



Idaho • Montana
Oregon • Washington

NORTHWEST
Job Gap
STUDY

SEARCHING FOR
WORK THAT PAYS,
2001

WASHINGTON

NORTHWEST POLICY CENTER,
NORTHWEST FEDERATION OF COMMUNITY ORGANIZATIONS, AND
WASHINGTON CITIZEN 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?	9
ARE WE CREATING ENOUGH JOBS THAT PAY A LIVING WAGE?	12
WHICH INDUSTRIES PROVIDE LIVING WAGE JOB OPPORTUNITIES?	17
WHICH OCCUPATIONS PROVIDE LIVING WAGE JOB OPPORTUNITIES?	24
HOW ARE DIFFERENT DEMOGRAPHIC GROUPS FARING IN GETTING AND KEEPING LIVING WAGE JOBS?	34
IS THERE AN EDUCATION GAP IN ADDITION TO THE JOB GAP?	37
WHAT ARE POLICY OPTIONS FOR CLOSING THE GAP?	39
TECHNICAL NOTES	45

NORTHWEST JOB GAP STUDY: SEARCHING FOR WORK THAT PAYS WASHINGTON

EXECUTIVE SUMMARY

The Washington Job Gap Study explores the gap between the number of living wage jobs being created in Washington 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.

Seven research questions are addressed in the job gap study:

- 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 assuming that single adults work full time on a year round basis; these budgets include basic necessities, savings, and state, local, and federal taxes. In 1996, the living wage in Washington ranged from \$10.25 an hour for a single adult to \$16.86 an hour for a single adult with two children. In 1998 dollars, those living wages were \$10.65 an hour and \$17.52 an hour, respectively; in 2000 dollars, \$11.25 and \$18.51.

ARE WE CREATING ENOUGH JOBS THAT PAY A LIVING WAGE?

The Washington economy is not creating enough living wage jobs for all those who need them, according to a variety of indicators. For example, of all job openings, about 43 percent paid less than the living wage for a single adult in 1996; about 72 percent of job openings paid less than the living wage for a single adult with two children.

From 1996 to 1998, a boom time for the economy, the portion of job openings that pay a living wage improved in Washington. The percentage of job openings that paid less than the living wage for a single adult went from 43 to 41 percent, and the percentage of job openings that pay less than the living wage for a single adult with two children went from 72 to 70 percent. The current economic slowdown may in turn slow down this rate of improvement.

WHICH INDUSTRIES PROVIDE LIVING WAGE JOB OPPORTUNITIES?

About two thirds of all jobs that pay at least the living wage for a single adult in Washington are in three industries: services, government, and manufacturing. The proportion of living wage jobs within each of these sectors varies considerably, however.

In 1996, services accounted for 26 percent of all jobs but only 22 percent of all jobs that pay at least the single adult living wage; this is due to the fact that slightly less than half of all service jobs pay a living wage. In contrast, manufacturing accounted for 16 percent of all jobs but 21 percent of all single adult living wage jobs; this is because a little over three quarters of all manufacturing jobs pay a living wage.

WHICH OCCUPATIONS PROVIDE LIVING WAGE JOB OPPORTUNITIES?

The two largest groups of occupations in Washington, both in terms of all jobs and living wage jobs, are professional, paraprofessional and technical; and production, construction, operating, maintenance, and material handling. Each group accounted for about 580,000 jobs apiece, and together contain about 46 percent of all jobs and about 61 percent of the state's single adult living wage jobs.

The occupational distribution at the living wage level for a single adult with two children is slightly different, with professional, paraprofessional, and technical jobs combining with managerial and administrative jobs to account for about 72 percent of all jobs at or above this wage level.

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

In the Northwest, people of color, women, single adults with two children, and those workers with less education are less likely to have living wage jobs.

People of color and women are also more likely to be looking for work than whites and men, as are those with lower levels of 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 are more likely to be employed part time on an involuntary basis.

Forty nine percent of people of color in Washington earn at least the living wage for a single adult, compared to 62 percent of whites. Fifty one percent of women earn at least the living wage for a single adult, compared to 66 percent of men;

only 22 percent of women earn the living wage for a single adult with two children, compared to 43 percent of men.

Forty two percent of single adults with two children earn the living wage for their household type, compared to 48 percent of single adults with no children, 50 percent of single adults with one child, and 86 percent of two adults with two children.

Fifty percent of those with a high school diploma or GED earn a single adult living wage, compared to 83 percent of those with a bachelor's degree or higher.

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

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

Fifty three percent of job seekers have at most a high school diploma or GED, compared to 41 percent of the total labor force.

Forty four percent of all job openings require little education and training but most of these openings also pay less than a living wage.

Of the openings that pay at least the single adult living wage, 73 percent require moderate to long term education and training; for the single adult/two children wage level, 94 percent of openings require such preparation.

It is important to note, however, that there are more job seekers than job openings at all education and training levels. There are about 190,000 job seekers with at most a high school diploma or GED, compared to 63,000 job openings that require short term education and training (only about 17,000 of which pay a living wage); there are about 54,000 job seekers with a bachelor's degree or more, compared to 29,000 job openings that require long term education and training.

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 WASHINGTON

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 10. 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:

- \$10.25 an hour or \$21,322 a year for a single adult.
- \$13.12 an hour or \$27,288 a year for a single adult with one child.
- \$16.86 an hour or \$35,079 a year for a single adult with two children.
- \$13.95 an hour or \$29,023 a year for two adults, one of whom is working, with two children.
- \$18.45 an hour or \$38,369 a year for two adults, both of whom are working, with two children (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	\$10.43/hour	\$9.50/hour
Single adult with one child	\$13.49/hour	\$12.16/hour
Single adult with two children	\$17.59/hour	\$15.47/hour
Two adults (one working) with two children	\$14.16/hour	\$12.89/hour
Two adults (both working) with two children	\$19.17/hour	\$17.11/hour



The state's higher cost areas are King, Pierce, Snohomish, Spokane, Clark, Kitsap, Yakima, Thurston, Whatcom, Benton, and Franklin counties.

WASHINGTON FAMILY BUDGETS (IN 1996 DOLLARS)



	Household 1	Household 2	Household 3	Household 4	Household 5
 Food	141	263	331	462	462
 Housing	488	615	615	615	615
 Transportation	372	321	364	333	390
 Health Care	64	117	132	162	162
 Child Care	0	170	602	0	602
 Household, Clothing & Personal	230	284	312	340	352
 Savings	144	178	195	212	220
 State, Local & Federal Taxes	338	327	372	296	395
Gross Monthly Income Needed	1,777	2,274	2,923	2,419	3,197*
Gross Annual Income Needed	21,322	27,288	35,079	29,023	38,369*
Living Wage (at 2080 hrs/yr)	\$10.25	\$13.12	\$16.86	\$13.95	\$18.45*

*Total amount earned by two working adults

Household 1 is a single adult

Household 2 is a single adult with a school-age child (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 about 48 percent of the living wage for a single adult and about 29 percent of the living wage for a single adult with two children. The state's median wage is somewhat greater than the living wage for a single adult (114 percent) and more than two thirds of the living wage for a single adult with two children (69 percent). The living wage is about 200 percent of the federal poverty level.

UPDATE

1998

Living wages, in 1998 dollars, are:

- \$10.65 an hour or \$22,151 a year for a single adult.
- \$13.63 an hour or \$28,349 a year for a single adult with one child.
- \$17.52 an hour or \$36,443 a year for a single adult with two children.
- \$14.50 an hour or \$30,151 a year for two adults, one of whom is working, with two children.
- \$19.16 an hour or \$39,861 a year for two adults, both of whom are working, with two children.

2000

Living wages, in 2000 dollars, are:

- \$11.25 an hour or \$23,401 a year for a single adult.
- \$14.40 an hour or \$29,949 a year for a single adult with one child.
- \$18.51 an hour or \$38,500 a year for a single adult with two children.
- \$15.31 an hour or \$31,853 a year for two adults, one of whom is working, with two children.
- \$20.25 an hour or \$42,111 a year for two adults, both of whom are working, with two children.

ARE WE CREATING ENOUGH JOBS THAT PAY A LIVING WAGE?

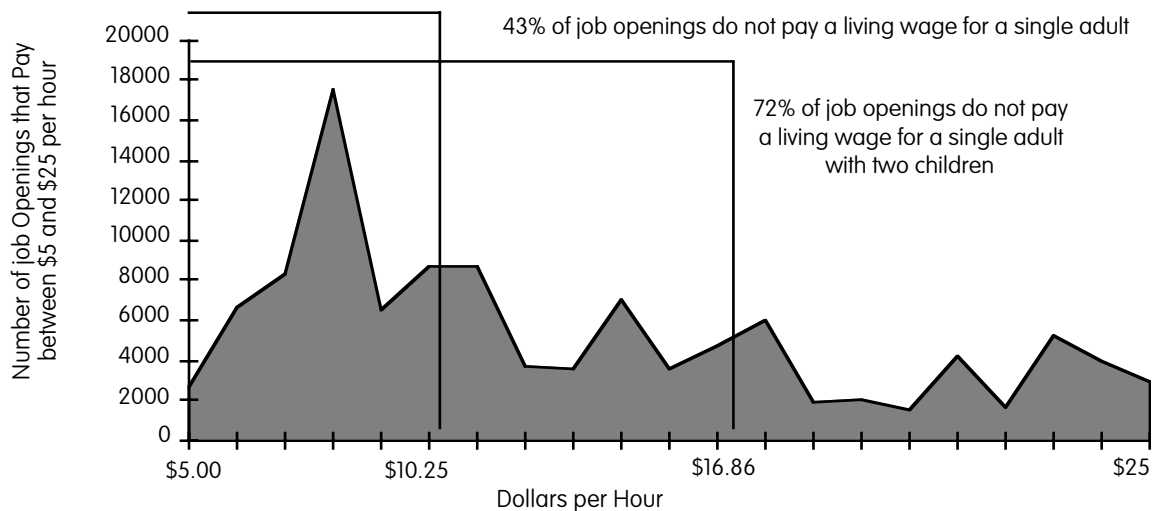
The Washington economy is not creating enough living wage jobs for all those who need them, according to several indicators. These include the number of working age households compared to the number of jobs that pay a living wage, the percentage of jobs and job openings that pay less than a living wage,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

In 1996, there were about 1.8 million working age households in Washington, but only about 1.5 million jobs that could support a single adult and slightly more than 700,000 jobs that could support a single adult with two children.

Thirty nine percent of all jobs in the economy 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.

The job market that job seekers face is similarly limited. Of all job openings, 43 percent pay less than the living wage for a single adult, as shown in the chart below. Seventy two percent of job openings pay less than the 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, 1996



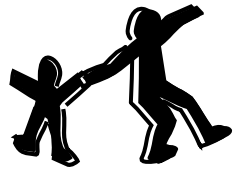
*There are few Job openings in the economy that pay more than \$25 an hour. Due to lack of space they have not been included here.

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 on average three job seekers.
- For each job opening that pays at least the \$10.25 an hour living wage for a single adult, there are on average five job seekers.
- For each job opening that pays at least the \$16.86 an hour living wage for a single adult with two children, there are on average 11 job seekers.

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 two percent of all job openings that pay at least the single adult living wage require that amount of education and training. For those job openings that pay at least the living wage for a single adult with two children, the proportion is 24 percent.

WASHINGTON JOB GAP RATIO, 1996



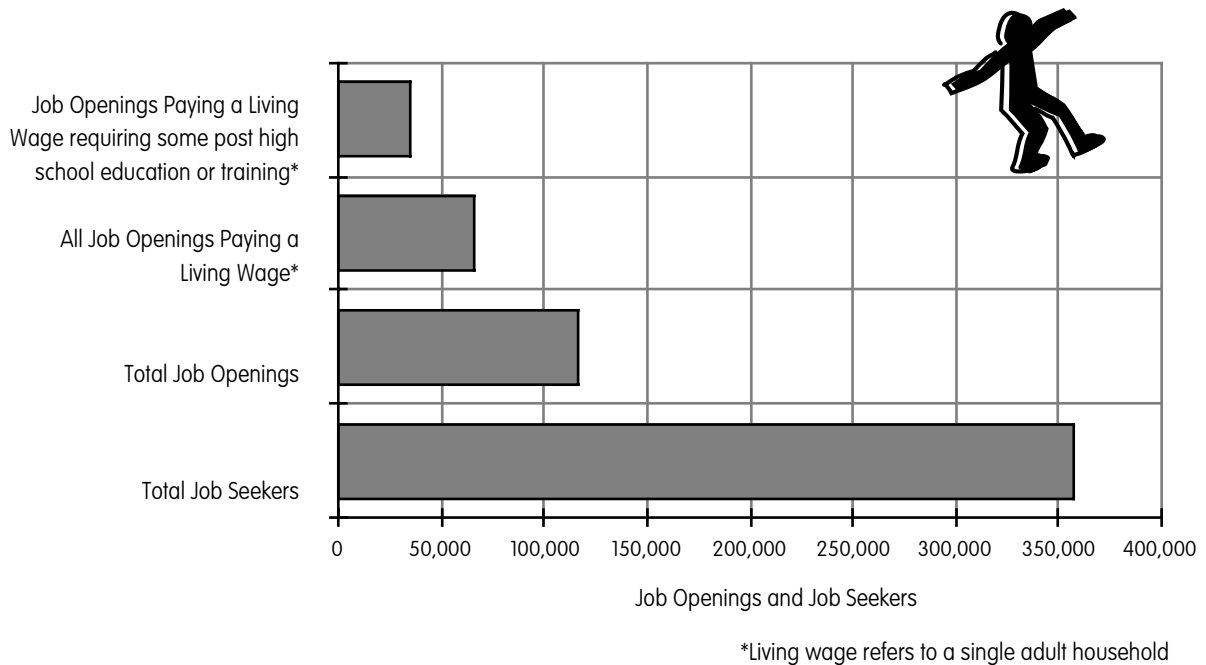
	Single Adult Living Wage \$10.25	Single Adult with Two Children Living Wage \$16.86	All Job Openings
All Job Seekers	357,243	357,243	357,243
Job Openings	66,315	33,275	117,011
Job Seekers per Job Opening	5 to 1	11 to 1	3 to 1
Percent of all Job Openings paying less than a living wage	43%	72%	

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 \$10.25 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 357,243, which equals about 13 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 lay-off or those looking only for part time

FINDINGS FOR WASHINGTON, 1996



work. About 59 percent of job seekers are unemployed.

- Involuntary part time workers—people who work less than full time, but want to work full time. About 30 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 not 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 11 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 357,243 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 but who 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 921,000 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 117,011 and include:

- Job openings due to growth—the result of new jobs being created by new or existing firms. About 45 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 55 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 earned 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 on the chart on page 14, 66,315 of the 117,011 job openings pay at least the \$10.25 an hour living wage for a single adult. And 34,813 of these job openings pay at least that 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.

UPDATE

1998

From 1996 to 1998, the portion of jobs and job openings that pay a living wage improved slightly. The percentage of job openings that pay less than the living wage for a single adult went from 43 to 41 percent, and the percentage of job openings that pay less than the living wage for a single adult with two children went from 72 to 70 percent.

Job gap ratios decreased between 1996 and 1998. As shown in the table on page 16, job gap ratios for 1998 are:

- For each job opening, regardless of pay, there are two job seekers on average, compared to three in 1996.
- For each job opening that pays at least the \$10.65 an hour living wage for a single adult, there are four job seekers on average, compared to five in 1996.
- For each job opening that pays at least the \$17.52 an hour living wage for a single adult with two children, there are seven job seekers on average, compared to the 11 to 1 ratio in 1996.

WASHINGTON JOB GAP RATIO, 1998

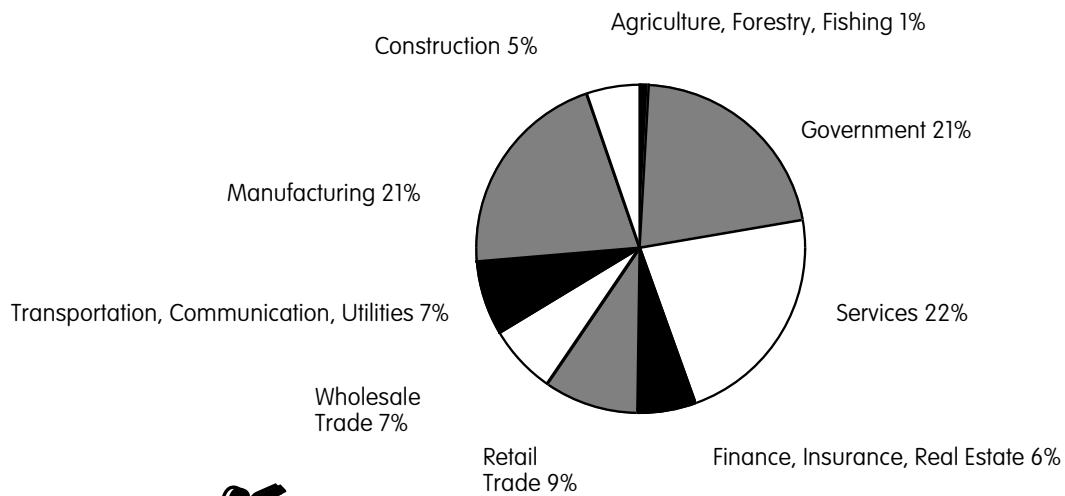


	Single Adult Living Wage \$10.65	Single Adult with Two Children Living Wage \$17.52	All Job Openings
All Job Seekers	252,708	252,708	252,708
Job Openings	69,159	34,926	117,011
Job Seekers per Job Opening	4 to 1	7 to 1	2 to 1
Percent of all Job Openings paying less than a living wage	41%	70%	

WHICH INDUSTRIES PROVIDE LIVING WAGE JOB OPPORTUNITIES?

About two thirds of all jobs that pay at least the living wage for a single adult in Washington are in three industries: services, government, and manufacturing. Services—such as health services, business services, and engineering and management services—accounted for 26 percent of all jobs in the state in 1996 and 22 percent of all jobs that pay at least the single adult living wage, as shown in the chart below and table on page 19. The difference between the two figures is due to only half of all service jobs paying a living wage. Government accounted for 17 percent of all jobs, as did retail trade; however, government’s share of all single adult living wage jobs was 21 percent, while retail trade’s share was only nine percent. Manufacturing accounted for 16 percent of all jobs, but 21 percent of all single adult living wage jobs. The difference is due to the fact that slightly more than three quarters of all manufacturing jobs pay a living wage.

WASHINGTON LIVING WAGE JOBS BY INDUSTRY, 1996*



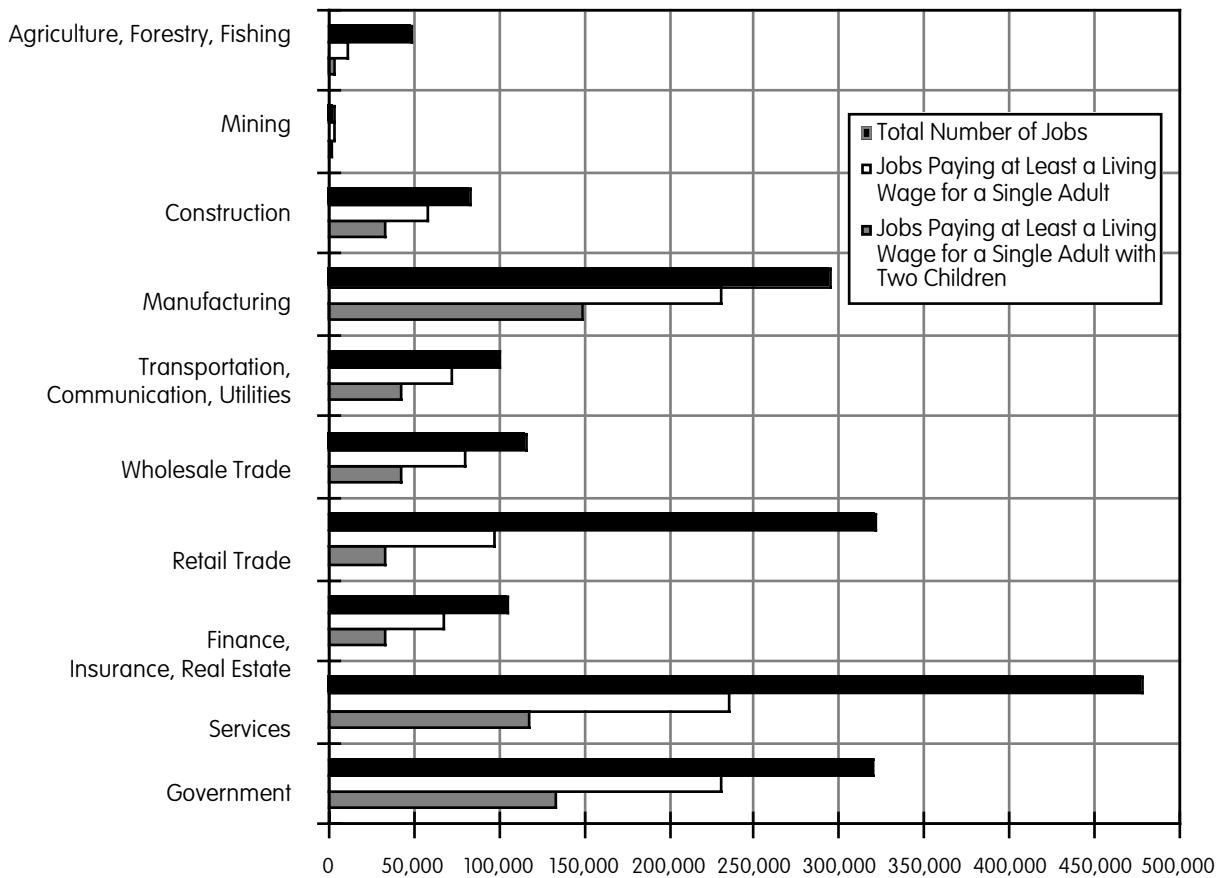
*Living wage refers to a single adult household

Wholesale trade accounted for another seven percent of all jobs that pay at least the living wage for a single adult, as did transportation, communication, and utilities. Finance, insurance, and real estate accounted for six percent; construction, five percent; agriculture, forestry and fishing, one percent; and mining, less than 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 19. Mining had the highest portion of jobs that pay at least the living wage for a single adult, 86 percent; manufacturing was close behind, with slightly more than three quarters. Agriculture, forestry and fishing had the lowest portion, 24 percent. A similar pattern occurred with jobs that pay at least the living wage for an adult with two children: mining had the highest portion, 61 percent; manufacturing, 50 percent; and the lowest portion was again in agriculture, forestry, and fishing, at seven percent.

WASHINGTON LIVING WAGE JOBS BY INDUSTRY, 1996



Median wages ranged from a high of \$47,995 a year in mining to a low of \$14,248 a year in agriculture, forestry, and fishing. A living wage for a single adult was in 1996 \$21,322 a year; for a single adult with two children, the figure was \$35,079 a year.

Between 1996 and 1998, the number of single adult living wage jobs grew by about 112,000, from 1,082,000 to 1,194,000, or 10 percent. This compares to an overall job growth rate of six percent. Manufacturing accounted for the largest portion of the growth in living wage jobs, 32 percent, followed by services, 24 percent; government, 11 percent; finance, insurance, and real estate, seven percent; retail

trade, seven percent; construction, seven percent; wholesale trade, five percent; transportation, communication, and utilities, five percent; and agriculture, forestry, and fishing, 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 80,000, or 14 percent. Over 50 percent of this growth took place in services and manufacturing.

WASHINGTON 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	Percent of Total Living Wage Jobs
Agriculture, Forestry, Fishing	47,791	3%	\$14,248	24%	1%
Mining	2,733	0%	\$47,995	86%	0%
Construction	82,632	4%	\$29,873	69%	5%
Manufacturing	294,484	16%	\$35,516	78%	21%
Transportation, Communication, Utilities	99,911	5%	\$32,792	73%	7%
Wholesale Trade	116,610	6%	\$28,638	69%	7%
Retail Trade	321,758	17%	\$14,993	30%	9%
Finance, Insurance, Real Estate	104,870	6%	\$26,175	64%	6%
Services	478,633	26%	\$21,896	49%	22%
Government	320,408	17%	\$30,999	72%	21%
Total	1,869,830	100%	\$28,312	58%	100%

* Living wage refers to a single adult household

Overall, the portion of jobs that pay the single adult living wage rose from 58 percent in 1996 to 60 percent in 1998. The portion of jobs that pay at least the living wage for a single adult with two children rose from 31 percent to 34 percent.



A more detailed look at industries shows that over half of all jobs added between 1996 and 1998 were in transportation equipment, business services, and local government (which includes public schools), as shown in the table on page 21. It should be noted that the increase in transportation equipment jobs was largely due to a boom in Boeing employment, which has since decreased again (this is a normal business cycle rhythm for aircraft production).

Out of the 25 industries that added the most jobs in this two year period, five were in services—business services, health services, private households, social services, and educational services. Four were in manufacturing—transportation equipment, industrial machinery and equipment, electronic and other electric equipment, and primary metals. And four were in retail trade—general merchandise stores, eating and drinking places, miscellaneous retail, and apparel and accessory stores.

Three of the five service industries had median wages at or above the living wage for a single adult, which was \$22,151 a year in 1998. This illustrates the wide range of industries included in services, from relatively low wage industries such as private households, with a median wage of \$8,604 a year, to high wage industries such as business services, with a median wage of \$28,800 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 \$36,443 a year in 1998. By contrast, all four manufacturing industries had median wages at or above the single adult living wage; two had median wages at or above the living wage for a single adult with two children. None of the retail trade industries had median wages at or above the single adult living wage.

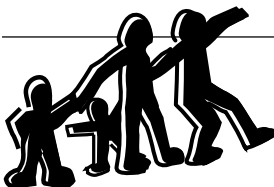
Also among the 25 industries that added the most jobs between 1996 and 1998 were three in transportation, communication, and utilities; two each in government, construction, wholesale trade, and finance, insurance, and real estate; and one in agriculture.

Overall, 17 of the 25 industries had median wages at or above the living wage for a single adult. Eight had median wages below a living wage; most of those were in services or retail trade, with one each in real estate and agriculture. Only five industries had median wages at or above the living wage for a single adult with two children: two in manufacturing, one in communication, one in utilities, and one in finance.

The proportion of living wage jobs varies by industry. Transportation equipment had the highest portion of jobs that pay at least the living wage for a single adult, 94 percent; private households had the lowest, five percent. These industries held the same positions for a single adult with two children, with transportation equipment at 74 percent and private households at one percent, respectively.

TOP 25 GROWTH INDUSTRIES IN WASHINGTON, 1996-1998

	Number of Jobs 2nd Qtr 1996	Number of Jobs 2nd Qtr 1998	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)
Transportation Equipment	91,787	122,358	30,571	\$48,820	94%	74%
Business Services	88,863	107,966	19,103	\$28,800	60%	41%
Local Government, Including Schools	221,733	233,379	11,646	\$32,164	68%	42%
Health Services	146,401	153,421	7,020	\$24,652	57%	26%
Private Households	13,233	18,121	4,888	\$8,604	5%	1%
Special Trade Contractors	47,859	52,589	4,730	\$31,468	71%	40%
General Merchandise Stores	37,058	40,910	3,852	\$17,672	35%	11%
Industrial Machinery and Equipment	20,064	23,722	3,658	\$35,896	83%	49%
Wholesale Trade - Durable Goods	65,302	68,854	3,552	\$32,112	75%	41%
Electronic and Other Electric Equipment	12,922	16,223	3,301	\$29,048	68%	36%
Communication	24,872	28,100	3,228	\$39,444	80%	55%
Eating and Drinking Places	105,272	108,405	3,133	\$10,432	14%	4%
Electric, Gas and Sanitary Services	8,711	11,291	2,580	\$48,620	90%	73%
Social Services	40,486	42,898	2,412	\$15,224	27%	7%
General Building Contractors	21,624	23,573	1,949	\$31,308	70%	40%
Primary Metal Industries	9,833	11,641	1,808	\$41,136	89%	66%
State Government	98,675	100,421	1,746	\$34,032	83%	44%
Agricultural Services	12,689	14,342	1,653	\$16,856	32%	11%
Miscellaneous Retail	39,833	41,332	1,499	\$14,496	29%	11%
Nondepository Institutions	6,897	8,344	1,447	\$36,500	82%	50%
Educational Services	15,169	16,611	1,442	\$24,216	55%	26%
Apparel and Accessory Stores	17,104	18,340	1,236	\$18,164	41%	16%
Wholesale Trade - Nondurable Goods	51,308	52,496	1,188	\$29,164	65%	35%
Real Estate	23,660	24,825	1,165	\$19,676	43%	18%
Transportation by Air	20,087	21,089	1,002	\$33,600	68%	45%
Total All Industries	1,869,830	1,983,639	113,809		60%	34%



Services, government, manufacturing, and retail trade 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 23. Of the 25, six were in manufacturing—transportation equipment, lumber and wood products, food products, industrial machinery and equipment, paper products, and printing and publishing; two in government—local and state; three in services—health services, business services, and engineering and management services; and five in retail trade—food stores, auto dealers and service stations, general merchandise stores, miscellaneous retail, and eating and drinking places.

Also among the 25 industries with the largest number of single adult living wage jobs were both wholesale sectors; three transportation, communication, and utilities industries; two finance, insurance, and real estate industries; and two construction industries.

Many of these industries (those with the largest number of living wage jobs) had slower than average growth. Manufacturing industries were among both the fastest and slowest growing industries. Two manufacturing industries registered double digit growth (transportation equipment and industrial machinery and equipment), while four registered negative growth (lumber and wood products, food products, paper products, and printing and publishing).

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 just discussed in the single adult living wage category. However, there were a couple more construction and manufacturing industries; and a couple less retail trade industries. Most of these 25 also had slower than average growth. Those with faster than average growth included manufacturing (transportation equipment, industrial machinery and equipment, and primary metals); construction (special trade contractors); retail trade (general merchandise stores); transportation, communication, and utilities (communications); and services (business services).



WASHINGTON 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
Local Government, Including Schools	221,733	148,443	67%	41%	233,379	5%
Transportation Equipment	91,787	86,496	94%	79%	122,358	33%
Health Services	146,401	82,229	56%	25%	153,421	5%
State Government	98,675	81,250	82%	43%	100,421	2%
Wholesale Trade - Durable Goods	65,302	47,932	73%	39%	68,854	5%
Business Services	88,863	47,499	53%	34%	107,966	21%
Engineering and Management Services	50,468	40,472	80%	53%	48,783	-3%
Special Trade Contractors	47,859	32,655	68%	36%	52,589	10%
Wholesale Trade - Nondurable Goods	51,308	32,392	63%	33%	52,496	2%
Food Stores	56,867	22,185	39%	12%	53,037	-7%
Lumber and Wood Products	28,973	21,791	75%	35%	28,476	-2%
Communication	24,872	21,600	87%	60%	28,100	13%
Depository Institutions	33,459	20,207	60%	27%	33,700	1%
Food and Kindred Products	33,111	19,731	60%	26%	27,465	-17%
Insurance Carriers	22,597	18,843	83%	42%	23,506	4%
Automotive Dealers and Services Stations	34,334	18,629	54%	26%	34,867	2%
Trucking and Warehousing	23,283	15,889	68%	29%	23,672	2%
Industrial Machinery and Equipment	20,064	15,742	78%	42%	23,722	18%
Paper and Allied Products	15,928	14,713	92%	67%	14,303	-10%
General Building Contractors	21,624	14,291	66%	36%	23,573	9%
Transportation by Air	20,087	13,423	67%	40%	21,089	5%
General Merchandise Stores	37,058	12,477	34%	10%	40,910	10%
Printing and Publishing	20,011	12,292	61%	30%	19,765	-1%
Miscellaneous Retail	39,833	11,102	28%	11%	41,332	4%
Eating and Drinking Places	105,272	11,029	10%	3%	108,405	3%
Total All Industries	1,869,830	1,081,702	58%	31%	1,983,639	6%

* Living wage refers to a single adult household

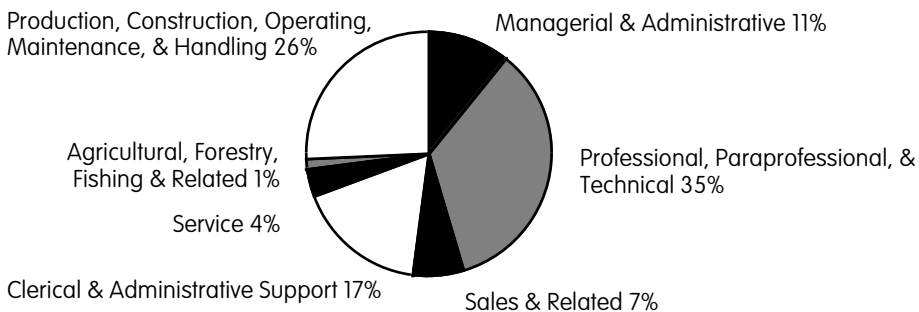
WHICH OCCUPATIONS PROVIDE LIVING WAGE JOB OPPORTUNITIES?

Professional, paraprofessional, and technical occupations; and production, construction, operating, maintenance, and material handling occupations are the two largest groups of occupations in Washington, both in terms of all jobs and living wage jobs.

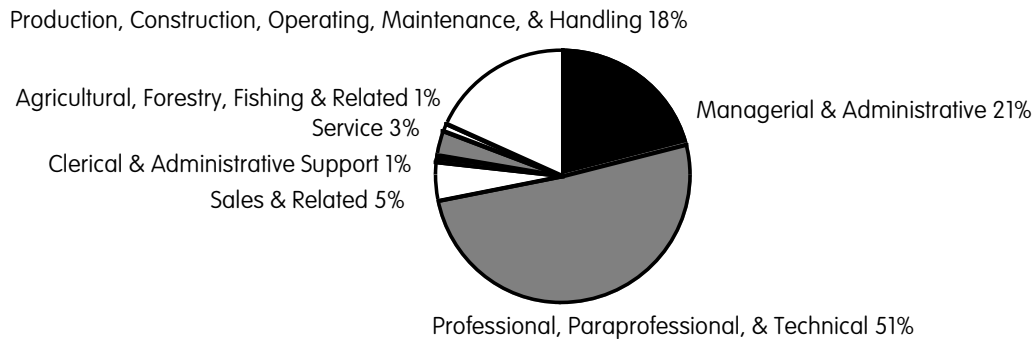
Professional, paraprofessional, and technical occupations accounted for over 580,000 jobs in 1996, equal to 23 percent of all jobs and 35 percent of jobs that pay at least the living wage for a single adult, as shown in the chart below and table on page 27. The difference between the two figures is due to 93 percent of all professional, paraprofessional, and technical jobs paying a living wage. The next largest group of occupations was production, construction, operating, maintenance, and material handling occupations, which accounted for over 578,000 jobs, equal to 23 percent of all jobs and 26 percent of jobs that pay at least

WASHINGTON LIVING WAGE JOBS BY OCCUPATION, 1996

SINGLE ADULT LIVING WAGE JOBS



SINGLE ADULT WITH TWO CHILDREN LIVING WAGE JOBS



the living wage for a single adult. The difference is due to 68 percent of all production and related 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 394,000 jobs or 16 percent of all jobs. But because only 15 percent of service occupations pay a single adult living wage, they made up only four percent of all living wage jobs.

Clerical and administrative support occupations accounted for another 17 percent of jobs that pay the single adult living wage, followed by managerial and administrative occupations, 11 percent; sales and related occupations, seven percent; and agriculture, forestry, fishing, and related occupations, one 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 72 percent of jobs that pay at or above this wage level, as shown in the chart on page 24. Production, construction, operating, maintenance, and material handling occupations accounted for another 18 percent, followed by sales and related occupations, five percent; service occupations, three percent; and clerical and administrative support, and agriculture, forestry, fishing, and related occupations, one percent each.

The proportion of living wage jobs varies by occupational group, as shown in the chart on page 26 and table on page 27. Managerial and administrative occupations had the highest portion of jobs that pay at least the living wage for a single adult, close to 100 percent; service occupations and agriculture, forestry, fishing, and related occupations had the lowest, 15 percent. Managerial and administrative occupations also had the highest portion of jobs that pay the living wage for a single adult with two children, 91 percent; clerical and administrative support occupations had the lowest, two percent.

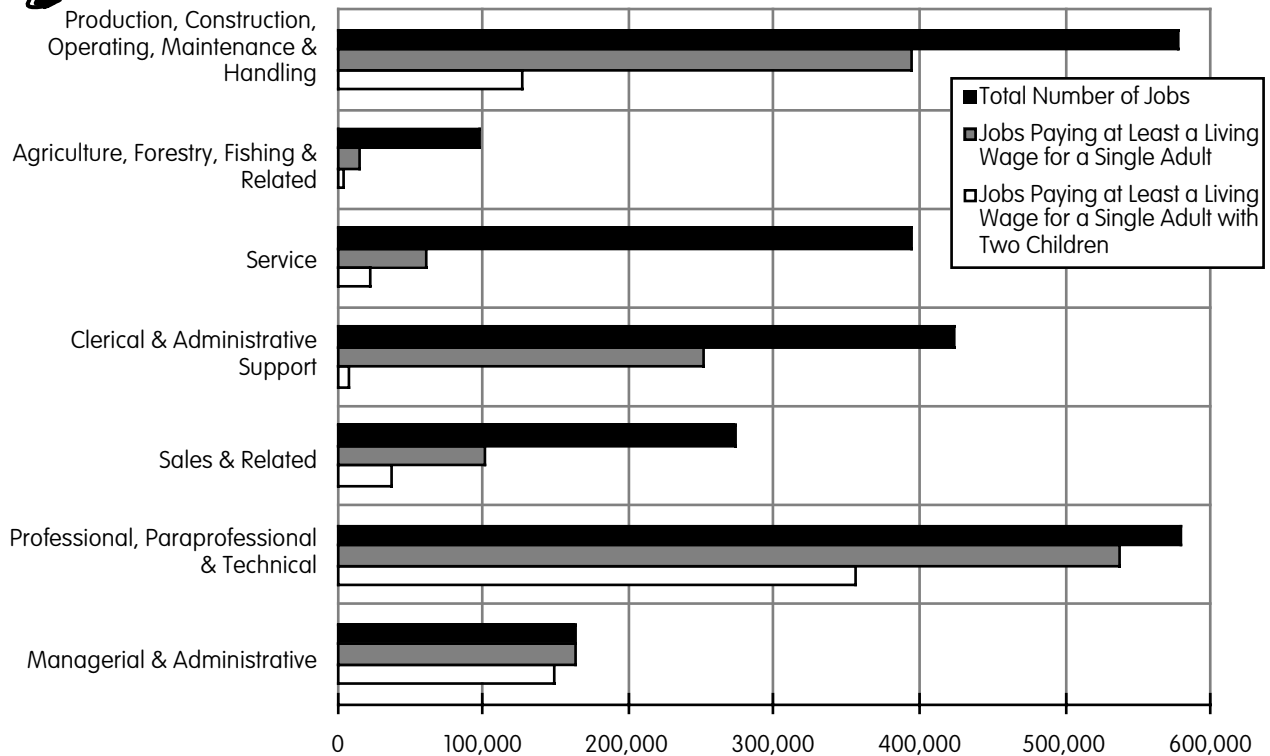
Median wages ranged from a high of \$24.74 an hour for managerial and administrative occupations to \$7.76 an hour for service occupations.

Overall, 61 percent of all jobs paid at least the living wage for a single adult in 1996; 28 percent paid at least the living wage for a single adult with two children.





WASHINGTON 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 a little over 2.2 percent a year, the same as the projected growth rate for all jobs. Professional, paraprofessional, and technical occupations are projected to account for the largest portion of this growth, 47 percent. This is followed by production, construction, operating, maintenance, and material handling occupations, 22 percent; managerial and administrative occupations, 12 percent; clerical and administrative support occupations, eight percent; sales and related occupations, seven 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 2.4 percent a year. Sixty percent of this growth is projected to take place in professional, paraprofessional, and technical occupations.

WASHINGTON 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	164,082	7%	\$24.74	100%	11%
Professional, Paraprofessional, & Technical	580,349	23%	\$18.91	93%	35%
Sales & Related	273,386	11%	\$10.17	37%	7%
Clerical & Administrative Support	422,948	17%	\$11.44	60%	17%
Service	394,843	16%	\$7.76	15%	4%
Agriculture, Forestry, Fishing, & Related	97,364	4%	\$8.97	15%	1%
Production, Construction, Operating, Maintenance, & Handling	578,022	23%	\$13.61	68%	26%
Total	2,510,994	100%		61%	100%

* Living wage refers to a single adult household

A more detailed look at occupations shows that 15 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 29. However, seven out of the top 10 occupations in this category have median wages below the living wage for a single adult. Together, the seven—retail salespersons, cashiers, food preparation and service workers, waiters and waitresses, general office clerks, food preparation workers, and helpers and laborers—account for over 21,000 job openings a year or one out of every six job openings.

Among the 15 occupations paying a living wage are seven professional, paraprofessional, and technical occupations; three clerical and administrative support occupations; two sales and related occupations; two managerial and administrative occupations; and one production, construction, operating, maintenance, and material handling occupation.

The 15 require varying amounts of education and training, ranging from little to long term. Specific education and training categories, as shown in the table on page 29, 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 and technical 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, all of the 10 occupations with the most job openings that have median wages below a living wage require little education and training. Among the 10 are four service occupations; two clerical and administrative support occupations; two sales and related occupations; and two production, construction, operating, maintenance, and material handling occupations.

Ten 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. Most of those are professional, paraprofessional, and technical occupations.



WASHINGTON JOB OPENINGS BY OCCUPATION, 1996 - 2006

	Annual Job Openings	Median Wage (1996)	Education & Training
Salespersons, Retail	5,238	\$7.83	Little
Cashiers	4,095	\$7.55	Little
Combined Food Preparation and Service Workers	3,105	\$5.62	Little
Waiters and Waitresses	2,699	\$5.45	Little
General Managers and Top Executives	2,536	\$24.66	Long Term
General Office Clerks	2,383	\$10.23	Little
Food Preparation Workers	1,940	\$7.14	Little
Other Helpers, Laborers, and Material Movers, Hand	1,623	\$9.74	Little
Teachers, Secondary School	1,594	\$24.20	Long Term
Computer Programmers/Systems Analysts	1,474	\$23.26	Long Term
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,472	\$8.43	Little
Teachers, Elementary School	1,417	\$23.39	Long Term
Hand Packers and Packagers	1,365	\$6.71	Little
Registered Nurses	1,323	\$20.75	Moderate
First-Line Supervisors and Managers/Supervisors - Sales and Related Workers	1,316	\$13.78	Moderate
All Postsecondary Teachers	1,276	\$26.75	Long Term
Receptionists and Information Clerks	1,248	\$9.08	Little
First Line Supervisors, Clerical & Administrative	1,211	\$14.19	Moderate
Maintenance Repairers, General Utility	1,188	\$12.51	Little
Computer Engineers	1,132	\$26.30	Long Term
Secretaries, Except Legal and Medical	1,059	\$11.45	Moderate
All Other Managers and Administrators	1,041	\$23.59	Long Term
All Other Professional, Paraprofessional, and Technical Workers	1,006	\$17.45	Long Term
Sales Representatives, Except Retail and Scientific and Related Products and Services	948	\$16.88	Short Term
Bookkeeping, Accounting, and Auditing Clerks	942	\$11.29	Short Term

Most of the fastest growing occupations—17 of 25—have median wages at or above the living wage for a single adult, as shown in the table on page 31. Among the 17 are 11 professional, paraprofessional, and technical occupations; one service occupation; one production, construction, operating, maintenance, and material handling occupation; two clerical and administrative support occupations; and two managerial and administrative occupations. In terms of education and training required, eight of the 17 require long term, five require moderate, two require short term, and two require little education and training.

Computer and engineering occupations dominate the 17.

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

Seven of the fastest growing occupations also have median wages at or above the living wage for a single adult with two children. Six of those are professional, paraprofessional, and technical occupations; all but one require long term education and training.

FASTEST GROWING OCCUPATIONS IN WASHINGTON, 1996-2006*

	Number of Jobs		Annual Growth Rate	Median Wage 1996	Education & Training
	1996	2006			
All Other Computer Scientists	3,741	10,800	19%	\$21.57	Long Term
Computer Engineers	9,806	20,426	11%	\$26.30	Long Term
Personal and Home Care Aides	4,175	7,904	9%	\$7.71	Little
Computer Support Specialists	4,032	7,252	8%	\$16.66	Long Term
Paralegal Personnel	2,361	4,202	8%	\$15.38	Moderate
Child Care Workers	8,740	14,792	7%	\$6.86	Little
Human Services Workers	2,863	4,417	5%	\$10.59	Short Term
Medical Assistants	4,430	6,770	5%	\$10.01	Short Term
Computer Programmers/Systems Analysts	21,230	32,265	5%	\$23.26	Long Term
Bill and Account Collectors	4,061	6,144	5%	\$10.62	Little
Engineering, Mathematical, and Natural Sciences Managers	6,373	9,580	5%	\$34.12	Long Term
Adjustment Clerks	4,814	7,236	5%	\$11.87	Little
Electrical and Electronic Assemblers	3,108	4,541	5%	\$8.38	Little
Correction Officers and Jailers	4,409	6,428	5%	\$15.08	Moderate
Residential Counselors	4,318	6,264	5%	\$9.23	Long Term
Instructors and Coaches, Sports and Physical Training	8,248	11,922	4%	\$10.78	Short Term
Designers, Except Interior Designers	4,687	6,704	4%	\$13.61	Long Term
Food Service and Lodging Managers	7,592	10,850	4%	\$10.66	Moderate
Electrical and Electronic Engineers	9,527	13,526	4%	\$25.87	Long Term
Dental Hygienists	3,971	5,618	4%	\$31.51	Moderate
Electrical and Electronic Equipment Assemblers, Precision	4,977	7,021	4%	\$10.98	Moderate
Guards and Watch Guards	12,197	17,150	4%	\$7.87	Little
Amusement and Recreation Attendants	6,655	9,300	4%	\$5.85	Little
All Other Engineers	7,927	10,977	4%	\$27.51	Long Term
Telemarketers and Door-To-Door Sales Workers	5,235	7,148	4%	\$7.74	Short Term
All Occupations	2,510,994	3,054,579	2%		

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



A little less than half of the 25 occupations with the largest number of single adult living wage jobs are professional, paraprofessional, and technical occupations; and production, construction, operating, maintenance, and material handling occupations, as shown in the table on page 33.

Seven of the 25 are professional, paraprofessional, and technical occupations—registered nurses, elementary and secondary school teachers, other professional, paraprofessional, and technical occupations, computer programmers/systems analysts, accountants and auditors, and other management support workers. Four of the seven are projected to grow at or above the rate for all occupations. Almost all of these jobs require long term education and training.

Five of the 25 are production, construction, operating, maintenance, and material handling occupations—truck drivers, maintenance repairers, carpenters, electricians, and auto mechanics. Two of the five are projected to grow at or above the rate for all occupations. These jobs require anywhere from little to moderate education and training.

Overall, almost half of the 25 occupations with the most living wage jobs are expected to grow at or above the rate for all occupations. Almost two thirds are expected to have 45 percent or more of job openings result from growth, equal to or exceeding the average for all occupations. Also, over two thirds require moderate or long term education and training.

Twelve of the 25 occupations with the largest number of single adult living wage jobs also have median wages at or above the living wage for a single adult with two children. Nine are managerial and administrative occupations or professional, paraprofessional, and technical occupations; two are production and related occupations; one is in sales. Eight of the 12 require long term education and training; three require a moderate amount; and one requires short term training.



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

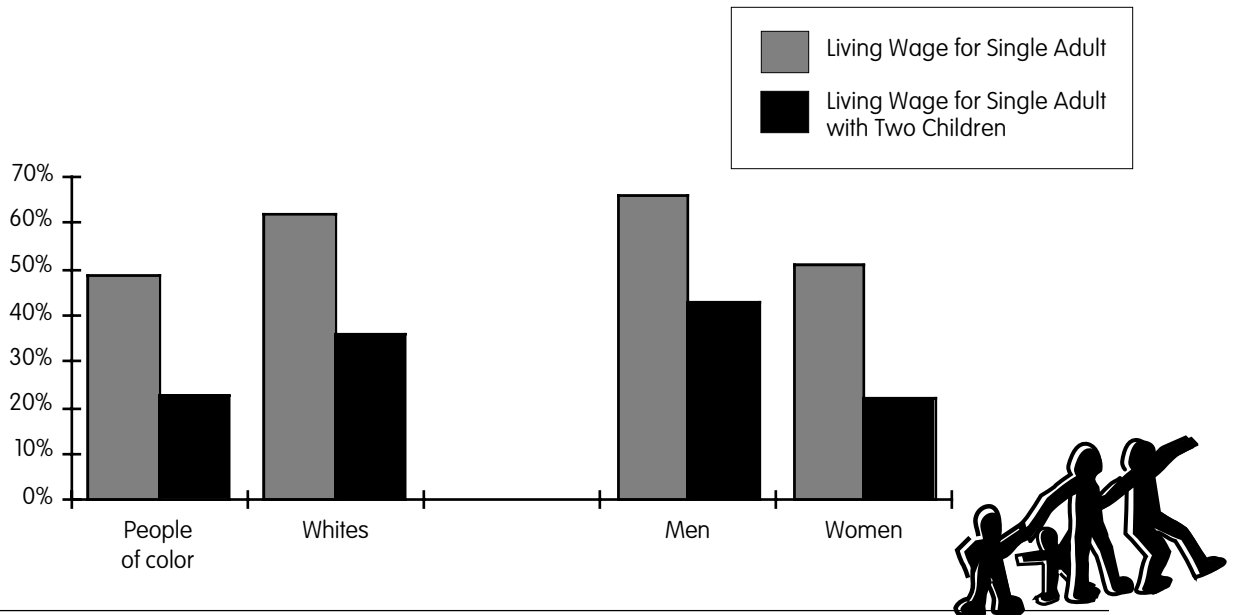
	Number of Jobs	Number of Annual Job Openings	Percent of Job Openings due to Growth/Replacement	Median Wage	Education & Training
General Managers and Top Executives	59,810	2,536	50/50	\$24.66	Long Term
Bookkeeping, Accounting, and Auditing Clerks	44,899	942	12/88	\$11.29	Short Term
Secretaries, Except Legal and Medical	43,788	1,059	27/73	\$11.45	Moderate
Registered Nurses	36,955	1,323	61/39	\$20.75	Moderate
Teachers, Elementary School	30,872	1,417	58/42	\$23.39	Long Term
First-Line Supervisors & Managers/ Supervisors—Sales and Related Workers	28,558	1,316	52/48	\$13.78	Moderate
Teachers, Secondary School	28,508	1,594	47/53	\$24.20	Long Term
Truck Drivers, Heavy or Tractor-Trailer	28,481	931	53/47	\$14.49	Little
First Line Supervisors, Clerical & Administrative	25,881	1,211	50/50	\$14.19	Moderate
Maintenance Repairers, General Utility	25,603	1,188	55/45	\$12.51	Little
Carpenters	22,019	853	39/61	\$16.86	Moderate
All Other Professional, Paraprofessional, & Technical Workers	21,982	1,006	46/54	\$17.45	Long Term
Sales Representatives, Except Retail and Scientific and Related Products and Services	21,970	948	43/57	\$16.88	Short Term
Computer Programmers/Systems Analysts	21,230	1,474	75/25	\$23.26	Long Term
Shipping, Receiving, and Traffic Clerks	19,036	572	49/51	\$10.96	Little
Accountants and Auditors	18,705	697	40/60	\$17.27	Long Term
All Other Managers and Administrators	17,343	1,041	28/72	\$23.59	Long Term
All Other Clerical and Administrative Support Workers	16,971	511	60/40	\$11.11	Little
All Other Management Support Workers	16,589	625	46/54	\$16.13	Long Term
Financial Managers	15,203	659	56/44	\$23.15	Long Term
Electricians	13,734	548	43/57	\$19.01	Moderate
Automotive Mechanics	12,886	719	44/56	\$13.96	Moderate
All Other Sales and Related Workers	11,816	630	47/53	\$11.88	Short Term
All Other Service Supervisors	11,755	653	45/55	\$11.80	Moderate
Typists, Including Word Processing	10,730	85	0/100	\$11.08	Short Term
All Occupations	2,510,994	117,011	45/55		

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. Forty nine percent of people of color in Washington earn at least the living wage for a single adult, compared to 62 percent of whites, as shown in the chart below. Only 23 percent of people of color earn the living wage for a single adult with two children, compared to 36 percent of whites.

Fifty one percent of women earn at least the living wage for a single adult, compared to 66 percent of men. Only 22 percent of women earn the living wage for a single adult with two children, compared to 43 percent of men.

WASHINGTONIANS EARNING LIVING WAGE BY RACE/ETHNICITY & GENDER



Single adults with two children are also less likely to earn a living wage. Forty two percent of single adults with two children earn the living wage for their household type. This compares to 50 percent of single adults with one child, 48 percent of single adults with no children, and 86 percent of two adults with two children.

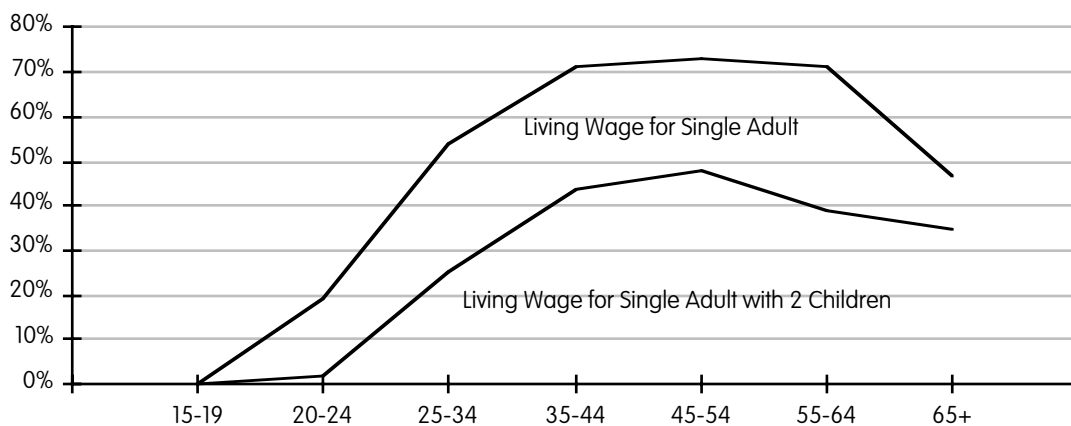
Those with less education and training are also less likely to earn a living wage. Fifty percent of those with a high school diploma or GED earn at least the living wage for a single adult, as shown in the table on page 35. By contrast, 83 percent of those with a bachelor's degree or more earn at least the living wage for a single adult. Twenty 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 63 percent of those with a bachelor's degree or more.

WASHINGTONIANS 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	20%	8%
High School Diploma/GED	50%	20%
Some College & Associate Degree	59%	29%
Bachelor's Degree or More	83%	63%
Overall	60%	34%

Earning a living wage also appears related to age and years in the labor force. Only 19 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 54 percent of 25 to 34 year olds, 71 percent of 35 to 44 year olds, and peaks at 73 percent of 45 to 54 year olds. It then falls back to 71 percent of 55 to 64 year olds and 47 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 48 percent of 45 to 54 year olds.

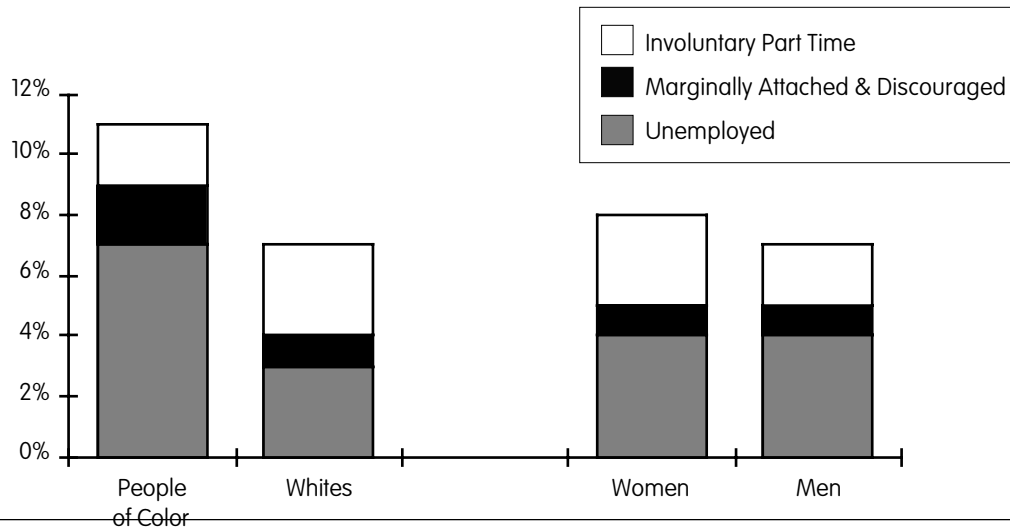
WASHINGTONIANS EARNING LIVING WAGE BY AGE



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 (results are reported for the Northwest, rather than the state, because the number of job seekers by status and race/ethnicity for the state was too small to analyze).

NORTHWEST JOB SEEKER STATUS BY RACE/ETHNICITY & GENDER



Eight percent of women in the Northwest 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.

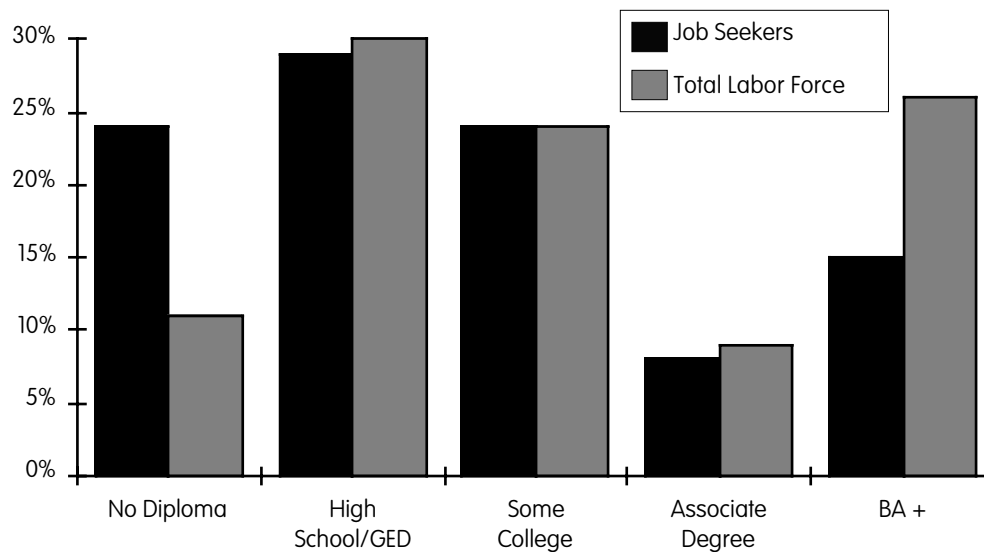
People with less education and training are also more likely to be looking for work. For example, those with a high school diploma or GED are almost twice as likely to be a job seeker than those with a bachelor's degree or more. In addition, job seeker status varies by education and training. Job seekers 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, 53 percent of job seekers have at most a high school diploma or GED, compared to 41 percent of the total labor force.

WASHINGTON LABOR FORCE BY EDUCATION AND TRAINING



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

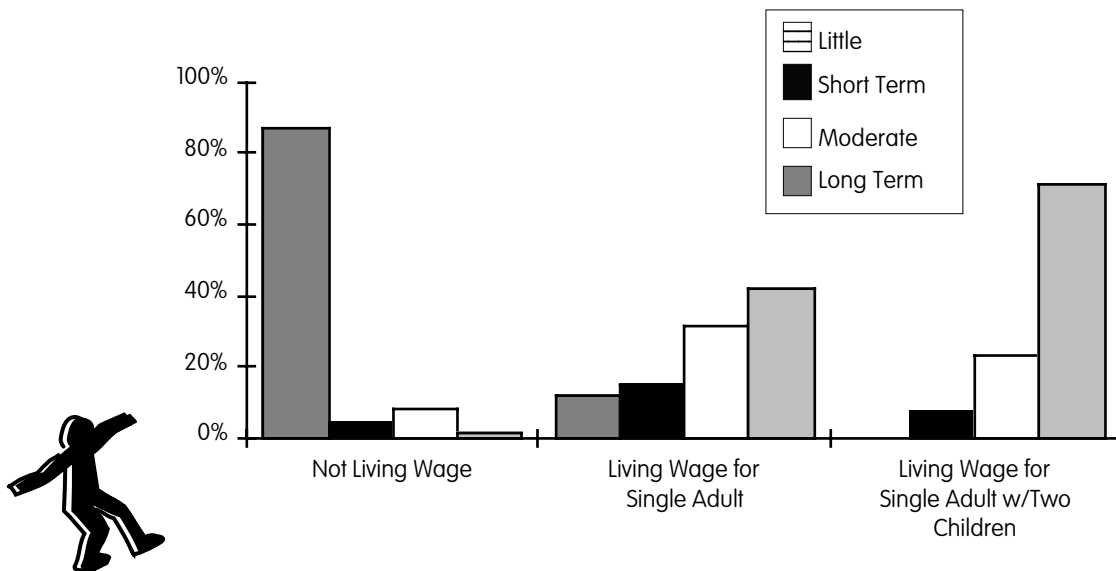


	Annual Job Openings		Not Living Wage		Living Wage for Single Adult		Living Wage for Single Adult with Two Children	
	Number	% Dist	Number	% Dist	Number	% Dist	Number	% Dist
Long Term	28,970	25%	659	1%	27,852	42%	23,468	71%
Moderate	24,693	21%	3,982	8%	20,711	31%	7,501	23%
Short Term	11,560	10%	1,749	4%	9,822	15%	2,211	7%
Little	51,788	44%	43,455	87%	7,930	12%	95	0%
Total	117,011	100%	49,845	100%	66,315	100%	33,275	100%

On the job opening side, 44 percent of all openings require only little education and training, as shown in the table on page 37. 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, 73 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 chart below is another way of illustrating these differences in job openings by education and wages.

The figures for all jobs are similar. However, the portion of all jobs that pay less than a living wage was slightly lower, 39 percent compared to 43 percent of all job openings. Little change is projected from 1996 to 2006.

WASHINGTON 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 190,000 job seekers with at most a high school diploma or GED, compared to 63,000 job openings that require short term education and training (only about 17,000 of which pay a living wage). And there are about 54,000 job seekers with a bachelor's degree or more, compared to 29,000 job openings that require long term education and training.

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.