



Idaho • Montana
Oregon • Washington

NORTHWEST
Job Gap
STUDY

SEARCHING FOR WORK THAT PAYS, 2001

OREGON

NORTHWEST POLICY CENTER,
NORTHWEST FEDERATION OF COMMUNITY ORGANIZATIONS, AND
OREGON ACTION

JUNE 2001

ABOUT THE NORTHWEST JOB GAP STUDY

The Northwest Job Gap Study is a joint project of the Northwest Policy Center at the University of Washington Evans 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: Idaho Community Action Network, Montana People's Action, 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.

Funding for the Northwest Job Gap Study is provided in part by a grant from the Northwest Area Foundation.

For more information contact:

Northwest Federation of
Community Organizations
1905 South Jackson Street
Seattle, WA 98144
206/568-5400 (phone)
206/568-5444 (fax)
nwfco@nwfco.org
www.nwfco.org

Northwest Policy Center
University of Washington
Evans School of Public Affairs
Box 353060
Seattle, WA 98195-3060
206/543-7900 (phone)
206/616-5769 (fax)
npcbox@u.washington.edu
<http://depts.washington.edu/npc>

TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
WHAT IS A LIVING WAGE?	11
ARE WE CREATING ENOUGH JOBS THAT PAY A LIVING WAGE?	14
WHICH INDUSTRIES PROVIDE LIVING WAGE JOB OPPORTUNITIES?	19
WHICH OCCUPATIONS PROVIDE LIVING WAGE JOB OPPORTUNITIES?	26
HOW ARE DIFFERENT DEMOGRAPHIC GROUPS FARING IN GETTING AND KEEPING LIVING WAGE JOBS?	36
IS THERE AN EDUCATION GAP IN ADDITION TO THE JOB GAP?	39
WHAT ARE POLICY OPTIONS FOR CLOSING THE GAP?	41
TECHNICAL NOTES	47

NORTHWEST JOB GAP STUDY: SEARCHING FOR WORK THAT PAYS OREGON

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 close 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 industries provide living wage job opportunities?
- Which occupations provide living wage job opportunities?
- How are different demographic groups faring in getting and keeping living wage jobs?
- Is there an education gap in addition to the job gap?
- What are policy options for closing the gap between the number of living wage jobs and people needing these jobs?

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.

Living wages are calculated on the basis of family budgets, which include basic necessities; state, local, and federal taxes; and savings. In 1996, the living wage for a single adult in Oregon was \$10.07 an hour; for a single adult with two children, the figure was \$16.36 an hour. In 1998 dollars, the figures were \$10.46 an hour for a single adult and \$16.99 an hour for a single adult with two children; and in 2000 dollars, the figures were \$11.05 an hour and \$17.95 an hour.

ARE WE CREATING ENOUGH JOBS THAT PAY A LIVING WAGE?

The Oregon economy is not creating enough living wage jobs for all those who need them, according to several indicators.

For example, 45 percent of all jobs paid less than the living wage for a single adult in 1996, and 80 percent paid less than the living wage for a single adult with two children.

Of all job openings, 49 percent paid less than the living wage for a single adult, and 81 percent paid less than the living wage for a single adult with two children.

In addition, there are more people looking for work than there are job openings that pay a living wage. For each job opening, regardless of pay, there were on average three job seekers in 1996. For job openings that pay at least the living wage for a single adult, the ratio was 5 to 1; for those that pay at least the living wage for a single adult with two children, the ratio was 14 to 1.

From 1996 to 1998, a boom time for the economy, the portion of jobs and job openings that pay a living wage remained about the same or improved slightly. The percentage of job openings that pay less than the living wage for a single adult went from 49 to 46 percent, and the percentage that pay less than the living wage for a single adult with two children went from 81 to 79 percent. Job gap ratios remained about the same. For each job opening, regardless of pay, there were on average, three job seekers. For job openings that pay at least the living wage for a single adult, the ratio was 5 to 1; for those that pay at least the living wage for a single adult with two children, the ratio was 13 to 1.

WHICH INDUSTRIES PROVIDE LIVING WAGE JOB OPPORTUNITIES?

Over half of all jobs that pay at least the living wage for a single adult in Oregon are in two industries: services and manufacturing. Services (such as educational, health, and business services) accounted for 29 percent of all jobs that pay at least the living wage for a single adult in 1996. Manufacturing accounted for another 24 percent.

The proportion of living wage jobs varies considerably by industry. For example, almost three quarters of all manufacturing jobs pay at least the living wage for a single adult, compared to less than a third of all retail jobs.

Between 1996 and 1998, the number of jobs that pay at least the living wage for a single adult grew by 10 percent, compared to an overall job growth rate of six percent. The number of jobs that pay at least the living wage for a single adult with two children grew by 13 percent. Most of the growth in living wage jobs took place in services and manufacturing.

Overall, the portion of jobs that pay at least the living wage for a single adult rose from 55 percent in 1996 to 57 percent in 1998. The portion of jobs that pay at least the living wage for a single adult with two children rose from 28 percent to 30 percent.

Almost half of the jobs that pay at least the living wage for a single adult added between 1996 and 1998 were in seven industries: business services, electronic and other electric equipment, educational services, health services, depository institutions such as banks and credit unions, construction-special trade contractors, and wholesale trade-durable goods.

Of the 25 industries that added the most jobs between 1996 and 1998, 14 had median wages at or above a living wage. However, of the 25 industries with the largest number of living wage jobs in 1996, 17 had slower than average growth.

WHICH OCCUPATIONS PROVIDE LIVING WAGE JOB OPPORTUNITIES?

The two largest groups of occupations in Oregon (both in terms of all jobs and living wage jobs) are professional, paraprofessional, and technical occupations; and production, construction, operating, maintenance, and material handling occupations. Professional, paraprofessional, and technical occupations accounted for 33 percent of all jobs that pay at least the living wage for a single adult in 1996. Production, construction, operating, maintenance, and material handling occupations accounted for another 30 percent.

Overall, 55 percent of all jobs paid at least the living wage for a single adult in 1996; 20 percent paid at least the living wage for a single adult with two children.

Between 1996 and 2006, the number of jobs that pay at least the living wage for a single adult is projected to grow by about two percent a year, equal to the projected growth rate for all jobs. For those jobs that pay at least the living wage for a single adult with two children, the projected growth rate is slightly more than two percent. For each wage level, the largest portion of growth is projected to occur in professional, paraprofessional, and technical occupations.

Of the 25 occupations projected to create the most job openings (due to growth and replacement) between 1996 and 2006, only 10 have median wages at or above the living wage for a single adult. The top six (retail salespersons, waiters and waitresses, cashiers, general office clerks, helpers and laborers, and food preparation workers) have median wages below a living wage. Together, they account for one out of every six job openings.

Of the 25 occupations projected to grow the fastest, 15 have median wages at or above the living wage for a single adult. Computer, engineering, and health related occupations dominate.

Of the 25 occupations with the largest number of living wage jobs, 13 are expected to grow at or above the rate for all occupations. About half of the 25 are either production, construction, operating, maintenance, and material handling occupations such as truck drivers, carpenters, and auto mechanics that require anywhere from little to moderate education and training; or professional, paraprofessional, and technical occupations such as registered nurses, teachers, and computer programmers/systems analysts, most of which require long term education and training.

HOW ARE DIFFERENT DEMOGRAPHIC GROUPS FARING IN GETTING AND KEEPING LIVING WAGE JOBS?

People of color and women are less likely to earn a living wage than whites and men. Thirty five percent of people of color in Oregon earn at least the living wage for a single adult, compared to 56 percent of whites. Forty one percent of women earn at least the living wage for a single adult, compared to 61 percent of men.

Single parents with children are also less likely to earn a living wage. Thirty seven percent of single adults with one child and 33 percent of single adults with two children earn the living wage for their household type.

Those with less education and training are also less likely to earn a living wage. Forty percent of those with a high school diploma or GED earn at least the living wage for a single adult, compared to 76 percent of those with a bachelor's degree or more.

People of color and women in the Northwest are more likely to be looking for work than whites and men, as are those with less education and training. In addition, job seekers of color and those without a high school diploma are more likely to be unemployed, marginally attached or discouraged workers, whereas white job seekers and those with a high school diploma or GED are more likely to be employed part time on an involuntary basis.

IS THERE AN EDUCATION GAP IN ADDITION TO THE JOB GAP?

Job seekers with limited education and training are likely to have more difficulty than others in getting living wage jobs, because most job openings that pay a living wage require moderate to long term education and training.

Sixty eight percent of job seekers have at most a high school diploma or GED, compared to 45 percent of the total labor force. Forty six percent of all job openings require only little education and training, but most of these job openings pay less than a living wage. Of the job openings that pay at least the living wage for a single adult, 70 percent require moderate to long term education and training. Of those that pay at least the living wage for a single adult with two children, the figure is 94 percent.

It is important to note, however, that there are still more job seekers than job openings at all education and training levels.

WHAT ARE POLICY OPTIONS FOR CLOSING THE GAP?

Findings from the Northwest Job Gap Study suggest a number of strategies that business, labor, government, and communities can pursue to close the job gap, promote living wage jobs, and make sure people are able to get and keep these jobs. The strategies fall into four broad categories:

- Job and wage strategies, which focus on increasing the number of jobs that pay a living wage.

Policy options include establishing job quality standards for employers and industries that receive public economic development and business assistance resources; using living wage figures to set wage policies; pursuing high road strategies aimed at creating high wage, high skill jobs; and ensuring workers a strong voice in decisions affecting them.

- Skill development strategies, which focus on providing people the education and training required of living wage jobs.

Policy options include investing in training; promoting job ladders and wage progression; expanding equal education and employment efforts; providing people moving from welfare to work training required for living wage jobs; promoting lifelong learning; promoting apprenticeship programs; and developing publicly funded jobs programs for the hard to serve.

- Linking strategies, which focus on connecting people to living wage jobs.
Policy options include creating integrated, coordinated workforce development systems connected to the regional economy and labor market; creating labor market intermediaries; creating sectoral employment development initiatives; providing low income community residents first chance at job openings with firms getting public assistance; and organizing communities to help shape company and government decisions regarding living wage jobs and low income communities.
- Safety net and cost of living strategies, which focus on making sure people's basic needs are met until they can get and keep a living wage job, and reducing costs of living—without lowering living standards.
Policy options include using living wage figures to determine eligibility for public assistance; providing food, housing, health care, transportation, and child care assistance to those earning less than a living wage; increasing access to health care; creating new and/or expanding existing safety net programs linked to employment; and developing new institutions and/or mechanisms to provide workers stable benefits.

NORTHWEST JOB GAP STUDY: SEARCHING FOR WORK THAT PAYS OREGON

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, as shown in the table on the page 12. Family budgets include basic necessities such as food, housing and utilities, transportation, health care, child care, and household, clothing, and personal items; state, local, and federal taxes; and savings.

Living wages, in 1996 dollars, are:

- For a single adult, \$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 need to total this amount).

These estimates assume full time work on a year round basis.

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:









	Higher Cost Areas	Lower Cost Areas
Single adult	\$10.36/hour	\$9.45/hour
Single adult with one child	\$13.57/hour	\$12.31/hour
Single adult with two children	\$17.13/hour	\$15.37/hour
Two adults (one working) with two children	\$14.34/hour	\$13.32/hour
Two adults (both working) with two children	\$18.75/hour	\$17.05/hour



The state's higher cost areas are Multnomah, Washington, Clackamas, Marion, Polk, Yamhill, Benton, Lane, Deschutes, and Jackson counties.

OREGON FAMILY BUDGETS (IN 1996 DOLLARS)



	Household 1	Household 2	Household 3	Household 4	Household 5
 Food	141	263	331	462	462
 Housing & Utilities	453	568	568	568	568
 Transportation	372	321	364	333	390
 Health Care	60	112	125	152	152
 Child Care	0	146	498	0	498
 Household, Clothing & Personal	222	273	300	327	340
 Savings	139	171	188	205	212
 State, Local & Federal Taxes	359	414	461	386	495
Gross Monthly Income Needed	1,745	2,267	2,835	2,433	3,117*
Gross Annual Income Needed	20,943	27,202	34,019	29,197	37,404*
Living Wage (at 2080 hrs/yr)	\$10.07	\$13.08	\$16.36	\$14.04	\$17.98*

*Total amount earned by two working adults

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

A comparison of the living wage to the state minimum wage shows that the 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 median wage is slightly greater than the living wage for a single adult (107 percent) and about two thirds of the living wage for a single adult with two children (66 percent). The living wage is about 200 percent of the federal poverty level.

UPDATE

1998

Living wages, in 1998 dollars, are:

- \$10.46 an hour or \$21,757 a year for a single adult.
- \$13.59 an hour or \$28,260 a year for a single adult with one child.
- \$16.99 an hour or \$35,342 a year for a single adult with two children.
- \$14.58 an hour or \$30,332 a year for two adults, one of whom is working, with two children.
- \$18.68 an hour or \$38,859 a year for two adults, both of whom are working, with two children.

2000

Living wages, in 2000 dollars, are:

- \$11.05 an hour or \$22,985 a year for a single adult.
- \$14.35 an hour or \$29,855 a year for a single adult with one child.
- \$17.95 an hour or \$37,336 a year for a single adult with two children.
- \$15.41 an hour or \$32,044 a year for two adults, one of whom is working, with two children.
- \$19.74 an hour or \$41,052 a year for two adults, both of whom are working, with two children.

ARE WE CREATING ENOUGH JOBS THAT PAY A LIVING WAGE?

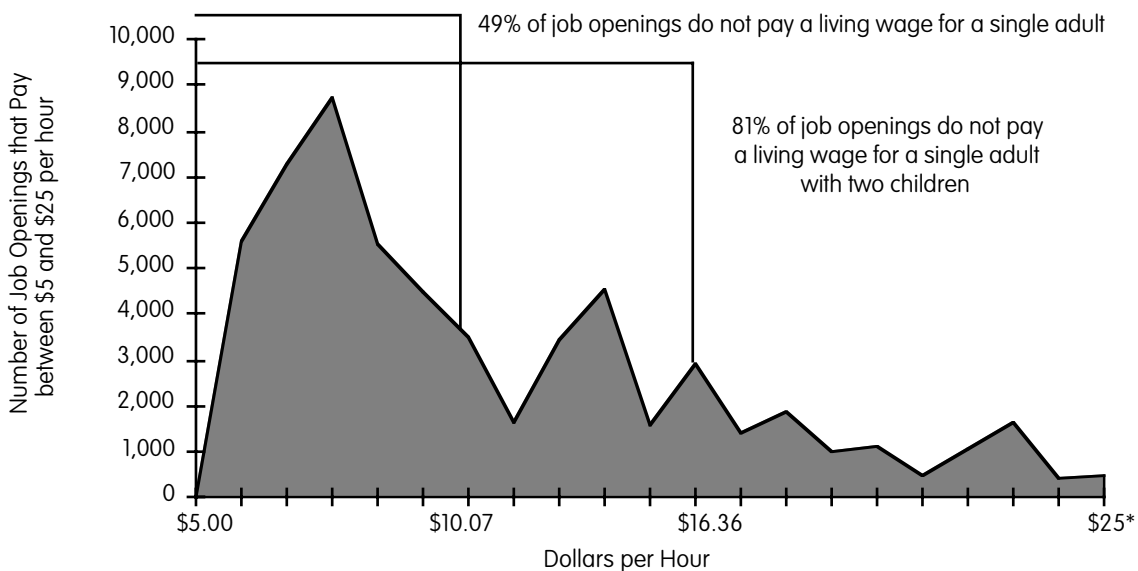
The Oregon economy is not creating enough living wage jobs for all those who need them, according to several indicators. These include the number of working age households compared to the number of jobs that pay a living wage, the percentage of jobs and job openings that pay less than a living wage,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

In 1996, there were slightly more than 1 million working age households in Oregon, but only 810,000 jobs that could support a single adult and 300,000 jobs that could support a single adult with two children.

Forty five percent of all jobs in the economy pay less than the \$10.07 an hour living wage for a single adult and 80 percent pay less than the \$16.36 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, about half (49 percent) pay less than the \$10.07 an hour living wage for a single adult, as shown in the chart below. Eighty one 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.

OREGON DISTRIBUTION OF JOB OPENINGS BY WAGE RATE, 1996



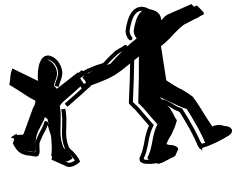
*There are few job openings in the economy that pay more than \$25 an hour. Due to lack of space they have not been included here.

In addition, there are more people looking for work than there are job openings that pay a living wage. As shown in the table below, 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 five 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. Sixty 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 25 percent.

OREGON JOB GAP RATIO, 1996



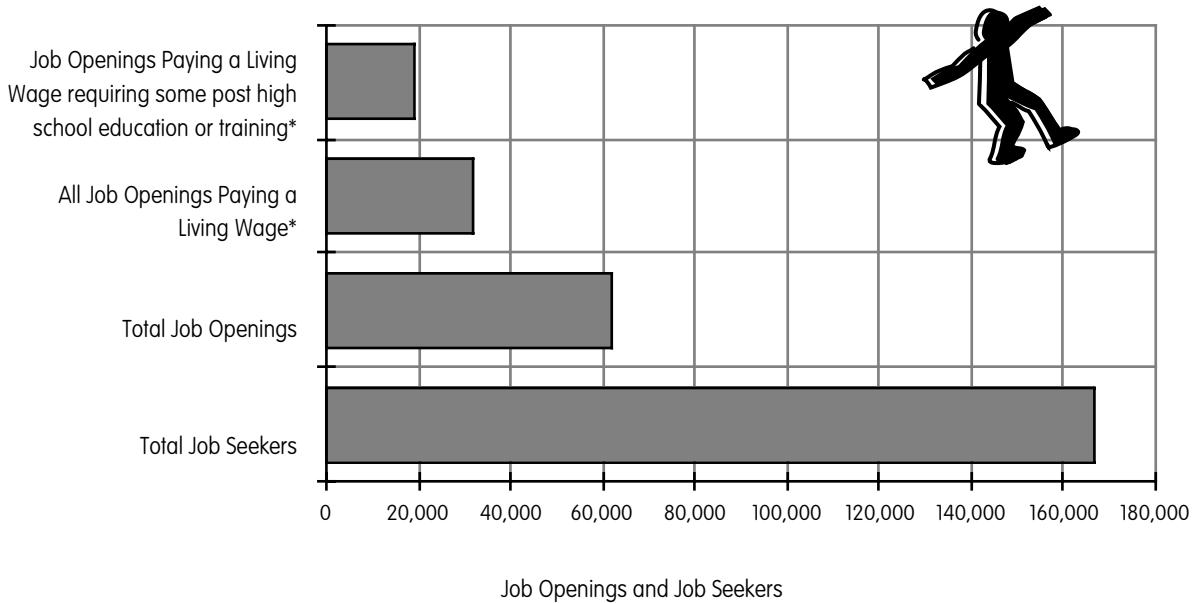
	Single Adult Living Wage \$10.07	Single Adult with Two Children Living Wage \$16.36	All Job Openings
Job Seekers	166,926	166,926	166,926
Job Openings	31,797	12,042	61,796
Job Seekers per Job Opening	5 to 1	14 to 1	3 to 1
Percent of all Job Openings paying less than a living wage	49%	81%	

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 five times as many job seekers as there are job openings that pay at least the \$10.07 an hour living wage for a single adult, not necessarily that there are five 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.

Job seekers total 166,926, which equals about 10 percent of total employment in the state. 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. About 64 percent of job seekers are unemployed.

FINDINGS FOR OREGON, 1996



*Living wage refers to a single adult household

- Involuntary part-time workers—people who work less than full time, but want to work full time. About 29 percent of job seekers are involuntary part-time workers.
- Discouraged and marginally attached workers—people who are not employed and not currently looking for work, but have looked within the past year. In the case of discouraged workers, they are not seeking work because they believe there are no jobs available or none for which they are qualified. And in the case of marginally attached workers, it is because of personal or financial reasons. About seven percent of job seekers are discouraged or marginally attached workers.

It is important to note that the unemployment rate reflects only the unemployed and, therefore, misses about 40 percent of all job seekers.

The 166,926 figure is 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 figure used in this study understates 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 650,000 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 total 61,796 and include:

- Job openings due to growth—the result of new jobs being created by new or existing firms. About 48 percent of all job openings are due to growth.
- 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. About 52 percent of job openings are due to net replacement.

Not included are job openings due to people changing employers, but remaining in the same occupation because these are largely invisible to the average job seeker. Also not included, for the same reason, 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.

As shown in the chart on page 16, 31,797 of the 61,796 job openings pay at least the \$10.07 an hour living wage for a single adult. And 19,226 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.

UPDATE

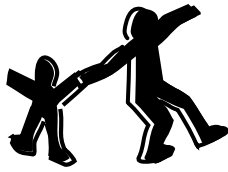
1998

From 1996 to 1998, the portion of jobs and job openings that pay a living wage remained about the same or improved slightly. The percentage of job openings that pay less than the living wage for a single adult went from 49 to 46 percent, and the percentage of job openings that pay less than the living wage for a single adult with two children went from 81 to 79 percent.

Job gap ratios also remained about the same between 1996 and 1998. As shown in the table on page 18, job gap ratios for 1998 are:

- For each job opening, regardless of pay, there are three job seekers on average, the same as in 1996.
- For each job opening that pays at least the \$10.46 an hour living wage for a single adult, there are five job seekers on average, the same as in 1996.
- For each job opening that pays at least the \$16.99 an hour living wage for a single adult with two children, there are 13 job seekers on average, compared to the 14 to 1 ratio in 1996.

OREGON JOB GAP RATIO, 1998

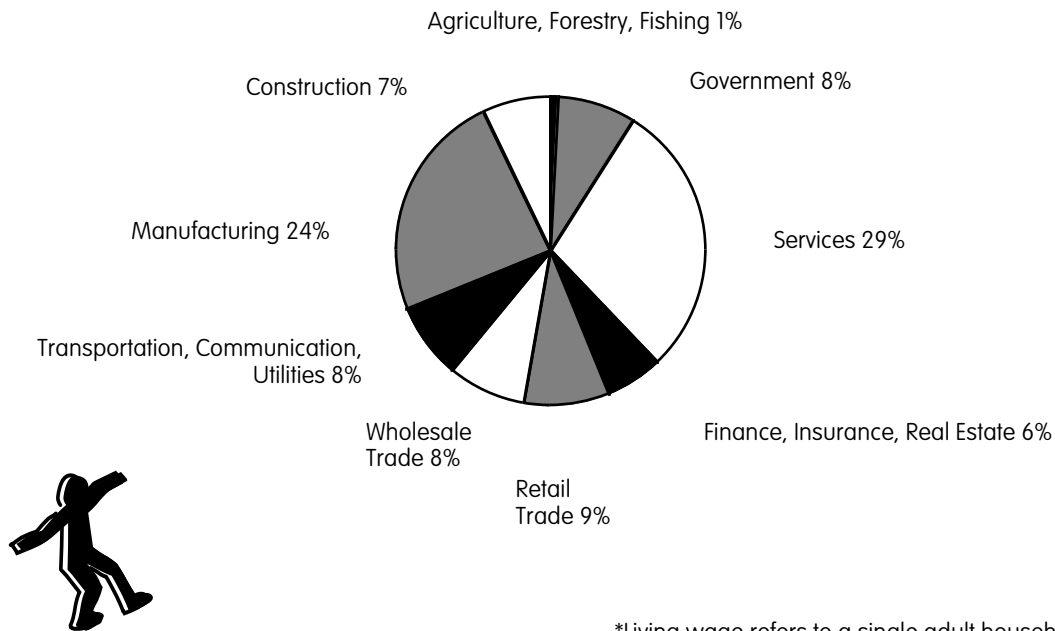


	Single Adult Living Wage \$10.46	Single Adult with Two Children Living Wage \$16.99	All Job Openings
Job Seekers	175,218	175,218	175,218
Job Openings	33,175	13,265	61,895
Job Seekers per Job Opening	5 to 1	13 to 1	3 to 1
Percent of all Job Openings paying less than a living wage	46%	79%	

WHICH INDUSTRIES PROVIDE LIVING WAGE JOB OPPORTUNITIES?

Over half of all jobs that pay at least the living wage for a single adult in Oregon are in two industries: services and manufacturing. Services—such as educational, health, and business services—accounted for 33 percent of all jobs in the state in 1996 and 29 percent of all jobs that pay at least the living wage for a single adult, as shown in the chart below and table on page 21. The difference between the two figures is due to only about half of all service industry jobs paying a living wage. Manufacturing accounted for 18 percent of all jobs, but 24 percent of all jobs that pay at least the living wage for a single adult. The difference is due to almost three quarters of all manufacturing jobs paying a living wage.

OREGON LIVING WAGE JOBS BY INDUSTRY, 1996*



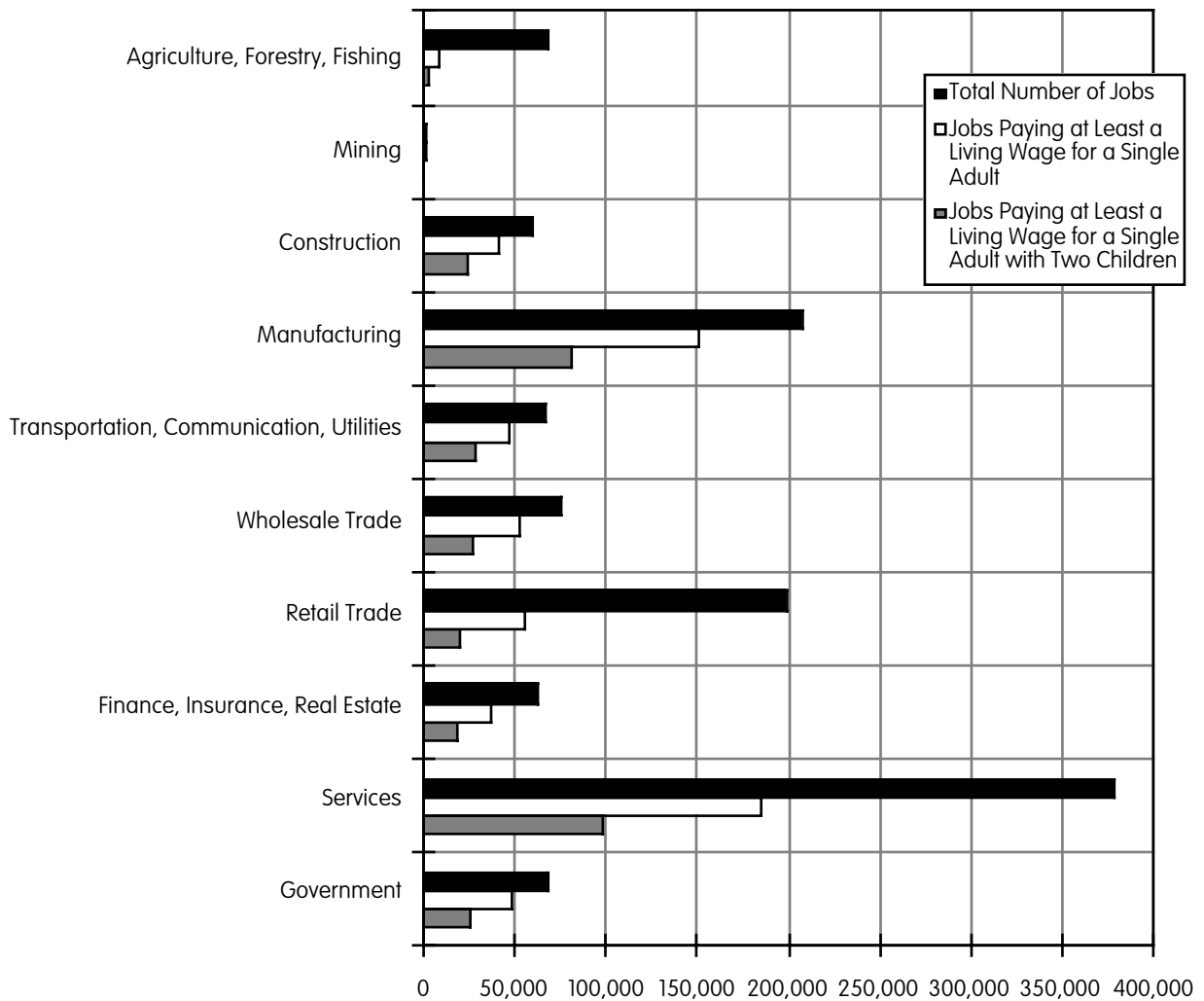
*Living wage refers to a single adult household

Retail trade accounted for another nine percent of all jobs that pay at least the living wage for a single adult, followed by transportation, communication, and utilities, eight percent; wholesale trade, eight percent; government, eight percent; construction, seven percent; finance, insurance, and real estate, six percent; and agriculture, forestry, and fishing, one percent.

The industry distribution of jobs that pay at least the living wage for a single adult with two children is roughly the same.

The proportion of living wage jobs varies by industry, as shown in the chart below and table on page 21. Mining had the highest portion of jobs that pay at least the living wage for a single adult, 75 percent; retail trade had the lowest, 28 percent. Transportation, communication, and utilities had the highest portion of jobs that pay at least the living wage for a single adult with two children, 44 percent; retail trade had the lowest, 10 percent.

OREGON LIVING WAGE JOBS BY INDUSTRY, 1996



Median wages ranged from a high of \$31,261 a year in transportation, communication, and utilities to a low of \$14,154 a year in retail trade. The living wage for a single adult in 1996 was \$20,943 a year; for a single adult with two children, the figure was \$34,019 a year.

Between 1996 and 1998, the number of jobs that pay at least the living wage for a single adult grew by about 63,000, from 627,000 to 690,000, or 10 percent. This compares to an overall job growth rate of six percent. Services accounted for the largest portion of the growth in jobs that pay at least the living wage for a single adult, 38 percent, followed by manufacturing, 20 percent; finance, insurance, and real estate, 13 percent; retail trade, nine percent; construction, seven percent; wholesale trade, five percent; government, four percent; agriculture, forestry, and fishing, two percent; and transportation, communication, and utilities, two percent.

During the same time period, the number of jobs that pay at least the living wage for a single adult with two children grew by about 40,000, or 13 percent. Over 60 percent of this growth took place in services and manufacturing.

OREGON LIVING WAGE JOBS BY INDUSTRY, 1996*

	Total Number of Jobs During 2nd Qtr.	Percent of Total Jobs	Median Wage	Percent of Jobs Above Living Wage	Total Living Wage Jobs
Agriculture, Forestry, Fishing	24,982	2%	\$16,063	31%	1%
Mining	1,247	0%	\$26,659	75%	0%
Construction	59,947	5%	\$28,631	69%	7%
Manufacturing	207,772	18%	\$29,821	73%	24%
Transportation, Communication, Utilities	66,210	6%	\$31,261	72%	8%
Wholesale Trade	75,714	7%	\$27,669	69%	8%
Retail Trade	199,287	17%	\$14,154	28%	9%
Finance, Insurance, Real Estate	63,200	6%	\$23,607	59%	6%
Services	378,900	33%	\$21,084	49%	29%
Government	68,390	6%	\$28,648	72%	8%
Total	1,145,649	100%		55%	100%



* Living wage refers to a single adult household

Overall, the portion of jobs that pay at least the living wage for a single adult rose from 55 percent in 1996 to 57 percent in 1998. The portion of jobs that pay at least the living wage for a single adult with two children rose from 28 percent to 30 percent.

A more detailed look at industries shows that almost half of the 25 industries that added the most jobs between 1996 and 1998 were in services and manufacturing, as shown in the table on page 23. Of the 25, seven were in services—business services, educational services, membership organizations, health services, social services, amusement and recreation services, and engineering and management services. Five were in manufacturing—electronic and other electric equipment, transportation equipment, instrument and related products, primary metals, and fabricated metal products.

Only three of the seven service industries had median wages at or above the living wage for a single adult, which was \$21,757 a year in 1998. This illustrates the wide range of industries included in services, from relatively low wage industries such as amusement and recreation services, with a median wage of \$13,967 a year, to relatively high wage industries such as engineering and management services, with a median wage of \$33,073 a year. None of the service industries had median wages at or above the living wage for a single adult with two children, which was \$35,342 a year in 1998. By contrast, all five manufacturing industries had median wages at or above the living wage for a single adult. Three had median wages at or above the living wage for a single adult with two children.

Also among the 25 industries adding the most jobs between 1996 and 1998 were three in finance, insurance, and real estate; three in retail trade; two in construction; two in government; two in agriculture, forestry, and fishing; and one in wholesale trade.

Overall, 14 of the 25 industries had median wages at or above the living wage for a single adult. Most of the 11 that did not were in services and retail trade. Only three industries—all in manufacturing—had median wages at or above the living wage for a single adult with two children.

The proportion of living wage jobs varies by industry. Primary metals had the highest portion of jobs that pay at least the living wage for a single adult, 91 percent; eating and drinking places had the lowest, 12 percent. Electronic and other electric equipment had the highest portion of jobs that pay at least the living wage for a single adult with two children, 62 percent; eating and drinking places had the lowest, three percent.

Almost half of the 63,000 jobs that pay at least the living wage for a single adult added between 1996 and 1998 were in seven industries: business services, electronic and other electric equipment, educational services, health services, depository institutions, construction-special trade contractors, and wholesale trade-durable goods. Six of the seven had median wages at or above the living wage for a single adult.

TOP 25 GROWTH INDUSTRIES IN OREGON, 1996 – 1998

	Number of Jobs		Numerical Change	Median Wage (1998)	Percent of Jobs Above Single Adult Living Wage (1998)	Percent of Jobs Above Single Adult with Two Children Living Wage (1998)
	2nd Qtr 1996	2nd Qtr 1998				
Business Services	56,362	64,565	8,203	\$20,003	46%	25%
Depository Institutions	14,644	20,246	5,602	\$24,336	58%	27%
Electronic & Other Electric Equipment	29,087	34,111	5,024	\$43,584	86%	62%
Educational Services	95,082	100,064	4,982	\$29,231	64%	41%
Membership Organizations	16,781	21,031	4,250	\$12,649	31%	12%
Special Trade Contractors	35,849	38,963	3,114	\$30,600	70%	41%
Health Services	91,943	94,908	2,965	\$24,760	58%	30%
Social Services	31,695	34,634	2,939	\$16,722	33%	10%
Amusement & Recreation Services	13,613	16,365	2,752	\$13,967	29%	10%
Transportation Equipment	14,100	16,355	2,255	\$33,217	79%	46%
Admin of Human Resource Programs (Public)	12,642	14,765	2,123	\$15,350	39%	19%
Wholesale Trade — Durable Goods	42,999	45,093	2,094	\$31,209	75%	41%
Nondepository Institutions	4,822	6,711	1,889	\$33,153	80%	46%
Agricultural Services	7,687	9,295	1,608	\$17,951	37%	14%
Eating & Drinking Places	64,977	66,520	1,543	\$10,493	12%	3%
Food Stores	29,876	31,355	1,479	\$16,017	35%	8%
General Building Contractors	12,832	14,238	1,406	\$29,252	66%	38%
Engineering & Management Services	21,114	22,354	1,240	\$33,073	73%	46%
Instrument & Related Products	10,934	12,103	1,169	\$40,280	88%	59%
Agricultural Production — Livestock	12,878	14,016	1,138	\$16,573	28%	8%
Miscellaneous Retail	22,276	23,363	1,087	\$14,138	27%	10%
Justice, Public Order & Safety	7,790	8,861	1,071	\$35,202	85%	49%
Primary Metal Industries	10,427	11,460	1,033	\$39,281	91%	61%
Fabricated Metal Products	11,806	12,788	982	\$27,443	68%	30%
Real Estate	17,399	18,240	841	\$18,004	41%	18%
All Industries	1,145,649	1,214,413	68,764		57%	30%



Manufacturing and services also dominated the 25 industries with the largest number of jobs that pay at least the living wage for a single adult, as shown in the table on page 25. Of the 25, eight were in manufacturing—lumber and wood products, electronic and other electric equipment, industrial machinery and equipment, food and kindred products, transportation equipment, primary metals, instrument and related products, and printing and publishing. Five were in services—educational services, health services, business services, engineering and management services, and social services.

Also among the 25 industries with the largest number of jobs that pay at least the living wage for a single adult were three in retail trade, three in transportation, communication, and utilities; two in construction; two in wholesale trade; one in government; and one in finance, insurance, and real estate.

Most of the 25 had slower than average growth. Manufacturing industries were among both the fastest and slowest growing industries. Four manufacturing industries registered double digit growth (electronic and other electric equipment, transportation equipment, primary metals, and instrument and related products), while two registered negative growth (lumber and wood products, and food and kindred products).

Most of the 25 industries with the largest number of jobs that pay a living wage for a single adult with two children were the same as those with the largest number of jobs that pay a living wage for a single adult. However, there were a couple more manufacturing, construction, and transportation, communication, and utilities industries; and a couple less service and retail trade industries.

Most of the 25 had slower than average growth. Those with faster than average growth were mostly manufacturing and construction; one was in services (business services).



OREGON INDUSTRIES WITH LARGEST NUMBER OF LIVING WAGE JOBS, 1996*

	Total Number of Jobs During 2nd Qtr (1996)	Number of Living Wage Jobs	Percent of Jobs Above Single Adult Living Wage	Percent of Jobs Above Single Adult with Two Children Living Wage	Total Number of Jobs During 2nd Qtr (1998)	Percent Change in Jobs
Educational Services	95,082	59,337	62%	40%	100,064	5%
Health Services	91,943	51,560	56%	28%	94,908	3%
Lumber & Wood Products	45,393	35,082	77%	36%	42,871	-6%
Wholesale Trade — Durable Goods	42,999	31,258	73%	38%	45,093	5%
General Government	38,670	29,799	77%	43%	38,894	1%
Special Trade Contractors	35,849	23,997	67%	39%	38,963	9%
Electronic & Other Electric Equipment	29,087	23,962	82%	56%	34,111	17%
Business Services	56,362	23,086	41%	21%	64,565	15%
Wholesale Trade — Nondurable Goods	32,715	20,746	63%	33%	32,835	0%
Engineering & Management Services	21,114	15,181	72%	44%	22,354	6%
Trucking & Warehousing	20,746	15,105	73%	35%	21,389	3%
Industrial Machinery & Equipment	18,326	14,135	77%	43%	18,952	3%
Auto Dealers & Service Stations	24,876	13,011	52%	26%	25,648	3%
Insurance Carriers	14,792	12,109	82%	40%	14,817	0%
Food & Kindred Products	20,943	10,721	51%	20%	20,596	-2%
Transportation Equipment	14,100	10,478	74%	42%	16,355	16%
General Merchandise Stores	29,536	10,215	35%	13%	29,999	2%
Food Stores	29,876	10,015	34%	8%	31,355	5%
Electric, Gas & Sanitary Services	11,044	9,848	89%	64%	11,139	1%
Social Services	31,695	9,753	31%	9%	34,634	9%
Primary Metal Industries	10,427	9,393	90%	56%	11,460	10%
Heavy Construction	11,266	9,226	82%	45%	11,698	4%
Instrument & Related Products	10,934	9,170	84%	53%	12,103	11%
Communication	11,229	9,085	81%	55%	11,237	0%
Printing & Publishing	14,181	8,533	60%	30%	14,192	0%
All Industries	1,145,649	627,431	55%	28%	1,214,413	6%

* Living wage refers to a single adult household

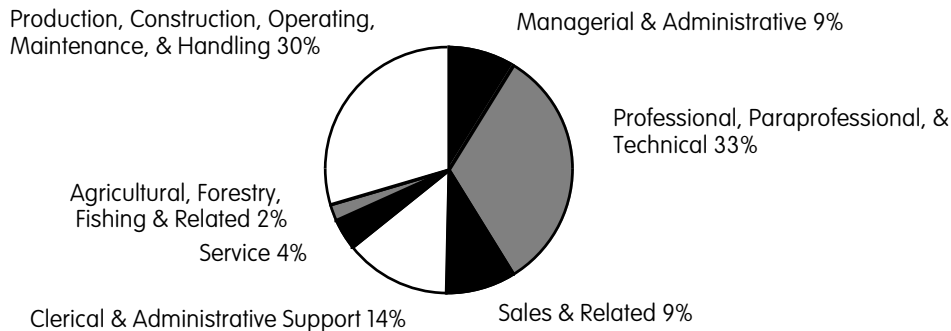
WHICH OCCUPATIONS PROVIDE LIVING WAGE JOB OPPORTUNITIES?

Production, construction, operating, maintenance, and material handling occupations, and professional, paraprofessional, and technical occupations are the two largest groups of occupations in Oregon, both in terms of all jobs and living wage jobs.

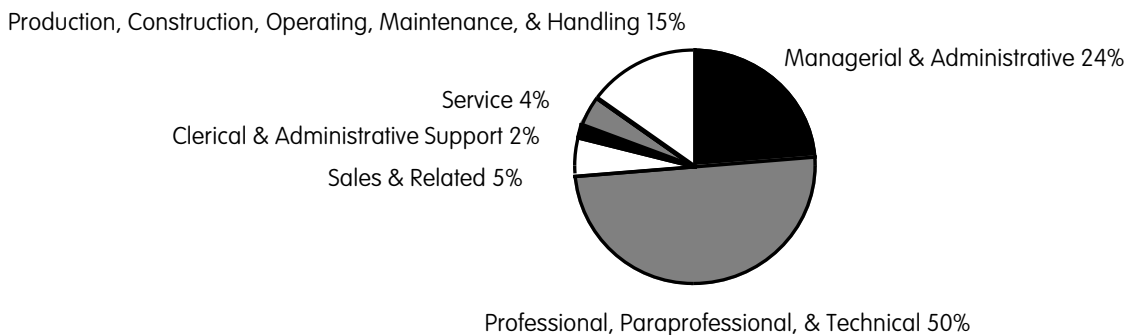
Production, construction, operating, maintenance, and material handling occupations accounted for over 387,000 jobs in 1996, equal to 26 percent of all jobs and 30 percent of jobs that pay at least the living wage for a single adult, as shown in the chart below and table on page 29. The difference between the two figures is due to over 60 percent of all production, construction, operating, maintenance, and material handling jobs paying a living wage. The next largest group of occupations was professional, paraprofessional, and technical occupations, which accounted for

OREGON LIVING WAGE JOBS BY OCCUPATION, 1996

SINGLE ADULT LIVING WAGE JOBS



SINGLE ADULT WITH TWO CHILDREN LIVING WAGE JOBS



over 300,000 jobs, equal to 21 percent of all jobs and 33 percent of all jobs that pay at least the living wage for a single adult. The difference is due to almost 90 percent of all professional, paraprofessional, and technical jobs paying a living wage.

By contrast, service occupations—which include protective service, food service, health assisting service, cleaning and building service, and personal service occupations—accounted for over 230,000 jobs or 16 percent of all jobs. But because only 15 percent of service occupations pay a living wage, they made up only four percent of all living wage jobs.

Clerical and administrative support occupations accounted for another 14 percent of jobs that pay at least the living wage for a single adult, followed by managerial and administrative occupations, nine percent; sales and related occupations, nine percent; and agriculture, forestry, fishing, and related occupations, two percent.

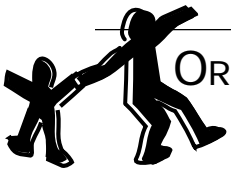
The occupational distribution of jobs that pay at least the living wage for a single adult with two children shifts toward professional, paraprofessional, and technical occupations, and managerial and administrative occupations. These two groups accounted for about 75 percent of jobs that pay at least the living wage for a single adult with two children, as shown in the chart on page 26. Production, construction, operating, maintenance, and material handling occupations accounted for another 15 percent, followed by sales and related occupations, five percent; service occupations, four percent; and clerical and administrative support occupations, two percent.

The proportion of living wage jobs varies by occupational group, as shown in the chart on page 28 and table on page 29. Managerial and administrative occupations had the highest portion of jobs that pay at least the living wage for a single adult, 94 percent; service occupations had the lowest, 15 percent. Managerial and administrative occupations also had the highest portion of jobs that pay at least the living wage for a single adult with two children, 90 percent; clerical and administrative support occupations, and agriculture, forestry, fishing, and related occupations had the lowest, three percent.

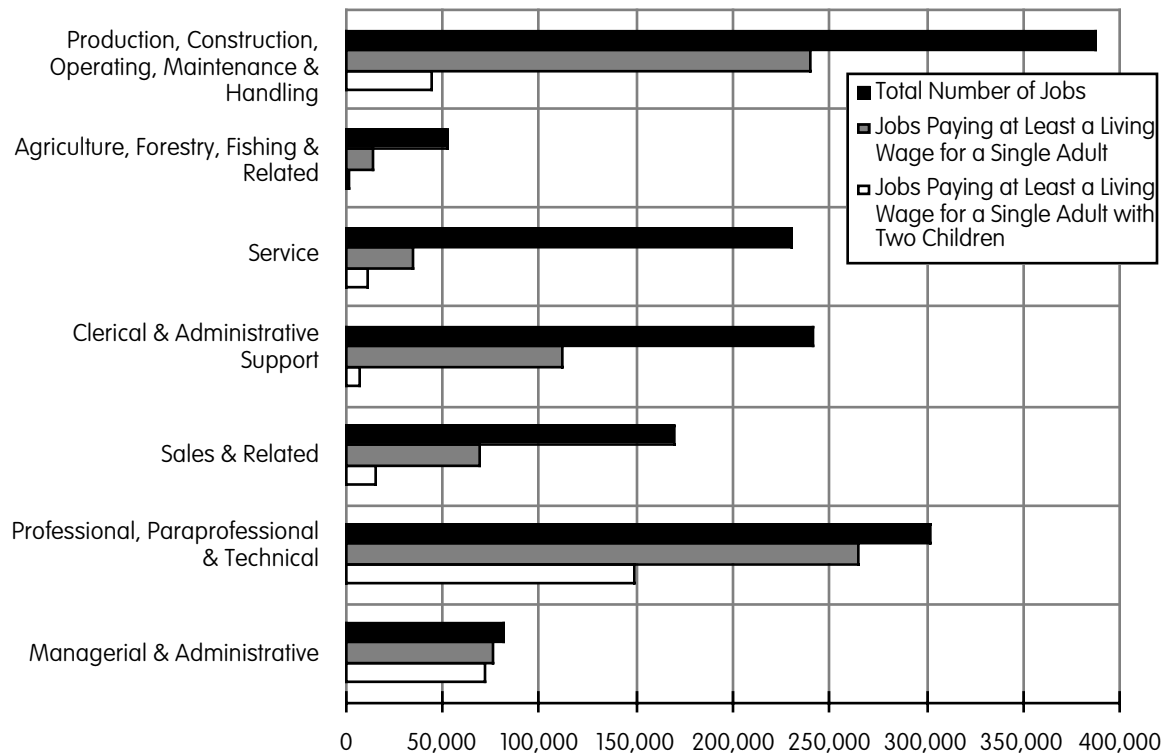
Median wages ranged from a high of \$24.31 an hour for managerial and administrative occupations to \$7.53 an hour for service occupations.

Overall, 55 percent of all jobs paid at least the living wage for a single adult in 1996; 20 percent paid at least the living wage for a single adult with two children.





OREGON LIVING WAGE JOBS BY OCCUPATION, 1996



Between 1996 and 2006, the number of jobs that pay at least the living wage for a single adult is projected to grow by about two percent a year, equal to the projected growth rate for all jobs. Professional, paraprofessional, and technical occupations are projected to account for the largest portion of the growth in jobs that pay at least the living wage for a single adult, 42 percent. This is followed by production, construction, operating, maintenance, and material handling occupations, 28 percent; sales and related occupations, nine percent; managerial and administrative occupations, eight percent; clerical and administrative support occupations, eight percent; service occupations, five percent; and agriculture, forestry, fishing, and related occupations, less than one percent.

During the same time period, the number of jobs that pay at least the living wage for a single adult with two children is projected to grow by slightly more than two percent a year. Almost two-thirds of this growth is projected to take place in professional, paraprofessional, and technical occupations.

OREGON LIVING WAGE JOBS BY OCCUPATION, 1996*



	Total Number of Jobs	Percent of Total Jobs	Median Wage (1996)	Percent of Jobs Above Living Wage	Percent of Total Living Wage Jobs
Managerial & Administrative	81,044	6%	\$24.31	94%	9%
Professional, Paraprofessional & Technical	301,759	21%	\$17.38	88%	33%
Sales & Related	170,362	12%	\$9.62	41%	9%
Clerical & Administrative Support	240,818	16%	\$10.69	47%	14%
Service	230,911	16%	\$7.53	15%	4%
Agriculture, Forestry, Fishing & Related	52,810	4%	\$9.38	27%	2%
Production, Construction, Operating, Maintenance & Material Handling	387,576	26%	\$11.69	62%	30%
Total	1,465,280	100%		55%	100%

* Living wage refers to a single adult household

A more detailed look at occupations shows that only 10 of the 25 occupations projected to have the most job openings (due to both growth and replacement needs) between 1996 and 2006 have median wages at or above the living wage for a single adult, as shown in the table on page 31. The top six occupations all have median wages below the living wage for a single adult. Together, the six—retail salespersons, waiters and waitresses, cashiers, general office clerks, helpers and laborers, and food preparation workers—account for over 10,000 job openings a year or one out of every six job openings.

Among the 10 occupations with median wages at or above the living wage for a single adult are three professional, paraprofessional, and technical occupations; two clerical and administrative support occupations; two production, construction, operating, maintenance, and material handling occupations; two sales and related occupations; and one managerial and administrative occupation.

The 10 require varying amounts of education and training, ranging from little to long term. Specific education and training categories are:

- Little—less than a month of on the job training.
- Short term—up to a year of on the job, employer provided, and/or community college training.
- Moderate—anywhere from more than a year to less than four years of education and training, including on the job, employer provided, college, and apprenticeship training.
- Long term—a four year bachelor's degree or more.

By contrast, almost all of the 15 occupations with the most job openings that have median wages below a living wage require little education and training. Among the 15 are five service occupations; three clerical and administrative support occupations; three production, construction, operating, maintenance, and material handling occupations; two sales and related occupations; and two agriculture, forestry, fishing, and related occupations.

Only two of the 25 occupations projected to have the most job openings between 1996 and 2006 have median wages at or above the living wage for a single adult with two children.



OREGON JOB OPENINGS BY OCCUPATION, 1996-2006

	Annual Job Openings	Median Wage (1996)	Education & Training
Salespersons, Retail	2,819	\$7.64	Little
Waiters & Waitresses	1,938	\$5.71	Little
Cashiers	1,696	\$7.14	Little
General Office Clerks	1,573	\$9.38	Little
Other Helpers & Laborers	1,144	\$8.74	Little
Food Preparation Workers	1,050	\$6.54	Little
First Line Supervisors & Mgrs, Clerical & Administrative	986	\$14.28	Moderate
Truck Drivers, Heavy or Tractor Trailer	939	\$13.01	Little
Food Prep & Service Workers	850	\$5.86	Little
First Line Supervisors & Mgrs, Sales & Related	790	\$14.07	Moderate
Electronic Semiconductor Processors	787	\$11.11	Short Term
Cooks, Restaurant	706	\$7.49	Moderate
Registered Nurses	697	\$18.08	Moderate
General Managers & Executives	665	\$27.48	Long Term
Other Freight, Stock, & Material Handlers	661	\$8.29	Little
Sales Representatives	643	\$15.95	Short Term
Other Professional, Paraprofessional, & Technical Workers	635	\$14.72	Long Term
Janitors & Cleaners	632	\$7.36	Little
Teachers, Elementary School	599	\$16.04	Long Term
Receptionists & Info Clerks	599	\$8.82	Little
Bookkeeping, Accounting & Auditing Clerks	593	\$10.69	Short Term
Truck Drivers, Light	579	\$9.06	Little
Secretaries	560	\$10.06	Moderate
Farmworkers	501	\$5.64	Little
Laborers, Landscaping & Groundskeeping	490	\$7.89	Little

Most of the fastest growing occupations—15 of 25—have median wages at or above the living wage for a single adult, as shown in the table on page 33. Among the 15 are nine professional, paraprofessional, and technical occupations, three service occupations; one production, construction, operating, maintenance, and material handling occupation; one clerical and administrative support occupation; and one managerial and administrative occupation. In terms of education and training, eight of the 15 require long term education and training. Four require moderate, and three require short term education and training.

Computer, engineering, and health related occupations dominate the 15.

Among the 10 fastest growing occupations with median wages below the living wage for a single adult are four service occupations; three professional, paraprofessional, and technical occupations; one production, construction, operating, maintenance, and material handling occupation; one managerial and administrative occupation; and one sales and related occupation. In terms of education and training, five require little, three require long term, one requires short term, and another requires moderate education and training.

Ten of the fastest growing occupations also have median wages at or above the living wage for a single adult with two children. Seven of the 10 are professional, paraprofessional, and technical occupations. All 10 require long term or moderate education and training.



FASTEST GROWING OCCUPATIONS IN OREGON, 1996-2006*

	Number of Jobs		Annual Growth Rate	Median Wage (1996)	Education & Training
	1996	2006			
Electronic Semiconductor Processors	4,750	11,473	14%	\$11.11	Short Term
Home Health Aides	1,888	4,052	11%	\$7.70	Little
Other Computer Scientists	3,765	7,794	11%	\$18.04	Long Term
Personal Health Care Aides	3,227	6,065	9%	\$7.02	Little
Human Service Workers	2,072	3,845	9%	\$9.98	Short Term
Industrial Engineers	1,301	2,095	6%	\$23.39	Long Term
Computer Support Specialists	1,629	2,605	6%	\$13.65	Long Term
Computer Engineers	5,156	8,243	6%	\$31.79	Long Term
Electrical & Electronic Engineering Techs	3,058	4,850	6%	\$14.36	Moderate
Other Health Service Workers	1,947	3,080	6%	\$9.57	Little
Child Care Workers	4,240	6,546	5%	\$6.53	Little
Residential Counselors	3,058	4,582	5%	\$8.02	Long Term
Other Hand Workers	2,823	4,135	5%	\$7.96	Little
Medical Assistants	2,815	4,098	5%	\$10.48	Short Term
Mechanical Engineers	2,486	3,573	4%	\$23.41	Long Term
Teachers, Preschool	4,178	5,985	4%	\$7.74	Long Term
Property & Real Estate Managers & Administrators	5,013	7,182	4%	\$7.86	Long Term
Dental Hygienists	2,387	3,418	4%	\$30.82	Moderate
Insurance Adjusters, Examiners & Investigators	2,601	3,690	4%	\$17.43	Moderate
Travel Agents	1,939	2,747	4%	\$9.81	Moderate
Construction Managers	3,570	5,024	4%	\$27.18	Long Term
Dental Assistants	3,238	4,543	4%	\$11.95	Short Term
Correction Officers & Jailers	2,723	3,748	4%	\$16.95	Moderate
Electrical & Electronic Engineers	4,740	6,529	4%	\$23.39	Long Term
Computer Programmers/Systems Analysts	8,792	12,036	4%	\$23.00	Long Term
All Occupations	1,465,280	1,759,756	2%		

*Excludes those occupations that account for less than 0.25% of all job openings

About half of the 25 occupations with the largest number of living wage jobs are production, construction, operating, maintenance, and material handling occupations and professional, paraprofessional, and technical occupations, as shown in the table on page 35.

Most of the production, construction, operating, maintenance, and material handling occupations—truck drivers, carpenters, maintenance repairers, industrial truck and tractor operators, electricians, first line supervisors, and auto mechanics—are projected to grow at or above the rate for all occupations. These jobs require anywhere from little to moderate education and training. Half of the professional, paraprofessional, and technical occupations—registered nurses, elementary school teachers, other professional, paraprofessional, and technical workers, accountants and auditors, computer programmers/systems analysts, and social workers—are projected to grow at or above the rate for all occupations. Most require long term education and training.

Overall, about half of the 25 occupations with the largest number of living wage jobs are expected to grow at or above the rate for all occupations. Over three quarters are expected to have 48 percent or more of job openings result from growth, equal to or exceeding the average for all occupations. About three quarters require moderate to long term education and training.

Eight of the 25 occupations with the largest number of living wage jobs also have median wages at or above the living wage for a single adult with two children. Almost all are managerial and administrative occupations, and professional, paraprofessional, and technical occupations. Most require long term education and training.



OCCUPATIONS WITH LARGEST NUMBER OF LIVING WAGE JOBS IN OREGON, 1996

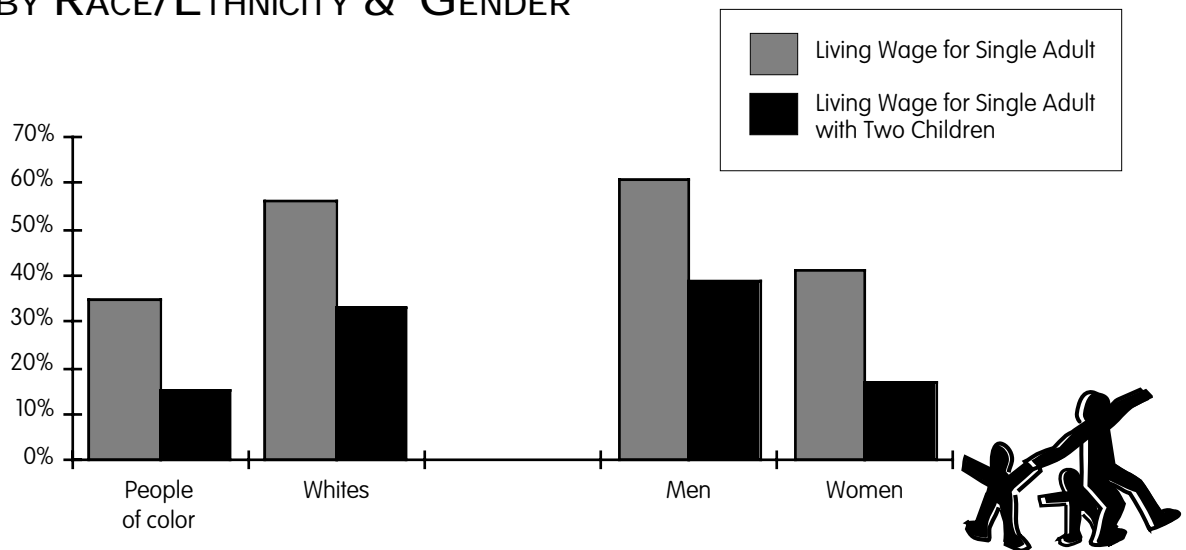
	Number of Jobs	Number of Annual Job Openings	Percent of Job Openings due to Growth/Replacement	Median Wage	Education & Training
Bookkeeping, Accounting & Auditing Clerks	28,049	593	14/86	\$10.69	Short Term
General Managers & Execs	27,321	665	38/62	\$27.48	Long Term
Truck Drivers, Heavy or Tractor-Trailer	24,563	939	56/44	\$13.01	Little
Registered Nurses	23,079	697	54/46	\$18.08	Moderate
First Line Supervisors & Managers, Sales & Related	18,363	790	62/38	\$14.07	Moderate
Teachers, Elementary School	17,674	599	49/51	\$16.04	Long Term
Sales Representatives	15,915	643	46/54	\$15.95	Short Term
First Line Supervisors & Managers, Clerical & Administrative	15,655	986	30/70	\$14.28	Moderate
Other Professional, Paraprofessional & Technical	12,637	635	63/37	\$14.72	Long Term
Carpenters	11,654	487	49/51	\$14.16	Moderate
Maintenance Repairers, General Utility	11,307	449	60/40	\$10.18	Little
Shipping, Receiving & Traffic Clerks	11,041	411	66/34	\$10.19	Little
Other Service Supervisors	9,005	357	58/42	\$10.37	Moderate
Accountants & Auditors	8,902	357	65/35	\$17.17	Long Term
Computer Programmers/Systems Analysts	8,792	381	85/15	\$23.00	Long Term
Industrial Truck & Tractor Operators	8,748	253	30/70	\$11.47	Little
Electricians	8,588	333	50/50	\$21.61	Moderate
Sales Agents, Real Estate	8,546	263	48/52	\$12.69	Moderate
First Line Supervisors & Managers, Production & Operating	8,164	347	32/68	\$16.01	Moderate
Financial Managers	7,861	248	54/46	\$23.51	Long Term
Other Clerical & Admin Support Workers	7,012	99	58/42	\$10.60	Little
Auto Mechanics	6,744	379	48/52	\$13.49	Moderate
Other Managers & Administrators	6,263	220	56/44	\$22.69	Long Term
Social Workers	6,223	176	67/33	\$14.46	Long Term
Marketing, Advertising & Public Relations Managers	5,612	275	64/36	\$24.95	Long Term
All Occupations	1,465,280	61,780	48/52		

HOW ARE DIFFERENT DEMOGRAPHIC GROUPS FARING IN GETTING AND KEEPING LIVING WAGE JOBS?

People of color and women are less likely to earn a living wage than whites and men. Thirty five percent of people of color in Oregon earn at least the living wage for a single adult, compared to 56 percent of whites, as shown in the chart below. Only 15 percent of people of color earn at least the living wage for a single adult with two children, compared to 33 percent of whites.

Forty one percent of women earn at least the living wage for a single adult, compared to 61 percent of men. Only 17 percent of women earn at least the living wage for a single adult with two children, compared to 39 percent of men.

OREGONIANS EARNING LIVING WAGE BY RACE/ETHNICITY & GENDER



Single adults with children are also less likely to earn a living wage. Thirty seven percent of single adults with one child and 33 percent of single adults with two children earn the living wage for their household type. This compares to 41 percent of single adults and 84 percent of two adults with two children.

Those with less education and training are also less likely to earn a living wage. Forty percent of those with a high school diploma or GED earn at least the living wage for a single adult, as shown in the table on page 37. By contrast, 76 percent of those with a bachelor's degree or more earn at least the living wage for a single adult. Eighteen percent of those with a high school diploma or GED earn at least the living wage for a single adult with two children, compared to 55 percent of those with a bachelor's degree or more.

OREGONIANS EARNING LIVING WAGE BY EDUCATION & TRAINING

	Percent Earning At or Above Living Wage for Single Adult	Percent Earning At or Above Living Wage for Single Adult with Two Children
No High School Diploma	22%	6%
High School Diploma/GED	40%	18%
Some College & Associate Degree	59%	33%
Bachelor's Degree or More	76%	55%
Overall	53%	30%

Earning a living wage also appears related to age and years in the labor force. Only 20 percent of 20 to 24 year olds earn at least the living wage for a single adult, as shown in the chart below. This figure rises to 49 percent of 25 to 34 year olds and peaks at 64 percent of 35 to 44 year olds and 45 to 54 year olds. It then falls to 57 percent of 55 to 64 year olds and 35 percent of those 65 and older. The portion of those earning at least the living wage for a single adult with two children peaks at 43 percent of 45 to 54 year olds.

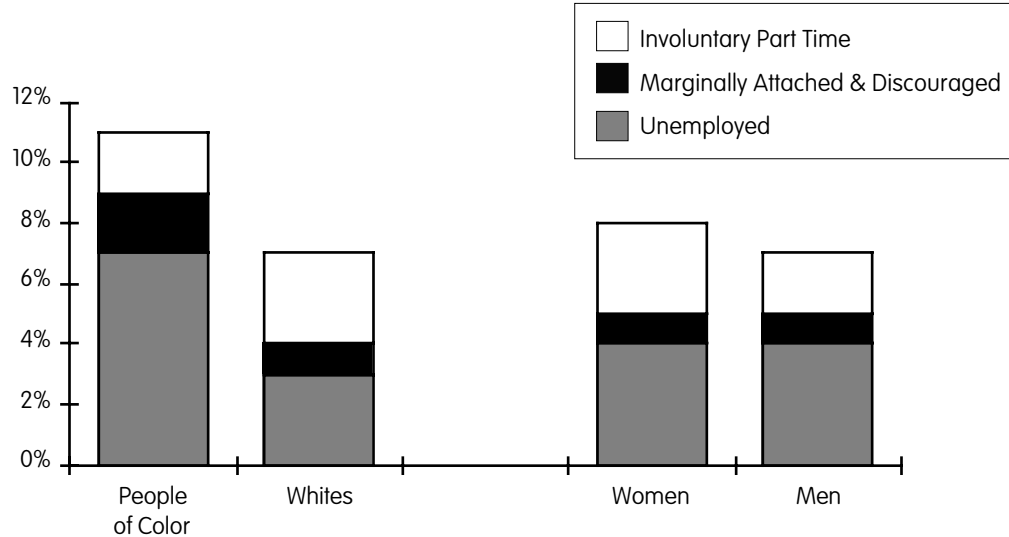
OREGONIANS EARNING LIVING WAGE BY AGE



People of color and women are also more likely to be looking for work than whites and men. Eleven percent of people of color in the Northwest are looking for work, compared to seven percent of whites. Counted among job seekers are the

unemployed, marginally attached and discouraged workers, and those who are working part time on an involuntary basis. As shown in the chart below, people of color who are job seekers are more likely to be unemployed and marginally attached and discouraged workers, while whites are more likely to be employed part time on an involuntary basis.

NORTHWEST JOB SEEKER STATUS BY RACE/ETHNICITY & GENDER



Results are reported for the Northwest because the number of job seekers by status and race/ethnicity and gender for the state was too small.

Eight percent of women are looking for work, compared to seven percent of men. Women are more likely to be employed part time on an involuntary basis, while men are somewhat more likely to be unemployed.

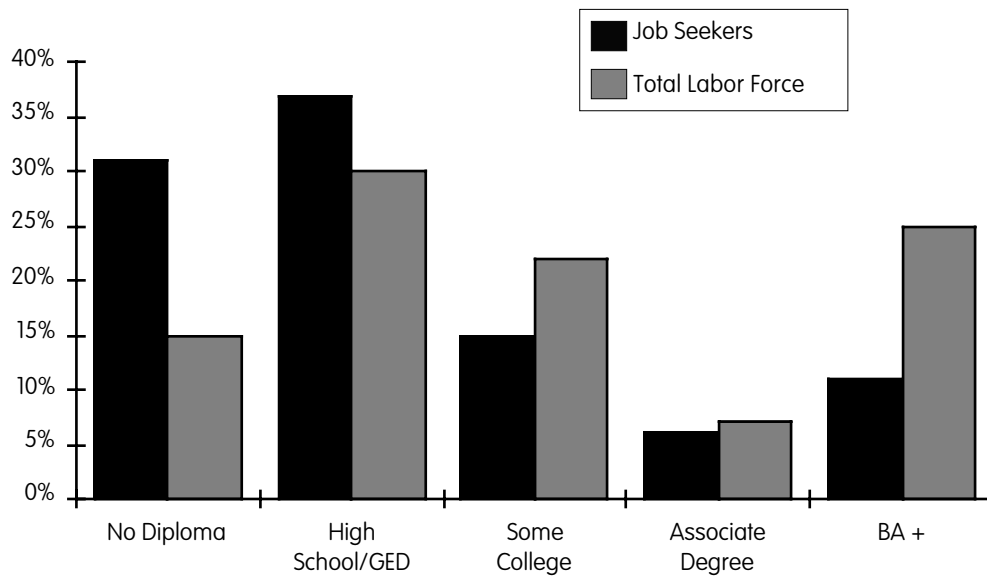
Those with less education and training are also more likely to be looking for work. For example, those with a high school diploma or GED are almost three times more likely to be a job seeker than those with a bachelor's degree or more. In addition, job seeker status varies by education and training. Those with no high school diploma are more likely to be marginally attached and discouraged workers or unemployed. Those with a high school diploma or GED are more likely to be employed part time on an involuntary basis.

IS THERE AN EDUCATION GAP IN ADDITION TO THE JOB GAP?

Job seekers with limited education and training are likely to have more difficulty than others in getting living wage jobs, because most job openings that pay a living wage require moderate to long term education and training.

On the job seeker side, those with less education and training are more likely to be looking for work. As shown in the chart below, 68 percent of job seekers have at most a high school diploma or GED, compared to 45 percent of the total labor force.

OREGON LABOR FORCE BY EDUCATION & TRAINING



OREGON JOB OPENINGS BY EDUCATION & TRAINING REQUIRED & WAGES PAID, 1996 - 2006



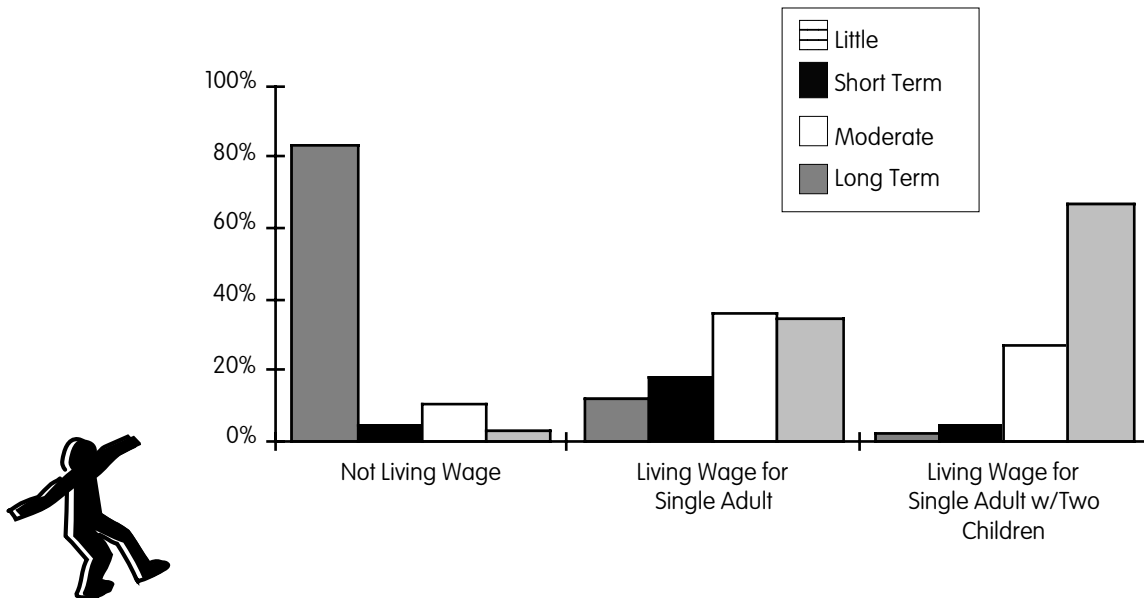
	Annual Job Openings		Not Living Wage		Living Wage for Single Adult		Living Wage for Single Adult with Two Children	
	Number	% Dist	Number	% Dist	Number	% Dist	Number	% Dist
Long Term	12,030	19%	897	3%	10,896	34%	8,126	67%
Moderate	14,237	23%	2,889	10%	11,325	36%	3,240	27%
Short Term	7,020	11%	1,284	4%	5,732	18%	491	4%
Little	28,509	46%	24,288	83%	3,844	12%	185	2%
Total	61,796	100%	29,358	100%	31,797	100%	12,042	100%

On the job opening side, 46 percent of all openings require only little education and training, as shown in the table on page 39. However, most of these job openings pay less than a living wage. Of job openings that pay at least the living wage for a single adult, 70 percent require moderate to long term education and training. Of those that pay at least the living wage for a single adult with two children, 94 percent require moderate to long term education and training.

The figures for all jobs are similar. However, the portion of all jobs that pay less than a living wage was slightly lower, 45 percent compared to 49 percent of all job openings. Little change is projected from 1996 to 2006.

The chart below further illustrates the connection between education and training and job openings that pay a living wage.

OREGON JOB OPENINGS BY EDUCATION & TRAINING REQUIRED & WAGES PAID



It is important to note that there are still more job seekers than job openings at all education and training levels. There are about 114,000 job seekers with at most a high school diploma or GED, compared to 35,500 job openings that require up to a year of education and training (only about 10,000 of which pay a living wage). And there are about 17,500 job seekers with a bachelor's degree or more, compared to 12,000 job openings that require a bachelor's degree or more.

WHAT ARE POLICY OPTIONS FOR CLOSING THE GAP?

Findings from the Northwest Job Gap Study suggest a number of strategies that business, labor, government, and communities can pursue to close the job gap, promote living wage jobs, and make sure people are able to get and keep these jobs. The strategies fall into four broad categories:

- Job and wage strategies, which focus on increasing the number of jobs that pay a living wage.
- Skill development strategies, which focus on providing people the education and training required of living wage jobs.
- Linking strategies, which focus on connecting people to living wage jobs.
- Safety net and cost of living strategies, which focus on making sure people's basic needs are met until they can get and keep a living wage job, and reducing costs of living—without lowering living standards.

JOB & WAGE STRATEGIES

One approach to closing the job gap is to increase the number of jobs that pay a living wage. As found by the job gap study, the regional economy is not creating enough living wage jobs. There are far more working age households than there are living wage jobs. Around half of all jobs and job openings pay less than the living wage for a single adult. And there are more people looking for work than there are job openings that pay a living wage. For each job opening that pays at least the living wage for a single adult, there are four to six job seekers on average.

Policy options include:

- *Establish job quality standards for employers and industries that receive public economic development and business assistance resources.*

States and communities can target their economic development and business assistance resources to those employers and industries that meet job quality standards. This includes working with groups of firms in targeted sectors to improve their competitiveness and ability to create living wage jobs.

In targeting economic development and business assistance efforts, one factor to take into account is the amount of education and training required of living wage jobs in an industry, if one goal is to increase the availability of living wage jobs to those who are unemployed and underemployed. For example, about three quarters of living wage jobs in manufacturing require at most moderate education and training.

- *Use living wage figures to establish wage policies.*

Business, labor, and government can use living wage figures in setting wage policies. Companies can analyze their wages in light of living wage figures and for those workers earning less than a living wage, they can develop wage progression strategies, so workers earn a living wage within a set time period. Unions can negotiate wages based on living wage figures. And government can ensure public funds support living wage jobs. In addition, communities can use living wage figures to set community standards.

- *Use living wage figures to set targets for job creation policies and programs and evaluate their impact.*
- *Pursue “high road” strategies aimed at creating high wage, high skill jobs.*
Companies can adopt high performance work organization systems that place priority on worker participation and skills. Government can support these companies with training and infrastructure development.
- *Promote job ladders and wage progression.*
With changes in the economy, internal job ladders have broken down. Companies can structure jobs and connections between jobs to create career pathways that make it possible for workers, with a combination of training and work experience, to move up job ladders and achieve wage progression. And government, labor market intermediaries, and other organizations can encourage and support these efforts by providing training and technical assistance.
- *Ensure workers a strong voice in decisions affecting them.*
In the workplace, this includes addressing barriers to workers’ right to organize and bargain collectively, establishing labor management partnerships, and promoting worker participation. And in the community, this includes ensuring participation in local economic and workforce development policy making.
- *Report living wage job creation and job gap figures on a regular basis.*
Government and/or other groups can regularly report living wage job creation and job gap figures, along with other economic indicators.

SKILL DEVELOPMENT STRATEGIES

Along with increasing the number of living wage jobs, people need access to the education and training required of these jobs. As found by the job gap study, most jobs that pay a living wage require moderate to long term education and training. Over 70 percent of job openings that pay the living wage for a single adult require anywhere from a year or more of education and training—including on the job, employer provided, college, and apprenticeship training—to a four year bachelor’s degree or more. For those that pay the living wage for a single adult with two children, the figure is over 90 percent.

In addition, people with less education and training are less likely to earn a living wage and more likely to be looking for work.

Policy options include:

- *Invest in education and training.*
Most living wage jobs require moderate to long term education and training. Both the private and public sector can invest in education and training.
- *Provide job seekers and low wage workers with the training required for living wage occupations, along with the income support and support services—such as child care and transportation assistance—needed to participate in training.*
Key features of effective training include targeting training to living wage occupations in demand in the regional economy; developing training that provides skills required by employers; replicating the work environment;

integrating basic skills and soft skills training with job skills training; structuring training in a way that is flexible, competency based, and open entry, open exit, so that it is easy to access; combining classroom instruction with work based learning; and focusing on living wage employment as the outcome. Business and labor participation is critical.

- *Promote job ladders and wage progression, to make it possible for those currently working in jobs that pay less than a living wage to move into living wage jobs.*

Job ladders are one way for those working in jobs that pay less than a living wage to move into living wage jobs, with a combination of training and work experience. This includes community career ladders that focus on cross firm and cross industry skill progressions.

Companies can structure jobs and connections between jobs to create job ladders and promote wage progression. And government, labor market intermediaries, and other organizations can encourage and support these efforts by providing training and technical assistance.

- *Expand equal education and employment efforts.*

People of color and women are less likely to earn a living wage than whites and men, and more likely to be looking for work than whites and men.

In addition to increasing access to education and training and providing income support and support services, government, training providers, employers, and unions can expand their equal education and employment efforts. This includes promoting living wage employment and training among people of color and women, enforcing equal opportunity and affirmative action laws, and creating mechanisms to help link people of color and women to living wage jobs (see below).

- *Promote a smooth transition from school to work.*

Schools can help young people make the school to work transition by providing them exposure to the world of work at an early age; career counseling; information on living wage jobs that are in demand, along with their education and training requirements; and work based learning opportunities.

- *Provide people moving from welfare to work the training required for living wage jobs, along with support services such as child care and transportation assistance needed to participate in training and get and keep a living wage job.*

People moving from welfare to work need access to training in order to get and keep living wage jobs, most of which require at least moderate education and training.

- *Promote lifelong learning.*

Increasingly, incumbent workers need to update their skills on a regular basis. Government, companies, and training providers can promote lifelong learning by providing incumbent workers financial support and easy access to targeted training.

- *Promote apprenticeship programs.*

Apprenticeship programs can be expanded to cover a wider range of occupations. In the U.S., apprenticeship programs focus primarily on the building and construction trades. However, in European countries such as Denmark and Germany, there are apprenticeships for most occupations. Key features of the apprenticeship model include labor and management

participation, industry skill standards and certification, a combination of work based learning and classroom instruction, the ability to earn while you learn, wage progression, career advancement, and funds for training.

- *Develop publicly funded jobs programs for the hard to serve, to help them develop skills and gain work experience.*

Some people who are unemployed lack the skills and work experience required in the labor market. States and communities can develop publicly funded jobs programs to help the hard to serve acquire these skills and experiences and, at the same time, address unmet community needs.

- *Use living wage figures to set targets for employment and training policies and programs, including welfare to work, and evaluate their impact.*

LINKING STRATEGIES

Beyond increasing the number of living wage jobs and providing people the education and training required of these jobs, there is the need to help connect job seekers to job openings that pay a living wage. This is particularly true for job seekers from low income communities in urban and rural areas, which are characterized by social, economic, and geographic isolation.

Policy options include:

- *Create an integrated, coordinated workforce development system that is connected to the regional economy and labor market.*

State and local workforce development agencies can build integrated, coordinated workforce development systems focused on helping job seekers and workers get and keep living wage jobs, and employers get the skilled workers they need. This includes providing labor exchange and job matching services, as well as access to training and support services. Business, labor, and community participation in developing these systems and services is critical.

- *Create labor market intermediaries to help connect low income community residents to living wage jobs.*

Labor market intermediaries can help connect low income community residents to living wage jobs by actively working with networks of community based organizations, industry brokers, employers, unions, and training providers. Together, they provide the combination of training, access to jobs, human services, and follow up support required to make the connection.

- *Create sectoral employment development initiatives that help link low income community residents to living wage jobs in targeted sectors.*

Sectoral employment development initiatives target a particular occupation or cluster of occupations within an industry that can provide low income community residents living wage job opportunities; intervene by developing value added, market based relationships with key actors in the industry that benefit both low income community residents and the industry; exist primarily to help low income community residents obtain living wage jobs; and increase low income community residents' access to living wage jobs by creating systemic change within the targeted occupation's labor market.

- *Provide low income community residents first chance at job openings with firms getting some kind of public assistance such as loans, bonds, and infrastructure improvements.*
State and local governments can require those firms that get public assistance provide low income community residents first chance at job openings.
- *Improve labor market information.*
With better labor market information (e.g., skills and training required of living wage jobs in demand in the regional economy, career pathways, etc.)—and job counseling—job seekers and workers can make more informed employment and training decisions. Such information can also help training providers develop programs to address the needs of job seekers, workers, employers, and targeted sectors.
- *Organize communities to help shape company and government decisions regarding living wage jobs and low income communities.*
Community based organizations can analyze the regional economy and its impact on the community; assess community needs and resources; secure company and government commitments to jobs and training; reach out and recruit community residents to take advantage of these commitments, and provide them support; and build a sense of community among participants.

SAFETY NET & COST OF LIVING STRATEGIES

There is also the need to make sure a safety net is in place so that people's basic needs are met until they are able to get and keep a living wage job. Another approach is to reduce costs of living such as housing, child care, and transportation costs—without lowering living standards.

Policy options include:

- *Use living wage figures to determine eligibility for public assistance (e.g., food stamps, medical care, child care, transportation assistance, etc.).*
Using living wage figures sets eligibility for public assistance at up to 200 percent of the federal poverty level.
- *Provide food, housing, health care, transportation, and child care assistance to those earning less than a living wage.*
- *Increase access to health care.*
People earning less than a living wage are far less likely to have employer provided health insurance. About 60 percent of those earning less than the living wage for a single adult do not have employer provided health insurance, according to the job gap study. This compares to almost 20 percent of those earning a living wage.
- *Create new and/or expand existing safety net programs linked to employment.*
Governments can create new and/or expand existing safety net programs linked to employment. This includes expanding Unemployment Insurance and Earned Income Tax Credits.
- *Develop new institutions and/or mechanisms to provide workers stability in health care, retirement, and other benefits.*

In today's flexible economy, people increasingly move from one job to

another. Oftentimes, these moves are accompanied by a break in benefits. One way to address this form of economic insecurity is to develop new institutions and/or mechanisms to provide workers stability in health care, retirement, and other benefits.

- *Improve access to safety net programs.*

State and local governments and community based organizations can promote increased awareness of and access to safety net programs.

- *Promote asset building.*

State and local governments, community based organizations, and other public and private institutions can help promote asset building—for example, home ownership—among low wage workers through individual development accounts. IDA's are dedicated savings accounts in which the deposits of low wage workers are matched by public and private sources.



TECHNICAL NOTES

LIVING WAGE ANALYSIS

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. A modified market basket approach was used to calculate family budgets, upon which living wage figures are based. Family budget items—along with their data sources—include:

- Food—U.S. Department of Agriculture’s “Low Cost Food Plan.”
- Housing & Utilities—U.S. Department of Housing and Urban Development’s Fair Market Rents (at the 40th percentile), and information provided by US West.
- Transportation—1995 U.S. National Personal Transportation Study from the U.S. Department of Transportation, the U.S. Department of Labor’s Consumer Expenditure Survey (CES), and Internal Revenue Service reimbursement rates for automobile travel (private and public transportation costs are included).
- Health Care—Updates from the 1987 National Health Care Expenditure Survey, data from the Families USA Foundation, and the CES (employer provided health care is assumed; out of pocket costs and individual contributions for health insurance coverage are included).
- Child Care—State welfare agencies’ market rate surveys (up to the 75th percentile).
- Household, Clothing, & Personal—the CES (calculated as a fixed percentage of total household spending, minus child care and taxes).
- Savings—Expert recommendations (set at 10 percent of total household spending, minus child care and taxes).
- State, Local, & Federal Taxes—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.

The most current data available was used and then inflation adjusted, using the CPI-U published by the Bureau of Labor Statistics. Because the CPI includes all of the budget items in its basket, it is appropriate to use for a short term update. To the extent that inflation has been significantly different from the national average, living wage budgets will vary in accuracy. Because of changes in the CPI sector by sector, this method is not recommended for updating budget items for the job gap study beyond 1999. However, living wage estimates (the bottom line) for each household type can be updated with relative confidence through 2005 using the CPI.

(More detailed information on family budget data sources and calculations can be found in the 1999 edition of the job gap study, posted on NPC’s website at <http://depts.washington.edu/npc>.)

JOB GAP ANALYSIS

Job gap figures are calculated by dividing the number of job seekers by the number of job openings that pay a living wage. Job gap figures and wages were updated to published and imputed 1998 values.

Job seeker numbers are based on published and unpublished data from the U.S. Department of Labor's Bureau of Labor Statistics and its Local Area Unemployment Statistics division. For purposes of the job gap study, job seekers are defined to include the unemployed, involuntary part time workers, and marginally attached and discouraged workers.

Job openings include annual openings due to growth and net replacement. Job opening estimates are produced by state employment departments at least every two years. Occupational projections for 1998-2008 were used for Oregon and Washington. At the time of the job gap analysis, Idaho and Montana had not yet released their 1998-2008 projections.

Data on wages associated with job openings come primarily from the Occupational Employment Statistics (OES) wage survey of employers conducted by state employment departments. State median wages were estimated using a regression for those occupations that were blank.

(More detailed information on job seeker and job opening data sources and calculations can be found in the 1999 edition of the job gap study, posted on NPC's website at <http://depts.washington.edu/npc/>.)

INDUSTRY ANALYSIS

Data on the number of people who earn a living wage by industry come from Unemployment Insurance (UI) wage data from state employment departments. States provided a summary table of the number of workers, median wage, and number of people earning a living wage by industry (at the two digit Standard Industrial Classification (SIC) code level). The table was based on UI wage data in 1996 and 1998 in Oregon and Washington and on 1998 data in Montana. Idaho declined to provide UI wage data.

The analysis focused on second quarter (April to June) earnings in the target year. To ensure that a person worked the entire quarter, only those records in the second quarter that also had corresponding records in the first and third quarters were used. Earnings were grouped into inflation adjusted living wage categories to facilitate the analysis.

OCCUPATION ANALYSIS

Data on occupations, their education and training requirements, number of job openings, and median wages come from the OES survey and Industry-Occupation matrices published by state employment departments.

Analysis of the fastest growing occupations was limited to only those occupations that comprised at least one quarter of one percent (0.25%) of all job openings. This

eliminated tiny occupations that, for example, might be forecast to grow 50% from two to three people statewide.

DEMOGRAPHIC ANALYSIS

All demographic data come from the Current Population Survey (CPS) conducted by the Bureau of Labor Statistics. Results from the 1996, 1997, and 1998 "March Supplement" surveys were combined for each of the four states. Using inflation adjusted living wage figures, households were identified as meeting various living wage thresholds. The data were also used to identify job seekers and examine the effects of race/ethnicity, gender, education and training, and age on earnings and labor force status.

EDUCATION GAP ANALYSIS

Data on the education and training of job seekers and the labor force come from the CPS. Data on the education and training required of jobs and job openings come from the OES survey and Industry-Occupation Matrices.