Drivers of Oregon’s Economy
Business Cycles in Oregon: Boom and Bust
Oregon Moves With the U.S. Business Cycle

Traditional Advantage Regained
Total Nonfarm Employment, Year-over-Year Percent Change


Oregon

U.S.

Latest data: Jul 2016 | Source: BLS, Oregon Employment Department, Oregon Office of Economic Analysis
Oregon’s high-tech sector today is equivalent in size to the forest sector (timber) in the 1970s in terms of employment, impact of wages and the like. However one big difference is the geographic concentration of the employment.
Manufacturing Jobs Aren’t What They Used to Be

Oregon Manufacturing Wages
Relative to Statewide Average Wage

1976
2015

Data: QCEW | Source: Oregon Employment Department, Oregon Office of Economic Analysis
Current pace of growth in out-of-state surrendered licenses should lead to over 90,000 total surrendered in 2016, setting a new all-time record.

Figure 3. Out-of-State Surrendered License - Forecast Comparison (quarterly frequency - seasonally adjusted)

Source: ODOT DMV
Migration Flows Return

Who Moves to Oregon?
Domestic Net Migration by Age

- Children (0-17)
- College Age (18-24)
- Root-Setting (25-34)
- Peak Working (35-44)
- Peak Earning (45-54)
- Late Career (55-64)
- Retirees (65+)

Data: American Community Survey, 2014 1 Year Estimates | Source: Census, Oregon Office of Economic Analysis
Oregon ranks 6th best nationally in migration among all degree types, 12th best among STEM+ degrees and 7th best among all other.

Calculation: Net migration by degree type divided by total population 20-39 years old
Source: IPUMS-USA, Oregon Office of Economic Analysis
This is Unique: Timber Belt Population

Weathering Shocks

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>2012</th>
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<tbody>
<tr>
<td>Corn Belt</td>
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<tr>
<td>Rust Belt</td>
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<tr>
<td>Timber Belt</td>
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Manufacturing and Farm Jobs Share of Total

Population Growth 1980-2012
Beyond the Business Cycle: Structural Issues
Few Middle-Wage Jobs

Oregon Job Polarization
Job Growth by Year

Low-Wage  Middle-Wage  High-Wage


U.S.  Overall

Categories based on median wage for major occupational groups as US level
Source: BLS, Oregon Office of Economic Analysis
Housing: Here We Go Again?

Bend Home Values
FHFA Index, 1995=100

Actual Home Values
Assessed Value Approximation


Latest Data: 2016q3 | Source: FHFA, Oregon Office of Economic Analysis
Building Activity in Perspective

Oregon Housing Starts

Forecast -->

Great Recession

Early 80s
The Housing Trilemma

Cities face tradeoffs in terms of housing affordability, job availability and quality of life. Comparing the 100 largest MSAs in the country.

Source: David Albouy, BEA, BLS, Census, IHS Global Insight, Oregon Office of Economic Analysis

Oregon Office of Economic Analysis
Software in Context

Oregon Employment Change
Dec 2007 - Dec 2015

- Tech Hardware
- Tech Software
- Alcohol
It’s 5 O’clock Somewhere

Alcohol Cluster Employment
Breweries, Wineries, Distilleries, Beer/Wine/Alcohol Wholesalers, Beer/Wine/Liquor Stores, Drinking Places

Oregon
+6,600 Jobs

United States
+107,900 Jobs

Jan-08 Jan-10 Jan-12 Jan-14 Jan-16

Data: QCEW, Oregon through Dec ’15, US through Sep ’15 | Source: BLS, OED, Oregon Office of Economic Analysis
How Long Will Bull Markets Persist?

Stock Prices and Oregon Taxable Capital Gains

- Sept 2016 Wilshire 5000 Stock Price Forecast (Right)
- Sept 2016 Cap Gains Forecast ($ bil)
Smoke ‘Em If You Got ‘Em

Recreational Marijuana Border Effect
Change in Tax Collections After Oregon Began Selling

<table>
<thead>
<tr>
<th></th>
<th>WA Total</th>
<th>Clark</th>
<th>Cowlitz</th>
<th>Klickitat</th>
<th>Pacific</th>
<th>Skamania</th>
<th>Seattle MSA</th>
<th>Rest of State</th>
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<tbody>
<tr>
<td>Percent</td>
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<td>Change</td>
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<td>-47%</td>
<td>-36%</td>
<td>-43%</td>
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</tbody>
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Percent change from July 2015 to September 2015 average to October 2015 to January 2016 average.
Source: www.502data.com, Oregon Office of Economic Analysis
Outlook
Big Picture: Transition to Sustainable Rates of Growth

Oregon Nonfarm Employment Growth
Year-over-Year Percent Change

Expansion Average

Forecast

Jan-60 Jan-70 Jan-80 Jan-90 Jan-00 Jan-10 Jan-20