SEARCHING FOR WORK THAT PAYS

NORTHWEST POLICY CENTER AND NORTHWEST FEDERATION OF COMMUNITY ORGANIZATIONS

JANUARY 1999
The Northwest Job Gap Study is a joint project of the Northwest Policy Center at the University of Washington Graduate School of Public Affairs and the Northwest Federation of Community Organizations.

The Northwest Policy Center is an applied policy research center that works with policy makers and practitioners to improve strategies for a vital Northwest economy, with an emphasis on the health and well-being of the region’s people, communities, and environment.

The Northwest Federation of Community Organizations is a regional federation of four statewide, community-based social and economic justice organizations: Montana People’s Action, Idaho Citizen’s Network, Oregon Action, and Washington Citizen Action. These organizations represent a broad based, grassroots constituency including disenfranchised and low-to-moderate income residents. They engage in community organizing and coalition building, and conduct issue campaigns at the state and community level.

Guiding the Northwest Job Gap Study and its research and analysis, and education and outreach efforts are state steering committees made up of representatives of business, labor, government, and community groups.

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EXECUTIVE SUMMARY

The Northwest Job Gap Study explores the gap between the number of living wage jobs being created in the Northwest and the number of people needing living wage jobs. It also seeks to raise awareness and promote public dialogue about the job gap and policy options to address it.

This first phase of the Northwest Job Gap Study—which covers the states of Idaho, Montana, Oregon, and Washington—aims to provide answers to the questions: What is a living wage? And are we creating enough jobs that pay a living wage?

Findings are based on data from 1996, the most recent year for which data on job openings, wages, and employment are available.

WHAT IS A LIVING WAGE?

A living wage is a wage that allows families to meet their basic needs without resorting to public assistance and provides them some ability to deal with emergencies and plan ahead. It is not a poverty wage.

Living wages are calculated on the basis of family budgets for several household types. Family budgets include basic necessities, savings, and state, local and federal taxes. Living wages for a single adult range from $9.02 an hour or $18,760 a year in Montana to $10.25 an hour or $21,322 a year in Washington. This assumes full time work on a year round basis. For a single adult with two children, living wages range from $14.42 an hour or $29,995 a year in Idaho to $16.86 an hour or $35,079 a year in Washington. Differences in state living wage estimates are largely attributable to differences in housing and child care costs.

A comparison of living wages to state minimum wages shows that the minimum wage is about half of the living wage for a single adult and 30 percent of the living wage for a single adult with two children. The median wage in each state is slightly greater than the living wage for a single adult, which suggests that slightly more than half of the workers in each state earn the living wage for a single adult. For a single adult with two children, the median wage is about two thirds of the living wage.
**ARE WE CREATING ENOUGH JOBS THAT PAY A LIVING WAGE?**

The Northwest economy is not creating enough living wage jobs for all those who need them, according to several indicators. These include the number of working age households compared to the number of jobs that pay a living wage, the percentage of jobs and job openings that pay less than a living wage, and the number of job seekers compared to the number of job openings that pay a living wage.

A comparison of working age households to jobs that pay a living wage shows there were more working age households than living wage jobs in every Northwest state in 1996, as shown in the charts below. The shortfall between the number of working age households and jobs that pay a living wage is evident in the charts presented next.

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**WORKING AGE HOUSEHOLDS COMPARED TO JOBS THAT PAY A LIVING WAGE FOR A SINGLE ADULT**

![Chart showing the comparison between working age households and jobs that pay a living wage for a single adult across different states in 1996.](chart1)

**WORKING AGE HOUSEHOLDS COMPARED TO JOBS THAT PAY A LIVING WAGE FOR A SINGLE ADULT WITH TWO CHILDREN**

![Chart showing the comparison between working age households and jobs that pay a living wage for a single adult with two children across different states in 1996.](chart2)
the number of jobs that pay a living wage for a single adult ranges from about 58,000 in Idaho to about 275,000 in Washington. For those jobs that pay a living wage for a single adult with two children, the shortfall ranges from about 200,000 in Montana to over 1 million in Washington.

About 40 percent of all jobs in the Northwest pay less than a living wage for a single adult and about 75 percent pay less than a living wage for a single adult with two children.

The job market that job seekers face is similarly limited. Of all job openings, 40 to 50 percent pay less than a living wage for a single adult and 70 to 80 percent pay less than a living wage for a single adult with two children, as shown in the chart below. It is important to note the distinction between jobs and job openings. Not all jobs come open during the course of a year. Job openings are of particular interest because they provide employment opportunities for people looking for work.

The percentage of jobs and job openings that pay a living wage vary from state to state for a number of reasons, including the mix of industries and related occupations in a state, and the prevailing wage levels, which also vary from state to state.

There are also more people looking for work than there are job openings that pay a living wage. As shown in the table and charts on the following page, for each job opening that pays at least the living wage for a single adult, there are on average four to six job seekers, depending on the state. For each job opening that pays at least the living wage for a single adult with two children, there are on average 10 to 17 job seekers.
Job Gap Ratios (Job Seekers per Job Opening)

<table>
<thead>
<tr>
<th>Job Openings</th>
<th>Idaho</th>
<th>Montana</th>
<th>Oregon</th>
<th>Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Job Openings</td>
<td>2 to 1</td>
<td>3 to 1</td>
<td>3 to 1</td>
<td>3 to 1</td>
</tr>
<tr>
<td>Job Openings Paying a Living Wage</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Single adult</td>
<td>4 to 1</td>
<td>6 to 1</td>
<td>6 to 1</td>
<td>5 to 1</td>
</tr>
<tr>
<td>Single adult with two children</td>
<td>10 to 1</td>
<td>17 to 1</td>
<td>14 to 1</td>
<td>12 to 1</td>
</tr>
</tbody>
</table>

Job gap ratios are calculated by dividing the number of people who were looking for work at some point during 1996 by the number of job openings that year. The ratios indicate that, for example, there are four to six times as many job seekers as there are job openings.

**Job Seekers Compared to Job Openings that Pay a Living Wage for a Single Adult**

**Job Seekers Compared to Job Openings that Pay a Living Wage for a Single Adult with Two Children**
that pay at least the living wage for a single adult, not necessarily that there are four to six people competing for each job of that type. The ratios do not take into account characteristics of job seekers such as their household size, their skills, or education and training.

Despite strong growth in the regional economy and the creation of many new jobs over the last decade, the Northwest is not creating enough living wage jobs for all those who need them.

Findings from the first phase of the Northwest Job Gap Study are intended to help guide and shape the efforts of business, labor, government, and the community—in terms of both policy and practice—around economic, workforce, and community development.

Next phases of the Northwest Job Gap Study will focus on identifying which occupations and industries provide living wage job opportunities to people needing them; analyzing workforce demographics such as race/ethnicity, gender, and education and training levels in the context of living wage jobs; and identifying ways to promote living wage jobs and make sure people needing these jobs are able to get and keep them. Also, education and outreach will be conducted to raise awareness and promote public dialogue about the job gap.
SEARCHING FOR WORK THAT PAYS: NORTHWEST JOB GAP STUDY

PURPOSE OF THE STUDY

The Northwest Job Gap Study explores the gap between the number of living wage jobs being created in the Northwest and the number of people needing living wage jobs. It also seeks to raise awareness and promote public dialogue about the job gap and policy options to address it.

The Northwest Job Gap Study—which covers the states of Idaho, Montana, Oregon, and Washington—aims to provide answers to the questions:

• What is a living wage?
• Are we creating enough jobs that pay a living wage?
• Which occupations and industries provide living wage job opportunities for people needing them?
• How can we promote living wage jobs and make sure people needing these jobs are able to get and keep them?

This report examines the first two of these questions. Findings are based on data from 1996, the most recent year for which data on job openings, wages, and employment are available.

WHAT IS A LIVING WAGE?

A living wage is a wage that allows families to meet their basic needs without resorting to public assistance and provides them some ability to deal with emergencies and plan ahead. It is not a poverty wage.

Living wages are calculated on the basis of family budgets for several household types. Family budgets include basic necessities such as food, housing and utilities, transportation, health care, child care, clothing and other personal items; savings; and state, local, and federal taxes. (Family budgets are presented in the State Findings section of this report. Detailed information on components of the family budgets can be found in the Technical Notes & Resources section.)

State by state living wage estimates, as shown in the table below, are:

• For a single adult, the living wage ranges from $9.02 an hour or $18,760 a year in Montana to $10.25 an hour or $21,322 a year in Washington. This assumes full time work on a year round basis.
• For a single adult with one child, the living wage ranges from $11.68 an hour or $24,302 a year in Idaho to $13.12 an hour or $27,288 a year in Washington.

• For a single adult with two children, the living wage ranges from $14.42 an hour or $29,995 a year in Idaho to $16.86 an hour or $35,079 a year in Washington.

• For two adults, one of whom is working, with two children, the living wage ranges from $12.29 an hour or $25,559 a year in Montana to $14.04 an hour or $29,197 a year in Oregon.

• For two adults, both of whom are working, with two children, the living wage ranges from $16.36 an hour or $34,032 a year in Idaho to $18.45 an hour or $38,369 a year in Washington. This means that the combined wages of both working adults need to total this amount.

Differences among state living wage estimates are largely attributable to differences in housing and child care costs.

### Living Wage Estimates

<table>
<thead>
<tr>
<th></th>
<th>Idaho</th>
<th>Montana</th>
<th>Oregon</th>
<th>Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single adult</td>
<td>$9.22</td>
<td>$9.02</td>
<td>$10.07</td>
<td>$10.25</td>
</tr>
<tr>
<td>Single adult with one child</td>
<td>$11.68</td>
<td>$11.71</td>
<td>$13.08</td>
<td>$13.12</td>
</tr>
<tr>
<td>Two adults (one working) with two children</td>
<td>$12.51</td>
<td>$12.29</td>
<td>$14.04</td>
<td>$13.95</td>
</tr>
<tr>
<td>Two adults (both working) with two children</td>
<td>$16.36*</td>
<td>$16.58*</td>
<td>$17.98*</td>
<td>$18.45*</td>
</tr>
</tbody>
</table>

* The combined wages of both working adults need to total this amount.

One way of measuring the adequacy of incomes is to compare the living wage to minimum wages, average wages, and median wages. Minimum wages are about half of the living wage for a single adult and about 30 percent of the living wage for a single adult with two children, as shown in the chart below.
State average annual wages are higher than the living wage for a single adult, ranging from 113 percent of the living wage in Montana to 135 percent in Washington, as shown in the chart below. However, state average wages are lower than the living wage for a single adult with two children, ranging from 69 percent in Montana to 82 percent in Washington.

**Average Annual Wage as Percent of Living Wage**

![Bar chart showing average annual wages as percent of living wage](chart)

The median wage in each state is slightly greater than the living wage for a single adult, ranging from 104 percent in Montana to 114 percent in Washington, as shown in the chart below. This suggests that slightly more than half of the workers in each state earn the living wage for a single adult. The median wage in each state is about two thirds of the living wage for a single adult with two children.

**Median Hourly Wage as a Percent of Living Wage**

![Bar chart showing median hourly wages as percent of living wage](chart)
The Northwest economy is not creating enough living wage jobs for all those who need them, according to several indicators. These include the number of working age households compared to the number of jobs that pay a living wage, the percentage of jobs and job openings that pay less than a living wage, and the number of job seekers compared to the number of job openings that pay a living wage.

A comparison of working age households to jobs that pay a living wage shows there were more working age households than living wage jobs in every Northwest state in 1996. Working age households are those with at least one adult between the ages of 18 and 64. The shortfall between the number of working age households and the number of jobs that pay a living wage for a single adult ranges from about 58,000 in Idaho to about 275,000 in Washington. For those jobs that pay a living wage for a single adult with two children, the shortfall ranges from about 200,000 in Montana to over 1 million in Washington.

State by state figures, as shown in the charts below and on the following page, are:

- In Idaho, there were about 330,000 working age households, but fewer than 275,000 jobs that could support a single adult and about 110,000 jobs that could support a single adult with two children.
- In Montana, there were about 265,000 working age households, but fewer than 170,000 jobs that could support a single adult and fewer than 66,000 jobs that could support a single adult with two children.
- In Oregon, there were more than 1 million working age households, but fewer than
760,000 jobs that could support a single adult and only slightly more than 300,000 jobs that could support a single adult with two children.

- In Washington, there were about 1.8 million working age households, but only about 1.5 million jobs that could support a single adult and about 610,000 jobs that could support a single adult with two children.

WORKING AGE HOUSEHOLDS COMPARED TO JOBS THAT PAY A LIVING WAGE FOR A SINGLE ADULT WITH TWO CHILDREN

About 40 percent of all jobs in the Northwest pay less than a living wage for a single adult and about 75 percent pay less than a living wage for a single adult with two children. State by state figures are:

- In Idaho, 42 percent of all jobs pay less than the $9.22 an hour living wage for a single adult and 75 percent pay less than the $14.42 an hour living wage for a single adult with two children.
- In Montana, 45 percent of all jobs pay less than the $9.02 an hour living wage for a single adult and 73 percent pay less than the $14.80 an hour living wage for a single adult with two children.
- In Oregon, 44 percent of all jobs pay less than the $10.07 an hour living wage for a single adult and 76 percent pay less than the $16.36 an hour living wage for a single adult with two children.
- In Washington, 37 percent of all jobs pay less than the $10.25 an hour living wage for a single adult and 73 percent pay less than the $16.86 an hour living wage for a single adult with two children.
The job market that job seekers face is similarly limited. Of all job openings, 40 to 50 percent pay less than a living wage for a single adult and 70 to 80 percent pay less than a living wage for a single adult with two children, as shown in the chart above. It is important to note the distinction between jobs and job openings. Not all jobs come open during the course of a year. Job openings are of particular interest because they provide employment opportunities for people looking for work. State by state figures are:

- In Idaho, 45 percent of job openings pay less than the $9.22 an hour living wage for a single adult and 75 percent pay less than the $14.42 an hour living wage for a single adult with two children.
- In Montana, 53 percent of job openings pay less than the $9.02 an hour living wage for a single adult and 81 percent pay less than the $14.80 an hour living wage for a single adult with two children.
- In Oregon, 47 percent of job openings pay less than the $10.07 an hour living wage for a single adult and 77 percent pay less than the $16.36 an hour living wage for a single adult with two children.
- In Washington, 41 percent of job openings pay less than the $10.25 an hour living wage for a single adult and 72 percent pay less than the $16.86 an hour living wage for a single adult with two children.

Job openings data, coupled with median wage estimates for each occupation, provide a new and interesting way of looking at the distribution of wages. Neither average nor median wages, as previously discussed, portray the distribution of wages in the states very well. Job openings by wages are not arrayed in a classic “normal” distribution. The full wage distribution across all occupations, as shown in the chart below, has distinctive peaks and valleys. There is a cluster of occupations in each state at relatively low wage levels, and a wide range of higher wage occupations with fewer job openings. A better
measure of the performance of the labor market in terms of providing living wage jobs is the percent of job openings that pay a living wage. This measure is not affected by the shape of the wage distribution curve depicted in the chart; it would be an equally valid measure if the wage distribution were “normal” or had peaks and valleys.

**Distribution of Northwest Job Openings by Wage Rate**

*There are few job openings in the economy that pay more than $25 an hour. Due to lack of space they have not been included here.*

The percentage of jobs and job openings that pay a living wage vary from state to state for a number of reasons, including the mix of industries and related occupations in a state, and the prevailing wage levels, which also vary from state to state.

The industry mix effect can be seen clearly in a comparison of Washington and Montana, two states with very different industry structures. The relatively high frequency occupations in Washington tend to be higher wage occupations than those found in Montana, and there is a clear association of these occupations with major industries that are important drivers of each state’s economy. For example, due to the presence of Boeing and its subcontractors, Washington has a high frequency of certain transportation equipment industry occupations, including electrical installers and repairers with a median wage of $14.55 an hour and aeronautical engineers with a median wage of $30.61 an hour. Montana, on the other hand, has a larger mining industry as well as major railroad switching yards and maintenance facilities. Occupations in these two industries also show up with relatively high frequency, including dragline operators at a median wage of $10.88 an hour and railroad conductors and yardmasters at a median wage of $12.45 an hour.
CHANGING DISTRIBUTION OF JOBS IN OREGON'S ECONOMY

CHANGING DISTRIBUTION OF JOBS IN WASHINGTON'S ECONOMY

Dollars per Hour

Percent

Existing Jobs
Projected Job Openings

Less than $8  $8-$11.99  $12-$15.99  $16-$19.99  $20 or more
Wages for any single occupation also vary across the Northwest states, for a variety of reasons, including its connection to key industries in the state and costs of living. Understanding the complexity of such wage variations may be helpful in efforts to reduce the job gap.

Comparing jobs with job openings reveals that there are more lower paying jobs and job openings than higher paying ones, as shown in the charts on the previous pages. In all four states, there is a higher percentage of job openings paying less than $8 an hour than existing jobs paying less than $8 an hour. The difference is at least five percent in each state for the under $8 an hour category. There are smaller but consistent differences across all four states at the $8 – 19.99 an hour wage levels as well, with an equal or a lower percentage of job openings than existing jobs. At the $20 or more an hour wage level, there is a higher percentage of job openings than existing jobs in two states; in the other two, it is the opposite.

These trends can be interpreted in at least two ways. If there are more low wage job openings than exist in the current job base, and at least in some states, more high wage job openings than the current job base, then the labor market may be polarizing. In the future, there may be fewer living wage jobs in the middle of the income distribution, but more very low and very high wage jobs. Another interpretation is that workers enter the labor force in low wage jobs and then either move from one low wage job to another or move up to better jobs over time. Some may argue that this accounts for the disproportionate share of job openings at the lowest level. While this is true to an extent, if one focuses the analysis exclusively on those job openings due to industry expansion, there is still growth at the lowest and highest wage levels. This pattern supports the “polarization” hypothesis with proportionately fewer jobs in the middle of the pay range where living wages can be found.

Another indicator of the job gap is the number of job seekers compared to the number of job openings that pay a living wage. Overall, there are more people looking for work than there are job openings that pay a living wage, as shown in the charts and table on the following pages.

Idaho has the smallest number of job seekers per job opening—an average of two job seekers for every job opening. The other states have an average of three job seekers for every job opening. However, not all job openings pay a living wage, even for a single adult. For each job opening that pays at least the living wage for a single adult, there are on average four to six job seekers, depending on the state. For each job opening that pays at least the living wage for a single adult with two children, there are 10 to 17 job seekers. The ratio of job seekers to job openings is higher for larger households because job seekers from smaller households can compete for the higher wage jobs, but fewer higher wage jobs are available.

A job gap ratio of 4 to 1, for example, does not necessarily imply there are four people competing for each job opening at that wage level. It simply indicates that over the course of a year there were four times as many job seekers as there were living wage jobs at or above that wage level. Available data do not provide details on what sorts of jobs workers from households of different sizes actually pursue, so no precise conclusions can be reached about the applicant pool for jobs at different wage levels. The applicant pool also depends on the skills and education and training of job seekers, as well as other factors. Large ratios suggest greater competition among job seekers for available job openings.
State by state figures are:

- In Idaho, for each job opening that pays at least the $9.22 an hour living wage for a single adult, there are four job seekers on average. For each job opening that pays at least the $14.42 an hour living wage for a single adult with two children, there are 10 job seekers on average.
• In Montana, for each job opening that pays at least the $9.02 an hour living wage for a single adult, there are six job seekers on average. For each job opening that pays at least the $14.80 an hour living wage for a single adult with two children, there are 17 job seekers on average.

• In Oregon, for each job opening that pays at least the $10.07 an hour living wage for a single adult, there are six job seekers on average. For each job opening that pays at least the $16.36 an hour living wage for a single adult with two children, there are 14 job seekers on average.

• In Washington, for each job opening that pays at least the $10.25 an hour living wage for a single adult, there are five job seekers on average. For each job opening that pays at least the $16.86 an hour living wage for a single adult with two children, there are 12 job seekers on average.

For those job openings that pay a living wage and require no more than some combination of a high school diploma, on-the-job training, work experience, and/or post-high school vocational training, the competition may be even stronger. In every state, slightly more than half of all job openings that pay a living wage for a single adult require that amount of education and training, as shown in the chart on the following page. For those job openings that pay a living wage for a single adult with two children, the proportion is less than a quarter.

### Job Gap Ratios (Job Seekers per Job Opening)

<table>
<thead>
<tr>
<th></th>
<th>Idaho</th>
<th>Montana</th>
<th>Oregon</th>
<th>Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Job Openings</td>
<td>2 to 1</td>
<td>3 to 1</td>
<td>3 to 1</td>
<td>3 to 1</td>
</tr>
<tr>
<td>Job Openings Paying a Living Wage</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Single adult</td>
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<td>17 to 1</td>
<td>14 to 1</td>
<td>12 to 1</td>
</tr>
</tbody>
</table>

Job gap ratios are calculated by dividing the number of people who were looking for work at some point during 1996 by the number of job openings that year. Job seekers include:

• The unemployed—people who are not employed, but looking for work. Included are those who have been laid off, quit their jobs, are entering the workforce for the first time, or are re-entering it. Not included are those who are unemployed due to temporary layoff or those looking only for part-time work.

• Involuntary part-time workers—people who work less than full time, but want to work full time.

• Discouraged workers and marginally attached workers—people who are not employed and not currently looking for work, but have looked for work within the past year. In the case of discouraged workers, they are not seeking work because they believe there are no jobs available or there are none for which they qualify. And in the case of marginally attached workers, it is because of personal or financial reasons.

Not included are people who prefer part-time work.

Job seekers equal between nine and 14 percent of employment in each of the states. The largest group of job seekers in all four states is the unemployed, accounting for about 60 percent of all job seekers, as shown in the table below. Marginally attached and discouraged workers account for seven to 11 percent of the job seekers, while involuntary part-time workers account for about 30 percent of the total.
Estimated Number of Job Seekers

<table>
<thead>
<tr>
<th></th>
<th>Idaho</th>
<th>Montana</th>
<th>Oregon</th>
<th>Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Job Seekers</td>
<td>53,373</td>
<td>46,704</td>
<td>166,926</td>
<td>357,243</td>
</tr>
<tr>
<td>Job Seekers as a percent of total employment</td>
<td>9%</td>
<td>11%</td>
<td>10%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Job Seeker categories

Unemployed: 61% 58% 64% 59%
Involuntary Part-Time: 31% 31% 29% 30%
Marginally Attached/ Discouraged: 8% 11% 7% 11%

It is important to note that the unemployment rate reflects only the unemployed and, therefore, misses about 40 percent of all job seekers. This suggests that there are many more job seekers for each living wage job opening than conventionally assumed.

The job seeker figures used are likely an underestimate of the actual number of job seekers. Ideally, the count of job seekers would capture everyone, working or not, who needs a living wage job. The figures understate the number of job seekers in that it does not count those who are working full time at less than a living wage job but want a living wage job, because data on this group do not exist. It overstates the number in that all the unemployed are counted, even though some may not be looking for a living wage job. Also, people who left the labor market and then re-entered the same occupation are counted among the job seekers, whereas those who moved directly from one job to another in the same occupation are not. However, assuming even a fraction of the people working at less than a living wage job for a single adult want a living wage job, the count is, on balance, an underestimate.
Job openings include:

- Job openings due to growth—the result of new jobs being created by new or existing firms.
- Job openings due to net replacement—the result of people retiring, entering school or the military, moving across state boundaries, changing occupations, or otherwise leaving the occupation in which they currently work.

The proportion of job openings due to growth and net replacement vary from state to state. Proportionately more job openings result from growth in Idaho (53 percent) than in Montana (41 percent). Conversely, proportionately more job openings result from net replacement in Montana (59 percent) than in Idaho (47 percent). Oregon and Washington fall in between, with a 48/52 percentage split between growth and net replacement in Oregon and a 45/55 split in Washington.

These differences are largely attributable to differences in workforce demographics and growth rates of new and existing firms.

<table>
<thead>
<tr>
<th>Job Openings</th>
<th>Idaho</th>
<th>Montana</th>
<th>Oregon</th>
<th>Washington</th>
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</thead>
<tbody>
<tr>
<td>Job Openings</td>
<td>25,335</td>
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<td>61,796</td>
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<tr>
<td>Growth as percent of total</td>
<td>53%</td>
<td>41%</td>
<td>48%</td>
<td>45%</td>
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<tr>
<td>Net replacement as percent of total</td>
<td>47%</td>
<td>59%</td>
<td>52%</td>
<td>55%</td>
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</tbody>
</table>

The analysis does not include job openings that result from people changing employers but remaining in the same occupation, since these are largely invisible to the average job seeker. Also not included, for similar reasons, are job openings for unpaid family workers and self-employment.

Job openings are broken down by occupation, wages paid, and education and training required. Wage and education and training data were collected and analyzed for over 800 occupations. In determining which job openings paid a living wage, the state median wage for an occupation was used, where available; this means that half the people in the occupation earn less and half more than that amount. Not everyone will start at the median wage, but many should progress to that wage over time.

(A more detailed description of the methodology can be found in the Technical Notes & Resources Section.)

**CONCLUSION & NEXT STEPS**

This first phase of the Northwest Job Gap Study develops estimates of living wages needed to support families in the Northwest and documents the extent to which there is a gap between the number of living wage jobs being created and the number of people needing living wage jobs. Despite strong growth in the regional economy and the creation of many
new jobs over the last decade, the Northwest is not creating enough living wage jobs for all those who need them, as indicated by the number of working age households compared to the number of jobs that pay a living wage, the percentage of jobs and job openings that pay less than a living wage, and the number of job seekers compared to the number of job openings that pay a living wage.

Findings from the first phase of the Northwest Job Gap Study are intended to help guide and shape the efforts of business, labor, government, and the community—in terms of both policy and practice—around economic, workforce, and community development.

Next phases of the Northwest Job Gap Study will focus on identifying which occupations and industries provide living wage job opportunities to people needing them; analyzing workforce demographics such as race/ethnicity, gender, and education and training levels in the context of living wage jobs; and identifying ways to promote living wage jobs and make sure people needing these jobs are able to get and keep them. Also, education and outreach will be conducted to raise awareness and promote public dialogue about the job gap.
STATE FINDINGS

IDAHO

IDAHO KEY FINDINGS

Key findings for Idaho are:

• The living wage for a single adult is $9.22 an hour. This is based on what is needed to meet basic needs and provides some ability to deal with emergencies and plan ahead. The living wage for a single adult with two children is $14.42 an hour.

• Almost half of all job openings (45 percent) pay less than the $9.22 an hour living wage for a single adult. Three quarters of all job openings (75 percent) pay less than the $14.42 an hour living wage for a single adult with two children.

• For each job opening that pays at least the $9.22 an hour living wage for a single adult, there are four job seekers on average. For each job opening that pays at least the $14.42 an hour living wage for a single adult with two children, there are 10 job seekers on average.

WHAT IS A LIVING WAGE?

Living wages for Idaho, which reflect family budgets as shown on the following page, are:

• For a single adult household, $19,168 a year or $9.22 an hour.

• For a single adult with one child, $24,302 a year or $11.68 an hour.

• For a single adult with two children, $29,995 a year or $14.42 an hour.

• For two adults, one of whom is working, with two children, $26,024 a year or $12.51 an hour.

• For two adults, both of whom are working, with two children, $34,032 a year or $16.36 an hour (which means that the combined wages of both working adults needs to total this amount).

These are statewide averages. In some areas, costs are higher (particularly for housing and child care) and, as a result, living wages are higher. In other areas, including most of the state’s rural areas, costs and, therefore, living wages are lower. Living wages for higher cost and lower cost areas are:

<table>
<thead>
<tr>
<th></th>
<th>Higher Cost Areas</th>
<th>Lower Cost Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single adult</td>
<td>$9.82/hour</td>
<td>$8.80/hour</td>
</tr>
<tr>
<td>Single adult with one child</td>
<td>$12.48/hour $11.08/hour</td>
<td></td>
</tr>
<tr>
<td>Single adult with two children</td>
<td>$15.23/hour $13.89/hour</td>
<td></td>
</tr>
<tr>
<td>Two adults (one working) with two children</td>
<td>$13.38/hour $12.01/hour</td>
<td></td>
</tr>
<tr>
<td>Two adults (both working) with two children</td>
<td>$17.18/hour</td>
<td>$15.57/hour</td>
</tr>
</tbody>
</table>

Idaho’s higher cost areas are Ada, Canyon, and Kootenai counties.
## Idaho Family Budgets (in 1996 Dollars)

<table>
<thead>
<tr>
<th></th>
<th>Household 1</th>
<th>Household 2</th>
<th>Household 3</th>
<th>Household 4</th>
<th>Household 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>141</td>
<td>263</td>
<td>331</td>
<td>462</td>
<td>462</td>
</tr>
<tr>
<td>Housing &amp; Utilities</td>
<td>379</td>
<td>474</td>
<td>474</td>
<td>474</td>
<td>474</td>
</tr>
<tr>
<td>Transportation</td>
<td>386</td>
<td>333</td>
<td>378</td>
<td>346</td>
<td>405</td>
</tr>
<tr>
<td>Health Care</td>
<td>58</td>
<td>108</td>
<td>121</td>
<td>146</td>
<td>146</td>
</tr>
<tr>
<td>Child Care</td>
<td>0</td>
<td>128</td>
<td>414</td>
<td>0</td>
<td>414</td>
</tr>
<tr>
<td>Household, Clothing</td>
<td>208</td>
<td>255</td>
<td>282</td>
<td>309</td>
<td>322</td>
</tr>
<tr>
<td>&amp; Personal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings</td>
<td>130</td>
<td>159</td>
<td>176</td>
<td>193</td>
<td>201</td>
</tr>
<tr>
<td>State, local &amp; Federal Taxes</td>
<td>295</td>
<td>304</td>
<td>322</td>
<td>240</td>
<td>412</td>
</tr>
<tr>
<td>Gross Monthly Income Needed</td>
<td>1,597</td>
<td>2,025</td>
<td>2,500</td>
<td>2,169</td>
<td>2,836*</td>
</tr>
<tr>
<td>Gross Annual Income Needed</td>
<td>19,168</td>
<td>24,302</td>
<td>29,995</td>
<td>26,024</td>
<td>34,032*</td>
</tr>
<tr>
<td>Living Wage (at 2080 hrs/yr)</td>
<td>$9.22</td>
<td>$11.68</td>
<td>$14.42</td>
<td>$12.51</td>
<td>$16.36*</td>
</tr>
</tbody>
</table>

Household 1 is a single adult  
Household 2 is a single adult with a school-age child (age 6-8 yrs)  
Household 3 is a single adult with a toddler (12-24 months) and a school-age child (age 6-8 yrs)  
Household 4 is two adults (one of whom is working) with a toddler and a school-age child  
Household 5 is two adults (both of whom are working) with a toddler and a school-age child

*Total amount earned by two working adults

Idaho’s minimum wage is less than 60 percent of the living wage for a single adult and less than 35 percent of the living wage for a single adult with two children. The state’s average annual wage ($23,362 in 1996) is 122 percent of the living wage for a single adult and 78 percent of the living wage for a single adult with two children.

### Are We Creating Enough Jobs That Pay a Living Wage?

There were about 330,000 working age households in Idaho in 1996, but fewer than 275,000 jobs that could support a single adult and about 110,000 jobs that could support a single adult with two children.
Forty two percent of all jobs in the economy pay less than the $9.22 an hour living wage for a single adult and 75 percent pay less than the $14.42 an hour living wage for a single adult with two children.

Of all job openings, almost half (45 percent) pay less than the $9.22 an hour living wage for a single adult, as shown in the chart above. Three quarters of job openings (75 percent) pay less than the $14.42 an hour living wage for a single adult with two children. It is important to note the distinction between jobs and job openings. Not all jobs come open during a year. Job openings are of particular interest because they provide employment opportunities to people looking for work.

In addition, there are more people looking for work than there are job openings that pay a living wage. As shown in the table on the following page, job gap ratios, which compare job seekers to job openings, are:

- For each job opening, regardless of pay, there are two job seekers on average.
- For each job opening that pays at least the $9.22 an hour living wage for a single adult, there are four job seekers on average.
- For each job opening that pays at least the $14.42 an hour living wage for a single adult with two children, there are 10 job seekers on average.

For those job openings that pay a living wage and require at most some combination of a high school diploma, on-the-job training, work experience, and/or post-high school vocational training, the competition may be even stronger. Fifty four percent of all job openings that pay at least the $9.22 an hour living wage for a single adult require that amount of education and training. For those job openings that pay at least the $14.42 an hour living wage for a single adult with two children, the proportion is 16 percent.
IDAHO JOB GAP RATIO

<table>
<thead>
<tr>
<th></th>
<th>Household 1</th>
<th>Household 3</th>
<th>All Job Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Seekers</td>
<td>$9.22</td>
<td>$14.42</td>
<td>53,373</td>
</tr>
<tr>
<td>Job Openings</td>
<td>13,120</td>
<td>5,574</td>
<td>25,355</td>
</tr>
<tr>
<td>Job Seekers per Job Opening</td>
<td>4 to 1</td>
<td>10 to 1</td>
<td>2 to 1</td>
</tr>
<tr>
<td>Percent of all Job Openings paying less than a living wage</td>
<td>45%</td>
<td>75%</td>
<td></td>
</tr>
</tbody>
</table>

Job gap ratios are calculated by dividing the number of people who were looking for work at some point during 1996 by the number of job openings that year. Job seekers total 53,373, which equals about nine percent of total employment in the state. Job seekers include the unemployed (61 percent of the total), involuntary part-time workers (31 percent), and discouraged and marginally attached workers (eight percent).

Job openings total 25,355 and include job openings due to growth (about 53 percent of the total) and job openings due to net replacement (47 percent).

As shown in the chart below, 13,120 of the 25,355 job openings pay at least the $9.22 an hour living wage for a single adult. And 7,043 of these job openings pay at least the $9.22 an hour living wage for a single adult and require at most some combination of a high school diploma, on-the-job training, work experience, and/or post-high school vocational training.

FINDINGS FOR IDAHO

*Living wage refers to a single adult household

Thousands of Job Openings and Job Seekers
Montana

Montana Key Findings

Key findings for Montana are:

• The living wage for a single adult is $9.02 an hour. This is based on what is needed to meet basic needs and provides some ability to deal with emergencies and plan ahead. The living wage for a single adult with two children is $14.80 an hour.

• About half of all job openings (53 percent) pay less than the $9.02 an hour living wage for a single adult. Over three quarters (81 percent) pay less than the $14.80 an hour living wage for a single adult with two children.

• For each job opening that pays at least the $9.02 an hour living wage for a single adult, there are six job seekers on average. For each job opening that pays at least the $14.80 an hour living wage for a single adult with two children, there are 17 job seekers on average.

What is a Living Wage?

Living wages for Montana, which reflect family budgets as shown on the following page, are:

• For a single adult household, $18,760 a year or $9.02 an hour.
• For a single adult with one child, $24,351 a year or $11.71 an hour.
• For a single adult with two children, $30,784 a year or $14.80 an hour.
• For two adults, one of whom is working, with two children, $25,559 a year or $12.29 an hour.
• For two adults, both of whom are working, with two children, $34,491 a year or $16.58 an hour (which means that the combined wages of both working adults needs to total this amount).

These are statewide averages. In some areas, costs are higher (particularly for housing and child care) and, as a result, living wages are higher. In other areas, including most of the state’s rural areas, costs and, therefore, living wages are lower. Living wages for higher cost and lower cost areas are:

<table>
<thead>
<tr>
<th></th>
<th>Higher Cost Areas</th>
<th>Lower Cost Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single adult</td>
<td>$9.10/hour</td>
<td>$8.91/hour</td>
</tr>
<tr>
<td>Single adult with one child</td>
<td>$11.88/hour</td>
<td>$11.44/hour</td>
</tr>
<tr>
<td>Single adult with two children</td>
<td>$14.94/hour</td>
<td>$14.64/hour</td>
</tr>
<tr>
<td>Two adults (one working) with two children</td>
<td>$12.47/hour</td>
<td>$12.12/hour</td>
</tr>
<tr>
<td>Two adults (both working) with two children</td>
<td>$16.72/hour</td>
<td>$16.49/hour</td>
</tr>
</tbody>
</table>

Montana's higher cost areas are Yellowstone, Missoula, Cascade, Flathead, Gallatin, Lewis and Clark, Silver Bow, and Ravalli counties.
Montana’s minimum wage is less than 60 percent of the living wage for a single adult and less than 35 percent of the living wage for a single adult with two children. The state’s average annual wage ($21,144 in 1996) is 113 percent of the living wage for a single adult and 69 percent of the living wage for a single adult with two children.

**Are we creating enough jobs that pay a living wage?**

There were about 265,000 working age households in Montana in 1996, but fewer than 170,000 jobs that could support a single adult and fewer than 66,000 jobs that could support a single adult with two children.
About 45 percent of all jobs in the economy pay less than the $9.02 an hour living wage for a single adult and 73 percent pay less than the $14.80 an hour living wage for a single adult with two children.

Of all job openings, about half (53 percent) pay less than the $9.02 an hour living wage for a single adult, as shown in the chart below. Over three quarters of job openings (81 percent) pay less than the $14.80 an hour living wage for a single adult with two children. It is important to note the distinction between jobs and job openings. Not all jobs come open during a year. Job openings are of particular interest because they provide employment opportunities to people looking for work.

In addition, there are more people looking for work than there are job openings that pay a living wage. As shown in the table on the following page, job gap ratios, which compare job seekers to job openings, are:

- For each job opening, regardless of pay, there are three job seekers on average.
- For each job opening that pays at least the $9.02 an hour living wage for a single adult, there are six job seekers on average.
- For each job opening that pays at least the $14.80 an hour living wage for a single adult with two children, there are 17 job seekers on average.

For those job openings that pay a living wage and require at most some combination of a high school diploma, on-the-job training, work experience, and/or post-high school vocational training, the competition may be even stronger. Sixty one percent of all job openings that pay at least the $9.02 an hour living wage for a single adult require that amount of education and training. For those job openings that pay at least the $14.80 an hour living wage for a single adult with two children, the proportion is 22 percent.

*There are few job openings in the economy that pay more than $25 an hour. Due to lack of space they have not been included here.*
Montana Job Gap Ratio

<table>
<thead>
<tr>
<th></th>
<th>Household 1</th>
<th>Household 3</th>
<th>All Job Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Seekers</td>
<td>46,704</td>
<td>46,704</td>
<td>46,704</td>
</tr>
<tr>
<td>Job Openings</td>
<td>7,446</td>
<td>2,710</td>
<td>17,000</td>
</tr>
<tr>
<td>Job Seekers per Job Opening</td>
<td>6 to 1</td>
<td>17 to 1</td>
<td>3 to 1</td>
</tr>
<tr>
<td>Percent of all Job Openings paying less than a living wage</td>
<td>53%</td>
<td>81%</td>
<td></td>
</tr>
</tbody>
</table>

Job gap ratios are calculated by dividing the number of people who were looking for work at some point during 1996 by the number of job openings that year. Job seekers total 46,704, which equals about 11 percent of total employment in the state. Job seekers include the unemployed (58 percent of the total), involuntary part-time workers (31 percent), and discouraged and marginally attached workers (11 percent).

Job openings total 17,000 and include job openings due to growth (41 percent of the total) and job openings due to net replacement (59 percent).

As shown in the chart below, 7,446 of the 17,000 job openings pay at least the $9.02 an hour living wage for a single adult. And 4,536 of these job openings pay at least the $9.02 an hour living wage for a single adult and require at most some combination of a high school diploma, on-the-job training, work experience, and/or post-high school vocational training.

Findings for Montana

*Living wage refers to a single adult household
Key findings for Oregon are:

- The living wage for a single adult is $10.07 an hour. This is based on what is needed to meet basic needs and provides some ability to deal with emergencies and plan ahead. The living wage for a single adult with two children is $16.36 an hour.

- About half of all job openings (47 percent) pay less than the $10.07 an hour living wage for a single adult. About three quarters of all job openings (77 percent) pay less than the $16.36 an hour living wage for a single adult with two children.

- For each job opening that pays at least the $10.07 an hour living wage for a single adult, there are six job seekers on average. For each job opening that pays at least the $16.36 an hour living wage for a single adult with two children, there are 14 job seekers on average.

What is a Living Wage?

Living wages for Oregon, which reflect family budgets as shown on the following page, are:

- For a single adult household, $20,943 a year or $10.07 an hour.
- For a single adult with one child, $27,202 a year or $13.08 an hour.
- For a single adult with two children, $34,019 a year or $16.36 an hour.
- For two adults, one of whom is working, with two children, $29,197 a year or $14.04 an hour.
- For two adults, both of whom are working, with two children, $37,404 a year or $17.98 an hour (which means that the combined wages of both working adults needs to total this amount).

These are statewide averages. In some areas, costs are higher (particularly for housing and child care) and, as a result, living wages are higher. In other areas, including most of the state’s rural areas, costs and, therefore, living wages are lower. Living wages for higher cost and lower cost areas are:

<table>
<thead>
<tr>
<th></th>
<th>Higher Cost Areas</th>
<th>Lower Cost Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single adult</td>
<td>$10.36/hour</td>
<td>$9.45/hour</td>
</tr>
<tr>
<td>Single adult with one child</td>
<td>$13.57/hour</td>
<td>$12.31/hour</td>
</tr>
<tr>
<td>Single adult with two children</td>
<td>$17.13/hour</td>
<td>$15.37/hour</td>
</tr>
<tr>
<td>Two adults (one working) with two children</td>
<td>$14.34/hour</td>
<td>$13.32/hour</td>
</tr>
<tr>
<td>Two adults (both working) with two children</td>
<td>$18.75/hour</td>
<td>$17.05/hour</td>
</tr>
</tbody>
</table>

Oregon’s higher cost areas are Multnomah, Washington, Clackamas, Marion, Polk, Yamhill, Benton, Lane, Deschutes, and Jackson counties.

Oregon’s minimum wage is less than 60 percent of the living wage for a single adult and
less than 35 percent of the living wage for a single adult with two children. The state’s average annual wage ($27,046 in 1996) is 129 percent of the living wage for a single adult and 80 percent of the living wage for a single adult with two children.

**ARE WE CREATING ENOUGH JOBS THAT PAY A LIVING WAGE?**

There were slightly more than 1 million working age households in Oregon in 1996, but fewer than 760,000 jobs that could support a single adult and only slightly more than 300,000 jobs that could support a single adult with two children.
About 44 percent of all jobs in the economy pay less than the $10.07 an hour living wage for a single adult and 76 percent pay less than the $16.36 an hour living wage for a single adult with two children.

Of all job openings, about half (47 percent) pay less than the $10.07 an hour living wage for a single adult, as shown in the chart below. About three quarters of job openings (77 percent) pay less than the $16.36 an hour living wage for a single adult with two children.

It is important to note the distinction between jobs and job openings. Not all jobs come open during a year. Job openings are of particular interest because they provide employment opportunities to people looking for work.

In addition, there are more people looking for work than there are job openings that pay a living wage. As shown in the table on the following page, job gap ratios, which compare job seekers to job openings, are:

- For each job opening, regardless of pay, there are three job seekers on average.
- For each job opening that pays at least the $10.07 an hour living wage for a single adult, there are six job seekers on average.
- For each job opening that pays at least the $16.36 an hour living wage for a single adult with two children, there are 14 job seekers on average.

For those job openings that pay a living wage and require at most some combination of a high school diploma, on-the-job training, work experience, and/or post-high school vocational training, the competition may be even stronger. Fifty nine percent of all job openings that pay at least the $10.07 an hour living wage for a single adult require that amount of education and training. For those job openings that pay at least the $16.36 an hour living wage for a single adult with two children, the proportion is 23 percent.

OREGON DISTRIBUTION OF JOB OPENINGS BY WAGE RATE

- 47% of job openings do not pay a living wage for a single adult
- 77% of job openings do not pay a living wage for a single adult with two children

*There are few job openings in the economy that pay more than $25 an hour. Due to lack of space they have not been included here.
Job gap ratios are calculated by dividing the number of people who were looking for work at some point during 1996 by the number of job openings that year. Job seekers total 166,926, which equals about 10 percent of total employment in the state. Job seekers include the unemployed (about 64 percent of the total), involuntary part-time workers (29 percent), and discouraged and marginally attached workers (seven percent).

Job openings total 61,796 and include job openings due to growth (about 48 percent of the total) and job openings due to net replacement (52 percent).

As shown in the chart below, 30,190 of the 61,796 job openings pay at least the $10.07 an hour living wage for a single adult. And 17,713 of these job openings pay at least the $10.07 an hour living wage for a single adult and require at most some combination of a high school diploma, on-the-job training, work experience, and/or post-high school vocational training.
WASHINGTON

WASHINGTON KEY FINDINGS

Key findings for Washington are:

- The living wage for a single adult is $10.25 an hour. This is based on what is needed to meet basic needs and provides some ability to deal with emergencies and plan ahead. The living wage for a single adult with two children is $16.86 an hour.
- Forty one percent of all job openings pay less than the $10.25 an hour living wage for a single adult. Seventy two percent pay less than the $16.86 an hour living wage for a single adult with two children.
- For each job opening that pays at least the $10.25 an hour living wage for a single adult, there are five job seekers on average. For each job opening that pays at least the $16.86 an hour living wage for a single adult with two children, there are 12 job seekers on average.

WHAT IS A LIVING WAGE?

Living wages for Washington, which reflect family budgets as shown on the following page, are:

- For a single adult household, $21,322 a year or $10.25 an hour.
- For a single adult with one child, $27,288 a year or $13.12 an hour.
- For a single adult with two children, $35,079 a year or $16.86 an hour.
- For two adults, one of whom is working, with two children, $29,023 a year or $13.95 an hour.
- For two adults, both of whom are working, with two children, $38,369 a year or $18.45 an hour (which means that the combined wages of both working adults needs to total this amount).

These are statewide averages. In some areas, costs are higher (particularly for housing and child care) and, as a result, living wages are higher. In other areas, including most of the state’s rural areas, costs and, therefore, living wages are lower. Living wages for higher cost and lower cost areas are:

<table>
<thead>
<tr>
<th></th>
<th>Higher Cost Areas</th>
<th>Lower Cost Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single adult</td>
<td>$10.43/hour</td>
<td>$9.50/hour</td>
</tr>
<tr>
<td>Single adult with one child</td>
<td>$13.49/hour</td>
<td>$12.16/hour</td>
</tr>
<tr>
<td>Single adult with two children</td>
<td>$17.59/hour</td>
<td>$15.47/hour</td>
</tr>
<tr>
<td>Two adults (one working) with two children</td>
<td>$14.16/hour</td>
<td>$12.89/hour</td>
</tr>
<tr>
<td>Two adults (both working) with two children</td>
<td>$19.17/hour</td>
<td>$17.11/hour</td>
</tr>
</tbody>
</table>

Washington’s higher cost areas are King, Pierce, Snohomish, Spokane, Clark, Kitsap, Yakima, Thurston, Whatcom, Benton, and Franklin counties.
Washington’s minimum wage is about 50 percent of the living wage for a single adult and about 30 percent of the living wage for a single adult with two children. The state’s average annual wage ($28,871 in 1996) is 135 percent of the living wage for a single adult and 82 percent of the living wage for a single adult with two children.

Are we creating enough jobs that pay a living wage?

There were about 1.8 million working age households in Washington in 1996, but only about 1.5 million jobs that could support a single adult and about 610,000 jobs that could support a single adult with two children.
Thirty seven percent of all jobs in the economy pay less than the $10.25 an hour living wage for a single adult and 73 percent pay less than the $16.86 an hour living wage for a single adult with two children.

Of all job openings, 41 percent pay less than the $10.25 an hour living wage for a single adult, as shown in the chart below. Seventy two percent pay less than the $16.86 an hour living wage for a single adult with two children.

It is important to note the distinction between jobs and job openings. Not all jobs come open during a year. Job openings are of particular interest because they provide employment opportunities to people looking for work.

![Washington Distribution of Job Openings by Wage Rate](chart)

*There are few job openings in the economy that pay more than $25 an hour. Due to lack of space they have not been included here.

In addition, there are more people looking for work than there are job openings that pay a living wage. As shown in the table on the following page, job gap ratios, which compare job seekers to job openings, are:

- For each job opening, regardless of pay, there are three job seekers on average.
- For each job opening that pays at least the $10.25 an hour living wage for a single adult, there are five job seekers on average.
- For each job opening that pays at least the $16.86 an hour living wage for a single adult with two children, there are 12 job seekers on average.

For those job openings that pay a living wage and require at most some combination of a high school diploma, on-the-job training, work experience, and/or post-high school vocational training, the competition may be even stronger. Fifty three percent of all job openings that pay at least the $10.25 an hour living wage for a single adult require that amount of education and training. For those job openings that pay at least the $16.86 an hour living wage for a single adult with two children, the proportion is 24 percent.
Job gap ratios are calculated by dividing the number of people who were looking for work at some point during 1996 by the number of job openings that year. Job seekers total 357,243, which equals about 13 percent of total employment in the state. Job seekers include the unemployed (about 59 percent of the total), involuntary part-time workers (30 percent), and discouraged and marginally attached workers (11 percent).

Job openings total 120,765 and include job openings due to growth (about 45 percent of the total) and job openings due to net replacement (55 percent).

As shown in the chart below, 68,382 of the 120,765 job openings pay at least the $10.25 an hour living wage for a single adult. And 36,139 of these job openings pay at least the $10.25 an hour living wage for a single adult and require at most some combination of a high school diploma, on-the-job training, work experience, and/or post-high school vocational training.

### Findings for Washington

<table>
<thead>
<tr>
<th></th>
<th>Household 1</th>
<th>Household 3</th>
<th>All Job Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seekers</td>
<td>357,243</td>
<td>357,243</td>
<td>357,243</td>
</tr>
<tr>
<td>Job Openings</td>
<td>68,382</td>
<td>30,606</td>
<td>120,765</td>
</tr>
<tr>
<td>Job Seekers per Job Opening</td>
<td>5 to 1</td>
<td>12 to 1</td>
<td>3 to 1</td>
</tr>
<tr>
<td>Percent of all Job Openings paying less than a living wage</td>
<td>41%</td>
<td>72%</td>
<td></td>
</tr>
</tbody>
</table>
TECHNICAL NOTES AND RESOURCES

The Northwest Job Gap Study involves a comparison of the number of job seekers to the number of job openings at or above a living wage level. This section defines key terms such as living wage, job seekers, and job openings; describes the data methodology used; and lists resources.

DEFINITIONS OF KEY TERMS

Key terms used in the job gap study include:
- Family budgets and living wages
- Job seekers
- Job openings

FAMILY BUDGETS AND LIVING WAGES

A living wage is a wage that allows families to meet their basic needs without resorting to public assistance, and provides them some ability to deal with emergencies and plan ahead. It is not a poverty wage.

Family budgets have been developed for several different household types, and these budgets have been converted into a living wage assuming that the wage earner works full time year round. The budgets include basic necessities such as food, housing and utilities, transportation, health care, child care (when necessary), clothing, and other personal items. In addition, applicable local, state, and federal taxes are included. Finally, a savings component is included to help cover emergencies and future expenses such as postsecondary education for a child, or the retirement of the wage earner. In each category, care was taken that the budgets not reflect a poverty-level wage, but neither are they designed to provide a luxurious standard of living. For example, a household with a single adult and two children is assumed to occupy a two bedroom apartment but would only be able to afford 40 percent of all units in the area. Details on each budget item are provided later in this section.

Household types were selected to reflect the range of budget requirements for five household types:
- Single adult
- Single adult with one child between the ages of 6 and 8
- Single adult with two children, one between the ages of 6 and 8 and the other between the ages of 1 and 2
- Two adults including one wage earner, with two children, one between the ages of 6 and 8 and the other between the ages of 1 and 2
- Two adults, both wage earners, with two children, one between the ages of 6 and 8 and the other between the ages of 1 and 2

No one household type included in the analysis represents a large percentage of the
population. Rather, the household types provide a representative picture of the wide range of income needs that families experience. This range falls between the requirements for a single adult living alone, and a household with two children and one or two working adults. Between 40 and 50 percent of the households in the four Northwest states will see themselves reflected in one of these budgets. Virtually all of the remainder should be able to approximate a livable wage budget for themselves with some simple arithmetic.

In the job gap calculations, statewide average budgets are used. However, in every state, some areas have relatively higher living costs than others. Rural areas tend to have lower housing and child care costs but higher transportation costs. Some rural areas adjacent to urban areas tend to experience many of the cost pressures of bigger cities. In order to judge the adequacy of the statewide average budget levels, budgets were developed for high and low cost areas in each state.

**JOB SEEKERS**

The most conventional and widely used measure of job seekers is the official count of unemployed persons. This measure is widely reported on a monthly basis for the nation as a whole, for each state, and for many metropolitan areas. However, the number of unemployed persons, and the even more familiar unemployment rate, are incomplete estimates of job seekers.

To be counted as unemployed, a person must not be employed but actively looking for work at the time of a federal survey. There are two additional components of the job seeker number that are regularly estimated but do not receive as much attention as the number of unemployed and the unemployment rate. First, the federal government provides estimates of discouraged and marginally attached workers, those that have looked for work in recent months but were not looking at the time of the survey. The second group are those persons who are working part time on an involuntary basis. Some workers prefer part-time work such as secondary wage earners, students, and retirees. However, there is another group of people working in one or more part-time jobs who would prefer a full-time job, but have not been able to find one. These “involuntary part-time” workers are also included in the job seeker estimates.

**JOB OPENINGS**

Readers who track the course of the economy are familiar with employment measures. Each month federal and state governments announce counts of employment and changes in employment; these indicators are widely used in assessing the performance of the economy. In the job gap study, a different indicator is added: job openings. Job openings are created by changes in employment from the growth of the economy, and by employers’ worker replacement needs due to retirements, deaths, entering school or military service, or moving across state boundaries.

In the job gap study, the particular measure of replacement used is net replacement; net replacement removes those openings created by the movement of individuals from one
position to another in the same occupation. These openings are largely invisible to the average job seeker because many of them are internal promotions.

Data on job openings are available by occupation for approximately 800 occupational categories. Median wage data are also available for these occupations, making it possible to identify which occupations pay living wages and thus what percentage of job openings are living wage jobs.

TECHNICAL DATA CONSIDERATIONS

Gathering and analyzing data for a regional study presents particular analytical challenges. In every phase of the research, data were gathered to facilitate cross-state comparison. Data from federal agencies and state data developed to meet federal requirements form the basis of this report. Where possible, definitions and methods were employed that result in conservative estimates. 1996 was chosen as the analysis year because it is the most recent year for which job openings, occupational wages, and employment figures are available.

This section contains:
• Family budget components
• High and Low cost areas
• Job seekers
• Jobs and job openings
• Wages associated with each occupation

FAMILY LIVING WAGE BUDGETS

A living wage is a wage that provides a household with economic self-sufficiency, allowing it to meet its basic needs without government subsidy. For this study, a modified market basket approach was used. The budgets were developed using the most current data available and then inflation-adjusted to 1996 dollars. Household budgets, upon which living wages are based, include:
• Food,
• Housing and utilities,
• Transportation,
• Health care,
• Child care,
• Household, clothing, and personal,
• Savings, and
• State, local, and federal taxes.
Food costs are derived from the “Low Cost Food Plan” produced by the U.S. Department of Agriculture (USDA). The values are based on food expenditures by the 25th to 50th percentiles of the U.S. population, as determined in the National Household Food Consumption Survey. This plan is 25 to 30 percent higher than the “Thrifty Food Plan” which is used as the basis for food stamp allocations and federal poverty benchmarks. The Thrifty Plan was not used because nutritionists consider it to be nutritionally inadequate on a long-term basis. The Low Cost Plan is based on the assumption that all food is prepared at home.

There are no adjustments for these food plans by state or region. Other reports indicate that the variation in food prices is small enough that geographic adjustments are not necessary. The USDA values are based on research published in 1983 and updated monthly for inflation.

Housing and utilities costs are derived from U.S. Department of Housing and Urban Development (HUD) Fair Market Rents, and information provided by US West.

Fair Market Rent data are provided at a county level. For this study, the data were weighted by county population. This ensures that more populous counties contribute proportionately to the overall estimates. Fair Market Rents are gross rent and utility estimates “that would be needed to rent privately owned, decent, safe, and sanitary rental housing of a modest (non-luxury) nature with suitable amenities.” They include shelter rent plus the cost of all utilities, except telephones. HUD sets Fair Market Rents at the 40th percentile (in other words, 40 percent of the standard quality rental housing units are at or below this cost.) The 40th percentile rent is drawn from the distribution of rents of all units occupied by renter households who moved to their present residence within the past 15 months. Public housing units and units less than two years old are excluded. It is assumed that families with one or two children will rent a two bedroom unit, and that a single adult household will rent a one bedroom unit.

US West provided the cost of basic service for unlimited local calls, with no call waiting, voice messaging, or other extras. The estimate does not include any long distance charges.

Transportation costs are derived using the 1995 U.S. National Personal Transportation Study from the U.S. Department of Transportation, the Consumer Expenditure Survey (CES) of the U.S. Department of Labor, and Internal Revenue Service (IRS) reimbursement rates for automobile travel. Private and public transportation costs are included.
• Private transportation costs are based on the assumption that households own and operate a vehicle. The 1995 U.S. National Personal Transportation Study provides data on the average annual vehicle miles of travel per driver. Values for the “Pacific” region are applied to Oregon and Washington, and “Mountain” region values are used for Idaho and Montana. These mileage totals are adjusted for the number of adults, number of workers, and number of persons in a household.

To determine the total cost of private transportation, the mileage totals are multiplied by the IRS reimbursement rate of $0.31 per mile which covers insurance, gasoline, repairs, depreciation, and vehicle registration fees. Further adjustments for urban and rural areas are based on CES data.

• Public transportation costs are estimated using CES figures for average expenses on fares for local mass transit and long distance travel by public carriers such as airlines, railroads, and buses. The values are added to the total without adjusting for household composition because data for such adjustments were not available.

Health Care

Health care expenses are derived using updates from the 1987 National Health Care Expenditure Survey, data from the Families USA Foundation, and the CES. They include both out-of-pocket costs and individual contributions for health insurance coverage. All health care expenses are inflation-adjusted using the medical care component of the Consumer Price Index.

• Out-of-pocket costs are based on current estimates of out-of-pocket expenses for individuals by age and gender, drawn from the 1987 National Health Care Expenditure Survey and updated by the U.S. Department of Health and Human Services Agency for Health Care Policy and Research. These figures are then adjusted to take into account differences by state using data from the Families USA Foundation; and urban and rural areas using data from the CES.

• Insurance costs are based on estimates of average individual and family health insurance premiums, as published by the Agency for Health Care Policy and Research. Because employers consistently pay about 84 percent of premiums, these health insurance premium estimates are multiplied by 16 percent to account for the household’s contribution to their health insurance.

Child Care

Child care expenses are based on the assumption that all single parent households and households with two working parents require child care services. Estimates are derived from market rate surveys conducted by state welfare agencies. Because the federal government and most states subsidize child care for low income families up to the 75th percentile, state level data are readily available and used for these estimates. The total cost is adjusted to reflect the percentage of children using centers versus smaller home based care. School-age children are assumed to attend half-time and toddlers full-time, 12 months a year. In the two parent household, with one parent working, it is assumed that child care is not necessary.
HOUSEHOLD, CLOTHING, AND PERSONAL

Household, clothing, and personal spending estimates are derived from the CES and are calculated as a fixed percentage of total household spending minus child care and taxes. Spending on these items, as a proportion of total income, is consistent across income categories. No detailed expenditures or needs-based estimates are available for these budget categories. A total percentage of 16 percent for this item is used in the household budgets. As defined by the CES:

- Household costs include laundry and cleaning supplies, stationery supplies and postage, household linens (towels, sheets, etc.), sewing materials, furniture, floor coverings, major appliances, miscellaneous housewares (small appliances, plates, etc.), and other items needed to operate and maintain a household. Household costs are estimated at 4 percent.
- Clothing and personal costs include clothing, personal care products, reading materials, and other personal expenses. Clothing and personal costs are estimated at 6 percent.
- Recreation and entertainment costs include fees for participant sports, admissions to sporting events, movies and video rentals, TV/sound equipment, music, pets, toys, and other entertainment expenses. Entertainment costs are estimated at 4 percent.
- Miscellaneous costs include items not covered in the above categories such as school supplies, bank fees, and credit card finance charges. Miscellaneous costs are estimated at 2 percent.

SAVINGS

Savings rates are based on the recommendations of experts. They are set at 10 percent of spending minus childcare and taxes. The American Savings Education Council has developed a formula for estimating the percentage of income that a household should save. When applied to the households in our study, the recommendation is that they should save between 7 and 13 percent of their income for retirement. Using the lower estimate of 7 percent, an additional 3 percent was added to cover emergencies and allow families to plan ahead.

STATE, LOCAL, AND FEDERAL TAXES

Taxes include employment taxes (FICA), federal taxes (including child care credits and the Earned Income Tax Credit), and state and local sales and income taxes, as appropriate. Employment taxes are calculated at 7.65 percent of earned income. Federal taxes assume no itemized deductions, no outside income, and a 15 percent tax rate. Where appropriate, deductions are made for applicable child care and EITC benefits, including the $400 per child credit set to take effect in 1998. Appropriate state sales tax rates are applied to appropriate categories. State income tax rates, as identified by the Citizens for Tax Justice, are applied to total earned income.
**HIGH & LOW COST AREAS**

Household budget numbers published in earlier chapters are statewide averages. Household budgets and living wages have also been developed for high and low cost areas. These distinctions are based on county population, proximity to a metropolitan area, and the costs of housing and child care. Where the cost of living in an area is higher, the living wage budgets have been modified to better reflect those costs. Where county specific data were available, budgets were developed using the counties identified below. Otherwise, budget items were modified using percentages determined by the CES for urban and rural areas.

- **Idaho**’s high cost areas are defined as counties with an urban population of more than 100,000 persons and counties with a population of 20,000 or more that are adjacent to a metro area. This includes Ada, Canyon, and Kootenai counties.
- **Montana**’s high cost areas are defined as counties that contain an urban population of 20,000 or more persons. This includes Yellowstone, Missoula, Cascade, Flathead, Gallatin, Lewis and Clark, Silver Bow, and Ravalli counties.
- **Oregon**’s high cost areas are defined as counties with an urban population of more than 100,000 persons or adjacent to a metro area. This includes Multnomah, Washington, Clackamas, Marion, Polk, Yamhill, Benton, Lane, Deschutes, and Jackson counties.
- **Washington**’s high cost areas are defined as counties with an urban population of more than 100,000 persons or adjacent to a metro area. This includes King, Pierce, Snohomish, Spokane, Clark, Kitsap, Yakima, Thurston, Whatcom, Benton, and Franklin counties.

**JOB SEEKERS**

Data on job seekers come from the Bureau of Labor Statistics (BLS) at the U.S. Department of Labor through the Current Population Survey (CPS). Ideally, the count of job seekers would capture everyone, working or not, who needs a living wage job. Unfortunately, data are not available for all groups and our resulting count is likely an underestimate of the total number of job seekers in 1996. For the purposes of this study, job seekers are defined to include:

- **Unemployed.** The unemployed are those who are not employed, are available for work, and have looked for work within the last four weeks. Specific groups include:
  - Persons who have been laid off or otherwise had their employment end involuntarily (about 50 percent of the total unemployed);
  - Job leavers who have quit their jobs or otherwise terminated their employment voluntarily and immediately begun looking for work (about 12 percent);
  - Re-entrants who have worked previously but were out of the labor market prior to beginning their job search (about 33 percent); and
  - New entrants who have never worked (about five percent).
- **Involuntary Part-time Workers.** Involuntary part-time workers are those who regularly work less than 35 hours a week because of a lack of work from their employers or because they are unable to find a full time job. They are sometimes referred to as the under-employed. In the four Northwest states, about 21 percent of
all employed people work part time. Of these, BLS estimates that about 12 to 15 percent would prefer to work full time. Since these people desire full time work, they are counted as job seekers.

- **Marginally Attached and Discouraged Workers.** Marginally attached and discouraged workers are those who are not working, but are not defined as “unemployed” because they did not look for work in the previous four weeks. They want and are available for work, and have looked for work sometime in the past year. Discouraged workers are not seeking work because they believe there are no jobs available or there are none for which they qualify. Marginally attached workers are not seeking work because of personal or financial reasons such as ill health, family responsibilities, or a lack of child care or transportation. As they have demonstrated a recent interest in working, both groups are counted as job seekers. Because there are relatively few discouraged and marginally attached workers, the number is subject to considerable rounding and sampling errors.

Not included in the definition of job seekers are:

- **Unemployed Due to Temporary Layoff.** Some persons counted among the unemployed are on temporary layoff and have been given a date to return to work or expect to return to work within six months. Since these people expect to be rehired, they are not likely to be among those seeking a new job. Therefore, they have been subtracted from the total unemployed.

- **Unemployed Seeking Part-Time Work.** About 20 to 25 percent of the unemployed seek part-time work for a number of reasons, including continuing education and family or personal obligations. Since they are not interested in a full time job, they are excluded from the count of job seekers.

- **Persons who were both unemployed and involuntary part-time.** CPS estimates that approximately 22 percent of people who were unemployed also worked part-time involuntarily. This double-counting was subtracted from the job seeker count.

### JOB SEEKERS, 1996

<table>
<thead>
<tr>
<th></th>
<th>ID</th>
<th>MT</th>
<th>OR</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed individuals not on temporary layoff and who are seeking full time work.</td>
<td>32,573</td>
<td>27,144</td>
<td>106,766</td>
<td>211,723</td>
</tr>
<tr>
<td>Involuntary part-time workers</td>
<td>16,800</td>
<td>14,560</td>
<td>48,160</td>
<td>107,520</td>
</tr>
<tr>
<td>Marginally attached and discouraged workers</td>
<td>4,000</td>
<td>5,000</td>
<td>12,000</td>
<td>38,000</td>
</tr>
<tr>
<td>Total Job Seekers</td>
<td>53,373</td>
<td>46,704</td>
<td>166,926</td>
<td>357,243</td>
</tr>
</tbody>
</table>

Since this report examines all seekers and openings during the entire year, BLS’s monthly unemployment averages were converted to annual totals. According to BLS estimates, 16.786 million persons across the U.S. experienced at least one week of unemployment during 1996. The 1996 monthly average unemployment was 7.236 million. This results in a
multiplier of 2.32, or in other words, for every 100 people counted in an average month, there were 232 people unemployed that year. A similar computation yielded a 1.12 multiplier for employment in 1996. These multipliers were applied to average monthly state data to estimate the number of job seekers who were unemployed or under-employed at any time in 1996. No multipliers were developed for discouraged or marginally attached workers.

In spite of these adjustments, the total number of seekers is likely still an underestimate of the actual number of job seekers. The count of job seekers should capture every person, whether or not they are working, who needs a living wage job. However, our estimate understates the number of job seekers in that it does not count those who are working full time at a job paying less than a living wage, but who want a living wage job. It slightly overstates the true number in that all the unemployed are counted, even though some may not be looking for a living wage job; also, people who left the labor market and then re-entered the same occupation are counted among the job seekers, whereas those who moved directly from one job to another in the same occupation are not. However, assuming even a fraction of the people working at less than a living wage job for a single adult want a living wage job, the count is, on balance, an underestimate.

**JOB OPENINGS**

Job openings are estimated annual openings due to growth and net replacement. Openings estimates are produced by each state at least every two years following guidelines developed by the states in cooperation with the Bureau of Labor Statistics and the Employment and Training Administration (ETA).

- **Job openings due to growth.** These are job openings that result from new jobs being created by new or existing firms. Between 40 and 50 percent of all openings are due to growth of the economy.

- **Job openings due to net replacement.** These are job openings that result from people retiring, entering school or the military, moving across state boundaries, changing occupations, or otherwise leaving the occupation in which they currently work.

Job openings data exclude openings due to self-employment or work in an unpaid family business since this research attempts to model the labor market as viewed by an unemployed job seeker. Self-employment opportunities are often seen as more risky than a wage or salary job. Also, wage data for self-employed individuals are not presently available. Openings due to self-employment represent less than 12 percent of all openings and do not appreciably affect the results even if one assumes an identical median wage for those occupations.

Similarly, the analysis also does not include those openings that are due to people who change employers, but remain within the same occupation. This is a large component of what is called “frictional” unemployment or “churning” in the labor market. There are no new net openings for accountants, for example, that result from an accountant who simply moves from one firm to another. Therefore both these job changers and the jobs they occupy have been excluded from the analysis.
BLS has classified occupations into eleven education and training categories. The categories range from “short-term on the job training” to “Ph.D.” required. These categories were applied to the openings to determine which openings are available to people with different educational backgrounds.

**WAGES**

Data on the wages associated with job openings come primarily from the Occupational Employment Statistics (OES) wage survey of employers conducted by state Employment Security Agencies in cooperation with the BLS and the ETA.

To determine which occupations pay a living wage, the state’s median wage for each occupation was identified. Using a median wage overestimates the number of jobs that meet the living wage criteria. The median means that half the people in the occupation earn less and half earn more than that amount. Since most persons who are new to a job do not start at the median wage, this has the effect of overstating the number of living wage jobs and job openings and underestimating the overall job gap.

When state figures were not available, the national median wage for that occupation was adjusted to reflect prevailing wage rates in that state. Adjustments were made on a statewide basis, using existing state data to estimate the percent difference between state median wages and national median wages. Finally, using the living wage budgets described earlier, occupations were classified as non-living wage or as living wage for each household type. The openings were aggregated to reflect all jobs that pay a living wage for each household. In other words, since the living wage for Household 3 is greater than that for Household 1, if a high wage job pays living wage for Household 3 therefore it is also sufficient to support Household 1.

**RESOURCES**

**DATA SOURCES**


State Departments of Social, Health, Welfare, Family or Human Services, child care rate specialists

State Departments of Employment Security, Labor, or other Labor Market Information units

United States Bureau of the Census. See: http://www.census.gov/

Consumer Price Index. See: http://stats.bls.gov/cpihome.htm


OTHER JOB GAP AND RELATED STUDIES

Phone 916-444-0500; Fax 914-444-0172.

http://www.osjspm.org/jobgap.htm


1 When state level occupational data was not available, we used a regression to adjust national data to state levels. Using existing state wage data we ran the following regression for each state:

\[ \beta \ln(\text{state\_MED}) = \beta \ln(\text{US\_MED}) + \text{intercept} + \epsilon \]