1570
29,001 – 37,000	231	693
37,001 – 43,560	216	864
Total original lots	**4015**	
Total new lots after partitions		**5910**

Footnotes:

1. Total Potential building lots, based on size of tax lot only. There has been no further evaluation to estimate the likelihood of the partitions actually occurring.
2. These lot size parameters are also used in the Keizer area infill estimates.

Table 4: Partially Vacant Residential land, Multi-Family Comprehensive Plan:

2 lots identified, 288 additional units can be built on approximately 18.5 acres

1. Vacant portion of land measured in GIS for an area of 18.5 acres.
2. Additional units taken from previous forecast work, estimates are specific to these tax lots.

As part of this study, the following additional information is provided regarding the baseline inventory and city staff work on recent lot density in subdivisions.

Residential Totals and Density:

Current Number of Residential Units inside the Urban Growth Boundary, Salem area only, as of June 30, 2007:

SF	49,716	Single Family and Single Family attached, manufactured and mobile homes
MF	22,850	Duplexes, Triplexes, Four or more units
Total	**72,566**	

Klaus Schilde of Salem's Community Development Department reviewed housing subdivision information for the last 5 years. He examined recorded subdivision maps, noting if there was any environmental factor associated with the proposed division. He did not calculate the degree or severity of an environmental factor. For example, he did not determine what percentage of a proposed subdivision may be affected by a stream, only that it was indicated on the subdivision map and application. From this assessment, he produced this table with an average of single family lots per acre ranging from 3.95 to 5.54, with an overall density of 4.4 units per acre.

Lot Density in Subdivisions Recorded in SFR Designation (2002-07)

Type of Subdivision	No.	No. of Lots	No. of Acres	Lots/ Acre
All	118	3,579	813.84	4.40
Without Environmental Constraints	34	522	94.19	5.54
With Landslide Hazards	75	2,575	617.54	4.17
With Geologic Assessment/Analysis	63	2,366	574.19	4.12
With Wetlands	5	244	59.57	4.10
With Streams	18	770	194.83	3.95
With Floodplains	3	108	26.52	4.07

Listed subdivisions are constrained environmentally to different degrees. Some are completely within landslide hazard areas, others have a stream that touches the subdivision only peripherally.

In Summary:

The purpose of this study was to work with the City of Salem in developing a process to create a buildable land inventory, and generate initial data to review. The inventory is part of a larger scope of future work that the City may undertake to evaluate the housing and economic growth needs of the Salem area and determine if there is an adequate land supply to meet those demands. These tables provide a summary of the initial buildable lands by development category for the Salem portion inside the Urban Growth boundary. See Appendix D for information summarizing the Keizer area.

Next steps include improving and maintaining the information regarding building development within the UGB with building permit data on a regular basis. For a final inventory, the environmental, serviceability and public use criteria must also be applied. These parameters and definitions must be reviewed and decided on by staff and the committee. Finally, with the resumption of this project, a final review of all the parameters used in the project thus far would be an important step to ensure consensus of the final results.

Appendix A: Definitions: Residential Land

The following definitions only apply to residential lands. Residential lands are defined as those with a Salem Comprehensive plan designation of SF, DR, MF or MU. If a tax lot falls in two comprehensive plan designations, it is assigned the designation in which most of the lot falls.

A. Residential Lands in Updated SACP Map Designations

		Category	General Description	Suggested Definition	Additional Notes and approximate size
A1	**a**	***Vacant Land***	Vacant land in current GIS inventory, determined by review of assessor's records & aerial photos and Comprehensive Plan residential	Land use code = 1100 & Comprehensive Plan Residential	Approximately 2800 acres, inside UGB
	b	***Vacant Land (small or odd shape)***	Vacant in current GIS inventory, but small or odd shaped. Include these properties if gt 4000 sq feet in size, or adjacent to other vacant land and Comprehensive Plan residential	Land use code = 1200 and area GT 4000 sq ft (min. lot size), ordinary shaped lot, & Comprehensive Plan Residential	Approximately 17 acres, inside UGB
	c	***Vacant Land (along Greenway)***	Vacant along greenway in GIS inventory (may be excluded later by other conditions, for example environment constraints of floodway) and Comprehensive Plan residential	Land use code = 1300 & Comprehensive Plan Residential	Approximately 2 acres, inside UGB
	d	***Vacant Land (farm land)***	Current use in GIS inventory is farm land, but Comprehensive plan is residential	Land use code = 2100 and Comprehensive Plan Residential	Approximately 88 acres, inside UGB (16 tax lots)

A2	**a**	***Partially Vacant*** *Additional development on lot* *(lot size less than 1 acre)*	Current Comprehensive Plan is SF or DR, tax lot less than 1 acre, but large enough to add one or more additional housing units. Data will estimate number of lots, not acres.	Land use code = 5100, 5200, 5600, 2200 (residential or farm house). Lot sizes: 13,000 to 20,000 sq ft, 20,000 to 29,000 sq. ft, 29,000 to 37,000 sq ft, and 37,000 to 43,560 sq ft. - Add additional lots.	See table 2 of this document.
	b	***Partially Vacant*** *(lot size greater than 1 acre)*	Current Comprehensive Plan is SF or DR, and tax lot greater than 1 acre	Land use code = 5100, 5200, 5600, 2200 (Residential or Farm house), lot area gt 43,560, 1/4 of acre = built, the balance is vacant.	Definition uses the Safe Harbor Recommendation (Greg Winterowd memo). Approx. 2600 acres before

					deductions for existing dwelling units.
	c	***Partially Vacant (MF use)***	Comprehensive plan = MF, but could possibly support more development	Land use code = 5300, 5400, Comprehensive plan = MF	Base on review, only 2 large parcels identified, est. additional units =288, 33.6 acres before deductions for existing units.

A3	a	***Redevelopable*** *(replace existing development)* *SF to MF use*	Current use is single family residential, and Comprehensive Plan = MF	Land use code = 5100, 5200, 5600, 2200, Comprehensive plan = MF, tax lot size gt 1/2 acre	Approximately 145 acres.

A4	a	***Public/excluded Vacant lands (general)***	Publicly owned vacant land (city, county, state, federal, school district) considered excluded from new residential development.	Based on ownership from Assessor's records	Exclude from residential development unless specific info about property is known, Approximately 150 acres
	b	***(PUD, common areas)***	common areas of PUD's	land use code is 5200, condo flag, and no units	Not available for more development
	c	***(Open Space)***	Open space and parks	Ownership from assessor's records, land use code = 8100,	Excluded if publicly owned, If privately owned, may develop, Approx. 197 acres.
	d	***(water)***	Water, rivers and streams	Land use code = 8300	Approx. 4 acres inside UGB.
	e	***(Power lines)***	Power lines that fell over tax lots.	land use code = 9300	Approx. 45 acres inside UGB.
	f	***(less than 4000 sq. ft.)***	Tax lots too small for development, or the minimum	lots LT 4000 sq ft, and not adjacent to vacant land	Approx 20 acres inside UGB

A5	a	***Developed***	Vacant on aerials or in assessor's file, but with building permit issued up to June 30, 2007	luse code = 1500	Approx 197.5 acres inside UGB

Appendix B: Definitions: Commercial, Industrial and ROM Land

Commercial lands are defined as those with a comprehensive plan designation of CB and COM.
Industrial lands are defined as those with a comprehensive plan designation of EC, IC, or IND.
The designation of ROM is left as its own category.

B. Commercial / Industrial Lands in Updated SACP Map Designations

		Category	General Description	Suggested Definition	Additional Notes and approximate size
B1	**a**	***Vacant Land (General)***	Vacant land in current GIS inventory, determined by review of assessor's records & aerial photos and Comprehensive Plan Comm/Indust	Land use code = 1100 & and Comprehensive Plan Comm/Ind	Commercial = 236 acres, Industrial = 902 acres
	b	***Vacant Land (small or odd shaped)***	Vacant in GIS inventory, but small or odd shaped. Include these properties if ordinary shape, or adjacent to other vacant land and Comprehensive Plan Comm/Ind	Land use code = 1200 & Comprehensive Plan comm/ind (and lot proportional)	Commercial = 3 acres, Industrial = 16 acres
	b	***Vacant Land (along greenway)***	Vacant along greenway in GIS inventory (may be excluded later, for example environment constraints of floodway) and Comprehensive Plan Comm/Indust.	Land use code = 1300 & Comprehensive Plan comm/ind	Commercial = 18 acres, Industrial = 2 acres

Commercial

B2	**a**	***Partially Vacant*** *(additional development on lot)*	Current use and Comprehensive Plan is Commercial, with a low Floor to Area Ratio (FAR), additional development can occur on lot	Land use code in the 4000 range. Use building footprints layer for FAR. exclude parking lots (use = 4600)	*Lot must be greater than .5 acre, FAR must be less than .20, 30% of the lot considered vacant. Total acreage approx. 107 acres (1)*

B3	**a**	***Redevelopable*** *(replace existing)*	Current use is residential but Comprehensive Plan is commercial; assumed to redevelop over time and replace the existing structure.	Land use code = 5100, 5200, 5600, (residential), BUT Comprehensive Plan Commercial	Use is SF, lot size gt 1/2 acre, approx 27 acres, replace residential with commercial use

Industrial

B4	**a**	***Partially Vacant*** *(additional development)*	Current use and Comprehensive Plan is Industrial, with a low Floor to Area Ratio (FAR), additional development can occur on lot	Land use code in the 3000 range, Building footprints layer for FAR	*Lot greater than 5 acres, FAR less than .20, 30% of the lot considered vacant.*
B5	**a**	***Redevelopable*** *(replace existing)*	Current use in GIS inventory is a lower intensity than Comprehensive Plan, likely to redevelop over time and replace the existing structure.	Land use code = 5100, 5200, 5600 (residential) BUT Comprehensive Plan is Industrial	Use is SF, lot size greater than 1 acre, approx 40 acres
	b	*(replace existing development)*	Current use in GIS inventory is a lower intensity than Comprehensive Plan, likely to redevelop over time and replace the existing structure.	Land use code = 2100 or 2200 (Farm), BUT Comp Plan is Industrial	All Farm land Approximately 168 acres

B6	**a**	***Unbuildable (Water)***	Water, ponds and streams	luse code = 8300	Approx. 53 acres inside UGB
	b	***(Airport)***	Airport expansion areas	If available, exclude	Airport is unlikely to relocate
	c	***(Open Space and Parks)***	Open space and parks publicly owned, common areas of PUD.	Land use code = 8100,Ownership from assessor's records	Excluded if publicly owned, If privately owned, may develop, approx 315 acres
	d	***(Power lines)***	Power lines that fall over tax lots.	land use code = 9300	Approx. 3 acres inside UGB

B7	**a**	***Developed***	Vacant on aerials or in assessor's file, but with building permit issued up to June 30, 2007	luse code = 1500	Approx 32 acres inside UGB

(1) This inventory does not include assumptions of commercial redevelopment if the current use has a FAR of greater than 0.20, although redevelopment and partially vacant infill does occur in those circumstances.

Appendix C: River Oriented Mixed Use (ROM) Categories

It was decided to leave all the tax lots in the ROM Comprehensive plan designation in one single category, rather than dividing them into commercial or industrial lands. In ROM, both commercial and industrial uses exist and are allowable. For definition purposes:

C1: Vacant: Land use code of 1100, 1200, or 1300.

C2: Partially Vacant: Land uses of commercial or industrial (luse gt 3000 and lt 4600), with an FAR less than .20, and lot size greater than ½ acre.

C3: Redevelopment: There were no lower intensity uses that were larger than ½ acre in size.

C4: Excluded: Open use or park land

C5: Developed: Everything else

See table 1 for acres of land by buildable land category.

Appendix D: Keizer Area Land Analysis

The focus of this study's work was on the Salem portion of the Urban Growth Boundary (UGB). As the cities of Salem and Keizer share an Urban Growth Boundary, the following information has also been included, in the event that data for the entire UGB is needed. Using the same June 30, 2007 baseline, the same definitions for vacant, excluded and developed land that were applied in the Salem area were also applied to the Keizer area. Tax lots were aggregated by Comprehensive plan for Residential, Commercial and Industrial uses. Only Commercial and Industrial redevelopable land has been identified here. Previous forecast work in the Keizer area focused on residential property, and has been summarized in the second table.

Keizer Buildable Land Summary Data:

Table D-1: Acres of land by development category, by aggregated Comprehensive plan, for the Keizer area inside the UGB:

Comp Plan	Vacant	Redevelopable (1,2)	Excluded	Developed	Grand Total
Commercial	15.86	16.83	0.43	165.56	198.68
Industrial	30.72	25.85	0	62.88	119.45
Residential	116.78	See table 5	96.13	2199.56	2412.47
Grand Total	**163.36**	**42.68**	**96.56**	**2428.00**	**2730.60**

Footnotes:

1. Redevelopable land is a summary of all tax lots, regardless of size, where the current use is Single Family and the Comprehensive Plan is Industrial or Commercial.
2. Redevelopable or partially vacant residential land has not been categorized; instead, previous COG work identified likely future (forecast) units in Keizer. See table 6.
3. There is no summary of Commercial or Industrial partially vacant land, as the Floor to Area Ratio (FAR) process used in the Salem area was not used in the Keizer area.

Keizer Area Residential Land, infill and redevelopment:

The following table reflects the Keizer area within the Urban growth boundary. In 2004, COG staff reviewed residential tax lots using a year 2000 baseline and classified land as vacant, underutilized, or mixed use (see 2031 SKATS Regional Transportation Plan, Appendix A). In 2007, COG staff updated the land use inventory to a June 2007 baseline, and this work was reviewed by the City of Keizer staff on a parcel by parcel basis for accuracy and likelihood of development.

For the determination of future residential development on partially vacant land (lots greater than 1 acre) or for residential infill (lots less than 1 acre) the methodology is similar to the work applied to the Salem area, with the difference being that each lot was reviewed in Keizer and included if likely to partition. The resulting data is an accurate assessment of the land use conditions within Keizer, and provides a good estimate of future residential development. As such, acres of redevelopable or partially vacant land have not been specifically identified; instead table 6 shows a summary of a build-out scenario of housing units on residential land.

Table D-2: Forecast housing units based on possible partitions or redevelopment, for the Keizer area inside the UGB, full build out scenario:

Forecast Housing units (on lots less than 1 acre in size):	1448
Forecast Housing units (on lots greater than 1 acre in size):	917
Total Forecast units:	**2365**

Appendix E: Aggregated Comprehensive Plan Designations

FOR SALEM:

Residential	(SF,MF,DR,MU)
Commercial	(CB,COM)
Industrial	(IND,EC,IC)
ROM	(ROM)

FOR KEIZER:

Commercial	(C)
Residential	(LDR, MDR, MHDR, MU)
Industrial	(GI, CLI)

Appendix F: Land Use Codes and Summary Categories

1000 VACANT
1100 Vacant
1200 Vacant Odd shape or sliver, ROW, easement
1300 Vacant along greenway
1400 Under construction
1500 Building permit issued

2000 FARM
2100 General Farm Use, Primarily Crop
2200 Farm Use, Single-Family Residential

3000 INDUSTRIAL USE
3100 Light Industrial use
3200 Heavy Industrial use
3300 Industrial salvage/storage

4000 COMMERCIAL / OFFICE
4100 General Commercial (mostly retail or wholesale)
4150 Large Commercial centers (malls, shopping centers, big boxes)
4200 Hotels/Motels
4300 Office
4400 Mixed Office and Retail
4500 Extensive Commercial
4510 Car dealerships (Boat,ATV,RV)
4520 RV Storage, towing yards, bus yards
4530 Building Supply, lumber yards
4540 Rental equipment yards
4550 Public self storage
4560 Retail nurseries & supply
4600 Parking lots

5000 RESIDENTIAL
5100 Single Family
5200 Single Family attached
5300 Duplexes, triplex, fourplex
5400 Multi-Family (5 or more)
5500 Mobile Home Parks
5600 Manufactured Home
5700 Group quarters

6000 MIXED USE -Residential and non-residential on same parcel
6100 Mixed Use primarily non residential, with SF residence
6200 Mixed Use primarily non residential, with MF units

7000 INSTITUTIONAL/ PUBLIC
7100 Religious - Church or Church property
7200 Parking lot for religious organization
7300 Schools or school property
7400 Government Offices
7500 General Government Uses (Fire, Police, Museums, Post offices)
7600 Hospitals, large clinics (Salem Hospital, Kaiser)
7700 Other institutions, public facilities (service clubs, non profits)

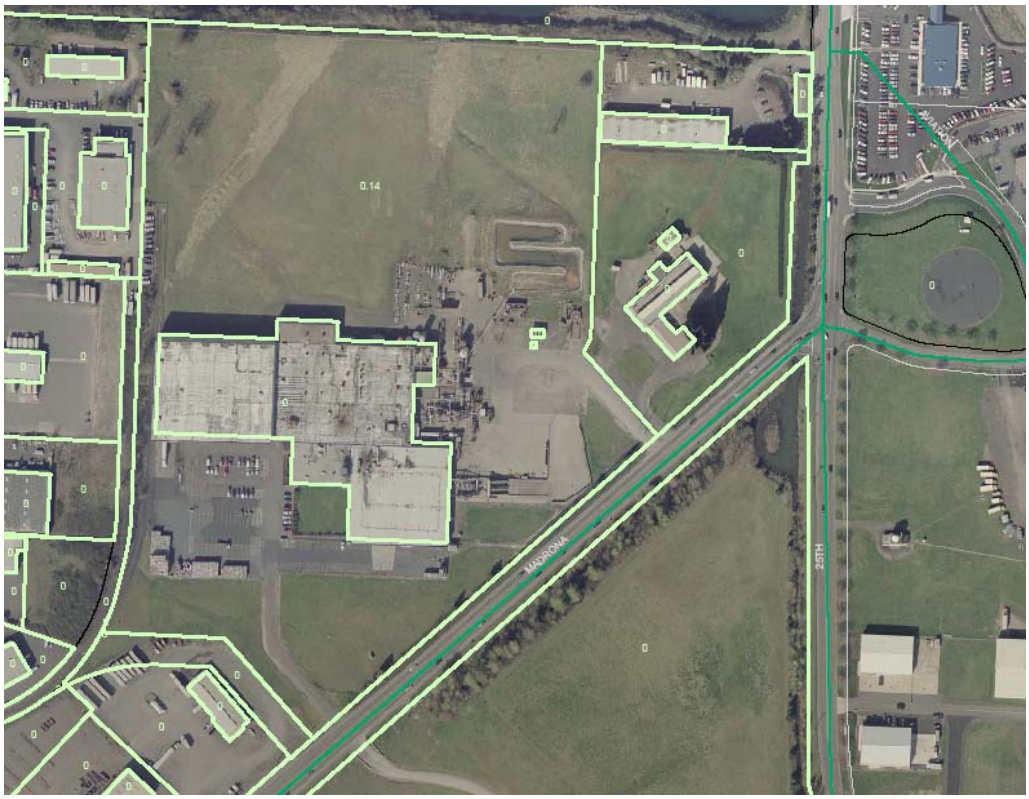
8000 PARKS, RECREATION, OPEN SPACE
8100 Parks and public Open spaces
8200 Recreation (Golf courses, tennis courts, baseball diamonds, playgrounds)
8300 Water, ponds, river, reservoir
8310 Water, privately owned, w/ development potential

9000 INFRASTRUCTURE
9100 Road polygons
9200 Railroad lines, RR yards and Right of Way
9300 Utilities, substations, water tower, water treatment, land fill
9400 Transportation (airport, transit center, train station)
9500 Parking Structure (no add or adjoin uses)

Appendix G: Examples of Partially Vacant Commercial and Industrial Land

Commercial Use on Commercial Comprehensive Plan, Floor –Area-Ratio of .09

Commercial Use on Commercial Comprehensive Plan, Floor-Area-Ratio of .10 - .13



Industrial use on Industrial Comprehensive Plan, Floor-Area-Ratio of .14

Industrial use on Industrial Comprehensive Plan, Floor-Area-Ratio of .05

Appendix H: Acres by land use, inside the UGB, Salem Area only, by Residential Comp Land Designation, as of June 30, 2007

Land Use	Description	SF	DR	MF	MU*	Total
1100	Vacant	734.44	1879.23	231.34	271.30	3116.31
1200	Vacant Odd shape or sliver/ easements	19.17	5.45	2.79		27.41
1300	Vacant along greenway	0.14		0.99		1.13
1500	Building permit issued	78.74	89.85	13.45		182.04
	Vacant Total	**832.49**	**1974.53**	**248.58**	**271.30**	**3326.89**
2100	General Farm Use, Primarily Crop	43.25	31.74	15.51		90.50
2200	Farm Use, Single-Family Residential	38.51	135.74	17.21		191.46
	Farm Uses Total	**81.77**	**167.47**	**32.71**		**281.96**
3100	Light Industrial use		1.88	5.90		7.78
3200	Heavy Industrial use		19.16			19.16
3300	Industrial salvage/storage	1.41		0.05		1.46
	Industrial Uses Total	**1.41**	**21.04**	**5.95**		**28.41**
4100	General Commercial retail or wholesale)	8.96	2.42	9.40		20.78
4150	Large Commercial (malls, shopping centers)					0.00
4200	Hotels/Motels					0.00
4300	Office	2.30	0.21	6.08		8.59
4400	Mixed Office and Retail	0.34		0.62		0.96
4500	Extensive Commercial					0.00
4510	Car/Boat/RV dealerships					0.00
4520	RV Storage/ Towing Yards/ vehicle storage	0.58				0.58
4530	Building Supply, lumber yards					0.00
4540	Rental equipment yards					0.00
4550	Public self storage					0.00
4560	Retail nurseries & supplies			4.63		4.63
4600	Parking Lot	3.00		4.17		7.18
	Commercial Uses Total	**15.18**	**2.63**	**24.91**		**42.72**
5100	Single Family	7527.41	2898.67	508.15		10934.23
5200	Single Family attached	101.88	8.53	64.19		174.59
5300	Duplexes, triplex, fourplex	109.60	9.13	254.48		373.21
5400	Multi-Family (5 or more)	35.00		779.46		814.46
5500	Mobile Home Parks	40.91	29.14	383.68		453.73

5600	Manufacture Home	152.98	208.14	16.56		377.67
5700	Group quarters	18.04		82.07		100.11
	Residential Uses Total	**7985.81**	**3153.61**	**2088.58**		**13228.00**
6100	Mixed Use non residential, with SF unit	0.71	17.17	0.29		18.17
6200	Mixed Use non residential, with MF units			0.12		0.12
	Mixed Use Total	**0.71**	**17.17**	**0.40**		**18.28**
7100	Religious - Church or Church property	145.12	45.78	66.01		256.91
7200	Parking lot for religious organization	2.17		0.57		2.75
7300	Schools or school property	55.37	66.83	33.80		156.00
7400	Government Offices	0.35				0.35
7500	General Government (Fire, Police, Post)	1.83	0.29	0.63		2.75
7600	Hospitals, large clinics					0.00
7700	Other public facilities (service clubs, NPO)	8.11	15.52	1.46		25.09
	Institutional Uses Total	**212.95**	**128.41**	**102.48**		**443.84**
8100	Parks and public Open spaces	140.09	35.54	20.91		196.54
8200	Recreation (Golf, tennis, baseball diamonds)	87.87	168.37	3.85		260.09
8300	Water, ponds, river, reservoir	1.47	0.90	1.26		3.63
8310	Water, privately owned	5.75		3.34		9.09
	Parks, Recreation Total	**235.18**	**204.82**	**29.36**		**469.36**
9100	Road polygons	15.32	17.82	9.22		42.37
9200	Railroad lines, RR yards and Right of Way		0.08	2.30		2.38
9300	Utilities, substations, water tower, treatment	14.41	55.42	7.48		77.31
9400	Transportation (airport, transit, train)					0.00
9500	Parking Structure (no add or adjoin uses)			0.09		0.09
	Infrastructure Total	**29.73**	**73.33**	**19.09**		**122.15**
Grand Total		**9395.23**	**5743.02**	**2552.06**	**271.30**	**17961.61**

*MU is Fairview Property

Appendix I: Acres by land use, inside the UGB, Salem Area only, by Commercial and Industrial Comp Land Designation, as of June 30, 2007

Land Use	Description	CB	COM	EC	IC	IND	ROM	Total
1100	Vacant	2.64	236.01	478.23	123.95	834.77	1.02	**1676.61**
1200	Vacant Odd shape or sliver/ easements	0.08	0.98		0.57	2.88	0.10	**4.61**
1300	Vacant along greenway	1.06	16.64		0.55	1.46	5.90	**25.61**
1500	Building permit issued		8.08		5.94	18.32		**32.34**
	Vacant Total	**3.78**	**261.71**	**478.23**	**131.01**	**857.43**	**7.02**	**1739.18**
2100	General Farm Use, Primarily Crop					52.07		**52.07**
2200	Farm Use, Single-Family Residential					115.98		**115.98**
	Farm Uses Total					**168.05**		**168.05**
3100	Light Industrial use	6.39	21.16		93.00	696.97	8.69	**826.21**
3200	Heavy Industrial use		1.12		11.43	844.20	8.86	**865.60**
3300	Industrial salvage/storage	0.94	5.15		11.54	117.68	3.16	**138.47**
	Industrial Uses Total	**7.32**	**27.43**		**115.97**	**1658.85**	**20.71**	**1830.28**
4100	General Commercial retail/wholesale	31.42	467.15		68.00	33.47	4.82	**604.86**
4150	Large Commercial (malls, centers)	5.30	312.03		63.80			**381.12**
4200	Hotels/Motels	1.70	33.77		2.91	5.05		**43.44**
4300	Office	23.92	254.53		88.25	114.16	11.79	**492.64**
4400	Mixed Office and Retail	10.68	49.26		4.93	7.96		**72.83**
4500	Extensive Commercial					2.51		**2.51**
4510	Car/Boat/RV dealerships	5.57	85.56		6.60			**97.73**
4520	RV Storage/ Towing Yards/ vehicles		9.53		1.15	25.83		**36.51**
4530	Building Supply, lumber yards		5.56		0.94	10.62	3.89	**21.01**
4540	Rental equipment yards		6.19			1.42		**7.61**
4550	Public self storage		18.49		19.66	35.52		**73.68**
4560	Retail nurseries & supplies		5.14		2.30	2.02		**9.47**
4600	Parking Lot	9.34	86.39		12.28	15.04	5.15	**128.20**
	Commercial Uses Total	**87.93**	**1333.61**		**270.82**	**253.62**	**25.64**	**1971.62**
5100	Single Family	1.28	89.53		7.68	96.55	1.96	**196.99**
5200	Single Family attached	0.30	1.72					**2.03**
5300	Duplexes, triplex, fourplex	0.57	10.67			1.52	0.76	**13.52**

5400	Multi-Family (5 or more)	2.91	70.62		10.08	1.29	5.69	**90.59**
5500	Mobile Home Parks		39.59		13.24	91.23		**144.06**
5600	Manufacture Home		0.24			13.83	0.12	**14.19**
5700	Group quarters	0.88	9.01			3.49	0.27	**13.65**
	Residential Uses Total	**5.94**	**221.37**		**30.99**	**207.91**	**8.80**	**475.02**
6100	Mixed Use non res, with SF unit	0.15	6.64		2.32	10.70		**19.81**
6200	Mixed Use non res, with MF units	1.58	0.75					**2.33**
	Mixed Use Total	**1.73**	**7.39**		**2.32**	**10.70**		**22.14**
7100	Religious - Church or Church property	10.55	12.89			2.49	0.67	**26.62**
7200	Parking lot for religious organization	1.07	2.74					**3.81**
7300	Schools or school property	0.56	3.78			75.38		**79.72**
7400	Government Offices	3.12	11.73		4.30	5.31		**24.44**
7500	General Gov't (Fire, Police, Post)	4.09	20.48	168.90	13.43	22.54	1.91	**231.35**
7600	Hospitals, large clinics		8.69					**8.69**
7700	Other public facilities (clubs, NPO)	0.57	10.89		1.46	14.30	0.45	**27.67**
	Institutional Uses Total	**19.96**	**71.20**	**168.90**	**19.19**	**120.02**	**3.03**	**402.30**
8100	Parks and public Open spaces	2.64	0.70			308.14	20.05	**331.54**
8200	Recreation (Golf, tennis, baseball)	0.68	13.00		2.07	2.50		**18.24**
8300	Water, ponds, river, reservoir	0.87	0.84		19.66	31.32	40.19	**92.88**
8310	Water, privately owned				94.51	13.78		**108.29**
	Parks, Recreation Total	**4.19**	**14.54**		**116.23**	**355.75**	**60.24**	**550.95**
9100	Road polygons	0.94	6.57		3.75	0.90	1.46	**13.62**
9200	Railroad lines, RR yards and ROW		3.25		5.90	25.80	0.94	**35.89**
9300	Utilities, substations, tower		0.96			17.76	1.00	**19.72**
9400	Transportation (airport, transit, train)	2.55	2.55			1.91		**7.01**
9500	Parking Structure (no add uses)	4.80						**4.80**
	Infrastructure Total	**8.28**	**13.32**		**9.65**	**46.37**	**3.40**	**81.02**
Grand Total		**139.13**	**1950.58**	**647.12**	**696.19**	**3678.69**	**128.85**	**7240.57**

Appendix J: Acres by land use, inside the UGB, Salem Area only, by other Comprehensive plan designations, as of June 30, 2007

Land Use	Description	CS	CSA	CSC	CSE	CSG	CSH	CSS	POS	ROW	None (1,2)	Total
1100	Vacant		1.29		10.48	198.41	0.48	73.50	202.14	10.66	8.81	505.78
1200	Vacant Odd shape or sliver				0.05	0.01	0.01		0.07	0.33	1.70	2.16
1300	Vacant along greenway						0.09		20.91			21.00
1500	Building permit issued				18.33							18.33
	Vacant Total		**1.29**		**28.85**	**198.42**	**0.58**	**73.50**	**223.12**	**10.99**	**10.51**	**547.27**
2100	General Farm Use, Primarily Crop					8.92		30.50	1196.46			1235.88
2200	Farm Use, SF Residential							42.23				42.23
	Farm Uses Total					**8.92**		**72.74**	**1196.46**			**1278.11**
3100	Light Industrial use		4.94		254.73	90.05				1.25		350.98
3200	Heavy Industrial use								72.68			72.68
3300	Industrial salvage/storage								1.38	0.30		1.68
	Industrial Uses Total		**4.94**		**254.73**	**90.05**			**74.06**	**1.55**		**425.34**
4100	General Commercial					20.36			0.54			20.91
4150	Large Commercial (malls, centers)											0.00
4200	Hotels/Motels											0.00
4300	Office				12.28		2.41					14.70
4400	Mixed Office and Retail											0.00
4500	Extensive Commercial											0.00
4510	Car/Boat/RV dealerships									0.42		0.42
4520	RV Storage/ Towing Yards											0.00
4530	Building Supply, lumber yards											0.00
4540	Rental equipment yards											0.00
4550	Public self storage											0.00
4560	Retail nurseries & supplies											0.00
4600	Parking Lot			0.30	0.31	5.53	0.18					6.33
	Commercial Uses Total			**0.30**	**12.60**	**25.89**	**2.60**		**0.54**	**0.42**		**42.36**
5100	Single Family			2.09	0.31				9.64			12.04
5200	Single Family attached											0.00
5300	Duplexes, triplex, fourplex											0.00
5400	Multi-Family (5 or more)											0.00
5500	Mobile Home Parks											0.00
5600	Manufacture Home				0.99							0.99

5700	Group quarters											0.00
	Residential Uses Total			**2.09**	**1.30**				**9.64**			**13.03**
6100	Mixed Use non res, with SF unit				0.99							0.99
6200	Mixed Use non res, with MF units											0.00
	Mixed Use Total				**0.99**							**0.99**
7100	Religious - Church or property			1.66								1.66
7200	Parking lot for religious organization											0.00
7300	Schools or school property				1007.44	31.53						1038.98
7400	Government Offices		1.03			166.02						167.06
7500	General Gov't (Fire, Police, Post)				4.79	1247.68	91.65	0.82	174.68			1519.62
7600	Hospitals, large clinics				5.41		26.93					32.33
7700	Other public facilities (clubs, NPO)			110.67								110.67
	Institutional Uses Total		**1.03**	**112.33**	**1017.64**	**1445.24**	**118.57**	**0.82**	**174.68**			**2870.31**
8100	Parks and public Open spaces				10.08	1.26	1.61		490.84			503.79
8200	Recreation (Golf, tennis, baseball)				2.13				578.29			580.41
8300	Water, ponds, river, reservoir			2.11		6.34	0.32		85.00		202.43	296.20
8310	Water, privately owned											0.00
	Parks, Recreation Total			**2.11**	**12.20**	**7.60**	**1.93**		**1154.12**		**202.43**	**1380.40**
9100	Road polygons			2.39	0.37				0.65	0.13	923.33	926.87
9200	Railroad lines, RR yards and ROW				0.35				0.53		2.44	3.32
9300	Utilities, substations, tower	3.25				21.95			0.44		0.67	26.31
9400	Transportation		661.56									661.56
9500	Parking Structure (no add uses)											0.00
	Infrastructure Total	**3.25**	**661.56**	**2.39**	**0.72**	**21.95**			**1.62**	**0.13**	**926.43**	**1618.06**
	Grand Total	**3.25**	**668.83**	**119.22**	**1329.04**	**1798.06**	**123.69**	**147.06**	**2834.24**	**13.09**	**1139.38**	**8175.86**

1) 8.81 acres of vacant/none is narrow frontage on Hwy 22, partially outside of UGB.
2) Acres with no comprehensive designation are primarily tax lot polygons in the river, or roads. There was no corresponding comprehensive plan designation in the GIS shapefile from the City of Salem.
3) This table excludes 155.5 acres in West Salem with a Comprehensive Plan designation of FRM that is inside the city limits but lies outside the UGB. This table is area inside the UGB only.

Appendix K: Acres of land by development designation, by aggregated Comprehensive plan, for the Salem area inside the UGB (by County)

Comprehensive Plan	Vacant	Partially Vacant	Redevelopable	Excluded	Developed	Total
Marion						
Commercial	213.07	101.15	20.10	6.37	1377.06	**1717.76**
Industrial	1437.16	267.20	246.44	472.29	1856.03	**4279.11**
Residential	2369.30	2500.25	95.55	371.43	8056.79	**13393.32**
ROM	7.02	2.12		60.24	54.53	**123.91**
Marion Subtotal	**4026.55**	**2870.72**	**362.09**	**910.32**	**11344.41**	**19514.09**
Polk						
Commercial	43.80	6.15		0.76	70.87	**121.58**
Industrial	3.52	8.14		0.13	88.66	**100.45**
Residential	686.00	977.51	52.55	155.39	1491.87	**3363.33**
Polk Subtotal	**733.32**	**991.80**	**52.55**	**156.28**	**1651.41**	**3585.36**
Both Counties	**4759.86**	**3862.52**	**414.64**	**1066.60**	**12995.83**	**23099.45**

The same footnotes in Table 1, page 7, apply to the data here.

ECONOMIC TRENDS AND FACTORS AFFECTING FUTURE ECONOMIC GROWTH IN THE SALEM-KEIZER METROPOLITAN AREA

Appendix B

The Salem-Keizer metropolitan area exists as part of the larger economy of the Willamette Valley and Portland Metropolitan region and is strongly influenced by regional economic conditions. For many factors, such as labor, the Salem-Keizer metropolitan area does not differ significantly from the broader region. For other factors, such as income, it does. Thus, the Salem-Keizer metropolitan area benefits from being a part of the larger regional and state economy and plays a specific role in the state economy.

This appendix summarizes national, state, county, and local trends and other factors affecting economic growth in the Salem-Keizer metropolitan area. It also presents factors affecting economic development and competitive advantage in the metropolitan area.

This appendix presents economic data for the region for using two geographic definitions of the region.

- The Salem Metropolitan Statistical Area (MSA) is composed of Marion County and Polk County, as defined by the U.S. Census. Where possible and appropriate, this appendix presents data for the Salem MSA and the two counties.

- The Salem-Keizer metropolitan area is the Salem-Keizer Area Transportation Study (SKATS) area, as defined by the Metropolitan Planning Organization. This area includes the Salem-Keizer urban growth boundary (UGB), Turner UGB, as well as portions of Marion and Polk counties that are outside of a UGB. This area is referred to as the Salem-Keizer metropolitan area throughout the study.

NATIONAL TRENDS

Short-term trends

The focus of the economic opportunities analysis is long-term economic opportunities and need for land to accommodate employment growth. The EOA generally focuses on long-term economic cycles (Goal 9 requires a 20-year forecast). The recent recession, however, is severe enough that it may continue to affect Oregon's economy over the next five years, possibly longer. This section briefly summarizes big-picture, short-term economic trends:

- The U.S. economy is in the midst of its deepest recession since World War II. The recession was brought about by instability of financial and housing markets and has already affected Oregon in a variety of ways, most notably with the labor market showing high unemployment and the housing market's oversupply of homes. While the national economy started to recover from the recession in 2010, the recovery has been a "jobless" recovery through 2010, where job growth is sluggish, even as production of goods and services begin to increase. Oregon is starting to see gradual employment increases in 2011.[19]
- According to the Oregon Office of Economic Analysis (OEA), the fourth quarter of 2010 unemployment rate for Oregon was 10.5%, which was essentially unchanged over the previous year. Private sector employers added a few jobs, which were off-set by job losses in the public sector. The OEA forecasts job growth of 0.9% in 2011, with growth increasing to 2% by the fourth quarter of 2011. [20]
- Nationally, housing demand decreased precipitously during 2008 and continued to decline through 2010. This decrease is the result of a number of factors, including the sub-prime lending crisis, difficulties with the financial industry and resulting tightening of credit availability, the impact of decreases in home value for existing homeowners, and the impact of job losses. The national housing market appears to be stabilizing, although prices may continue to decrease in some areas. The OEA expects that Oregon's housing

[19] Office of Economic Analysis. Oregon Economic and Revenue Forecast, December 2010, Vol. XXX, No. 4., http://www.oregon.gov/DAS/OEA/docs/economic/forecast1210.pdf

[20] Ibid.

market should recover more easily than other states that had greater increases in housing prices during the recent housing boom.[21]

- The Oregon Index of Leading Indicators indicates that, for the six months ending in August 2010, the index increased an annualized 1.5%, following a revised 0.2% decrease the prior month. Recent trends in the Index suggest that Oregon's economy grew during the first part of 2010 and slowed through later parts of 2010..[22]
- Governments across the globe attempted to stabilize the economy through economic stimulus. In the U.S. government stimulation that has directly affected Oregon includes government subsidies for the housing market and the return of federal timber payments to Oregon's counties. But the federal timber payments will be phased out over a four-year period, ending in 2011.The withdrawal of these forms of stimulus may have adverse impacts on economic activity. [23]
- Oregon's economic health is dependent on the export market. The countries that Oregon has the most exports to are China, Canada, Malaysia, Japan, and Taiwan. These and other Asian economies have started to rebound and are expected to lead the world out of recession. were all affected by the global recession. As foreign economies recover from the recession, their increased purchasing power will aid U.S. producers looking to export, including export firms in Oregon. Oregon's exports peaked in the third quarter of 2008, and have decreased by about 39% through 2009. Exports rebounded through 2010 but remain nearly 20 percent below peak levels. [24]
- The OEA has identified the following major risks to Oregon's economic recovery:[25]
    - Continuing scarcity of credit for consumers and businesses and financial market instability.
    - Prolonged housing market instability and the possibility of further decreases to housing prices.

[21] Ibid.

[22] Ibid.

[23] Ibid.

[24] Ibid.

[25] Ibid.

- Period of deflation or inflation as a result of very low interest rates drop in housing prices.
- The extent of the global downtown, with financial instability in Europe.
- Increasing national and regional energy prices.

Long-term National trends

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

- **National economic recovery from the current recession.** Despite the unusual depth of the current recession, the national economy started growing in the later part of 2010. The U.S. Gross Domestic Product (GDP) decreased by 2.5% in 2009 but grew at more than 5% in the fourth quarter of 2009. The Congressional Budget Office (CBO) forecasts that the GDP is forecast to grow at about 3.1% for 2011, averaging to 2.8% for 2012. .[26]

  The CBO projects that the unemployment rate will decrease to 9.2 in 2011 and 8.2 in 2012. By 2016, the CBO projects the unemployment rate will decrease to 5.3. In comparison, the average unemployment rate from 1999 to 2008 was 5.0%.The CBO projects that inflation will continue to average about 1% annually, gradually increasing as the economy approaches full employment. The CBO projects long-term inflation to average no more than 2.0% per year from 2013 to 2016.[27]

- **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 between 2010 and 2050, while the number of people under age 65 will grow only 20%. 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.[28]

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[26] Congressional Budget Office. The Budget and Economic Outlook: Fiscal Years 2011 to 2021, January 2011. http://www.cbo.gov/ftpdocs/120xx/doc12039/SummaryforWeb.pdf

[27] Ibid.

[28] The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2009, *The 2009 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, May 12, 2009.

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.[29] This trend can be seen in Oregon.[30]

- **Long-term need for replacement workers.** Over the long-term, 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 34.3 million job openings over the 2008-2018 period, more than twice the growth in employment of 15.3 million jobs. Management occupations and teachers will have the greatest need for replacement workers because these occupations have an older-than-average workforce.[31]

- **Increases in labor productivity.** Productivity, as measured by output per hour, generally increased between 1947 and 2008. The largest recent increases in productivity occurred between 2000 and 2005, with average annual increases of approximately 3%. Between 2005 and 2008, average annual increases averaged about 1.7%.[32] The largest increases in productivity over between 1995 and 2005 were led by industries that produced, sold, or intensively used information technology products. 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.[33]

- **Continued trend towards domestic outsourcing.** Businesses continue to outsource work to less expensive markets. Outsourcing generally falls into two categories: (1) moving jobs from relatively expensive areas to less expensive areas within the U.S. and (2) moving jobs outside of the U.S. to countries with lower labor costs. About three-quarters of layoffs in the U.S. between 1995 and 2004

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

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

[31] T. Alan Lacey and Benjamin Wright, "Occupational Employment Projections to 2018," *Monthly Labor Review*, November 2009, pp. 82-123.

[32] Michael Chernousov, Susan E. Fleck, and John Glaser, "Productivity trends in business cycles: a visual essay," *Monthly Labor Review*, June 2009, pp. 50-63.

[33] 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.

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.[34] Jobs that are outsourced or moved off-shore generally involve operation of technology or use of telecommunications. The service occupations most susceptible to being moved off-shore over the 2006 to 2016 period include: computer programmers, pharmacy technicians, parts salespersons, telephone operators, billing and posting clerks and machine operators, computer operators, data entry keyers, and word processors and typists.[35]

- **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 off-shore.[36]

- **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 led 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 grow with the economy but manufacturing employment will decline.[37]

- **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

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

[35] Roger J. Moncarz, Michael G. Wolf, and Benjamin Wright, "Service-providing occupations, offshoring, and the labor market," *Monthly Labor Review*, December 2008, pp. 71-86.

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

[37] 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.

population and in households' incomes, plus changes in tastes and preferences, have dramatically increased demands for outdoor recreation, scenic vistas, clean water, and other resource-related amenities. Such amenities contribute to a region's quality of life and play an important role in attracting both households and firms.[38]

- **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 2018. These occupations typically have lower pay than occupations requiring an academic degree. [39]

  The national median earning in 2008 was about $34,700. Workers without a high school diploma earned $14,500 less than the median income and workers with a high school diploma earned $7,300 less than median income. Workers with some college earned slightly less than median and workers with a bachelor's degree earned $12,300 more than median. Workers in Oregon experience the same patterns as the nation but pay is generally lower in Oregon than the national average.[40]

- **Continued increase in demand for energy.** Energy prices are forecast to resume to relatively high levels, such as those seen in the 2006 to 2008 period, possibly increasing further over the planning period. There is, however, some uncertainty about energy prices, with the possibility of lower energy prices if major-oil-producing countries expand production beyond the forecast. Higher energy prices are possible if major-oil-producing countries maintain tight

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[38] 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.

[39] T. Alan Lacey and Benjamin Wright, "Occupational Employment Projections to 2018," *Monthly Labor Review*, November 2009, pp. 82-123.

[40] American Community Survey *Table B20004 Median Earnings in the Past 12 Months by Sex by Educational Attainment for the Population 25 Years and Over*, U.S. Census, 2008.

control over production. 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 2009 to 2030 period because of increases in population and economic activity.[41]

- **Growing opportunities for "green" businesses.** Businesses are increasingly concerned with "green" business opportunities and practices. These business practices include "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."[42]

  Defining what constitutes a green job or business is difficult because most industries can have jobs or business practices that are comparatively environmentally beneficial. A 2009 study by the Pew Charitable Trust defines the clean energy economy as an economy that "generates jobs, businesses and investments while expanding clean energy production, increasing energy efficiency, reducing greenhouse gas emissions, waste and pollution, and conserving water and other natural resources."[43]

  The Pew study classifies businesses in the clean energy economy into five separate categories:

  - *Clean Energy.* Building sustainable energy for the future.
  - *Energy Efficiency.* Reducing and managing our energy demand.
  - *Environmentally Friendly Production.* Improving our products and processes.

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[41] Energy Information Administration, 2009, *Annual Energy Outlook 2009 with Projections to 2030*, U.S. Department of Energy, DOE/EIA-0383(2009), March 2009.

[42] Urban Green Partnership at urbangreenpartnership.org

[43] "The Clean Energy Economy: Repowering Jobs, Businesses and Investments Across America." The Pew Charitable Trusts. June 2009. Pages 8-11. http://www.pewcenteronthestates.org/uploadedFiles/Clean_Economy_Report_Web.pdf

- *Conservation and Pollution Mitigation.* Recycling and remediating waste.
- *Training and Support.* Helping develop our clean energy economy.

The study found that clean energy jobs grew about two and one-half times faster than all jobs over the 1998 to 2007 period. Pew found that clean energy jobs grew at 9.1% annually between 1998 and 2007, compared with total job growth of 3.7% over the same period. In Oregon, clean energy jobs grew faster than the national average, with 50.7% annual growth, compared to total job growth of 7.5% annually. In 1998, Oregon had about 1,600 clean businesses and about 19,000 clean jobs by 2007.[44]

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 2008 and 2009 following declines in the housing market and the mortgage banking crisis. The result of the economic downturn has been a decrease in employment related to the housing market, such as construction and real estate. Employment in these industries will recover as the housing market recovers and will continue 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 AND REGIONAL TRENDS

State and regional trends will also affect economic development in the Salem MSA over the next twenty years. The most important of these trends includes the following.

- **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.[45] Oregon had an annual average of 26,290 more in-migrants than out-migrants during the

[44] Ibid., 8.

[45] 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.

period 1990-2000. The annual average dropped to 12,880 during the period 2000-2004.[46] Most in-migrants come from California, Washington, and other western states.[47]

- **Concentration of population and employment in the Willamette Valley.** About 43% of Oregon's population lives within the three-county area of Multnomah, Washington, and Clackamas Counties and nearly 70% of Oregon's population lives in the Willamette Valley.[48] The OEA forecasts that population will continue to be concentrated in the Willamette Valley through 2040, increasing slightly to 71% of Oregon's population.

  Employment growth generally follows the same trend as population growth. Employment growth varies between regions even more, however, as employment reacts more quickly to changing economic conditions. Total employment increased in each of the state's regions over the period 1970-2008 but about half of Oregon's employment was located within the Multnomah, Washington, and Clackamas Counties and about 70% of Oregon's employment was located in the Willamette Valley.[49]

- **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 nearly 20% to about 45% in 2008 while employment in Manufacturing declined from an average of 18% in the 1970s to an average of 12% in 2008.

- **Shift within manufacturing from natural resource-based to high-tech and other manufacturing industries.** Since 1970, Oregon

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[46] 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.

[47] 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.

[48] 2007 American Community Survey.

[49] Oregon Labor Market Information System. Covered Employment and Wages. http://www.qualityinfo.org/olmisj/CEP

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.[50]

- **Continued importance of manufacturing to Oregon's economy.** Revenue from exports totaled $19.4 billion in 2008, an increase of $8.0 billion or 70% since 2000. Four of the five industries that accounted for more than three-quarters of revenue from exports in 2007 ($15.1 billion) were manufacturing industries: Computers and Electronic Production ($8.0 billion); Agricultural Products ($2.8 billion); Machinery Manufacturers ($1.6 billion); Transportation Equipment ($1.5 billion); and Chemical Manufacturers ($1.3 billion).[51] Manufacturing employment is concentrated in eight counties in the Willamette Valley and Portland metropolitan region. Average wages for employees of manufacturing firms in these counties in 2008 ranged from $79,658 to $30,904 and were generally above the state's average (about $53,130).[52]

- **Small businesses continue to account for over 50% of employment in Oregon.** Small businesses, those with 100 or fewer employees, account for 51% of private sector employment in Oregon. 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

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[50] 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.

[51] OECDD, "*Economic Data Packet, April 2009.*"

[52] Oregon Employment Department, Covered Employment and Wages. http://www.qualityinfo.org/olmisj/CEP

diversity (1st = most diversified) based on Gross State Product data for 1963–1986, and 32nd based on data for the 1977–1996 period.[53] A recent analysis, based on 2007 data, ranked Oregon 31st.[54] 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.

Availability of Labor

The availability of trained workers in the Salem-Keizer metropolitan area will impact development of the region's economy over the planning period. Key trends that will affect the workforce in the region over the next 20-years include: growing population, aging population, and commuting trends.

Growing population

Population growth in Oregon tends to follow economic cycles. Historically, Oregon's economy is more cyclical than the nation's, growing faster than the national economy during expansions, and contracting more rapidly than the nation during recessions. 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 slowed during 2007, Oregon's population growth began to slow.

Table B-1 shows that Oregon's population grew from 2.8 million people in 1990 to 3.8 million people in 2009, an increase of more than 980,000 people at an average annual rate of 1.6%. Oregon's growth rate slowed to 1.2% annual growth between 2000 and 2009.

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

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

The Salem Metropolitan Statistical Area (MSA), which is Marion and Polk counties, grew faster than the State between 1990 and 2009, growing at 1.8% annually and adding nearly 109,000 people. Growth in Marion County accounted for more than 80% of the growth in the MSA, adding more than 89,600 people. Polk County added about 19,200 people over the nineteen-year period.

Nearly half of the population growth in the MSA occurred in Salem, which grew at an average annual rate of 2.0% and added more than 50,000 people. Keizer's population increased by two-thirds over the nineteen-year period, adding more than 14,000 people at an average annual rate of 2.7%. Turner grew nearly the same rate as the MSA (1.7%) and added nearly 470 people.

Table B-1. Population in the U.S., Oregon, the Willamette Valley, Salem MSA, Marion and Polk Counties, and the cities of Salem, Keizer, and Turner, 1990-2009

	Population			Change 1990 to 2009		
Area	**1990**	**2000**	**2009**	**Number**	**Percent**	**AAGR**
U.S.	248,709,873	281,421,906	307,006,550	58,296,677	23%	1.1%
Oregon	2,842,321	3,421,399	3,823,465	981,144	35%	1.6%
Willamette Valley	1,962,816	2,380,606	2,659,150	696,334	35%	1.6%
Salem MSA	278,024	347,214	386,955	108,931	39%	1.8%
Marion County	228,483	284,834	318,170	89,687	39%	1.8%
Polk County	49,541	62,380	68,785	19,244	39%	1.7%
Salem	106,786	136,924	156,955	50,169	47%	2.0%
Keizer	21,884	32,515	36,220	14,336	66%	2.7%
Turner	1,281	1,199	1,750	469	37%	1.7%

Source: U.S. Census 1990 SF1 P001, U.S. Census 2000 SF1 P1, U.S. Census Population Estimates, http://www.census.gov/popest/national/national.html, the Population Research Center at Portland State University http://www.pdx.edu/prc/population-estimates
Notes: Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties represent the Willamette Valley Region.
AAGR is average annual growth rate.
Percent change is the change in population between 1990 and 2009 divided by population in 1990.

Migration is the largest component of population growth in Oregon. Between 1990 and 2008, in-migration accounted for 64% of Oregon's population growth. Over the same period, in-migration accounted for 42% of population growth in the Salem MSA. The smaller share of population growth from in-migration indicates that relatively fewer people are moving to the Salem MSA from outside of the region.

Aging population

The number of people age 65 and older in the U. S. is expected to double by 2050, while the number of people under age 65 will only grow by 12%. The economic effects of this demographic change include a slowing of the growth of the labor force, need for workers to replace retirees, aging of the workforce for seniors that continue working after age 65, an increase in the

demand for healthcare services, and an increase in the percent of the federal budget dedicated to Social Security and Medicare.[55]

The average age of residents in the Salem MSA is increasing. Table B-2 shows the change in age distribution for the Salem MSA between 2000 and 2008. All age groups added population over the eight-year period, with about 60% of growth in people aged 45 and older. In comparison, growth in people aged 45 and older accounted for about 80% of growth in Oregon over the eight-year period.

Table B-2 shows that the largest growing age group was people 45 to 64 years, adding more than 17,500 people. Other groups with substantial growth were: people aged 25-44 grew by 9% (more than 8,600 people) and people aged 65 and older grew by 11% (about 4,700 people).

Table B-2. Change in age distribution, Salem MSA, 2000-2008

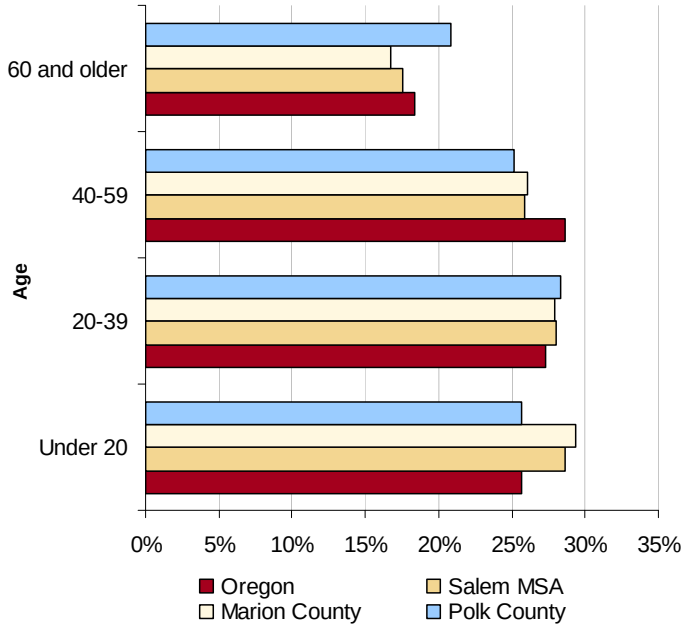
	2000		2008		Change 2000-2008		
Age Group	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Share**
Under 5	25,796	7%	28,411	7%	2,615	10%	0%
5-17	67,982	20%	70,913	18%	2,931	4%	-1%
18-24	36,629	11%	38,023	10%	1,394	4%	-1%
25-44	97,237	28%	105,931	28%	8,694	9%	0%
45-64	75,121	22%	92,684	24%	17,563	23%	2%
65 and over	44,449	13%	49,167	13%	4,718	11%	0%
Total	**347,214**	**100%**	**385,129**	**100%**	**37,915**	**11%**	**0%**

Source: 2000 U.S. Census SF1 P12, 2008 American Community Survey B01001.
Note: Share is the change in the percent of population in each age group For example, in 2000 people aged 45 to 64 accounted for 22% of the population, increasing to 24% in 2008. The change in share of population in this age group is 2%.

The age distribution in the Salem MSA was similar to the State in 2008. Figure B-1 shows the age structure for Oregon, the Salem MSA, Marion County, and Polk County in 2008. The population of the Salem MSA and Marion County was generally younger than the State average and Polk County's was generally older than the State average. Figure B-1 shows that the Salem MSA and Marion County had a larger share of people under 20 years and a smaller share of people over 40 years old than the State average. Polk County had a smaller share of people under 20 years and a larger share of people 60 years and older than the State average.

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

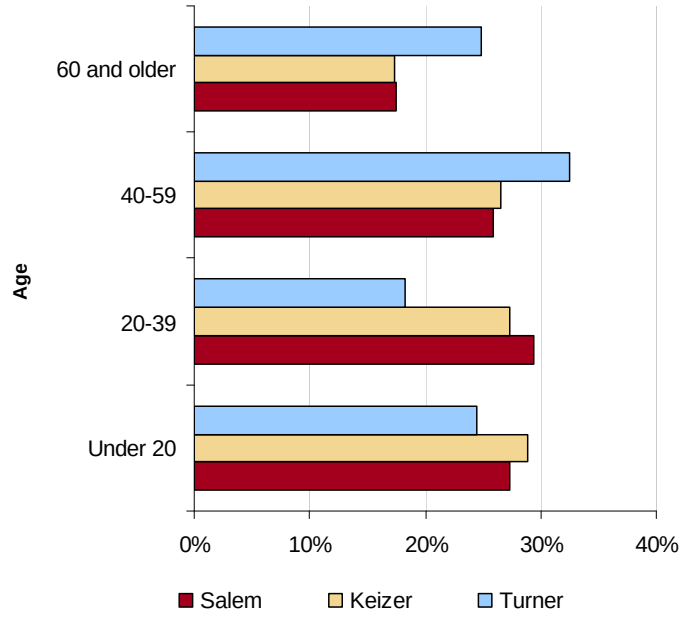
Figure B-1. Population by age, Oregon, Salem MSA, Marion County, and Polk County, 2008



Source: 2008 American Community Survey B01001.

Figure B-2 shows an estimate of population by age in Salem, Keizer, and Turner in 2009. Figure B-2 shows that more than 55% of Salem and Keizer's population is under 40 years, consistent with the age distribution in the Salem MSA. Turner's population is on average older, with more than 55% of the population 40 years or older.

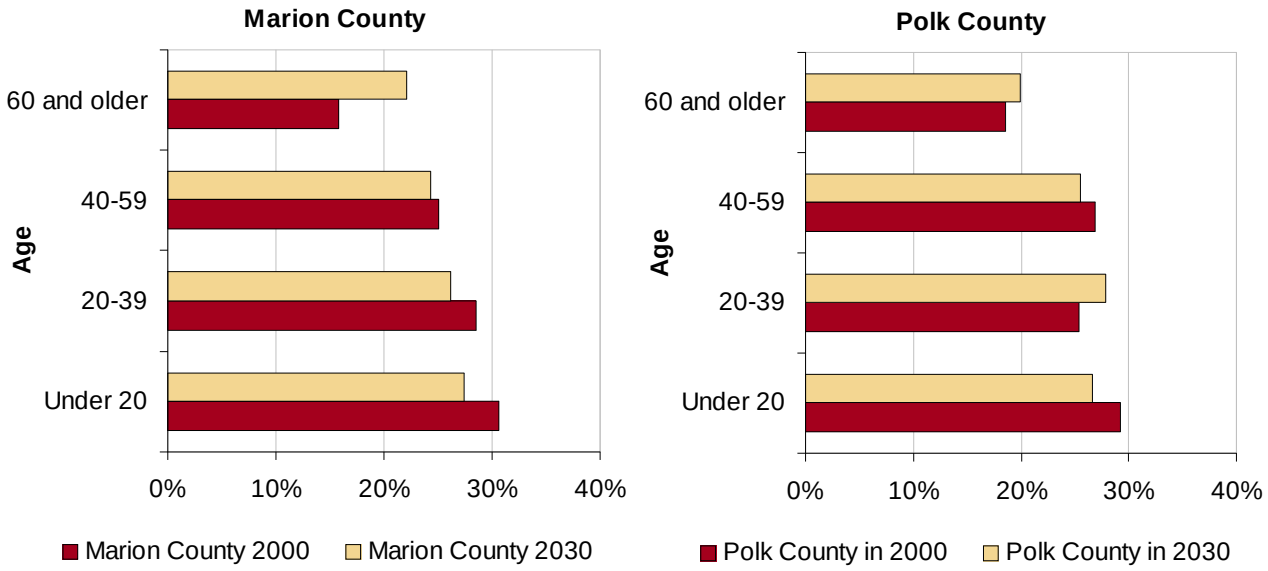
Figure B-2. Estimated population by age, Salem, Keizer, and Turner, 2009



Source: Oregon Prospector, City and County Profiles, 2009.

Figure B-3 shows the population for age in Marion County and Polk County in 2000 and the OEA projection for 2030. The OEA projects the share of the population over the age of 59 in Marion County will grow from 16% in 2000 to 22% in 2030 and from 19% in Polk County in 2000 to 20% in 2030.

Figure B-3. Population by age, Marion County and Polk County, 2000 and 2030



Source: Oregon Office of Economic Analysis, Long-Term County Forecast, http://www.oregon.gov/DAS/OEA/demographic.shtml#Long_Term_County_Forecast

Income

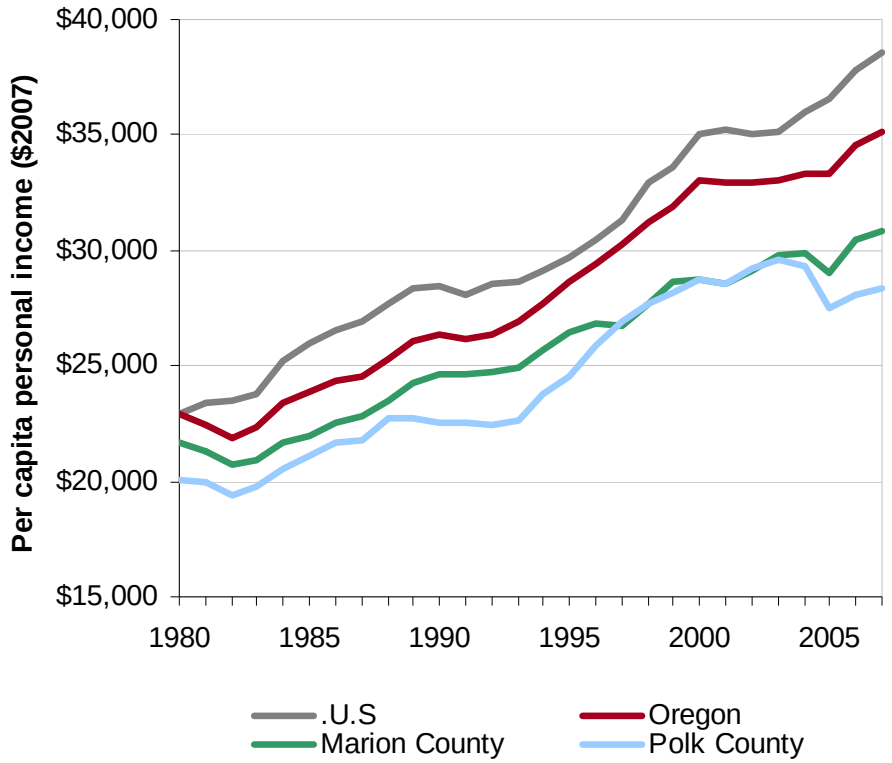
The income of a region affects the workforce and the types of businesses attracted to the region, but it affects workers and businesses in different ways. Workers may be attracted to a region with higher average wage or high wage jobs. Businesses, however, may prefer to locate in regions with lower wages, where the cost of doing business may be lower. This section describes income trends in the Salem-Keizer metropolitan area relative to the U.S. and Oregon.

Figure B-4 shows the change in per capita personal income for the U.S., Oregon, Marion County, and Polk County between 1980 and 2007 (in constant 2007 dollars).Income includes wage and non-wage income sources. Oregon's per capita personal income was consistently lower than the U.S. average over the 27-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, with Oregon's per capita income increasing slower than the nation's.

Per capita income in Marion and Polk counties was lower than the State average, with income generally lower in Polk County than in Marion

County. Marion County's per capita income increased by 42% and Polk County's by 41% over the 27 year period, compared to a 54% increase in per capita income in the State and 69% for the nation.

Figure B-4. Per capita personal income in the U.S., Oregon, Marion County and Polk County, 1980-2007, (2007 dollars)



Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce https://www.bea.gov/regional/reis/default.cfm?selTable=CA1-3&section=2.

There are three basic reasons that income has been lower in Oregon and Marion and Polk Counties than in the U.S.: (1) wages for similar jobs are lower; (2) the occupational mix of employment is weighted towards lower paying occupations; and (3) a higher proportion of the population has transfer payments (e.g. social security payments for retirees), which are typically lower than earnings. To a certain degree, these factors are all true for both Oregon and Marion and Polk Counties and result in lower income.

In addition, wages in Marion and Polk counties and Oregon tend to be more volatile than the national average. The major reason for this volatility is that the relative lack of diversity in the State and County economy. Wages in Oregon and Marion and Polk counties are typically impacted more than the national average by downturns in either the national economy or in industries in Oregon and Marion and Polk counties that are dependent on natural resources (e.g., timber and wood processing or agricultural products).

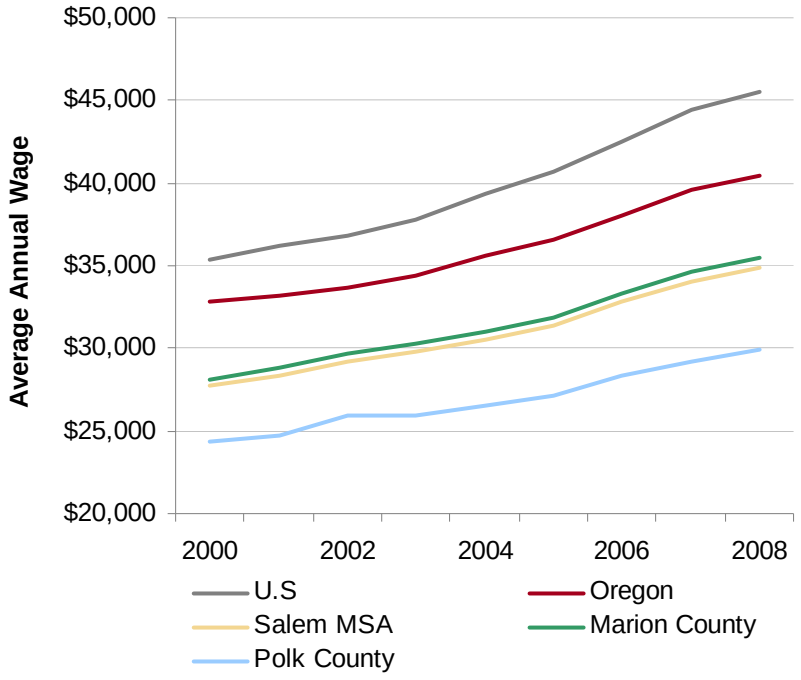
Table B-3 and Figure B-5 show the change in average annual pay per employee in the U.S., Oregon, Salem MSA Marion County, and Polk County for 2000 and 2008. The national average wage was higher than the State or regional averages. The national average wage increased by 29% over the eight year period, an increase of more than $10,000. In comparison, the average wage in Oregon increased by 22% (more than $7,700) and increased in the Salem MSA by 20% (nearly $7,200). Average wages grew by 21% in Marion County ($7,400) and 16% in Polk County (about $5,550)

Table B-3. Average annual pay, U.S., Oregon, Salem MSA, Marion County, and Polk County (nominal dollars), 2000 and 2008

			Change 2000 to 2008	
	2000	2008	Nominal	Percent
U.S	$35,323	$45,563	$10,240	29%
Oregon	$32,776	$40,486	$7,710	22%
Salem MSA	$27,697	$34,870	$7,173	20%
Marion County	$28,119	$35,519	$7,400	21%
Polk County	$24,334	$29,886	$5,552	16%

Source: Oregon Employment Department, http://www.qualityinfo.org/olmisj/CEP, and U.S. Bureau of Labor Statistics, http://www.bls.gov/cew/

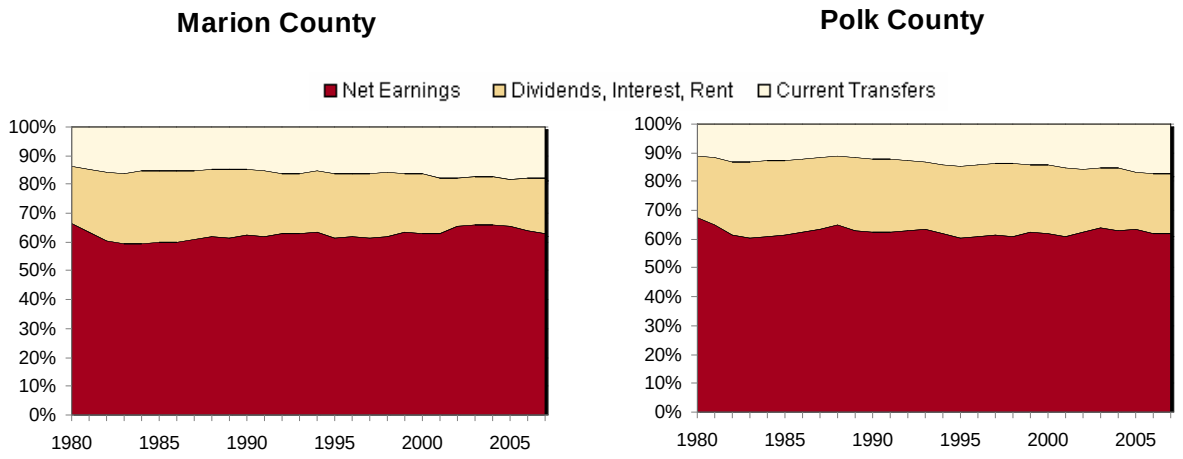
Figure B-5. Average annual pay, U.S., Oregon Salem MSA, Marion County, and Polk County (nominal dollars), 2000-2008



Source: Oregon Employment Department, http://www.qualityinfo.org/olmisj/CEP, and U.S. Bureau of Labor Statistics, http://www.bls.gov/cew/.
Data not adjusted for inflation.

Figure B-6 shows the major sources of per capita personal income for Marion and Polk counties between 1980 and 2007. The percent of income from net earnings in Marion County is 64% and 63% in Polk County. These trends are consistent with State trends.

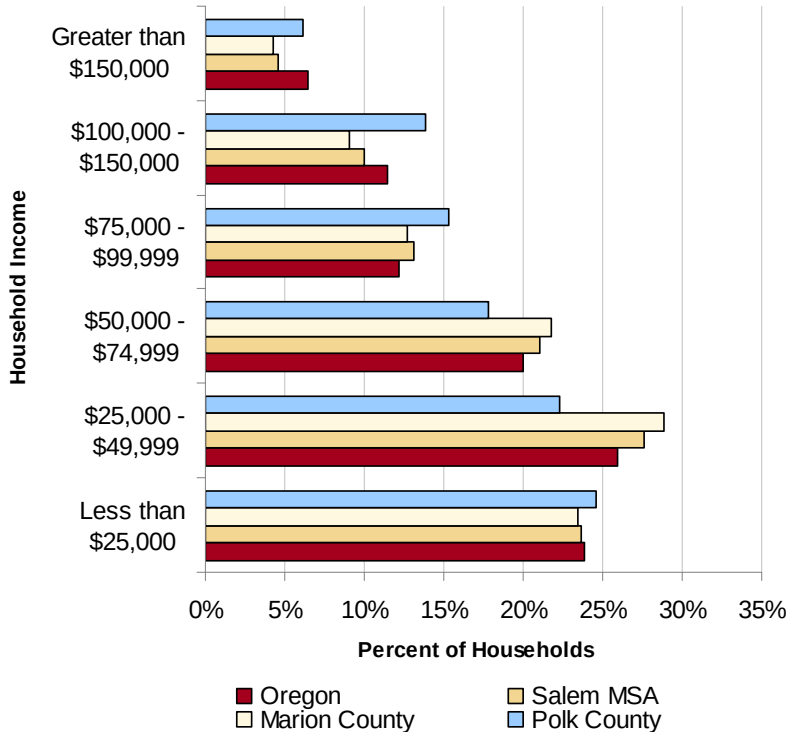
Figure B-6 Per capita personal income by major sources, Oregon and Lane County, 1980-2005



Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce, https://www.bea.gov/regional/reis/default.cfm?selTable=CA05

Figure B-7 shows the distribution of household income in Oregon, the Salem MSA, Marion County and Polk County in 2008. Marion County has a larger share of middle-income households and Polk County has a larger share of higher income households. About half of households in the Salem MSA and in Marion County have income between $25,000 and $74,999, compared with 40% of Polk County households and 46% of Oregon's households. About 20% of Polk County households have income of $100,000 or more, compared to 13% of Marion County households and 18% of Oregon households.

Figure B-7. Distribution of household income of Oregon, the Salem MSA, Marion County and Polk County, 2008



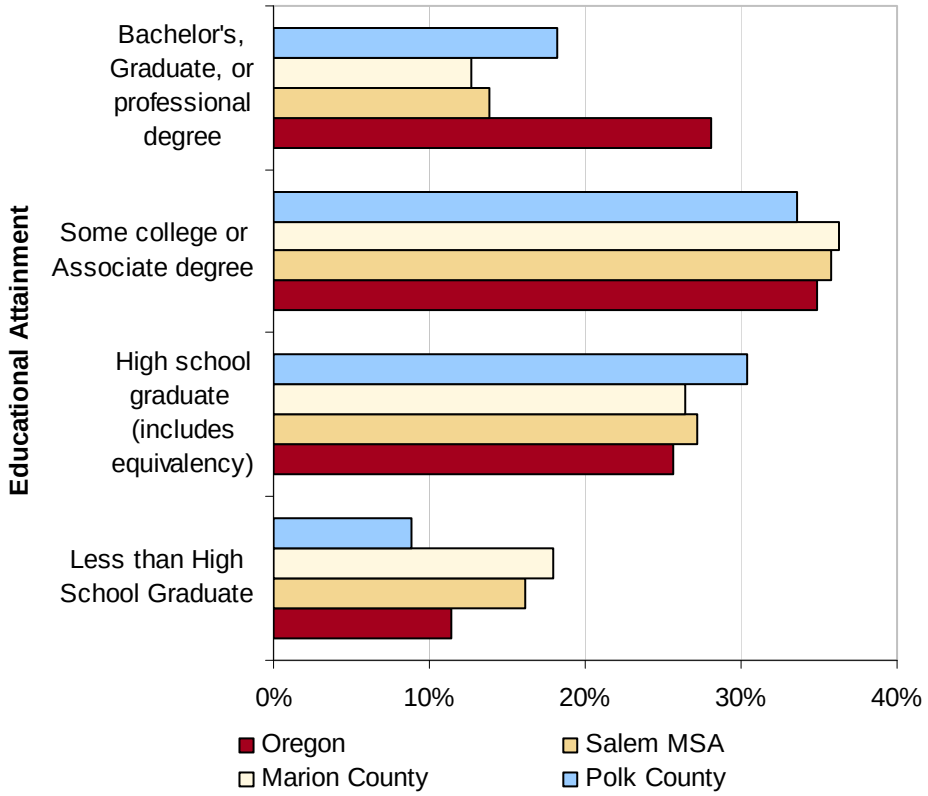
Source: 2008 American Community Survey, B19001

The low average wage in the Salem-Keizer metropolitan area, relative to Oregon and the U.S., make the region attractive to some firms considering moving within the U.S. Firms continue to outsource back-office functions, such as call centers or administrative functions, within the U.S. The metropolitan area's relatively low labor costs and the regional availability of skilled workers make the region attractive to firms considering relocating back-office functions.

Educational attainment

The availability of trained, educated workers affects the quality of labor in a community. Educational attainment is an important labor force factor because firms need to be able to find educated workers. Figure B-8 shows the share of population by education level completed in Oregon. Salem MSA, Marion County, and Polk County in 2008. The Salem MSA had a smaller share of residents with a Bachelor's or Graduate or professional degree (21%) than the State average (28%). Within the Salem MSA, Marion County had a smaller share (19%) and Polk County a larger share (27%) of residents with a Bachelor's degree or higher.

Figure B-8. Educational attainment for the population 25 years and over, Oregon, Salem MSA, Marion County, and Polk County, 2008



Source: 2008 American Community Survey, B15002

Opportunities for workforce training and post-secondary education in the immediate Salem-Keizer metropolitan area include: Willamette University, Western Oregon University, Chemeketa Community College, and Corban College.

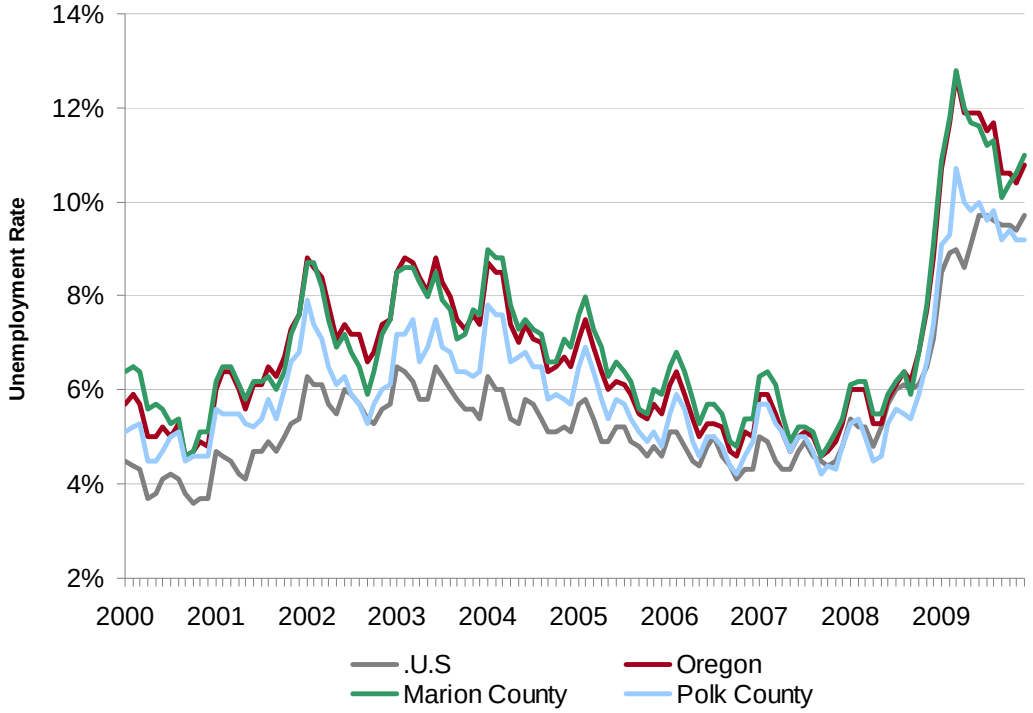
Workforce participation and unemployment

The current labor force participation rate is an important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. Children, retirees, students, and people who are not actively seeking work are not considered part of the labor force. According to the 2008 American Community Survey, the Salem MSA has more than 193,605 people in its labor force.

The unemployment rate is one indicator of the relative number of workers who are actively seeking employment. Figure B-9 shows the unemployment rate for the U.S., Oregon, Marion County, and Polk County for the past decade. During this period, Marion County's unemployment rate has generally been higher than the State and national averages. Polk

County's unemployment rate has generally been higher than the national average but lower than the State average.

Figure B-9. Unemployment rates for U.S., Oregon, Marion County, and Polk County, January 2000 to December 2009



Source: Bureau of Labor Statistics, http://data.bls.gov/PDQ/outside.jsp?survey=la, http://data.bls.gov/PDQ/outside.jsp?survey=ln
Note: unemployment data is not seasonally adjusted

The workforce is composed of all people 16 years and older who are available for work, whether they are employed or unemployed. The rate of workforce participation is a determiner of worker availability. A higher workforce participation rate indicates that more workers are available to businesses.

Table B-4 presents the workforce participation rate for Oregon, the Salem MSA, Marion County, and Polk County. The workforce participation rate in the Salem MSA is 64%, comparable to the State average. The workforce participation rate in Marion County is 65% and 60% in Polk County.

The workforce participation rate for workers 65 years and older is typically lower than workforce for all ages. As the share of people 65 years and older increases, workforce participation for this age group may change, depending on worker's ability to and preference for retirement. Workforce participation by people 65 years and older was 10% in the Salem MSA, compared to the State average of 13%.

Table B-4. Workforce participation, population 16 years and older, U.S., Oregon, Salem MSA, Marion County, and Polk County, 2008

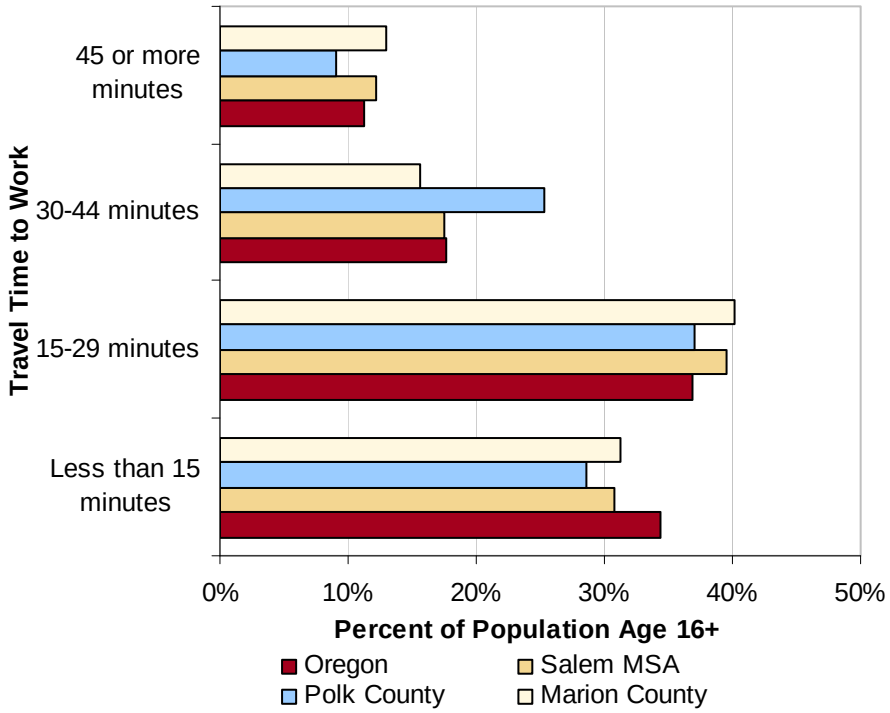
	Oregon	Salem MSA	Marion County	Polk County
All Population 16 years and older				
In workforce	65%	64%	65%	60%
Not in workforce	35%	36%	35%	40%
Population 65 years and older				
In workforce	13%	10%	10%	8%
Not in workforce	87%	90%	90%	92%

Source: 2008 American Community Survey, C23001

Commuting patterns

Commuting plays an important role in the economy of the Salem-Keizer metropolitan area. Figure B-10 shows a comparison of the commute time to work for residents 16 years and older for Oregon, Salem MSA, Marion County, and Polk County in 2008. About 70% of workers in the Salem MSA and in Marion County commute 29 minutes or less, consistent with State averages. Two-thirds of Polk County workers commute 29 minutes or less and one-quarter commute between 30 and 44 minutes, higher than the regional and State averages.

Figure B-10. Commuting time to work in minutes for residents 16 years and older, Oregon, Salem MSA, Marion County, and Polk County, 2008



Source: 2008 American Community Survey, B08303

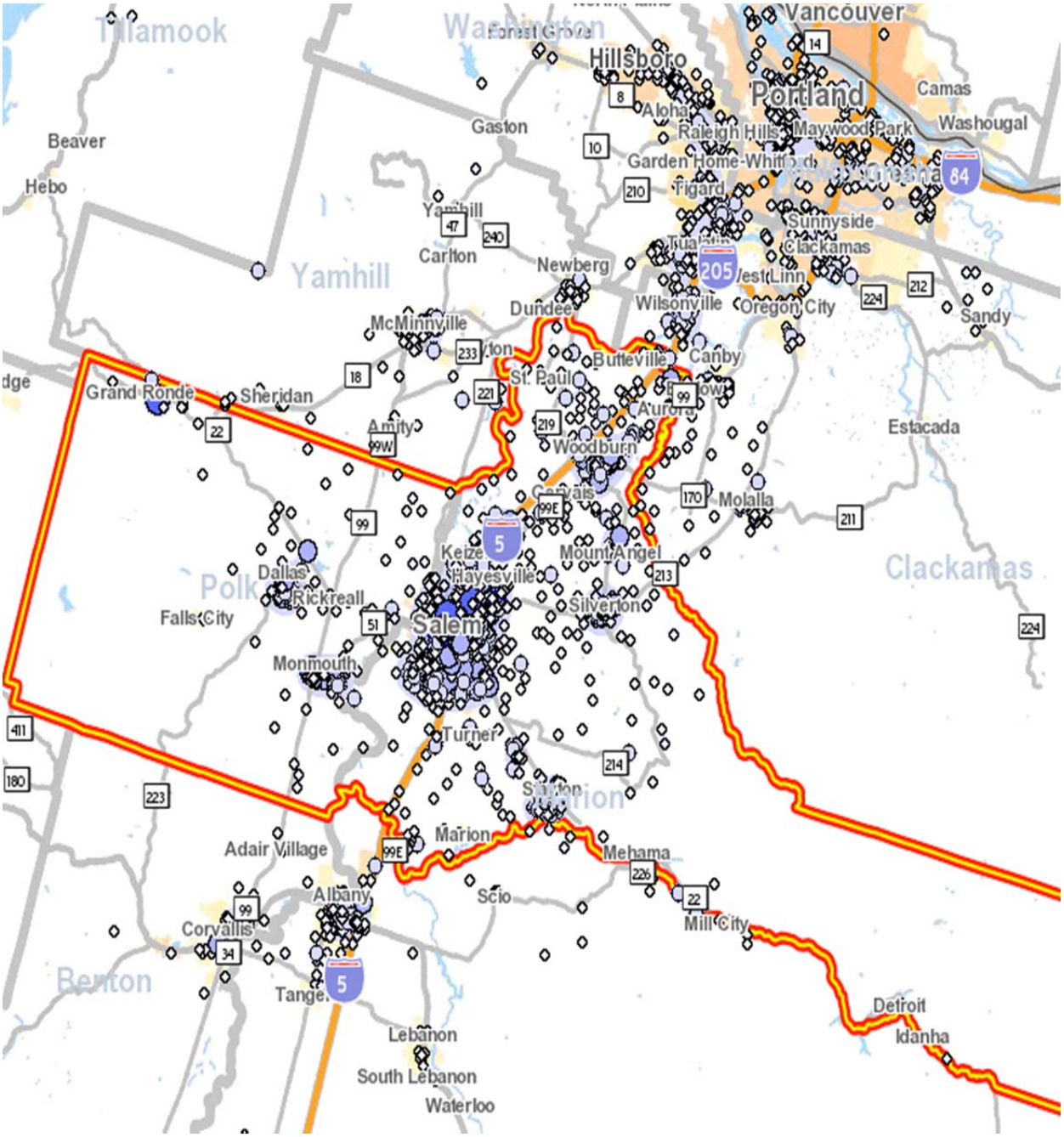
Table B-5 and Figure B-11 show the places where residents of the Salem MSA were employed in 2008. About 57% of the working residents of the Salem MSA were employed in Marion County, with 39% working in Salem. Residents of the Salem MSA worked throughout the Willamette Valley, from Multnomah County to Lane County, with employment clustered around I-5 and other major regional highways.

Table B-5. Places that residents of the Salem MSA were employed, 2008

Location	Number	Percent
Marion County	82,992	57%
Polk County	11,966	8%
Multnomah County	10,823	7%
Washington County	10,070	7%
Clackamas County	8,468	6%
Linn County	4,404	3%
Yamhill County	3,231	2%
Lane County	2,692	2%
All other counties	9,819	7%
Salem	59,499	41%
Portland	9,514	7%
Woodburn	4,428	3%
Keizer	3,629	3%
Dallas	2,780	2%
All other cities	64,615	45%
Total	**144,465**	**100%**

Source: U.S. Census Bureau: LED on the Map, http://lehdmap3.did.census.gov/themap3/

Figure B-11. Places that residents of the Salem MSA were employed, 2008



Source: U.S. Census Bureau: LED on the Map, http://lehdmap3.did.census.gov/themap3/

Table B-6 shows where residents of Salem and residents of Keizer were employed in 2008. Table B-6 shows that the majority of residents of Salem (56%) were employed in Salem and 16% of Salem's workers were employed in the counties around Portland (Multnomah, Washington, and Clackamas counties). About 44% of Keizer's workers were employed in Salem and 7% were employed in Keizer. About 19% of Keizer's workers were employed in the counties around Portland (Multnomah, Washington, and Clackamas counties).

Table B-6. Places that residents of Salem and Keizer were employed, 2008

	Salem		Keizer	
Location	**Number**	**Percent**	**Number**	**Percent**
Marion County	37,473	65%	8,496	65%
Multnomah County	3,794	7%	1,008	8%
Washington County	3,236	6%	865	7%
Polk County	3,538	6%	576	4%
Clackamas County	2,201	4%	576	4%
Linn County	1,333	2%	276	2%
Yamhill County	1,037	2%	217	2%
Lane County	1,095	2%	288	2%
All other counties	3,582	6%	810	6%
Salem	31,908	56%	5,813	44%
Portland	3,355	6%	884	7%
Keizer	1,442	3%	961	7%
Woodburn	992	2%	371	3%
All other cities	19,592	34%	5,083	39%
Total	**57,289**	**100%**	**13,112**	**100%**

Source: U.S. Census Bureau: LED on the Map,
http://lehdmap3.did.census.gov/themap3/

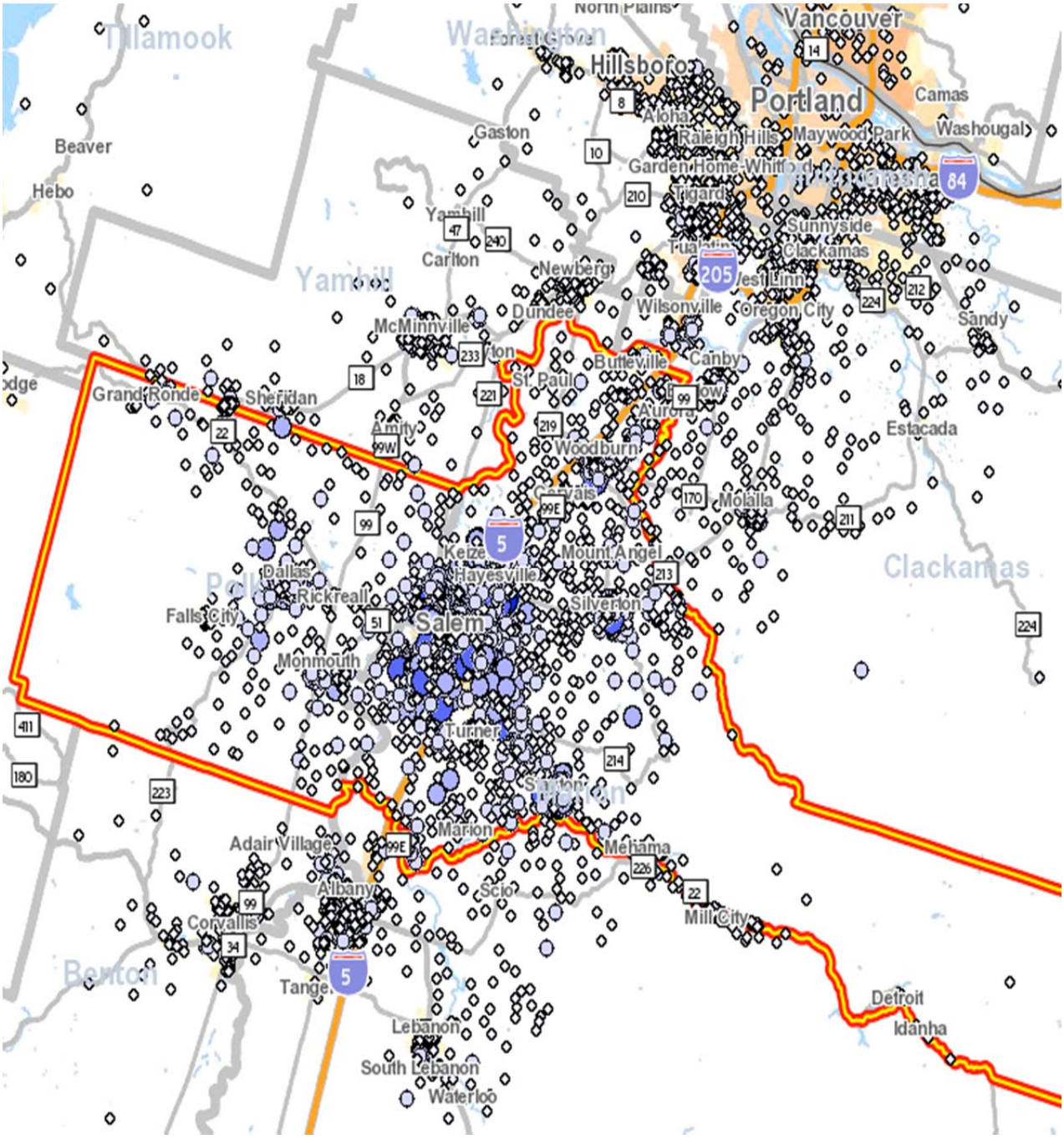
Table B-7 and Figure B-12 show where employees of firms located in the Salem MSA lived in 2008. Workers in the Salem MSA lived throughout the Willamette Valley, from Multnomah County to Lane County. Workers lived in both incorporated areas and in unincorporated parts of the region. Fifty-three percent of workers in the Salem MSA lived in Marion County and 13% lived in Polk County. Twenty-nine percent of workers in the Salem MSA lived in Salem and 6% lived in Keizer.

Table B-7. Places where workers in the Salem MSA lived, 2008

Location	Number	Percent
Marion County	75,982	53%
Polk County	18,976	13%
Clackamas County	7,007	5%
Multnomah County	6,367	4%
Linn County	5,860	4%
Washington County	5,783	4%
Yamhill County	4,449	3%
Lane County	4,075	3%
Benton County	2,500	2%
All other counties	11,165	8%
Salem	49,951	35%
Keizer	9,020	6%
Portland	4,854	3%
Dallas	4,119	3%
Woodburn	3,262	2%
All other cities	70,958	50%
Total	**142,164**	**100%**

Source: U.S. Census Bureau: LED on the Map, http://lehdmap3.did.census.gov/themap3/

Figure B-12. Places where workers in the Salem MSA lived, 2008



Source: U.S. Census Bureau: LED on the Map, http://lehdmap3.did.census.gov/themap3/

These commuting patterns show employers in the Salem MSA have access to workforce living throughout the Willamette Valley, with workers and employers concentrated around the Salem-Keizer metropolitan area. The majority of workers living in Salem (56%) also worked in Salem. The majority of workers living in Keizer commuted to Salem (44%) or the Portland area (19%) for work.

Commuting times within the Salem MSA are generally comparable to commuting times throughout the State. Workers in the Salem MSA live throughout the Willamette Valley and throughout the State of Oregon. The commuting patterns of workers employed in the Salem MSA create demand for automotive and other forms of transportation, both within the Salem-Keizer metropolitan area and on roads throughout the Willamette Valley, especially along the I-5 corridor.

Increasing energy prices may impact commuting patterns within the Salem MSA. The impact is most likely to be greatest for workers living further from the employment center in Salem, such as workers living in the Portland region, the Eugene-Springfield region, or workers living outside the Willamette Valley. Given that Salem is the State capital, commuters working for or with the State are unlikely to stop commuting to Salem. Increases in energy prices will cause some commuters to shift to cars with increased gas mileage and may change the mode of commuting, shifting commuting to trains, buses, carpools, or telecommuting.

Changes in employment

The economy of the nation changed in the 1980 to 2008 period. These changes affected the composition of Oregon's economy, including the Salem MSA. The most important shift during this period at the national-level was the shift in employment from a focus on manufacturing to services. The most important shift in Oregon, including the Salem MSA, has been the shift from a timber-based economy to a more diverse economy, with the greatest employment in services.

The Salem MSA County employment trends

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

In the 1970s Oregon started to transition away from reliance on traditional resource-extraction industries. An important indicator of this transition is the shift within Oregon's manufacturing sector, with a decline in the level of employment in the Lumber & Wood Products industry[56] and concurrent

[56] Lumber and Wood Products manufacturing is in Standard Industrial Classification (SIC) 24

growth of employment in high-technology manufacturing industries (Industrial Machinery, Electronic Equipment, and Instruments[57]).

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

The changes in employment in the Salem MSA have followed similar trends as changes in national and state employment. Between 1980 and 2006, the Salem MSA added more than 71,000 jobs. The sectors with the greatest change in share of employment were Services, adding more than 40,000 or 57% of new jobs. Industrial sectors and Government both added more than 14,000 jobs, accounting for about 20% of new jobs.

Tables B-7 and B-8 present data from the Oregon Employment Department that show changes in covered employment[58] for the Salem MSA between 1980 and 2008. The changes in sectors and industries are shown in two tables: (1) between 1980 and 2000 and (2) between 2001 and 2008. 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 B-8 shows the changes in covered employment by sector in the Salem MSA between 1980 and 2000. Covered employment in the MSA grew from 88,113 to 143,540, an increase of 63% or 55,427 jobs. Every sector added jobs during this period, except for Nonclassifiable. The sector with the greatest change in employment was Services, adding a total of 20,617 jobs or about 37% of all new jobs. Other sectors with substantial growth were: Retail Trade (adding 8,913 jobs), Government (adding 8,865 jobs), and Agricultural, Forestry, and Fishing (adding 6,007 jobs).

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[57] SIC 35, 36, 38

[58] 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.

Manufacturing grew by 3,483 jobs during the twenty-year period. The industries with the largest manufacturing growth were Electric and Electronic Equipment, Fabricated Metal Products, and Lumber and Wood Products. The manufacturing industry with the greatest loss of employment was Paper and Allied Products.

Average pay per employee increased from about $13,000 in 1980 to $27,700 in 2000 (not adjusted for inflation). The sectors that grew the most in terms of employment generally paid less than average in 2000, with Services paying 88% of average, Retail Trade paying about 64% of average, and Agriculture, Forestry, and Fishing paying 63% of average. Government jobs generally paid more than the average, varying between 112% of average for Local Government to 149% of average for Federal Government.

Table B-8. Covered employment the Salem MSA, 1980-2000

				Change 1980 to 2000			
Sector	**1980**	**1990**	**2000**	**Difference**	**Percent**	**AAGR**	**Share**
Agriculture, Forestry & Fishing	**3,985**	**7,520**	**9,992**	**6,007**	**151%**	**4.7%**	**2%**
Mining	59	73	276	217	368%	8.0%	0%
Construction	4,247	4,714	7,469	3,222	76%	2.9%	0%
Manufacturing	14,315	16,000	17,798	3,483	24%	1.1%	-4%
Trans., Comm., & Utilities	2,718	2,896	4,448	1,730	64%	2.5%	0%
Wholesale Trade	3,189	4,086	4,403	1,214	38%	1.6%	-1%
Retail Trade	**15,993**	**19,730**	**24,906**	**8,913**	**56%**	**2.2%**	**-1%**
Finance, Insurance & Real Estate	4,693	5,029	5,882	1,189	25%	1.1%	-1%
Services	**12,949**	**21,681**	**33,566**	**20,617**	**159%**	**4.9%**	**9%**
Nonclassifiable/all others	91	99	61	-30	-33%	-2.0%	0%
Government	**25,874**	**30,026**	**34,739**	**8,865**	**34%**	**1.5%**	**-5%**
Total	**88,113**	**111,854**	**143,540**	**55,427**	**63%**	**2.5%**	

Source: Oregon Employment Department, Oregon Labor Market Information System, Covered Employment & Wages, http://www.qualityinfo.org/olmisj/CEP. Summary by industry and percentages calculated by ECONorthwest
Note: **Bolded** sectors are the sectors with the majority of employment.

Table B-9 shows the change in covered employment by sector in the Salem MSA between 2001 and 2008. Employment increased by 16,553 jobs or 12% during this period. The sectors with the largest increases in numbers of employees were Government, Health and Social Assistance, Construction, and Retail Trade. The sector that lost the greatest number of employees during this period was Manufacturing.

Table B-9. Covered employment in the Salem MSA, 2001-2008

Sector	2001	2008	Change 2001 to 2008 Difference	Percent	AAGR	Share
Natural Resources and Mining	10,534	12,246	1,712	14%	2.2%	0%
Construction	**6,759**	**9,030**	**2,271**	**25%**	**4.2%**	**1%**
Manufacturing	15,014	13,952	-1,062	-8%	-1.0%	-2%
Wholesale	3,354	3,945	591	15%	2.3%	0%
Retail	**15,646**	**17,659**	**2,013**	**11%**	**1.7%**	**0%**
Transportation & Warehousing	3,172	3,703	531	14%	2.2%	0%
Information	1,929	1,447	-482	-33%	-4.0%	0%
Finance & Insurance	3,579	4,074	495	12%	1.9%	0%
Real Estate Rental & Leasing	2,434	2,174	-260	-12%	-1.6%	0%
Professional, Scientific & Tech. Srv.	3,569	4,296	727	17%	2.7%	0%
Management of Companies	660	1,461	801	55%	12.0%	0%
Admin. Support & Cleaning Srv.	5,628	6,945	1,317	19%	3.0%	0%
Education	1,819	2,116	297	14%	2.2%	0%
Health & Social Assistance	**14,692**	**17,176**	**2,484**	**14%**	**2.3%**	**0%**
Arts, Entertainment & Recreation	1,473	1,440	-33	-2%	-0.3%	0%
Accomodations & Food Services	9,836	11,151	1,315	12%	1.8%	0%
Other Services	5,289	5,758	469	8%	1.2%	0%
Private Non-Classified	39	37	-2	-5%	-0.7%	0%
Government	**37,264**	**40,633**	**3,369**	**8%**	**1.2%**	**-1%**
Total	**142,690**	**159,243**	**16,553**	**12%**	**1.6%**	

Source: Oregon Employment Department, Oregon Labor Market Information System, Covered Employment & Wages, http://www.qualityinfo.org/olmisj/CEP. Summary by industry and percentages calculated by ECONorthwest
Note: **Bolded** sectors are the sectors with the majority of employment.

Employment in the Salem-Keizer metropolitan area

Table B-10 shows a summary of employment data for the Salem-Keizer metropolitan area in 2008.[59] The Salem-Keizer metropolitan area had 104,180 jobs at 7,092 establishments in 2008, with an average firm size of 15 employees. The sectors with the greatest number of employees were: Government (29%), Retail (12%), Health Care and Social Assistance (12%), and Accommodation and Food Service (8%). These sectors accounted for 63,261 or 61% of the region's jobs.

[59] The employment summary is for covered employment located within the Salem-Keizer Area Transportation Study (SKATS) area, as defined by the Metropolitan Planning Organization. The summary is based on confidential firm-level data provided by the Oregon Employment Department Quarterly Census of Employment and Wages (QCEW).

Table B-10. Covered employment in the Salem-Keizer metropolitan area, 2008

Sector / Industry	Establish-ments	Employees Number	Employees % of Emp.	Payroll Total Payroll	Payroll Average Pay / Emp.
Agriculture, Forestry, Fishing & Hunting	**90**	**1,954**	**2%**	**$ 36,387,035**	**$ 18,622**
Support Activities for Agriculture & Forestry	49	1,327	1%	$ 21,829,183	$ 16,450
Other Agriculture & Forestry	41	627	1%	$ 14,557,852	$ 23,218
Mining	**7**	**89**	**0%**	**$ 3,290,475**	**$ 36,972**
Utilities	**4**	**297**	**0%**	**$ 21,696,928**	**$ 73,054**
Construction	**828**	**5,347**	**5%**	**$ 233,477,841**	**$ 43,665**
Specialty Trade Contractors	489	3,653	4%	$ 152,450,936	$ 41,733
Construction of Buildings	280	1,138	1%	$ 53,515,896	$ 47,026
Heavy & Civil Engineering Construction	59	556	1%	$ 27,511,009	$ 49,480
Manufacturing	**269**	**6,959**	**7%**	**$ 251,127,535**	**$ 36,087**
Food Manufacturing	34	3,103	3%	$ 92,786,269	$ 29,902
Fabricated Metal Product Manufacturing	43	797	1%	$ 36,765,521	$ 46,130
Other Manufacturing	192	3,059	3%	$ 121,575,745	$ 39,744
Wholesale Trade	**292**	**2,067**	**2%**	**$ 98,246,160**	**$ 47,531**
Retail Trade	**792**	**12,578**	**12%**	**$ 314,889,848**	**$ 25,035**
General Merchandise Stores	27	3,145	3%	$ 71,758,060	$ 22,817
Food & Beverage Stores	116	2,145	2%	$ 48,036,910	$ 22,395
Other Retail Trade	649	7,288	7%	$ 195,094,878	$ 26,769
Transportation & Warehousing	**126**	**1,300**	**1%**	**$ 42,661,515**	**$ 32,817**
Information	**89**	**1,109**	**1%**	**$ 50,271,094**	**$ 45,330**
Finance & Insurance	**416**	**3,305**	**3%**	**$ 159,041,664**	**$ 48,122**
Real Estate & Rental & Leasing	**412**	**1,535**	**1%**	**$ 46,556,053**	**$ 30,330**
Professional, Scientific, & Technical Srv.	**654**	**3,451**	**3%**	**$ 172,002,728**	**$ 49,841**
Management of Companies & Enterprises	**46**	**1,051**	**1%**	**$ 54,871,892**	**$ 52,209**
Administrative & Support & Waste Mgt.	**336**	**5,700**	**5%**	**$ 145,584,484**	**$ 25,541**
Administrative & Support Srv.	321	5,461	5%	$ 133,744,807	$ 24,491
Waste Management & Remediation Srv.	15	239	0%	$ 11,839,677	$ 49,538
Private Educational Srv.	**70**	**1,737**	**2%**	**$ 59,790,496**	**$ 34,422**
Health Care & Social Assistance	**774**	**12,341**	**12%**	**$ 539,638,015**	**$ 43,727**
Ambulatory Health Care Srv.	462	5,043	5%	$ 279,256,281	$ 55,375
Other Health Care	172	5,615	5%	$ 225,418,893	$ 40,146
Social Assistance	140	1,683	2%	$ 34,962,841	$ 20,774
Arts, Entertainment, & Recreation	**69**	**973**	**1%**	**$ 13,818,169**	**$ 14,202**
Accommodation & Food Srv.	**529**	**8,409**	**8%**	**$ 120,347,102**	**$ 14,312**
Other Srv.	**915**	**4,045**	**4%**	**$ 94,754,068**	**$ 23,425**
Government	**410**	**29,933**	**29%**	**$ 1,534,522,622**	**$ 51,265**
Federal Government	21	936	1%	$ 54,173,503	$ 57,878
State Government	236	17,391	17%	$ 1,002,068,343	$ 57,620
Local Government	153	11,606	11%	$ 478,280,776	$ 41,210
Total	**7,092**	**104,180**	**100%**	**$ 3,869,424,708**	**$ 37,142**

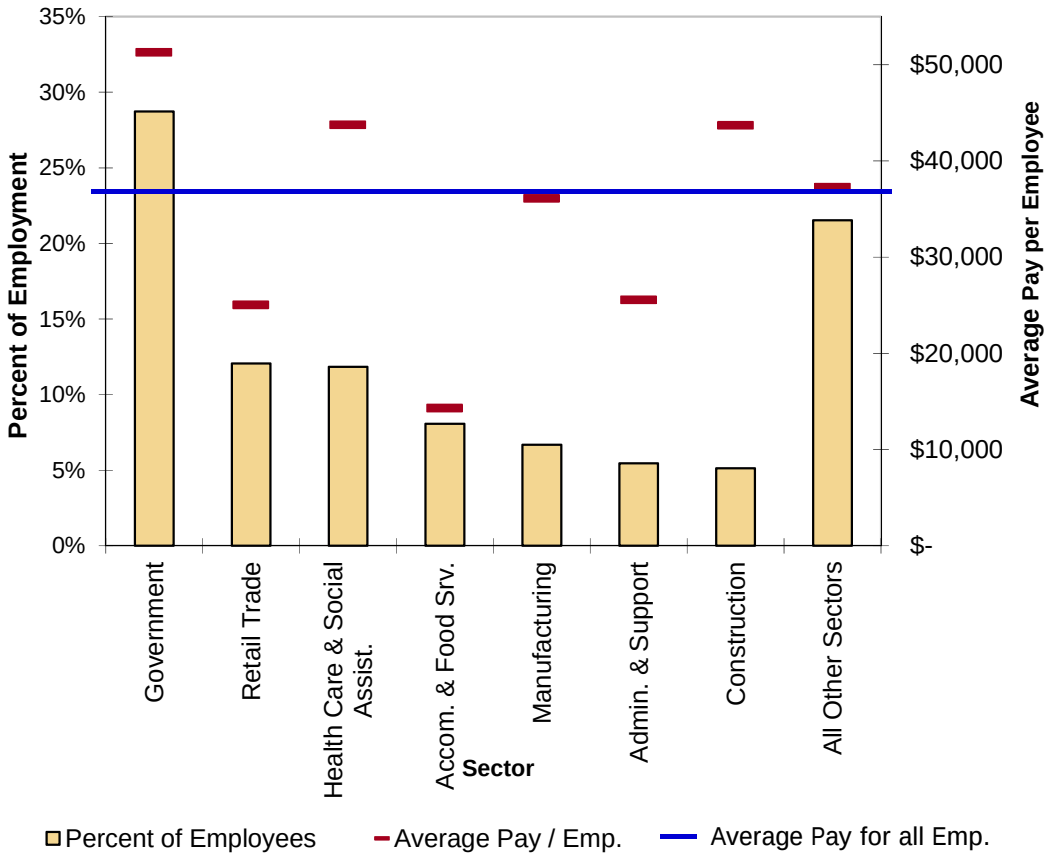
Source: Oregon Employment Department Quarterly Census of Employment and Wages (QCEW). Summary by industry and percentages calculated by ECONorthwest.
Note: The employment shown in the table is for the area covered by SKATS.

Figure B-13 shows the percent of all employment and average pay per employee for sectors with 5% or more of employment in the Salem-Keizer metropolitan area in 2008. Figure B-13 shows average pay for all employees ($37,000) as a blue line across the graph and average pay for individual sectors as short red lines. Figure B-13 shows:

The sectors with more than 5% of employment and *above* average pay are: Government ($51,000 average pay per employee), Health Care and Social Assistance ($43,700), Manufacturing ($36,100), and Construction ($43,700).

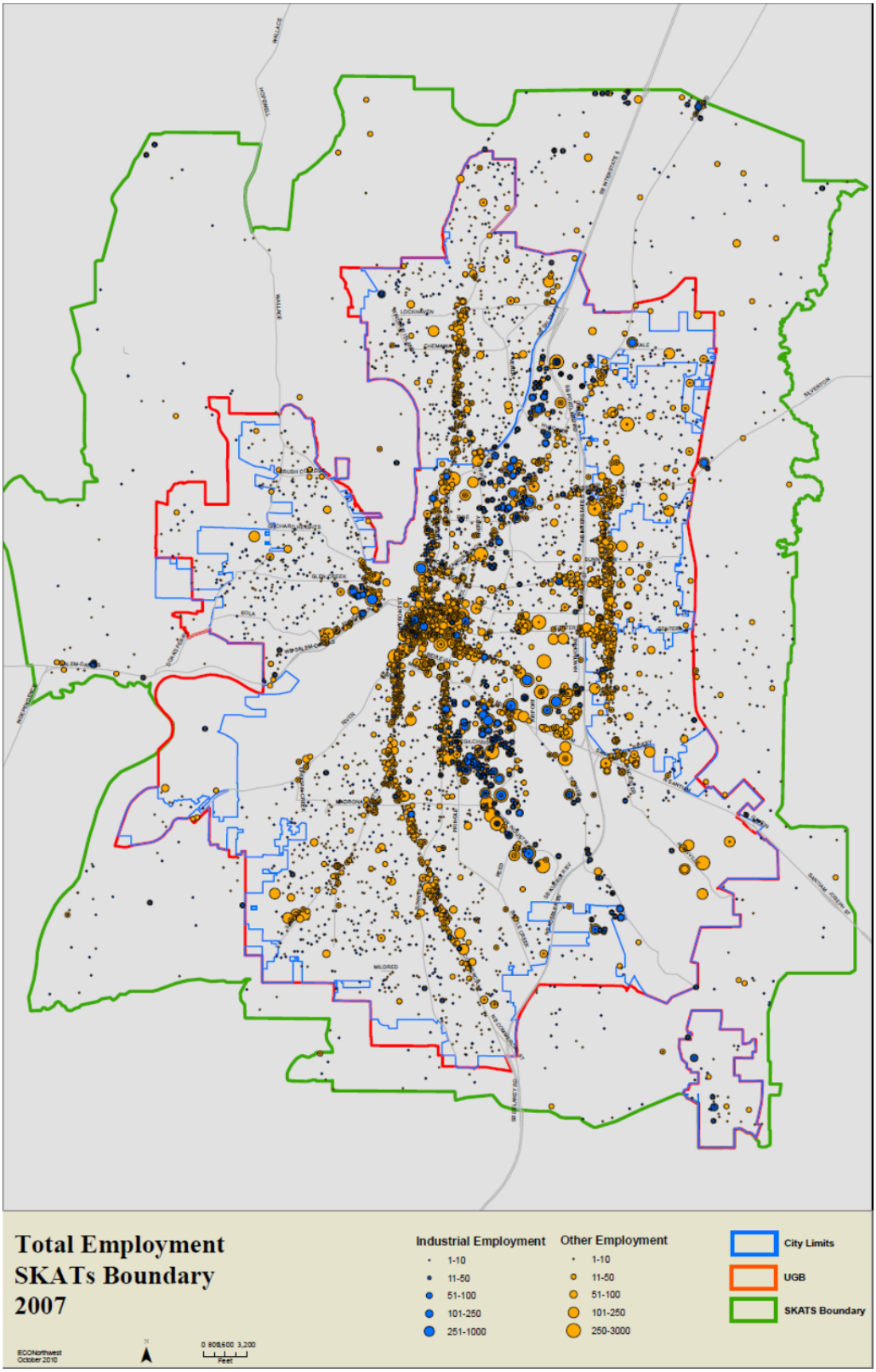
- The sectors with more than 5% of employment and *below* average pay are: Retail Trade ($25,000), Accommodations and Food Services ($14,300), and Administrative and Support and Waste Management ($$25,500).

Figure B-13. Percent of employment and average pay per employee for selected sectors, the Salem-Keizer metropolitan area, 2008



Source: Oregon Employment Department Quarterly Census of Employment and Wages (QCEW
Note: The employment shown in Figure B-13 is for the area covered by SKATS.

Map B-1. Employment within the SKATs Boundary



Salem Employment

Salem is the regional employment center of the Salem-Keizer metropolitan area, with 88% of employment in the metropolitan area and 57% of employment in the Salem MSA located within Salem's city limits. Table B-11 shows that Salem had about 91,400 employees at nearly 5,500 firms in 2008, with an average firm size of 16.6 employees per firm. The sectors with the majority of employment are: Government (30%), Retail Trade (12%), and Health Care and Social Assistance (12%). Salem's average wage per employee was about $38,200, which was above the metropolitan area average of $37,100 but below the State average of $40,500.

Table B-11. Covered employment in the City of Salem, 2008

		Employees		Payroll	
Sector / Industry	Establish-ments	Number	% of Total	Total	Average per Emp.
Agriculture, Forestry, Fishing and Hunting and Mining	49	1,239	1%	$ 19,422,573	$ 15,676
Construction	522	3,999	4%	$ 184,720,319	$ 46,192
Manufacturing	226	5,958	7%	$ 220,298,487	$ 36,975
Wholesale Trade	203	1,661	2%	$ 79,831,666	$ 48,062
Retail Trade	665	10,823	12%	$ 274,288,769	$ 25,343
Transportation and Warehousing and Utlilities	95	1,406	2%	$ 57,177,748	$ 40,667
Information	73	1,060	1%	$ 48,427,100	$ 45,686
Finance and Insurance	311	2,998	3%	$ 147,866,049	$ 49,322
Real Estate and Rental and Leasing	325	1,299	1%	$ 41,642,440	$ 32,057
Professional, Scientific, and Technical Services	538	3,161	3%	$ 162,846,568	$ 51,517
Management of Companies and Enterprises	44	1,045	1%	$ 54,285,096	$ 51,947
Administrative, Support, & Waste Management Services	243	5,266	6%	$ 133,043,518	$ 25,265
Private Educational Services	53	1,645	2%	$ 57,637,047	$ 35,038
Health Care and Social Assistance	635	10,794	12%	$ 494,724,495	$ 45,833
Arts, Entertainment, and Recreation	48	712	1%	$ 10,522,482	$ 14,779
Accommodation and Food Services	438	7,110	8%	$ 103,826,648	$ 14,603
Other Services	684	3,357	4%	$ 81,617,644	$ 24,313
Government	332	27,856	30%	$ 1,322,840,294	$ 47,489
Total	**5,484**	**91,389**	**100%**	**$ 3,495,018,943**	**$ 38,243**

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

Keizer Employment

Table B-12 shows covered employment in the City of Keizer in 2008. Keizer had about 5,151 employees at 725 firms in 2008, with an average firm size of 7.1 employees per firm. The sectors with the majority of employment are: Government (19%), Health Care and Social Assistance (16%), Retail Trade (16%), and Accommodation and Food Services (15%). Keizer's average wage per employee was about $27,400, which was below the metropolitan area average of $37,100 and the State average of $40,500.

Table B-12. Covered employment in the City of Keizer, 2008

Sector / Industry	Establish-ments	Employees Number	Employees % of Total	Payroll Total	Payroll Average per Emp.
Construction	119	395	8%	$ 14,399,320	$ 36,454
Manufacturing and Agriculture	9	57	1%	$ 1,036,981	$ 18,193
Wholesale Trade	24	34	1%	$ 1,701,028	$ 50,030
Retail Trade	68	809	16%	$ 18,261,261	$ 22,573
Transportation and Warehousing and Utlilities	8	25	0%	$ 660,608	$ 26,424
Information	11	44	1%	$ 1,560,776	$ 35,472
Finance and Insurance	59	160	3%	$ 5,796,074	$ 36,225
Real Estate and Rental and Leasing	46	144	3%	$ 3,024,398	$ 21,003
Professional Services & Management of Companies	48	157	3%	$ 5,181,158	$ 33,001
Administrative, Support, & Waste Management Services	37	152	3%	$ 3,223,799	$ 21,209
Private Educational Services	8	20	0%	$ 553,452	$ 27,673
Health Care and Social Assistance	83	828	16%	$ 23,527,728	$ 28,415
Arts, Entertainment, and Recreation	16	181	4%	$ 2,454,117	$ 13,559
Accommodation and Food Services	55	797	15%	$ 10,367,572	$ 13,008
Other Services	117	382	7%	$ 7,115,000	$ 18,626
Government	17	966	19%	$ 42,180,767	$ 43,665
Total	**725**	**5,151**	**100%**	**$ 141,044,039**	**$ 27,382**

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

Turner Employment

Table B-13 shows covered employment in the City of Turner in 2008. Turner had about 341 employees at 32 firms in 2008, with an average firm size of 10.6 employees per firm. About 41% of employment in Turner was in industrial sectors, such as construction, manufacturing, or transportation and warehousing. Most of the rest of employment was in services (e.g., profession services or heath care) or in wholesale or retail trade. Turner's average wage per employee was about $29,000, which was below the metropolitan area average of $37,100 and the State average of $40,500.

Table B-13. Covered employment in the City of Turner, 2008

Sector / Industry	Establish-ments	Employees Number	Employees % of Total	Payroll Total	Payroll Average per Emp.
Construct., Mfg. and Transp. & Warehousing	13	141	41%	$ 3,903,331	$ 27,683
Wholesale Trade and Retail Trade	3	78	23%	$ 3,272,205	$ 41,951
Services	13	96	28%	$ 1,696,807	$ 17,675
Government	3	26	8%	$ 1,007,444	$ 38,748
Total	**32**	**341**	**100%**	**$ 9,879,787**	**$ 28,973**

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

Population and employment balance

The relationship between population and employment growth is an important one. Ideally, people would live and work within the same city and possibly within the same neighborhood. In reality, people frequently commute to work outside the city or region where they live. Maintaining the population and jobs balance or reducing the number of people who commute outside a city for work (generally through faster employment growth relative to population growth) is one way to increase local economic prosperity and decrease the negative effects of commuting.

More than one-third of employees in the Salem MSA commute out of Marion and Polk Counties for work, with about 20% commuting to the Portland area for work. One way to decrease the amount of intra-regional commuting is to increase employment growth relative to population growth.

Table B-14 shows the population to employment ratio in urban counties and cities in Western Oregon. The population to employment ratio (PE) describes the relationship between the amount of employment relative the amount of population in an area. Areas with a lower PE (more jobs per person) are generally an employment center, such as Portland (1.5 persons per job). Areas with a higher PE (fewer jobs per person) may be more of a bedroom community, such as Keizer (7 persons per job).

Table B-14 shows that the PE in Marion County is 2.2, with a PE in Salem of 1.7. Keizer and Turner have a higher PE (fewer jobs per person), with PEs of 7.0 and 5.1 respectively. Employment centers in the Western Oregon with a PE less than 2.0 include Portland, Beaverton, Hillsboro, Medford, Salem, Eugene, and Corvallis.

Table B-14. Population to employment ratio, urban counties in the Western Oregon, 2008

Area	Population	Employment	Population to Employment Ratio (PE)
Oregon	3,791,060	1,714,781	2.2
Multnomah County	717,881	449,568	1.6
Portland	575,930	395,053	1.5
Gresham	100,655	34,335	2.9
Clackamas County	376,662	149,761	2.5
Washington County	519,925	247,743	2.1
Beaverton	86,205	60,144	1.4
Hillsboro	89,285	63,480	1.4
Linn and Benton Counties	196,304	79,067	2.5
Corvallis	54,880	29,108	1.9
Albany	48,770	21,324	2.3
Lane County	345,878	147,764	2.3
Eugene	154,620	86,976	1.8
Springfield	58,005	25,343	2.3
Jackson County	205,304	81,917	2.5
Medford	76,850	47,782	1.6
Marion County	314,866	140,899	2.2
Salem	154,510	91,389	1.7
Keizer	36,150	5,151	7.0
Turner	1,730	341	5.1

Source: Population data from the Population Research Center at Portland State University and Employment data from the Oregon Employment Department Quarterly Census of Employment and Wages (QCEW).

Regional business activity

The Salem-Keizer metropolitan area exists within with Willamette Valley's regional economy. Regional business activity and trends will affect the types of businesses that are attracted to the region and choose to locate in the Salem-Keizer metropolitan area. This section presents the large-scale regional business activities.

Importance of governmental employment

Government employment accounts for more than one-third of employment in the Salem-Keizer metropolitan area. Employment at all levels of government are represented in the region's employment base. The majority of governmental employment is through state-level employment, consistent with the fact that Salem is the State capital.

Table B-15 shows governmental employment in the Salem-Keizer metropolitan area in 2008. The region had more than 41,000 governmental employees at 410 agencies. More than two-thirds of government employment is State employment, with concentrations of employment in

Social Assistance (27% of government employment) and Justice, Public Order, and Safety Activities (10% of government employment). Local government accounts for more than one-quarter of government employment, with the highest concentration in Educational Services (13% of government employment).

Table B-15 Covered government employment in the Salem-Keizer metropolitan area, 2008

		Employees		Payroll	
Government Sector	Establish-ments	Number	% of Emp.	Total Payroll	Average Pay / Emp.
Federal Government	**21**	**936**	**2%**	**$ 54,173,503**	**$ 57,878**
State Government	**236**	**28,556**	**69%**	**$ 1,002,068,343**	**$ 35,091**
Social Assistance	36	11,165	27%	$ 123,551,016	$ 11,066
Justice, Public Order, & Safety Activities	40	4,166	10%	$ 217,092,406	$ 52,111
Administration of Human Resource Programs	34	3,795	9%	$ 185,901,791	$ 48,986
Administration of Economic Programs	58	3,125	8%	$ 162,378,124	$ 51,961
Executive, Legislative, & Other General Gov't Support	27	2,575	6%	$ 127,367,700	$ 49,463
Heavy & Civil Engineering Construction	21	1,404	3%	$ 71,096,058	$ 50,638
Hospitals	1	1,065	3%	$ 56,488,729	$ 53,041
Other State Government	19	1,261	3%	$ 58,192,519	$ 46,148
Local Government	**153**	**11,606**	**28%**	**$ 478,280,776**	**$ 41,210**
Educational Services	64	5,469	13%	$ 197,352,668	$ 36,086
Administrative & Support Services	8	1,653	4%	$ 48,529,836	$ 29,359
Other Local Government	81	4,484	11%	$ 232,398,272	$ 51,828
Government Total	**410**	**41,098**	**100%**	**$ 1,534,522,622**	**$ 37,338**

Source: Oregon Employment Department Quarterly Census of Employment and Wages (QCEW). Summary by industry and percentages calculated by ECONorthwest
Note: The employment shown in Table B-15 is for the area covered by SKATS.

Government employment is likely to continue as an important source of employment in the Salem-Keizer metropolitan area. While some State governmental services are spread throughout Oregon, such as the new site of the Oregon Hospital in Junction City or State prisons located throughout the State, many State functions will continue to locate in Salem.

Tourism in Marion and Polk Counties

Tourism brings economic activity into the Salem MSA from outside sources. Table B-16 shows direct travel spending in Marion and Polk Counties from 2000 to 2008. Direct travel spending includes spending on accommodations, food and beverages, air and ground travel, retail sales, and entertainment.

Direct travel spending in Marion County grew from $241 million in 2000 to $357.1 million in 2008, an increase of $116.1 million. Direct travel spending in Polk County grew from $103.3 million in 2000 to $139.6 million in 2008, an increase of $36.3 million. Together, direct travel spending in the two counties accounted for about 6% of direct travel spending in Oregon in 2000 and 2008.

Table B-16. Direct Travel Spending, Marion County and Polk County, 2000 to 2008

Year	Marion County	Polk County
2000	$241,000,000	$103,300,000
2002	$246,000,000	$116,300,000
2004	$281,700,000	$125,400,000
2006	$337,700,000	$145,200,000
2007	$346,000,000	$147,200,000
2008	$357,100,000	$139,600,000
Change 2000-2008		
Number	$116,100,000	$36,300,000
Percent	48%	35%
AAGR	5.0%	3.8%

Source: Oregon Travel Impacts, 1991-2008p,
Dean Runyan and Associates
http://www.deanrunyan.com/doc_library/Full%20Report.pdf

Direct travel spending resulted in about 3,920 jobs in Marion County in 2008, with earnings of about $72.7 million of earnings. In Polk County, direct travel spending resulted in 2,000 jobs and about $49.2 million of earnings.

Table B-17 shows local lodging tax revenues for Salem and Keizer from 2000 to 2008. Salem's revenue from the local lodging tax grew from $1.56 million in 2000 to $2.51 million in 2008, an increase of $946,000 or 61%. Salem's lodging tax accounted for 84% of lodging taxes collected in Marion County in 2008.[60] Keizer's revenue from local lodging tax grew from $62,100 in 2000 to $79,900 in 2008, an increase of $17,800 or 29%. Keizer's lodging tax revenues accounted for 3% of Marion County's lodging tax revenues.

[60] Oregon Travel Impacts reports that Polk County does not levy a lodging tax.

Table B-17. Local lodging tax revenues, Salem and Keizer, 2000 to 2008

Year	Salem	Keizer
2000	$1,561,500	$62,100
2001	$1,555,300	$63,800
2002	$1,564,500	$55,900
2003	$1,611,100	$58,400
2004	$1,667,500	$63,300
2005	$1,827,800	$57,300
2006	$2,051,800	$66,300
2007	$2,394,800	$76,000
2008	$2,507,500	$79,900
Change 2000-2008		
Number	$946,000	$17,800
Percent	61%	29%
AAGR	6.1%	3.2%

Source: Oregon Travel Impacts, 1991-2008p, Dean Runyan and Associates http://www.deanrunyan.com/doc_library/Full%20Report.pdf

Significance of agriculture in the Salem MSA

Agriculture continues to be important in the economy of the Salem MSA (e.g., Marion and Polk Counties). Table B-18 shows the market value of agricultural products and the top six agricultural products in the Salem MSA County in 2002 and 2007. In 2007, the total market value of agricultural products in Marion County was about $586.7 million and $146.6 million in Polk County. Marion County had 2,670 farms and about 307,000 acres in farms. Polk County had 1,252 farms and more than 166,000 acres in farms.

The top agricultural products in the Salem MSA in 2007 were: Nursery and greenhouse ($253.3 million); other crops and hay ($176.2 million); milk and other dairy from cows ($82.0 million); fruits, tree nuts, and berries ($79.6 million); vegetables, melons, potatoes, and sweet potatoes ($46.4 million); and cut Christmas trees and short-rotation woody crops ($36.3 million).

The agricultural products that had the largest increase in sales between 2002 and 2007 were: other crops and hay (increase of $68.4 million or 63%) and nursery and greenhouse (increase of $57.6 million or 29%).

Table B-18. Six agricultural products with the highest sales value, the Salem MSA, 2002 and 2007

	Total Sales	Total Farms	Average Sales Per Farm
2007			
Nursery, greenhouse, floriculture, and sod	$253,270,000	431	$587,633
Other crops and hay	$176,178,000	932	$189,032
Milk and other dairy from cows	$81,965,000	68	$1,205,368
Fruits, tree nuts, and berries	$79,634,000	651	$122,326
Vegetables, melons, potatoes, and sweet potatoes	$46,416,000	228	$203,579
Cut Christmas trees and short-rotation woody crops	$36,313,000	222	$163,572
2002			
Nursery, greenhouse, floriculture, and sod	$195,627,000	549	$356,333
Other crops and hay	$107,819,000	903	$119,401
Milk and other dairy from cows	$51,212,000	55	$931,127
Vegetables, melons, potatoes, and sweet potatoes	$45,335,000	366	$123,866
Cut Christmas trees and short-rotation woody crops	$29,238,000	169	$173,006
Fruits, tree nuts, and berries	$46,722,000	868	$53,827

Source: USDA Census of Agriculture, 2007, http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_County_Level/Oregon/orv1.pdf

While agriculture is an important source of economic activity in Marion and Polk Counties, there is relatively little direct employment within the Salem-Keizer metropolitan area that is involved with agriculture, for the simple reason that agriculture is not an urban activity.

Consistent with statewide land use policy, land within the Salem-Keizer UGB and Turner UGB is committed for future urban uses, rather than agricultural uses. The types of natural resource related jobs that might locate in within the metropolitan area include: agricultural services, food processors, wineries and breweries, and manufacturers that depend on natural resources (e.g., lumber mills, furniture manufacturing, or fabricated metal products).

Regional business clusters

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

The March 2007 report "Marion, Polk, & Yamhill Counties Regional Economic Profile and Strategic Assessment" (E.D. Hovee and Company) provided an extensive analysis and discussion of business clusters with growth potential in the three-county region. The business clusters identified in this report were:

- **Agriculture, Food & Beverage Products.** This cluster includes two separate agriculture clusters: food process & agriculture and nursery products. Agricultural products are an important part of the economy in Marion and Polk counties, providing opportunities for production of export products, such as wine or organic foods. State initiatives, such as the Oregon Innovation Council, provide firms in these businesses with opportunities to collaborate with similar businesses.
- **Traded-Sector Services.** This cluster includes creative services and professional services. Examples of these services include: social, economic, or educational research; testing laboratories; specialized legal services; drafting services; and other professional, scientific, and technical services.
- **Metals, Machinery, and Equipment.** This cluster consists of firms producing primary and fabricated metals. Opportunities in this cluster include: producing fabricated metals for specialty markets, manufacturing machinery, and refining metals.
- **Forest Products.** Production of forest products, wood, and paper continue to a significant employment cluster in Oregon. Oregon is the dominant producer of softwood plywood, softwood veneer, engineered wood products, and lumber. Emerging forest products include generation of renewable electric energy and producing transportation bio-fuels from woody biomass.

- **Specialty Materials Manufacturing.** This potential cluster includes industrial activities such as materials, fabrics, aggregate materials, and petro-chemical products. The Marion, Polk, and Yamhill County region has a concentration in the production of construction materials, such as sand and gravel, asphalt, or plastic and concrete pipes. Other opportunities in this cluster include production of non-durable consumer products, such as fertilizer, paint, synthetic dyes and pigments, or laminated plastics.

Outlook for growth in the Salem-Keizer metropolitan area

Table B-19 shows the population forecast developed by the OEA for Oregon and Polk County for 2000 through 2040. Polk County is forecast to

grow at a faster rate than Oregon over the 2010 to 2030 period. The forecast shows Polk County's population will grow by about 44,700 people over the 20-year period, a 61% increase. Over the same period, Oregon is forecast to grow by more than 1.0 million people, a 27% increase.

Table B-19. State population forecast, Oregon and Polk County, 2000 to 2040

Year	Oregon	Polk County
2000	3,436,750	62,700
2005	3,618,200	65,434
2010	3,843,900	72,845
2015	4,095,708	83,338
2020	4,359,258	95,594
2025	4,626,015	107,118
2030	4,891,225	117,557
2035	5,154,793	127,019
2040	5,425,408	135,937
Change 2010 to 2030		
Amount	1,047,325	44,711
% Change	27%	61%
AAGR	1.2%	2.4%

Source: Office of Economic Analysis, http://www.oregon.gov/DAS/OEA/demographic.shtml

Marion County adopted a population forecast for the County and the jurisdictions within the County. Marion County is forecast to grow to 410,245 people by 2030, at an average annual rate of 1.2% over the 2010 to 2030 period. The Marion County portion of the Salem-Keizer UGB is forecast to grow to 261,484 people by 2030, at an average annual rate of 1.12% over the 2010 to 2030 period. Turner is forecast to grow to 3,664 people by 2030, at an average annual rate of 3.15% over the 2010 to 2030 period

Table B-20 shows the Oregon Employment Department's forecast for employment growth by industry over the 2008 to 2018 period for Employment Region 3, which includes Marion, Polk, and Yamhill Counties. The sectors that will lead employment growth in Region 3 for the ten-year period are Health Care & Social Assistance (adding 6,300 jobs), Local and State Government (adding 3,100 jobs), Retail Trade (adding 2,400 jobs), Professional and Business Services (adding 2,100 jobs), Accommodation and Food Services (adding 1,800 jobs), and. Together, these sectors are expected to add 15,700 new jobs or 82% of employment growth in Region 3.

Table B-20. Nonfarm employment forecast by industry in Region 3 (Marion, Polk, and Yamhill Counties), 2008-2018

			Change 2008-2018		
Industry Sector	**2008**	**2018**	**Number**	**Percent**	**AAGR**
Natural resources and mining	16,300	17,000	700	4%	0.4%
Mining and logging	1,500	1,300	-200	-13%	-1.4%
Construction	10,800	10,900	100	1%	0.1%
Manufacturing	20,500	20,700	200	1%	0.1%
Durable goods	10,900	10,900	0	0%	0.0%
Wood product manufacturing	3,000	2,700	-300	-10%	-1.0%
Nondurable goods	9,600	9,800	200	2%	0.2%
Food manufacturing	5,600	5,900	300	5%	0.5%
Trade, transportation, and utilities	30,100	33,100	3,000	10%	1.0%
Wholesale trade	4,600	4,900	300	7%	0.6%
Retail trade	21,000	23,400	2,400	11%	1.1%
Transportation, warehousing, and utilities	4,500	4,800	300	7%	0.6%
Information	1,700	1,600	-100	-6%	-0.6%
Financial activities	8,900	9,500	600	7%	0.7%
Professional and business services	14,300	16,400	2,100	15%	1.4%
Administrative and support services	7,300	8,200	900	12%	1.2%
Educational and health services	26,400	33,200	6,800	26%	2.3%
Health care and social assistance	21,300	27,600	6,300	30%	2.6%
Health care	17,900	23,400	5,500	31%	2.7%
Leisure and hospitality	15,300	17,500	2,200	14%	1.4%
Accommodation and food services	13,700	15,500	1,800	13%	1.2%
Accommodation	900	1,200	300	33%	2.9%
Food services and drinking places	12,700	14,300	1,600	13%	1.2%
Other services	6,400	6,900	500	8%	0.8%
Federal government	2,100	2,000	-100	-5%	-0.5%
State government	21,400	22,900	1,500	7%	0.7%
Local government	23,100	24,700	1,600	7%	0.7%
Total payroll employment	**197,300**	**216,400**	**19,100**	**10%**	**0.9%**

Source: Oregon Employment Department. Employment Projections by Industry 2008-2018. http://www.qualityinfo.org/pubs/projections/r5.pdf. Projections summarized by ECONorthwest.

FACTORS AFFECTING FUTURE ECONOMIC GROWTH IN THE SALEM-KEIZER METROPOLITAN AREA

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

By affecting the cost of production and marketing, comparative advantages affect the pattern of economic development in a region relative to other regions. Goal 9 and OAR 660-009-0015(4) recognizes this by requiring plans to include an analysis of the relative supply and cost of factors of production.[61] An analysis of competitive advantage depends on the geographic areas being compared. In general, economic conditions in the Salem-Keizer metropolitan area will be largely shaped by national and Pacific Northwest regional economic conditions affecting Oregon and the Willamette Valley.

The previous section presents trends and forecasts of conditions in Oregon and the Salem-Keizer metropolitan area to help establish the context for economic development in the metropolitan area. Local economic factors will help determine the amount and type of development in the Salem-Keizer metropolitan area relative to other communities in the Willamette Valley and Oregon. This section focuses on the competitive advantages of the Salem-Keizer metropolitan area for attracting businesses relative to the Willamette Valley and Oregon.

Location

The Salem MSA is the second-largest metro area in Oregon with a population of approximately 383,101 people in 2008. Interstate 5 runs through the eastern portions of Salem and Keizer and to the west of Turner. Highway 99E breaks off of I-5 in northeastern Salem and parallels I-5 north through Canby. Highway 22 runs east-west through Salem, and Highway 213 runs northeast out of Salem. The majority of the Salem-Keizer metropolitan area is located east of the Willamette River, though a portion

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

of Salem is located west of the River. The Salem-Keizer metropolitan area's location will impact the area's future economic development:

- As Oregon's state capital, Salem is home to many departmental offices that attract employees and visitors from across the region and the subsequent economic activity they create.
- The Salem-Keizer metropolitan area has easy access to the State's highway system and other transportation opportunities. In addition to the multiple freeways running by and through the Area, residents and businesses can access other modes of transportation in Salem, including Greyhound bus service, and Amtrak passenger rail service. Salem's airport, McNary Field does not provide commercial passenger service but the City is making improvements to the airport to attract commercial air service. Salem is less than 60 miles from Portland International Airport.
- The Salem-Keizer metropolitan area is located at the central portion of the Willamette Valley, about an hour from Portland. It is the largest metropolitan area on I-5 between Portland and Sacramento.
- Residents of the Salem-Keizer metropolitan area have easy access to shopping, cultural activities, indoor and outdoor recreational activities, and other amenities in Salem, Keizer, Turner, and rural Marion and Polk Counties. The easy access contributes to the area's overall quality of life.
- Residents of the metropolitan area have several nearby opportunities for post-secondary education: Willamette University, Western Oregon University, Corban University, and Chemeketa Community College, among others.
- Businesses in the metropolitan area have access to natural resources, such as wood products or agricultural products, from resource lands in western Oregon.

The Salem-Keizer metropolitan area's location, access to I-5, urban amenities, the presence of the State Capital, and access to natural resources are primary comparative advantages for economic development in the metropolitan area.

Buying power of markets

The buying power of the Salem-Keizer metropolitan area forms part of the area's competitive advantage by providing a market for goods and services. Table B-21 show average household and total expenditures for households

in Marion County and Polk County in 2009. Total household expenditures in Marion County were $5.2 billion and $1.3 billion in Polk County.

Marion County households spent an average of $45,010 per household and Polk County households spent an average of $47,435 per household. The average household in the two counties combined spent $45,477. The categories of greatest expenditure in each county were transportation, shelter, food and beverages, utilities, and health care.

Table B-21. Per household and total expenditures, Marion County and Polk County, 2009

	Marion County		Polk County	
Expenditure	**Per Household**	**Total ($000)**	**Per Household**	**Total ($000)**
Transportation	$9,100	$1,058,195	$9,584	$266,040
Shelter	$8,637	$1,004,351	$9,129	$253,402
Food and Beverages	$6,958	$809,131	$7,313	$202,990
Utilities	$3,206	$372,786	$3,345	$92,849
Health Care	$2,802	$325,812	$2,914	$80,897
Entertainment	$2,505	$291,336	$2,648	$73,503
Apparel	$2,150	$250,050	$2,271	$63,049
Household Furnishings	$1,964	$228,435	$2,084	$57,859
Contributions	$1,604	$186,572	$1,703	$47,276
Household Operations	$1,570	$182,629	$1,677	$46,555
Gifts	$1,158	$134,695	$1,222	$33,932
Education	$1,037	$120,579	$1,114	$30,923
Miscellaneous Expenses	$761	$88,461	$793	$22,021
Personal Care	$656	$76,294	$690	$19,140
Personal Insurance	$449	$52,212	$478	$13,280
Tobacco	$305	$35,478	$315	$8,745
Reading	$148	$17,180	$155	$4,297
Total	**$45,010**	**$5,234,196**	**$47,435**	**$1,316,758**

Source: Oregon Prospector, Consumer Expenditures, http://oregonprospector.com/profiles.asp

Availability of transportation facilities

Businesses and residents in the Salem-Keizer metropolitan area have access to a variety of modes of transportation: automotive (Interstate 5, multiple State highways and local roads); rail (Union Pacific and Amtrak); and transit (Salem Area Transit District).

All firms are heavily dependent upon surface transportation for efficient movement of goods, customers, and workers. Access to an adequate highway and arterial roadway network is needed for all industries. Close proximity to a highway or arterial roadway is critical for firms that generate a large volume of truck or auto trips or firms that rely on visibility from passing traffic to help generate business. This need for proximity explains much of the highway strip development prevalent in urban areas today.

Oregon's primary transportation corridor is Interstate 5 and proximity to it is an important comparative advantage for the Salem MSA. The Salem-

Keizer metropolitan area has excellent automotive access for commuting and freight movement. The metropolitan area is located along Interstate 5, the primary north-south transportation corridor on the West Coast, linking the metropolitan area to domestic markets in the United States and international markets via West Coast ports.

In addition to access to I-5, Salem is situated along Highway 22, connecting Salem with the Oregon Coast and Central Oregon cities of Bend and Redmond.

Other transportation systems in the Salem-Keizer Metropolitan Region are:

- **Rail.** Rail access can be very important to certain types of heavy industries. Union Pacific rail lines serve Salem, providing freight service. Amtrak passenger service also available, connecting Salem to cities all across the west coast. The train station is located immediately southeast of downtown Salem near Willamette University. Union Pacific Railroad provides freight service to metropolitan area businesses.
- **Transit.** The Salem Area Transit District (Cherriots) provides transit services within the urban growth boundary of Salem and Keizer. Cherriots serves Salem with multiple weekday-operating bus lines, both within Salem and connecting Salem to Keizer and other outlying communities such as Wilsonville and Grand Ronde. In addition, there is a private bus service to Tualatin, as well as Valley Van Pool services run by the State with service to and from Portland and Corvallis
- **Air.** Proximity to air transportation is important for some firms engaged in manufacturing, finance, or business services. McNary Field in Salem provides freight service for metropolitan area residents and businesses. The airport is served by four cargo airlines, Ameriflight, Empire Airlines, FedEx, and UPS. In addition, the Portland International Airport is about one hour's drive from the metropolitan area, providing wider access to passenger and freight air service.

Transportation access is a comparative advantage that primarily affects the overall type of employment and its growth in the Salem-Keizer metropolitan area.

Public facilities and services

ECO's past research has shown that businesses make locational decisions primarily based on regional factors, such as the availability and cost and

quality of labor, transportation (highways, rail, and air transportation), access to raw materials, and access to capital. These are factors that local governments typically have little control over.

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

Tax policy

The tax policy of a jurisdiction is a consideration in economic development policy. Table B-22 shows that Marion County's average property tax rate is $16.09 and Polk County's is $14.94 per $1,000 of assessed value, compared to the State average of $15.69.

Table B-22. Property tax rate per $1,000 assessed value for Oregon, Marion County, and Polk County, FY 2008-2009

Area	Tax Rate (per $1,000 assessed value)
Oregon	15.69
Marion County	16.09
Polk County	14.94

Source: Oregon Department of Revenue, http://www.oregon.gov/DOR/STATS/statistics.shtml

Water

The City of Salem's source of potable water is the North Santiam River. The current transmission capacity of the water system is 66 million gallons per day, with a water treatment plant capacity of 84 million gallons per day. The average water demand is 27 million gallons per day, with a summer peak demand for about 47 million gallons per day. The City expects to have sufficient water to service a population of about 230,000. Appendix C describes the costs of water system improvements that would be necessary to service high value employment sites.

The City of Keizer's source of potable water is groundwater. The current transmission capacity of the water system is 16 million gallons per day and they have no water treatment plant. The average water demand is between 3 and 4 million gallons per day, with a summer peak demand for about 7

million gallons per day. The Salem Water Management and Conservation Plan was last updated in 2009 and identifies water conservation opportunities. Between the conservation measures and planned investments in the water system, the City expects to have sufficient water to service a population of about 230,000. Appendix C describes the costs of water system improvements that would be necessary to service high value employment sites.

Wastewater

The City of Salem provides wastewater service for Salem, Keizer, and Turner. Salem has two wastewater treatment plants: Willow Lake and River Road. The capacity of the existing wastewater treatment plants treat an average of about 34.6 million gallons of waste per day. The amount of waste treated daily varies substantially, with infiltration in the rainy season increasing effluent substantially. The existing treatment plants have a capacity to treat about 205 million gallons per day. The Salem Wastewater Management Master Plan was last amended in 2005 and identifies about $571 million of maintenance and upgrade projects that will be necessary to service a population of about 270,000. Appendix C describes the costs of waste water system improvements that would be necessary to service high value employment sites.

THE SALEM-KEIZER METROPOLITAN AREA'S COMPETITIVE ADVANTAGES

Economic development opportunities in the Salem-Keizer metropolitan area will be affected by local conditions as well as the national and state economic conditions addressed above. Economic conditions in the Salem-Keizer metropolitan area relative to these conditions in other portions of the Willamette Valley form the metropolitan area's competitive advantage for economic development. The metropolitan area's competitive advantages have implications for the types of firms most likely to locate and expand in the Area.

There is little that metropolitan area jurisdictions can do to influence national and state conditions that affect economic development, though they can influence local factors that affect economic development. The Salem-Keizer metropolitan area's primary competitive advantages are: location, access to transportation, presence of the State government, quality of life, market buying power, and access to highly educated and skilled labor from within the region and the Willamette Valley. These factors make the metropolitan area attractive to residents and businesses that want a high quality of life where they live and work.

The local factors that form the Salem-Keizer metropolitan area's competitive advantage are summarized below.

- **Location.** The Salem-Keizer metropolitan area is located in Marion and Polk Counties, on Interstate 5, and less than an hour south of Portland. Salem is one of Oregon's largest cities, located in one of Oregon's most populous metropolitan areas, with more than 380,000 people or about 10% of the state population. Salem is home to Oregon's state capital. Businesses in the metropolitan area have access to natural resources from surrounding rural areas, such as agricultural products, lumber, and other resources.

- **Transportation.** Businesses and residents in the Salem-Keizer metropolitan area have access to a variety of modes of transportation, but the most important is the I-5. Other transportation systems are available: automotive (Highways 22 and 213, among others, and local roads); rail (freight service from Union Pacific and passenger service with Amtrak); and transit (Cherriot). Businesses that need relatively easy automotive access to I-5 and other major roads in the region may be attracted to the metropolitan area. The short distance from some industrial areas, especially those near McNary Field, to I-5 may encourage some types of firms, such

as warehousing and distribution, to locate in Salem. Firms needing additional access to air transportation, such as regional corporate headquarters or professional service firms, have relatively easy access to Portland International Airport.

- **Oregon State government.** Salem is the capital of Oregon, with about 28,500 State government employees located in Salem. State government offers a range of employment opportunities, from jobs requiring highly skilled and educated employees to jobs requiring little formal education. The average pay for State employees is slightly above the average pay for all employees in the metropolitan area. Growth in State government provides opportunities for expansion of employment in the metropolitan area.

- **Quality of life.** The Salem-Keizer metropolitan area's high quality of life and urban amenities are a competitive advantage for attracting businesses to the City. The Metropolitan's quality of life attributes include: cultural amenities, shopping opportunities, and access to outdoor recreation. The metropolitan area's high quality of life is likely to attract businesses and entrepreneurs that want to locate in a high-amenity area.

- **Buying power of markets.** The buying power of the Salem-Keizer metropolitan area's households provides a market for goods and services. The average household in Marion and Polk Counties spent $45,477 on household expenditures in 2009. The buying power of households in the Salem-Keizer metropolitan area are a competitive advantage for attracting retail and services to serve the local population.

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

  Businesses in the Salem-Keizer metropolitan area have access to highly educated skilled workers, nearby college students, and unskilled workers. Commuting is common in the Salem-Keizer region. About a third of Marion and Polk County's workers commute from outside the metropolitan area. The commuting patterns show that businesses in the metropolitan area are able to attract skilled and unskilled workers living within the metropolitan area and from the Willamette Valley and Portland Metropolitan Region.

- **Public policy.** Public policy can impact the amount and type of economic growth in a community. The City can impact economic growth through its policies about the provision of land and redevelopment. Success at attracting or retaining firms may depend on availability of attractive sites for development and public support for redevelopment. In addition, businesses may choose to locate in the Salem-Keizer metropolitan area (rather than in a different part of the Willamette Valley) based on: City's tax policies, development charges (i.e., systems development charges), availability of public infrastructure (i.e., transportation or sanitary sewer), and attitudes towards businesses.