Oregon
Department of Land Conservation and Development 635 Capitol Street, Suite 150

Theodore R. Kulongoski, Governor Salem, OR 97301-2540
(503) 373-0050

Fax (503) 378-5518 www.lcd.state.or.us

NOTICE OF ADOPTED AMENDMENT

February 21, 2007
TO: $\quad$ Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments
FROM: Mara Ulloa, Plan Amendment Program Specialist
SUBJECT: City of Grants Pass Plan Amendment
DLCD File Number 005-06
The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

## DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: March 7, 2007

This amendment was submitted to DLCD for review 45 days prior to adoption. Pursuant to ORS 197.830 (2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.
*NOTE: THE APPEAL DEADLINE IS BASED UPON THE DATE THE DECISION WAS MAILED BY LOCAL GOVERNMENT. A DECISION MAY HAVE BEEN MAILED TO YOU ON A DIFFERENT DATE THAN IT WAS MAILED TO DLCD. AS A RESULT YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE ABOVE DATE SPECIFIED.

Cc: Gloria Gardiner, DLCD Urban Planning Specialist John Renz, DLCD Regional Representative Matthew Crall, DLCD Transportation Planner Bob Short, City of Grants Pass

[^0]D LC D NOTICE OF ADOPTION
This form must be mailed to DLCD within 5 working days after the final decision $\square$ per ORS 197.610, OAR Chapter 660 - Division 18
(See reverse side for submittal requirements)
F- 152017
LAND CONSERVATION AND DEVELOPMENT
Jurisdiction: City of Grants PASS Local File No.: $\qquad$ $\frac{06-40200004}{\text { (If no number, use none) }}$
Date of Adoption: $\qquad$ Date Mailed:

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\text { Feb. } 82007
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Date the Notice of Proposed Amendment was mailed to DLCD: $\qquad$ Oct 24, 2006
$\qquad$ Comprehensive Plan Text Amendment
$\stackrel{C}{2}$
Comprehensive Plan Map Amendment
$\qquad$ Land Use Regulation Amendment
$\qquad$ New Land Use Regulation

Zoning Map Amendment
Condiment op
Doter: Database Amendment
(Please Specify Type of Action)

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached."
Amended the Comprehensive Plan map And changed 12.84 Acres of TAx Lot 36-05-06-00/1400 from Industrial to cow-Density Residential and the zoning fin I-Industnial to R-1-presidentiol. An and ed
 "Same." If you did not give notice for the proposed amendment, write "N/A."
Proposed zone change was to $l-1-8$ residential. Adopted zoning was $R-1-12$ residential.

Plan Map Changed from : $\qquad$ Industrial to Low Density Kesidertiol
Zone Map Changed from: $\qquad$ I-Industninl to $l-1-12$ residential
Location: $\frac{2944 \mathrm{N.W.} \mathrm{Highland} \mathrm{AVC.}}{250059.7 \mathrm{FPIN}}$ Acres Involved: $\frac{12,84}{12,005}$
Specify Density: Previous: $\qquad$ New: $\qquad$ Low Density Residential Applicable Statewide Planning Goals: $\qquad$ $7,9,10,11$
Was an Exception Adopted? Yes: $\qquad$ No: $\qquad$ -

DLCD File No.: $006-06(15652)$

# DEPT OF 

Did the Department of Land Conservation and Development receive a notice of ProposedND CONSERVATION Amendment FORTY FIVE (45) days prior to the first evidentiary hearing. Yes: AYD DEVELOPMENT

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\text { If no, do the Statewide Planning Goals apply. } \quad \text { Yes: ___ No: }
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If no, did The Emergency Circumstances Require immediate adoption. Yes: ___ No: $\qquad$
Affected State or Federal Agencies, Local Governments or Special Districts: City of GuAnts
Pass, Josephine County
Local Contact: Bob Shont Area Code + Phone Number: $54 /-474-6355$ Ext.
Address: 101 N.W. 'A' Street
City: GrAnts Pass Zip Code+4: $\quad 97526$

## ADOPTION SUBMITTAL REQUIREMENTS

This form must be mailed to DLCD within 5 working days after the final decision per ORS 197.610, OAR Chapter 660 -Division 18.

1. Send this Form and TWO (2) Copies of the Adopted Amendment to:

## ATTENTION: PLAN AMENDMENT SPECLALIST DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT 635 CAPITOL STREET NE, SUITE 150 <br> SALEM, OREGON 97301-2540

2. Submit TWO (2) copies the adopted material, if copies are bounded please submit TWO (2) complete copies of documents and maps.
3. Please Note: Adopted materials must be sent to DLCD not later than FIVE (5) working days following the date of the final decision on the amendment.
4. Submittal of this Notice of Adoption must include the text of the amendment plus adopted findings and supplementary information.
5. The deadline to appeal will not be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within TWENTY-ONE (21) days of the date, the "Notice of Adoption" is sent to DLCD.
6. In addition to sending the "Notice of Adoption" to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.
7. Need More Copies? You can copy this form on to $8-1 / 2 \times 11$ green paper only ; or call the DLCD Office at (503) 373-0050; or Fax your request to:(503) 378-5518; or Email your request to Larry.French@state.or.us - ATTENTION: PLAN AMENDMENT SPECIALIST.

## AN ORDINANCE AMENDING THE COMPREHENSIVE PLAN MAP FROM INDUSTRIAL TO LOW-DENSITY RESIDENTIAL AND THE ZONING MAP FROM I-INDUSTRIAL TO R-1-12 FOR A PORTION OF THE PROPERTY LOCATED AT 2944 HIGHLAND AVENUE. THE ORDINANCE WILL ALSO AMEND THE COMPREHENSIVE PLAN DATABASE.

## WHEREAS:

1. The Comprehensive Plan of the City of Grants Pass was adopted December 15, 1982. The Development Code of the City of Grants Pass was adopted August 17, 1983; and
2. The owner of the subject property has requested the comprehensive plan database, comprehensive plan map, and zone map amendments.
3. In terms of the physical conditions and characteristics, location and availability of services, the property is appropriate for the proposed designation; and
4. The applicable criteria listed in the Comprehensive Plan and the Development Code are met.

## NOW, THEREFORE, THE CITY OF GRANTS PASS HEREBY ORDAINS:

Section 1: The Comprehensive Plan database is hereby amended to include the Economic Opportunities Analysis attached as Exhibit ' $A$ '.

Section 2: The Comprehensive Plan Map is hereby amended to include a portion of the property identified by Assessor's Map and Tax Lot 36-05-06-00/1400. Twelve and eightyfour one-hundredths acres of Tax Lot 1400, shown in Exhibits ' $B$ ', are to be entirely within the Low-Density Comprehensive Plan Map designation.

Section 3: The Zoning Map is hereby amended to include approximately 12.84 acres of Tax Lot 1400 within the R-1-12 zoning district, as shown in Exhibit ' C '.

ADOPTED by the Council of the City of Grants Pass, Oregon, in regular session, this $17^{\text {TH }}$ day of January, 2007.

SUBMITTED to and $\qquad$ by the Mayor of the City of Grants. Pass, Oregon, this 24 day of/Jephuary, 2007. Oregon, this 24 day of/Jothuary, 2007. Oregon, this 24 day of/sphuary, 2007. the Mayor of the City of Grants Pass,


ATTEST:
Cor Administrative Services Director bo anne


CITY OF GRANTS PASS COMMUNITY DEVELOPMENT DEPARTMENT

## HIGHLAND AVENUE COMPREHENSIVE PLAN MAP AMENDMENT AND ZONING MAP AMENDMENT CITY COUNCIL FINDINGS OF FACT

| Procedure Type: | Type IV: Planning Commission Recommendation <br> and City Council Decision |
| :--- | :--- |
| Project Number: | $06-40200004$ |
| Project Type: | Comprehensive Plan Map Amendment, <br> Comprehensive Plan Database Amendment, and <br> Zoning Map Amendment |
| Map \& Tax Lots: | $36-05-06-00 / 1400$ |
|  | Valerie Albright, Trustee of the Ernest Mignot Family <br> Trust |
| Owners: | Raul Woerner, Craig Stone and Associates |
| Applicant: | 2944 NW Highland Avenue |
| Address: | Industrial |
| Existing Comprehensive Plan <br> Designation: | Low Density Residential |
| Proposed Comprehensive <br> Plan Designation: | I-Industrial |
| Current Zoning: | R-1-8 |
| Proposed Zoning: | Bob Short |
| Planner Assigned: | October 12, 2006 |
| Application Received: | October 13, 2006 |
| Application Complete: | December 6, 2006 |
| Date of UAPC Staff Report: | December 13, 2006 |
| Date of UAPC Hearing: | January 10, 2007 |
| Date of City Council Staff | Report: |
| Date of City Council Hearing: | January 17, 2007 |
| City Council Findings of Fact: | February 7, 2007, |

I. PROPOSAL:

Comprehensive Plan Map Amendment from Industrial to Low Density Residential and a Zoning Map Amendment from I-Industrial to R-1-8 for approximately 12.84 acres of the 17.8 acre parcel. A Comprehensive Plan Database Amendment is also requested with this application.

## II. AUTHORITY AND CRITERIA:

Sections 13.5.5 and 13.8.3 of the Comprehensive Plan provide that joint review by the City Council and Board of County Commissioners shall be required for amendment and revision to Comprehensive Plan findings, goals, policies, and land use maps of the Comprehensive Plan.

The review shall be in accordance with the procedures of Section 13.8.3 of the Comprehensive Plan, which provides for a recommendation hearing by the Urban Area Planning Commission prior to a joint hearing of the City Council and Board of County Commissioners.

However, with adoption of the 1998 Intergovernmental Agreement, this provision requiring a joint hearing is modified with the result that City Council will make the decision, and the County will have automatic party status, as summarized below:

Section III of the 1998 Intergovernmental Agreement (IGA) provides for transfer of authority for provision and management of planning services from the County to the City for the Urbanizing Area. It provides:

The City is hereby vested with the exclusive authority to exercise the County's legislative and quasi-judicial powers, rights, and duties within the Urbanizing Area...

Section V of the IGA contains provisions pertaining to notification and appeals for quasi-judicial and legislative decisions within the Urbanizing Area.

For legislative decisions, the IGA provides:
The City agrees to provide written notice of all proposed legislative actions to the County at least 45 days prior to the public hearing at which the action is first considered. The County shall be deemed to have automatic party status regarding all such decisions for the purposes of standing for appeals.

For quasi-judicial decisions, the IGA provides:
The City shall give the County written notice of all land use, limited land use, and expedited land division decisions in the UA in the same manner as required by Oregon Law for adjacent property owners. The County shall be deemed to have automatic party status regarding all such decisions for the purposes of standing for appeals. Quasi-judicial land use and limited land use development decisions made by the City's Director or Hearings Officer or the Urban Area Planning Commission may be appealed according the City's Land Use Hearing Rules. The City may provide staff support for any administrative or judicial review of decisions regarding the application of Land Use Regulations to land within the UA.

Section 13.8.3 of the Comprehensive Plan provides that notice shall be as provided in Section 2.060 of the Development Code for a Type IV procedure. Section 13.8.3 further provides that the hearing shall be conducted in accordance with the Legislative Hearing Guidelines of Section 9 of the Development Code.

Therefore, the application will be processed through a "Type IV" procedure, with a recommendation from the Urban Area Planning Commission and a final decision by City Council. The County has automatic party status for appeals.
The text or map of the Comprehensive Plan may be recommended for amendment and amended provided the criteria in Section 13.5.4 of the Comprehensive Plan are met.

The Zoning Map may be amended provided the Criteria in Section 4.033 of the development Code are met.

## III. APPEAL PROCEDURE:

Section 10.060 provides the City Council's final decision to be appealed to the State Land Use Board of Appeals (LUBA) as provided in state statutes. A notice of intent to appeal must be filed with LUBA within 21 days of the Council's written decision.

## IV. PROCEDURE:

A. An application for a Comprehensive Plan Map amendment, Zone Map amendment and Comprehensive Plan database amendment was submitted on October 12, 2006. The application was deemed complete on October 13, 2006 and processed in accordance with Section 2.060 of the Development Code.
B. Notice of the proposed amendments and the public hearings was mailed to the Oregon Department of Land Conservation and Development on October 24, 2006.
C. Public notice of the December 13, 2006 Planning Commission hearing was mailed on November 22, 2006 in accordance with Sections 2.053, 2.063 and 2.095 of the Development Code.
D. A public hearing was held by the Urban Area Planning Commission on December 13, 2006 to consider the request.
E. Public notice of the January 17,2007 City Council hearing was mailed on December 27, 2006 in accordance with Sections 2.053, 2.065 and 2.095 of the Development Code.
F. Public notice of the January 17, 2007 City Council hearing was published in the local newspaper on January 4, 2007.
G. A public hearing was held by the City Council on January 17, 2007 to consider the request.

## V. SUMMARY OF EVIDENCE:

A. The basic facts and criteria regarding this application are contained in the staff report and attached record, which are attached as Exhibit "A" and incorporated herein.
B. The minutes of the January 17, 2007 public hearing held by the City Council, which are attached as Exhibit " B ", summarize the oral testimony presented and are hereby adopted and incorporated herein.
C. Exhibit 5 to City Council Staff Report. Letter from applicant with attached survey showing actual size of affected property to be12.84 acres.
VI. BACKGROUND:

## Property Characteristics


2. Frontage: Highland Avenue, Sinclair Drive and Pony Lane (not located within the UGB)
3. Access: Highland Avenue
4. Public Utilities:
a. Existing:
i. Water: 8-inch line in Highland Avenue. 8-inch line in Sinclair Drive approximately 74 feet from the property.
ii. Sewer: 8-inch sewer line in Sinclair Drive.
iii. Storm Water: None
b. Proposed: The applicant proposes no further extension of utilities at this time.
5. Topography: The property contains steep slopes including Class A slopes in excess of $25 \%$.
6. Natural Hazards: The property is located within the Steep Slope Hazard District and a Wildland / Urban Interface area.
7. Natural Resources: The majority of the property is heavily wooded. There is also a stream and associated wetlands running primarily west to east across the property. The wetlands are not covered by the local wetlands inventory.
8. Existing Land Use:
a. On site: Industrial and a Mobile Home Park
b. Surrounding:

North: Industrial (M-2 and Rural Industrial outside UGB)
South: Single Family Residential (RR 5 outside UGB)
East: Single Family Residential (R-1-8) and Industrial (M-2)
West: Single Family Residential (RR 5 outside UGB)
9. Special Purpose Districts: Steep Slope Hazard District, Wetlands Overlay

## VII. GENERAL DISCUSSION AND FINDINGS:

The subject property has been zoned Industrial since it was originally incorporated into the Urban Growth boundary in the early 1980's. The north end of the property has been developed with an industrial building and a mobile home park. The south end of the property has never been developed primarily because it contains Class A slopes in excess of $25 \%$, and this presents challenges for industrial development of the property.

The proposed zone change is supported because the land appears unsuitable for industrial development and residential development seems more appropriate. However, the proposal to change the zoning to R-1-8 is of concern for several reasons. First, properties within the UGB with Class A slopes are generally located in lower density zones such as R-1-10 or R-1-12 because additional area is required to protect the slopes. The major subdivisions developed in steep slope areas over the past few years have all be in either R-1-10 or R-1-12 zones. For example, Panoramic, Townes View, and the various phases of Laurelridge, Meadow Wood, and Forest Hills are all located within the R-1-10 or R-1-12 zones. Rezoning to a lower-density can also assist in protection of the stream located on the property. It is recommended that the property be rezoned to R-1-12 to provide for the greatest protection of the slopes on the property and remain consistent with other properties located in the steep slope areas on the northwest side of the UGB.

Also of concern is the potential street layout for the property. There is an existing street plug at the end of Sinclair Drive which would provide access to any proposed subdivision of the subject property. Any future development would be required to create a street connection back to Highland Avenue through the portion of the property to retain the existing industrial zoning. It is recommended that no portion of this street contain an access to the industrial area, but rather access to the industrial area would be taken accesses only from Highland Avenue to minimize conflicts between residential and industrial uses.

## VIII. CONFORMANCE WITH APPLICABLE CRITERIA:

For comprehensive plan map amendments, Comprehensive Plan Policy 13.5.4 requires that all of the following criteria be met:

CRITERION (a): Consistency with other findings, goals and policies in the
Comprehensive Plan.
City Council's Response: Satisfied. The subject property lies within the North City I Area of the North Area Industrial portion of the Urban Growth Boundary (UGB). The Comprehensive Plan does not state specific policies for the North City I area; however, the Economy Element of the Comprehensive Plan includes a policy designed to ensure that an adequate quality and quantity of industrial land is available within the UGB. The subject property includes land with steep slopes in excess of $30 \%$, which may not be suitable or considered of adequate "quality" for industrial development.

The Housing Element of the Comprehensive Plan indicates that sufficient lands capable of full urbanization shall be provided within the UGB to ensure an adequate choice in the market place for the estimated future population growth. Recent residential development has eliminated much of the available supply of residential properties within the UGB, and the proposal would supply additional residential land for future growth in accordance with the policies of the Housing Element.

The Comprehensive Plan identifies the northwest slopes along the edge of the UGB where the subject property is located as being within a Slope Hazard area. The 15-35\% slopes found on this property are identified as a moderate hazard. However, the requirements of the Development Code regarding steep slopes will mitigate the negative effects of this potential hazard. Changing the zone of the property to a lower density zone such as R-1-12 would also help to mitigate the negative effects of the steep slopes.

The subject property is also located within a Wildfire Hazard area. The Comprehensive Plan indicates properties within hilly terrain should take steps to minimize this hazard including but not limited to, reducing fuel concentrations, utilizing fire resistant vegetation and constructing loop roads systems. Specific requirements to mitigate potential hazards in this are will be addressed at the time of development.

CRITERION (b): A change in circumstances validated by and supported by the database or proposed changes to the database, which would necessitate a change in findings, goals and policies.

City Council's Response: Satisfied. The applicant has submitted an Economic Opportunities Analysis (EOA) as required by Goal 9 to ensure a sufficient supply of employment lands will be available within the UGB over a 20 -year span. The applicant proposes this EOA be added to the database. This analysis includes a study of lands available for development within Grants Pass and indicates a 4.7 year supply of lowdensity residential land within the UGB and a 26.4 S3.

City Council has reviewed the submitted EOA, and the methodology appears sound and the conclusions basically adequate, considering the limited scope of the proposal. City

Council recommends the applicant's EOA be added to the database. It should be noted that the City of Grants Pass has received a grant from the State of Oregon and contracted a private organization to complete an EOA in conjunction with a planned future expansion of the UGB. This EOA will be much more extensive than the EOA submitted by the applicant, and once it is completed, it is expected to supersede the EOA the applicant has submitted.

## CRITERION (c): Applicable planning goals and guidelines of the State of Oregon.

City Council's Response: Satisfied. Applicable goals are identified below. The applicant has submitted findings related to each of the state wide planning goals.

Goal 7: $\quad$ Areas Subject to Natural Disaster and Hazards
Goal 9: Economic Development
Goal 10: Housing
Goal 11: Public Facilities and Services
City Council has reviewed the goals and Comprehensive Plan policies and concludes that the proposal is consistent with the Statewide Goals and the Comprehensive Plan policies.

The proposed amendment is in compliance with Goal 10, Housing. The state planning goals encourage the provision of adequate housing within Urban Growth Boundaries. The proposal provides for low urban housing densities in an area planned for industrial development. Public services are present to serve the development, or are contiguous to the property, and will be extended in conjunction with development.

The subject property is located within the steep slope area which has been identified in Goal 7 as subject to natural disaster and hazards. The City's Development Code contains specific requirements for development within the Steep Slope Hazard District. Issues related to development within the steep slope area can be addressed as specific developments are proposed. City Council recommends rezoning the property to R-1-12 rather than the R-1-8 proposed to allow for a thorough mitigation of the potential hazards created by the presence of Class A slopes in excess of $25 \%$. As an option, the applicant may provide a development agreement addressing this hazard.

The applicant has submitted an EOA that meets the requirements of Goal 9 and indicates a sufficient supply of industrial land remains available for future needs. The submitted EOA also indicates a short supply of low-density residential lands, especially when compared to the available industrial land.

An additional issue is the quality of the industrial land included in the proposal. Goal 9 indicates that "Prime industrial lands possess site characteristics that are difficult or impossible to replicate in the planning area or region." Included in the Goal 9 definition of "Site Characteristics" is topography. The subject property contains steep slopes in excess of $25 \%$ and is probably not considered suitable for industrial development especially when compared to other industrial lands in the planning area including industrial lands on the east side of the UGB.

CRITERION (d): Citizen Review and comment.
City Council's Response: Satisfied. Notice was provided to surrounding property owners in accordance with the Comprehensive Plan and Development Code. No written comments have been received as of the date of the staff report. The owner of a nearby lot zoned Business Park did express a concern at the community development counter that the noise created by his existing business would affect a future residential development subject property. The proposed development will not abut or be adjacent to this existing industrial property and is not a "specifically protected" use according to Section 24.120 (b) of the Development Code. However, the proposal will create residential property much closer to industrial property, and noise created on the industrial property could potentially effect future residential development. These issues can be addressed upon application for development of the property.

CRITERION (e): Review and comment from affected governmental units and other agencies.

City Council's Response: Satisfied. Notice was provided to affected governmental units and other agencies.

Notice was provided to the Department of Land Conservation and Development (DLCD). DLCD has submitted comments regarding this application. However, these comments were completed before the representative, John Renz, received the EOA, and he indicated more time is needed for a complete analysis of the EOA. John Renz indicated in a phone conversation on 1-8-07 that he had no additional comments.

ODOT was provided notice of the application including a copy of the Traffic Impact Analysis. ODOT has submitted comments expressing support for the findings of the TIA.

Notice was provided to Josephine County in accordance with the 1998 Intergovernmental Agreement for the Urbanizing Area. The County did not provide comment.

CRITERION (f): A demonstration that any additional need for basic urban services (water, sewer, streets, storm drainage, parks, and fire and police protection) is adequately covered by adopted utility plans and service policies, or a proposal for the requisite changes to said utility plans and service policies as a part of the requested Comprehensive Plan amendment.

City Council's Response: Satisfied with Conditions. The adopted plans adequately address the need for basic urban services in the area. Conditions of approval would be added to any concurrent subdivision application to bring urban services into compliance with the levels identified in the various master plans.

CRITERION (g): Additional information as required by the review body.

City Council's Response: Satisfied. The submitted application provided a thorough analysis of the proposal. Additional information will be required upon request of the review body.

CRITERION ( h ): In lieu of item (h) above, demonstration that the Plan as originally adopted was in error.

City Council's Response: Not Applicable. Criterion (b) is not applicable. The Plan was not adopted in error. The proposed amendments are adopted in response to a change in circumstances. See Criterion (b) for discussion of the change in circumstances.

For Zone Map Amendments, Section 4.033 of the City of Grants Pass Development Code requires that all of the following criteria be met:

CRITERION 1: The proposed use, if any is consistent with the proposed Zoning District.
City Council's Response: Satisfied. The applicant has not indicated a proposed use; however, any future proposals will be required to comply with the Development Code regarding development within the R-1-12 zone.

CRITERION 2: The proposed Zoning District is consistent with the Comprehensive Plan Land Use Map designation.

City Council's Response: Contingent on action taken on the proposed Comprehensive Plan Amendment. If the Comprehensive Plan designation were amended from Industrial to Low Density Residential, the proposed zoning would be consistent with the Comprehensive Plan Land Use Map designation.

CRITERION 3: A demonstration that existing or proposed levels of basic urban services can accommodate the proposed or potential development without adverse impact upon the affected service area or without a change to adopted utility plans.
City Council's Response: Satisfied. See Discussion under Criterion (f) above.

CRITERION 4: A demonstration that the proposed amendment is consistent with the functions, capacities, and performance standards of transportation facilities identified in the Master Transportation Plan.

City Council's Response: Satisfied. The applicant has submitted a detailed Traffic Impact Analysis (TIA) completed by JRH Engineering of Eugene, Oregon. The submitted TIA includes an analysis of the nearby intersections including those located around the Interstate 5 interchange. The TIA concludes that all intersections meet the adopted mobility standards with or without the zone change and the potential resulting development. The TIA has been reviewed and approved by the City Engineer. The

Oregon Department of Transportation (ODOT) has received the TIA and has submitted comments in support of the proposal.

CRITERION 5: The natural features of the site are conducive to the proposed Zoning District.

City Council's Response: Satisfied. The property contains Class A slopes in excess of $25 \%$. These slopes represent challenges to any residential development; however, slopes of this degree are generally contained within lower-density residential zones. It is recommended the property be rezoned to $\mathrm{R}-1-12$ rather the $\mathrm{R}-1-8$ proposed.

CRITERION 6: The proposed zone is consistent with the requirements of all overlay districts that include the subject property.

City Council's Response: Satisfied with Conditions at the time of development. The property is located within the Steep Slope Hazard District. The Development Code requires that the development on the property meet the steep slope development standards. Conditions include the provision of steep slope development reports and erosion control and grading plans as required by the Code. The property also contains potential wetlands and a stream and will be required to comply with Code requirements regarding wetlands and stream banks.

CRITERION 7: The timing of the zone change request is appropriate in terms of the efficient provision or upgrading of basic urban services versus the utilization of other buildable lands in similar zoning districts already provided with basic urban services.

City Council's Response: Satisfied. The property is located within close proximity to urban services and will not require substantial extensions in order to have those services available for development.

CRITERION 8: In the case of rezoning from the Urban Reserve District, that the criteria for conversion are met, as provided in Section 4.034.

Cify Council's Response: Not Applicable. The subject property is not zoned Urban Reserve.

## IX. DECISION AND SUMMARY:

The City Council finds the applicable criteria are satisfied and APPROVES the proposed Comprehensive Plan Map and Zoning Map amendment from I (Industrial) to R-1-12 (Low-Density Residential). The vote was $5-0-1$, with Councilors Paquin, Renfro, Kangas, Patterson and Wendle, in favor and none opposed. Councilor Cummings abstained and Councilors Berger and Thompson were absent.
X. ADOPTED BY THE GRANTS PASS CITY COUNCIL this $7^{\text {th }}$ day of February 2007.

t:cdlplanninglreportst2006106-40200004_highland avenue zone changelcity councillhighland avenue cpa and rz.city council.fof.bhs.doc
cap/bs/mos

# CRAIG A STONE \& ASSOC ${ }^{\top}$ UTES, LTD. Consultants in Urban Planning and Development <br> 712 Cardley Avenue Medford, Oregon 97504 <br> Telephone: (541) 779-0569 Facsimile: (541) 779-01140 E-mail: raul@,cstoneassociates.com 

## MEMORANDUM

To: Jim Huber, City of Grants Pass Planning Director
From: Raul Werner
Date: January 17, 2007
Subject: Legal Description and Boundary Survey for Proposed Comprehensive Plan Map Amendment and Zone Change; Project No. 06-402000024


#### Abstract

Dear Mr. Huber: Please find included herein a map and legal description prepared by Peter D. Allen, an Oregon registered professional land surveyor, which establish the location of the proposed zone boundary based on the center line of the stream. The area to the north will retain the existing industrial comprehensive plan map designation and zoning. The area to the north is to be designated and zoned for residential use in accordance with the City's final action.

Please note that the survey establishes that the parent parcel has 18.11 acres, that the area to the north of the creek has 5.27 acres $(+/-)$, and the area to the south proposed for re-zoning has 12.84 acres. That is, the parent parcel is 0.31 acres larger as a whole, the area to the north of the creek is 1.53 acres smaller, and the area to the south of the creek is 1.84 acres larger, than approximated in the application findings. The approximated acreage was based on GIS and assessment data, which is less precise than data from an actual land survey. The request remains fundamentally the same in that the boundary between the industrial and residential zones is to coincide with the seasonal drainage channel.

I request that the City, in its proceedings, acknowledge that the survey establishes the actual boundary and respective land use areas and adopt, by exhibit, the survey and legal description of the same. In considering this, the City make take into consideration that the area south of the stream, regardless of acreage, is more appropriate to residential than industrial uses for the same reasons established in the applicant's findings and the staff and Planning Commission recommendations. As land generally unsuitabie for industrial use, the removal of the incremental 1.53 acre from the industrial land inventory will not adversely impact the economic opportunities available to the City of Grants Pass.


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\text { Ex. } \subset \text { to C.C. Findings }
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Please include this correspondence and the attached map and legal description into the record for these proceedings.

Respectfully yours,

CRAIG A. STONE \& ASSOCIATES, LTD.


Raul Woerner
Consulting Planner
RGW/m

Enclosure
cc. File

|  | Peter D. Allen |  |
| :---: | :---: | :---: |
| 321 Northwest "A" Street Grants Pass, Oregon 97526 | LAND SURVEYING | Office/Fax: (541) 476-4502 <br> E-mail: pdasurveying@qwest.net |

January 17, 2007

## PARCEL A

(A portion of Tax Lot 1400, Assessor's Map No. 36-05-06-00)
Description for a tract of land situated in the East Half of the Southwest Quarter of the Northwest Quarter of Section 6, Township 36 South, Range 5 West of the Willamette Meridian, Josephine County, Oregon, being more particularly described as follows:

BEGINNING at the Northwest corner of said East Half of the Southwest Quarter of the Northwest Quarter of Section 6; thence along the north line thereof, North $89^{\circ} 42^{\prime} 41^{\prime \prime}$ East, 200.00 feet; thence leaving said north line parallel to the west line of said East Half, South $00^{\circ} 22^{\prime} 48^{\prime \prime}$ East, 120.00 feet; thence parallel to said north line, North $89^{\circ} 42^{\prime} 41^{\prime \prime}$ East, 160.00 feet; thence parallel to said west line, North $00^{\circ} 22^{\prime} 48^{\prime \prime}$ West, 24.78 feet, more or less, to the southerly right of way line of Highland Avenue; thence along said southerly line 447 feet, more or less, to the east line of said East Half; thence along said east line 314 feet, more or less, to a point that bears North $00^{\circ} 36^{\prime} 22^{\prime \prime}$ West, 595.73 feet from the Southeast corner of said East Half; thence leaving said east line, North $13^{\circ} 50^{\prime} 50^{\prime \prime}$ West, 130.15 feet; thence North $38^{\circ} 33^{\prime} 18^{\prime \prime}$ West, 81.61 feet; thence North $52^{\circ} 18^{\prime} 32^{\prime \prime}$ West, 36.65 feet; thence North $69^{\circ} 56^{\prime} 21^{\prime \prime}$ West, 84.30 feet; thence South $84^{\circ} 57^{\prime} 22^{\prime \prime}$ West, 128.59 feet; thence North $77^{\circ} 35^{\prime} 24^{\prime \prime}$ West, 65.13 feet; thence North $82^{\circ} 14^{\prime} 38^{\prime \prime}$ West, 106.23 feet; thence North $75^{\circ} 53^{\prime} 55^{\prime \prime}$ West, 110.62 feet; thence South $89^{\circ} 23^{\prime} 38^{\prime \prime}$ West, 81.02 feet to the west line of said East Half; thence along said west line, North $00^{\circ} 22^{\prime} 48^{\prime \prime}$ West, 440.02 feet to the BEGINNING, containing 5.27 acres, more or less.

## PARCEL B

(A portion of Tax Lot 1400, Assessor's Map No. 36-05-06-00)
Description for a tract of land situated in the East Half of the Southwest Quarter of the Northwest Quarter of Section 6, Township 36 South, Range 5 West of the Willamette Meridian, Josephine County, Oregon, being more particularly described as follows:

Commencing at the Northwest corner of said East Half of the Southwest Quarter of the Northwest Quarter of Section 6; thence along the west line of said East Half, South $00^{\circ} 22^{\prime} 48^{\prime \prime}$ East, 440.02 feet to the POINT OF BEGINNING; thence leaving said west line, North $89^{\circ} 23^{\prime} 38^{\prime \prime}$ East, 81.02 feet; thence South $75^{\circ} 53^{\prime} 55^{\prime \prime}$ East, 110.62 feet; thence South $82^{\circ} 14^{\prime} 38^{\prime \prime}$ East, 106.23 feet; thence South $77^{\circ} 35^{\prime} 24^{\prime \prime}$ East, 65.13 feet; thence North $84^{\circ} 57^{\prime} 22^{\prime \prime}$ East, 128.59 feet; thence South $69^{\circ} 56^{\prime} 21^{\prime \prime}$ East, 84.30 feet; thence South $52^{\circ} 18^{\prime} 32^{\prime \prime}$ East, 36.65 feet; thence South $38^{\circ} 33^{\prime} 18^{\prime \prime}$ East, 81.61 feet; thence South $13^{\circ} 50^{\prime} 50^{\prime \prime}$ East, 130.15 feet to the east line of said East Half; thence along said east line, South $00^{\circ} 36^{\prime} 22^{\prime \prime}$ East, 595.73 feet to the Southeast corner of said East Half; thence along the south line of said East Half, North $89^{\circ} 57$ ' $52^{\prime \prime}$ West, 675.93 feet to the Southwest corner of said East Half; thence along the west line of said East Half, North $00^{\circ} 22^{\prime} 48^{\prime \prime}$ West, 879.93 feet to the POINT OF BEGINNING, containing 12.84 acres, more or less.



# City of Grants Pass 

## Economic Opportunities Analysis

## October 2006

(Revised January 2007)

CRAIG A. STONE \& ASSOCIATES, LTD.
Consultants in Urban Planning, Economic Analysis, Development

712 Cardley Avenue Medford, Oregon 97504-6124
Telephone: (541) 779-0569 Fax: (541) 779-0114 E-mail: cstone@cstoneassociates.com

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## I

## Introduction

## Purpose and Scope:

This Economic Opportunities Analysis is offered for inclusion by minor amendment into the City of Grants Pass Comprehensive Data Base with regard to the inventory of employment land. The study has been prepared in support of a request for minor amendment to the City of Grants Pass Comprehensive Plan Data Base, Comprehensive Plan Land Use Map, and Zoning Map and pursuant to OAR 660-009-0015. The Economic Opportunities Analysis assesses the need requirement for employment lands through the planning period, and then assesses whether the community has an inventory of employment land sufficient to meet the demand. Methods recommended for the preparation of an Economic Opportunities Analysis are further explained in the guidebook Industrial and Other Employment Lands Analysis-Basic Guidebook 2005 provided by the Department of Land Conservation and Development (DLCD).

## Results of Study:

1. Supply: Employment land in Grants Pass is in plentiful supply over the twentyyear planning horizon. The largest supplies of available employment lands are in the general commercial ( 206 acres) and business park ( 40 acres) zoning districts.
2. Consumption Trend and Projection: By 2026, the City of Grants Pass is expected to consume 67 of 77 available acres of industrial land. Table 1 presents the results of this available lands inventory.
3. The primary driver of the demand for employment lands is the growth in population, which in Josephine County is entirely a result of in-migration. The Population Element of the City of Grants Pass Comprehensive Plan was last updated based on data available through the year 1992. The planning horizon for that study was projected only through the year 2010. At that time, it was projected that the population for all areas within the Urban Growth Boundary would be 33,764 by the year 2010. The current population within the Urban Growth Boundary is estimated at 36,702 . The Population Element does not provide a projection over the next twenty year planning horizon (i.e., through the year 2026). For this study, a 2026 population projection for the entire county was extrapolated from the projected 2025 population for Josephine County as published by the Oregon Office of Economic Analysis (OEA) in its document entitled State and County Forecasts and Components of Change, 2000 to 2040).

The 2025 population projected by the OEA for Josephine County is 100,001 residents. Extrapolated on a linear trend, the 2026 population for the county is 100,100 . We have assumed conservatively ${ }^{1}$ that the City of Grants Pass will accommodate 73 percent of future population growth in Josephine County. 14,949 additional people are expected to occupy the area within the Grants Pass UGB in 2026, a total of approximately 51,651 residents.
4. Conclusion: Based on this analysis, industrial land supply is adequate to supply the expected demand for 23.2 years and the commercial land supply is adequate to supply the expected demand for 15.6 years.

[^1]Tables - Data Summary

Table 1:

| Lands Available for Development in Grants Pass Oregon <br> Prepared by Craky Stone and Assoclates Using tax assessors data from April, 2006 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Net Available Acres |  <br>  $5$ 88 <br>  <br> 588空 <br> 1464 | Land Requirement |  $\qquad$ <br>  <br> 8 |
| Commercial | 209 |  | 268 |  |
| Industrial | 77 |  | 67 |  |
| Medium and High Density Residential | 160 |  | 681 |  |
| Low Density Residential | 337 |  | 1428 |  |
| Grand Total | 784 |  | 2109 |  |
| Note: Population increase for Commercial and Industrial categories represents employment increase. |  |  |  |  |

Table 2:

| Summary of Available Lands by Zoning Designation <br> Prepared by Craig Stone and Associates Using Assessors Data from 4/1/2006 |  |  |
| :---: | :---: | :---: |
| Density | Zoning Designation | Net Available Acres |
| Commercial | CBD |  |
| Commercial | GC |  |
| Commercial | NC |  |
| Industrial | BP |  |
| Industrial | 1 |  |
| Industrial | IP |  |
| Industrial | RI |  |
| Low Density Residential | R-1-10 |  |
| Low Density Residential | R-1-12 |  |
| Low Density Residential | R-1-12, RR-5 |  |
| Low Density Residential | R-1-8 |  |
| Moderate Density Residential | R-1-6 |  |
| High Density Residential | R-2 | 1.4.verex |
| High Density Residential | R-3 |  |
| High Rise Density Residential | R-4 |  |
| Total Acres |  |  |
| Note: R-1-12,RR is a split zone parcel |  |  |

Note that the totals reported for residential land categories round down to 160 acres for "Medium and High Density Residential" and 337 acres for "Low Density Residential".

## Table 3:

| Employment Density <br> Prepared by Craig Stone and Associates using. DLCD Data |  |
| :---: | :---: |
| Building Category | Jobs Per Ac |
| Institutional/Other |  |
| Industrial |  |
| Commercial |  |
| Source: DLCD Basic Guidbook pg 2-11 |  |

## III

## Methodology

## A. Definitions

## Constrained Land

Lands containing slopes over $30 \%$, wetlands, within 20 feet of water or within 75 feet of the Rogue River are constrained. The constraint parameter reflects standards of the Grants Pass Land Development Code as described in the methodology below.

## Employment Land

Employment lands are assumed to be so if they have a zoning designation of commercial or industrial in the Josephine County tax assessor's master data set.

## Housing Density

Housing Density is the number of dwelling units per acre. This number is calculated by dividing the number of housing units constructed since the year 2000 by the number of
gross acres consumed. It is assumed that the acreage on which these units currently exist represents the net acreage consumed and that the gross acreage is the land consumed divided by (one minus) the requirement for public facilities.

## Public Land

Federal, State, County, City, School, cemeteries and private streets were considered public lands, unavailable for development.

## Vacant Employment Land

On January 1, 2007, revisions to Oregon Administrative Rules Chapter 660, Division 9 adopted by the Land Conservation and Development Commission on December 13, 2005 will be in effect which, in pertinent part, will establish the following definition at OAR 660-009-0005:
> "(14) 'Vacant Land' means lot or parcel: (a) Equal to or larger than one half-acre not currently containing permanent buildings or improvements; or (b) Equal to or larger than five acres where less than one half-acre is occupied by permanent buildings or improvements."

The term is not defined in the current version of the rule, and we decline to use it as defined above for the reason that the methodology will significantly overestimate the inventory of readily available employment land and also because the definition is not consistent with the Josephine County Tax Assessor's designations of "Potential Development" and "Vacant". Our method for identifying vacant employment lands is based upon using the best available data, and we believe assessor's definition of vacant to be best available data. Non-structural improvements of employment land as identified by site survey, permit records, aerial photos, and assessment records found to be integral to associated businesses were not considered vacant. Parking lots are a good example of occupied parcels without buildings which nevertheless serve as integral parts of neighboring businesses. Under the Division 9 methodology effective on January 1, 2007, by deeming land currently employed for beneficial economic use "vacant", the analysis would falsely yield a larger inventory of available commercial and industrial lands than
actually exists. Based on our more conservative methodology in which land without improvements which is still serving an obvious economic purpose are not considered "vacant", we have concluded that 15.6 years of commercial land and 23.2 years of industrial land supply is available to meet expected demand.

## B. The Residential Inventory

An analysis of the residential land inventory is provided separately in the document entitled City of Grants Pass Available Residential Land Study (October 2006) , prepared by Craig A. Stone \& Associates, Ltd.

## C. Employment Lands- Conducting an Economic Opportunities Analysis

## Step 1

Summarize National, Regional, State and Local economic trends and forecast Employment.

Appendix G, attached hereto, includes the following national, regional, state, and local economic trends and employment forecast information:

Oregon Department of Administrative Services:

- Executive Summary and Part I (Economic Forecast) of Oregon Economic and Revenue Forecast-September 2006, Volume XXVI, No. 3, prepared by the Office of Economic Analysis (State of Oregon), summarizing the national and state economic trends and forecasts.

Oregon Employment Department WorkForce Analysis summarizing regional and local economic trends and forecasts:

- Regional Profile Industry Employment in Region 8, issued in 2004;
- Regional Profile - Labor Force, Employment and Unemployment in Region 8 , issued in 2004;
- Workforce and Economic Research - Josephine County (1994-2005) issued in 2005;
- Employment Projections by Occupation 2004-2014, Region 8 (Jackson and Josephine Counties) issued September 2005


## Step 2

Estimate land requirement by type of land and parcel size required to accommodate the forecast of Employment

Our analysis, based on the foregoing data, summarized in Table 1, shows a total land requirement of 2109 acres over the next 20 years. For employment lands, land requirements are calculated according to the requirements of OAR 660-09-0015 and using methods recommended in the Industrial and Other Employment Lands AnalysisBasic Guidebook 2005 provided by DLCD.

The amount of employment land necessary to provide for a given number of jobs is a ripe field for further research where little substantive research has been done. DLCD has provided guidelines in the Industrial and Other Employment Land Analysis-Basic Guidebook 2005. For our analysis, the DLCD recommended employment density assumptions have been applied to the forecast of new employment which was extrapolated from the OEA population forecast. The number of jobs projected within the planning area through the Year 2026 has been derived through the following equation:
[(No. of Jobs in Year 2006)/(Population in Year 2006)] X (Population forecasted for Year 2026) $=$ Forecasted Jobs in Year 2026

To estimate the land requirement by type of land through the Year 2026, the equation is:
(Forecasted Jobs in Year 2026) / (Jobs per Acre) $=$ Land Requirement.

DLCD guidelines were assumed to determine the Jobs per Acre variable, as summarized in Table 3. The variables and resulting acreages are shown in Table 1 relating to land requirements for industrial and commercial purposes.

## Step 3

Inventory available lands

Vacant employment lands were determined using Josephine County Tax Assessor's Master File in combination with GIS data produced by the Josephine County Planning Department.

Parcels were assumed to be vacant if the Tax Assessor has assigned no real market value to structures unless an active commercial non-structural use was identified. Activities on industrial lands which may be critical to the function of a business may require that no structure is present. Log decks, for example, appear to be vacant parcels in the tax lot data base but are necessary and permanent parts of going concerns. Occupied industrial lands without structures were identified using aerial photos from the Josephine County GIS website. The following lands were removed from the vacant industrial lands category:

- Wood products yards
- Wrecking and salvage yards
- Stone and Clay Products
- Industrial Flex Buildings (parcels with)
- Golf Course
- Warehouse/Manufacturing
- Parking
- Miscellaneous Industrial Use
- Log decks, van storage, industrial yards

Similarly, parking facilities on commercial land is an outdoor use and is often located on parcels adjacent to commercial buildings. Parking lots are not considered available for development because of their importance to surrounding developed parcels. Using aerial photos, parking lots were identified and deleted from the available commercial lands. Outdoor van storage or similar freight management activities were assumed to take place on occupied property, despite the lack of buildings.

Appendices E and F herein provide an inventory of lands actively employed in commercial or industrial use without structures.

Using GIS software, constrained lands were identified by overlaying maps of environmental land constraints on the map of vacant and re-developable parcels. Portions of parcels identified to have constraints were removed, and parcel acreage was recalculated.

- Slopes- DLCD regards slopes over $25 \%$ to be un-buildable ${ }^{2}$ for the purpose of calculating the land inventory while recognizing that it is possible to build on slopes greater than $25 \%$.
- Wetlands- wetlands were not assumed to be available for development pursuant to Grants Pass Development Code 24.345
- Water- a 20 foot setback requirement was assumed for all creeks and drainages as per Grants Pass development code section 24.341. A 75 foot setback was assumed for the Rogue River, as per the same section of the code.
- Public lands- School, City, County, State and Federally owned land was not assumed to be available for development. Cemeteries were also not assumed to be available for development (OAR 660-08-005(13))

After removing areas with environmental constraints, the acreage of buildable land was recalculated for every parcel.

## Step 4

Assess community economic development potential

The WorkForce Analysis prepared by the Oregon Employment Department for Region 8 (Jackson and Josephine Counties) provides the following assessment regarding economic development potential.

- Economic activity in Josephine County is expected to mirror recent trends in Jackson County over the planning horizon. The most important factor driving these trends is strong population growth, especially among retired in-migrants. An aging population has implications for labor force growth because labor force participation is lower for older residents. The labor force is expected to grow more slowly than the overall population. This will increase the demand for services to meet the needs of retired-aged groups. Particularly, the demand for services such as assisted living, adult foster care facilities, health care, and social services will increase.
- Service industries are expected to account for one-half of the region's job growth, led by health services which will increase by 31.5 percent.
- The fastest growing manufacturing sectors are expected to be "other durable goods" ${ }^{2}$ and "food and kindred products".
- Other employment sectors, including retail, wholesale, and professional services are forecasted to increase over the next ten years, tracking closely along with forecasted population growth.
- Manufacturing employment fell by nine percent for the 1995-2004 period in Region 8. Because the region has a fairly resilient manufacturing mix, the

[^2]Oregon Employment Department forecasts a three percent increase in employment in this sector over the next ten years. This growth will be led by small local manufacturers that can react nimbly to changing products, technologies, and markets

- Large lumber and wood products manufacturing will decline by 13.1 percent.


## IV

## Conclusions

Grants Pass has an adequate supply of employment land over the planning horizon to accommodate the forecasted population growth sector needs. Changes in the economy or community desires may require re-allocation and management of the employment land inventory over time.

Appendices $C$ and $D$ herein identify the inventory of available commercial and industrial lands within the City of Grants Pass urbanizable area. Industrial and commercial sites in a variety of sizes that are well served by utilities and good freeway access are clustered in the south and southeastern portions of the city. Industrial land in the north are at a comparative disadvantage generally to sites near the south interchange area due to transportation and topographic constraints affecting the north industrial area. The north industrial area will be suited to firms that do not require high visibility and that are not heavily dependent upon freight or commercial access. Wholesale and trade services, such as storage and mechanical repair are ideal uses for commercial and industrial sites on the north side of town. Outside of Grants Pass, close to the airport, the economy also has large reserves of industrial land for the slow growing durable goods manufacturing sector.

The supply of residential land is severely limited to meet even short term demand. The availability of residential land is a decision factor for prospective employers with regard
to site selection. Residential price increases have a corrosive effects which tend to decrease in-migration, increase out-migration and decrease employment. These effects can be expected long before the supply of residential land reaches zero as the market requires a degree of liquidity in order to function properly. Insufficient residential land supply can adversely impact economic opportunities due to increases in the cost of rent (housing). These declines are not accounted for in the analysis presented above because the assumption is made that additional residential lands will be allocated. However, it is strongly recommended that the City consider increasing the available supply of residential land by either expanding the Urban Growth Boundary, re-designating nonresidential lands for residential use, increasing densities and variety of housing types in appropriate areas, or a combination of these options in the very near future.

## Appendix A

## Bibliography

1 Industrial and Other Employment Lands Analysis-Basic Guidebook 2005
2. Josephine County GIS Data

Wetlands
Water
Steep Slopes
Taxlots
GPS Roads
Aerial photos
3. Josephine County Tax Assessors data

Master.dbf- August 18, 2006
4. OAR 660-09-0015
5. Oregon Economic and Revenue Forecast September 2006 Volume XXVI, No. 3

## Appendix B

## OAR 660-009-0015

## 660-009-0015

## Economic Opportunities Analysis

Cities and counties must review and, as necessary, amend their comprehensive plans to provide economic opportunities analyses containing the information described in sections (1) to (4) of this rule. This analysis will compare the demand for land for industrial and other employment uses to the existing supply of such land.
(1) Review of National, State, Regional, County and Local Trends. The economic opportunities analysis must identify the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the planning area based on information about national, state, regional, county or local trends. This review of trends is the principal basis for estimating future industrial and other employment uses as described in section (4) of this rule. A use or category of use could reasonably be expected to expand or locate in the planning area if the area possesses the appropriate locational factors for the use or category of use. Cities and counties are strongly encouraged to analyze trends and establish employment projections in a geographic area larger than the planning area and to determine the percentage of employment growth reasonably expected to be captured for the planning area based on the assessment of community economic development potential pursuant to section (4) of this rule.
(2) Identification of Required Site Types. The economic opportunities analysis must identify the number of sites by type reasonably expected to be needed to accommodate the expected employment growth based on the site characteristics typical of expected uses. Cities and counties are encouraged to examine existing firms in the planning area to identify the types of sites that may be needed for expansion. Industrial or other employment uses with compatible site characteristics may be grouped together into common site categories.
(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.
(4) Assessment of Community Economic Development Potential. The economic opportunities analysis must estimate the types and amounts of industrial and other employment uses likely to occur in the planning area. The estimate must be based on information generated in response to sections (1) to (3) of this rule and must consider the planning area's economic advantages and disadvantages. Relevant economic advantages and disadvantages to be considered may include but are not limited to:
(a) Location, size and buying power of markets;
(b) Availability of transportation facilities for access and freight mobility;
(c) Public facilities and public services;
(d) Labor market factors;
(e) Access to suppliers and utilities;
(f) Necessary support services;
(g) Limits on development due to federal and state environmental protection laws; and
(h) Educational and technical training programs.
(5) Cities and counties are strongly encouraged to assess community economic development potential through a visioning or some other public input based process in conjunction with state agencies. Cities and counties are strongly encouraged to use the assessment of community economic development potential to form the community economic development objectives pursuant to OAR 660-009-0020(1)(a).

Stat. Auth.: ORS 183 \& 197
Stats. Implemented: ORS 197.712
Hist.: LCDC 4-1986, f. \& ef. 10-10-86; LCDD 7-2005, f. 12-13-05, cert. ef. 1-1-07

## Appendix C Available Commercial Property



| Available Commercial Properties in Grants Pass Oregon |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates based on Josephine County Tax Assessor's Data and Josephine County GIS Data |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360517DA00070000 | A \& F GRANTS PASS L | GC | 2.21 |
| 360624DC00160000 | ALLEN CREEK CENTER | GC | 0.90 |
| 360624DC00180000 | ALLEN CREEK CENTER | GC | 1.91 |
| 360624DC00180100 | ALLEN CREEK CENTER | GC | 0.47 |
| 360518AD01150000 | AMER LEGJON GP POST | CBD | 0.11 |
| 360518DC00460000 | AMJO, LLC | NC | 0.15 |
| 360518DC00470000 | AMJO, LLC | NC | 0.12 |
| 360520 CB 00670000 | AMNEUS, RICHARD H \& | GC | 0.39 |
| 360519AD00130000 | ANDERSON, LOIS | GC | 0.23 |
| 360518DA00460000 | ANDROY, ROBERT M II | CBD | 0.11 |
| 360517CB00920000 | ARANA, MARCELLA T | GC | 0.11 |
| 360519 CD 00170100 | ASANTE | GC | 2.13 |
| 360508BC00031700 | ASANTE | GC | 0.11 |
| 360508BC00031400 | ASANTE | GC | 0.10 |
| 360508BC00031200 | ASANTE | GC | 0.16 |
| 360508BC00031300 | ASANTE | GC | 0.10 |
| 360508BC00030900 | ASANTE | GC | 0.12 |
| 360508 BC 00030800 | ASANTE | GC | 0.11 |
| 360519 CD 00090300 | ASANTE | GC | 0.74 |
| 360519CD00090000 | ASANTE | GC | 0.86 |
| 360519CD00090400 | ASANTE | GC | 0.52 |
| 360519 CD 00090500 | ASANTE | GC | 0.37 |
| $360519 C D 00090600$ | ASANTE | GC | 0.28 |
| 360519 CD 00090200 | ASANTE | GC | 0.53 |
| 360518DD00420000 | AUSLAND HOLDINGS LL | GC | 0.10 |
| 360518DD00430000 | AUSLAND HOLDINGS LL | GC | 0.14 |
| 360517 CB 00030100 | AUSLAND, JENNIFER \& | GC | 0.08 |
| 360517CB00280000 | AUSLAND, JENNIFER \& | GC | 0.45 |
| $360519 \mathrm{DB00410000}$ | AYLING REV TRUST, J | GC | 0.91 |
| 360508CD00930000 | BAKER, BUCK N \& | GC | 0.28 |
| 360516DC00050000 | BALLINGER, VELMA C | GC | 1.55 |
| 360519DA00350300 | BASSETT, DAVID A | GC | 0.63 |
| 360519DA00370300 | BASSETT, DAVID A \& | GC | 0.75 |
| 360517CC01440000 | BAYLESS FAMILY TRUS | GC | 0.12 |
| 360624 CD 00040900 | BEAVER MARSH PROPER | GC | 0.85 |
| 360624 CD 00040800 | BEAVER MARSH PROPER | GC | 0.98 |
| 360624 CD 00040700 | BEAVER MARSH PROPER | GC | 1.16 |
| 360624CD00040200 | BEAVER MARSH PROPER | GC | 0.84 |
| 360624CD00040600 | BEAVER MARSH PROPER | GC | 0.99 |
| 360624CD00040300 | BEAVER MARSH PROPER | GC | 1.03 |
| 360624CD00040500 | BEAVER MARSH PROPER | GC | 1.41 |
| 360518DA00470000 | BECK, BERNADETTE | CBD | 0.10 |
| 360519AD00090000 | BELL, HERBERT R \& | GC | 0.17 |
| 360518DD00550000 | BETETA, JOE \& | GC | 0.28 |
| 360613DD00070000 | BICE TRUST, TOM J \& | GC | 0.33 |
| 360521D000070000 | BINGHAM, HARRY | GC | 0.47 |
| 360521 CD00050000 | BJERRE, JACOB M \& G | GC | 0.78 |

## Available Commercial Properties in Grants Pass Oregon

Prepared by Craig Stone and Associates based on Josephine County Tax Assessor's Data and

| Map and Tax Lot | Name of Owner | Zoning | Acres |
| :---: | :---: | :---: | :---: |
| 360516DC00060000 | BOERSMA BROS LLC | GC | 0.44 |
| 360516DC00090000 | BOERSMA BROS LLC | GC | 0.11 |
| 360623DD00010000 | BORMUTH, TOMMY W \& | GC | 0.41 |
| 360519DC00170000 | BOYER, DONALD W TRU | GC | 1.03 |
| 360519DC00030000 | BRAINWASH LLC | GC | 0.10 |
| 360518DD00440000 | BRIDGES FAMILY TRUS | GC | 0.10 |
| 360530BA00080000 | BRISENO, ROBERT J | GC | 0.74 |
| $360624 \mathrm{CC00080000}$ | BROWN, IRENE D \& | GC | 0.76 |
| 360517AC00650000 | BROWN, PATRICK W \& | GC | 0.18 |
| 360518DD00900000 | BRUBAKER, STEPHANIE | GC | 0.15 |
| 360613D000090000 | BRUTON, ROBERT A \& | GC | 2.86 |
| 360624CB00290000 | BUEHNER, HEIDI RENA | GC | 0.88 |
| 360626B000060000 | BUNTIN CONSTRUCTION | GC | 4.81 |
| 360626B000010100 | BUNTIN CONSTRUCTION | GC | 0.54 |
| 360521 CD 00060000 | BURKEY, KATHLEEN A | GC | 0.55 |
| 360518DB00280000 | BURTON, BRUCE \& | NC | 0.10 |
| 360517 CB 00930000 | BURTON, GARY L \& | CBD | 0.11 |
| 360613DD00030000 | CATTERALL, CRAIG J | GC | 1.24 |
| 360508BD00020400 | CHIERICHETTI, PAUL | GC | 0.19 |
| 360613DA00060000 | CHURCH OF CHRIST | GC | 0.47 |
| 360508BA00040600 | COLEMAN PROPERTIES | GC | 0.17 |
| 360520CA00450000 | COLLINS, WADE L \& | GC | 0.76 |
| 360517AC00090000 | COLVIN STATIONS INC | NC | 0.16 |
| 360530 CB 00200000 | COMBE FAMILY TRUST | GC | 0.97 |
| 360530C000150000 | COMBE, DAVID BUD \& | GC | 0.50 |
| 360519AD00150000 | CONGER RESIDUAL DIS | GC | 0.41 |
| 360519AD00250000 | CONGER RESIDUAL DIS | GC | 0.10 |
| 360517 CC 00680000 | COURIER PUBLISHING | GC | 0.19 |
| $360517 \mathrm{CC00700000}$ | COURIER PUBLISHING | GC | 0.15 |
| 360518DD00840000 | COWGILL, DAVID L \& | GC | 0.06 |
| 360624 CD 00030000 | CRAMER FAMILY TRUST | GC | 1.57 |
| 360624CD00160000 | CRAMER FAMILY TRUST | GC | 0.07 |
| 360626B000130100 | CRAMER FAMILY TRUST | GC | 1.53 |
| 360518DD01150000 | CUBIT CONSTRUCTION | GC | 0.22 |
| 360520CB00620000 | DESOLMINIHAC, PIERR | GC | 0.04 |
| 360519AD00110000 | DOLLARHIDE, WAYNE O | GC | 0.62 |
| 360626B000130000 | DRURY, PATRICK S \& | GC | 0.87 |
| 360530 BA 00120300 | EAGLE RIDGE DEVELOP | GC | 0.88 |
| 360530BA00120200 | EAGLE RIDGE DEVELOP | GC | 1.40 |
| 360508CA00340000 | EVENSEN, WILLIAM E | GC | 0.15 |
| 360530BA00010000 | EVERGREEN FEDERAL B | GC | 1.19 |
| 360613DD00080000 | EWERS, GIDEON B | GC | 0.61 |
| $360519 \mathrm{DB00330500}$ | F \& D WHEELER FAMIL | GC | 3.47 |
| 360624DC00100100 | FAHEY REALTY LLC | GC | 3.04 |
| 360624DB00230000 | FAHEY, SUSAN R \& | GC | 0.31 |
| 360517CA00310100 | FASZER, DWIGHT \& | GC | 0.23 |
| $360530 \mathrm{C000180200}$ | FEDERAL INVESTMENT | GC | 0.89 |


| Available Commercial Properties in Grants Pass Oregon |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates based on Josephine County Tax Assessor's Data and Josephine County GIS Data |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360530BA00120100 | FEDOSKY, DAVID V \& | GC | 1.83 |
| 360517 BA 00470000 | FIRE SERVICE RESEAR | GC | 0.19 |
| $360530 C B 00160000$ | FIRE SERVICE RESEAR | GC | 0.68 |
| 360624CA00070100 | FISHER, ROBERTA L | GC | 0.67 |
| 360518DD01020000 | FLENNER, JOHN \& | GC | 0.19 |
| 360520 CB 00890000 | FORD TRUST, DONALD | GC | 0.34 |
| 360521CD00360000 | FORNELLI, THELMA LE | GC | 0.71 |
| $360516 \mathrm{CC00010100}$ | FOSTER CREEK LLC | GC | 2.00 |
| 360517 CB 00910000 | FRALICH, JOHN L \& | GC | 0.12 |
| 360520 CB 00840000 | FRANCO, RUDOLPH R \& | GC | 0.03 |
| 360517 D 000080100 | FREEDMAN, STUART I | GC | 0.31 |
| 360520CA00230000 | FRUITDALE GRANGE | GC | 0.08 |
| 360626B000150000 | FUTUREQUEST COMPANY | GC | 0.67 |
| 360517 DD 00010100 | G P VENTURES LLC | GC | 4.61 |
| 360623CA00020100 | GARCIA, JUAN CARLOS | GC | 0.23 |
| 360508BB00060200 | GEORGE, JUSTIN V \& | GC | 0.49 |
| 360519 CO 0310000 | GIBSON, DELMA JEAN | GC | 2.45 |
| $360519 \mathrm{CC00290000}$ | GOETJEN REV TRUST, | GC | 0.32 |
| 360624DB00100000 | GOODLETT TRUST, DON | GC | 0.50 |
| 360517BA00430000 | GRALO CORP | GC | 0.26 |
| 360613C000030200 | GRANTS PASS BROADCA | EF | 0.36 |
| 360623DB00110200 | GRIFFITH, MELVIN B | GC | 0.21 |
| 360519DB00430000 | GUERRERO, BERNABE \& | GC | 0.26 |
| 360520 CB 00680000 | GUERRERO, EMILIO \& | GC | 0.33 |
| 360517BB00110000 | H2 HOLDINGS LLC | GC | 0.25 |
| 360624CB00140000 | HALL, BRYAN R \& | GC | 0.34 |
| 360521 CD00070000 | HAMILTON, CHARLES D | GC | 0.27 |
| $360521 \mathrm{CC00200200}$ | HARRIS, DONNA JENE | GC | 0.74 |
| 360521 CC00050000 | HART, MICHAEL J \& | GC | 0.22 |
| 360624 CB 00280000 | HART, THOMAS R JR \& | GC | 0.88 |
| 360520CB00610000 | HARTSONS LLC | GC | 0.04 |
| 360519 CAO 0190000 | HATCH, CLYDE L \& HE | GC | 0.42 |
| 360521CD00330000 | HATCH, KELLEY \& | GC | 1.03 |
| 360519AD00280000. | HENDERSON, THOMAS W | GC | 1.03 |
| 360530BA00070000 | HENDRICKSON FAMILY | GC | 0.23 |
| $360517 \mathrm{CC00470000}$ | HEYER, ROBERT J \& | CBD | 0.11 |
| 360625DD00150000 | HICKS, SCOTT A \& | GC | 0.24 |
| 360518DD00270000 | HOFMANN, MARGARET A | GC | 0.12 |
| 360520 CAO 340000 | HONEYCUTT, ROBERTA | GC | 0.14 |
| 360627AA00050000 | HORIZON SENIOR COMM | GC | 1.65 |
| 360624CC00020000 | HUERTA, ROBERT HENR | GC | 1.92 |
| 360520 CB 00790000 | HYDE, MATTHEW L \& | GC | 0.19 |
| 360520 CB 00800000 | HYDE, MATTHEW L \& | GC | 0.12 |
| 360520 CB 00800100 | HYDE, MATTHEW L \& | GC | 0.10 |
| $360518 \mathrm{DA0} 0250000$ | ISHAM, HARVEY \& | CBD | 0.12 |
| 360519CA00050100 | JACKSON LIV TRUST, | GC | 0.11 |
| 360516DC00040000 | JENSEN, ROBERT A \& | GC | 0.42 |


| Available Commercial Properties in Grants Pass Oregon |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates based on Josephine County Tax Assessor's Data and Josephine County GIS Data |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360521 CD 00170000 | JESINGHAUS, LINDA | GC | 0.58 |
| $360519 \mathrm{DC00300000}$ | JONES LOVING TRUST, | GC | 0.90 |
| 360624DA00100000 | JOSEPHINE COUNTY | GC | 3.02 |
| 360521 CD00160000 | JOSWICK, JAMES | GC | 0.55 |
| 360613DA00080000 | KARTES, ROBERT H \& | GC | 0.85 |
| 360623DC00340000 | KEIL, RICHARD G \& | GC | 0.43 |
| 360516CB00240000 | KELLER-FEDERAL INVE | GC | 0.96 |
| $360519 \mathrm{DB00330600}$ | KIRKMAN, DANIEL R \& | GC | 1.28 |
| 360508CD00440000 | KRAUSS, DAVID M, D | GC | 0.24 |
| 360520CA00060000 | LAND GROUP LLC | GC | 2.28 |
| 360624CD00160100 | LANGLEY, DONNA C TR | GC | 0.18 |
| 360518DD01160000 | LAUREANO, BENJAMIN | GC | 0.10 |
| 360626B000040000 | LEAIR, LARRYL | GC | 1.19 |
| 360518DD00260000 | LEET, KENDON R \& | GC | 0.12 |
| 360519DB00330400 | LES SCHWAB TIRE CEN | GC | 2.06 |
| 360624CD00130000 | LEWIS, W G | GC | 0.93 |
| 360517 BA 00600000 | LIV TRUST UAD 10/11 | GC | 0.18 |
| 360519AC00630000 | LIVESAY, LORRAINE | GC | 1.46 |
| 360625DD00140000 | LOWRY, JOHN F \& | GC | 0.43 |
| 360625DD00160000 | LOWRY, JOHN F \& | GC | 0.21 |
| 360521CC00120000 | LUCAS FAMILY TRUST, | GC | 0.07 |
| 360518AC01100000 | LUKER FAMILY TRUST, | NC | 0.18 |
| 360518AC01100100 | LUKER FAMILY TRUST, | NC | 0.16 |
| 360518AC01100200 | LUKER FAMILY TRUST, | NC | 0.11 |
| $360520 \mathrm{CB00870000}$ | M \& T INVESTMENTS L | GC | 1.27 |
| 360520 CB 00880100 | M \& T INVESTMENTS L | GC | 0.57 |
| 360517BD00320000 | MACKAY, EDWARD A SR | GC | 0.20 |
| 360623DD00250000 | MARSH, MILLARD L \& | GC | 0.76 |
| 360518DB00260000 | MARTIN, DANIEL E \& | NC | 0.15 |
| 360508 CD 00600000 | MCCALL, HELEN J TRU | GC | 0.14 |
| 360521DB00150000 | MCCOY, RICHARD A \& | GC | 0.41 |
| 360521 DB00360100 | MCFEETERS, WILLIAM | GC | 0.23 |
| 360519AC00620000 | MEHRABIAN, ALBERT \& | GC | 0.99 |
| 360530BA00110000 | MEHRABIAN, ALBERT \& | GC | 0.34 |
| $360518 \mathrm{DB00270000}$ | MEIGHAN, LUCILLE RO | NC | 0.10 |
| 360520CA00380000 | MELBY, RAYMOND M \& | GC | 0.07 |
| 360624CB00270000 | MERKEL, DUANE E \& | GC | 0.31 |
| 360518DD01030000 | MILLER REV TRUST, D | GC | 0.19 |
| 360508CD00600200 | MILLETTE, RAYMOND A | GC | 0.12 |
| 360508CD00430000 | MILLS, RICHARD LEWI | GC | 0.49 |
| 360508CA00130000 | MONNOT, FRANK D \& L | GC | 0.23 |
| 360518DD00380000 | MORRISON FAMILY PRO | GC | 0.12 |
| 360516CA00220000 | MORRISON TRUST, C A | GC | 2.73 |
| 360626B000010000 | MORRISON TRUST, MIR | GC | 1.37 |
| 360508BD00090000 | MORRISON, C A TRUST | GC | 0.08 |
| 360517AC00970000 | MORRISON, C A TRUST | GC | 1.12 |
| 360516CA00210000 | MORRISON: C A TRUST | GC | 1.17 |

## Available Commercial Properties in Grants Pass Oregon

Prepared by Craig Stone and Associates based on Josephine County Tax Assessor's Data and Josephine County GIS Data

| Map and Tax Lot | Name of Owner | Zoning | Acres |
| :---: | :---: | :---: | :---: |
| $360521 \mathrm{CC00090000}$ | MURDOCK, R WENDEL | GC | 0.29 |
| 360530BA00030000 | NAWODYLO FAMILY TRU | GC | 0.97 |
| 360517BC00210000 | NEWMAN UNITED METHO | GC | 0.12 |
| 360517 BC 00220000 | NEWMAN UNITED METHO | GC | 0.11 |
| 360518AD01070000 | NEXT-CENTURY PROPER | GC | 0.22 |
| 360521 CD 00180000 | NOE REV LIV TRUST, | GC | 0.60 |
| 360530AB00020000 | NORTHRIDGE ENTERPRI | GC | 0.92 |
| 360530C000160000 | NUNN, RONALD C \& | GC | 0.13 |
| 360518DA00320000 | OAKLEY, HARVEY W SR | CBD | 0.13 |
| 360519DC00210100 | OREGON PROPERTY HOL | GC | 0.49 |
| 360520 CB 00860000 | OSMONSON, WAYNE \& | GC | 0.16 |
| 360624CA00070000 | PACIFIC CONF BRETHE | GC | 1.14 |
| 360519DB00440000 | PADGETT, VERNON D \& | GC | 0.18 |
| 360530 C 000170000 | PORTER TRUST, JEAN | GC | 0.66 |
| 360508 CD 00550000 | PORTLAND LIMITED PA | GC | 0.28 |
| 360508CD00560000 | PORTLAND LIMITED PA | GC | 0.34 |
| 360518DA00530000 | PURPUREE LIV TRUST, | GC | 0.08 |
| 360518DB00440000 | PURPUREE, VICTOR L | GC | 0.07 |
| 360518DB00440200 | PURPUREE, VICTOR L | GC | 0.17 |
| 360530 CO 00200000 | QSR PROPERTIES \#3 L | GC | 0.60 |
| 360623DD00300000 | QUINTERO FAMILY TRU | GC | 0.29 |
| 360626B000120000 | RADIO DESIGN GROUP | GC | 3.03 |
| 360518DA01090000 | RAPLEY, MARK W \& | CBD | 0.35 |
| 360623DD00260000 | READ, RAYMOND E \& | GC | 0.19 |
| 360624CA00160000 | REDWOOD COUNTRY CHU | GC | 0.62 |
| 360624CB00120000 | REDWOOD GRANGE \#760 | GC | 1.03 |
| 360517CB00010000 | REEDY, CHRISTINE \& | GC | 0.09 |
| 360623CA00020200 | RESTER, BRUCE B | GC | 0.26 |
| 360624DB00090000 | RILEY, DAVID \& | GC | 0.20 |
| 360519CA00010300 | RINGUETTE LLC | GC | 0.99 |
| 360521CD00190000 | ROBCO INC | GC | 0.96 |
| 360518DA01070000 | ROBERTS JR TRUST, A | GC | 0.17 |
| $360518 \mathrm{DA01040000}$ | ROBERTS JR TRUST, A | CBD | 0.16 |
| 360505CD00010100 | ROBERTS JR TRUST, A | GC | 8.85 |
| 360521 CD00030000 | RUSSELL, KENNETH B | GC | 0.44 |
| 360519DB00430100 | RYDELL LOV TRUST, L | GC | 0.23 |
| 360517 CB 00220400 | SAXON FAMILY TRUST | GC | 0.61 |
| $360519 \mathrm{DB00330200}$ | SAXON FAMILY TRUST | GC | 0.70 |
| 360625DD00190000 | SCROGGS, DEBRA L | GC | 0.46 |
| 360613D000110100 | SE ACQUISITIONS OF | GC | 0.39 |
| 360623DD00320000 | SHARER INVESTMENTS | GC | 1.01 |
| 360623DD00290000 | SHARER INVESTMENTS | GC | 0.21 |
| 360623DD00310000 | SHARER INVESTMENTS | GC | 0.25 |
| 360518AD00600000 | SHAW, CAROLE R \& | GC | 0.17 |
| 360519CA00170000 | SHAW, ROGER A \& | GC | 1.47 |
| $360521 \mathrm{CC00230000}$ | SHRODE LIVING TRUST | GC | 0.39 |
| $360508 B D 00060000$ | SIGEL FAMILY LLC | GC | 4.97 |


| Available Commercial Properties in Crants Pass Oregon |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates based on Josephine County Tax Assessor's Data and Josephine County GIS Data |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360613DD00050000 | SILER TRUST, ORVILL | GC | 1.26 |
| 360520 CA 00320000 | SNOOK, DAVE | GC | 0.41 |
| 360517 BB 00060000 | SPEARS, FAY C \& ALV | GC | 0.17 |
| 360517 BB 00070000 | SPEARS, FAY C \& ALV | GC | 0.15 |
| 360613DA00050000 | SPICKLER, RAY L \& | GC | 1.96 |
| 360613DA00040000 | SPICKLER, RAY L \& | GC | 2.39 |
| 360624DB00350000 | SPRING VILLAGE RETI | GC | 6.45 |
| 360517 BB 00080000 | STACH, WALTER J \& M | GC | 0.14 |
| 360508BA00070100 | STEIN LIV TRUST | GC | 1.63 |
| 360508BA00090000 | STEIN LIV TRUST | GC | 0.55 |
| 360508BA00100100 | STEIN LIV TRUST | GC | 0.22 |
| 360519DC00190000 | STEPHENS LOVING TRU | GC | 2.07 |
| 360520 DB00410300 | STEVENS, ALAN D | GC | 0.20 |
| 360520DB00410000 | STEVENS, ALAN D | GC | 0.23 |
| 360518AD01140000 | STEVENSON, GARY ORV | CBD | 0.17 |
| 360518AD00580000 | STEWART, RICH | GC | 0.11 |
| 360624CC00010000 | STUTZMAN INVESTMENT | GC | 4.96 |
| 360624CD00130100 | STUTZMAN INVESTMENT | GC | 4.12 |
| 360623DD00020000 | SULLIVAN, DENISE M | GC | 0.58 |
| 360530BA00090000 | SVED, SAMUEL \& | GC | 0.40 |
| 360625DD00100000 | TAMASHIRO PC 401K P | GC | 0.23 |
| 360519AD00070000 | THOMPSON, GAYE P | GC | 0.15 |
| 360519CD00160200 | THREE RIVERS COMMUN | GC | 4.51 |
| $360517 \mathrm{CC00500000}$ | TORBERT, JON A \& | CBD | 0.11 |
| 360519CA00140000 | UNION PROPERTIES LL | GC | 0.93 |
| 360519 CA 00150000 | UNION PROPERTIES LL | GC | 1.95 |
| $360519 \mathrm{CA00160000}$ | UNION PROPERTIES LL | GC | 1.06 |
| 360508BA00120200 | V R INC | GC | 0.53 |
| 360519AD00290000 | VOIT, RONALD P | GC | 0.22 |
| 360516CA00230000 | WALKER, MORRISON LL | GC | 1.93 |
| 360516CA00230200 | WALKER, MORRISON LL | GC | 1.78 |
| 360516CC00140100 | WAL-MART REAL ESTAT | GC | 1.19 |
| $360516 \mathrm{CC00140000}$ | WAL-MART STORES INC | GC | 0.69 |
| 360521DB00180000 | WALTERS, RUSSELL D | GC | 0.44 |
| 360521DB00180100 | WALTERS, RUSSELL D | GC | 0.65 |
| 360521D000030000 | WALTERS, RUSSELL D | GC | 0.35 |
| 360508CA00160000 | WATKINS LIV TRUST | GC | 0.20 |
| $360530 C B 00170000$ | WATSON LIVING TRUST | GC | 0.32 |
| $360530 C B 00180000$ | WATSON LIVING TRUST | GC | 0.30 |
| 360518DA00510000 | WEBB, THERESA V | GC | 0.08 |
| 360518DD00590000 | WEIDENBACH, RAY \& | GC | 0.16 |
| 360624CB00260100 | WELCH, JAMES ELTON | GC | 0.17 |
| 360517 BB 00270100 | WELLS, PHILLIP T \& | GC | 0.21 |
| $360519 \mathrm{DB00250000}$ | WESTON, JERRY R \& | GC | 1.01 |
| 360520DD00110000 | WIIK, HARRY T | GC | 0.74 |
| 360517 BB 00280000 | WOOD, JOAN | GC | 0.10 |
| 360624DC00050200 | WOODRUFF, DALE R \& | GC | 1.39 |

Available Commercial Properties in Grants Pass Oregon
Prepared by Craig Stone and Associates based on Josephine County Tax Assessor's Data and

| Josephine County GIS Data |  |  |  |
| :--- | :--- | :--- | :--- |
| Map and Tax Lot | Name of Owner | Zoning | Acres | | $360518 D B 00290000$ | WOOLDRIDGE, MICHAEL | NC | 0.20 |
| :---: | :---: | :---: | :---: |

## Appendix D

## Available Industrial Property



| Available Industrial Properties in Grants Pass Oregon |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates based on Josephine County Tax Assessor's Data and Josephine County GIS Data |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning Designation | Acreage |
| 360518AC00520000 | AMARANTHUS, MICHAEL | 1 | 0.86 |
| 360516CD00060000 | BAIDA, FRED G \& | 1 | 2.42 |
| 360625AA00070000 | BMC CAPITAL LLC | BP | 1.11 |
| 360521BB00150000 | CARTER, DONALD L \& | BP | 3.53 |
| $360624 \mathrm{CC00090000}$ | CASCADE ENTERPRISES | BP | 0.66 |
| 360516DC00010000 | CEMETERY 100 F | BP | 6.17 |
| 360505CC00110000 | COLEMAN PROPERTIES | BP | 0.58 |
| 360517 D 000140000 | COPELAND, ROBERT S | 1 | 5.44 |
| 360508 BB 00030100 | DRAKE, ROBERT ALLEN | IP | 0.79 |
| 360520AB00080000 | EMBURY, MAC | 1 | 1.34 |
| 360521 BD00040000 | FOGG, RICHARD E \& | BP | 0.90 |
| 360521BB00070000 | HAMLYN FAMILY LLC | BP | 3.87 |
| 360521 BB00130100 | HANSEN, ROGER H \& | BP | 2.65 |
| 360517D000130000 | HVALL, RANDY E | 1 | 0.70 |
| 360506BD00060000 | JBF CORPORATION | BP | 2.57 |
| 360520AA00060100 | JONAS, BOB \& | 1 | 1.75 |
| 360516DC00020000 | MASONIC CEMETERY | BP | 5.91 |
| 3605060000439000 | MCKINNEY, VIRGINIA | IP | 2.10 |
| $360506 \mathrm{DB00010000}$ | MIGNOT TRUST | 1 P | 0.72 |
| 360626A000010000 | MILLER, JAMES \& | RI | 0.88 |
| 360624DC00130000 | NORTHRIDGE REAL EST | BP | 1.49 |
| 360519CC00060400 | NUNN, RONALD C \& | BP | 0.63 |
| 360520AB00050000 | OCKENDEN, FRED | BP | 1.67 |
| 360505CC00020000 | PETERSON, BARRY R | BP | 0.61 |
| 360506 BD 00040000 | REDWOOD GROUP LLC \& | BP | 3.05 |
| 360521 BB00140000 | RUSSELL REV LIV TRU | BP | 1.76 |
| 360522 BC 00060000 | SPALDING \& SON INC | I | 2.11 |
| 3605220000040000 | SPALDING \& SON INC | 1 | 9.72 |
| 360521BA00060000 | TORBERT, JON A \& | BP | 0.94 |
| 360521 BB00030000 | TP GRANTS PASS LLC | 1 | 2.43 |
| 360508 BB 00020100 | WASHINGTON MEDICAL | IP | 6.23 |
| 360520AA00070100 | WILLIAMS LIVING TRU | BP | 1.67 |

Appendix E
Commercial Parking


| Grants Pass Commercial Parking-Removed from Inventory |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates using Josephine County Tax Assessor's Data and Josephine County Aerial Photos from County GIS |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360517D000020400 | A \& F GRANTS PASS L | GC | 1.31 |
| 360519 CC 00060700 | A2H LLC | GC | 1.50 |
| 360508CD00570000 | ABDALLAH, PETER F \& | GC | 0.33 |
| 360508CA00380000 | ABEL, ETHELL | GC | 0.15 |
| 360516 CC 00060100 | ABRE LLC | GC | 1.44 |
| 360519DB00280100 | AGUILERA, JOE R \& | GC | 0.16 |
| 360517CB00620000 | ALLIED CHRISTIAN FO | CBD | 0.20 |
| 360519CA00130000 | ANDERSON, DARRELL D | GC | 0.30 |
| 360518DA00490000 | ANDROY, ROBERT M II | CBD | 0.13 |
| 360530AB00030000 | ANIMAL CLINIC OF JO | GC | 0.89 |
| 360508BC00031600 | ASANTE | GC | 0.11 |
| 360508BC00031500 | ASANTE | GC | 0.18 |
| 360519CD00090700 | ASANTE | GC | 1.00 |
| 360508CD00850000 | ASHLEY ENTERPRISES | GC | 0.11 |
| 360508CD00590100 | ATKINS, CHUCK | GC | 0.18 |
| 360508BD00150000 | ATKINS, MELBURN L \& | GC | 0.42 |
| 360517 D 000010100 | AUERBACH GRANTS PAS | GC | 0.32 |
| 360517DA00080300 | AUERBACH GRANTS PAS | GC | 0.39 |
| 360517D000050000 | AUSLAND AUSLAND REE | GC | 0.34 |
| 360508BD00110200 | AUTOZONE INC | GC | 0.31 |
| 360519DC00210000 | AUTOZONE INC | GC | 0.94 |
| $360519 \mathrm{DA00030000}$ | BAKSHAS LOVING TRUS | GC | 0.58 |
| 360520 CB00660000 | BARNES, GEORGE S \& | GC | 0.18 |
| 360508CD00580000 | BARNSTORMERS LITTLE | GC | 0.20 |
| 360518AD01259000 | BAUER GP LLC | GC | 0.06 |
| 360518DD00340000 | BAUER REV LIV TRUST | GC | 0.22 |
| 360518DD00330000 | BAUER REV LIV TRUST | GC | 0.13 |
| 360520 DD 00060000 | BEAIRSTO, JOHN R JR | GC | 0.22 |
| 360624CD00040100 | BEAVER MARSH PROPER | GC | 2.02 |
| 360518 DA 00500000 | BECK, BERNADETTE | CBD | 0.11 |
| 360517BA00380000 | BEHYMER, KENNETH W | GC | 0.27 |
| 360624 CD00020000 | BENEDETTI, PAUL A | GC | 1.02 |
| $360519 \mathrm{DB00010000}$ | BI MART CORP \#610 | GC | 2.77 |
| 360519 CA 00060100 | BI-MOR STATIONS INC | GC | 0.51 |
| $360519 \mathrm{DA00350100}$ | BLUE FROG PROPERTIE | GC | 0.40 |
| 360519AC00150000 | BOEHM, DARYL R \& | GC | 1.25 |
| 360519AC00190100 | BOEHM, DARYL R \& | GC | 0.30 |
| 360517 BC 01650000 | BOLINT FAMILY TRUST | CBD | 0.11 |
| 360517D000070000 | BOYER, ORIE C \& | GC | 0.28 |
| 360516 CCO 0020100 | BP WEST COAST PROCU | GC | 1.07 |
| 360519AA00080000 | BRADLEY, GENE R \& | GC | 0.36 |
| 360519AA00050000 | BRADLEY, GENE R \& | GC | 0.17 |
| 360519AA00090000 | BRADLEY, GENE R \& | GC | 0.15 |
| 360519AA00100000 | BRADLEY, GENE R \& | GC | 0.23 |
| $360519 \mathrm{CC00070000}$ | BRAINWASH LLC | GC | 0.39 |
| 360519 C 00060100 | BRAINWASH LLC | GC | 0.30 |
| 360519 CO 00050000 | BRAINWASH LLC | GC | 0.72 |


| Grants Pass Commercial Parking- Removed from Inventory |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates using Josephine County Tax Assessor's Data and Josephine County Aerial Photos from County GIS |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360519 CCO 0060600 | BRANSFIELD, ROBERT | GC | 1.98 |
| 360519CA00210100 | BRISENO, ROBERT J \& | GC | 0.62 |
| 360517 CB 00220300 | BROER CO | GC | 0.55 |
| 360624DC00010000 | BROOKHURST PUD LLC | GC | 1.51 |
| 360519AD00260000 | BROWN, JEROMED \& | GC | 0.14 |
| 360519AD00230000 | BROWN, JEROME D \& | GC | 0.15 |
| 360518AD00690000 | BROWNSON, ERNEST (L | GC | 0.12 |
| 360508 CC 01150000 | BUCKLEY, ROBNETTE | GC | 0.16 |
| $360508 \mathrm{BC00270000}$ | BYRD, RICHARD E \& | GC | 0.54 |
| 360520DD00140000 | CADLE, THOMAS | GC | 0.43 |
| 360520DD00140100 | CADLE, THOMAS | GC | 0.19 |
| 360508CA00090000 | CAR LIT LLC | GC | 1.00 |
| 360508CA00100000 | CAR LIT LLC | GC | 0.64 |
| 360508CA00110000 | CAR LIT LLC | GC | 2.45 |
| 360519DB00020000 | CARTER, BUDDY JOSEP | GC | 1.06 |
| 360624DC00060000 | CEDARWOOD SALOON IN | GC | 0.18 |
| 360624 DC 00060100 | CEDARWOOD SALOON IN | GC | 0.29 |
| 360520DD00130000 | CHAMBERS, GARY J \& | GC | 0.63 |
| 360519 CB 00120000 | CHAMBERS, GARY J \& | GC | 0.22 |
| 360519 CB 00110000 | CHAMBERS, GARY J \& | GC | 0.10 |
| 360517 BB 00210000 | CHANKIN, JOSEPH G \& | GC | 0.13 |
| 360520 CB00170000 | CLARK FAMILY TRUST, | GC | 0.27 |
| 360521 CC00150000 | CLARK TRUST, JAMES | GC | 0.83 |
| 360508 BA 00040300 | COLEMAN PROPERTIES | GC | 0.57 |
| 360508 BA 00040100 | COLEMAN PROPERTIES | GC | 0.51 |
| 360508 BA 00040500 | COLEMAN PROPERTIES | GC | 0.53 |
| $360519 \mathrm{CC00240100}$ | COL-JO CORP | GC | 0.40 |
| 360517 BC 01120000 | COLLINS, MICHAELA | CBD | 0.12 |
| $360517 \mathrm{BC01130100}$ | COLLINS, MICHAEL A | CBD | 0.12 |
| 360517DA00110100 | COLLINS, WANDA M TR | GC | 0.20 |
| 360517DA00110000 | COLLINS, WANDA M TR | GC | 0.72 |
| 360517AC00970100 | COLVIN OIL CO \& | GC | 0.44 |
| 360508CC01130000 | COLVIN OIL COMPANY | GC | 0.46 |
| 360519 CA 00080000 | COLVIN, MERVINW \& | GC | 0.93 |
| 360508 CB 00090000 | COMMUNITY BANK OF G | GC | 0.23 |
| 360508BA00140000 | CONDRAY REV LIV TRU | GC | 3.45 |
| 360508BA00120100 | CONDRAY REV LIV TRU | GC | 0.35 |
| 360517 CC 00550000 | COURIER PUBLISHING | CBD | 0.25 |
| 360517 CC 00580000 | COURIER PUBLISHING | CBD | 0.13 |
| $360517 C C 00600000$ | COURIER PUBLISHING | CBD | 0.13 |
| 360517 CCO 0590000 | COURIER PUBLISHING | CBD | 0.12 |
| $360517 \mathrm{CCO0610000}$ | COURIER PUBLISHING | CBD | 0.13 |
| 360517 CC 00620000 | COURIER PUBLISHING | CBD | 0.13 |
| 360517 CC 00630000 | COURIER PUBLISHING | CBD | 0.13 |
| 360517 CCO 0670000 | COURIER PUBLISHING | GC | 0.25 |
| 360517 CC 00660000 | COURIER PUBLISHING | GC | 0.13 |
| 360517 CC 00710000 | COURIER PUBLISHING | GC | 0.23 |


| Grants Pass Commercial Parking-Removed from Inventory |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates using Josephine County Tax Assessor's Data and Josephine County Aerial Photos from County GIS |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360517BC00420000 | CRATER TITLE INSURA | GC | 0.12 |
| 360520 CA 00380200 | CRHA LIVING TRUST | GC | 0.10 |
| 360520 DB00160000 | CROUCHER, KEVIN \& | GC | 0.90 |
| 360517BA00340000 | CUMMINGS REV TRUST | GC | 0.15 |
| 360508CA00530000 | DAVIS, WILLIAM L JR | GC | 0.16 |
| 360520CB00320000 | DEAN, STEVEN J \& | GC | 0.23 |
| 360517BC00350000 | DECOURCEY TRUST, DA | GC | 0.12 |
| 360520DA00320000 | DILLINGHAM, JOHN AL | GC | 0.20 |
| 360520DA00320200 | DILLINGHAM, JOHN AL | GC | 0.61 |
| 360520DA00320100 | DILLINGHAM, JOHN AL | GC | 0.13 |
| 360624DD00110200 | DOCTORS COURT II LL | GC | 0.64 |
| 360517D000080200 | EAM ADVERTISING AGE | GC | 0.35 |
| 360517 D 000080000 | EAM ADVERTISING AGE | GC | 1.06 |
| 360517 BC 00970000 | EHRLICH, JOHN A \& | CBD | 0.12 |
| 360505 CD 00030100 | EQUILON ENTERPRISES | GC | 0.79 |
| 360519CD00180000 | ERMSHAR FAMILY LLC | GC | 0.73 |
| 360624DC00100000 | FAHEY REALTY LLC | GC | 5.43 |
| 360508CA00580000 | FEDOSKY, DAVID V \& | GC | 0.19 |
| 360508CA00120000 | FERGUSON, KENNETH R | GC | 0.30 |
| 360517BC00890000 | FIRST BAPTIST CHURC | CBD | 0.12 |
| 360517 BC 00900000 | FIRST BAPTIST CHURC | CBD | 0.14 |
| 360518DD00630000 | FIRST STATES INVEST | GC | 0.24 |
| 360508CD00320100 | FLEISCHMAN, RONALD | GC | 0.17 |
| 360517BC00370000 | FORD, THOMAS P | GC | 0.13 |
| 360521CD00140000 | FORTUNA, VINCENT C | GC | 0.36 |
| 360521 CC00140000 | FOSTER FAMILY TRUST | GC | 0.40 |
| 360517BC01550000 | FOSTER, ROBERT \& DO | CBD | 0.12 |
| 360517 CB 00900000 | FRALICH, LINDA D \& | GC | 0.23 |
| 360518DA00010100 | FRAN MAR COMPANY | CBD | 2.71 |
| 360520DA00180000 | FRANCO, RUDOLPH \& | GC | 0.15 |
| 360519DB00280200 | FRANCO, RUDOLPH R \& | GC | 0.13 |
| 360520CA00360000 | FRANCO, RUDOLPH R \& | GC | 0.21 |
| 360518DA00910000 | FRATERNAL ORDER OF | CBD | 0.06 |
| 360518DA00920000 | FRATERNAL ORDER OF | CBD | 0.06 |
| 360520CA00200000 | FRUITDALE GRANGE | GC | 0.65 |
| 360519CD00060200 | FUTUREQUEST COMPANY | GC | 0.37 |
| 360517DD00030000 | G P VENTURES LLC | GC | 1.34 |
| 360518DD00280000 | GATES, JOHN GIFFIN | GC | 0.14 |
| 360518DD00290000 | GATES, JOHN GIFFIN | GC | 0.21 |
| 360508CD00110000 | GETTY FAMILY TRUST | GC | 0.23 |
| 360517CB00190000 | GILL, CHARLES ARTHU | GC | 0.07 |
| 360508CA00060100 | GIORGI 2000 REV TRU | GC | 0.60 |
| 360517 BBO 0200000 | GOSPEL RESCUE MISSI | GC | 0.06 |
| 360518AD01250000 | GRANGE CO-OP SUPPLY | GC | 0.55 |
| 360517BC00480000 | GRANTS PASS BOARD O | GC | 0.11 |
| 360508BC00250400 | GRANTS PASS COMMUNI | GC | 0.24 |
| 360519DA00060000 | GRANTS PASS IRRIGAT | GC | 0.65 |



| Grants Pass Commercial Parking-Removed from Inventory |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates using Josephine County Tax Assessor's Data and Josephine County Aerial Photos from County GIS |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360508CC00030100 | KRUSE LOVING TRUST | GC | 0.15 |
| $360517 \mathrm{CB00830000}$ | LAMONTAGNE LIV TRUS | CBD | 0.11 |
| 360517CB00820000 | LAMONTAGNE LIV TRUS | CBD | 0.12 |
| 360624CD00010000 | LANGLEY, DONNA C TR | GC | 1.79 |
| 360518AD01010000 | LANSING, MARK A | GC | 0.12 |
| 360521 CC 00220000 | LEWIS, BETTY JANE L | GC | 0.49 |
| 360518DA00570000 | LIN, SHOU-MIN \& | GC | 0.11 |
| 360520 CA 00380300 | LINGAFELTER, PATRIC | GC | 0.44 |
| 360521CC00130000 | LITWILLER, NAOMI L | GC | 0.41 |
| 360518AD01030000 | LONGHURST, GORDON \& | GC | 0.12 |
| 360520DD00010100 | LUKER, RICHY \& | GC | 0.54 |
| 360508CD00110100 | MAIN BRANCH BUILDIN | GC | 0.13 |
| 360508CD00620000 | MANZANITA MEDICAL P | GC | 0.44 |
| 360517 CB 00860000 | MARTIN, RONALD H \& | CBD | 0.12 |
| 360517 CB 00870000 | MARTIN, RONALD H \& | CBD | 0.12 |
| $360521 \mathrm{CC00450000}$ | MATTISON, DONNA J \& | GC | 0.38 |
| 360521CC00010000 | MAUBACH REV LIV TRU | GC | 0.29 |
| 360508 CD 00450000 | MAXEY, JOE G \& | GC | 0.23 |
| 360508CD00460000 | MAXEY, JOE G \& | GC | 0.24 |
| 360508CD00470000 | MAXEY, JOE G \& | GC | 0.11 |
| 360519DA00020000 | MCCARTER, JAMES W | GC | 0.26 |
| 360518DA00130000 | MCCOURTNEY, T JUNE | CBD | 0.23 |
| 360520DB00150000 | MCGINNIS, JOHN \& | GC- | 1.84 |
| 360519AA00120000 | MCGRATH, ANTONY RAM | GC | 0.08 |
| 360519AD00050100 | MCKINNEY PARK LTD | GC | 0.77 |
| 360519AD00060000 | MCKINNEY PARK, LTD | GC | 0.24 |
| 360508CD00790000 | MEHRABIAN, ALBERT \& | GC | 0.19 |
| 360519DC00060000 | MERTZ, DENNIS J \& | GC | 0.12 |
| 360519DC00050100 | MERTZ, DENNIS J \& | GC | 0.15 |
| 360517CA00400000 | MILLER FAMILY TRUST | GC | 0.75 |
| 360517CA00390000 | MILLER FAMILY TRUST | GC | 0.25 |
| 360519AD00200000 | MILLS FAMILY TRUST | GC | 0.26 |
| 360519AD00210000 | MILLS FAMILY TRUST | GC | 0.54 |
| 360508CA00150000 | MONNOT, FRANK D \& | GC | 0.30 |
| 360518DA01350000 | MOORE, NEIL TRUST | GC | 0.12 |
| 360518DA01340000 | MOORE, NEILA | GC | 0.12 |
| 360624DC00040000 | MOREY, EDWARD P | GC | 2.25 |
| $360519 \mathrm{CC00050000}$ | MORGAN, JAMES P \& B | GC | 0.24 |
| 360519 CCO 040100 | MORGAN, JAMES P \& B | GC | 0.71 |
| $360518 \mathrm{DD00370000}$ | MORRISON FAMILY PRO | GC | 0.23 |
| $360517 \mathrm{BC01400000}$ | MORRISON TRUST, C A | GC | 0.11 |
| 360516CD00020000 | MORRISON TRUST, C A | GC | 2.03 |
| 360516 CA 00200000 | MORRISON TRUST, MIR | GC | 2.59 |
| 360519CA00130100 | MORRISON TRUST, MIR | GC | 0.56 |
| 360519CA00100000 | MORRISON TRUST, MIR | GC | 0.41 |
| 360519CA00110000 | MORRISON TRUST, MIR | GC | 0.86 |
| 360508BD00100000 | MORRISON, C A TRUST | GC | 0.41 |


| Grants Pass Commercial Parking-Removed from Inventory |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates using Josephine County Tax Assessor's Data and Josephine County Aerial Photos from County GIS |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360508BD00110100 | MORRISON, C A TRUST | GC | 1.48 |
| 360508BD00090100 | MORRISON, C A TRUST | GC | 0.29 |
| 360517 BC 00830000 | MORRISON, C A TRUST | CBD | 0.23 |
| 360518DD00390000 | MORRISON, GARY \& MI | GC | 0.12 |
| 360518AD01040000 | MUMFORD, ROBERT L \& | GC | 0.10 |
| 360520 DB 00130300 | NAUMES EQUIPMENT \& | GC | 0.86 |
| 360519 DC 00080200 | NEWKIRK JLE WAY LP | GC | 3.14 |
| 360517 BC 00190000 | NEWMAN UNITED METHO | GC | 0.23 |
| 360519AA00220000 | NOW INVESTMENT INC | GC | 0.38 |
| 360519AA00240000 | NOW INVESTMENT INC | GC | 0.61 |
| 360624CA00150000 | NUNN, DENNIS \& | GC | 0.51 |
| 360624DB00220000 | NUNN, RONALD C \& | GC | 0.96 |
| 360518DA00380000 | ODEN, WILLIAM RUSSE | CBD | 0.17 |
| 360624CD00060000 | OREGON CREWE CUTTER | GC | 0.69 |
| 360624 CD 00120000 | OREGON PROPERTY HOL | GC | 0.66 |
| 360508BA00110200 | ORTEGA, LINDAM | GC | 0.32 |
| 360518DD00710000 | OWEN, WAYNE W \& | GC | 0.18 |
| 360519 C 00010000 | PAPAANUI RANCH PART | GC | 0.36 |
| 360519DC00030100 | PAPAANUI RANCH PART | GC | 0.54 |
| 360519DA00110000 | PARKER, THOMAS S \& | GC | 0.38 |
| 360519DA00130000 | PARKER, THOMAS S \& | GC | 0.29 |
| $360519 \mathrm{DA00140000}$ | PARKER, THOMAS S \& | GC | 0.08 |
| $360517 \mathrm{CB00160100}$ | PARKWAY PROFESSIONA | GC | 0.11 |
| 360517 CB 00170000 | PARKWAY PROFESSIONA | GC | 0.09 |
| 360517 CB 00180000 | PARKWAY PROFESSIONA | GC | 0.08 |
| 360508 CD 00390000 | PATEL, BHARAT B \& | GC | 0.59 |
| 360518DD00910000 | PATMGT 761GP LLC | GC | 0.24 |
| 360518DD00920100 | PATMGT 768GP, LLC | GC | 0.09 |
| 360518DD00980000 | PATMGT 901GP LLC | GC | 0.17 |
| 360520DD00010400 | PATTON, HOYT D JR | GC | 0.42 |
| $360517 \mathrm{BCO1060000}$ | PAVTAK PARTNERS | CBD | 0.11 |
| 360519DC00080000 | PAY LESS DRUG STORE | GC | 4.33 |
| $360517 B A 00270000$ | PAYNE, RONALD G \& D | GC | 0.14 |
| 360520 CA 00460000 | PENTECOSTAL CHURCH | GC | 0.40 |
| 360517 BC 01080000 | PIERCE, KENNETH W J | CBD | 0.18 |
| 360517 CB 00220200 | PIKE, LEONARD F CRE | CBD | 0.89 |
| 360508BD00190000 | POOLE, WILLIAM H \& | GC | 0.17 |
| $360519 \mathrm{DA00360000}$ | PROW, DAVID \& MARIL | GC | 0.27 |
| 360624 DD 00040000 | QSR PROPERTIES LLC | GC | 1.16 |
| 360517 CB 00360000 | QUICK, JOANNE K | GC | 0.17 |
| 360519DA00160000 | QUICKER, ALLEN JOHN | GC | 0.49 |
| 360517 BC 00090000 | R W HAYS PROPERTIES | GC | 0.29 |
| 360508BA00140100 | RACHOR, JOHN V \& SU | GC | 2.25 |
| 360518 BD 00870000 | RANDALL, NEIL B \& | NC | 0.29 |
| $360624 C D 00010100$ | REDWOOD BUSINESS PA | GC | 0.31 |
| $360519 \mathrm{DB00030000}$ | REEDY LIVING TRUST, | GC | 0.52 |
| 360517 CB 00060000 | REEDY, CHRISTINE \& | GC | 0.15 |


| Grants Pass Commercial Parking-Removed from Inventory |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates using Josephine County Tax Assessor's Data and Josephine County Aerial Photos from County GIS |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360517CA00250000 | REEDY, CHRISTINE E | GC | 0.37 |
| 360520 CB00640000 | REESE, GLEN | GC | 0.13 |
| $360520 \mathrm{CB00650000}$ | REESE, GLEN | GC | 0.15 |
| 360519 CA 00200000 | REINHART, MICHAEL C | GC | 0.40 |
| 360520DA00340000 | RICHARDS, IRMA \& | GC | 0.47 |
| 360517 BAO 0220000 | RIORDAN, JOHN J | GC | 0.12 |
| 360519CA00120100 | RISTAU, P D \& DELYO | GC | 1.52 |
| 360519CD00020000 | ROBERTS JOINT TRUST | GC | 0.69 |
| 360518DA00680000 | ROBERTS JR TRUST, A | CBD | 0.31 |
| 360517 BC 01300000 | ROE, ROSS N \& | CBD | 0.12 |
| $360517 \mathrm{BC01310000}$ | ROE, ROSS N \& | CBD | 0.11 |
| $360517 \mathrm{BCO1480000}$ | ROE, ROSS N \& | GC,CBD | 1.52 |
| 360517BC01380000 | ROE, ROSS N \& | GC | 0.23 |
| 360517 BC 01290000 | ROTUNNO, PETER JTR | CBD | 0.12 |
| 360518DD00720000 | RUBBER TREE INC | GC | 0.36 |
| 360519DC00220000 | RV JONES LLC | GC | 1.91 |
| 360519DC00180000 | RVI INC | GC | 0.58 |
| 360517CB01200000 | SAFEWAY, INC | GC | 1.08 |
| 360519DA00370000 | SAITO, DEL | GC | 0.51 |
| 360517CA00350400 | SAMMIS, SHIRLEY A | GC | 0.72 |
| $360517 \mathrm{BC01460000}$ | SANFORD, MALLORY | GC | 0.12 |
| 360517CA00170000 | SAUER FAMILY TRUST, | GC | 0.42 |
| 360519AA00070000 | SCHWEIN FAMILY TRUS | GC | 0.28 |
| 360518DB00020000 | SCOTT, NORMAN E \& | GC | 0.19 |
| 360517CB00370000 | SHIRLEY, TIMOTHY W | GC | 0.17 |
| 360517BC01180000 | SHREWSBURY PROPERTI | CBD | 0.10 |
| 360508BD00070200 | SIGEL FAMILY LLC | GC | 0.58 |
| 360508BD00200100 | SIXTH AND MIDLAND P | GC | 0.55 |
| $360520 \mathrm{DB00420000}$ | SLAMA, KURT \& | GC | 0.26 |
| 360624DB00130000 | SMITH, CARLIE W \& | GC | 0.33 |
| 360624DB00120000 | SMITH, CARLIE W \& | GC | 0.72 |
| $360521 \mathrm{CC00080000}$ | SMITH, MAYNARD E \& | GC | 0.86 |
| $360521 \mathrm{CC00070000}$ | SMITH, MAYNARD E \& | GC | 0.20 |
| 360508CA00550000 | SMITH, RALPH D \& MA | GC | 0.21 |
| 360508CA00560000 | SMITH, TED \& | GC | 0.20 |
| 360508CA00520000 | SOFCU COMMUNITY CRE | GC | 0.16 |
| 360508CA00490000 | SOFCU COMMUNITY CRE | GC | 0.16 |
| 360517BB00130000 | SPEARS FAMILY TRUST | GC | 0.17 |
| 360517BB00050000 | SPEARS, ALVIN K | GC | 0.21 |
| 360517 BB 00170000 | SPEARS, FAY C \& ALV | GC | 0.17 |
| 360517 BB 00160000 | SPEARS, FAY C \& ALV | GC | 0.17 |
| 360517 BB 00020000 | SPEARS, FAY C \& ALV | GC | 0.17 |
| 360517 BB 00150000 | SPEARS, FAY C \& ALV | GC | 0.17 |
| 360517 BB 00030000 | SPEARS, FAY C \& ALV | GC | 0.17 |
| 360517 BB 00040000 | SPEARS, FAY C \& ALV | GC | 0.25 |
| 360508BB00100000 | STEIN ENTERPRISES I | GC | 1.33 |
| 360508BB00100000 | STEIN ENTERPRISES I | GC | 0.46 |


| Grants Pass Commercial Parking-Removed from Inventory |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates using Josephine County Tax Assessor's Data and JosephineCounty Aerial Photos from County GIS |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360508BB00100300 | STEIN ENTERPRISES I | GC | 0.95 |
| 360508BB00100300 | STEIN ENTERPRISESI | GC | 0.51 |
| 360518DD00620000 | STEIN LIV TRUST | GC | 0.39 |
| 360517CA00280000 | STEPHENSON, THEODOR | GC | 0.93 |
| 360518DD00610000 | STEVENSON, GARY ORV | GC | 0.23 |
| 360517 BB 00220000 | STINEBAUGH, S JJR | GC | 0.17 |
| 360517BB00220100 | STINEBAUGH, S J JR | GC | 0.33 |
| 360518DA00970040 | STRINGER, JOYCE J \& | CBD | 0.23 |
| 360624CC00120000 | STUTZMAN JOINT TRUS | GC | 4.70 |
| 360530BA00100000 | SVED, SAMUEL \& | GC | 0.14 |
| 360519CD00020200 | SWANSON, JERRY S \& | GC | 0.83 |
| 360516CD00030400 | TACO BELL CORP | GC | 0.85 |
| 360519CD00029100 | TEHAMA TIRE SERVICE | GC | 0.12 |
| 360519CD00010000 | TEHAMA TIRE SERVICE | GC | 1.09 |
| 360508CA00390000 | THOMAS, LOIS IONE | GC | 0.15 |
| 360518DD00030000 | THOMASON FAMILY TRU | GC | 0.25 |
| 360518DD00040000 | THOMASON FAMILY TRU | GC | 0.51 |
| 360518DD00050000 | THOMASON FAMILY TRU | GC | 0.25 |
| $360519 \mathrm{CC00060300}$ | THREE RIVERS COMMUN | GC | 1.36 |
| $360519 \mathrm{CC00061100}$ | THREE RIVERS COMMUN | GC | 1.28 |
| 360520CA00400000 | TILLERY REV LIV TRU | GC | 1.09 |
| 360517 BA 00400000 | TOMPKINS, AMY K TRU | GC | 0.23 |
| 360517BA00390000 | TOMPKINS, AMY K TRU | GC | 0.21 |
| 360519DC00120000 | UMPQUA HOLDING CORP | GC | 0.50 |
| 360520CA00370000 | VAN BRINK, LAURA | GC | 0.12 |
| 360508CC01180000 | VENUTI, TONY \& | GC | 0.17 |
| 360517BA00520000 | VETSCH, DOUGLAS M \& | GC | 0.29 |
| 360517BA00550000 | VON COELLN TRUST DT | GC | 0.25 |
| 360520 CA 00470000 | WADE'S RENTAL SALES | GC | 0.59 |
| 360518DD00970000 | WALDON FAMILY TRUST | GC | 0.13 |
| 360521 CD00380000 | WALKER, LEE \& | GC | 0.92 |
| 360521 CD00370000 | WALKER, LEE \& | GC | 0.79 |
| 360521 CC 00440000 | WALLACE LIVING TRUS | GC | 0.30 |
| 360516 CD 00030100 | WAL-MART REAL ESTAT | GC | 18.43 |
| 360508CA00060200 | WASHINGTON MUTUAL B | GC | 0.29 |
| 360508 CA 00060000 | WASHINGTON MUTUAL B | GC | 0.53 |
| 360518DA00390100 | WEBB, DARRELL R \& J | CBD | 0.23 |
| 360519DB00400000 | WEINBERG REV TRUST, | GC | 5.48 |
| 360517BC01580000 | WELLS FARGO BANK, N | CBD | 0.30 |
| 360517 BC 01150100 | WESTERGARD, GORDON | CBD | 0.11 |
| $360517 \mathrm{BC01150000}$ | WESTERGARD, GORDON | CBD | 0.11 |
| $360517 \mathrm{BC01140000}$ | WESTERGARD, GORDON | CBD | 0.24 |
| 360519DB00240000 | WESTON, GERALD R \& | GC | 2.17 |
| 360519 CD 00099000 | WFS MATERIALS INC | GC | 0.13 |
| 360519 CD 00070000 | WFS MATERIALS INC | GC | 0.28 |
| 360517 CB00140000 | WHALEY, LARRY A \& | GC | 0.14 |
| 360517 CB 00150000 | WHALEY, LARRY A \& | GC | 0.09 |


| Grants Pass Commercial Parking- Removed from Inventory |  |  |  |
| :---: | :---: | :---: | :---: |
| Prepared by Craig Stone and Associates using Josephine County Tax Assessor's Data and JosephineCounty Aerial Photos from County GIS |  |  |  |
| Map and Tax Lot | Name of Owner | Zoning | Acres |
| 360516 CB 00270000 | WHALEY, LARRY A \& | GC | 0.47 |
| 360518DD00460000 | WHEELER, CLIFFORD T | GC | 0.66 |
| 360520DD00099000 | WHETSTONE HOLDINGS | GC | 0.45 |
| 360505CD00030200 | WILD RIVER INN INC | GC | 3.62 |
| $360519 \mathrm{CC00040300}$ | WILLIAMS TRUST, MAC | GC | 0.52 |
| $360519 C C 00040400$ | WILLIAMS TRUST, MAC | GC | 0.50 |
| 360519 CD 00030000 | WINETEER, EDWIN L \& | GC | 0.78 |
| 360508CA00480000 | WOOD, KENNETH M \& M | GC | 0.16 |
| 360624DC00050300 | WOODRUFF, DALE R \& | GC | 0.41 |
| 360519 CCO 0060000 | WOODRUFF, DANIEL L | GC | 3.51 |
| 360517 BB 00350000 | ZHU, YUAN C \& | GC | 0.16 |
| 360517BB00340000 | ZHU, YUAN C \& | GC | 0.25 |

## Appendix F

## Industrial Lands Part of Going Concerns



| Industrial Properties with non-Building Uses in Grants |  |  |
| :---: | :---: | :---: |
| Prepared by Craig Stone and Associates based on Josephine County Tax Assessor's Data and J |  |  |
| Map and Tax Lot | Owner Name | Zoning |
| 360505CCO0070500 | BEACHAM, FRANK A \& | BP |
| 360505CC00080000 | CHIERICHETTI, PAUL | BP |
| 360505CC00100000 | COLEMAN PROPERTIES | BP |
| 360505CC00050000 | COLEMAN, JOSEPH E \& | BP |
| 360517CD00010000 | DAVISON'S READYMIX | BP |
| 360517D000120000 | HVALL, RANDYE | I |
| 360520AA00020000 | INDIAN CREEK MANAGE | BP |
| $360505 \mathrm{CC00060000}$ | LEONARD, LONNIE | BP |
| 360521 AC00070000 | MARTIN, WILLIAM M J | BP |
| 360520AB00020000 | PETERSON, GARY L \& | I |
| 360521A000030000 | SPALDING \& SON INC | 1 |
| 360521 A000030000 | SPALDING \& SON INC | 1 |
| 360517D000110000 | STEVENSON, GARY ORV | 1 |

## Appendix G

National, Regional and Statewide Trends

# Oregon Economic and Revenue Forecast 

## September 2006

Volume XXVI, No. 3


Theodore R. Kulongoski
Governor

## SUBSCRIPTIONS

The Oregon Economic and Revenue Forecast, is published quarterly, as follows: March, June, September, and December.

To subscribe, send the following information to:
Oregon Economic and Revenue Forecast
Office of Economic Analysis
Department of Administrative Services
155 Cottage Street, NE, U20
Salem, OR 97301-3966


#### Abstract

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If you have any questions regarding subscriptions to the forecast, please call Suzanne Brean at 503-378-3405 or send e-mail to suzanne.brean@das.state.or.us

The Economic and Revenue Forecast document is also available on our web page at: www.oea.das.state.or.us. Data files are also available for download on our web page.


# Department of Administrative Services 

Lindsay Ball, Director

## Office of Economic Analysis

Tom Potiowsky, State Economist Dae Baek, Deputy State Economist Michael Kennedy, Senior Economist Kanhaiya Vaidya, Senior Demographer Suzanne Porter, Corrections Forecast Analyst Suzanne Brean, Administrative Assistant

## FOREWORD

This document contains the Oregon economic and revenue forecasts. The Oregon economic forecast is published to provide information to planners and policy makers in state agencies and private organizations for use in their decision making processes. The Oregon revenue forecast is published to open the revenue forecasting process to public review. It is the basis for much of the budgeting in state government.

The report is issued four times a year; in March, June, September, and December. During legislative sessions, the June forecast is released on May 15.

The economic model assumptions and results are reviewed by the Department of Administrative Services Economic Advisory Committee and by the Governor's Council of Economic Advisors. The Department of Administrative Services Economic Advisory Committee consists of 15 economists employed by state agencies, while the Governor's Council of Economic Advisors is a group of 12 economists from academia, finance, utilities, and industry.

Members of the Economic Advisory Committee and the Governor's Council of Economic Advisors provide a two-way flow of information. The Department of Administrative Services makes preliminary forecasts and receives feedback on the reasonableness of such forecasts and assumptions employed. After the discussion of the preliminary forecast, the Department of Administrative Services makes a final forecast using the suggestions and comments made by the two reviewing committees.

The results from the economic model are in turn used to provide a preliminary forecast for state tax revenues. The preliminary results are reviewed by the Council of Revenue Forecast Advisors. The Council of Revenue Forecast Advisors consists of 15 specialists with backgrounds in accounting, financial planning, and economics. Members bring specific specialties in tax issues and represent private practices, accounting firms, corporations, government (Oregon Department of Revenue and Legislative Revenue Office), and the Governor's Council of Economic Advisors. After discussion of the preliminary revenue forecast, the Department of Administrative Services makes a final revenue forecast using the suggestions and comments made by the reviewing committee.

Readers who have questions or wish to submit suggestions may contact the Office of Economic Analysis 503-378-3405.

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## EXECUTIVE SUMMARY

## September 2006

## Oregon Economic Forecast

The second quarter initial estimate of job growth was an increase of 1.4 percent at an annual rate. This is the twelfth consecutive quarterly growth in jobs but breaks a string of eight quarters of growth above 2.0 percent. On a year-over-year ( $\mathrm{Y} / \mathrm{Y}$ ) basis, jobs increased in the second quarter by 3.6 percent. $\mathrm{Y} / \mathrm{Y}$ growth has been above 2.0 percent since the second quarter of 2004 .

The second quarter of 2006 marks the third year of job growth. The last three months (April to June) show a markedly slow pace for job creation. The Oregon Employment Department reports that recent job growth is running a little better than one percent compared to the 3.5 percent annual growth rate of the prior two-year period. The outlook for the national economy is for positive growth but at a slower rate. Given the prospects for a slowing of the housing market and the negative impacts from high energy prices, the prognosis is for slower growth in the Oregon economy. As the economy slows, it is more vulnerable to other risks, be they geopolitical or hurricane season.

The Office of Economic Analysis (OEA) forecasts employment to rise by 3.2 percent for 2006, the strongest yearly growth since 1997. This annual job growth is pushed up by the strong first quarter growth of 6.3 percent. The job growths of the remaining two quarters of 2006 are projected to average 1.0 percent. Job growth in 2007 is projected to be 1.3 percent, reflecting the slowing growth projected for the national economy. The economy continues to expand with 1.6 percent job growth in 2008.

Manufacturing will increase by 2.9 percent in 2006 and then reflect mild declines of 0.5 percent in 2007 and 0.3 percent in 2008. Job levels will still be below the average job levels of 2000.

Wood product manufacturing is projected to be down 0.5 percent in 2006 and then decline by 1.5 percent in 2007 and 2008.

The sector that contains semiconductors, computer and electronic products, will show gains of 3.0 percent for 2006. The job outlook is more uncertain with declines of 0.8 percent in 2007 and 0.1 percent in 2008. The outer years are projected to keep this sector in a no growth pattern.

Transportation equipment will increase by 6.2 percent in 2006. Job gains will give way to a slight decline in 2007 with a decrease of 0.5 percent. Employment will slightly decline with a loss of 0.8 percent in 2008.

Private non-manufacturing jobs will increase by 4.0 percent in 2006 and 1.7 percent in 2007 and 2.0 percent in 2008.

Construction will increase jobs at a strong 9.7 percent in 2006. Job growth will decline with a 1.0 percent drop in 2007 before a milder job growth of 0.8 percent in 2008.

Trade job growth will have similar growth this year compared to 2005. Retail trade job growth will be stronger in 2006 at 3.5 percent and grow 1.4 percent in 2007 and 1.9 percent in 2008. Wholesale trade will be positive in 2006 with an annual job growth of 2.5 percent followed by job gains of 1.0 percent in 2007 and 0.8 percent in 2008.

Professional and business services and health services will see some of the strongest growth. Professional and business services will grow 4.9 percent in 2006 followed by 3.5 percent growth in 2007 and 3.8 percent in 2008. Health services will increase 3.6 percent, 2.0 percent, and 2.6 percent on average for the same years.

Leisure and hospitality, which includes accommodations and food services, is expected to grow by 3.4 percent in 2006, and 1.8 percent in 2007, and 2.0 percent in 2008.

Government employment is expected to increase by 0.2 percent in 2006 followed by growth of 1.1 percent in 2007 and 2008. State and local government jobs will continue mild growth as tax revenues have improved with the stronger economy.

Population growth is expected to be higher than the U.S. average, but slower than the growth experienced in the mid-1990s. Growth will be slightly higher than during the recession over the next three years, with increases of 1.4 percent for each year.

## Forecast Risks

The housing market in Oregon shows all signs of slowing with building inventories, declines in sales of new and existing homes, and lower building permits. The last item to join this group is price. So far, house price appreciation has continued but at a slightly slower pace. The expectation is for house prices to drift to single digit increases and decline in some markets.

Oil prices continue to be bounced around by geopolitical events, the most recent being the Israeli-Hezbollah conflict. Refineries in the Gulf region are almost completely back to capacity operation and have helped mute some of the oil price increases from translating to much higher prices at the gas pump. But hurricane season is rapidly coming up and the risk of a repeat of last year is still in our memories. (For a more thorough review of oil market risk to the economy, please see this section in the June 2006 Economic and Revenue Forecast publication "Economic Impact from Oil Prices".)

We will continue to monitor and recognize the potential disruptions of these two risks factors on the Oregon economy.

The major risks now facing the Oregon economy are:

- Geopolitical risks. Uncertainty still surrounds the transition in Iraq, tensions with North Korea, Iran, Israel and Lebanon, and heightened security risks all weigh heavily on businesses and consumers. Disruptions in travel, oil supplies, and consumer confidence could be severe. The drop in business activity could be deeper if this uncertainty persists or
if the transition out of war goes badly for the U.S. The winding down of military expenses will not greatly impact Oregon. There is also an upside risk that transition issues go more smoothly than anticipated and stability in the Mid East provide a stimulus to the economy that is stronger than forecast.
- Inflation and Federal Reserve Bank reactions. A growing economy with surging energy costs is a recipe for inflation. Faster inflation than forecasted may force the Federal Reserve to raise interest rates more quickly and to higher levels. This action could slow the U.S. economy and in turn slowdown the Oregon economy.
- Falling U.S. Dollar. As the dollar depreciates against other foreign currencies, U.S. exports are promoted. Oregon's manufacturing sector has a large dependency on international markets. If the U.S. dollar falls too quickly, this could harm Oregon's trading partners, weakening their economies and lowering their demand for Oregon products. For the moment, the dollar has crept up against other currencies and the revaluation of the Yuan may be too small to greatly assist Oregon exports. In the end, a controlled lowering of the U.S. dollar is most beneficial to the Oregon economy.
- A sharp and major stock market correction. This would slow consumer spending. Lower stock prices could also limit the ability of businesses to raise necessary capital in the equity markets.
- A possible collapse of the housing market. The extremely low interest rates have caused a boom in home refinancing. As this activity matures and interest rates begin to raise, the added boost to consumer spending may also slow. Any drop in home price appreciations coupled with a large drop in mortgage refinancing could slow down consumer spending. The Oregon housing market could be adversely impacted by a major housing correction in California. Continued gains in personal income will be needed to keep consumer spending from falling.
- Rising regional energy prices. More businesses may slow production and lay off workers. Natural gas prices have risen the past year but appear to be leveling off, at least for this year. Oil prices have crossed above $\$ 70$ per barrel with fears it could go higher. A Goldman Sachs report suggests the possibility of a 'super-spike', sending the price of oil over $\$ 100$ per barrel. A geopolitical incident could dramatically disrupt gasoline and natural gas prices, with the Goldman Sachs report a more probable outcome. Regionally, electricity generation has been helped by a deeper snow pack but is still subject to weather patterns and natural gas prices. As demand surpasses the available capacity of hydro generation, electric generation may move towards natural gas powered turbine engines. Higher electricity prices could result from being pegged to natural gas prices.
- PERS and possible state and local government budget shortfalls. The Oregon Supreme Court overturned two major reforms but upheld the Settlement Agreement. The Court did not rule out future Legislative reforms to PERS. Although the 2005-2007 biennium appears to need only small additional expenditures, state and local governments may need to increase taxes, reduce services, and/or increase bond financing in the future to cover potential unfunded
liabilities for PERS. If increases in unfunded liabilities leads to increased tax rates, this could lead to a substantial negative impact on Oregon's economy. To the extent that spending cutbacks hit education and public infrastructure, the state could suffer longer-term impacts.
- Initiatives, referendums, and referrals. The ballot box brings a number of unknowns that could have wide-sweeping impacts on the Oregon economy. The Oregon Supreme Court has upheld the land use Measure 37. This measure could bring dramatic changes to land use regulation. Claims that were on hold will start moving through the hearing process. At this time, it is uncertain as to the impacts from compensation or lifting of land use restrictions.
- The recovery for semiconductors, software, and communications could be much slower than anticipated. Continued outsourcing of manufacturing could slow growth in this region. Recent commitments to move research out of the country would be very harmful to Oregon's high technology sector.

The major upside opportunities now facing the Oregon economy are:

- Sharp reduction of oil prices. Oil prices are being pushed above market equilibriums by disruptions stemming from political turmoil to extreme weather. Once these factors settle down and supplies increase, oil prices could fall much further than currently anticipated.
- Recovering business and consumer confidence. The transition out of the war in Iraq could accelerate. Rising confidence can help boost spending and hiring. Spillover effects to the stock market would reinforce the economic recovery.
- Controlled growth of China and India. China and India may successfully manage their economies to be more stable and still strong. This should stabilize commodity price volatility while promoting Oregon exports.

The September 2006 forecast for the next few years is a balanced look at prospects for the future. It is our "base scenario" or most likely outcome of the future. Nevertheless the risk factors described above can push economic activity stronger or weaker. At this point, OEA deems that the risks are not balanced; they are tilted toward more downside than upside, at least in the near term. In other words, risks are biased toward a milder growth scenario compared to our baseline forecast. The risks, of course, could change going forward as conditions change and certain risk factors would have been resolved, becoming part of the baseline assumptions.

## Demographic Forecast

The Census 2000 enumerated 3,421,399 persons in Oregon on April 1, 2000. This is an increase of 579,000 persons or 20.4 percent from the 1990 Census. Oregon's rate of growth between the two censuses was eleventh highest in the nation. In the past few years, however, the population growth rate was slow due to the struggling economy. Oregon's July 1,2005 estimated population was 3.631 million, an increase of 1.36 percent over the 2004 population, up from the nearly 1.14 percent annual growth rate since 2000 . This is a strong indicator that Oregon's
economy is picking up. Yet this annual growth rate is far from the well over 2 percent annual rate of growth a decade ago. The state's population is expected to reach 4.061 million in the year 2013, with an annual rate of growth around 1.4 percent.

During the 2005-2013 period, growth in all age groups will show the effects of the baby-boom generation, migration of the working age population and elderly retirees, and demographics impacted by the depression era birth cohort. After a period of slow growth in the past, the elderly population (65+) growth will pick up speed as the baby-boom generation start to enter this age group. The annual growth of the elderly population will reach 5 percent in 2012 when the boomers start to enter the retirement age. The youngest elderly (aged 65-74) will grow at an extremely fast pace due to the direct impact of baby-boom generation entering the retirement age. The elderly aged $75-84$ will shrink in number until 2010 as this group will be dominated by the depression era birth cohort. The oldest elderly ( $85+$ ) will continue to grow at a moderately high rate due to the combination of cohort change, continued positive net migration, and improving longevity.

As the baby-boom generation matures, once fast paced growth of population aged 45-64 will gradually taper to well below 1 percent rate by 2013. The young adult population, the 18-24 age group, will grow at an average of below 1 percent annually, considerably slower than the rate averaging 1.4 percent between 2000 and 2004. This will ease the pressure on public spending on college education. Children under the age of 5 will grow moderately at 0.6 to 1.4 percent rate. The K-12 population, the 5-17 age group, will show very slow growth which will translate into slow growth in school enrollments. The $25-44$ age group population has shown a sign of reversing the trend after several years of decline due to exiting baby-boom cohort. This age group has seen a positive growth starting in the year 2003 and will exceed 1.4 percent annual growth by the year 2013.

## Revenue Forecast

The forecast for General Fund revenues in the 2005-07 biennium equals $\$ 12,607.4$ million, an increase of $\$ 199.0$ million from the June 2006 forecast. Unlike the prior forecast's revision, the increase for this update is spread across the majority of revenue sources. Available resources of $\$ 12,915.9$ million exceed appropriations by $\$ 1,272.0$ million.

The forecast for General Fund revenues excluding corporate income tax, the basis for the "personal" kicker calculation, exceeds the Close of Session forecast for these revenue sources by 9.6 percent. If, when these revenues are tabulated following the end of the biennium, actual revenues exceed the COS forecast by 2.0 or more, all surplus revenues will be refunded to 2006 taxpayers per Oregon's kicker law. As of the September 2006 forecast, the value of the personal kicker is $\$ 1,042.7$ million.

Projected corporate income tax collections for the 2005-07 biennium equal $\$ 738.0$ million, an increase of $\$ 39.6$ million from the June 2006 forecast. The forecast exceeds the Close of 2005 Session forecast by $\$ 238.0$ million, which is well above the kicker threshold. The current forecast would result in a 61.3 percent tax credit for 2007 corporate taxpayers.

Structural General Fund revenues (excluding kicker refunds and credits) are projected to grow 8.3 percent to $\$ 13,797.7$ million for the 2007-09 biennium, an increase of $\$ 99.2$ million from the June forecast. Beyond the deceleration in general economic growth, the mild growth in revenues is primarily the product of two factors: growth in personal income taxes will slow as the drivers behind recent, rapid increases, namely the housing market and one-time capital gains realizations, fail to serve as primary growth factors in the next two years. In addition, corporate income taxes are expected to decline due to tax law changes and normal business cycle patterns. Excluding kicker refunds and credits totaling $\$ 1,280.7$ million, General Fund resources available for appropriation will equal $\$ 13,789.0$ million in 2007-09.

The long-term outlook is driven primarily by anticipated growth in personal income taxes. Project growth for other revenue sources is quite mild. General Fund revenues will reach $\$ 15,369.9$ million in 2009-11, a 22.8 percent increase that is exaggerated by impact of sizable kicker refunds in the prior biennium. For 2011-13, General Fund revenues increase 12.5 percent to $\$ 17,296.4$ million.

Projected lottery resources for the 2005-07 biennium will total $\$ 1,068.3$ million, an increase of $\$ 39.7$ million from the June forecast. Following each fiscal year, the Oregon State Lottery transfers administrative savings, the difference between actual and budgeted expenses, if any, to the Economic Development Fund. The transfer for fiscal year 2006 is $\$ 26.7$ million, accounting for the majority of the forecast revision. Excluding constitutionally dedicated and other legislatively-adopted allocations, the projected ending balance for the Economic Development Fund is $\$ 47.2$ million.

The extended outlook for lottery earnings reflects anticipated video lottery sales growth, as earnings from traditional games are expected to decline slightly. For the 2007-09 biennium, projected earnings and resources will equal $\$ 1,185.3$ million and $\$ 1,236.5$ million, respectively. In 2009-11, earnings will reach $\$ 1,311.7$ million while resources will total $\$ 1,316.2$ million. Finally, earnings equal $\$ 1,456.3$ million and resources equal $\$ 1,462.3$ million for the 2011-13 biennium.

## I. ECONOMIC FORECAST

September 2006
This edition of the National Economic Review and Forecast contains excerpts from Nigel Gault, Global Insight, "U.S. Economy: Current Situation: Forecast Flash" July 2006. This publication summarizes Global Insight's baseline national forecast that OEA incorporates into the Oregon economic and revenue models. Text in [ ] is editorial comments written by OEA staff. In addition, Table N. 1 provides a quick look at the annual rates. Table N. 2 provides a look at the forecast change from the last forecast. Graph N. 1 provides a graphic U.S. history and forecast. A full version of the National section can be found at our website.
www.oea.state.or.us/DAS/OEA/docs/economic/nationalfull.pdf

## A. National Economic Review and Forecast

## The Slowdown Is Here

The fourth-quarter slowdown in GDP growth proved to be a head-fake, as the economy came roaring back in the first quarter. But growth has slowed again in the second quarter, and this time we think it's for real. The housing market is cooling, and already-stretched consumers are facing high gasoline bills. With core inflation edging higher, the Federal Reserve is in no position to provide relief, and will have to push interest rates a bit higher still.

Growth Slowed in the Second Quarter. Signs of slower growth have become clearer. We have revised down our estimate of second-quarter growth to $2.3 \%$ (from $2.7 \%$ last month). Our consumer spending growth projection is unchanged at $2.0 \%$, down from $5.1 \%$ in the first quarter. The increased cost of filling gasoline tanks has squeezed spending in other areas, particularly for lower-income consumers who have less room for maneuver. However, based on monthly construction data, we now expect a larger drag from residential investment than before-the first negative in more than four years. And monthly capital goods shipments data suggest that business equipment spending growth has slowed unexpectedly. For residential investment, the second-quarter decline foreshadows a more severe drag in the second half of the year. For business equipment spending, though, the fundamentals (especially cash flow) still look good, and we anticipate that the second half will see a pickup in growth.

Second Half Better than the Second Quarter. We do not expect GDP growth in the second half of the year to be as soft as in the second quarter, although we still see it running below trend, at a $2.8 \%$ average. While housing should continue to decline, we expect some improvement in consumer spending growth, especially if oil and gasoline prices stabilize and then retreat, as we assume. Strong business investment demand and export growth should support GDP growth, but we do not see them fully canceling out the housing drag. Will sub-par growth allow the Fed to stop hiking interest rates? All will depend on inflation.

Core Inflation Rising. Three bad core CPI figures in a row ( $0.3 \%$ in March, April, and May) fanned fears of inflation, and scotched any notion that the Fed could take a break from rate hikes
in June. Core consumption price (PCE) inflation now stands at $2.1 \%$ year-on-year, above the upper limit of the Fed's informal 1-2\% tolerance band. This tolerance band is not a "hard" target zone, so the Fed can tolerate some slippage-as long as it is confident that inflation will fall back later. Unfortunately, even if monthly price increases ease back, unfavorable comparisons with a year ago are likely to take core PCE inflation up to $2.4 \%$ in the third quarter, even as growth slows. Despite the downside risks to economic growth, we think that the Fed will need to react, since it cannot afford to appear to be "behind the curve" on inflation.

Financial Markets Have Calmed Down. Although important risks remain, financial markets have calmed down in recent weeks. The Fed's statement of June 29, accompanying its rate hike to $5.25 \%$, was interpreted by some as hinting that interest rates have peaked, or that at least a pause is in the offing. Since we see upside risks to inflation in the immediate future, concern that the Fed might be "behind the curve" could easily resurface and lead to renewed volatility in financial markets.

At Least One More Move from the Fed. FOMC members are clearly worried about the risk of over-tightening, and thus sending the housing market into a tailspin. But the June rate hike showed that the Fed is determined above all to keep a lid on inflationary expectations. We believe that the inflation threat will trump the growth slowdown, and expect the Fed to hike the federal funds rate by another 25 basis points (to $5.50 \%$ ) on August 8. [The Fed left the federal funds rate unchanged at 5.25 percent]The risk for the remainder of 2006 is that the Fed might have to hike more than once. In 2007, with GDP growth running below trend and inflation edging lower, we see some modest rate reductions beginning in the second quarter.
Table N. 1

|  | Quarterly |  |  | Annual |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2006:2 | 2006:3 | 2006:4 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| GDP (Bil of 2000 \$) Chain Weight | 11,470 | 11,549 | 11,628 | 10,756 | 11,135 | 11,513 | 11,808 | 12,179 | 12,565 | 12,939 | 13,310 | 13,668 | 14,042 |
| \% Ch | 2.3 | 2.8 | 2.8 | 4.2 | 3.5 | 3.4 | 2.6 | 3.1 | 3.2 | 3.0 | 2.9 | 2.7 | 2.7 |
| Personal Income (Bil of \$) | 10,737 | 10,875 | 11,011 | 9,713 | 10,238 | 10,801 | 11,403 | 12,068 | 12,773 | 13,489 | 14,212 | 14,934 | 15,681 |
| \% Ch | 6.0 | 5.3 | 5.1 | 5.9 | 5.4 | 5.5 | 5.6 | 5.8 | 5.8 | 5.6 | 5.4 | 5.1 | 5.0 |
| Nonagricultural Employment (Millions) | 135.1 | 135.6 | 136.0 | 131.4 | 133.5 | 135.4 | 137.2 | 139.1 | 140.8 | 142.0 | 143.0 | 143.8 | 144.5 |
| \% Ch | 1.3 | 1.4 | 1.2 | 1.1 | 1.5 | 1.4 | 1.3 | 1.4 | 1.2 | 0.9 | 0.7 | 0.5 | 0.5 |
| Unemployment Rate | 4.6 | 4.6 | 4.7 | 5.5 | 5.1 | 4.7 | 4.8 | 4.8 | 4.7 | 4.7 | 4.8 | 4.9 | 5.0 |
| \% Ch | (8.2) | 1.3 | 2.3 | (8.1) | (8.3) | (7.6) | 3.1 | (0.3) | (2.7) | 0.4 | 1.3 | 2.5 | 2.6 |
| Industrial Production Index (2002=100) | 112.4 | 113.3 | 113.8 | 104.7 | . 108.1 | 112.6 | 115.2 | 117.6 | 120.1 | 123.0 | 126.5 | 130.1 | 134.0 |
| $\% \mathrm{Ch}$ | 6.0 | 3.1 | 1.7 | 4.1 | 3.2 | 4.2 | 2.3 | 2.1 | 2.1 | 2.4 | 2.9 | 2.8 | 3.0 |
| Corporate Profits (Bil of \$) | 1,751 | 1,724 | 1,737 | 1,059 | 1,438 | 1,730 | 1,740 | 1,766 | 1,789 | 1,822 | 1,882 | 1,963 | 2,081 |
| \% Cb | 10.5 | (6.0) | 3.1 | 13.0 | 35.8 | 20.3 | 0.6 | 1.5 | 1.3 | 1.8 | 3.3 | 4.3 | 6.0 |
| Money Supply (M2) (Bil of \$) | 6,797 | 6.854 | 6,906 | 6,398 | 6,650 | 6,906 | 7,168 | 7,484 | 7,813 | 8,167 | 8,540 | 8,927 | 9,334 |
| \% Ch | 2.2 | 3.4 | 3.1 | 5.2 | 3.9 | 3.9 | 3.8 | 4.4 | 4.4 | 4.5 | 4.6 | 4.5 | 4.6 |
| Prime Rate | 7.89 | 8.40 | 8.50 | 4.34 | 6.19 | 8.06 | 8.20 | 7.75 | 7.94 | 8.00 | 8.00 | 8.00 | 8.00 |
| \% Ch | 27.4 | 28.1 | 5.0 | 5.3 | 42.5 | . 30.2 | 1.8 | (5.5) | 2.4 | 0.8 | 0.0 | 0.0 | 0.0 |
| Consumer Price Index (1982-84=100) | 2.018 | 2.027 | 2.028 | 1.889 | 1.953 | 2.017 | 2.058 | 2.093 | 2.126 | 2.167 | 2.210 | 2.256 | 2.303 |
| \% Ch | 5.1 | 1.9 | 0.2 | 2.7 | 3.4 | 3.3 | 2.1 | 1.7 | 1.6 | 1.9 | 2.0 | 2.1 | 2.1 |
| Federal Budget (unified) (Bil of \$, Fed FY) | 91.9 | (78.2) | (96.5) | (400.7) | (319.7) | (266.5) | (287.4) | (328.9) | (285.8) | (242.9) | (205.3) | (172.4) | (189.5) |
| Current Account Balance (Bil of \$) | (882.0) | (915.1) | $(902,6)$ | (665.3) | (791.5) | (883.6) | (893.6) | (873.3) | (850.3) | (857.6) | (864.2) | (844.8) | (819.3) |
| \% Ch | 24.7 | 15.9 | (5.3) | 26.1 | 19.0 | 11.6 | 1.1 | (2.3) | (2.6) | 0.9 | 0.8 | (2.2) | (3.0) |
| Population (Millions) | 299.3 | 300.0 | 300.6 | 294.2 | 296.9 | 299.6 | 302.3 | 304.9 | 307.6 | 310.3 | 312.9 | 315.6 | 318.3 |
| \% Ch | 0.9 | 0.9 | 0.9 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |

Table N. 2
U.S. Forecast Change - Current (July 2006) vs. Last Forecast (April 2005)

| U.S. Forecast Change - Current (July 2006) vs. Last Forecast (April 2005) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quarterly |  |  | Annual |  |  |  |  |  |  |  |  |  |
|  | 2006:2 | 2006:3 | 2006:4 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| GDP (Bil of 2000 \$) Chain Weight \% Change From Last Forecast | $\begin{array}{r} 11,470 \\ (0.0) \end{array}$ | $\begin{array}{r} 11,549 \\ 0.0 \end{array}$ | $\begin{array}{r} 11,628 \\ 0.1 \end{array}$ | $\begin{gathered} 10,756 \\ 0.0 \end{gathered}$ | $\begin{gathered} 11,135 \\ 0.0 \end{gathered}$ | $\begin{gathered} 11,513 \\ 0.1 \end{gathered}$ | $\begin{gathered} 11,808 \\ 0.1 \end{gathered}$ | $\begin{array}{r} 12,179 \\ 0.1 \end{array}$ | $\begin{array}{r} 12,565 \\ (0.1) \end{array}$ | $\begin{array}{r} 12,939 \\ (0.1) \end{array}$ | $\begin{array}{r} 13,310 \\ (0.1) \end{array}$ | $\begin{array}{r} 13,668 \\ (0.1) \end{array}$ | $\begin{array}{r} 14,042 \\ (0.1) \end{array}$ |
| Personal Income (Bil of \$) \% Cbange From Last Forecast | $\begin{array}{r} 10,737 \\ (0.5) \end{array}$ | $\begin{array}{r} 10,875 \\ (0.6) \end{array}$ | $\begin{array}{r} 11,011 \\ (0.7) \end{array}$ | $\begin{gathered} 9,713 \\ 0.0 \end{gathered}$ | $\begin{array}{r} 10,238 \\ (0.1) \end{array}$ | $\begin{array}{r} 10,801 \\ (0.6) \end{array}$ | $\begin{array}{r} 11,403 \\ (0.4) \end{array}$ | $\begin{array}{r} 12,068 \\ (0,1) \end{array}$ | $\begin{array}{r} 12,773 \\ (0.1) \end{array}$ | $\begin{gathered} 13,489 \\ 0.1 \end{gathered}$ | $\xrightarrow{14,212} 0.4$ | $\begin{gathered} 14,934 \\ 0.7 \end{gathered}$ | $\begin{gathered} 15,681 \\ 0.8 \end{gathered}$ |
| Nonagricultural Employment (Millions) \% Change From Last Forecast | $\begin{gathered} 135.1 \\ (0.1) \end{gathered}$ | $\begin{gathered} 135.6 \\ (0.1) \end{gathered}$ | $\begin{gathered} 136.0 \\ (0.1) \end{gathered}$ | $\begin{gathered} 131.4 \\ (0.0) \end{gathered}$ | $\begin{array}{r} 133.5 \\ 0.0 \end{array}$ | $\begin{gathered} 135.4 \\ (0.1) \end{gathered}$ | $\begin{gathered} 137.2 \\ (0.1) \end{gathered}$ | $\begin{array}{r} 139.1 \\ 0.0 \end{array}$ | $\begin{array}{r} 140.8 \\ 0.0 \end{array}$ | $\begin{array}{r} 142.0 \\ 0.0 \end{array}$ | $\begin{array}{r} 143.0 \\ 0.0 \end{array}$ | $\begin{array}{r} 143.8 \\ 0.0 \end{array}$ | $\begin{gathered} 144.5 \\ (0.0) \end{gathered}$ |
| Unemployment Rate \% Change From Last Forecast | $\begin{gathered} 4.6 \\ (1.9) \end{gathered}$ | $\begin{gathered} 4.6 \\ (1.7) \end{gathered}$ | $\begin{gathered} 4.7 \\ (1.7) \end{gathered}$ | $\begin{aligned} & 5.5 \\ & 0.0 \end{aligned}$ | $\begin{aligned} & 5.1 \\ & 0.0 \end{aligned}$ | $\begin{gathered} 4.7 \\ (1.5) \end{gathered}$ | $\begin{gathered} 4.8 \\ (1.6) \end{gathered}$ | $\begin{gathered} 4.8 \\ (1.8) \end{gathered}$ | $\begin{gathered} 4.7 \\ (1.2) \end{gathered}$ | $\begin{gathered} 4.7 \\ (1.0) \end{gathered}$ | $\begin{gathered} 4.8 \\ (1.3) \end{gathered}$ | $\begin{gathered} 4.9 \\ (1.1) \end{gathered}$ | 5.0 $(0.5)$ |
| Industrial Production Index (2002=100) \% Change From Last Forecast | $\begin{gathered} 112.4 \\ 0.3 \end{gathered}$ | $\begin{gathered} 113.3 \\ 0.3 \end{gathered}$ | $\begin{gathered} 113.8 \\ 0.2 \end{gathered}$ | $\begin{gathered} 104.7 \\ 0.0 \end{gathered}$ | $\begin{gathered} 108.1 \\ (0.0) \end{gathered}$ | $\begin{gathered} 112.6 \\ 0.2 \end{gathered}$ | $\begin{gathered} 115.2 \\ (0.0) \end{gathered}$ | $\begin{aligned} & 117.6 \\ & (0.3) \end{aligned}$ | $\begin{gathered} 120.1 \\ (0.8) \end{gathered}$ | $\begin{aligned} & 123.0 \\ & (1.1) \end{aligned}$ | $\begin{gathered} 126.5 \\ (1.3) \end{gathered}$ | $\begin{aligned} & 130.1 \\ & (1.4) \end{aligned}$ | 134.0 $(1.5)$ |
| Corporate Profits (Bil of \$) <br> \% Change From Last Forecast | $\begin{array}{r} 1,751 \\ 5.6 \end{array}$ | $\begin{gathered} 1,724 \\ 6.8 \end{gathered}$ | $\begin{array}{r} 1,737 \\ 7.0 \end{array}$ | $\begin{gathered} 1,059 \\ 0.0 \end{gathered}$ | $\begin{gathered} 1,438 \\ 0.0 \end{gathered}$ | 1.730 6.0 | 1,740 8.8 | 1,766 10.7 | 1.789 12.6 | 1.822 14.2 | $\begin{aligned} & 1,882 \\ & 14.8 \end{aligned}$ | $\begin{aligned} & 1,963 \\ & 15.3 \end{aligned}$ | 2,081 15.1 |
| Money Supply (M2) (Bil of S) \% Change From Last Forecast | $\begin{gathered} 6.797 \\ (0.2) \end{gathered}$ | $\begin{gathered} 6,854 \\ 0.1 \end{gathered}$ | $\begin{gathered} 6.906 \\ 0.3 \end{gathered}$ | $\begin{gathered} 6,398 \\ 0.0 \end{gathered}$ | $\begin{gathered} 6,650 \\ 0.0 \end{gathered}$ | $\begin{gathered} 6.906 \\ 0.3 \end{gathered}$ | $\begin{gathered} 7.168 \\ 1.0 \end{gathered}$ | $\begin{gathered} 7,484 \\ 0.9 \end{gathered}$ | $\begin{gathered} 7,813 \\ 0.9 \end{gathered}$ | $\begin{gathered} 8.167 \\ 1.0 \end{gathered}$ | $\begin{gathered} 8.540 \\ 1.2 \end{gathered}$ | $\begin{gathered} 8.927 \\ 1.3 \end{gathered}$ | 9,334 1.4 |
| Prime Rate <br> \% Change From Last Forecast | $\begin{array}{r} 7.89 \\ 0.1 \end{array}$ | $\begin{array}{r} 8.40 \\ 1.8 \end{array}$ | $\begin{array}{r} 8.50 \\ 3.0 \end{array}$ | $\begin{array}{r} 4.34 \\ 0.0 \end{array}$ | $\begin{aligned} & 6.19 \\ & (0.0) \end{aligned}$ | $\begin{array}{r} 8.06 \\ 1.2 \end{array}$ | $\begin{array}{r} 8.20 \\ 2.8 \end{array}$ | $\begin{array}{r} 7.75 \\ 0.0 \end{array}$ | $\begin{array}{r} 7.94 \\ 0.0 \end{array}$ | $\begin{array}{r} 8.00 \\ 0.0 \end{array}$ | $\begin{aligned} & 8.00 \\ & (0.0) \end{aligned}$ | $\begin{aligned} & 8.00 \\ & (0.0) \end{aligned}$ | 8.00 $(0.0)$ |
| Consumer Price Index (1982-84=1) \% Change From Last Forecast | $\begin{array}{r} 2.018 \\ 0.8 \end{array}$ | $\begin{array}{r} 2.027 \\ 1.1 \end{array}$ | $\begin{array}{r} 2.028 \\ 0.7 \end{array}$ | $\begin{gathered} 1.889 \\ (0.0) \end{gathered}$ | $\begin{gathered} 1.953 \\ (0.0) \end{gathered}$ | $\begin{array}{r} 2.017 \\ 0.7 \end{array}$ | 2.058 1.2 | 2.093 1.0 | 2.126 0.9 | 2.167 1.0 | 2.210 1.1 | 2.256 1.2 | 2.303 1.3 |
| Federal Budget (unified) (Bil of \$, Fed FY) | 91.9 | (78.2) | (96.5) | (400.7) | (319.7) | (266.5) | (287.4) | (328.9) | (285.8) | (242.9) | (205.3) | (172.4) | (189.5) |
| Current Account Balance (Bil of \$) \% Change From Last Forecast | $\begin{array}{r} (882.0) \\ (5.2) \end{array}$ | $\begin{array}{r} (915.1) \\ (2.8) \end{array}$ | $\begin{array}{r} (902.6) \\ (4.4) \end{array}$ | $\begin{array}{r} (665.3) \\ (0.4) \end{array}$ | $\begin{array}{r} (791.5) \\ (1.7) \end{array}$ | $\begin{array}{r} (883.6) \\ (5.0) \end{array}$ | $\begin{array}{r} (893.6) \\ (4.8) \end{array}$ | $\begin{array}{r} (873.3) \\ (5.1) \end{array}$ | $\underset{(6.4)}{(850.3)}$ | $\begin{array}{r} (857.6) \\ (5.5) \end{array}$ | $\begin{array}{r} (864.2) \\ (4.7) \end{array}$ | (844.8) $(4.3)$ | $(819.3)$ $(4.3)$ |
| Population (Millions) <br> \% Change From Last Forecast | $\begin{gathered} 299.3 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 300.0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 300.6 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 294.2 \\ (0.0) \\ \hline \end{array}$ | $\begin{array}{r} 296.9 \\ 0.0 \\ \hline \end{array}$ | $\begin{gathered} 299.6 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 302.3 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 304.9 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 307.6 \\ 0.0 \\ \hline \end{array}$ | $\begin{array}{r} 310.3 \\ (0.0) \\ \hline \end{array}$ | $\begin{array}{r} 312.9 \\ 0.0 \\ \hline \end{array}$ | $\begin{array}{r} 315.6 \\ 0.0 \\ \hline \end{array}$ | $\begin{gathered} 318.3 \\ (0.0) \\ \hline \end{gathered}$ |

## B. International Review and Outlook

## Introduction

The U.S. economy has already seen a substantial slowdown in its growth rate. In its August 2006 forecast, Global Insight expects that the rest of the world economy will follow suit, with perhaps a short lag. It is generally expected that inflation will continue to drift upward over the next year. While global inflation rates have been slightly above the comfort levels perceived by the central banks, it is also believed that the inflation rate will not go on an upward spiral, partly thanks to quite stable inflation expectations across the world.

While the Fed stopped raising interest rates for now, both the European Central Bank and the Bank of England raised key interest rates by 25 basis points ( 0.25 percentage points) in early August. In July, the Bank of Japan ended its zero-interest-rate policy by raising rates 25 basis points. The global monetary tightening cycle will probably continue for a while as inflation remains a concern and the economy enjoys strong growth.

Global Insight believes that an expected further weakening of the U.S. dollar will create an additional headwind for many regions of the world, which have enjoyed strong export growth in the past few years. Although the global economy will experience a largely U.S.-led "mid-cycle correction" over the next year, the risks of a more serious downturn are still low, according to Global Insight.

In the first half of 2006, U.S. exports to the rest of the world increased 13.8 percent from a year ago to $\$ 506.2$ billion in current prices. During the same period, Oregon's export growth outpaced the nation, increasing 29.7 percent to reach $\$ 7.4$ billion.

## Recent Developments and Outlook for Oregon Export Markets

The global economy continued to grow strongly in the first half of 2006. Global Insight expects it to cool off in the second half of 2006 and then land at near trend growth of 3 percent in the first half of 2007.

The U.S. economy has already decelerated from its very rapid growth rate in the first quarter. Cooling housing markets and restrained consumer spending contributed to this deceleration. The U.S. slowdown is expected to have ripple effects across the world. According to scenarios run with Global Insight's Global Scenario Model, the U.S. cyclical downturn alone will shave 0.4 to 0.5 percentage points off world growth. Global Insight lists other factors that will also constrain world growth, including higher energy prices, tightening monetary conditions in the Eurozone and Japan, and a falling U.S. dollar.

The Eurozone economy posted second-quarter growth of 0.9 percent, or 3.6 percent seasonally adjusted annual growth. It was the best performance in six years. Global Insight expects Eurozone growth to decelerate between this year and next, from 2.1 percent to 1.7 percent. Global Insight also forecasts that the Japanese economy will expand 2.6 percent this year, followed by 2.5 percent in 2007. Even though China's growth accelerated to 11.3 percent in the

Table I. 1

| Projected Growth Rates of Real GDP (Percent) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| As of 07/12/2006 |  |  |  |  |  |
|  |  | (Average) |  |  |  |
| United States | 3.2 | 2006 | 2007 | $2008-11$ |  |
| Canada | 2.9 | 3.3 | 2.4 | 3.1 |  |
| Japan | 2.6 | 2.6 | 2.7 | 2.8 |  |
| Eurozone | 1.4 | 2.1 | 1.7 | 1.5 |  |
| Mexico | 3.0 | 3.8 | 3.7 | 3.5 |  |
| South America | 4.9 | 4.8 | 4.4 | 4.0 |  |
| Asia except Japan | 6.9 | 7.0 | 6.5 | 6.1 |  |
| China | 9.9 | 10.6 | 9.2 | 7.9 |  |
| World | 3.5 | 3.8 | 3.3 | 3.4 |  |
|  |  |  |  |  |  |
| Source: Global Insighi, August $I 6,2006$ |  |  |  |  |  |

second quarter (compared with 10.3 percent in the first), Global Insight predicts that the Chinese government will have some success in slowing growth from more than 10 percent this year to around 9 percent next year. Table I. 1 shows Global Insight's global economic forecast.

Canada's economy has been adjusting well to the higher value of the Canadian dollar. It has appreciated about 40 percent against U.S. dollar since 2002. Rising business investment, especially in energy projects, will support continued growth. But the headwinds of a strong domestic currency and the slowing U.S. economy will hurt Canadian growth down the road. Construction is robust in the western provinces, but slowing has started in Ontario and Quebec. The new conservative government is cutting taxes, which will stimulate demand. Countering this stimulus is the expected interest rate increase by the Bank of Canada to fend off inflation risk.

Mexico is enjoying strong economic growth in 2006, but the slowing U.S. economy will dampen the growth momentum. Mexico's growth rate is expected to average 3 to 4 percent in the next few years. This is better than the first half of this decade, but much lower than 4 to 6 percent growth in the late 1990s.

In South America, a robust global economy and high commodity prices are supporting growth. Global Insight expects that a retreat from market reforms of the 1990s dims prospects for longterm investment and growth.

Eurozone economic growth has picked up, led by exports and investment. The Eurozone economy posted second-quarter growth of 0.9 percent, or 3.6 percent seasonally adjusted annual growth. It was the best performance in six years. Business confidence is high. Healthy profits and better growth prospects will encourage firms to upgrade capacity and increase hiring. Economic confidence reached 5 -year high in July, while the unemployment rate fell to a record low of 7.8 percent in June.

However, the appreciation of the euro and increasingly tight monetary and fiscal policies will slow growth in coming months. The European Central Bank raised its key interest rate by 25 basis points to 3 percent in early August, saying that the risk of inflation was persistent. The slowing U.S. economy is another concern. In addition, key obstacles to growth remain: an aging population, inflexible labor markets, costly pensions, and high tax rates.

The U.K. economy is returning to its trend growth after a sharp slowdown in 2005. Business investment and exports will lead the economy, but consumer spending remains weak. Increased spending on health and education will lead to budget deficit, but it will be a fiscal stimulus to the economy. As the country prepares for the 2012 Summer Olympics in London, a large investment in the hospitality and recreation industries will begin in the near future.

Japan has shown that its growth is sustainable for now. An improving business outlook revealed in the Tankan survey is another indication that the growth momentum will remain. In July, the Bank of Japan hiked interest rates from virtually zero to 0.25 percent. This is the first increase in almost six years. The Bank is confident that the Japanese economy is pulling out of economywide deflation (price decrease) that has plagued the country for almost a decade. The increase also signals that the rate hike is not going to hurt the current growth momentum.

Challenges remain. The Japanese yen is expected to appreciate, restraining export growth that provided the initial stimulus to the current expansion. Japan's population is declining and is expected to decline further. Japan has the highest government debt among the most advanced economies. Its debt is over 180 percent of the value of current economic production (Gross Domestic Product, or GDP), about three times higher than the U.S. as a ratio of GDP. Fiscal policy will have to tighten, resulting in less stimulus coming from the public sector.

Asia remains a world economic growth leader as a group. Many Asian countries are exportoriented economies, but the benefits from trade are now spilling over to the domestic side, resulting in a more balanced growth. On top of high growth, these economies have high saving rates. That means they will also be capital exporters to the rest of the world, including the U.S. Still, they remain very much vulnerable to fluctuations in global markets. Asia, China, India, and South Korea are expected to post very strong growth in the next few years. Hong Kong and Singapore are also expected to do very well.

In 2005, China surpassed France and the U.K. to become the fourth-largest economy in the world. Global Insight expects that it will overtake Germany as the third-largest by 2008. China has continued its red-hot economic growth and it does not seem to slow down on its own. However, the government is taking actions to curb excessive investment, and its currency renminbi is expected to further appreciate. Combined, they may put a little dent in economic growth, but the forces are strong for a continuous high economic growth. A transition to a more open political system in the future is a challenge, which may come at the expense of an economic slowdown.

India will continue its high economic growth. Its growth will be in the 7 to 8 percent range in the next three years. The export sector is very strong thanks to information technology services, pharmaceuticals, business outsourcing, and financial services. A surge in consumer spending and home-building is backed by the growth of the urban middle class and increased credit availability. Still, for long term sustained growth India needs vast improvement in infrastructure and a move toward a more open economy with less trade restrictions.

## Table I. 2

| Projected Growth for Top U.S. Export Markets |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ranked by \$ Value of U.S. Goods Exported |  | $\text { s } 2005$ |  |  | I Chan $1 \text { GDP }$ |  |
|  | Ran | mil.) | 2004 | 2005 | 2006 | 2007 |
| Canada | 1 | 2,237 | 3.3 | 2.9 | 3.2 | 2.9 |
| Mexico | 5 | 811 | 4.2 | 3.0 | 3.9 | 3.4 |
| Japan | 3 | 1,210 | 2.3 | 2.6 | 3.0 | 2.3 |
| United Kingdom | 15 | 221 | 3.3 | 1.9 | 2.5 | 2.4 |
| China | 6 | 805 | 10.1 | 9.9 | 10.0 | 8.9 |
| Germany | 11 | 320 | 1.6 | 1.0 | 1.9 | 1.3 |
| South Korea | 2 | 1,308 | 4.6 | 4.0 | S. 2 | 4.9 |
| Netherlands | 16 | 173 | 1.7 | 1.1 | 2.4 | 2.1 |
| Taiwan | 7 | 640 | 6.1 | 4.1 | 4.0 | 4.0 |
| France | 14 | 223 | 2.0 | 1.2 | 2.0 | 1.9 |
| Singapore | 9 | 357 | 8.7 | 6.4 | 6.3 | 5.4 |
| Belgium | 21 | 74 | 2.4 | 1.5 | 2.5 | 2.0 |
| Hong Kong | 13 | 230 | 8.6 | 7.3 | 5.7 | 4.6 |
| Australia | 10 | 350 | 3.5 | 2.5 | 3.0 | 2.7 |
| Brazil | 33 | 40 | 4.9 | 2.3 | 3.6 | 3.7 |
| U.S. |  |  | 3.9 | 3.2 | 3.4 | 2.7 |
| Sowre: Bhe Chip Economic Indicators, Augusi 10, 2006 Oregon Export Data: WISER, May 2006 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Graph I. 1
Oregon's Total Exports
(1Q 1997-2Q 2006, current dollars)


Table I. 2 summarizes the Blue Chip Consensus forecast (August 2006) for Oregon's major export markets. It is consistent with the Global Insight forecast shown in Table I.1. The global economy has been expanding very rapidly in the past three years. However, 2007 forecast clearly indicates that almost all the countries will experience substantial slowdown. Still, no recession is expected in 2007.

Table I. 3

| Oregon Exports by Industry |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| (\$ millions, current prices) |  |  |  |  |
|  | 2Q 2005 | 2Q 2006 | y/y \% |  |
|  | YTD | YTD | change |  |
| Total All Industries | $5,680.9$ | $7,367.9$ | $29.7 \%$ |  |
| COMPUTER AND ELECTRONIC PRODUCTS | $1,857.9$ | $3,178.0$ | $71.1 \%$ |  |
| TRANSPORTATION EQUIPMENT | 830.3 | 955.1 | $15.0 \%$ |  |
| AGRICULTURAL PRODUCTS | 671.6 | 711.4 | $5.9 \%$ |  |
| MACHINERY, EXCEPT ELECTRICAL. | 671.3 | 706.9 | $5.3 \%$ |  |
| PRIMARY METAL MANUFACTURING | 183.7 | 251.4 | $36.8 \%$ |  |
| CHEMICALS | 301.7 | 248.0 | $-17.8 \%$ |  |
| WOOD PRODUCTS | 179.0 | 182.4 | $1.9 \%$ |  |
| PAPER | 173.8 | 166.7 | $-4.1 \%$ |  |
| WASTE AND SCRAP | 67.2 | 152.6 | $127.0 \%$ |  |
| FOOD AND KINDRED PRODUCTS | 142.3 | 145.1 | $2.0 \%$ |  |

[^3]
## Oregon Exports

WISER (World Institute of Social and Economic Research) data show that Oregon's exports increased 29.7 percent ( $\$ 7.4$ billion in total) in the first half of 2006 from a year ago. The nation as a whole experienced an increase of 13.8 percent during the same period. After a flat first half of 2005 , Oregon saw a substantial increase in exports, starting in the second half of 2005. The strong first half of 2006 follows an equally strong second half 2005 export growth.

Graph 1.1 illustrates Oregon's total exports.
A close examination reveals that the most growth came from exports of computer and electronics products. In fact, this sector saw its exports grow 71.1 percent from a year ago, totaling $\$ 3,178.0$ million. This sector alone explains 43.1 percent of total Oregon exports. Malaysia ( $\$ 547.3$ million) now ranks first as this sector's export destination, followed by China, the Philippines, South Korea, and Costa Rica. Table I. 3 shows Oregon's exports and growth rates by industry for year-to-date in 2006. These are the top ten industries by export volume (in value).

Out of these major sectors, exports of transportation equipment, agricultural products, and nonelectrical machinery also increased. Exports of primary metals increased sharply.

Graph I. 2 illustrates quarterly exports by major industry since 1997. The graph demonstrates a rapid increase since the third quarter of 2005. It reflects a major rebound in exports to South Korea, China, Malaysia and other Southeast Asian countries. The graph also shows a steady increasing trend in transportation equipment and non-electrical machinery. Despite occasional ups and downs, a slightly increasing trend is observed for the exports of agricultural products.

Table I. 4 charts exports to major destinations for Oregon products. Through the second quarter of 2006 exports to Canada increased 13.5 percent from a year ago to $\$ 1,328.4$ million, thanks to continued growth in Canada. The strong gains in exports of transportation equipment and nonelectrical machinery products explain most of the gains. In 2005, the top three exports to Canada were transportation equipment, primary metal products and computer and electronic products.

Graph I. 2


Table I. 4

| Oregon Exportsto Major Trading Partuers (\$ millions, current prices) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 2 2 2005 | 2 Q 2006 |  |
|  | Y T D | YTD | change |
| Total All Countries | 5,680.9 | 7,367.9 | 29.7\% |
| CANADA | 1,169.9 | 1,328.4 | $13.5 \%$ |
| Korea, republic of | 632.2 | 651.4 | 3.0\% |
| CHINA (MAINLAND) | 2.99 .3 | 644.2 | $115.2 \%$ |
| JAPAN | 611.4 | 598.1 | -2.2\% |
| Malaysia | 268.7 | 572.2 | $112.9 \%$ |
| PHILIPPINES | 248.0 | 488.1 | $96.8 \%$ |
| CHINA (TAIWAN) | 293.7 | 426.1 | $45.1 \%$ |
| MEXICO | 410.2 | 408.3 | -0.5\% |
| costarica | 74.6 | 263.2 | 252.7\% |
| SINGAPORE | 151.5 | 221.5 | $46.2 \%$ |
| GERMANY | 151.7 | 174.5 | 15.1\% |
| Australia. | 195.7 | 160.9 | -17.8\% |
| UNITED KINGDOM | 111.7 | 149.9 | $34.2 \%$ |
| It ALY | 55.0 | 126.0 | $129.2 \%$. |
| HONGKONG | 97.8 | 116.0 | 18.6\% |
| Source: WISER. Angusi 2006 |  |  |  |

Exports to South Korea increased 3.0 percent during the first half of 2006, following a 16.6 percent in 2005. An ongoing economic expansion in Korea and the growing demand for information technology products are behind this increase. Solid growth in Korea demanded more of Oregon's computer and electronics products, chemicals, and non-electrical machinery. Exports of agricultural products declined slightly.

Exports to China and Malaysia increased sharply in the first half of 2006. The bulk of exports to China come from computer and electronic products ( $\$ 436.4$ million out of $\$ 644.2$ in the first half of 2006). Even more concentration is seen in Malaysia ( $\$ 547.3$ million out
of $\$ 572.2$ million).
A decline in exports to Japan is a big disappointment considering the steady expansion in the country. Exports of agricultural and computer and electronics products posted double digit gains but other sectors did not do as well. In particular, exports of non-electrical machinery, wood products, and chemicals declined. Still, more consumer and business spending should increase Japan's demand for Oregon products as Japan continues its sustainable growth.

Graph I. 3 shows the quarterly export trend for Oregon's major markets since 1997. Exports to Canada have accelerated again in the second quarter of 2006 while the rate of growth of exports to South Korea declined a little bit. It had been expected for quite some time that exports to China would increase, but there had been some false starts. The recent rapid growth is mostly led by computer and electronics products. Unless there is diversification of exports to China, it may be hard to achieve consistent export growth. Exports to Malaysia are strong on a y/y basis. Exports to Japan show a slight downward trend.

## Graph I. 3



## C. Western Region Demographic Review

## Introduction

This section presents population and race/ethnic trends in the western states that encompass Arizona, California, Idaho, Nevada, Oregon, Utah, and Washington. A fast rate of population growth in a state is an indicator of strong economic, environmental, and social health. The western states have traditionally been a region of high growth made possible by retaining resident population and attracting migrants from other states and from abroad. Several western states have been leaders in high technology related industries attracting highly educated workers from all over the world.

## Population Growth

Table W. 1 shows the population in 2000 and 2005 in the U.S. and the western states. The Census 2000 enumerated $53,843,179$ persons in the western region which has grown to $58,313,742$ persons in 2005. The region was home for 19.7 percent of the U.S. population. However, the region accounted for nearly 30 percent of the U.S. population change between 2000 and 2005. The above average growth is the proof of overall attractiveness of the region. Four of the seven western states ranked in the top ten fastest growing states in the nation. In terms of percent change between 2000 and 2005, Nevada ( 20.8 percent) and Arizona ( 15.8 percent) ranked $1^{\text {st }}$ and $2^{\text {nd }}$, respectively, in the nation. Similarly, Utah ( 10.6 percent) and Idaho ( 10.4 percent) ranked $5^{\text {th }}$ and $6^{\text {th }}$ respectively. All seven states ranked in the top 15 in the nation in population growth rate during the same period. By comparison, the U.S. population changed by 5.3 percent during the 2000-2005 period. Oregon, one of the fast growing states during the 1990s, had the slowest growth rate ( 6.4 percent) among the western states. California's numeric population increase $(2,260,499)$ was the highest in the nation for the period.

Table W. 1
Population change in the United States and the Western States April 1, 2000 - July 1, 2005

| Geographic Area | July 1,2005 | April 1,2000 | \% change | National ranking in <br> growth rate |
| :--- | ---: | ---: | ---: | :---: |
| United States | $296,410,404$ | $\mathbf{2 8 1 , 4 2 1 , 9 0 6}$ | $5.3 \%$ | --- |
| Western states | $58,313,742$ | $53,843,179$ | $8.3 \%$ | -- |
| Arizona | $5,939,292$ | $5,130,632$ | $15.8 \%$ | 2 |
| California | $36,132,147$ | $33,871,648$ | $6.7 \%$ | 13 |
| Idaho | $1,429,096$ | $1,293,953$ | $10.4 \%$ | 6 |
| Nevada | $2,414,807$ | $1,998,257$ | $20.8 \%$ | 1 |
| Oregon | $3,641,056$ | $3,421,399$ | $6.4 \%$ | 14 |
| Utah | $2,469,585$ | $2,233,169$ | $10.6 \%$ | 5 |
| Washington | $6,287,759$ | $5,894,121$ | $6.7 \%$ | 12 |
|  |  |  |  |  |
| Source: Population Division, U.S. Census Bureau |  |  |  |  |

Table W. 2

| Geographic Area | Total Population Change* | Natural Increase |  |  | Net Migration |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Births | Deaths | Total | Net International Migration | Net Internal Migration |
| United States | 14,985,802 | 8,651,861 | 21,329,804 | 12,677,943 | 6,333,941 | 6,333,941 | --- |
| Western states | 4,503,124 | 2,381,156 | 4,434,905 | 2,053,749 | 2,121,968 | 1,921,077 | 200,891 |
| Arizona | 817,970 | 241,732 | 462,739 | 221,007 | 576,238 | 168,078 | . 408,160 |
| California | 2,308,531 | 1,557,112 | 2,781,539 | 1,224,427 | 751,419 | 1,415,879 | -664,460 |
| Idaho | 134,679 | 58,884 | 111,131 | 52,247 | 75,795 | 14,522 | 61,273 |
| Nevada | 418,704 | 81,661 | 170,451 | 88,790 | 337,043 | 66,098 | 270,945 |
| Oregon | 225,280 | 75,196 | 236,557 | 161,361 | 150,084 | 72,263 | 77,821 |
| Utah | 202,584 | 186,411 | 254,433 | 68,022 | 16,173 | 49,995 | -33,822 |
| Washington | 395,376 | 180,160 | 418,055 | 237,895 | 215,216 | 134,242 | 80,974 |

*Total population change includes residual - see "State and County Terms \& Definitions"
Note: Western states migration includes movement between states within the region
Source: Population Division, U.S. Census Bureau

Table W. 2 shows the components of the population change in the U.S. and western states between the years 2000 and 2005 . Overall, 53.3 percent of the change in the western states came from natural increase (births minus deaths) and migration accounted for 47.5 percent. Majority of the change due to migration in the west came from international migration which was nearly 10 times higher than the domestic migration.

There is a wide variation by state in the role of each component of change. The fastest growing state in the nation had 19.5 percent of the change due to natural increase and 80.5 percent coming from migration, most of which was domestic migration. Utah, the fifth fastest growing state in the nation, only 8 percent of the population change was due to migration and 92 percent was attributed to natural increase due to a very high birth rate. Both the rate of natural increase and birth rate in Utah were the highest in the nation. The majority of the migration related change in Arizona, Idaho, Nevada, and Oregon came from the domestic component of migration. California and Utah, however, lost their population to other states, yet total migration remained positive because of relatively high international migration.

According to the American Community Survey of the U.S. Census Bureau, Utah residents are least mobile in the Western region. In 2005, all the western states, except Utah ( 62.8 percent) and California ( 51.9 percent), had majority of their populations were born outside of the state of residence. Only 21.8 percent of the Nevada residents were native born.

## Age Structure

Age composition of any population, simply put, is the function of births, deaths, and migration patterns over a long period of time. Age structure affects state's employment, economy, its potential and public spending needs. Children require public support for education and elderly require support in financial and health care areas. As major budget drivers, higher percentage of either or both of these groups seriously affects public spending.

Table W. 3

| Children and elderly populations, dependency ratio, and median age: July 1, 2005 |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Geographic Area |  |  |  |  |  |
|  | under age 18 | age 65+ | age 85+ | Dependency ratio | Median age |
| United States | $24.8 \%$ | $12.4 \%$ | $1.7 \%$ | $52.4 \%$ | 36.2 |
| Arizona | $26.6 \%$ | $12.8 \%$ | $1.5 \%$ | $57.7 \%$ | 34.4 |
| California | $26.9 \%$ | $10.7 \%$ | $1.5 \%$ | $53.0 \%$ | 34.3 |
| Idaho | $26.2 \%$ | $11.5 \%$ | $1.6 \%$ | $52.9 \%$ | 34.5 |
| Nevada | $25.7 \%$ | $11.3 \%$ | $1.1 \%$ | $52.4 \%$ | 35.1 |
| Oregon | $23.3 \%$ | $12.9 \%$ | $2.0 \%$ | $50.4 \%$ | 37.0 |
| Utah | $30.1 \%$ | $8.7 \%$ | $1.1 \%$ | $55.6 \%$ | 28.5 |
| Washington | $23.6 \%$ | $11.5 \%$ | $1.8 \%$ | $47.6 \%$ | 36.5 |

Dependency ratio $=$ ratio of $<16$ and $65+$ populations to the working-age ( $16-64$ ) population. Source: Population Division, U.S. Census Bureau

Table W. 3 shows the percentage of children and elderly, and the median age of the population. With the highest birth rate in the nation, Utah had the highest percentage of children and lowest percentage of elderly population in the region. This combination has resulted in the youngest population, median age 28.5 , of the seven western states. Oregon, on the other hand, has the highest median age (37.0) due to the combination of lowest percentage of children ( 23.1 percent) and highest percentages of overall elderly ( 12.9 percent) and oldest elderly ( 2.0 percent). The oldest elderly require serious medical and nursing home services.

Dependency ratio is the ratio of children and elderly, who are supposed to be financial dependent, to working-age population. A combination of lower percentage of children and higher percentage of elderly population has resulted in lower dependency ratio in Washington and Oregon. Dependency ratio was highest in Arizona due to higher percentages of both children and elderly.

## Race and Ethnicity

Table W. 4 shows population by race and Hispanic or Latino origin in 2005. The western states together have percentage of white non-Hispanic ( 54.9 percent) was lower than the U.S. ( 66.9 percent). This indicates more racial/ethnic diversity in the western states. However, looking at the state data individually, only Arizona, California, and Nevada had fewer percentage of nonHispanic whites than the U.S. The lower percentage of white non-Hispanic was not accompanied by a better mix of different racial groups; rather it was characterized by a higher percentage of the Hispanic or Latino group. California is only one of four majority-minority states in the country where the majority white non-Hispanic population has fallen below 50 percent mark.

All the states in the western region had percentage of African-American population lower than the national average. Arizona had relatively high concentration of American Indian and California has higher percentage of Asian and Pacific Islander population. California had the highest share of Hispanic population in the nation. More than one in three persons in California is of Hispanic or Latino origin.

Table W. 4

|  | Po | by r | liapa | L Latino | igin, July 1, 200 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Non-Hispa |  |  | Hispanic |
|  |  |  |  | race |  |  |  |
|  | Total |  |  |  | Asian \& Pacific | Two or more | (of any race) |
| State | population | White | Black | Am. Indian | Islander | races |  |
| United States | 296,410,404 | 66.9\% | 12.3\% | 0.8\% | 4.3\% | 1.3\% | 14.4\% |
| Western states | 58,313,742 | 54.9\% | 5.0\% | 1.1\% | 9.2\% | 2.0\% | 27.9\% |
| Arizona | 5,939,292 | 60.4\% | 3.2\% | 4.5\% | 2.2\% | 1.2\% | 28.5\% |
| California | 36,132,147 | 43.8\% | 6.2\% | 0.5\% | 12.3\% | 2.0\% | 35.2\% |
| Idaho | 1,429,096 | 87.0\% | 0.5\% | 1.2\% | 1.1\% | 1.2\% | 9.1\% |
| Nevada | 2,414,807 | 60.0\% | 7.2\% | 1.1\% | 6.0\% | 2.2\% | 23.5\% |
| Oregon | 3,641,056 | 81.6\% | 1.6\% | 1.1\% | 3.6\% | 2.1\% | 9.9\% |
| Utah | 2,469,585 | 83.5\% | 0.8\% | 1.1\% | 2.5\% | 1.2\% | 10.9\% |
| Washington | 6,287,759 | 77.1\% | 3.3\% | 1.5\% | 6.7\% | 2.7\%\| | 8.8\% |
| Source: Population Division, U.S. Census Bureau |  |  |  |  |  |  |  |

As mentioned earlier, western states rank highly in the U.S. in terms of overall population growth. The population growths nationally and in the western states have been fueled by minority population growth. Of the total population change between 2000 and 2005, the majority white non-Hispanic population increase accounted for merely 18.6 percent in the U.S. and by 16.1 percent in the western states. Hispanic population growth in the recent years has been remarkable. Between 2000 and 2005, Hispanic population increased by 20.9 percent in the U.S. In the western states, the growth ranged from 16 percent in California to 44.3 percent in Nevada. Overall, the Hispanic population change accounted for 58.5 percent of the total population change in the western states. Nearly 78 percent of the population change in California involved increased Hispanic population.

A faster growth of minority population groups has given rise to a more diverse racial and ethnic landscape. Growth in a minority population group requires racial tolerance by the majority and other race-ethnic groups. Increase in a minority population provides new business opportunities

Table W. 5

| Population change by race and Hispanic origin, April 1, 2000 - July 1, 2005 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total population change |  | White non-Hispanic alone |  | Hispanic (any race) |  |
| State | Number | Percent | Number | Percent | Number | Percent |
| United States | 14,988,498 | 5.3\% | 2,790,952 | 1.4\% | 7,381,406 | 20.9\% |
| Arizona | 808,660 | 15.8\% | 296,793 | 9.0\% | 397,313 | 30.7\% |
| California | 2,260,499 | 6.7\% | -229,660 | -1.4\% | 1,756,406 | 16.0\% |
| Idaho | 135,143 | 10.4\% | 99,554 | 8.7\% | 28,190 | 27.7\% |
| Nevada | 416,550 | 20.8\% | 137,488 | 10.5\% | 174,386 | 44.3\% |
| Oregon | 219,657 | 6.4\% | 98,405 | 3.4\% | 84,471 | 30.7\% |
| Utah | 236,416 | 10.6\% | 152,725 | 8.0\% | 66,675 | 33.1\% |
| Washington | 393,638 | 6.7\% | 165,315 | 3.5\% | 109,862 | 24.9\% |

as well as challenges to provide services to the minority groups. In general, the fast growing

Hispanic population tends to be younger, have more children, have a higher poverty rate, lower homeownership rate, lower education attainment, etc. These involve challenges that need to be addressed, and housing needs and overall business opportunities to be tapped. Minority owned and minority centered businesses have been booming all over the country. At the same time, minority purchasing power has been growing very rapidly. Civilian labor force projections prepared by the Bureau of Labor Statistics indicate that between 2005 and 2014, U.S. labor force will increase from 149.132 million to 162.100 million - an increase of 12.968 million. Of this increase labor force, 80.3 percent will come from minority populations and 19.7 percent from White non-Hispanic group. Therefore, the nation will heavily depend upon minority labor force in the future.

Graph W. 1 shows the Index of Diversity for the states, District of Columbia, and the U.S. The index is computed taking each non-Hispanic race category individually and a Hispanic group that includes people of any race sharing a common ethnic thread. The index ranges from 0 , which means complete homogeneous, to 1 which represents a perfectly heterogeneous population. Hawaii is the most diverse state and Maine is the least diverse state in the U.S. In the western region, California, Nevada, and Arizona are more diverse than the national average, whereas Washington, Oregon, Utah, and Idaho are subsequently less diverse states.

## Graph W. 1

Index of Diversity, 2005
$1=$ heterogenous, $0=$ homogenous


Source: Census Bureau

## D. Oregon Economic Review and Forecast

## Summary of Recent Trends

The second quarter initial estimate of job growth was an increase of 1.4 percent at an annual rate. This is the twelfth consecutive quarterly growth in jobs but breaks a string of eight quarters of growth above 2.0 percent. On a $\mathrm{Y} / \mathrm{Y}$ basis, jobs increased in the second quarter by 3.6 percent. $\mathrm{Y} / \mathrm{Y}$ growth has been above 2.0 percent since the second quarter of 2004.

The slower pace of job growth for the second quarter was spread across a number of sectors. Volatile sectors such as wood products and food had seasonally adjusted job declines. But the last job losses for wholesale trade and leisure and hospitality occurred in the first quarter of 2004. Job losses in government also contributed to the slower growth: Construction, while registering a job growth of 2.6 percent for the second quarter, this is the first quarter in two years for growth to be below five percent. Retail trade job growth of 1.0 percent is the first quarter below three percent growth since the first quarter of 2004.

Other sectors still pushed forward with strong growth in the second quarter. Computer and electronic products, transportation equipment, information, financial activities, professional and business services all kept their relative job growth numbers of the past two years.

The most recent Blue Chip Job Growth rankings place Oregon $5^{\text {th }}$ in the nation. For $\mathrm{Y} / \mathrm{Y}$ job growth, between June 2005 and June 2006, jobs increased by 59,300 or 3.59 percent. A year ago, Oregon ranked $8^{\text {th }}$. The relative performance of the fifty states is shown in Figure O.1.

Nevada ranked $1^{\text {st }}$. California rose from $26^{\text {th }}$ place to $22^{\text {nd }}$, while Idaho moved up from $5^{\text {th }}$ to $2^{\text {nd }}$. Washington job gains place it $7^{\text {th }}$ among the 50 states.

OEA's forecast for the second quarter annualized job growth was a positive 1.0 percent compared to the reported positive 1.4 percent. Details of actual second quarter growth compared to the June 2006 forecast are shown in Table O.1. Table 0.1 shows annualized growth comparisons and $\mathrm{Y} / \mathrm{Y}$ growth. Unless noted otherwise, all percentage rates discussed below reflect annualized rates of change for the second quarter of 2006.

Total Private Employment increased by 6,240 jobs, a 1.8 percent rise from the first quarter. The $\mathrm{Y} / \mathrm{Y}$ employment was up by 4.4 percent. Both manufacturing

Figure 0.1


Table O. 1

| Total Nonfarm Employment, 2nd quarter 2006 (Employment in thousands, Annualized Percent Change) | Preliminary Estimate |  | Forecast |  | \|Forecast Error |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{array}{\|l} \mathbf{Y} / \mathbf{Y} \\ \text { Change } \\ \% \text { ech } \end{array}$ |  |  |
| Total Nonfarm | 1,710.2 | 1.4 |  |  | 1,708.0 | 1.0 | 2.2 | 0.1 | 3.6 |
| Total Private | 1,424.3 | 1.8 | 1,420.8 | 0.9 | 3.6 | 0.3 | 4.4 |
| Natural Resources and Mining | 9.3 | 19.6 | 8.8 | (1.5) | 0.5 | 5.5 | (1.9) |
| Construction | 100.4 | 2.6 | 99.5 | (1.5) | 0.9 | 0.9 | 12.0 |
| Manufacturing | 210.8 | 0.7 | 210.3 | (0.5) | 0.5 | 0.3 | 3.3 |
| Durable Goods | 156.1 | 0.8 | 156.2 | 0.8 | (0.1) | (0.0) | 2.5 |
| Wood Product | 32.4 | (2.2) | 32.9 | 2.6 | (0.5) | (1.6) | (1.3) |
| Metals and Machinery | 36.5 | (1.1) | 36.6 | 0.5 | (0.2) | (0.4) | 1.2 |
| Computer and Electronic Product | 43.0 | 2.7 | 42.8 | 0.5 | 0.2 | 0.5 | 3.8 |
| Transportation Equipment | 19.4 | 7.4 | 18.9 | (2.0) | 0.5 | 2.5 | 8.1 |
| Other Durable Goods | 24.8 | (0.3) | 24.9 | 1.0 | (0.1) | (0.3) | 3.3 |
| Nondurable Goods | 54.7 | 0.2 | 54.1 | (3.7) | 0.6 | 1.1 | 5.7 |
| Food | 23.0 | (7.0) | 22.8 | (10.0) | 0.1 | 0.6 | 6.1 |
| Other Nondurable Goods | 31.7 | 5.8 | 31.2 | 0.3 | 0.5 | 1.5 | 5.4 |
| Trade, Transportation \& Utilities | 337.6 | 0.9 | 337.4 | 0.9 | 0.2 | 0.1 | 3.2 |
| Retail Trade | 200.2 | 1.0 | 199.8 | 0.5 | 0.4 | 0.2 | 4.1 |
| Wholesale Trade | 79.8 | (0.8) | 80.2 | 1.1 | (0.3) | (0.4) | 2.8 |
| Transportation, Warehousing \& Utilities | 57.6 | 2.8 | 57.4 | 2.1 | 0.2 | 0.3 | 0.8 |
| Information | 33.9 | 2.6 | 33.8 | 2.0 | 0.1 | 0.3 | 1.5 |
| Financial Activities | 106.5 | 2.5 | 106.1 | 0.5 | 0.5 | 0.4 | 5.1 |
| Professional \& Business Services | 193.6 | 4.1 | 192.3 | 1.5 | 1.3 | 0.7 | 5.0 |
| Educational \& Health Services | 207.6 | 2.1 | 207.2 | 0.5 | 0.4 | 0.2 | 4.6 |
| Educational Services | 30.1 | 3.8 | 30.0 | 1.0 | 0.1 | 0.4 | 10.0 |
| Health Services | 177.5 | 1.8 | 177.2 | 0.7 | 0.3 | 0.2 | 3.7 |
| Leisure and Hospitality | 165.3 | (0.1) | 166.2 | 1.7 | (0.9) | (0.5) | 3.9 |
| Other Services | 59.3 | 2.4 | 59.2 | 1.4 | 0.1 | 0.1 | 3.4 |
| Government | 285.8 | (0.5) | 287.3 | 1.6 | (1.4) | (0.5) | (0.1) |
| Federal | 29.0 | (3.7) | 29.4 | 1.2 | (0.4) | (1.3) | (2.7) |
| State | 76.4 | (2.2) | 77.0 | 1.2 | (0.7) | (0.9) | (0.9) |
| State Education | 27.3 | (0.7) | 27.4 | 1.3 | (0.1) | (0.3) | (1.5) |
| Local | 180.5 | 0.8 | 180.9 | 1.6 | (0.4) | (0.2) | 0.6 |
| Local Education | 95.5 | 1.8 | 95.5 | 1.8 | (0.0) | (0.0) | 0.4 |

jobs at rates of 0.7 percent and 2.0 percent, respectively. The government sector slightly declined with a loss of 340 jobs for a 0.5 percent decrease.

Within manufacturing, transportation equipment had the highest growth. This sector added 400 jobs for a 7.4 percent increase. Despite high gasoline prices, low interest rates and a rebounding economy have helped this sector since the second quarter of 2003.

The computer and electrical product subsector, which includes semiconductors and electronic instrument manufacturing, added 290 jobs for a 2.7 percent increase. Although jobs increased by

3,200 since the first quarter of 2004, this sector has a long ways to go to replace the 11,200 jobs lost during the downturn.

Wood products employment shows some continued slowing from the strong growth of 2004 and early 2005 with job losses of 2.2 percent. Metals and machinery show a similar employment pattern with losses of 1.1 percent.

Non-durable manufacturing jobs increased by 0.2 percent. Food products jobs declined by 7.0 percent for the quarter. This subsector has been very volatile due to industry restructuring and seasonal factors. Although this quarter reports job losses for food products, the $\mathrm{Y} / \mathrm{Y}$ growth rate is up 6.1 percent.

Private non-manufacturing employment increased by 2.0 percent. Major contributors to this increase were construction, professional and business services, educational services, information, and transportation, warehousing, and utilities.

Construction employment growth slowed to 2.6 percent with $\mathrm{Y} / \mathrm{Y}$ growth a very strong 12.0 percent. Retail and wholesale trade reflect the slower pace with job gains of 1.0 percent and a decline of 0.8 percent, respectively. Transportation, warehousing, and utilities posted job growth at 2.8 percent.

Information, which includes publishers of software along with more traditional publishers such as newspapers, bounced back from the past two quarters with a 2.6 percent increase in jobs. Financial activities added 2.5 percent more jobs while professional and business services reported a strong job growth of 4.1 percent.

Educational services have been quite volatile with wide seasonal swings. The job growth in the second quarter was 3.8 percent with $\mathrm{Y} / \mathrm{Y}$ growth of 10.0 percent. Health services continued to add jobs at the rate of 1.8 percent.

Leisure and hospitality was essentially flat with a loss of 50 jobs for a 0.1 percent decline. This is the first decline in jobs since the second quarter of 2003.

The government sector marginally declined by 0.5 percent, lead by a decrease of 3.7 percent in federal government employment. As tax revenues slowly improve, state and local government employment is starting to firm up. State government employment is still down by 0.9 percent $\mathrm{Y} / \mathrm{Y}$ while local government employment is up 0.6 percent $\mathrm{Y} / \mathrm{Y}$.

## Short-Term Outlook

## Overview

The second quarter of 2006 marks the third year of job growth. The last three months (April to June) show a markedly slow pace for job creation. The Oregon Employment Department reports that recent job growth is running a little better than one percent compared to the 3.5 percent annual growth rate of the prior two-year period. The outlook for the national economy is for

Table 0.2

| Oregon Total Nonfarm Employment and Personal Income Growth |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Date of |  |  |  |  |  |  |
| Forecaster | Forecast |  | Employment | 2006 | 2007 | 2008 | 2006 |

positive growth but at a slower rate. Given the prospects for a slowing of the housing market and the negative impacts from high energy prices, the prognosis is for slower growth in the Oregon economy. As the economy slows, it is more vulnerable to other risks, be they geopolitical or hurricane season.

OEA forecasts employment to rise by 3.2 percent for 2006, the strongest yearly growth since 1997. This annual job growth is pushed up by the strong first quarter growth of 6.3 percent. The job growths of the remaining two quarters of 2006 are projected to average 1.0 percent. Job growth in 2007 is projected to be 1.3 percent, reflecting the slowing growth projected for the national economy. The economy continues to expand with 1.6 percent job growth in 2008.

Table 0.2 shown above compares OEA's forecast to other published forecasts. All forecasts project job gains and income growth. All forecasts follow a similar outlook for employment, with the strongest growth in 2006 and lower growth in 2007 and 2008. Personal income projections follow a similar pattern. OEA's outlook follows the same pattern as Global Insight into 2007, but OEA projects employment and income growth to pick up in 2008. Overall, Conerly Consulting and U.S. Bank have the most optimistic outlook while Moody's Economy.com and Wells Fargo have the mildest outlook.

Total private nonfarm employment will increase in 2006 , growing by 3.9 percent. The sector will continue to improve through 2008. Total private nonfarm employment will grow 1.3 percent in 2007 and 1.7 percent in 2008. Manufacturing will increase by 2.9 percent in 2006 and then reflect mild declines of 0.5 percent in 2007 and 0.3 percent in 2008. Job levels will still be below average job levels of 2000. Private non-manufacturing jobs will increase by 4.0 percent in 2006 , and 1.6 percent in 2007 and 2.0 percent in 2008. Table 0.3 provides a summary of the forecast.

Wood product manufacturing is projected to be down 0.5 percent in 2006 and then decline by 2.6 percent in 2007 and 2008.

Table 0.3

| Oregon Forecast Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quarterly |  |  | Annual |  |  |  |  |  |  |  |  |
|  | 2006:2 | 2006:3 | 2006:4 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| Personal Income ( $\mathbf{S}$ billions) |  |  |  |  |  |  |  |  |  |  |  |  |
| Nominal Personal Income | 122.4 | 124.4 | 126.2 | 116.5 | 123.3 | 130.3 | 137.9 | 146.3 | 155.0 | 163.9 | 173.1 | 182.9 |
| \% change | 6.8 | 6.8 | 6.1 | 6.1 | 5.9 | 5.7 | 5.8 | 6.1 | 6.0 | 5.7 | 5.6 | 5.6 |
| Real Personal Income (base year=200, | 107.0 | 108.2 | 109.7 | 104.7 | 107.8 | 111.8 | 116.2 | 121.2 | 128.0 | 130.6 | 135.1 | 139.8 |
| \% change | 2.5 | 4.8 | 5.3 | 3.2 | 3.0 | 3.7 | 4.0 | 4.3 | 4.0 | 3.6 | 3.5 | 3.5 |
| Other Indicators |  |  |  |  |  |  |  |  |  |  |  |  |
| Per Capita Income ( $51 ; 000$ ) | 33.3 | 33.7 | 34.1 | 32.1 | 33.5 | 34.9 | 36.4 | 38.1 | 39.8 | 41.5 | 43.2 | 45.0 |
| \% change | 5.3 | 5.3 | 4.6 | 4.7 | 4.4 | 4.2 | 4.3 | 4.6 | 4.5 | 4.3 | 4.2 | 4.2 |
| Average Wage rate ( $\mathbf{\$ 1 , 0 0 0 \text { ) }}$ | 38.8 | 39.3 | 39.8 | 38.0 | 39.1 | 40.6 | 42.2 | 43.9 | 45.7 | 47.5 | 49.3 | 51.0 |
| \% change | 4.6 | 5.5 | 5.2 | 4.0 | 2.8 | 3.9 | 3.9 | 4.1 | 4.0 | 3.9 | 3.8 | 3.6 |
| Population (Millions) | 3.677 | 3.690 | 3.703 | 3.631 | 3.683 | 3.735 | 3.789 | 3.843 | 3.898 | 3.952 | 4.007 | 4.061 |
| \% change | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| Housiag Starts (Thousands) | 30.0 | 29.4 | 28.8 | 30.9 | 29.6 | 28.1 | 28.2 | 28.4 | 28.8 | 29.1 | 29.0 | 29.0 |
| \% change | (2.3) | (7.6) | (8.8) | 12.6 | (4.1) | (5.2) | 0.5 | 0.6 | 1.5 | 1.0 | (0.4) | 0.3 |
| Employment (Thousands) |  |  |  |  |  |  |  |  |  |  |  |  |
| Total Nonfarm | 1,710.2 | 1,714.5 | 1,718.7 | 1,658.2 | 1,711.9 | 1,733.3 | 1,760.7 | 1,787.1. | 1,810.0 | 1,830.6 | 1,849.4 | 1,868.0 |
| \% change | 1.4 | 1.0 | 1.0 | 3.1 | 3.2 | 1.3 | 1.6 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 |
| Construction | $100,4$ | $99.8$ | $99: 2$ | $90.9$ | 99.8 | 98.8 | 99.5 | 100.9 | 102.3 | 103.6 | 104.7 | 105.6 |
| Durable Manufacturing | 156.1 | 156.1 | 155.9 | 152.5 | 156.0 | 155.1 | 154.6 | 154.6 | 154.7 | 154.5 | 154.0 | 153.4 |
| \% change | 0.8 | (0.0) | (0.5) | 3.4 | 2.3 | (0.6) | (0.4) | (0.0) | 0.1 | (0.2) | (0.3) | (0.4) |
| Wood Praduct | 32.4 | 32.3 | 32.1 | 32.5 | 32.4 | 31.5 | 30.7 | 30.3 | 30.3 | 30.3 | 29.8 | 29.4 |
| \% change | (2.2) | (1.2) | (2.0) | 1.3 | (0.5) | (2.6) | (2.6) | (1.2) | (0.0) | (0.2) | (1.5) | (1.3) |
| High Tech Manufacturing | 43.0 | 42.9 | 42.8 | 41.6 | 42.9 | 42.6 | 42.5 | 42.4 | 42.2 | 41.8 | 41.9 | 42.0 |
| \% change | 2.7 | (1.0) | (1.5) | 1.5 | 3.0 | (0.8) | (0.1) | (0.3) | (0.6) | (0.8) | 0.2 | 0.2 |
| Nondurable Manufacturing | 54.7 | 54.5 | 54.3 | 52.0 | 54.5 | 54.4 | 54.3 | 54.0 | 53.8 | 53.7 | 53.4 | 53.2 |
| \% change | 0.2 | (1.2) | (1.7) | (0.7) | 4.9 | (0.3) | (0.2) | (0.5) | (0.4) | (0.3) | (0,4) | (0.5) |
| Private Nonmanufacturing | 1,213.5 | 1,217.2 | 1,221.0 | 1,167.7 | 1,214,8 | 1,234.1 | 1,258.8 | 1,282.4 | 1,301.5 | 1,320.4 | 1,336.7 | 1,352.9 |
| \% change | 2.0 | 1.2 | 1.3 | 3.9 | 4.0 | 1.6 | 2.0 | 1.9 | 1.5 | 1.5 | 1.2 | 1.2 |
| Information | 33.9 | 34.0 | 34.1 | 33.4 | 33.9 | 34.6 | 34.6 | 35.2 | 35.8 | 36.3 | 36.9 | 37.4 |
| \% change | 2.6 | 1.6 | 1.3 | 1.5 | 1.5 | 1.9 | 0.2 | 1.6 | 1.6 | 1.4 | 1.7 | 1.5 |
| Retail Trade | 200,2 | 200.5 | 201.0 | 193.6 | 200.4 | 203.1 | 206.9 | 210.0 | 212.7 | 215.7 | 218.1 | 220.6 |
| \% change | 1.0 | 0.6 | 1.0 | 3.1 | 3.5 | 1.4 | 1.9 | 1.5 | 1.3 | 1.4 | 1.1 | 1.2 |
| Leisure and Hospitality | 165.3 | 166.1 | 166.6 | 160.4 | 165.8 | 168.8 | 172.1 | 174.7 | 176.4 | 177.6 | 177.7 | 177.5 |
| \% change | (0.1) | 2.0 | 1.1 | 3.4 | 3.4 | 1.8 | 2.0 | 1.5 | 1.0 | 0.7 | 0.1 | (0.1) |
| Government | 285.8 | 286.7 | 287.5 | 286.0 | 286.6 | 289.8 | 293.1 | 296.2 | 300.0 | 302.0 | 305.3 | 308.6 |
| \% change | (0.5) | 3.1 | 1.2 | 0.8 | 0.2 | 1.1 | 1.1 | 1.1 | 1.3 | 0.7 | 1.1 | 1.1 |

The sector that contains semiconductors, computer and electronic products, will show gains of 3.0 percent for 2006. The job outlook is more uncertain with declines of 0.8 percent in 2007 and 0.1 percent in 2008. The outer years are projected to keep this sector in a no growth pattern.

Transportation equipment will increase by 6.2 percent in 2006. Job gains will give way to a slight decline in 2007 with a decrease of 0.5 percent. Employment will slightly decline with a loss of 0.8 percent in 2008.

Construction will increase jobs at a strong 9.7 percent in 2006. Job growth will decline with a 1.0 percent drop in 2007 before a milder job growth of 0.8 percent in 2008.

Trade job growth will have similar growth this year compared to 2005. Retail trade job growth will be stronger in 2006 at 3.5 percent and grow 1.4 percent in 2007 and 1.9 percent in 2008. Wholesale trade will be positive in 2006 with an annual job growth of 2.5 percent followed by job gains of 1.0 percent in 2007 and 0.8 percent in 2008.

Professional and business services and health services will see some of the strongest growth. Professional and business services will grow 4.9 percent in 2006 followed by 3.5 percent growth in 2007 and 3.8 percent in 2008. Health services will increase 3.6 percent, 2.0 percent, and 2.6 percent on average for the same years.

Leisure and hospitality, which includes accommodations and food services, is expected to grow by 3.4 percent in 2006, and 1.8 percent in 2007, and 2.0 percent in 2008.

Government employment is expected to increase by 0.2 percent in 2006 followed by growth of 1.1 percent in 2007 and 2008. State and local government jobs will continue mild growth as tax revenues have improved with the stronger economy.

Population growth is expected to be higher than the U.S. average, but slower than the growth experienced in the mid-1990s. Growth will be slightly higher than during the recession over the next three years, with increases of 1.4 percent for each year.

Forecast Changes Relative to the June 2006 Forecast
OEA's September 2006 Oregon economic forecast reflects minor changes to employment levels. Second quarter employment numbers were slightly stronger than forecast and this level shift is reflected through the outer years. Personal income was revised down by the Bureau of Economic Analysis for 2005. Combined with a slower estimated growth than forecasted for the first quarter of 2006 and a lower national forecast, the personal income forecast is shifted down and lowered throughout most of the forecast horizon. The revisions are 1.0 percent down in 2006 and 2007. Revisions are very small out to 2012 with a marginal up revision in 2013.

Table O.4 provides a summary of the forecast changes. Graph O.1 compares Oregon and U.S. forecasts. A comparison of the current Oregon forecast with the last two quarters is shown in Graph O.2.

The forecast for total non-farm jobs has been revised up 0.1 percent in 2006, and minimal downward revision in 2007 and 2008. Second quarter growth was stronger than expected and virtually no change to the national economic job growth outlook.

Table O. 4

| Oregon Forecast Change (Current vs. Last) |  |  |  | Annual |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2006:2 | 2006:3 | 2006:4 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| Personal Income (S billions) |  |  |  |  |  |  |  |  |  |  |  |  |
| Nominal Personal Income \% change | $\begin{gathered} 122.4 \\ (1.2) \end{gathered}$ | $\begin{array}{r} 124.4 \\ (1.0) \end{array}$ | $\begin{gathered} 126.2 \\ (0.9) \end{gathered}$ | $\begin{array}{r} 116.5 \\ (0.3) \end{array}$ | $\begin{gathered} 123.3 \\ (1.0) \end{gathered}$ | $\begin{gathered} 130.3 \\ (1.0) \end{gathered}$ | $\begin{gathered} 137.9 \\ (0.8) \end{gathered}$ | $\begin{gathered} 146.3 \\ (0.6) \end{gathered}$ | $\begin{gathered} 155.0 \\ (0.4) \end{gathered}$ | $\begin{gathered} 163.9 \\ (0.2) \end{gathered}$ | $\begin{gathered} 173.1 \\ (0.0) \end{gathered}$ | $\begin{array}{r} 182.9 \\ 0.2 \end{array}$ |
| Real Personal Income (base year=2000) \% change | $\begin{gathered} 107.0 \\ (1.9) \end{gathered}$ | $\begin{gathered} 108.2 \\ (1.8) \end{gathered}$ | $\begin{array}{r} 109.7 \\ (1.4) \end{array}$ | $\begin{gathered} 104.7 \\ (0.3) \end{gathered}$ | $\begin{gathered} 107.8 \\ (1.5) \end{gathered}$ | $\begin{gathered} 111.8 \\ (1.8) \end{gathered}$ | $\begin{gathered} 116.2 \\ (1.5) \end{gathered}$ | $\begin{gathered} 121.2 \\ (1.3) \end{gathered}$ | $\begin{gathered} 126.0 \\ (1.3) \end{gathered}$ | $\begin{gathered} 130.6 \\ (1.3) \end{gathered}$ | $\begin{gathered} 135.1 \\ (1.3) \end{gathered}$ | $\begin{gathered} 139.8 \\ (1.2) \end{gathered}$ |
| Other Indicators |  |  |  |  |  |  |  |  |  |  |  |  |
| Per Capita Income ( $\mathbf{\$ 1 , 0 0 0 )}$ \% change | $\begin{aligned} & 33.3 \\ & (1.3) \end{aligned}$ | $\begin{aligned} & 33.7 \\ & (1.1) \end{aligned}$ | $\begin{aligned} & 34.1 \\ & (1.0) \end{aligned}$ | $\begin{aligned} & 32.1 \\ & (0.3) \end{aligned}$ | $\begin{aligned} & 33.5 \\ & (1.0) \end{aligned}$ | $\begin{aligned} & 34.9 \\ & (1.1) \end{aligned}$ | $\begin{aligned} & 36.4 \\ & (1.0) \end{aligned}$ | $\begin{aligned} & 38.1 \\ & (0.9) \end{aligned}$ | $\begin{aligned} & 39.8 \\ & (0.8) \end{aligned}$ | $\begin{aligned} & 41.5 \\ & (0.6) \end{aligned}$ | $\begin{aligned} & 43.2 \\ & (0.5) \end{aligned}$ | $\begin{aligned} & 45.0 \\ & (0.4) \end{aligned}$ |
| Average Wage rate $(\mathbf{S 1 , 0 0 0 )}$ \% change | $\begin{aligned} & 38.8 \\ & (1.9) \end{aligned}$ | $\begin{aligned} & 39.3 \\ & (1.4) \end{aligned}$ | $\begin{gathered} 39.8 \\ (1.0) \end{gathered}$ | $\begin{aligned} & 38.0 \\ & (0.7) \end{aligned}$ | $\begin{aligned} & 39.1 \\ & (1.7) \end{aligned}$ | $\begin{aligned} & 40.6 \\ & (1.3) \end{aligned}$ | $\begin{aligned} & 42.2 \\ & (1.2) \end{aligned}$ | $\begin{aligned} & 43.9 \\ & (1.0) \end{aligned}$ | $\begin{aligned} & 45.7 \\ & (0.8) \end{aligned}$ | $\begin{aligned} & 47.5 \\ & (0.7) \end{aligned}$ | $\begin{aligned} & 49.3 \\ & (0.5) \end{aligned}$ | $\begin{aligned} & 51.0 \\ & (0.3) \end{aligned}$ |
| Population (Millions) | 3.677 | 3.690 | 3.703 | 3.631 | 3.683 | 3.735 | 3.789 | 3.843 | 3.898 | 3.952 | 4.007 | 4.061 |
| \% change | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 |
| Housing Starts (Thousands) | 30.0 | 29.4 | 28.8 | 30.9 | 29.6 | 28.1 | 28.2 | 28.4 | 28.8 | 29.1 | 29.0 | 29.0 |
| \% change | 6.7 | 7.1 | 4.8 | 0.0 | 4.5 | 2.0 | 1.4 | 1.5 | 1.4 | 0.9 | 0.4 | (0.0) |
| Employment (Thousands) |  |  |  |  |  |  |  |  |  |  |  |  |
| Total Nonfarm \% change | $\begin{array}{r} 1,710.2 \\ 0.1 \end{array}$ | $\begin{array}{r} 1,714.5 \\ 0.1 \end{array}$ | $\begin{array}{r} 1,718.7 \\ 0.1 \end{array}$ | $\begin{array}{r} 1,658.2 \\ 0.0 \end{array}$ | $\begin{array}{r} 1,711.9 \\ 0.1 \end{array}$ | $\begin{gathered} 1,733.3 \\ (0.0) \end{gathered}$ | $\begin{gathered} 1,760.7 \\ (0.1) \end{gathered}$ | $\begin{gathered} 1,787.1 \\ (0.0) \end{gathered}$ | $\begin{array}{r} 1,810.0 \\ 0.0 \end{array}$ | $\begin{array}{r} 1,830.6 \\ 0.0 \end{array}$ | $\begin{array}{r} 1,849.4 \\ 0.0 \end{array}$ | $\begin{gathered} 1,868.0 \\ (0.0) \end{gathered}$ |
| Construction \% change | $\begin{array}{r} 100.4 \\ 0.9 \end{array}$ | $\begin{array}{r} 99.8 \\ 0.6 \end{array}$ | $\begin{array}{r} 99.2 \\ 0.1 \end{array}$ | $\begin{array}{r} 90.9 \\ 0.0 \end{array}$ | $\begin{array}{r} 99.8 \\ 0.4 \end{array}$ | $\begin{aligned} & 98.8 \\ & (1.2) \end{aligned}$ | $\begin{aligned} & 99.5 \\ & (1.9) \end{aligned}$ | $\begin{gathered} 100.9 \\ (1.9) \end{gathered}$ | $\begin{gathered} 102.3 \\ (2.0) \end{gathered}$ | $\begin{gathered} 103.6 \\ (2.2) \end{gathered}$ | $\begin{gathered} 104.7 \\ (2.3) \end{gathered}$ | $\begin{gathered} 105.6 \\ (2.5) \end{gathered}$ |
| Durable Manufacturing \% change | $\begin{gathered} 156.1 \\ (0.0) \end{gathered}$ | $\begin{gathered} 156.1 \\ (0.1) \end{gathered}$ | $\begin{gathered} 155.9 \\ (0.1) \end{gathered}$ | $\begin{array}{r} 152.5 \\ 0.0 \end{array}$ | $\begin{aligned} & 156.0 \\ & (0.1) \end{aligned}$ | $\begin{gathered} 155.1 \\ (0.2) \end{gathered}$ | $\begin{gathered} 154.6 \\ (0.3) \end{gathered}$ | $\begin{gathered} 154.6 \\ (0.1) \end{gathered}$ | $\begin{array}{r} 154.7 \\ 0.1 \end{array}$ | $\begin{array}{r} 154.5 \\ 0.3 \end{array}$ | $\begin{array}{r} 154,0 \\ 0.3 \end{array}$ | $\begin{array}{r} 153.4 \\ 0.2 \end{array}$ |
| Weod Product \% change | $\begin{aligned} & 32.4 \\ & (1.6) \end{aligned}$ | $\begin{aligned} & 32.3 \\ & (1.8) \end{aligned}$ | $\begin{aligned} & 32.1 \\ & (1.6) \end{aligned}$ | $\begin{array}{r} 32.5 \\ 0.0 \end{array}$ | $\begin{aligned} & 32.4 \\ & (1.4) \end{aligned}$ | $\begin{aligned} & 31.5 \\ & (1.7) \end{aligned}$ | $\begin{aligned} & 30.7 \\ & (1,4) \end{aligned}$ | $\begin{aligned} & 30.3 \\ & (0.3) \end{aligned}$ | $\begin{array}{r} 30.3 \\ 0.4 \end{array}$ | $\begin{array}{r} 30.3 \\ 0.3 \end{array}$ | $\begin{array}{r} 29.8 \\ 0.0 \end{array}$ | $\begin{aligned} & 29.4 \\ & (0.4) \end{aligned}$ |
| High Tech Manufacturing \% change | $\begin{array}{r} 43.0 \\ 0.5 \end{array}$ | $\begin{array}{r} 42.9 \\ 0.1 \end{array}$ | $\begin{aligned} & 42.8 \\ & (0.3) \end{aligned}$ | $\begin{aligned} & 41.6 \\ & (0.0) \end{aligned}$ | $\begin{array}{r} 42.9 \\ 0.1 \end{array}$ | $\begin{array}{r} 42.6 \\ 0.1 \end{array}$ | $\begin{array}{r} 42.5 \\ 0.3 \end{array}$ | $\begin{array}{r} 42.4 \\ 0.4 \end{array}$ | $\begin{array}{r} 42.2 \\ 0.2 \end{array}$ | $\begin{array}{r} 41.8 \\ 0.5 \end{array}$ | $\begin{array}{r} 41.9 \\ 0.5 \end{array}$ | $\begin{array}{r} 42.0 \\ 0.5 \end{array}$ |
| Nondurable Manufacturing \% change | $\begin{array}{r} 54.7 \\ 1.1 \end{array}$ | $\begin{array}{r} 54.5 \\ 1.0 \end{array}$ | $\begin{array}{r} 54.3 \\ 0.5 \end{array}$ | $\begin{array}{r} 52.0 \\ 0.0 \end{array}$ | $\begin{array}{r} 54.5 \\ 0.7 \end{array}$ | $\begin{array}{r} 54.4 \\ 0.4 \end{array}$ | $\begin{array}{r} 54.3 \\ 0.3 \end{array}$ | $\begin{array}{r} 54.0 \\ 0.0 \end{array}$ | $\begin{array}{r} 53.8 \\ 0.0 \end{array}$ | $\begin{array}{r} 53.7 \\ 0.0 \end{array}$ | $\begin{aligned} & 53.4 \\ & (0.0) \end{aligned}$ | $\begin{aligned} & 53.2 \\ & (0.1) \end{aligned}$ |
| Private Nonmanufacturing \%change | $\begin{array}{r} 1,213.5 \\ 0.3 \end{array}$ | $\begin{array}{r} 1,217.2 \\ 0.3 \end{array}$ | $\begin{array}{r} 1,221.0 \\ 0.2 \end{array}$ | $\begin{array}{r} 1,167.7 \\ 0.0 \end{array}$ | $\begin{array}{r} 1,214.8 \\ 0.2 \end{array}$ | $\begin{array}{r} 1,234.1 \\ 0.1 \end{array}$ | $\begin{array}{r} 1,258.8 \\ 0.1 \end{array}$ | $\begin{array}{r} 1,282.4 \\ 0.1 \end{array}$ | $\begin{array}{r} 1,301.5 \\ 0.1 \end{array}$ | $\begin{array}{r} 1,320.4 \\ 0.2 \end{array}$ | $\begin{array}{r} 1,336.7 \\ 0.2 \end{array}$ | $\begin{array}{r} 1,352.9 \\ 0.2 \end{array}$ |
| Information \% change | $\begin{array}{r} 33.9 \\ 0.3 \end{array}$ | $\begin{array}{r} 34.0 \\ 0.4 \end{array}$ | $\begin{array}{r} 34.1 \\ 0.5 \end{array}$ | $\begin{aligned} & 33,4 \\ & (0.0) \end{aligned}$ | $\begin{array}{r} 33.9 \\ 0.3 \end{array}$ | $\begin{array}{r} 34.6 \\ 0.8 \end{array}$ | $\begin{aligned} & 34.6 \\ & (0.4) \end{aligned}$ | $\begin{aligned} & 35.2 \\ & (0.5) \end{aligned}$ | $\begin{aligned} & 35.8 \\ & (0,4) \end{aligned}$ | $\begin{aligned} & 36.3 \\ & (0.6) \end{aligned}$ | $\begin{aligned} & 36.9 \\ & (0.7) \end{aligned}$ | $\begin{aligned} & 37.4 \\ & (0.9) \end{aligned}$ |
| Refail Trade \% change | $\begin{array}{r} 200.2 \\ 0.2 \end{array}$ | $\begin{array}{r} 200.5 \\ 0.1 \end{array}$ | $\begin{gathered} 201.0 \\ (0.1) \end{gathered}$ | $\begin{array}{r} 193.6 \\ 0.0 \end{array}$ | $\begin{array}{r} 200.4 \\ 0.1 \end{array}$ | $\begin{gathered} 203.1 \\ (0.3) \end{gathered}$ | $\begin{array}{r} 206.9 \\ (0.2) \end{array}$ | $\begin{array}{r} 210.0 \\ (0.2) \end{array}$ | $\begin{array}{r} 212.7 \\ (0.1) \end{array}$ | $\begin{gathered} 215.7 \\ (0.1) \end{gathered}$ | $\begin{gathered} 218.1 \\ (0.1) \end{gathered}$ | $\begin{gathered} 220.6 \\ (0.1) \end{gathered}$ |
| Leisure and Hospitality \% change | $\begin{gathered} 165.3 \\ (0.5) \end{gathered}$ | $\begin{gathered} 166.1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 166.6 \\ (0.8) \end{gathered}$ | $\begin{array}{r} 160.4 \\ 0.0 \end{array}$ | $\begin{gathered} 165.8 \\ (0.5) \end{gathered}$ | $\begin{gathered} 168.8 \\ (0.7) \end{gathered}$ | $\begin{gathered} 172.1 \\ (0.8) \end{gathered}$ | $\begin{gathered} 174.7 \\ (0.4) \end{gathered}$ | $\begin{gathered} 176.4 \\ (0.3) \end{gathered}$ | $\begin{gathered} 177.6 \\ (0.2) \end{gathered}$ | $\begin{gathered} 177.7 \\ (0.2) \end{gathered}$ | $\begin{gathered} {[77.5} \\ (0.1) \end{gathered}$ |
| Government \% change | $\begin{gathered} 285.8 \\ (0.5) \end{gathered}$ | $\begin{gathered} 286.7 \\ (0.5) \end{gathered}$ | $\begin{gathered} 287.5 \\ (0.5) \end{gathered}$ | $\begin{array}{r} 286.0 \\ 0.0 \end{array}$ | $\begin{gathered} 286,6 \\ (0.4) \end{gathered}$ | $\begin{gathered} 289.8 \\ (0.5) \end{gathered}$ | $\begin{gathered} 293.1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 296.2 \\ (0.6) \end{gathered}$ | $\begin{gathered} 300.0 \\ (0.6) \end{gathered}$ | $\begin{gathered} 302.0 \\ (0.7) \end{gathered}$ | $\begin{gathered} 305.3 \\ (0.7) \end{gathered}$ | $\begin{gathered} 308.6 \\ (0.8) \end{gathered}$ |

Manufacturing is raised slightly for 2006 with further slight upward revisions for the other forecast years. Both durable and nondurable manufacturing reflect the same pattern of change. Durable manufacturing forecast changes are slightly down through 2009 and then mild upward revisions in the outer years. The national outlooks for wood products and high tech manufacturing offset each other through 2008. Wood product second quarter estimates were weaker than forecast and high tech manufacturing was stronger than forecast.

Graph $\mathbf{0 . 1}$


Graph 0.2


After 2008, the national outlook for wood products has mildly improved with little change to the national outlook for high tech manufacturing. Nondurable manufacturing revisions are mainly due to other nondurable goods which includes paper, printing and related support activities (printing does not include publishing, which is part of the information sector) which came in stronger than estimated for the second quarter.

Private nonmanufacturing is raised to reflect better second quarter numbers. The increase holds through the outer years reflecting the level shift.

Information is raised to reflect the stronger second quarter numbers compared to forecast and the slight downward revisions in the outer years is due to a slightly lower national outlook for this sector.

Retail trade is essentially unchanged in 2006. The outer years are lowered to reflect the marginally lower national forecast for those years.

Leisure and hospitality is lowered by 0.4 percent in 2006 and 0.5 percent in 2007. The weaker than expected second quarter lowers this forecast through the forecast horizon.

The government sector is revised down 0.4 percent in 2006 and 0.5 percent in 2006. The revisions are due mainly to the weaker numbers compared to estimate for the second quarter and a lower national forecast in the outer years.

Personal Income Components
Personal income is forecast to grow by 5.9 percent in 2006, followed by growth of 5.7 percent in 2007 and 5.8 percent in 2008. Wage and salary income will grow 6.1 percent in 2006, 5.4 percent in 2007, and 5.7 percent in 2008.

Non-farm proprietors' income will grow 7.9 percent in 2006. Growth in this income component will slow to 5.4 percent in 2007 and 5.5 percent in 2008.

Per capita income in Oregon will stay below the U.S. average over the next 8 years. Oregon's population and economy is expected to grow faster than the U.S. With both components of the ratio measure growing, per capita income in Oregon will not appreciatively gain or loose ground compared to the U.S. average.
[The following two sections, Goods-Producing Sectors and Service-Producing Sectors, use information from publicly produced sources, such as newspapers, magazines, and web sites. A number of the news items used were compiled by the Oregon Employment Department and published in "Around the State".]

## Goods-Producing Sectors

The rapid price appreciation along with rising mortgage rates is lowering housing affordability. The index reported by the National Association of Realtors (NAR) is down to around 104.5 for May 2006 from a high of 136.4 in February 2003. An index above 100 represents less than 25 percent of a family's income is being used to pay principle and interest payments on a mortgage. A cooling trend is moving across the housing markets throughout the U.S. NAR is also forecasting a drop in housing starts in the U.S. of 6.2 percent in 2006 and further declines of 6.3 percent in 2007. The Random Lengths Composite Price (Random Lengths Publications, June 2006) for lumber are down to $\$ 326$ per thousand feet compared to $\$ 367$ per thousand feet in April. Prices averaged $\$ 401$ per thousand feet in June 2005. As of the week of August 11, 2006, prices averaged $\$ 291$ per thousand feet, considerable below the July 2004 average of $\$ 426$ per thousand feet.

In early July, U.S. and Canada signed a trade agreement on the long debated softwood lumber market. Quotas and tariffs are to be lifted and $\$ 4$ billion of the $\$ 5$ billion collected in fees are to be returned to Canadian producers. As market prices fall below a set market value (roughly set at around $\$ 355$ per thousand board feet), a 5.0 percent tax would be imposed on Canadian imports, going as high as 15.0 percent depending on the drop in market prices. The agreement is to be binding in September but strong concerns, especially from British Columbia wood producers, could delay implementation. The intent of the agreement is to prevent a further rise in the U.S. market share of softwood lumber by Canadian imports. Oregon mills may also be impacted by the opening of new mills in Washington. The increased demand for logs in Washington could cause a shortage of logs for Oregon mills.

A number of recent company news items details changes in the wood products industry. Stimson Lumber in St. Helens laid off 45 workers in May of this year. Roseburg Forest Products has retooled its plant in Coquille, laying off 17 employees with another 25 to 35 workers losing their jobs next year. Roseburg Forest Products also announced an expansion of its engineered wood products plant in Riddle with plans to add 100 workers. Reports indicate that Georgia-Pacific plans to lay off 130 workers by mid September at its Wauna Mill is eastern Clatsop County. It was just two years ago that Georgia-Pacific completed expansion of the mill and added around

110 workers. We expect this sector to reverse the previous two years of jobs gains and mildly contract as rising mortgage rates curtails housing starts.

The computer and electronic equipment sector should see positive gains in the second half of 2006 based on improved sales projections. The three month moving average of worldwide sales of semiconductors in May grew by 9.4 percent over May 2005. The Semiconductor Industry Association (SIA) raised their chips sales growth forecast for 2006 to 9.8 percent from 7.9 percent (EETimes On-Line). The semiconductor equipment book-to-bill for June stood at 1.06, the fifth consecutive month above 1.0, which last occurred in August 2004. The competition between Intel and AMD is heating up with Intel lowering prices to regain market share and further efforts to contain costs. Intel announced 1,000 layoffs across the company but no definite statements about Oregon operations, though reports circulate that larger layoffs may occur.

In Eugene, PSC bar code scanner maker has laid off 21 workers. In the Gresham area, ON Semi announces plans to remain at the former LSI Logic factory for 20 years. Wacker Chemie AG plans to expand polysilicon production to meet demands from the solar cell industry, possibly impacting their Portland operations. At the same time, Sitronic AG has decided to expand their Singapore operation rather than its existing plant in Portland. Included in this sector are producers of aviation navigation and communication equipment, such as Garmin AT who plans to expand at the Salem Airport and add 90 workers over a four year period. Any improvement in hiring for this sector is expected to be modest and employment levels in our forecast horizon (out to 2013) to not reach previous employment levels set in early 2001. Intel's actions may also be impacting Credence Systems Corp. which announced it will lay off 14.0 percent of its global workforce, possibly impacting the 430 employees at the Hillsboro plant.

The transportation equipment sector, representing trucking, RV's, boats, air planes, railroad cars, and others, continue to do well. Western Trailer of Boise, Idaho, will open a new facility in Ontario with initial employment set between 10 and 20 employees. Transportation equipment jobs may finally feel the impact of rising interest rates and high gasoline prices. As the Environmental Protection Agency's (EPA) "2007 Heavy-Duty Highway Rule" is phased in starting with the 2007 truck model year, the pace of truck orders is expected to slow. As the U.S. economy is expected to slow in the second half of this year and 2007, the same factors of rising interest rates and uncertain gasoline prices will temper the growth of this sector. Monaco Coach Corp. in Coburg, a RV manufacturer, reports orders for motor homes are down 12.0 percent for the second quarter of this year.

Metals and machinery manufacturing has rebounded nicely with the economy. American Bridge received a large contract to work on the San Francisco-Oakland Bridge and will add workers to its Reedsport plant. Overall, we expect this industry to follow the U.S. sector with mild growth through 2008.

The growth in the economy has extended to smaller firms in manufacturing. In the other durables sector, Mutual Materials Inc. will open a new brick manufacturing plant in December and employ 50 workers at this Gresham facility. Micro Power of Beaverton has moved to a larger facility and will add 40 positions by the end of the year. The other non-durable sector of manufacturing news is dominated by ethanol production plants. The locations with the most
promise appear to be Clatskanie, Port of Vancouver, Boardman, and Stanfield. Also in this sector, IMEX America will expand its toner for printer cartridges plant in Salem and add 21 workers. As the economy slows into 2007, this sector will see slower but still positive growth. Employment in food processing is forecast to have a strong 2006 with growth of 6.6 percent. Job declines are projected at 1.0 percent for 2007 followed by job increases of 0.9 percent in 2008. This industry continues to face increased competition and consolidation. In Salem, Truitt Bros. is expanding their west side plant while Trans-Ocean Products will lay off 38 workers by the end of July. The rising cost of inputs such as energy, fertilizer and labor continue to add production costs. Recovering global markets and a declining U.S. dollar should assist this industry.

Construction employment is projected to increase by 9.7 percent in 2006, decline by 1.0 percent in 2007, and increase by 0.8 percent in 2008. Mortgage rates have finally moved up, with rates for 30 -year conventional mortgages more than a full percentage point above year ago levels. The U.S. Census reports that year-to-date June 2006 single unit housing starts are down 8.3 percent compared to the similar period a year ago. The strong 2006 job numbers are due to the extraordinary growth of 21.0 percent in the first quarter of this year. The outlook is for continued slowing in 2006 and into 2007. While the single-family residential market is cooling off, demand has picked up in the office space and industrial markets. In the Portland metro, Grubb \& Ellis report vacancy rates continue to drop for office space. The industrial market vacancy rates are down by over two percent compared to two years ago with new construction deliveries on the way. Tempering this strong demand is high construction costs which are starting to push up rents. Continued public work projects, such as the Oregon Department of Transportation's extensive bridge and road work, will help counter the dampening impact on jobs from the softening housing market. The strong growth experienced in this sector since mid-2003 is coming to an end.

## Service-Producing Sectors

Trade, transportation, and utilities sector employment will increase by 2.8 percent in 2006 followed by 1.4 percent in 2007, and 1.7 percent in 2008. Portland International Airport reports passenger traffic was up 3.9 percent year-to-date through June 2006. The Port of Portland added a third container service company with the arrival of Zim Integrated Shipping Services Ltd. With high snow packs allowing for good water flows and better markets for selling surplus power, Bonneville Power plans to lower wholesale electricity rates by 3.0 percent for 2007. Wind farms generally have low employment associated with their operation to provide electricity, but the number of farms being built or planned is impressive. Areas near the Columbia River, mainly Sherman and Gilliam counties, will see a number of wind farms if plans are carried through.

The retail sector is still in an expansionary period but the pace is beginning to slow. There are still reports of Big-box retailers that are under construction, such as the Home Depot store in Corvallis that will employ 150 full- and part-time workers by this January. Expansions are still underway at Clackamas Town Center. The retail sector is projected to increase jobs by 3.5 percent in 2006 followed by slower growth of 1.4 percent in 2007 and 1.9 percent in 2008.

The information sector, which includes traditional publishers such as newspapers and publishers of software, has been adding jobs since the first half of 2005. Job growth should come in at 1.5 percent for 2006 followed by growth of 1.9 percent in 2007 and 0.2 percent in 2008. This sector has recently received both good and bad news. Laika Entertainment plans to build a 30 -acre campus in Tualatin and add 400 people in the next two years. Qwest Communications International Inc. will close its downtown Portland call center, eliminating 175 jobs in October.

Long term interest rates are higher now than a year ago. Housing inventory is rising slightly and sales of existing homes (includes single-family, apartment condos, and co-ops) in Oregon are down 12.0 percent for the second quarter of 2006 compared to a year ago (National Association of Realtors). Median prices of homes are still rising but the pace is starting to slow, with expectations of declines in select parts of the state (possible price declines for previous strong price appreciation areas such as Bend, Medford, and along the coast).

The slowing housing market will also slow the real estate employment sector and the financial connections through mortgage originations and refinancing. Clear Choice Health Plans will build a new building in Bend and add 45 employees. Also in the insurance area, Country Insurance will add a call center to its Salem offices and could add 30 jobs. Netflix, an online DVD rental company, is moving its call center out of the Bay area to Hillsboro, adding about 100 workers over the next few months. Annual employment in the financial activities sector is expected to grow 4.4 percent in 2006 and then milder job growth of 0.7 percent in 2007 and 1.0 percent in 2008.

Professional and business services will finish 2006 with an average growth of 4.9 percent. Job growth is projected at 3.5 percent in 2007 and 3.8 percent in 2008. This sector has been one of the fastest growing job areas since mid-2003. Molecular Probes in Eugene, a biotech firm, is expanding facilities and expects to add 15 to 20 people by the end of the year. Associated Business Systems of Tigard, will create a new division and hire 80 to 100 new employees over the next year.

Education and health services will grow 4.0 percent in 2006, 1.8 percent in 2007, and 2.3 percent in 2008. Health services have been one of the few industries to add jobs through the recession. Along with several hospitals being built, a number of smaller health facilities are joining their ranks.

Leisure and hospitality is projected to grow 3.4 percent in 2006, 1.8 percent in 2007, and 2.0 percent in 2008. Although geopolitical concerns and high gasoline prices may dampen tourism, the evidence points to only a mild impact on the tourism in the first half of 2006. New resorts, hotels, and restaurants continue to open in established tourism sectors in the state. Escape Lodging Co. plans to build a resort in Cascade Locks. In Bend, the opening of Greg's Grill will employ 130 people.

The Government sector is expected to mildly increase 0.2 percent in 2006 then grow by 1.1 percent in 2007 and 2008. The Oregon Employment Department will be closing nine field offices with an unknown number of attritions and/or layoffs. The improving economy has helped local government tax receipts to improve. La Grande, Oregon Trail in Sandy, and Forest

Grove plan to add more teachers. Cuts in special education programs will result in layoffs at Willamette Education Service District in Salem and Portland Public Schools.

## Alternative Scenarios

The baseline forecast is our projection of the most likely outcome for the Oregon economy. As with any forecast, other scenarios are possible. The economy could either under or over perform relative to our baseline forecast. We broadly call these forecasts the Optimistic and Pessimistic scenarios. While we attach the highest probability to the baseline forecast, these other outcomes are within the reaim of possibilities.

The outlook for the U.S. economy has a direct influence on the outlook for the Oregon economy. Global Insight provides alternative forecasts to their baseline forecast that we label "Optimistic" and "Pessimistic". Essentially, the optimistic forecast has stronger growth in the next few years while the pessimistic forecast has weaker growth for the same period. The Governor's Oregon Council of Economic Advisors (OCEA) meets with OEA to discuss the outlook for the U.S. economy. Members were asked to compare their outlook with that of forecaster Global Insight, whose forecast forms the basis for OEA's Oregon economic model. Table O. 5 compares the probability of occurrence for alternative forecasts.

OCEA believes the Baseline Scenario has a greater chance of occurrence, with dramatic deviations more likely on the Pessimistic Scenario compared to the Optimistic Scenario. This heightened view of risks in the next few years is reflected in OEA's forecast for the Oregon economy.

Table 0.5


Table 0.6

| Alternative Scenarios U.S. Outlook |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Forecaster | Optimistic | Baseline | Pessimistic | Recession |
| Global Insight | $20 \%$ | $55 \%$ | $25 \%$ | $0 \%$ |
| OEA | $10 \%$ | $52 \%$ | $27 \%$ | $11 \%$ |

Table O. 6 compares the alternative scenarios for the Oregon economy and Figure 0.2 shows the three scenarios for total employment, personal income, manufacturing employment and private non-manufacturing employment.

The alternative scenarios set boundaries around our baseline forecast that incorporate the risk assessment for the national economy by OEA. The boundaries are constructed to reflect Global Insight and OEA's views that the risks are not symmetrical and that they are relative higher in the low (pessimistic) than the high (optimistic) scenarios ${ }^{\prime}$.

The alternative scenarios for the national economy and their possible impact on Oregon are described below:

Optimistic Scenario: The national economy performs better than anticipated. Seven areas are responsible for the stronger growth: Productivity strength, high foreign economic growth, a stronger dollar, stronger business investment, lower federal budget deficit, stronger housing starts, and a lower price for oil. Productivity strength is helped along through continued growth of business spending on information technology and other capital upgrading. Businesses are in a better position to still reap profits without having to appreciatively raise prices. Along with an abatement of rising oil prices, inflation stays in check allowing the Federal Reserve to ease off the raising of interest rates. The stronger dollar also helps on the inflation front by keeping import prices relatively low and constrains businesses in the U.S. from raising prices.

World economies grow faster than anticipated and boost stronger exports even in the face of a stronger dollar. Relatively lower interest rates with a stronger economy keeps construction activity higher. These national trends are especially beneficial to growth in the Oregon economy. Manufacturing employment increases more rapidly compared to the baseline forecast. The nonmanufacturing sector is pulled along with the expanding economy. The impact builds into 2006. The Oregon economy continues with stronger growth until the end of 2006 and settles into a sustained growth period into 2007 and 2008, which is still higher than the baseline projection.

[^4]Pessimistic Scenario: The national economy underperforms compared to the baseline forecast. The main culprit is accelerating inflation. At the root of the inflation is high demand for raw materials, doubling of oil prices, weak domestic capacity expansion, and continued fall in the dollar. Production capacity is tighter than measured and continued advances in technology make current idle capacity obsolete. Pressure is placed on prices to rise. Couple this situation with oil prices rising faster than baseline and a weaker dollar, inflation and interest rates rise sooner and faster than the baseline scenario.

The Federal Reserve moves to fight inflation and raise interest rates. At the same time, the housing market experiences a more severe correction with prices falling more than 20 percent by late 2007 and larger drops in housing starts and related residential consumption (construction, building materials, home furnishings, etc.). With foreign demand weaker, exports are also softer. Businesses react by slowing investments and consumers pull back spending. Both profits and the stock market soften in late 2006 and further in 2007. Oregon businesses follow suit and slow down hiring to reflect the slower economic activity. The scenario does not result in a recession. The expansion underway is put on hold through 2008. As Federal Reserve policies take hold in 2007, inflation should start to lessen and the economy marginally improves in late 2007 and early 2008.

The September 2006 forecast for the next few years is a balanced look at prospects for the future. It is our "base scenario" or most likely outcome of the future. Nevertheless, risk factors can push economic activity stronger or weaker. At this point, OEA deems that the risks are not balanced; they are tilted toward more downside than upside, at least in the near term. In other words, risks are biased toward a milder growth scenario compared to our baseline forecast. The risks, of course, could change going forward as conditions change and certain risk factors would have been resolved, becoming part of the baseline assumptions.

Figure 0.2


## Forecast Risks

When a person is weak or is in a state of malnutrition, they are more susceptible to getting viruses and suffering from other diseases. With the national economy expected to slow down in the latter part of this year and into 2007, the risks are greater from any disturbances that could throw the economy off track. The same two major drags on the economy that is responsible for the slowdown, oil prices and a slowing housing market could hurt the economy further when it is most susceptible. Any geopolitical disruptions during this time would be more harmful than when the economy is stronger.

The housing market in Oregon shows all signs of slowing with building inventories, declines in sales of new and existing homes, and lower building permits. The last item to join this group is price. So far, house price appreciation has continued but at a slightly slower pace. The expectation is for house prices to drift to single digit increases and decline in some markets.

Oil prices continue to be bounced around by geopolitical events, the most recent being the Israeli-Hezbollah conflict. Refineries in the Gulf region are almost completely back to capacity operation and have helped mute some of the recent oil price increases from translating to much higher prices at the gas pump. But hurricane season is rapidly coming up and the risk of a repeat of last year is still in our memories. (For a more thorough review of oil market risk to the economy, please see this section in the June 2006 Economic and Revenue Forecast publication "Economic Impact from Oil Prices".)

We will continue to monitor and recognize the potential disruptions of these two risks factors on the Oregon economy.

The major risks now facing the Oregon economy are:

- Geopolitical risks. Uncertainty still surrounds the transition in Iraq, tensions with North Korea, Iran, Israel and Lebanon, and heightened security risks all weigh heavily on businesses and consumers. Disruptions in travel, oil supplies, and consumer confidence could be severe. The drop in business activity could be deeper if this uncertainty persists or if the transition out of war goes badly for the U.S. The winding down of military expenses will not greatly impact Oregon. There is also an upside risk that transition issues go more smoothly than anticipated and stability in the Mid East provide a stimulus to the economy that is stronger than forecast.
- Inflation and Federal Reserve Bank reactions. A growing economy with surging energy costs is a recipe for inflation. Faster inflation than forecasted may force the Federal Reserve to raise interest rates more quickly and to higher levels. This action could slow the U.S. economy and in turn slowdown the Oregon economy.
- Falling U.S. Dollar. As the dollar depreciates against other foreign currencies, U.S. exports are promoted. Oregon's manufacturing sector has a large dependency on international markets. If the U.S. dollar falls too quickly, this could harm Oregon's trading partners, weakening their economies and lowering their demand for Oregon products. For the
moment, the dollar has crept up against other currencies and the revaluation of the Yuan may be too small to greatly assist Oregon exports. In the end, a controlled lowering of the U.S. dollar is most beneficial to the Oregon economy.
- A sharp and major stock market correction. This would slow consumer spending. Lower stock prices could also limit the ability of businesses to raise necessary capital in the equity markets.
- A possible collapse of the housing market. The extremely low interest rates have caused a boom in home refinancing. As this activity matures and interest rates begin to raise, the added boost to consumer spending may also slow. Any drop in home price appreciations coupled with a large drop in mortgage refinancing could slow down consumer spending. The Oregon housing market could be adversely impacted by a major housing correction in California. Continued gains in personal income will be needed to keep consumer spending from falling.
- Rising regional energy prices. More businesses may slow production and lay off workers. Natural gas prices have risen the past year but appear to be leveling off, at least for this year. Oil prices have crossed above $\$ 70$ per barrel with fears it could go higher. A Goldman Sachs report suggests the possibility of a 'super-spike', sending the price of oil over $\$ 100$ per barrel. A geopolitical incident could dramatically disrupt gasoline and natural gas prices, with the Goldman Sachs report a more probable outcome. Regionally, electricity generation has been helped by a deeper snow pack but is still subject to weather patterns and natural gas prices. As demand surpasses the available capacity of hydro generation, electric generation may move towards natural gas powered turbine engines. Higher electricity prices could result from being pegged to natural gas prices.
- Avian flu. The possibility of a pandemic would be disruptive on the Oregon economy. Besides higher mortality rates than compared to other influenza outbreaks, absenteeism at work could be 20 to 30 percent. Past pandemics (such as the Spanish flu of 1918) erupt quickly and work through the population within 8 weeks.
- PERS and possible state and local government budget shortfalls. The Oregon Supreme Court overturned two major reforms but upheld the Settlement Agreement. The Court did not rule out future Legislative reforms to PERS. Although the 2005-2007 biennium appears to need only small additional expenditures, state and local governments may need to increase taxes, reduce services, and/or increase bond financing in the future to cover potential unfunded liabilities for PERS. If increases in unfunded liabilities leads to increased tax rates, this could lead to a substantial negative impact on Oregon's economy. To the extent that spending cutbacks hit education and public infrastructure, the state could suffer longer-term impacts.
- Initiatives, referendums, and referrals. The ballot box brings a number of unknowns that could have wide-sweeping impacts on the Oregon economy. The Oregon Supreme Court has upheld the land use Measure 37 . This measure could bring dramatic changes to land use
regulation. Claims that were on hold will start moving through the hearing process. At this time, it is uncertain as to the impacts from compensation or lifting of land use restrictions.
- The recovery for semiconductors, software, and communications could be much slower than anticipated. Continued outsourcing of manufacturing could slow growth in this region. Recent commitments to move research out of the country would be very harmful to Oregon's high technology sector.

The major upside opportunities now facing the Oregon economy are:

- Sharp reduction of oil prices. Oil prices are being pushed above market equilibriums by disruptions stemming from political turmoil to extreme weather. Once these factors settle down and supplies increase, oil prices could fall much further than currently anticipated.
- Recovering business and consumer confidence. The transition out of the war in Iraq could accelerate. Rising confidence can help boost spending and hiring. Spillover effects to the stock market would reinforce the economic recovery.
- Controlled growth of China and India. China and India may successfully manage their economies to be more stable and still strong. This should stabilize commodity price volatility while promoting Oregon exports.


## Extended Outlook

The Oregon economy grew slower than the U.S. economy in 1998 through 2003. This had not occurred since 1985. Between 2006 and 2013, the U.S. economy is expected to have even slower growth than the slow growth expected in Oregon. Employment growth in Oregon will be slower than the mid-1990s.

The slower economic growth of 1998 through 2003 also slowed the growth of Oregon per capita income and average wages. The devastating 1980-82 recession slowed the growth of incomes and wages until 1986. As the Oregon economy became more industrially diversified, per capita income and wages grew faster than the nation as a whole. Even though the Oregon economy is projected to grow faster than the nation after 2005, per capita income and average wages are not expected to keep up with the national average. Although the recent period of prosperity has raised these two measures, they have yet to reach their previous peaks of 1978.

The key factors that will fuel the state's long-term growth are:

- Recovery in the semiconductor industry: Increasing demand for computers and communications equipment, and a related increase in orders, will bring some relief to the excess capacity in the industry. The needs of the Internet should fuel greater demand. The strength in the industry will allow previously announced investment plans by major companies to be carried out in the 2006-2008 period.
- Export growth and rising commodity prices: Global recovery of economies will increase demand for Oregon commodities, finished and capital goods. Oregon is well positioned for trade with Asian countries. Rising commodity prices will benefit agricultural and timber producers in the state.
- Rising Federal Deficit and Outstanding Debt: Tax breaks to help the economy out of recession, defense spending, relief spending with hurricanes Katrina and Rita, and the under funded outlook for health care and social security, have created an imbalance between spending and tax revenues, creating a possible higher inflation environment with higher interest rates. Corrections of this imbalance include reduced federal services and/or higher taxes. This dampening effect on the national economy would in turn dampen the Oregon economy.
- Continued strength in domestic markets: Continued economic growth in California and other major domestic markets will fuel demand for Oregon products.
- Business costs advantages: The Oregon economy will benefit from a comprehensive energy plan. Efforts which have long been in place for electricity planning should extend to all energy sources. If the plan can assure businesses of an abundant, reliable, and relatively inexpensive supply of electricity and other sources of energy, the state (and Pacific Northwest) will continue to have a relative energy advantage over other regions. If recent price hikes for electricity and natural gas surpass those for other parts of the country, Oregon could lose this cost advantage. Oregon has other business cost advantages, such as lower workers' compensation rates and multi-modal transportation options compared to other states. Equally important is an educated work force that contributes to productivity.
- Environmental issues: Salmon protection measures, Portland Super Fund, and other issues could change the economic landscape.
- Affordable housing: If housing costs rise faster in Oregon than in the rest of the nation, companies will face increased difficulties recruiting workers. Over the last five years, California, Washington, and the nation as a whole when compared to Oregon have experienced faster rising housing costs. If Oregon can maintain a relative cost advantage in housing, this factor will be attractive for firm location.
- Biotechnology and Nanotechnology: These sectors are seen by many as the next growth industries. Portland and the state have launched funding plans to promote the biotechnology sector. The platform for the Oregon Business Plan includes nanotechnology as an emerging field for the state. It is too early to tell if these are the next growth industries and the returns that they may bring.
- Sustainable development: Centered in the Portland area, this movement in the building practices is spreading throughout the U.S. Uncertainty surrounds the number of new jobs associated with this movement, but it may allow gains in market share for construction and consulting firms in Oregon.
- Quality of life: Oregon will continue to attract financially secure retirees. Companies that place a high premium on quality of life will desire to locate in Oregon.


## Oregon Index of Leading Economic Indicators (OILI)

Since November 2003, the Oregon Economic and Revenue Forecast report has included analysis based on the Oregon Index of Leading Economic Indicators (OILI). The OILI applies the Conference Board's methodology for the U.S. National Leading Index to Oregon-specific components ${ }^{2}$. OEA anticipates potential changes in these index components over time as Oregon's economy evolves and new and better predictors of economic activity emerge. While it does not measure the magnitude of this economic activity, the Index can identify the direction of future trends. The OILI is therefore a useful supplement to Oregon's economic forecast.

The OILI contains ten components related to business decisions and conditions that tend to trigger an expansion or contraction: 1) national Semiconductor Book-to-Bill Ratio, 2) Oregon residential building permits, 3) Institute for Supply Management's (ISM) national index, 4) interest rate spread ( 10 -year treasury bond less Federal Funds Rate), 5) the University of Michigan (UM) Consumer Sentiment Index, 6) total withholding for Oregon employees, 7) the Federal Reserve Bank of Atlanta Dollar Index (Pacific Excluding Japan), 8) Oregon new business incorporations, 9) Oregonian help wanted index and 10) Oregon unemployment initial claims.

The OILI uses component data from January 1995 to July 2006, and Oregon nonfarm employment data for the same period is used as a proxy for general economic activity. According to the nonfarm data, the Oregon economy experienced two downturns over the index period: one occurred from mid-2001 to mid-2002, and the second occurred in late 2002 and continued through the end of June 2003. While a "double-dip" recession has not been officially recognized, the second period of Oregon employment contraction late in 2002 is consistent with the jobless recovery observed nationally.

Measured against these employment trends, OILI provides four signals in all: OILI signals the first Oregon recession with a considerable ten-month lead and gives a three-month leading signal on the second recession. The remaining two signals, one in 1995 and a second in 1998, give false indications of economic change that possibly reflect an unusual influence on individual components. The 1995 signal, for example, occurs at the start of the data set where outlying numbers are likely, and the 1998 signal roughly corresponds with the Asian Financial Crisis, not altogether an unexpected error given Oregon's ties to eastern trading partners.
${ }^{2}$ In 2005, the Conference Board changed the yield curve component from the one-month change in the spread to the spread itself. As a result, the yield curve component provides a negative signal only when the yield curve inverts, an occurrence that historically leads a recession. As of April 2006, the Oregon Leading Index is modified to include the spread as well.

Figure 0.3
Oregon Index of Leading Indicators
(Six Month Annualized Percent Change, through July '06)


For the six months ending in July 2006, the Oregon Index of Leading Indicators ${ }^{3}$ declined an annualized 2.4 percent, following a revised 2.5 percent rise in June. This marks the first decline in the index since July 2001. Annualized employment growth of 2.1 percent for the six months through July followed a revised 2.6 percent increase in the prior month.

Housing permits, consumer sentiment, and help wanted ads were the primary contributors to the index's decline. Withholding and new incorporations also exhibited negative growth for the sixmonth period ending in July. Major contrary indicators were the book-to-bill ratio, dollar, and the yield curve.

[^5]
## Oregon Regional Profile

The accompanied tables provide data on regional and county levels within the state. This section will be a regular feature following the Oregon Economic Review and Forecast. The tables (Table 0.7 through 0.10 ) highlight the social, economic, and demographic diversity in the state. Please review these tables in each quarterly issue as data is updated and new information is displayed.

Table 0.7
Oregon's Economic Profile by County and Region

| Geography | 2005 Total Employment | Unemployment Rate | 2004 Per capita personal income | Average wage per job |
| :---: | :---: | :---: | :---: | :---: |
| OREGON | 1,745,811 | 6.1\% | \$30,561 | \$35,621 |
| Portland 5-County | 841,393 | 5.7\% | \$34,783 | \$41,718 |
| Clackamas | 180,561 | 5.4\% | \$37,094 | \$37,779 |
| Columbia | 21,418 | 7.3\% | \$27,745 | \$31,956 |
| Multnomah | 344,576 | 6.2\% | \$36,117 | \$41,243 |
| Washington | 253,358 | 5.2\% | \$33,347 | \$46,784 |
| Yamhill | 41,480 | 6.1\% | \$27,030 | \$31,397 |
| Willamette Valley | 425,674 | 6.2\% | \$27,700 | \$32,497 |
| Benton | 40,138 | 4.8\% | \$33,988 | \$39,279 |
| Lane | 163,668 | 6.1\% | \$27,788 | \$32,302 |
| Linn | 48,609 | 7.4\% | \$25,091 | \$31,905 |
| Marion | 140,181 | 6.4\% | \$27,128 | \$31,821 |
| Polk | 33,078 | 5.5\% | \$26,671 | \$27,141 |
| Coast | 86,587 | 6.6\% | \$26,789 | \$27,421 |
| Clatsop | 17,945 | 5.7\% | \$27,940 | \$28,320 |
| Coos | 27,099 | 7.3\% | \$26,031 | \$27,420 |
| Curry | 9,064 | 6.5\% | \$25,084 | \$25,953 |
| Lincoln | 20,857 | 6.7\% | \$27,605 | \$26,814 |
| Tillamook | 11,622 | 6.0\% | \$27,089 | \$28,181 |
| Southern | 169,784 | 6.7\% | \$26,637 | \$30,098 |
| Douglas | 43,565 | 8.1\% | \$25,623 | \$30,759 |
| Jackson | 93,598 | 6.0\% | \$28,531 | \$30,502 |
| Josephine | 32,621 | 6.9\% | \$23,367 | \$27,708 |
| Central | 144,542 | 6.3\% | \$26,837 | \$29,830 |
| Crook | 8,684 | 6.7\% | \$22,719 | \$31,666 |
| Deschutes | 70,234 | 5.5\% | \$29,853 | \$31,482 |
| Gilliam | 957 | 5.8\% | \$25,242 | \$27,818 |
| Hood River | 11,500 | 6.4\% | \$25,237 | \$23,976 |
| Jefferson | 8,533 | 6.1\% | \$22,735 | \$28,412 |
| Klamath | 27,986 | 7.6\% | \$24,917 | \$29,797 |
| Lake | 3,301 | 8.5\% | \$24,271 | \$27,677 |
| Sherman | 828 | 7.2\% | \$23,599 | \$29,232 |
| Wasco | 11,894 | 7.1\% | \$24,958 | \$26,706 |
| Wheeler | 625 | 6.4\% | \$22,832 | \$23,294 |
| Eastern | 77,838 | 8.0\% | \$24,099 | \$28,291 |
| Baker | 6,625 | 7.5\% | \$22,331 | \$27,012 |
| Grant | 3,304 | 9.9\% | \$26,163 | \$27,151 |
| Harney | 3,141 | 9.1\% | \$24,293 | \$27,286 |
| Malheur | 11,729 | 8.8\% | \$20,222 | \$25,929 |
| Morrow | 5,122 | 7.5\% | \$27,901 | \$30,804 |
| Umatilla | 33,638 | 7.9\% | \$24,484 | \$29,667 |
| Union | 10,998 | 6.9\% | \$26,179 | \$28,350 |
| Wallowa | 3,281 | 7.6\% | \$25,574 | \$24,852 |

Sources: Total employment and unemployment rate: Oregon Employment Department;
per capita personal income: U.S. Bureau of Economic Analysis;
average wage per job: Oregon Employment Department.

Table 0.8

| Oregon's Gross Farm \& Ranch Sales By County and Region for 2004 and 2005 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STATE/COUNTY | All Crops | Year 2005 <br> All Animal Products | Total Sales | All Crops | Year 2004 <br> All Animal Products | Total Sales | Change in total sales from 04 to 05 |
| OREGON | 2,915,305 | 1,149,163 | 4,064,468 | 2,775,316 | 1,081,080 | 3,856,396 | 5.4\% |
| Portland PMSA | 901,044 | 110,511 | 1,011,555 | 861,271 | 105,464 | 966,735 | 4.6\% |
| Clackamas | 312,329 | 49,589 | 361,918 | 308,280 | 47,076 | 355,356 | 1.8\% |
| Columbia | 28,749 | 4,221 | 32,970 | 26,809 | 4,005 | 30,814 | 7.0\% |
| Multnomah | 75,125 | 2,619 | 77,744 | 73,408 | 2,464 | 75,872 | 2.5\% |
| Washington | 257,626 | 17,259 | 274,885 | 244,458 | 17,573 | 262,031 | 4.9\% |
| Yamhill | 227,215 | 36,823 | 264,038 | 208,316 | 34,346 | 242,662 | 8.8\% |
| Willamette Valley | 910,198 | 230,912 | 1,141,110 | 893,932 | 214,824 | 1,108,756 | 2.9\% |
| Benton | 91,407 | 13,971 | 105,378 | 94,834 | 13,811 | 108,645 | 5 |
| Lane | 89,624 | 27,615 | 117,239 | 87,165 | 27,531 | 114,696 | 2.2\% |
| Linn | 200,101 | 48,711 | 248,812 | 196,584 | 45,668 | 242,252 | 2.7\% |
| Marion | 432,725 | 106,904 | 539,629 | 421,787 | 96,941 | 518,728 | 4.0\% |
| Polk | 96,341 | 33,711 | 130,052 | 93,562 | 30,873 | 124,435 | 4.5\% |
| Coast | 80,428 | 128,951 | 209,379 | 81,177 | 121,765 | 202,942 | 3.2\% |
| Clatsop | 5,509 | 6,580 | 12,089 | 7,115 | 6,333 | 13,448 |  |
| Coos | 31,795 | 14,051 | 45,846 | 32,995 | 12,944 | 45,939 |  |
| Curry | 22,286 | 3,412 | 25,698 | 21,267 | 3,183 | 24,450 | 5.1\% |
| Lincoln | 16,250 | 1,779 | 18,029 | 15,401 | 1,727 | 17,128 | 5.3\% |
| Tillamook | 4,588 | 103,129 | 107,717 | 4,399 | 97,578 | 101,977 | 5.6\% |
| Southern | 123,478 | 61,720 | 185,198 | 117,204 | 57,083 | 174,287 | 6.3\% |
| Douglas | 52,134 | 24,814 | 76,948 | 47,809 | 23,615 | 71,424 | 7.7\% |
| Jackson | 52,271 | 23,970 | 76,241 | 54,300 | 20,771 | 75,071 | 1.6\% |
| Josephine | 19,073 | 12,936 | 32,009 | 15,095 | 12,697 | 27,792 | 15.2\% |
| Central | 348,590 | 207,175 | 555,765 | 342,522 | 202,980 | 545,502 | 1.9\% |
| Crook | 14,172 | 28,452 | 42,624 | 13,941 | 29,082 | 43,023 |  |
| Deschutes | 10,383 | 12,875 | 23,258 | 9,551 | 15,698 | 25,249 |  |
| Gilliam | 16,818 | 10,528 | 27,346 | 14,714 | 10,026 | 24,740 | 10.5\% |
| Hood River | 65,808 | 1,200 | 67,008 | 64,466 | 1,200 | 65,666 | 2.0\% |
| Jefferson | 29,152 | 13,833 | 42,985 | 35,580 | 14,925 | 50,505 |  |
| Klamath | 108,303 | 92,446 | 200,749 | 93,337 | 89,441 | 182,778 | 9.8\% |
| Lake | 26,701 | 28,784 | 55,485 | 24,478 | 28,758 | 53,236 | 4.2\% |
| Sherman | 23,774 | 2,286 | 26,060 | 22,879 | 2,085 | 24,964 | 4.4\% |
| Wasco | 51,795 | 6,967 | 58,762 | 61,890 | 6,921 | 68,811 |  |
| Wheeler | 1,684 | 9,804 | 11,488 | 1,686 | 4,844 | 6,530 | 75.9\% |
| Eastern | 551,567 | 409,894 | 961,461 | 479,210 | 378,964 | 858,174 | 12.0\% |
| Baker | 14,756 | 42,012 | 56,768 | 15,625 | 39,972 | 55,597 | 2.1\% |
| Grant | 9,490 | 20,739 | 30,229 | 9,406 | 19,478 | 28,884 | 4.7\% |
| Harney | 16,562 | 51,837 | 68,399 | 14,348 | 46,269 | 60,617 | 12.8\% |
| Malheur | 112,740 | 93,686 | 206,426 | 81,316 | 90,308 | 171,624 | 20.3\% |
| Morrow | 118,383 | 115,013 | 233,396 | 111,501 | 100,964 | 212,465 | 9.9\% |
| Umatilla | 221,143 | 53,620 | 274,763 | 188,485 | 48,407 | 236,892 | 16.0\% |
| Union | 34,309 | 13,652 | 47,961 | 34,585 | 13,568 | 48,153 |  |
| Wallowa | 24,184 | 19,335 | 43,519 | 23,944 | 19,998 | 43,942 |  |

Source: Oregon State University's Oregon Agricultural Information Network (OAN),
Extension Economic Information Office.

Table 0.9
Oregon's Public Elementary and Secondary School Enrollment Statistics

| STATE/COUNTY | Oct. 1, 2005 enrollment | Oct. 1, 2000 enrollment | $\begin{gathered} 2000-2005 \\ \% \text { change } \end{gathered}$ | $\begin{array}{r} \text { 2004-2005 } \\ \text { per student } \\ \text { expenditure(*) } \end{array}$ | for fre <br> lunch |
| :---: | :---: | :---: | :---: | :---: | :---: |
| OREGON | 559,215 | 545,680 | 2.5\% | \$7,680 | 33.4\% |
| Portland PMSA | 254,980 | 245,255 | 4.0\% | \$7,619 | 29.5\% |
| Clackamas | 57,926 | 54,691 | 5.9\% | \$7,023 | 20.1\% |
| Columbia | 8,703 | 8,600 | 1.2\% | \$6,844 | 24.0\% |
| Multnomah | 91,569 | 93,296 | -1.9\% | \$8,606 | 40.7\% |
| Washington | 80,469 | 73,195 | 9.9\% | \$7,078 | 23.6\% |
| Yamhill | 16,313 | 15,473 | 5.4\% | \$7,211 | 32.0\% |
| Willamette Valley | 139,545 | 134,717 | 3.6\% | \$7,539 | 35.9\% |
| Benton | 9,229 | 9,996 | -7.7\% | \$7,481 | 22.6\% |
| Lane | 47,709 | 48,144 | -0.9\% | \$7,567 | 32.8\% |
| Linn | 19,163 | 17,798 | 7.7\% | \$6,984 | 38.2\% |
| Marion | 56,899 | 52,271 | 8.9\% | \$7,751 | 40.3\% |
| Polk | 6,545 | 6,508 | 0.6\% | \$7,138 | 32.8\% |
| Coast | 25,765 | 28,293 | -8.9\% | \$8,061 | 39.6\% |
| Clatsop | 5,162 | 5,555 | -7.1\% | \$7,797 | 27.4\% |
| Coos | 8,531 | 9,404 | -9.3\% | \$7,883 | 41.9\% |
| Curry | 2,819 | 3,072 | -8.2\% | \$7,996 | 37.9\% |
| Lincoln | 5,831 | 6,496 | -10.2\% | \$8,426 | 48.9\% |
| Tillamook | 3,422 | 3,766 | -9.1\% | \$8,356 | 38.4\% |
| Southern | 56,829 | 57,338 | -0.9\% | \$7,214 | 35.3\% |
| Douglas | 16,132 | 16,646 | -3.1\% | \$7,462 | 36.4\% |
| Jackson | 29,057 | 29,188 | -0.4\% | \$7,035 | 32.7\% |
| Josephine | 11,640 | 11,504 | 1.2\% | \$7,318 | 39.9\% |
| Central | 49,727 | 47,645 | 4.4\% | \$7,747 | 35.0\% |
| Crook | 3,295 | 3,198 | 3.0\% | \$7,377 | 36.6\% |
| Deschutes | 22,668 | 19,867 | 14.1\% | \$6,767 | 26.0\% |
| Gilliam | 275 | 353 | -22.1\% | \$14,670 | 20.6\% |
| Hood River | 4,015 | 3,777 | 6.3\% | \$8,593 | 30.1\% |
| Jefferson | 3,636 | 3,722 | -2.3\% | \$9,684 | 62.3\% |
| Klamath | 10,696 | 11,048 | -3.2\% | \$8,277 | 41.0\% |
| Lake | 1,121 | 1,383 | -18.9\% | \$8,833 | 41.7\% |
| Sherman | 270 | 364 | -25.8\% | \$12,008 | 35.6\% |
| Wasco | 3,531 | 3,678 | -4.0\% | \$7,842 | 48.1\% |
| Wheeler | 220 | 255 | -13.7\% | \$17,326 | 42.8\% |
| Eastern | 30,801 | 31,716 | -2.9\% | \$9,254 | 43.1\% |
| Baker | 2,356 | 2,826 | -16.6\% | \$8,837 | 40.0\% |
| Grant | 1,106 | 1,352 | -18.2\% | \$10,948 | 35.1\% |
| Harney | 1,225 | 1,426 | -14.1\% | \$10,083 | 39.6\% |
| Malheur | 5,358 | 5,609 | -4.5\% | \$8,574 | 54.1\% |
| Morrow | 2,367 | 2,250 | 5.2\% | \$8,736 | 54.2\% |
| Umatilla | 13,419 | 12,878 | 4.2\% | \$9,856 | 43.1\% |
| Union | 4,063 | 4,177 | -2.7\% | \$8,131 | 30.3\% |
| Wallowa | 907 | 1,198 | -24.3\% | \$8,562 | 29.8\% |

[^6]Table O. 10
2005 Annual Average Covered Employment by NAICS Division and by Region

| Employment | Oregon | Region |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Portland 5County | Willamette Valley | Coast | Southern | Central | Eastern |
| Natural Resources \& Mining | 48,858 | 13,854 | 15,793 | 2,910 | 4,987 | 5,739 | 5,464 |
| Construction | 89,965 | 45,953 | 18,630 | 3,485 | 8,863 | 9,006 | 2,237 |
| Manufacturing | 203,328 | 108,996 | 48,863 | 6,958 | 16,304 | 13,525 | 8,599 |
| Trade, Transportation, \& Utilities | 325,145 | 172,751 | 64,456 | 13,461 | 31,903 | 23,830 | 13,395 |
| Information | 33,583 | 20,024 | 6,289 | 846 | 2,519 | 2,258 | 750 |
| Financial Activities | 87,562 | 54,534 | 16,074 | 2,483 | 6,141 | 5,221 | 2,055 |
| Professional \& Business Services | 186,437 | 114,659 | 34,881 | 5,371 | 12,169 | 10,303 | 3,614 |
| Education \& Health Services | 192,914 | 99,103 | 45,820 | 6,738 | 19,459 | 14,328 | 6,420 |
| Leisure \& Hospitality | 158,872 | 77,365 | 32,072 | 12,562 | 15,161 | 15,567 | 5,394 |
| Other Services | 60,329 | 31,772 | 13,396 | 2,608 | 5,307 | 3,904 | 1,878 |
| Government | 265,222 | 109,044 | 77,621 | 15,850 | 23,165 | 21,472 | 18,005 |
| Total | 1,652,874 | 848,350 | 373,988 | 73,303 | 146,010 | 125,195 | 67,815 |
|  | Region |  |  |  |  |  |  |
| Distribution | Oregon | Portland PMSA | Willamette Valley | Coastal | Southern | Central | Eastern |
| Natural Resources \& Mining | 3.0\% | 1.6\% | 4.2\% | 4.0\% | 3.4\% | 4.6\% | 8.1\% |
| Construction | 5.4\% | 5.4\% | 5.0\% | 4.8\% | 6.1\% | 7.2\% | 3.3\% |
| Manufacturing | 12.3\% | 12.8\% | 13.1\% | 9.5\% | 11.2\% | 10.8\% | 12.7\% |
| Trade, Transportation. \& Utilities | 19.7\% | 20.4\% | 17.2\% | 18.4\% | 21.8\% | 19.0\% | 19.8\% |
| Information | 2.0\% | 2.4\% | 1.7\% | 1.2\% | 1.7\% | 1.8\% | 1.1\% |
| Financial Activities | 5.3\% | 6.4\% | 4.3\% | 3.4\% | 4.2\% | 4.2\% | 3.0\% |
| Professional \& Business Services | 11.3\% | 13.5\% | 9.3\% | 7.3\% | 8.3\% | 8.2\% | 5.3\% |
| Education \& Health Services | 11.7\% | 11.7\% | 12.3\% | 9.2\% | 13.3\% | 11.4\% | 9.5\% |
| Leisure \& Hospitality | 9.6\% | 9.1\% | 8.6\% | 17.1\% | 10.4\% | 12.4\% | 8.0\% |
| Other Services | 3.6\% | 3.7\% | 3.6\% | 3.6\% | 3.6\% | 3.1\% | 2.8\% |
| Government | 16.0\% | 12.9\% | 20.8\% | 21.6\% | 15.9\% | 17.2\% | 26.6\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

Source: Oregon Employment Department
Note: Employment includes only covered employment.
Oregon total includes multi-county employment not shown in individual regions.
Total includes a small number of non-classifiable jobs not shown in individual industries.
Definition of regions:
Portland 5-County: Clackamas, Columbia, Multnomah, Washington, and Yamhill counties.
Willamette Valley: Benton, Lane, Linn, Marion, and Polk counties.
Coast: Clatsop, Coos, Curry, Lincoin, and Tillamook counties.
Southem: Douglas, Jackson, and Josephine counties.
Central: Crook, Deschutes, Gilliam, Hood River, Jefferson, Klamath, Lake, Sherman, Wasco, and Wheeler counties.
Eastern: Baker, Grant, Harney, Malheur, Morrow, Union, Umatilla, and Wallowa counties.

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# Regional Profile Industry Employment in Region 8 

For questions regarding content, please contact Guy Tauer at Guy.R.Tauer@state.or.us, (541)776-6060 ext. 240
www. WorkingInOregon.org www. QualityInfo.org
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## REGION 8 INDUSTRY EMPLOYMENT

In our economy, we measure, track and analyze employment data by occupations and industry. We'll focus here on the latter - the industries that comprise the economy of the Rogue Valley (Jackson and Josephine counties). Our most complete source of industry employment data are obtained through employer tax records. All new and existing businesses are assigned a six-digit code that helps us classify types of businesses. This allows us to monitor employment and payroll trends within those industries. Beginning in 2001, all of our industry employment data are published using the North American Industrial Classification System (NAICS). This represents a new industry coding system, the first entirely new way of measuring industry employment in more than 60 years. The economy has changed dramatically over that time, and this new system reflects the reality of our industry mix much better than the Standard Industrial Classification (SIC) system.

However, this change has had some drawbacks. It makes comparing industry trends over time, before 2001, difficult if not impossible. Many industries in the NAICS system did not exist according to the older SIC coding system (management of companies, or leisure and hospitality). Maybe in the 1930s there wasn't any time for leisure, with the depression and the world preparing for another world war. This new industry coding system also was adopted to make comparisons between the United States, Mexico and Canada easier. Our neighbors to the north and south also have adopted the NAICS system to measure industry employment and payroll.

Even with all of the comprehensive data we can analyze through employer tax records, using the "Quarterly Census of Employment and Wages" program, there are some segments of our economy where there are significant gaps in data collection and analysis. Two of those areas are selfemployment and the agriculture industry. Our employer tax record data reports workers who are required to be covered by unemployment insurance. Self-employed workers and many agriculture employees are exempt from unemployment insurance coverage. Therefore, monthly and annual average data for these sectors of the economy are estimates based on Census or Current Population Survey information. The best measurement of farm proprietor data is published every five years by the Census of Agriculture. Self-employment numbers are tabulated from the decennial census.

According to the 2000 Census, 15.6 percent of the Jackson County labor force was self-employed in either an incorporated or nonincorporated business. Josephine County had an even higher percentage of self-employed, at 16.9 percent. Unlike our industry employment data from employer payroll records, self-employment data are based on where the population in the labor force lives. Our industry data for covered employment are based on where firms in those industries are located. Another missing piece of the employment puzzle for self-employment data is the type of business where these self-employed work.

Our agricultural employment estimates show that, in 2003, there were 1,780 employed on an annual average basis in Jackson County. Peak employment months for agriculture are from August through October. These months are when most harvesting in the local fruit tree, mainly pear tree, crops occur. In Josephine County, there were 440 employed on an annual average basis in the agriculture industry. Agriculture and farm sales data from Oregon State University's Agricultural Extension Service show total agricultural sales in 2003 increased by 16.5 percent from the prior year, with sales
totaling over $\$ 94$ million in the two-county region. Cattle sales were up 40.9 percent over the prior year. Total livestock sales were up by 20.6 percent, while crop sales increased by 14.2 percent over 2002. While the total acreage in pear production has fallen over the past 20 years, many older trees are being removed, and young trees are being planted in those orchards. Southern Oregon also boasts an increasingly viable wine grape industry. In 2003, that area has been granted its own appellation, an important development in the region's viticulture. Threats to the long-term outlook of the area's agriculture sector include imports of lower cost products from overseas, more stringent pesticide use laws, and irrigation water availability from storage basins in neighboring counties. New efforts have recently begun to link smaller farms to the region's local restaurants. Farmer's markets have sprouted up during the spring and summer months in many local communities, giving growers additional channels of distribution. Data from the 2002 Census of Agriculture, which includes counts of farm proprietors by county, will be released later this year.

## Industry Mix

The Rogue Valley economy has been undergoing structural change over the past few decades. Once an agriculture and wood products manufacturing-dominated economy, the economy of today represents a diverse mix of industries that provides goods and services for the local population and brings in dollars from out of the area. The area is increasingly becoming a retail and services hub that serves a population much larger than the 260,000 residents of the two-county region. A recent analysis used a tool called the "Hachman Index" to measure industry diversity among all Oregon counties. Jackson County was rated the seventh most diverse county, while Josephine County ranked as the fifth most diverse county. Jackson County's location on Interstate 5, which borders California, and lacks a sales tax, has created strong growth in wholesale and retail trade. Other Jackson County industries with a higher percentage of employment than statewide include art, entertainment and recreation, heath care and social assistance, and accommodations and food services. An aging population, along with a steady stream of near and retirement-age residents from other locations, also has benefited the Rogue Valley's health services and residential care facilities industries.

Josephine County has a higher percentage of employment than Oregon in ambulatory health care services, wood product manufacturing, logging and forestry, furniture and related product manufacturing, general merchandise and food stores, nursing and residential care facilities, and accommodations. In the past year, the construction industry has experienced strong growth in both counties. Building permit data show an increase of more than 25 percent between 2002 and 2003 in the Rogue Valley. Graph 1 compares the percentage of employment by industry between Region 8


Graph 1
and statewide. Graph 2 shows industry employment numbers for Region 8. While the downturn in the economy between 2001 and 2003 was especially acute statewide, the recession in Southern Oregon was less severe. After experiencing two years of flat or slightly declining job growth in 2001 and 2002, job growth returned to the Rogue Valley in 2003. As Graph 3 shows, the latest downturn was slightly longer than the 1991 recession, but total employment loss was less. Compared with the recession of 1980 through 1982, the recent downturn was much more mild in Southern Oregon. The areas of Oregon, especially the Portland Primary Metropolitan Statistical Area, most affected had become much more reliant on the high-tech manufacturing sector over the past decade. The bursting of the dot-com bubble, along with a steep decline in business investments, were the main culprits in the most recent recession to hit Oregon.

Employment Projections by Industry for Jackson and Josephine Counties: 2002-2012

A bit like a turkey at Thanksgiving, every two years Oregon Employment Department (OED) analysts stick our necks out and make projections of


Graph 2


Graph 3 industry growth for the upcoming 10 years. Who would have expected the Rogue Valley to outpace Oregon's job growth over the past decade? We did, with 24 percent for Oregon versus 26 percent in Jackson and Josephine counties. Did anyone anticipate the depth of the recession in the early 1980s that caused the unemployment rate to soar far into double-digit territory in the Rogue Valley? In 1982, the annual average unemployment rate in Josephine County was 15.2 percent, while Jackson County wasn't far behind at 14.4.

Although predicting the future is perhaps best left to psychics, we do our best to come up with estimates of future employment growth trends for the upcoming decade. Remember, nothing in this world is certain except death and taxes. Our latest round of projections covers the period from 2002 through 2012. We don't know for sure that the Rogue Valley will add employment over the next 10
years. But based on history, the region most likely will. The difficult task is estimating how many jobs will be added, and in what industry sectors those jobs will be created.

The latest projections for the Rogue Valley have made headlines. The region is expected to add jobs faster than any region of the state. Jackson and Josephine counties' job growth over that time has been pegged at 15.6 percent, outpacing Oregon's 13.7 percent through 2012 (Figure 1). While that may sound impressive, it is a slower job growth rate than we experienced over the prior 10year period. Figure 1 shows job growth forecast by workforce region.

We develop our forecast at the detailed industry level, then sum those - in this case, a three-digit SIC industry forecast to mostly two-digit published sectors. Why don't we forecast industry growth by the NAICS industry coding system since we


Figure 1 now publish current and annual average data by NAICS industry codes? Good question. One reason is that we look at past trends to forecast future job growth. We just don't have reliable, statistically valid historical data by NAICS industry code on which to base our current round of projections. Over the next few years, as true time series data are collected by NAICS code, then we will revise our forecasting methodology to reflect the new industry coding structure.

What drives job increases, and why is overall growth expected to moderate in the coming decade? What about specific industry forecasts?

Southern Oregon has been an increasingly popular destination to travel to, retire to and in-migrate to in search of quality-of-life factors. But, as the area grows, some of those quality-of-life factors may become diluted. Air quality may degrade due to increased traffic volume. That traffic volume may lead to congested roadways, longer waits at traffic lights and slower commutes around town. Population growth will strain such local infrastructure as water supplies, water waste treatment, public services, classroom sizes, and potentially, more crime. While population growth typically leads to increased demand for goods and services, and greater employment prospects to meet those demands, it does not come without some challenges.

This area is expected to continue to have strong population growth over the next 10 years, and that growth is largely responsible for the increase in employment in the retail and service sectors of the local economy. The most recent projections by the Oregon Office of Economic Analysis, published in 1997, show that the population of the two-county region of the Rogue Valley would grow by about 12 percent between 2000 and 2010. But a more recent prediction published in the April 2003 issue of

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## American Demographics picked the

 Medford-Ashland MSA (Jackson County) as one of 22 of the "magnet markets" in the United States, defined as having a high diversity quotient, or that have a large senior population and are expected to grow the fastest over the next 25 years. The research published in this issue predicts Jackson County's population would increase to 226,198 by 2010, a 10 year growth rate of 24 percent.Other demographic trends also are expected to boost employment. For example, not only do we expect a growing population, but also one that is aging. This will increase demand for services to meet the needs of those age groups, particularly such health care and social services as assisted living and adult foster care facilities. An aging population also has implications for labor force growth. While population is expected to increase, without a substantial shift in labor force participation rates of older residents, the overall labor force is expected to grow more slowly over the next 10 years.

Next, we will examine in more detail what sectors of the region's economy are expected to add jobs over the next 10 years. Graph 4 shows historical and forecasted employment change by industry for Region 8. Graph 5 looks at the distribution of new jobs by broad


Graph 4


Graph 5 industry category.

Services industries are expected to account for about one-half of the Rogue Valley's job growth between 2002 and 2012. Services employment is forecast to grow by 25.7 percent, adding 7,210 new jobs. Health services is expected to be the fastest growing of any sector in the Rogue Valley, increasing by 31.5 percent. To put this into perspective, over the previous decade, the Rogue Valley added more than 10,000 jobs in services, with health services accounting for 3,430 of that increase. Health services employment increased by more than 50 percent over the past decade.

Trade industries are expected to add nearly 4,500 new jobs to the region's employment base over the coming decade, or nearly one in three new jobs. Trade employment is expected to grow slightly
faster than the average for all industries, at 16.1 percent. Trade employment often tracks population growth. Depending on what population forecast you believe, the rate of growth in trade employment may even be faster than our published forecast for this industry. Wholesale trade is more affected by broader industry and economic trends and by the recent slowing of economic growth and the downturn in lumber and wood products industry. As the economy rebounds and the rate of job loss in lumber and wood products slows over the coming decade, wholesale trade employment is forecast to increase by 17 percent over the next 10 years.

Finance, insurance, and real estate industries also are expected to grow along with the region's population. This sector is affected by such economic forces as interest rates and housing markets. Employment in this sector may have more cyclical swings than other components of the Rogue Valley economy. Overall, however, it is expected to add 740 jobs over the coming decade for a growth rate of about 16 percent. Continuing mergers and consolidation in the banking industry, along with more technology-related changes like online banking, raises the risk for slowing job growth in that sector.

Transportation and public utilities are expected to grow more slowly in the coming decade. After surging by more than 30 percent during the past 10 years, employment is expected to climb by nearly 11 percent. Much of the growth in the 1990s was related to call center employment in the telecommunication sector. That activity appears to be leveling off in the Rogue Valley.

Construction and mining was the fastest growing industry segment in the Rogue Valley over the past 10 years, increasing by nearly 80 percent. This industry outpaced even the health services industry, which grew at a strong 51 percent in this region. In the coming 10 years, this sector is expected to grow more slowly, up by about 15 percent and adding about 700 new jobs. This projection may be a little conservative if more robust population growth forecasts hold true. Increase in this sector has been fueled by rapid population growth, a robust economy and low interest rates over the past few years. The construction industry tends to be cyclical, but low interest rates have helped bolster job counts despite slowing in many other industries.

Manufacturing employment fell by 9 percent over the past 10 years in the Rogue Valley. The biggest drag on overall manufacturing employment was a loss of nearly 2,000 jobs in the lumber and wood products industries. However, other durable goods manufacturing added more than 650 new jobs over the decade, and nondurable goods employment rose by nearly 200 . The lack of high-techrelated manufacturing has been a mixed blessing for this region. We did not experience the rapid job growth that occurred in the northern half of Oregon during the 1990s, and the associated gains in average wages or property and other taxes paid to those counties. During the latest recession, we did not have those jobs to lose, so we looked comparatively better in some statistics than the Portland metro area. We also have had less reliance on such manufacturing industries as primary metals manufacturing and transportation equipment manufacturing.

We have a fairly diverse and resilient manufacturing mix in this area. We forecast that manufacturing will grow about 3 percent over the next 10 years, despite a reduction of 13.1 percent in lumber and wood products employment. Many factors will impact these trends; there is no clear outcome. Will logging increase on state and national forests as a result of the health forest initiative currently being debated in Congress? Will our region benefit from possible salvage logging of the Biscuit Fire? Will

[^7]Canadian and other imports continue to depress lumber prices and demand for locally produced lumber? There are so many unknowns that making these estimates is perilous.

Other durable goods employment is forecast to grow by about 20 percent, adding 750 new jobs to the Rogue Valley economy over the next 10 years. Key ingredients will help sustain local manufacturing employment (Table 1). These include the area's availability of industrial sites; small manufacturers that can react nimbly to changing products, technologies, and markets; a community college that is embarking on a technology center to provide manufacturing-related training programs; an airport that is planning for further expansion; and our nearly equidistant location on Interstate 5 between the major markets of Portland and San Francisco.

Table 1

| Employment Projections by Industry Region 8: Jackson and Josephine Counties 2002-2012 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2002 | 2012 | Change | Change |
| TOTAL NONFARM PAYROLL EMPLOYMENT | 94,810 | 109,620 | 14,810 | 15.6\% |
| GOODS PRODUCING | 16,120 | 17,130 | 1,010 | 6.3\% |
| SERVICE PRODUCING | 78,690 | 92,490 | 13,800 | 17.5\% |
| MANUFACTURING, TOTAL | 11,250 | 11,550 | 300 | 2.7\% |
| Durable Goods | 9,010 | 9,120 | 110 | 1.2\% |
| Lumber \& Wood Products | 4,900 | 4,260 | -640 | -13.1\% |
| Other Durable Goods | 4,110 | 4,860 | 750 | 18.2\% |
| Nondurable Goods | 2,240 | 2,430 | 190 | 8.5\% |
| Food \& Kindred Products | 610 | 690 | 80 | 13.1\% |
| Printing \& Publishing | 950 | 1,010 | 60 | 6.3\% |
| Other Nondurable Goods | 680 | 730 | 50 | 7.4\% |
| NONMANUFACTURING, TOTAL | 83,560 | 98,070 | 14,510 | 17.4\% |
| Mining \& Quarrying | 230 | 240 | 10 | 4.3\% |
| Construction | 4,640 | 5,340 | 700 | 15.1\% |
| Transportation \& Public Utilities | 4,480 | 4,970 | 490 | 10.9\% |
| Transportation | 2,710 | 3,030 | 320 | 11.8\% |
| Communications \& Utilities | 1,770 | 1,940 | 170 | 9.6\% |
| Wholesale \& Retail Trade | 27,910 | 32,400 | 4,490 | 16.1\% |
| Wholesale Trade | 2,930 | 3,440 | 510 | 17.4\% |
| Retail Trade | 24,980 | 28,960 | 3,980 | 15.9\% |
| General Merchandise \& Food Stores | 6,000 | 6,810 | 810 | 13.5\% |
| Eating \& Drinking Places | 8,120 | 9,360 | 1,240 | 15.3\% |
| Other Retail Trade | 10,860 | 12,790 | 1,930 | 17.8\% |
| Finance, Insurance, \& Real Estate | 4,610 | 5,350 | 740 | 16.1\% |
| Services | 28,040 | 35,250 | 7,210 | 25.7\% |
| Business \& Professional Services | 5,200 | 6,450 | 1,250 | 24.0\% |
| Health Services | 10,200 | 13,410 | 3,210 | 31.5\% |
| Other Services | 12,640 | 15,390 | 2,750 | 21.8\% |
| Government | 13,650 | 14,520 | 870 | 6.4\% |
| Federal Government | 2,060 | 2,130 | 70 | 3.4\% |
| State Government | 2,100 | 2,250 | 150 | 7.1\% |
| Education | 850 | 900 | 50 | 5.9\% |
| Other State | 1,250 | 1,350 | 100 | 8.0\% |
| Local Government | 9,490 | 10,140 | 650 | 6.8\% |
| Education | 5,700 | 5,950 | 250 | 4.4\% |
| Other Local | 3,790 | 4,190 | 400 | 10.6\% |

Government employment is forecast to grow more slowly than the average of all industries in the coming decade, up by just 6.4 percent. Efforts at the national level to privatize some government jobs may slow growth in federal government employment. State budgets have been squeezed by declining revenue. Local government budgets likely will deal with declining Oregon and California timber receipt dollars. The sunsetting of the safety net legislation designed to cushion the loss of those timber dollars will impact city, county and local education-related employment.

## Census Bureau and State Cooperative Local Employment Dynamics Data

Local employment dynamics (LED) data for Oregon are based primarily on quarterly earnings reports submitted by Oregon employers covered by unemployment insurance (UI). These quarterly reports provide information on earnings of workers as well as employer characteristics. Roughly nine in 10 jobs in Oregon are covered by UI, with notable exceptions including the self-employed, small agricultural employers, elected officials, and many real estate and insurance-related occupations, which are paid solely by commission. The U.S. Census Bureau integrates information about individuals (e.g., place of residence, sex, age, earnings) with information about the employer (e.g., place of work, industry, and employment). These data are used to generate quarterly reports that provide a wealth of information regarding interactions between workers and employers over time.

In the Rogue Valley, the industries with the highest turnover were agriculture, retail trade, construction and services. Lower turnover industries include mining, manufacturing, transportation and utilities, wholesale trade, and finance, insurance, and real estate. Industries with lower turnover typically have higher pay, and more full-time and year-round employment. Construction pays above the average for all industries, but also exhibits a seasonal hiring pattern. Table 2 shows total employment, hires, separations and turnover by SIC industry group for 2002 in Region 8.

Table 2

| Region 8: Full-Quarter Local Employment Dynamics Measures*, 2002 |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| Industry | Employment | Hires | Separations | Turnover |
| All Private Industries | 70,999 | 8,386 | 7,837 | $12.2 \%$ |
| Agriculture | 1,859 | 280 | 299 | $18.8 \%$ |
| Mining | 185 | 17 | 15 | $9.5 \%$ |
| Construction | 3,770 | 473 | 430 | $13.2 \%$ |
| Manufacturing | 10,588 | 688 | 751 | $7.3 \%$ |
| Transportation and Utilities | 4,036 | 341 | 325 | $8.7 \%$ |
| Wholesale Trade | 2,792 | 243 | 191 | $8.2 \%$ |
| Retail Trade | 21,379 | 3,142 | 2,675 | $14.5 \%$ |
| Finance, Insurance, and Real Estate | 3,357 | 304 | 276 | $9.1 \%$ |
| Services | 23,034 | 2,900 | 2,875 | $13.3 \%$ |
|  |  |  |  |  |
|  |  |  |  |  |
| *Average of quarterly values for full-quarter employees. |  |  |  |  |
| Source: Local Employment Dynamics; Quartenly Workforce Indicators |  |  |  |  |

8

# Regional Profile <br> Labor Force, Employment and Unemployment in Region 8 

For questions regarding content, please contact Guy Tauer at Guy.R.Tauer@state.or.us, (541) 776-6060 ext. 240
www.WorkingInOregon.org www. QualityInfo.org
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## INTRODUCTION

In this discussion of labor force, employment and unemployment trends in the Rogue Valley, it may be helpful to first dispel a couple of common myths. The total number of unemployed and the unemployment rate includes individuals who may not be receiving unemployment insurance (UI) benefits. People who exhaust their Ul claim without returning to work are considered unemployed if they are still looking for work. If someone has quit looking for work, they are not considered in the labor force and not counted as unemployed in Local Area Unemployment Statistics (LAUS) data. There are estimates of these "discouraged workers" at the national level, but not for state and local areas. Someone may also be collecting Ul benefits but not be counted as unemployed. They may be working part-time and receiving partial benefits.

The following analysis provides an overview of recent trends in the region's labor force. How has the labor force grown over time? Who is counted in the labor force? How has the age composition of the labor force changed over the past decade? Trends in the region's unemployment rate, types of unemployment, and trends in the state's labor force participation rate are examined. We'll also discuss how a person's education level is likely to affect the probability that they will be employed. All students and new entrants to the labor market should understand how educational attainment affects earnings and employment prospects. Seasonal trends in employment and unemployment in each county in the region also will be examined.

## LABOR FORCE: EMPLOYMENT AND UNEMPLOYMENT

## Labor Force

The labor force consists of all residents 16 and older who are either employed or unemployed and actively seeking work. Each person is counted only once in labor force statistics even if he or she holds more than one job. Institutionalized individuals are excluded from official labor force statistics, as are active-duty Armed Forces personnel, which is why the term "civilian" labor force is often used.

Employed: A labor force participant is employed if he or she:

- worked at least one hour as a paid employee; or
- worked in his or her own business, profession, or farm; or
- worked at least 15 hours as an unpaid worker in an enterprise operated by a family member; or
- was temporarily absent from work because of vacation, illness, bad weather, childcare problems, parental leave, labor-management dispute, job training or other family or personal reasons.

Unemployed: A labor force participant is unemployed if he or she:

- had no job,
- was available for work,
- made specific efforts to find work, or
- was waiting to be recalled to a job after a layoff, regardless of whether or not he or she was looking for other work.

The definition of unemployment excludes certain groups who are sometimes thought of as being unemployed or underemployed. Discouraged workers - those who would like to work but have stopped looking - are not counted because they are not actively seeking work. People who work part time but would prefer full time work also are not counted as unemployed because they are working. While neither of these groups is included in unemployment figures, national data for each are gathered and published separately.

There are five major "unemployed" categories:

- Job losers, who are on temporary or permanent layoff
- Job leavers, who voluntarily leave a job and immediately begin to look for another
- Those who complete temporary jobs and begin to look for new jobs.
- Re-entrants, who worked, left the labor force, and have begun a new job search
- New entrants, who have never worked before

Unemployment Rate: The unemployment rate is simply the number of unemployed people expressed as a percentage of the labor force.

To help distinguish the causes of rising or falling unemployment rates, economists often characterize unemployment as:

- Seasonal unemployment, which results from normal, repetitive fluctuations in business activity that occur as the seasons change, for example, post-holiday layoffs in the retail trade sector
- Cyclical unemployment, which results from a general downturn in business activity that is brought about by reduced demand for goods and services such as during a recession
- Structural unemployment, which refers to a mismatch between industry needs and the skills of the local workforce, typically caused by a change in the economic structure of an area or by technological change
- Frictional unemployment, which occurs due to inevitable delays between starting a job search and finding a suitable job.


## Reasons for Unemployment

"Job losers" make up the largest share of Oregon's unemployed, accounting for 43 percent of the total in 2002. About 62 percent of the job losers have lost their jobs permanently, while the rest are on temporary layoff (Graph 1).

The share of the unemployed who are "job leavers" typically varies with the state of the economy. During recessions, fewer people voluntarily leave their jobs since opportunities elsewhere are diminished. However,
when the economy and labor demand are strong, more people are likely to quit their jobs, confident that they will soon find something better.

New entrants to the labor force have remained a relatively small and fairly constant fraction of the total unemployed ( $4 \%$ to $8 \%$ ), primarily reflecting the size of the youth population. Unemployment among re-entrants to the labor force, however, is larger and more variable, following a pattern similar to that of job leavers. The number of re-entrants tends to fall when the economy is weak and rise when job growth is strong.


Graph 1

## Unemployment Myths and Realities

A person does not have to be drawing UI benefits to be counted as unemployed for statistical purposes. Tallies of unemployment insurance recipients are, indeed, one factor used in the calculation of local area unemployment rates, but several other statistical inputs are considered, too. Fewer than half of the people counted as unemployed actually are receiving unemployment insurance payments. It's likely that job leavers, re-entrants, and new entrants, for example, would have a difficult time qualifying for unemployment benefits, even though they count among the jobless for statistical purposes. Unemployment insurance benefits vary by individual case; the preceding sentence is a generalization.

In fact, some people who draw unemployment insurance benefits are counted as employed. For example, a person who worked full time but has been involuntarily cut to part-time hours may qualify for partial unemployment insurance benefits. Another example would be a person who has been let go by one employer and works odd jobs for another employer or through self-employment. If the earnings from these odd jobs are small, partial unemployment benefits may be paid. However, since the individual works at least one hour per week, he or she is statistically employed under the labor force definitions.

## UNEMPLOYMENT TRENDS: HISTORICAL AND RECENT

The recent recession that has given Oregon the distinction of having one of the highest unemployment rates in the nation for much of the past three years also has affected unemployment rates in Region 8 (Jackson and Josephine counties). During the 35 months between July 2001 and May 2004, Oregon's unemployment rate was either first or second highest of all 50 states. However, recent job growth has helped lower the state's unemployment rate by as much as two percentage points. This job growth, combined with the trend toward increasing net outflow of drivers' licenses to other states (excluding California), may work to reduce Oregon's national ranking in unemployment rate over the next year or two.

After generally trending downward from the peak of over 14 percent in 1982, the Rogue Valley's unemployment rate fell to 5.7 percent in 2000 (Graph 2). By 2003, the rate had risen to 7.7 percent. The number of people estimated as unemployed rose from its low point of 7,021 in 2000 to 9,969 in 2003.

During those three years both the civilian labor force and total employment in Region 8 increased. The Rogue Valley's civilian labor force totaled 122,876 in 2000. By 2003, the civilian labor force had risen to 129,304 for an increase of 5.2 percent. In comparison, Oregon's statewide civilian labor force increased by 1.8 percent between 2000 and 2003.

Total employment in Region 8 grew from 115,855 in 2000 to 119,335 in 2003 for a growth of 3.0 percent. With the labor force growing faster than total employment, this helps explain the increase in the unemployment rate between 2000 and 2003 in the Rogue Valley.

Jackson County's unemployment rate has historically been lower than Josephine County's. Since 1980, Josephine County's annual average unemployment rate has averaged 1.5 percentage points higher than Jackson County's. In 1990, the rate difference was 0.5 percent. During 1980 and 1994, Josephine County's rate was 2.4 percentage points higher than Jackson County's (Graph 3).


Graph 2


Graph 3

Josephine County's unemployment rate was 8.8 percent in 2003, very close to the average of 8.7 percent for the previous 10 years. While a rate of close to 9 percent indicates a rate higher than the national average, which is currently close to six percent, it is still much lower than during the 1980 through 1984 period when the rate ranged from 12.3 percent to 15.2 percent (Graph 4).

Jackson County also experienced very high unemployment rates during the 1980 to 1984 recessionary period. The unemployment rate during that time ranged from 10 percent to 14.4 percent. Jackson County's unemployment rate for 2003, at 7.3 percent, was slightly higher than the 6.9 percent average over the previous 10 years. For the first time, in year 2002, Jackson County's

[^8]unemployment rate was lower than the statewide average. We equaled the state's rate in 2001, at 6.3 percent and also dipped below the statewide average in 2003, when the state's annual average unemployment rate was 8.2 percent. Recessionary clouds that rained hardest on the Portland area contributed to the hike in Oregon's statewide unemployment rate over the past few years.

## Seasonal Trends in Region 8 Labor Force Statistics

Many industries in the Rogue Valley have definite and predictable seasonal employment trends. This can be observed in overall employment and unemployment trends. For this analysis, we looked at the monthly average data over the past 10 years to examine trends in seasonality in the Rogue Valley's total employment and total unemployment data series. Jackson and Josephine counties are presented separately, to examine the similarities and differences in seasonal employment trends.

In Jackson County, average monthly total employment is highest during the last onethird of the year (Graph 5). Over the past 10 years, employment counts have been highest in September and October and dipped just slightly during November and


Graph 4


Graph 5 December. In September, many school district employees are returning to work after summer hiatus. The tourism-dependent leisure and hospitality industry is just beginning to scale back seasonal employees, and the construction industry is still at its peak before winter rains arrive. Agriculture employment, which is included in this data series, reaches a peak in Jackson County during September and October when pears and other crops are being picked and packed. In November and December, seasonal hiring for the county's strong retail trade sector is ramping up for customer service, gift package assembly and holiday shopping sales. Employment counts are lowest in the first quarter of the year.

Total average monthly unemployment follows nearly a reverse trend as total employment, with the greatest number historically unemployed in January and February (Graph 6). There also is a slight spike in total unemployment in June and July, as it is likely that many youths and college students
may re-enter the workforce for the summer, and those who are seeking work but not finding work are then counted as unemployed. Some school district employees may also be re-entering the workforce in search of summer employment.

Josephine County experiences a slightly different seasonal employment trend. Total employment peaks in June through October (Graph 7). Then total employment historically trends downward over the winter months, reaching a trough in January. Josephine County has less employment in agriculture, so the peak harvest months have a smaller effect on total employment than they do in Jackson County. Josephine County also does not have as much seasonal employment in the retail sector as its neighboring county.

Similar to Jackson County, average monthly total unemployment reaches its peak in the first quarter of the year when tourism, construction, logging and other seasonal industries are at their low points (Graph 8). Total unemployment shows only slight variation between April and December in Josephine County.

## Rogue Valley Workforce Growing Older Over Last Decade

The Census Bureau has partnered with many states to create a longitudinal database containing labor force indicators. The Quarterly Workforce Indicators produced from the bureau's Local Employment Household Dynamics program were created to fill in the gaps for many labor market information needs. Some new data sets from this project included turnover, number of new hires, job creation and average monthly earnings. These data can be obtained by


Graph 6


Graph 7


Graph 8
industry, sex and age to the county level. Quarterly data are available from 1991 through the third quarter of 2003. We now have a measurement that shows how the age of the workforce is changing over time.

In Region 8, the workforce has been aging during the past decade (Graph 9). In the third quarter of 1991, the percentage of 25 - to 34 -year-old workers exceeded the percentage of those ages 45 to 54 by a 26 -percent to 17-percent margin. By the third quarter of 2003, the Rogue Valley had a higher percentage of the workforce between 45 and 54 than those 25 to 43,23 percent versus 20.5 percent. In net numbers, the 25 - to 34 -year-old workers outnumbered the 45 - to 54 -year-old cohort by 5,517 in 1991. By the third quarter of 2003, there were 2,135 more workers ages 45 to 54 than those ages 25 to 34. This is a dramatic change in workforce composition for just


Graph 9 over 10 year's time. More information can be found at http://lehd.dsd.census.gov/led/00/.

## LABOR FORCE TRENDS AND CHARACTERISTICS

The nation's labor force participation rates - the percentage of the population age 16 or older working or looking for work - was about 59 percent in 1964. It climbed for many years as women increasingly entered the paid labor force and the baby-boom generation moved out of high school and college and into the workplace. Oregon's rate rose from about 62 percent in 1975 - about one point above the U.S. rate in that year - and hit a peak of about 69 percent in 1996. Since then, it has drifted down slightly, bouncing between 68 percent and 69 percent except in the recession year of 2002, when it dropped to 67.5 percent.

On average, workers with higher levels of formal education are less likely to be unemployed (Graph 10). National data for 2003 indicate that, as a group, workers 25 or older with a first professional degree (e.g., a law or medical degree) had an unemployment rate of only 1.7 percent, while those with a doctorate had an unemployment rate of 2.1 percent. At the other end of the scale, those who had not completed high school had an unemployment rate of 8.8 percent. The unemployment rates of groups between these two extremes were systematically related to the groups' educational attainment levels, with higher levels of education corresponding to lower unemployment rates. Although comparable Oregon data are not available, it is reasonable to assume this pattern occurs in Oregon just as it does in the nation as a whole.

Slightly more than one of five workers in Oregon works part time. Since at least 1978, the percentage of Oregonians working part time has varied from as low as 18.5 percent to as high as 24.4 percent,
but in most years it is very close to 22 percent. In 2002, about nine of 10 parttime workers in Oregon indicated they worked part time voluntarily (e.g., to accommodate their other activities such as school or family life) while one in 10 worked involuntarily (e.g., due to their inability to find full-time work). Over the past decade, as few as one in 20 said they worked part time involuntarily.


Graph 10


# EMPLOYMENT PROJECTIONS BY OCCUPATION 2004-2014 Region 8 (Jackson and Josephine Counties) 

Project Managers:

Dwayne Stevenson, Economic Analyst
Brenda Turner, Occupational Economist

Assisted by:
Kathi Riddell

For questions regarding content, please contact Brenda Turner at Brenda.P.Turner@state.or.us, (503) 947-1233

Oregon Employment Department Workforce and Economic Research

875 Union St. NE
Salem, OR 97311
www.WorkingInOregon.org
www.QualityInfo.org

September 2005
Occupational Employment Projections, 2004-2014
Region 8 (Jackson and Josephine counties)
Competitive
Education


[^9]Occupational Employment Projections, 2004-2014
Region 8 (Jackson and Josesphine counties)
Region 8 (Jackson and Josephine counties)

| Standard Occupational Classification Code and Title |  | 2004-2014 |  |  |  |  |  | Minimum Education | Competitive Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} 2004 \\ \text { Employment } \\ \hline \end{array}$ | 2014 Employment | Percent Growth | Growth Openings | Replacement Openings | $\begin{gathered} \text { Total } \\ \text { Openings } \\ \hline \end{gathered}$ |  |  |
| 13-1011 | Agents and Business Managers of Artists, Performers, and |  |  |  |  |  |  |  |  |
|  | Athletes | 3 | 4 | 33.3\% | 1 | 1 | 2 | Bachelor's | acheor's + Work Exp. |
| 13-1021 | Purchasing Agents and Buyers, Farm Products | 37 | 43 | 16.2\% | 6 | 14 | 20 | Bachelors | Bachelor's + Work Exp. |
| 13-1022 | Wholesale and Retail Buyers, Except Farm Products | 184 | 223 | 21.2\% | 39 | 54 | 93 | Bachelor's | Bachelor's + Work Exp. |
| 13-1023 | Purchasing Agents, Except Wholesale, Retail, and Farm |  |  |  |  |  |  |  |  |
|  | Products | 144 | 171 | 18.8\% | 27 | 40 | 67 | Bachelor's | Bachelor's + Work Exp. |
| 13-1031 | Claims Investigators, Examiners, and Adjusters | 49 | 56 | 14.3\% | 7 | 7 | 14 | Long OJT | Bachelor's |
| 13-1041 | Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation | 107 | 117 | 9.3\% | 10 | 27 | 37 | Bachelor's | Master's |
| 13-1051 | Cost Estimators | 200 | 241 | 20.5\% | 41 | 51 | 92 | Bachelor's | Bachelor's + Work Exp. |
| 13-1061 | Emergency Management Specialists | 3 | 4 | 33.3\% | 1 | 1 | 2 | Work Exp. | Work Exp. |
| 13-1071 | Employment, Recruitment, and Placement Specialists | 150 | 178 | 18.7\% | 28 | 27 | 55 | Bachelors | Bachelor's + Work Exp. |
| 13-1072 | Compensation, Benefits, and Job Analysis Specialists | 36 | 41 | 13.9\% | 5 | 6 | 11 | Bachelors | Bachelor's + Work Exp. |
| 13-1073 | Training and Development \$pecialists | 80 | 95 | 18.8\% | 15 | 14 | 29 | Bachelor's | Bachelor's + Work Exp. |
| 13-1079 | Human Resources, Training, and Labor Relations |  |  |  |  |  |  |  |  |
|  | Specialists, All Other | 120 | 133 | 10.8\% | 13 | 21 | 34 | Bachelor's | Bachelor's + Work Exp. |
| 13-1081 | Logisticians | 9 | 11 | 22.2\% | 2 | 2 | 4 | Bachelor's | Bachelor's + Work Exp. |
| 13-1111 | Management Analysts | 56 | 67 | 19.6\% | 11 | 9 | 20 | Bachelor's | Master's |
| 13-1121 | Meeting and Convention Planners | 21 | 24 | 14.3\% | 3 | 5 | 8 | Work Exp. | Bachelor's |
| 13-1199 | Business Operations Specialists, All Other | 547 | 652 | 19.2\% | 105 | 108 | 213 | Bachelor's | Bachelor's + Work Exp. |
| 13-2000 | Financial Specialists | 1,184 | 1,438 | 21.5\% | 254 | 241 | 495 |  |  |
| 13-2011 | Accountants and Auditors | 553 | 684 | 23.7\% | 131 | 120 | 251 | Bachelors | Bachelor's + Work Exp. |
| 13-202 | Appraisers and Assessors of Real Estate | 30 | 33 | 10.0\% | 3 | 7 | 10 | Post-sec. | Bachelor's |
| 13-2031 | Budget Analysts | 18 | 19 | 5.6\% | 1 | 3 | 4 | Bachelor's | Bachelor's + Work Exp. |
| 13-2041 | Credit Analysts | 38 | 45 | 18.4\% | 7 | 7 | 14 | Bachelor's | Bachelor's + Work Exp. |
| 13-2051 | Financial Analysts | 24 | 27 | 12.5\% | 3 | 4 | 7 | Bachelor's | Master's |
| 13-2052 | Personal Financial Advisors | 9 | 13 | 44.4\% | 4 | 1 | 5 | Bachelor's | Bachelor's + Work Exp. |
| 13-2053 | Insurance Underwriters | 9 | 10 | 11.1\% | 1 | 2 | 3 | Bachelor's | Bachelor's + Work Exp. |
| 13-2061 | Financial Examiners | 4 | 5 | 25.0\% | 1 | 1 | 2 | Bachelor's | Bachelor's + Work Exp. |
| 13-2071 | Loan Counselors | 42 | 49 | 16.7\% | 7 | 8 | 15 | Bachelor's | Bachelor's + Work Exp. |
| 13-2072 | Loan Officers | 318 | 393 | 23.6\% | 75 | 60 | 135 | Bachelor's | Bachelor's + Work Exp. |
| 13-2081 | Tax Examiners, Collectors, and Revenue Agents | 30 | 33 | 10.0\% | 3 | 7 | 10 | Bachelor's | Bachelor"s + Work Exp. |
| 13-2082 | Tax Preparers | 32 | 36 | 12.5\% | 4 | 6 | 10 | Post-sec. | Post-sec. + Work Exp. |
| 13-2099 | Financial Specialists, All Other | 77 | 91 | 18.2\% | 14 | 15 | 29 | Bachelor's | Bachelor's + Work Exp. |
|  | Professional and Related | 12,988 | 15,030 | 15.7\% | 2,042 | 2,883 | 4,925 |  |  |
| 15-0000 | Computer and Mathematical Science Occupations | 1,064 | 1,306 | 22.7\% | 242 | 166 | 408 |  |  |
| 15-1000 | Computer Specialists | 1,031 | 1,265 | 22.7\% | 234 | 154 | 388 |  |  |
| 15-1021 | Computer Programmers | 106 | 124 | 17.0\% | 18 | 28 | 46 | Bachelor's | Bachelor's + Work Exp. |
| 15-1031 | Computer Software Engineers, Applications | 82 | 102 | 24.4\% | 20 | 10 | 30 | Bachelor's | Bachelor's + Work Exp. |
| 15-1032 | Computer Sofware Engineers, Systems Software | 33 | 41 | 24.2\% | 8 | 4 | 12 | Bachelor's | Bachelor's + Work Exp. |
| 15-1041 | Computer Support Specialists | 247 | 307 | 24.3\% | 60 | 36 | 96 | Post-sec. | Bachelors |
| 15-1051 | Computer Systems Analysts | 137 | 170 | 24.1\% | 33 | 19 | 52 | Bachelor's | Bachelor's + Work Exp. |

## Occupational Employment Projections, 2004-2014

| Standard Occupational Classification Code and TTitle |  | 2004 Employment | Emplo <br> Employment | Percent Growth | $\begin{gathered} \text { Growth } \\ \text { Openings } \end{gathered}$ | Replacement Openings | $\begin{array}{r} \text { Totall } \\ \text { Openings } \end{array}$ | Minimum Education | Competitive Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-1061 | Database Administrators | 37 | 49 | 32.4\% | 12 | 5 | 17 | Bachelors | Masters |
| 15-1071 | Network and Computer Systems Administrators | 130 | 163 | 25.4\% | 33 | 17 | 50 | Bachelor's | Bachelor's + Work Exp. |
| 15-1081 | Network Systems and Data Communications Analysts | 110 | 138 | 25.5\% | ${ }^{28}$ | 16 | 44 | Bachelor's | Bachelor's + Work Exp. |
| 15-1099 | Computer Specialists, All Other | 149 | 171 | 14.8\% | 22 | 19 | 41 | Post-sec. | Bachelor's |
| 15-2000 | Mathematical Science Occupations | 33 | 41 | 24.2\% | 8 | 12 | 20 |  |  |
| 15-2011 | Actuaries | 15 | 18 | 20.0\% | 3 | 7 | 10 | Bachelor's | Master's |
| 15-2031 | Operations Research Analysts | 16 | 19 | 18.3\% | 3 | 4 | 7 | Bachelor's | Master's |
| 15-2041 | Statasicicians | 2 | 4 | 100.0\% | 2 | 1 | 3 | Bachelor's | Master's |
| 17-0000 | Architecture and Engineering Occupations | 800 | 942 | 17.8\% | 142 | 212 | 54 |  |  |
| 17-1000 | Architects, Surveyors, and Cartographers | 85 | 106 | 24.7\% | 21 | 26 | 47 |  |  |
| 17-1011 | Architects, Except Landscape and Naval | 18 | 24 | 33.3\% | 6 | 3 | 9 | Bachelor's | Master's |
| 17-1012 | Landscape Architects | 8 | 10 | 25.0\% | 2 | 1 | 3 | Bachelor's | Bachelor's + Work Exp. |
| 17-1021 | Cartographers and Photogrammetrists | 24 | 29 | 20.8\% | 5 | 9 | 14 | Bachelor's | Bachelor's + Work Exp. |
| 17-1022 | Surveyors | 35 | 43 | 22.9\% | 8 | 13 | 21 | Bachelor's | Bachelor's + Work Exp. |
| 17-2000 | Engineers | 305 | 352 | 15.4\% | 47 | 69 | 116 |  |  |
| 17-2011 | Aerospace Engineers | 7 | 8 | 14.3\% | 1 | 2 | 3 | Bachelors | Masters |
| 17-2021 | Agricultural Engineers | 1 |  | 200.0\% | 2 | 1 | 3 | Bachelor's | Masters |
| 17-2041 | Chemical Engineers | 1 | 1 | 0.0\% | 0 | 0 | 0 | Bachelor's | Master's |
| 17-2051 | Civit Engineers | 85 | 101 | 18.8\% | 16 | 15 | 31 | Bachelor's | Masters |
| 17-2071 | Eectrical Engineers | 20 | 21 | 5.0\% | 1 | 4 | 5 | Bachelor's | Master's |
| 17-2072 | Electronics Engineers, Except Computer | 41 | 46 | 12.2\% | 5 | 9 | 14 | Bachelor's | Master's |
| 17-2081 | Environmental Engineers | 11 | 14 | 27.3\% | 3 | 2 | 5 | Bachelor's | Master's |
| 17-2111 | Health and Safety Engineers, Except Mining Safety Engineers and Inspectors | 5 | 7 | 40.0\% | 2 | 1 | 3 | Bachelors | Masters |
| 17-2112 | Industrial Engineers | 29 | 33 | 13.8\% | 4 | 8 | 12 | Bachelor's | Masters |
| 17-2131 | Materials Engineers | 1 | 1 | 0.0\% | 0 | 0 | 0 | Bachelor's | Masters |
| 17-2141 | Mechanical Engineers | 66 | 75 | 13.6\% | 9 | 19 | 28 | Bachelor's | Master's |
| 17-2199 | Engineers, All Other | 38 | 42 | 10.5\% | 4 | ${ }_{117}^{8}$ | 12 | Bachelor's | Master's |
| 17-3000 | Drafters, Engineering, and Mapping Technicians | 410 | 484 | 18.0\% | 74 | 117 | 191 |  |  |
| 17-3011 | Architectural and Civil Drafters | 80 | 102 | 27.5\% | 22 | 26 | 48 | Post-sec. | Post-sec. + Work Exp. |
| 17-3012 | Electrical and Electronics Drafters | 14 | 15 | 7.1\% | 1 | 4 | 5 | Post-sec. | Post-sec. + Work Exp. |
| 17-3013 | Mechanical Dratiers | 24 | 27 | 12.5\% | 3 | 7 | 10 | Assoc. | Bachelor's |
| 17-3019 | Drafters, All Other | 22 | 26 | 18.2\% | 4 | 6 | 10 | Post-sec. | Post-sec. + Work Exp. |
| 17-3022 | Civil Engineering Technicians | 76 | 93 | 22.4\% | 17 | 18 | 35 | Assoc. | Assoc. + Work Exp. |
| 17-3023 | Electrical and Electronic Engineering Technicians | 46 | 55 | 19.6\% | 9 | 11 | 20 | Assoc. | Assoc. + Work Exp. |
| 17-3025 | Environmental Engineering Technicians | 4 | 5 | 25.0\% | 1 |  |  | Assoc. | Assoc. + Work Exp. |
| 17-3027 | Mechanical Engineering Technicians | 15 | 15 | 0.0\% | 0 | 3 | 3 | Assoc. | Assoc. + Work Exp. |
| 17-3029 | Engineering Technicians, All Other | ${ }^{66}$ | 70 | 6.1\% | 4 | 17 | 21 | Assoc. | Assoc. + Work Exp. |
| 17-3031 | Surveying and Mapping Technicians | 63 | 76 | 20.6\% | 13 | 24 | 37 | Moderate OJT | Post-sec. |
| 19-0000 | Life, Physical, and Social Science Occupations | 989 | 1,082 | 9.4\% | ${ }^{93}$ | 257 | 350 |  |  |
| 19-1000 | Life Scientists | 287 | 300 | 4.5\% | 13 | 81 | 94 |  |  |
| 19-1012 | Food Sciertists and Technologists | 4 |  |  | 4 | 1 | 5 |  |  |

Occupational Employment Projections, 2004-2014
Region 8 (Jackson and Josephine counties)


Occupational Employment Projections, 2004-2014
Region 8 (Jackson and Josephine counties)

| Standard | Occupational Classification Code and Title | $\begin{array}{r} 2004 \\ \text { Employment } \\ \hline \end{array}$ | $\begin{array}{r} 2014\lceil \\ \text { Employment } \\ \hline \end{array}$ | Percent Growth | $\begin{array}{r} \text { Growth } \\ \text { Openings } \\ \hline \end{array}$ | $\begin{aligned} & \text { Replacement } \\ & \text { Openings } \\ & \hline \end{aligned}$ |  | Minimum Education | Competitive Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21-1013 | Marriage and Family Therapists | 14 | 19 | 35.7\% | 5 | 4 | 9 | Master's | Master's + Work Exp. |
| 21-1014 | Mental Health Counselors | 125 | 171 | 36.8\% | 46 | 35 | 81 | Master's | Master's + Work Exp. |
| 21-1015 | Rehabilitation Counselors | 125 | 153 | 22.4\% | 28 | 33 | 61 | Master's | Masters + Work Exp. |
| 21-1019 | Counselors, All Other | 4 | 5 | 25.0\% | 1 | 1 | 2 | Masters | Master's + Work Exp. |
| 21-1021 | Child, Family, and School Social Workers | 284 | 340 | 19.7\% | 56 | 56 | 112 | Bachelor's | Master's |
| 21-1022 | Medical and Public Heath Social Workers | 24 | 32 | 33.3\% | 8 | 5 | 13 | Master's | Master' + Work Exp. |
| 21-1023 | Mental Health and Substance Abuse Social Workers | 226 | 271 | 19.9\% | 45 | 45 | 90 | Master's | Masters + Work Exp. |
| 21-1029 | Social Workers, All Other | 200 | 234 | 17.0\% | 34 | 39 | 73 | Bachelor's | Bachelor's + Work Exp. |
| 21-1091 | Heath Educators | 113 | 148 | 31.0\% | 35 | 24 | 59 | Bachelor's | Master's |
| 21-1092 | Probation Officers and Correctional Treatment Specialists | 171 | 191 | 11.7\% | 20 | 33 | 53 | Bachelor's | Bachelor's + Work Exp. |
| 21-1093 | Social and Human Service Assistants | 364 | 445 | 22.3\% | 81 | 74 | 155 | Moderate OJT | Asso |
| 21-1099 | Community and Social Serice Specialists, All Other | 111 | 126 | 13.5\% | 15 | 22 | 37 | Moderate O. | Assoc. |
| 21-2000 | Religious Workers | ${ }^{288}$ | ${ }^{333}$ | 15.6\% | 45 | 56 | 101 |  |  |
| 21-2011 | Clergy | 179 | 208 | 16.2\% | 29 | 40 | 69 | Bachelor's | 1 1st Prof. |
| 21-2021 | Directors, Religious Activities and Education | 59 | 68 | 15.3\% | 9 | 7 | 16 | Bachelor's | Bachelor's + Work Ex |
| 21-2099 | Religious Workers, All Other | 50 | 57 | 14.0\% | 7 | 9 | 16 | Bachelor's | Bachelor's + Work Exp. |
| 23-0000 | Legal Occupations | 403 | 467 | 15.9\% | 64 | 52 | 116 |  |  |
| 23-1000 | Lawyers, Judges, and Related Workers | ${ }^{236}$ | ${ }^{272}$ | 15.3\% | 36 | ${ }^{33}$ |  |  |  |
| 23-1011 | Lawyers | 197 | 229 | 16.2\% | 32 | 28 | 60 | 1st Prof. | 1st Prof. + Work Exp. |
|  |  | - | ${ }^{8}$ |  |  |  | 1 | Bacmers | Pr |
|  | Arbitrators, Mediaiors, and Concliliators | 9 | 1 | 22.2\% | 2 |  | 5 | Bacherors | ${ }_{1} 1$ st Pro |
| 23-1023 | Judges and Magistrates | 22 | 24 | 9.1\% | 2 | 3 | 5 | 1 st P | 1 st Pro |
| 23-2000 | Legal Support Workers | 167 | 195 | 16.8\% | 28 | 19 | 47 |  |  |
| ${ }^{23-2019}$ | Paralegals and Legal Assistants | ${ }^{63}$ | 74 | 17.5\% | 11 | ${ }^{6}$ | 17 | Assoc. | Bachelor's |
| 23-2092 | Law Clerks | 16 | 18 | 12.5\% | 2 | 2 |  | Bachelor's | Bachelor's + Work Exp. |
| 23-2093 | Title Examiners, Abstractors, and Searchers | 68 | 81 | 19.1\% | 13 | 9 | 22 | Moderate OJT | Assoc. |
| 23-2099 | Legal Support Workers, All Other | 20 | 22 | 10.0\% | 2 | 2 | 4 | Post-sec. | Assoc. |
| 25-0000 | Education, Training, and Library Occupations | 6,242 | . 030 | 12.6\% | 788 | 1.459 | 247 |  |  |
| 25-1000 | Postsecondary Teachers | 603 | 672 | 11.4\% | 69 | 147 | 216 |  |  |
| 25-1191 | Graduate Teaching Assistants | 8 | 9 | 12.5\% | 1 | 2 | 3 | Bachelor's | Master |
| 25-1199 | Postsecondary Teachers, Except Graduate Teaching Assistants | 595 | 663 | 11.4\% | 68 | 145 | 213 | Master's | PhD |
| 25-2000 | Primary, Secondary, and Special Education Teachers | 3,451 | 3,899 | 13.0\% | 448 | 870 | 1,318 |  |  |
| 25-2011 | Preschool Teachers, Except Special Education | 214 | 262 | 22.4\% | 48 | 30 | 78 | Moderate OJT | Bachelor's |
| 25-2012 | Kindergarten Teachers, Except Special Education | 130 | 147 | 13.1\% | 17 | 18 | 35 | Bachelor's | Master's |
| 25-2021 | Elementary School Teachers, Except Special Education | 1,302 | 1,463 | 12.4\% | 161 | 319 | 480 | Bachelor's | Master's |
| 25-2022 | Middle School Teachers, Except Special and Vocational Education | 629 | 700 | 11.3\% | 71 | 153 | 224 | Bachelor's | Master's |
| 25-2023 | Vocational Education Teachers, Middle School | 14 | 15 | 7.1\% | 1 | 3 | 4 | Bachelor's | Master's |
| 25-2031 | Secondary School Teachers, Except Special and Vocational Education | 884 | 998 | 12.9\% | 114 | 271 | 385 | Bachelor's | Master's |

##  <br> Region 8 (Jackson and Josephine counties)

| Standard Occupational Classifcation Code and Titte |  | $2004-2014$ |  |  |  |  |  | Minimum Education | Competitive Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2004 Employment | $\begin{array}{r} 2014 \mid \\ \text { Employment } \end{array}$ | $\begin{aligned} & \text { Percent } \\ & \text { Growth } \end{aligned}$ | $\begin{array}{r} \text { Groth } \\ \text { Openings } \end{array}$ | Replacement | $\begin{gathered} \text { Total } \\ \text { Openings } \end{gathered}$ |  |  |
| $\begin{aligned} & 25-2032 \\ & 25-2041 \end{aligned}$ | Vocational Education Teachers, Secondary School | 38 | 43 | 13.2\% | 5 | 12 | 17 | Bachelor's | Master's |
|  | Special Education Teachers, Preschool, Kindergarten, and |  |  |  |  |  |  |  |  |
|  | Elementary School | 124 | 39 | 12.1\% | 15 | 33 | 48 | Bachelor's | Master's |
| 25-2042 | Special Education Teachers, Middle School | 50 | 56 | 12.0\% | 6 | 13 | 19 | Bachelor's | Master's |
| 25-2043 | Special Education Teachers, Secondary School | 66 | 76 | 15.2\% | 10 | 18 | ${ }^{28}$ | Bachelor's | Mast |
| 25-3000 | Other Teachers and Instructors | 229 | 269 | 17.5\% | 40 | 33 | 73 |  |  |
| 25-3011 | Adult Literacy, Remedial Education, and GED Teachers and Instructors | 41 | 49 | 19.5\% | 8 | 6 | 14 | Bachelor's | Master's |
| 25-3021 | Self-Enrichment Education Teachers | 91 | 105 | 15.4\% | 14 | 13 | 27 | Work Exp. | Post-sec. |
| 25-3099 | Teachers and instructors, All Other | 97 | 115 | 18.6\% | 18 | 14 | 32 | Bachelor's | Master's |
| 25-4000 | Librarians, Curators, and Archivists | 174 | 194 | 11.5\% | 20 | 54 | 74 |  |  |
| 25-4011 | Archivists | 1 |  | 0.0\% |  | 0 | 0 | Master's | Master's + Work Exp. |
| 25-4012 | Curators | 4 | 4 | 0.0\% | 0 | 1 | 1 | Master's | Master's + Work Exp. |
| 25-4013 | Museum Technicians and Conservators | 3 | 3 | 0.0\% | 0 | 1 | 1 | Master's | Master's + Work Exp. |
| $25-4021$ | Librarians | 87 | 98 | 12.6\% | 11 | ${ }^{23}$ | 34 | Master's | Master's + Work Exp. |
| 25-4031 | Library Technicians | 79 | 88 | 11.4\% | 9 | 29 | 38 | Moderate OJ |  |
| 25-9000 | Other Education, Training, and Libray Occupations | 785 | 996 | 11.8\% | 11 | 355 | 56 |  |  |
| 25-9011 | Audio-Visual Speciailists, Education-related | 1 |  | 0.0\% | 0 | 0 | 0 | Moderate OJT | Assoc. |
| 25-9021 | Farm and Home Management Advisors | 3 | 5 | 66.7\% | 2 | 1 | 3 | Post-sec. | Bachelors |
| 25-9031 | Instructional Coordinators | 101 | 108 | 6.9\% | 7 | 17 | 24 | Bachelor's | Master's |
| 25-9041 | Teacher Assistants | 1,198 | 1,351 | 12.8\% | 153 | 256 | 409 | Short OJT | Post-sec. |
| 25-9099 | Education, Training, and Library, All Other | 482 | 531 | 10.2\% | 49 | 81 | 130 | Bachelor's | Bachelor's + Work Exp. |
| 27-0000 | Ars, Design, Entertainment, Sports, and Media Occupations | 1,219 | 1,475 | 21.0\% | 256 | 253 | 509 |  |  |
| 27-1000 | Art and Design Workers | 296 | 363 | 22.6\% | 67 | 48 | 115 |  |  |
| 27-1011 | Art Directors | 9 | 12 | 33.3\% | 3 | 2 | 5 | Bachelor's | Master's |
| 27-1012 | Craft Arists | 2 | 4 | 100.0\% | 2 | 1 | 3 | Moderate OJT | Post-sec. |
| 27-1013 | Fine Artists, Including Painters, Scuiptors, and Illustrators | 4 | 6 | 50.0\% | 2 | 1 | 3 | Long OfT | Bachelor's |
| 27-1014 | Mult-Media Artists and Animators | 12 | 14 | 16.7\% | 2 | 3 | 5 | Bachelor's | Master's |
| 27-1019 | Arrists and Related Workers, All Other | 3 | 3 | 0.0\% | 0 | 1 | 1 | Bachelor's | Master's |
| 27-1021 | Commercial and Industrial Designers | 28 | 31 | 10.7\% | 3 | 4 | 7 | Bachelor's | Bachelor's + Work Exp. |
| 27-1022 | Fashion Designers | 7 | 9 | 28.6\% | 2 | 1 | 3 | Bachelor's | Bachelor's + Work Exp. |
| 27-1023 | Floral Designers | 50. | 55 | 10.0\% | 5 | 7 | 12 | Moderate OJT | Post-sec. |
| 27-1024 | Graphic Designers | 117 | 146 | 24.8\% | 29 | 18 | 47 | Bachelor's | Bachelor's + Work Exp. |
| 27-1025 | Interior Designers |  | 12 | 33.3\% | 3 | 1 | 4 | Bachelor's | Bachelor's + Work Exp. |
| 27-1026 | Merchandise Displayers and Window Trimmers | 47 | 59 | 25.5\% | 12 | 7 | 19 | Moderate OJT | Assoc. |
| 27-1027 | Set and Extribit Designers | 5 | 7 | 40.0\% | 2 | 1 | 3 | Bachelor's | Bachelor's + Work Exp. |
| 27-1029 | Designers, All Other |  |  | 66.7\% | 2 | 1 |  | Post-sec. | Bachelor's |
| 27-2000 | Entertainers and Periormers, Sports, and Related Workers | 289 | 346 | 19.7\% | 57 | 59 | 16 |  |  |
| 27-2011 | Actors | 97 | 115 | 18.6\% | 18 | 14 | 32 | Long OJT | Post-sec |
| ${ }^{27-2012}$ | Producers and Directors | 53 | 64 | 20.8\% | 11 | 9 | 20 | Bachelor's | Bachelor's + Work Exp. |
| 27-2021 | Athletes and Sports Competitors | 4 | 5 | 25.0\% | 1 | 1 | ${ }_{2}^{2}$ | Long OJT | Post-sec. |
| 27-2022 | Coaches and Scouts | 42 | 55 | 31.0\% | 13 | 10 | 23 | Long OJT | Bachelor's |

## Occupational Employment Projections, 2004-2014

Region 8 (Jackson and Josephine counties)

Occupational Employment Projections, 2004-2014
Region 8 (Jackson and Josephine counties)

|  |  |  |  |  |  | 4-2014 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Standard | Occupational Classification Code and Title | $\begin{array}{r} 2004 \\ \text { Employment } \end{array}$ | $\begin{array}{r} 2014 \sqrt{F} \\ \text { Employment } \end{array}$ | $\overline{\text { Percent }}$ |  | Replacement | Total | Minimum <br> Education | Competitive |
| 29-1124 | Radiation Therapists | 14 | 18 | 28.6\% | 4 | 4 | 8 | Assoc. | Bachelor's |
| 29-1125 | Recreational Therapists | 16 | 23 | 43.8\% | 7 | 5 | 12 | Bachelor's | Bachelor's + Work Exp. |
| 29-1126 | Respiratory Therapists | 124 | 158 | 27.4\% | 34 | 47 | 81 | Assoc. | Bachelor's |
| 29-1127 | Speech and Language Pathologists | 37 | 48 | 29.7\% | 11 | 11 | 22 | Master's |  |
| 29-1131 | Veterinarians | 31 | 41 | 32.3\% | 10 | 9 | 19 | 1 1st Prof. | 1st Prof. + Work Exp. |
| 29-1199 | Heath Diagnosing and Treating Practitioners, All Other | 56 | 72 | 28.6\% | 16 | 14 | 30 | 1st Prof. | 1st Prof. + Work Exp. |
| 29-2000 | Heath Technologists and Technicians | 1,741 | 2,261 | 29.9\% | 520 | 362 | 882 |  |  |
| 29-2011 | Medical and Clinical Laboratory Technologists | 171 | 222 | 29.8\% | 51 | 54 | 105 | Bachelor's | Bachelor's + Work Exp. |
| 29-2012 | Medical and Clinical Laboratory Technicians | 114 | 151 | 32.5\% | 37 | 36 | 73 |  | Assoc. + Work Exp. |
| 29-2021 | Dental Hygienists | 149 | 207 | 38.9\% | 58 | 16 | 74 | Assoc. | Assoc. + Work Exp. |
| 29-2031 | Cardiovascular Technologists and Tecchnicians | 58 | 77 | 32.8\% | 19 | 13 | 32 | Assoc. | Assoc. + Work Exp. |
| 29-2032 | Diagnostic Medical Sonographers and Ultrasound |  |  |  |  |  |  |  |  |
|  | Technologists | 24 | 32 | 33.3\% | 8 | 5 | 13 | Assoc. | Assoc. + Work Ex |
| 29-2033 | Nuclear Meeicicine Technologists | 10 | 13 | 30.0\% | 3 | 2 |  | Assoc. | Bachelor's |
| 29-2034 | Radiologic, CAT, and MRI Technologists and Technicians | 166 | 215 | 29.5\% | 49 | 37 | ${ }^{86}$ | Assoc. | Bachelor's |
| 29-2041 | Emergency Medical Technicians and Paramedics | 112 | 148 | 32.1\% | 36 | 16 | 52 | Post-sec. | Post-sec. + Work Exp. |
| 29-2051 | Dietetic Technicians | 2 |  | 50.0\% | 1 | 0 |  | Moderate OJT | Work Exp. |
| 29-2052 | Pharmacy Technicians | 268 | 332 | 23.9\% | 64 | 41 | 105 | Moderate OJT | Post-sec. |
| 29-2053 | Psychiatric Technicians | 14 | 17 | 21.4\% | 3 | 2 | 5 | Post-sec. | Assoc. |
| 29-2055 | Surgical Technologists | 69 | 87 | 26.1\% | 18 | 11 | 29 | Post-sec. | Assoc. |
| 29-2056 | Veterinary Technologists and Technicians | 46 | 61 | 32.6\% | 15 | 7 | 22 | Assoc. | Assoc. + Work Exp. |
| 29-2061 | Licensed Practical and Licensed Vocational Nurses | 278 | 355 | 27.7\% | 77 | 71 | 148 | Postsec. | Post-sec. + Work Exp. |
| 29-2071 | Medical Records and Health information Technicians | 126 | 162 | 28.6\% | 36 | ${ }^{22}$ | 58 | Assoc. | Assoc. + Work Exp. |
| 29-2081 | Opticians, Dispensing | 61 | 85 | 39.3\% | 24 | 13 | 37 | Long OT | Post-sec. |
| 29-2091 | Orthotists and Prostretists | 0 | 1 | NA | 1 | 0 |  | Bachelor's | Bachelors + Work Exp. |
| 29-2099 | Heath Technologists and Technicians, All Other | 73 | 93 | 27.4\% | 20 | 16 | 36 | Assoc. | Bachelor's |
| 29-9000 | Other Healthcare Practioner and Tecchical Occupations | 90 | 111 | 23.3\% | 21 | 21 | 42 |  |  |
| 29-9011 | Occupational Health and Safety Specialists | 11 | 15 | 36.4\% | 4 | 3 | 7 | Bachelors | Masters |
| $29-9012$ | Occupational Heath and Safety Technicians | 14 | 16 | 14.3\% | 2 | 3 | 5 | Bachelor's | Bachelor's + Work Exp. |
| 29.9091 | Athletic Trainers | 19 | 23 | 21.1\% | 4 | 5 | 9 | Bachelor's | Master's |
| 29-9099 | Heathcare Practitioner and Technical Workers, All Other | 46 | 57 | 23.9\% | 11 | 10 | 21 | Assoc. | Assoc. + Work Exp. |
| 31-0000 | Heath Ca Se Support Occupations | 2,990 | 4,093 | 36.9\% | 1,103 | 609 | ,712 |  |  |
| 31-1000 | Nursing, Psychiatic, and Home Heath Aides | 1,450 | 1,930 | 33.1\% | 480 | 230 | 710 |  |  |
| 31-1011 | Home Health Aides | 386 | 548 | 42.0\% | 162 | 64 | 226 | Short OJT | Post-sec. |
| 31-1012 | Nursing Aides, Orderries, and Attendants | 1,063 | 1,381 | 29.9\% | 318 | 166 | 484 | Short OJT | Work Exp. |
| 31-1013 | Psychiatic Aides | 1 | 1 | 0.0\% | 0 | 0 | 0 | Shortort | Work Exp. |
| 31-2000 | Occupational and Physical Therapy Assistants and Aides | 79 | 109 | 38.0\% | 30 | ${ }_{1}^{16}$ | 46 |  |  |
| 31-2011 | Occupational Therapist Assistants | 4 | 5 | 25.0\% | 1 | 1 | 2 | Assoc. | Assoc. + Work Exp. |
| 31-2021 | Physical Therapist Assistants | 39 | 52 | 33.3\% | 13 | 8 | 21 | Assoc. | Assoc. + Work Exp. |
| 31-2022 | Physical Therapist Aides | 36 |  | 44.4\% | 16 | ${ }^{7}$ | 23 | Moderate OJT | Assoc. |
| 31-9000 | Other Healthcare Support Occupations | 1,461 | 2,054 | 40.6\% | 593 | 363 | 956 |  |  |
| 31-9011 | Massage Therapists | 31 | 40 | 29.0\% |  | 7 | 16 | Post-sec. | Post-sec. + Work Exp |

Occupational Employment Projections, 2004-2014
Region 8 (Jackson and Josephine counties)

Occupational Employment Projections, 2004-2014 Region 8 (Jackson and Josephine counties)



Occupational Employment Projections, 2004-2014
Region 8 (Jackson and Josephine counties)

| Standard Occupational Classification Code and Title |  | 2004 Employment | 2014 Employment | Percent Growth | Growth Openings | Replacement Openings | $\begin{gathered} \text { Total } \\ \text { Openings } \end{gathered}$ | Minimum Education | Competitive Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 39-2021 | Nonfarm Animal Caretakers | 140 | 173 | 23.6\% | 33 | 40 | 73 | Short OJT | Post-sec. |
| 39-3000 | Entertainment Attendants and Related Workers | 312 | 357 | 14.4\% | 45 | 105 | 150 |  |  |
| 39-3012 | Gaming and Sports Book Writers and Runners | 9 | 10 | 11.1\% | 1 | 3 | 4 | Short OJT | Work Exp. |
| 39-3019 | Gaming Service Workers, All Other | 7 | 7 | 0.0\% | 0 | 2 | 2 | Short OJT | Work Exp. |
| 39-3021 | Motion Picture Projectionists | 13 | 13 | 0.0\% | 0 | 7 | 7 | Short OJT | Work Exp. |
| 39-3031 | Ushers, Lobby Attendants, and Ticket Takers | 62 | 72 | 16.1\% | 10 | 31 | 41 | Short OJT | Work Exp. |
| 39-3091 | Amusement and Recreation Attendants | 124 | 148 | 17.7\% | 22 | 35 | 57 | Short OJT | Work Exp. |
| 39-3092 | Costume Attendants | 6 | 7 | 16.7\% | 1 | 2 | 3 | Short OJT | Work Exp. |
| 39-3093 | Locker Room, Coatroom, and Dressing Room Attendants | 13 | 16 | 23.1\% | 3 | 4 | 7 | Short OJT | Work Exp. |
| 39-3099 | Entertainment Attendants and Related Workers, All Other | 78 | 86 | 10.3\% | 8 | 21 | 29 | Short OJT | Work Exp. |
| 39-4000 | Funeral Service Workers | 5 | 6 | 20.0\% | 1 | 1 | 2 |  |  |
| 39-4021 | Funeral Attendants | 5 | 6 | 20.0\% | 1 | 1 | 2 | Short OJT | Work Exp. |
| 39-5000 | Personal Appearance Workers | 251 | 295 | 17.5\% | 44 | 54 | 98 |  |  |
| 39-5011 | Barbers | 13 | 15 | 15.4\% | 2 | 4 | 6 | Post-sec. | Post-sec. + Work Exp. |
| 39-5012 | Hairdressers, Hairstylists, and Cosmetologists | 215 | 253 | 17.7\% | 38 | 46 | 84 | Post-sec. | Post-sec. + Work Exp. |
| 39-5092 | Manicurists and Pedicurists | 7 | 8 | 14.3\% | 1 | 1 | 2 | Post-sec. | Post-sec. + Work Exp. |
| 39-5094 | Skin Care Specialists | 16 | 19 | 18.8\% | 3 | 3 | ${ }^{6}$ | Post-sec. | Post-sec. + Work Exp. |
| 39-6000 | Transportation, Tourism, and Lodging Attendants | 80 | 98 | 22.5\% | 18 | 19 | 37 |  |  |
| 39-6011 | Baggage Porters and Bellhops | 17 | 20 | 17.6\% | 3 | 5 | 8 | Short OJT | Work Exp. |
| 39-6012 | Concierges | 5 | 6 | 20.0\% | 1 | 1 | 2 | Work Exp. | Work Exp. |
| 39-6021 | Tour Guides and Escorts | 35 | 43 | 22.9\% | 8 | 10 | 18 | Moderate OJT | Work Exp. |
| 39-6031 | Flight Attendants | 23 | 29 | 26.1\% | 6 | 3 | 9 | Long O.JT | Bachelor's |
| 39-9000 | Other Personal Care and Service Workers | 855 | 1,048 | 22.6\% | 193 | 209 | 402 |  |  |
| 39-9011 | Child Care Workers | 288 | 348 | 20.8\% | 60 | 84 | 144 | Short OJT | Post-sec. |
| 39-9021 | Personal and Home Care Aides | 238 | 318 | 33.6\% | 80 | 45 | 125 | Short OJT | Post-sec. |
| 39-9031 | Fitness Trainers and Aerobics Instructors | 134 | 152 | 13.4\% | 18 | 33 | 51 | Work Exp. | Bachelor's |
| 39-9032 | Recreation Workers | 65 | 86 | 32.3\% | 21 | 18 | 39 | Short OJT | Bachelor's |
| 39-9041 | Residential Advisors | 26 | 30 | 15.4\% | 4 | 6 | 10 | Moderate O.JT | Post-sec. |
| 39-9099 | Personal Care and Service Workers, All Other | 104 | 114 | 9.6\% | 10 | 23 | 33 | Short OJT | Work Exp. |
| Sales and Related |  | 11,968 | 14,176 | 18.4\% | 2,208 | 3,971 | 6,179 |  |  |
| 41-0000 | Sales and Related Occupations | 11,968 | 14,176 | 18.4\% | 2,208 | 3,971 | 6,179 |  |  |
| 41-1000 | Supervisors, Sales and Related | 1,353 | 1,624 | 20.0\% | 271 | 280 | 551 |  |  |
| 41-1011 | Supervisors and Managers of Retail Sales Workers | 1,088 | 1,296 | 19.1\% | 208 | 222 | 430 | Work Exp. | Assoc. |
| 41-1012 | Supervisors and Managers of Non-Retail Sales Workers | 265 | 328 | 23.8\% | 63 | 58 | 121 | Work Exp. | Assoc. |
| 41-2000 | Retail Sales Workers | 7,005 | 8,390 | 19.8\% | 1,385 | 2,863 | 4,248 |  |  |
| 41-2011 | Cashiers | 2,521 | 2,989 | 18.6\% | 468 | 1,164 | 1,632 | Short OJT | Work Exp. |
| 41-2012 | Gaming Change Persons and Booth Cashiers | 9 | 13 | 44.4\% | 4 | 5 | 9 | Short OJT | Work Exp. |
| 41-2021 | Counter and Rental Clerks | 437 | 525 | 20.1\% | 88 | 168 | 256 | Short OJT | Work Exp. |
| 41-2022 | Parts Salespersons | 288 | 343 | 19.1\% | 55 | 88 | 143 | Moderate O.JT | Work Exp. |
| 41-2031 | Retail Salespersons | 3,750 | 4,520 | 20.5\% | 770 | 1,438 | 2,208 | Short OJT | Work Exp. |
| 41-3000 | Sales Representatives, Service | 781 | 932 | 19.3\% | 151 | 160 | 311 |  |  |
| 41-3011 | Advertising Sales Agents | 94 | 112 | 19.1\% | 18 | 21 | 39 | Moderate O.JT | Post-sec. |


Occupational Employment Projections，2004－2014 Region 8 （Jackson and Josephine counties）


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## Occupational Employment Projections, 2004-2014

Region 8 (Jackson and Josephine counties)

| Standard Occupational Classification Code and Title |  | 20042014 |  |  |  |  |  | Minimum Education | Competitive Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\text { Employment }}{2004}$ | $\begin{array}{r} 2014 \\ \text { Employment } \end{array}$ | $\begin{aligned} & \text { Percent } \\ & \text { Growth } \end{aligned}$ | $\begin{aligned} & \text { Growth } \\ & \text { Opening } \end{aligned}$ | Replacement Openings | $\begin{gathered} \text { Total } \\ \text { Openings } \end{gathered}$ |  |  |
| 43-9071 | Office Machine Operators, Except Computer | 85 | 98 | 15.3\% | 13 | 23 | 36 | Short OJT | Work Exp. |
| 43-9081 | Proofreaders and Copy Markers | 2 | 3 | 50.0\% | 1 | 0 | 1 | Short OJT | Work Exp. |
| 43-9111 | Statistical Assistants | 6 | 7 | 16.7\% | 1 | 1 | 2 | Moderate OJT | Post-sec. |
| 43-9199 | Office and Administrative Support Workers, All Other | 610 | 706 | 15.7\% | 96 | 143 | 239 | Short OJT | Work Exp. |
|  | Farming, Fishing, and Forestry | 2,197 | 2,567 | 16.8\% | ${ }^{370}$ | 606 | 976 |  |  |
| 45-0000 | Farming, Fishing, and Forestry Occupations | 2,197 | 2,567 | 16.8\% | 370 | ${ }^{606}$ | 976 |  |  |
| 45-1000 | Supervisors, Farming, Fishing, and Forestry Workers | 134 | 149 | 11.2\% | 15 | 33 | 48 |  |  |
| 45-1011 | Supervisors and Managers of Farming, Fishing, and Forestry Workers | 124 | 137 | 10.5\% | 13 | 30 | 43 | Work Exp. | Work Exp. |
| 45-1012 | Fam Labor Contractors | 10 | 12 | 20.0\% | 2 | 3 |  |  |  |
| 45-2000 | Agricultural Workers | 1,410 | 1,646 | 16.7\% | 236 | 416 | 652 |  |  |
| 45-2011 | Agricultural Inspectors |  |  | 28.6\% | 2 | 2 | 4 | Bachelors | Bachelor's + Work Exp. |
| 45-2021 | Animal Breeders | 10 | 12 | 20.0\% | 2 | 2 |  | Moderate OJT | Work Exp. |
| 45-2041 | Graders and Sorters, Agricultural Products | 90 | 111 | 23.3\% | 21 | 27 | 48 | Short OJT | Work Exp. |
| 45-2091 | Agricultural Equipment Operators | 30 | 147 | 13.1\% | 17 | 38 | 55 | Short OJT | Work Exp. |
| 45-2092 | Farmworkers and Laborers for Crops, Nurseries, and Greenhouses |  | 1,141 | 15.7\% |  |  | 446 | Short OJT |  |
|  |  |  |  | 15.7 | 155 | 291 | 446 | Short Ost | Work Exp. |
|  |  | 16 | 25 | 20.4\% | 5 | 5 |  | Shotor | Workexp. |
| 45-2099 | Agricultural Workers, All Other | 20 | 25 | 25.0\% | 5 | 6 | 11 | Short OjT | Work Exp |
| 45-3000 | Fishing and Hunting Workers | 4 | 5 | 25.0\% | 1 | 1 | 2 |  |  |
| 45-3011 | Fishers and Related Fishing Workers | 4 | 5 | 25.0\% | 1 |  | 2 | Short OJT | Work |
| 45-4000 | Forest, Conservation, and Logging Workers | 649 347 | 767 | 18.2\% | 118 | ${ }^{156}$ | 274 |  |  |
| 45-4011 | Forest and Conservation Workers | 347 | 451 | 30.0\% | 104 | 98 | 202 | Short OJT | Work Exp. |
| 45-4021 | Fallers and Buckers | 18 | 18 | 0.0\% | 0 | 3 |  | Moderate O.J | Work Exp. |
| 45-4022 | Logging Equipment Operators | 121 | 123 | 1.7\% | ${ }^{2}$ | ${ }^{23}$ | 25 | Moderate O.T | Work Exp. |
| 45-4023 | Log Graders and Scalers | 8 | 9 | 12.5\% | 1 | 2 | 3 | Moderate OTT | Work Exp. |
| 45-4029 | Logging Workers, All Other | 155 | 166 | 7.1\% | 11 | 30 | 41 | Moderate OJT | Work Exp. |
|  | Construction and Extraction | 5,233 | 6,370 | 21.7\% | 1,137 | 1,170 | 2,307 |  |  |
| 47-0000 | Construction and Extraction Occupations | 5,233 | 6,370 | 21.7\% | 1,137 | 1,170 | $\begin{array}{r}2,307 \\ \hline 186\end{array}$ |  |  |
| 47-1000 | Supenisors, Construction and Extraction Workers | 426 | 527 | 23.7\% | 101 | 85 | 186 |  |  |
| 47-1011 | Supervisors and Managers of Construction Trades and Extraction Workers | 426 | 527 | 23.7\% | 101 | 85 | 186 | Work Exp. | Bachelors |
| 47-2000 | Construction Trades Workers | 4,104 | 4,998 | 21.8\% | 894 | 886 | 1,780 |  |  |
| 47-2021 | Brickmasons and Blockmasons | 92 | 114 | 23.9\% | 22 | 16 | 38 | Long O.JT | Post-sec. |
| 47-2022 | Stonemasons | 16 | 19 | 18.8\% | 3 | 3 |  | Long OJT | Post-sec. |
| 47-2031 | Carpenters | 792 | 986 | 24.5\% | 194 | 150 | 344 | Long OJT | Post-sec. |
| 47-2041 | Carpet installers | 64 | 76 | 18.8\% | 12 | 12 | 24 | Moderate OJT | Work Exp. |
| 47-2042 | Floor Layers, Except Carpet, Wood, and Hard Tiles | 6 |  | 16.7\% | 1 | 1 | 2 | Moderate OJT | Work Exp. |
| 47-2043 | Floor Sanders and Finishers | 6 | 8 | 33.3\% | ${ }^{2}$ | 1 | 3 | Moderate OJT | Work Exp. |
| 47-2044 | Tile and Marble Setters | 9 | 13 | 44.4\% | 4 | 2 | ${ }^{6}$ | Long OfT | Work Exp. |
| 47-2051 | Cement Masons and Concrete Finishers | ${ }_{752}^{167}$ | ${ }_{930}^{206}$ | ${ }^{23.4 \%}$ | -39 | -115 | 78 293 | Leng | Work Exp. |
| 47-2061 | Constuction Laborers | 752 | 930 | 23.7\% | 178 | 115 | 293 | Short OTT | Work Exp. |

Occupational Employment Projections, 2004-2014 Region 8 (Jackson and Josephine counties)

| Standard Occupational Classification Code and Titte |  | $\begin{array}{r} 2004 \\ \text { Employment } \\ \hline \end{array}$ | Employment | Percent Growth | $\begin{array}{r} \text { Growth } \\ \text { Openings } \\ \hline \end{array}$ | Replacement Openings | Total Openings | Minimum Education | Competitive Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47-2071 | Paving, Surfacing, and Tamping Equipment Operators | 23 | 28 | 21.7\% | 5 | 4 | 9 | Moderate OJT | Work Exp. |
| 47-2072 | Pile-Driver Operators | 2 | 3 | 50.0\% | 1 | 0 | 1 | Post-sec. | Post-sec. + Work Exp. |
| 47-2073 | Operating Engineers and Other Construction Equipment |  |  |  |  |  |  |  |  |
|  | Operators | 476 | 562 | 18.1\% | 86 | 135 | 221 | Moderate O.JT | Work Exp. |
| 47-2081 | Drywall and Ceiling Tile Installers | 104 | 128 | 23.1\% | 24 | 26 | 50 | Post-sec. | Post-sec. + Work Exp. |
| 47-2082 | Tapers | 47 | 57 | 21.3\% | 10 | 12 | 22 | Moderate OJT | Work Exp. |
| 47-2111 | Electricians | 422 | 498 | 18.0\% | 76 | 93 | 169 | Post-sec. | Post-sec. + Work Exp. |
| 47-2121 | Glaziers | 63 | 77 | 22.2\% | 14 | 15 | 29 | Long OTT | Work Exp. |
| 47-2131 | Insulation Workers, Floor, Ceiling, and Wall | 50 | 62 | 24.0\% | 12 | 17 | 29 | Long OJT | Work Exp. |
| 47-2141 | Painters, Construction and Maintenance | 231 | 283 | 22.5\% | 52 | 41 | 93 | Long OTT | Work Exp. |
| 47-2142 | Paperhangers | 4 | 5 | 25.0\% | 1 | 1 | 2 | Moderate OJT | Work Exp. |
| 47-2151 | Pipelayers | 79 | 93 | 17.7\% | 14 | 20 | 34 | Moderate OJT | Work Exp. |
| 47-2152 | Plumbers, Pipefitters, and Steamfitter | 197 | 235 | 19.3\% | 38 | 51 | 89 | Post-sec. | Post-sec. + Work Exp. |
| 47-2161 | Plasterers and Stucco Masons | 17 | 21 | 23.5\% | 4 | 4 | 8 | Long OJT | Work Exp. |
| 47-2181 | Roofers | 173 | 216 | 24.9\% | 43 | 46 | 89 | Moderate OJT | Work Exp. |
| 47-2211 | Sheet Metal Workers | 297 | 355 | 19.5\% | 58 | 79 | 137 | Post-sec. | Post-sec. + Work Exp. |
| 47-2221 | Structural Iron and Steel Workers | 15 | 16 | 6.7\% | 1 | 3 | 4 | Post-sec. | Post-sec. + Work Exp. |
| 47-3000 | Helpers, Construction Trades | 225 | 283 | 25.8\% | 58 | 105 | 163 |  |  |
| 47-3011 | Brickmason's, Blockmason's, Stonemason's, and Tile and |  |  |  |  |  |  |  |  |
|  | Marble Setter's Helpers | 41 | 52 | 26.8\% | 11 | 19 | 30 | Short O.JT | Work Exp. |
| 47-3012 | Carpenter's Helpers | 41 | 52 | 26.8\% | 11 | 19 | 30 | Short OJT | Work Exp. |
| 47-3013 | Electrician's Helpers | 22 | 27 | 22.7\% | 5 | 10 | 15 | Short OJT | Work Exp. |
| 47-3014 | Painter's, Papentanger's, Plasterer's, and Stucco Mason's |  |  |  |  |  |  |  |  |
|  | Helpers | 35 | 45 | 28.6\% | 10 | 17 | 27 | Short OJT | Work Exp. |
| 47-3015 | Pipelayer's, Plumber's, Pipefitter's, and Steamfitter's |  |  |  |  |  |  |  |  |
|  | Helpers | 16 | 20 | 25.0\% | 4 | 7 | 11 | Short OJT | Work Exp. |
| 47-3016 | Roofer's Helpers | 19 | 23 | 21.1\% | 4 | 9 | 13 | Short OJT | Work Exp. |
| 47-3019 | Construction Trades' Helpers, All Other | 51 | 64 | 25.5\% | 13 | 24 | 37 | Short OJT | Work Exp. |
| 47-4000 | Other Construction and Related Workers | 442 | 519 | 17.4\% | 77 | 84 | 161 |  |  |
| 47-4011 | Construction and Building Inspectors | 42 | 47 | 11.9\% | 5 | 10 | 15 | Work Exp. | Assoc. |
| 47-4031 | Fence Erectors | 109 | 133 | 22.0\% | 24 | 19 | 43 | Moderate OJT | Work Exp. |
| 47-4041 | Hazardous Materials Removal Workers | 38 | 49 | 28.9\% | 11 | 12 | 23 | Moderate OJT | Work Exp. |
| 47-4051 | Highway Maintenance Workers | 179 | 202 | 12.8\% | 23 | 28 | 51 | Moderate OJT | Work Exp. |
| 47-4061 | Rail-Track Laying and Maintenance Equipment Operators | 2 | 2 | 0.0\% | 0 | 0 | 0 | Moderate OJT | Work Exp. |
| 47-4071 | Septic Tank Servicers and Sewer Pipe Cleaners | 15 | 20 | 33.3\% | 5 | 5 | 10 | Moderate OJT | Work Exp. |
| 47-4099 | Construction and Related Workers, All Other | 57 | 66 | 15.8\% | 9 | 10 | 19 | Moderate OJT | Work Exp. |
| 47-5000 | Extraction Workers | 36 | 43 | 19.4\% | 7 | 10 | 17 |  |  |
| 47-5021 | Earth Drillers, Water and Construction | 17 | 20 | 17.6\% | 3 | 4 | 7 | Moderate OJT | Work Exp. |
| 47-5081 | Extraction Worker's Helpers | 19 | 23 | 21.1\% | 4 | 6 | 10 | Short OJT | Work Exp. |
|  | Installation, Maintenance, and Repair | 4,134 | 4,847 | 17.2\% | 713 | 1,104 | 1,817 |  |  |
| 49-0000 | Instaliation, Maintenance, and Repair Occupations | 4,134 | 4,847 | 17.2\% | 713 | 1,104 | 1,817 |  |  |
| 49-1000 | Supervisors, Installation, Maintenance, and Repair Workers | 305 | 352 | 15.4\% | 47 | 85 | 132 |  |  |

Occupational Employment Projections, 2004-2014
Region 8 (Jackson and Josephine counties)

| Standard | cupational Classification Code and Title | 2004 Employment | Employment | Percent Growth | $\begin{array}{r} 200 \\ \hline \text { Growth } \\ \text { Openings } \\ \hline \end{array}$ | Replacement Openings | Total Openings | Minimum Education | Competitive Education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49-1011 | Supervisors and Managers of Mechanics, Installers, and Repairers | 305 | 352 | 15.4\% | 47 | 85 | 132 | Work Exp. | Assoc. |
| 49-2000 | Electrical and Electronic Equipment Mechanics, Installers, and Repairers | 381 | 407 | 6.8\% | 26 | 80 | 106 |  |  |
| 49-2011 | Computer, Automated Teller, and Office Machine | 83 | 102 | 22.9\% | 19 | 12 | 31 | Post-sec. | Assoc. |
| 49-2021 | Radio Mechanics | 23 | 17 | -26.1\% | -6 | 4 | -2 | Post-sec. | Post-sec. + Work Exp. |
| 49-2022 | Telecommunications Equipment Installers and Repairers, Except Line Installers | 175 | 170 | -2.9\% | -5 | 38 | 33 | Post-sec. | Assoc. |
| 49-2091 | Avionics Technicians | 5 | 8 | 60.0\% | 3 | 2 | 5 | Post-sec. | Assoc. |
| 49-2092 | Electric Motor, Power Tool, and Related Repairers | 18 | 22 | 22.2\% | 4 | 5 | 9 | Long O.J | Post-sec. |
| 49-2093 | Electrical and Electronics Installers and Repairers, Transportation Equipment | 5 | 6 | 20.0\% | 1 | 1 | 2 | Post-sec. | Post-sec. + Work Exp. |
| 49-2094 | Electrical and Electronics Repairers, Commercial and Industrial Equipment | 21 | 21 | 0.0\% | 0 | 5 | 5 | Post-sec. | Assoc. |
| 49-2095 | Electrical and Electronics Repairers, Powerhouse. Substation, and Relay | 15 | 16 | 6.7\% | 1 | 4 | 5 | Post-sec. | Post-sec. + Work Exp. |
| 49-2096 | Electronic Equipment Installers and Repairers, Motor Vehicles | 18 | 22 | 22.2\% | 4 | 5 | 9 | Post-sec. | Post-sec. + Work Exp. |
| 49-2097 | Electronic Home Entertainment Equipment Instailers and Repairers | 10 | 12 | 20.0\% | 2 | 2 | 4 | Post-sec. | Post-sec. + Work Exp. |
| 49-2098 | Security and Fire Alarm Systems Installers | 8 | 11 | 37.5\% | 3 | 2 | 5 | Long OJT | Work Exp. |
| 49-3000 | Vehicle and Mobile Equipment Mechanics, Installers, and Repairers | 1,589 | 1,880 | 18.3\% | 291 | 476 | 767 |  |  |
| 49-3011 | Aircraft Mechanics and Service Technicians | 154 | 177 | 14.9\% | 23 | 40 | 63 | Post-sec. | Assoc. |
| 49-3021 | Automotive Body and Related Repairers | 131 | 160 | 22.1\% | 29 | 30 | 59 | Long O.JT | Assoc. |
| 49-3022 | Automotive Glass Installers and Repairers | 8 | 10 | 25.0\% | 2 | 2 | 4 | Moderate O.JT | Assoc. |
| 49-3023 | Automotive Service Technicians and Mechanics | 519 | 621 | 19.7\% | 102 | 153 | 255 | Post-sec. | Assoc. |
| 49-3031 | Bus and Truck Mechanics and Diesel Engine Specialists | 249 | 292 | 17.3\% | 43 | 71 | 114 | Long O.JT | Post-sec. |
| 49-3041 | Farm Equipment Mechanics | 57 | 65 | 14.0\% | 8 | 14 | 22 | Long OST | Post-sec. |
| 49-3042 | Mobile Heavy Equipment Mechanics, Except Engines | 134 | 153 | 14.2\% | 19 | 32 | 51 | Long OJT | Post-sec. |
| 49-3043 | Rail Car Repairers | 2 | 2 | 0.0\% | 0 | 0 | 0 | Long OJT | Work Exp. |
| 49-3051 | Motorboat Mechanics | 19 | 17 | -10.5\% | -2 | 5 | 3 | Long OJT | Work Exp. |
| 49-3052 | Motorcycle Mechanics | 33 | 39 | 18.2\% | 6 | 9 | 15 | Long O.JT | Post-sec. |
| 49-3053 | Outdoor Power Equipment and Other Small Engine Mechanics | 22 | 30 | 36.4\% | 8 | 7 | 15 | Moderate OJT | Post-sec. |
| 49-3091 | Bicycle Repairers | 15 | 19 | 18.8\% | 3 | 7 | 10 | Moderate OJT | Work Exp. |
| 49-3092 | Recreational Vehicle Service Technicians | 12 | 15 | 25.0\% | 3 | 5 | 8 | Long O.JT | Work Exp. |
| 49-3093 | Tre Repairers and Changers | 233 | 280 | 20.2\% | 47 | 101 | 148 | Short OJT | Work Exp. |
| 49-9000 | Other Installation, Maintenance, and Repair Occupations | 1,859 | 2,208 | 18.8\% | 349 | 463 | 812 |  |  |
| 49-9011 | Mechanical Door Repairers | 22 | 26 | 18.2\% | 4 | 6 | 10 | Moderate OJT | Post-sec. |
| 49-9012 | Control and Valve Installers and Repairers, Except Mechanical Door | 11 | 13 | 18.2\% | 2 | 3 | 5 | Moderate OJT | Work Exp. |

## Occupational Employment Projections, 2004-2014

Region 8 (Jackson and Josephine counties)



## Occupational Employment Projections，2004－2014

Region 8 （Jackson and Josephine counties）


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|  |  | ¢ | Rダg | ミ | $\stackrel{\text { T}}{ }$ | 年 | Textile，Apparel，and Furnishings Workers

Laundry and Dry－Cleaning Workers
Pressers，Textile，Garment，and Related Materials
Sewing Machine Operators
Shoe and Leather Workers and Repairers
Sewers，Hand
Tailors，Dressmakers，and Custom Sewers
Textile Cutting Machine Setters，Operators，and Tenders
Fabric and Apparel Patternmakers
Uphosterers
Textile，Apparel，and Furnishings Workers，All Other
Woodworkers
Cabinetmakers and Bench Carpenters
Fumiture Finishers
Sawing Machine Setters，Operators，and Tenders，Wood
Woodworking Machine Setters，Operators，and Tenders，
Woodworkers，All Other
Plant and System Operators
Power Distributors and Dispatchers
Power Plant Operators
Stationary Engineers and Boiler Operators
Water and Liquid Waste Treatment Plant and System
Operators
Chemical Plant and System Operators
Gas Plant Operators
Plant and System Operators，All Other
Other Production Occupations
Chemical Equipment Operators and Tenders
Separating，Filtering，Clarifying，Precipitating，and Still
Machine Setters，Operators，and Tenders
Crushing，Grinding，and Polishing Machine Setters，
Operators，and Tenders
Grinding and Polishing Workers，Hand
Mixing and Blending Machine Setters，Operators，and
Tenders
Cutters and Trimmers，Hand
Cutting and Slicing Machine Setters，Operators，and
Tenders
Extruding，Forming，Pressing，and Compacting Machine
Setters，Operators，and Tenders
Furnace，Kiln，Oven，Drier，and Kettle Operators and
Inspectors，Testers，Sorters，Samplers，and Weighers

Occupational Employment Projections, 2004-2014

| Jewelers and Precious Stone and Metal Workers |
| :---: |
| Dental Laboratory Technicians |
| Medical Appliance Technicians |
| Ophthalmic Laboratory Technicians |
| Packaging and Filling Machine Operators and Tenders |
| Coating, Painting, and Spraying Machine Setters, |
| Operators, and Tenders |
| Painters, Transportation Equipment |
| Painting, Coating, and Decorating Workers |
| Photographic Process Workers |
| Photographic Processing Machine Operators |
| Cementing and Gluing Machine Operators and Tenders |
| Cleaning, Washing, and Pickling Equipment Operators and Tenders |
| Cooling and Freezing Equipment Operators and Tenders |
| Etchers and Engravers |
| Molders, Shapers, and Casters, Except Metal and Plastic |
| Paper Goods Machine Setters, Operators, and Tenders |
| Production Worker's Helpers |
| Production Workers, All Other |
| Transportation and Material Moving |
| Transportation and Material Moving Occupations |
| Supervisors, Transportation and Material Moving Workers |
| Supervisors and Managers of Transportation Helpers, |
| Laborers, and Material Movers, Hand |
| Supervisors and Managers of Transportation and Material- |
| Moving Machine and Vehicle Operators |
| Air Transportation Workers |
| Airtine Pilots, Copilots, and Flight Engineers |
| Commercial Pilots, Exclude Airitine Pilots |
| Aiffeld Operations Specialists |
| Motor Vehicle Operators |
| Ambulance Drivers and Attendants, Except Emergency |
| Medical Technicians |
| Bus Drivers, Transit and Intercity |
| Bus Drivers, School |
| Driver/Sales Workers |
| Truck Drivers, Heavy and Tractor-Trailer |
| Truck Drivers, Light or Delivery Services |
| Taxi Drivers and Chauffeurs |
| Motor Vehicle Operators, All Other |
| Rail Transportation Workers |

[^10]Leased Workers: Workers employed by leasing agencies. The number of workers by occupation employed by leasing agencies is not available.
Sheltered Workshop Workers: Sheltered workshops are organizations that receive funding to employ workers with disabiities or work-related limitations. The number of workers
by occupation employed in sheltered workshops is not available.




[^0]:    <paa> yal

[^1]:    ${ }^{1}$ The population for the incorporated area within the City of Grants Pass increased by 2,915 between the years 2000 and 2005 based on certified estimates of the Oregon Center for Population Research and Census (CRPC). The population gain for Josephine County as a whole over the same period was 3,595 . The City's share of the countywide population increase was 81 percent between 2000 and 2005. Because the County and City have not coordinated a population allocation plan through the planning horizon, a more conservative assumption that only $73 \%$ of population would be allocated to Grants Pass over the planning horizon.

[^2]:    ${ }^{2}$ Non-lumber or wood

[^3]:    Source: WISER, Auguss 200

[^4]:    ${ }^{1}$ The model is subjected to random errors using "stochastic" techniques. From this stochastic simulation, the resulting residuals of the model are matched to these random errors and constrained to fall within certain confidence levels. To reflect the greater risk associated with the Pessimistic scenario, OEA sets a "confidence" band of 98.0 percent, meaning that "pessimistic" (lower) outcomes occur only 2.0 percent of the time, a more stringent criteria. OEA sets a 90.0 percent "confidence" interval for the Optimistic scenario, implying that "optimistic" (higher) outcomes occur only 10 percent of the time, a less stringent criteria. The higher probability for the Pessimistic scenario ( 98.0 percent) allows for an outcome to deviate further from the baseline forecast than an outcome from the Optimistic scenario ( 90.0 percent).

[^5]:    ${ }^{3}$ The OLLI applies the Conference Board's methodology for the U.S. National Leading Index to Oregon-specific components. The ten components incorporated in the OILI include: Institute for Supply Management's purchasing managers index, spread between 10-year treasury bond and Federal Funds rates, University of Michigan consumer sentiment index, Oregon withholding, Federal Reserve Bank of Atlanta Dollar index (Pacific excluding Japan), new Oregon incorporations, Oregonian help-wanted index, and initial Oregon unemployment claims.

[^6]:    ${ }^{(*)}$ Includes only expenditures by school districts. Excludes expenitures by ESDs and state-run schools.
    Source: Oregon Department of Education, Office of Analysis and Reporting

[^7]:    $6 \quad$ Oregon Employment Department • Workforce Analysis

[^8]:    4 Oregon Employment Department • Workforce Analysis

[^9]:    Total All Occupations
    Mand Management Occupations

    Chief Extecutives
    Gen
    General and Operations Managers
    Legislators
    Advertising, Marketing, Promotions, Public Relations, and
    Sales Managers
    Advertising and Promotions Managers
    Advertising and Promotions Managers
    Marketing Managers
    Sales Managers
    Public Relations Managers
    Operations Speciatties Managers
    Computer and Information Systems Managers
    Human Resources Managers, All Other
    Industrial Production Managers
    Purchasing Managers
    Transportation, Storage, and Distribution Managers
    Other Management Occupations
    Farm, Ranch, and Other Agricultural Managers
    Preschool and Child Care Administrators
    Elementary and Secondary School Administrators
    Elementary and Secondary School Adminiistrators
    Postsecondary School Administrators
    Education Admininstrators, All Other
    Engineering Managers
    
    Funeral Directors
    Gaming Managers
    Naturarsiers and Mail Superintendents
    Postmasters
    Property, Real Estate, and Community Association
    Managers
    Managers
    Social and Community Service Managers
    Managers, All Other
    Business and Financial Operations Occupations
    

[^10]:    

