



Workforce Training and Education Coordinating Board

2015 Workforce Training Results

Worker Retraining Program

Program Details

In response to dramatic changes in the structure of Washington's economy, the layoffs of thousands of workers in major industries, and the long-term need for retraining programs for Washington workers, the Legislature enacted the Workforce Employment and Training Act in 1993. This law significantly expanded the training available to the thousands of jobless workers who need to change careers in order to re-enter the workforce.

The Worker Retraining program provides dislocated workers and the long-term unemployed with access to job retraining for a new career. Program enrollments vary from year to year in response to layoffs and, during recessions, the need increases. The industries from which participants are laid off also vary over time. About one percent of worker retraining participants receive their training at private career schools. This evaluation, however, is limited to training at community and technical colleges. The colleges provide training in occupational and basic skills. Qualifying participants may receive financial assistance to help with their tuition.

Every year, the Workforce Board measures the performance of key workforce programs. In this report, you'll find out more about the program and who is served, the metrics used to measure performance and how the program performed.

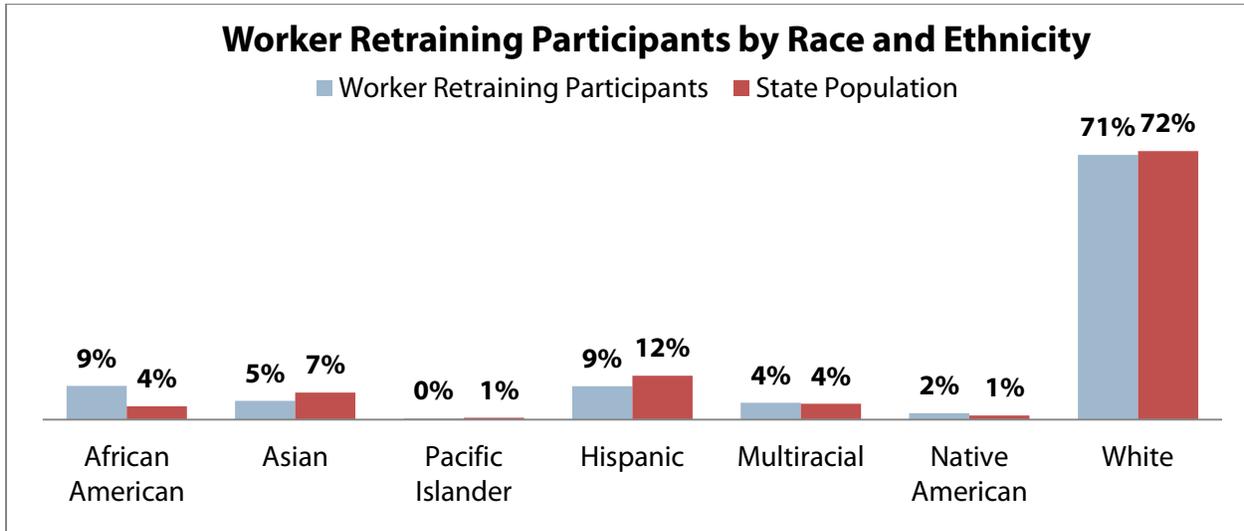
Participant Profile

For this report, researchers studied the results of 6,600 Worker Retraining participants who completed or otherwise left a community or technical college program during the most recent reporting year.¹ The median length of enrollment for these participants was 18 months, up from six months on the last report.

¹ The 2015 Workforce Training Results reports are based on data observed as recently as 2013-2014 for individuals exiting programs during 2012-13.



The racial and ethnic composition of Worker Retraining participants roughly reflects the general population in Washington for Pacific Islanders (1 percent), Multiracial (4 percent), and Whites (71 percent). African Americans (9 percent) are represented at a greater percentage than their portion of the general population, whereas Hispanics (9 percent) and Asians (5 percent) are at a slightly lower percentage.²



Source: Community and Technical Colleges Administrative Data and 2012 U.S. Census Data from the American Community Survey.

In terms of program completion by racial and ethnic groups, the rates are nearly identical to the proportion participating in the program. Overall, Pacific Islanders had the highest completion rate (68 percent), followed by Asians (65 percent), and Whites (64 percent). African Americans had the lowest completion rate (51 percent) followed by Hispanics (54 percent), and Native Americans (56 percent).

Among Worker Retraining participants, 52 percent were women, and 48 percent were men.
Source: Community and Technical Colleges Administrative Data.

When they enrolled in the program, 45 percent of participants had not previously attended college, 25 percent had attended college without receiving a credential, 14 percent had received a certificate or associate’s degree, and 11 percent had received a baccalaureate or higher degree. The median age at the start of the last quarter of the program was 41 years. One in four participants was under age 32, while another one in four participants was over 51.

² In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians (also referred to as Asians); non-Hispanic Pacific Islanders (also referred to as Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites).



Tracking Worker Retraining Progress

The Workforce Board routinely measures the performance of our state's largest workforce programs. As a customer-focused advocate for Washington's workers and employers, the Workforce Board strives to provide performance accountability, verifying whether worker education and training programs provide a return on investment for participants and taxpayers.

The Workforce Training Results report seeks to answer five core questions:

- Did participants get the skills they needed?
- Did participants get a job and how much were they paid?
- Were employers satisfied with the preparation workers received?
- Has the program made a difference in the participant's success?
- Did participants and the public receive a return on their investment?

Turn to page 15 for the Net Impact Study. Conducted every four years, this in-depth report adds extra value to 2015 Workforce Training Results. The study provides a side-by-side comparison of participants vs. similar non-participants, answering the question of whether the program is making a difference.

Data Comes From State Wage Files

The 2015 Workforce Training Results includes information obtained from Employment Security Department wage files in Washington, Idaho, and Oregon, and federal employment records for 2013-14.³

Net Impact Study Adds More Insight into Program Performance

In addition, the report includes a comprehensive Net Impact Study. Conducted every four years, this study provides a head-to-head comparison of participants and non-participants to help answer a central question: How much of a workforce participant's success in obtaining a job, or a higher wage, is due to the workforce program? By comparing program participants with similar individuals who did not participate in a workforce training program, the Net Impact Study indicates whether employment and earnings gains are due to the workforce program, or if workers could have made this progress on their own. This research also allows for a more detailed analysis as to whether the participant and the public received a return on their investment in the program.

Did Participants Get the Skills They Needed?

As a measure of whether participants got the skills they needed, this study tracks the credentials and degrees earned by participants. Among those leaving a Worker Retraining program in 2012-13:

³ Worker Retraining participants were not included in the Workforce Board's 2012 Employer Survey, which provides feedback on how well workforce program participants perform in the workplace in areas such as job skills; reading, writing and math, and teamwork, among others.



- 26 percent received an associate’s degree.
- 16 percent received a certificate.
- 1 percent received another type of credential.

Another 18 percent were defined as completers because they completed 45 or more credits or a unique (non-degree) program.

Altogether, 61 percent of participants completed their program. This completion rate is down by a small amount from the 62 percent for those who left Worker Retraining programs in the 2013 report. In that report, 26 percent received an associate’s degree, 16 percent received a certificate, and 19 percent were defined as completers because they completed 45 or more credits or a unique (non-degree) program. Although there was a slight decline in the completion rate, it’s not clear whether this is a function of the improving labor market. More students may have left their training earlier because of the opportunity to go to work.

Did Participants Have a Job and How Much Were They Paid?

To find out whether participants had jobs and how much they earned, participant records were matched with Employment Security Department wage files from Washington and neighboring states.⁴ The study looks at employment and earnings three calendar quarters after the participant exited a Worker Retraining program. Record matches found that 66 percent of the participants had reported employment during the third quarter after they left their program, 2 percentage points lower than that reported in the last report.

Their median hourly wage was \$16.91, and they had median annualized earnings of \$31,290.⁵ Program completers were more likely to be working full time than the overall participant population (69 percent compared to 67 percent) and had higher annual earnings (\$32,551 compared to \$31,290).

⁴ These files contain quarterly earnings and hours worked information on those individuals with employment reported for unemployment insurance (UI) benefits purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employers not included).

⁵ Annual earnings are calculated as third quarter earnings multiplied by four. Quarterly earnings are the result of hourly wage rates and the number of hours worked in a calendar quarter. All wages and earnings are stated in first quarter 2014 dollars.



2014 Employment and Earnings for Worker Retraining Participants

Performance Measure	Results
Employment Rate* (State Records)	66%
Employment Rate (Completers)	69%
Full-Time Employment**	67%
Median Quarterly Hours	468
Median Hourly Wage***	\$16.91
Median Annualized Earnings***	\$31,290
Median Annualized Earnings (completers)	\$32,551

*These figures apply to those with employment reported to state employment agencies six to nine months after leaving the program. Rate does not include self-employment, employment outside the Northwest, or military service and thus understates total employment by approximately 10 percent.

**Full-time employment averages 30 or more hours per week.

***Earnings/wages expressed in first quarter 2014 dollars in order to account for inflation.

Earnings of Worker Retraining Participants

The next table shows employment and earnings information over five study periods, starting with 2011. Wages continue to be widely distributed among Worker Retraining participants. Although the median hourly wage was \$16.91, one quarter earned more than \$23.44 an hour, while another quarter had jobs that paid less than \$12.83 an hour. This wide distribution of wages is reflected in the dispersion of employment across higher and lower-wage industries.

Performance Measure	2010	2011	2012	2013	2014
Employment Rate* (State Records)	58%	61%	66%	68%	66%
Full-Time Employment**	57%	58%	64%	61%	67%
Median Quarterly Hours	429	442	468	455	468
Median Hourly Wage***	\$17.05	\$17.69	\$17.67	\$16.48	\$16.91
Median Annualized Earnings***	\$28,639	\$28,872	\$31,036	\$29,104	\$31,290

*These figures apply to those with employment reported to the Employment Security Department six to nine months after leaving program. Rate does not include self-employment, employment outside the Northwest, or military service and thus understates total employment by approximately 10 percent.

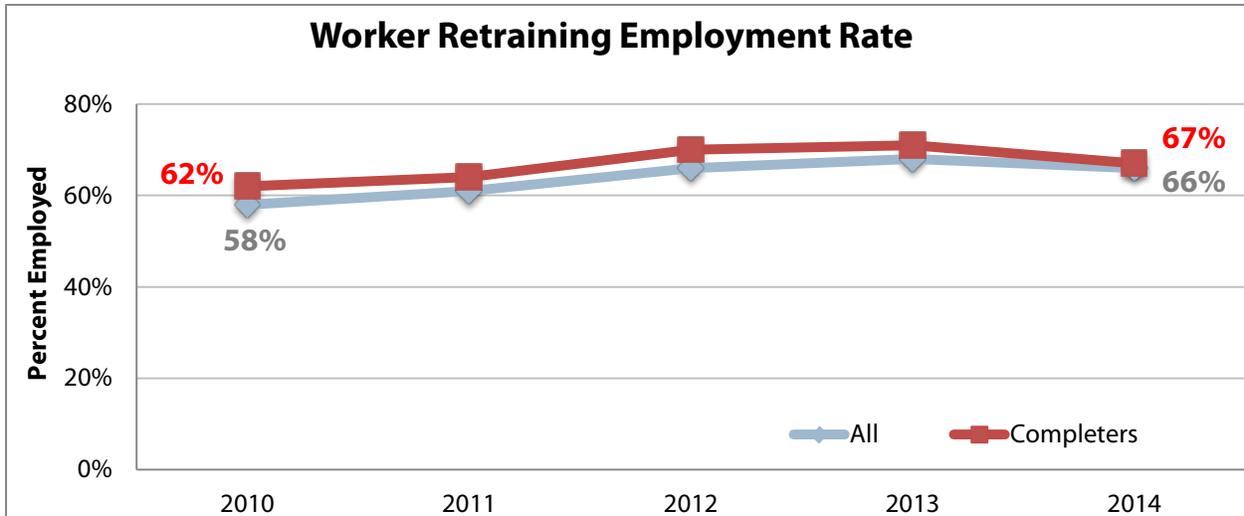
**Full-time employment averages 30 or more hours per week.

***Earnings/wages expressed in first quarter 2014 dollars in order to account for inflation.



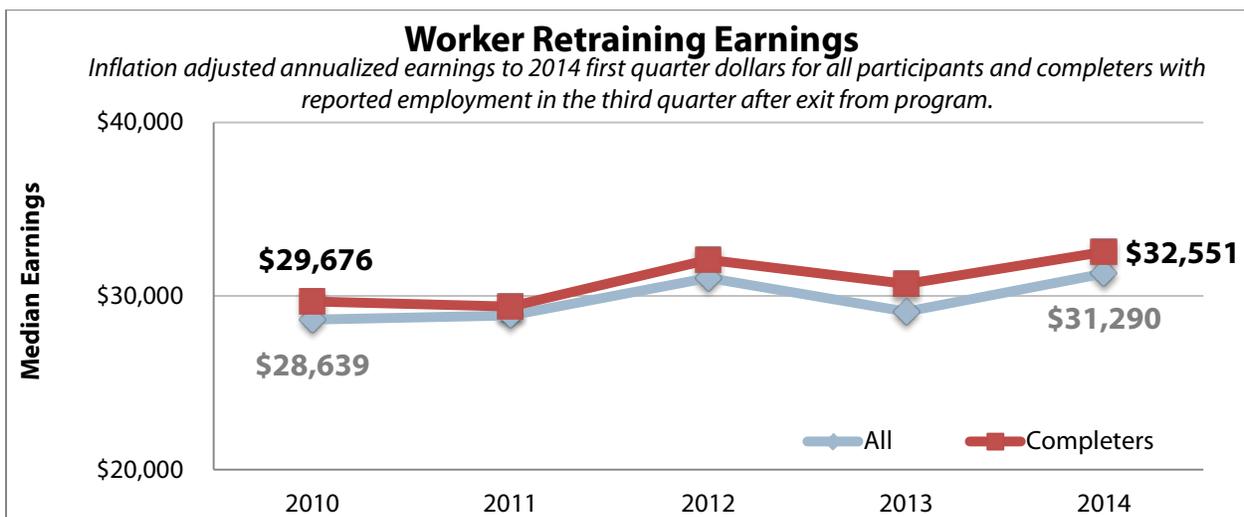
Employment and Earnings Trends for All Worker Retraining Participants

The employment rate among all Worker Retraining participants declined during the Great Recession. However, there has been an increase in employment from a low of 58 percent in 2011, to 68 percent in 2014, before a moderate decline in 2015. The employment rate among those completing the Worker Retraining program was only a little higher than for all participants. However, there has historically been a larger employment rate difference between completers and general participants.



Note: Rate does not include self-employment, employment outside the Northwest, or military service and thus understates total employment by approximately 10 percent.

Among all Worker Retraining participants, earnings rose between the 2014 and 2015 Workforce Training Results, to just above the 2013 levels. Earnings were four percent higher for those participants who completed the program, a trend that has borne out over time.



Note: Workforce Training Results 2010-15 reports. Note: This chart shows annualized earnings in 2013 first quarter dollars to account for inflation.



Worker Retraining Participants Employment by Industry

While over half of those employed found jobs in the service industry, 10 percent were working in manufacturing, 9 percent in retail trade, and 8 percent in construction. Healthcare was the top services sub-industry, accounting for 18 percent.

Industry Group	
54%	Services
10%	Manufacturing
9%	Retail Trades
8%	Construction
5%	Public Administration
4%	Transportation and Warehousing and Utilities
4%	Financial Services
4%	Wholesale Trade
1%	Information
1%	Natural Resources and Mining
Breakout of Services	
18%	Health Care
12%	Admin., Support, Waste Management, and Remediation Services
6%	Social Assistance
6%	Professional, Scientific, and Technical Services
5%	Education Services
4%	Accommodation and Food Services
3%	All Other Services
1%	Arts, Entertainment, and Recreation
Breakout of Manufacturing	
4.3%	All Other Manufacturing
2.4%	Aerospace
1.4%	Fabricated Metal Products
1.2%	Food & Beverage
1.0%	Wood & Paper Products

Source: Matches with Employment Security Department data in third quarter after exiting program. Industry groups based on North American Industry Classification System (NAICS) codes.

Relationship of Training to Employment

In 2013, the Workforce Board surveyed Worker Retraining Participants who had left their program in 2011-12. The survey provided data on employment and documented how satisfied participants were with their training. The Participant Satisfaction Survey was conducted by telephone and was completed by 160 participants.

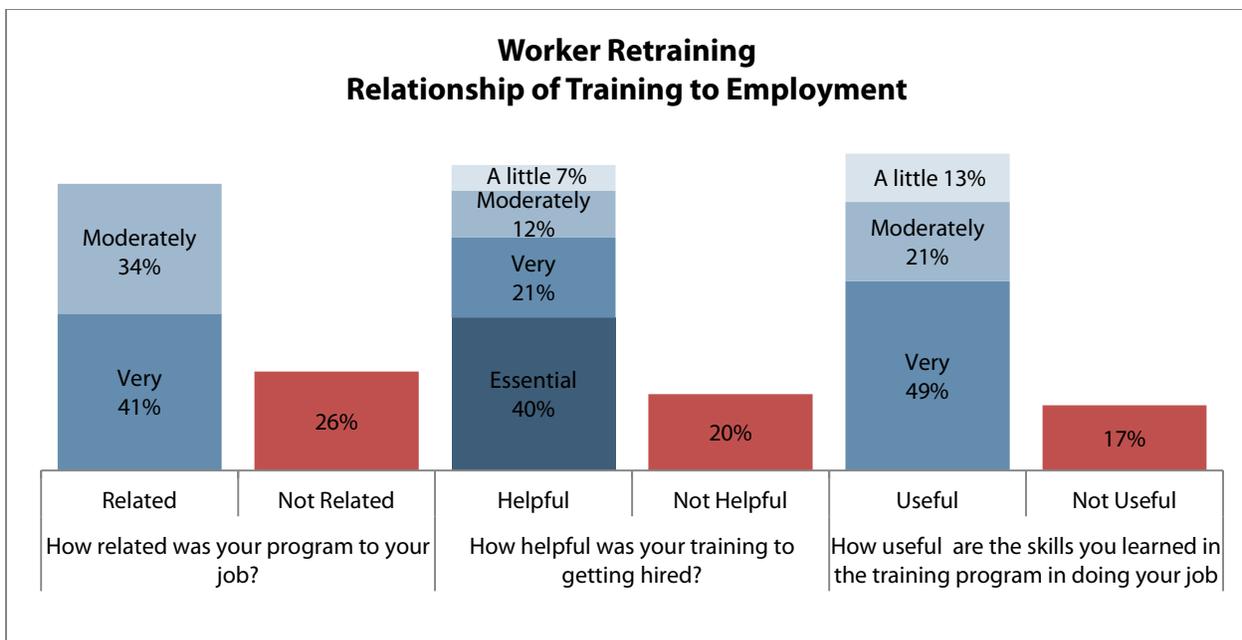
To measure the extent to which a participant's education program and training related to employment, we asked participants three questions:



1. How related was the program to their job?
2. How important was the training in getting hired?
3. Are the skills they learned useful in their job?

Asking about the relationship between training and employment in different ways can produce more complete information. For example, some participants said their training was not related to their job, but nevertheless found the skills acquired were useful on the job.

Among Worker Retraining participants employed seven to nine months after leaving a program, 41 percent said their training was “very related” to their job. A further 18 percent reported the training was “somewhat related” to their job. In 2011, slightly higher rates of employed participants reported their training was “very related” (46 versus 41 percent) while 22 percent more participants said the training was “somewhat related.”



Source: Workforce Board's Participant Satisfaction Survey 2013.

Participants interviewed in 2013 also indicated the training was helpful to them in getting their job. Of those participants, 40 percent indicated their training was an “essential requirement,” another 21 percent indicated it was “very important,” and 12 percent reported it was “moderately important.” Seven percent said it was “a little helpful.” The remaining 20 percent indicated their training was “not important at all” to getting their job, 7 percentage points below the 2011 survey.

Most participants said skills they learned in their training program were useful in doing their job. Some 49 percent of participants indicated the skills were “very useful,” 21 percent said “moderately useful,” and 10 percent “a little useful.” Only 17 percent of participants who were employed indicated the skills were “not useful at all.”

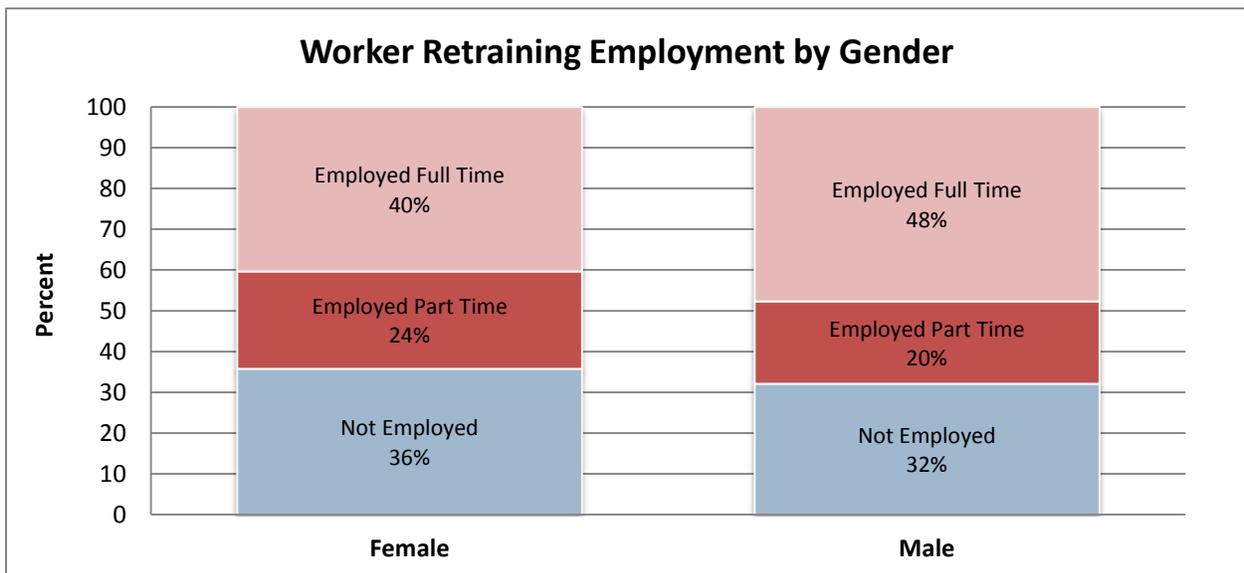


When combining two of the questions about the program’s relationship to the job and about whether the skills acquired were helpful, a small percentage of participants answer negatively to both. Just 12 percent of participants employed the third quarter after exit said the training they received was *neither* helpful in their job nor related to the job they obtained.

Wages and Employment Results Vary by Population

Employment and earnings can vary by gender, race and ethnicity, and disability status. Forty-eight percent of men were employed full time, and 20 percent part time for an overall rate of 68 percent. Women’s overall employment rate was 64 percent. Men were also more likely to be employed full time than women (48 percent versus 40 percent).

The wage gap between men and women in the Worker Retraining program is notable. Women’s hourly wages were 85 percent of men’s (\$15.65 vs. \$18.32) and their annual earnings were 80 percent of men’s (\$28,302 vs. \$35,507).



Source: Community and Technical College Administrative Data (DLOA)

Race and Ethnicity Plays Role

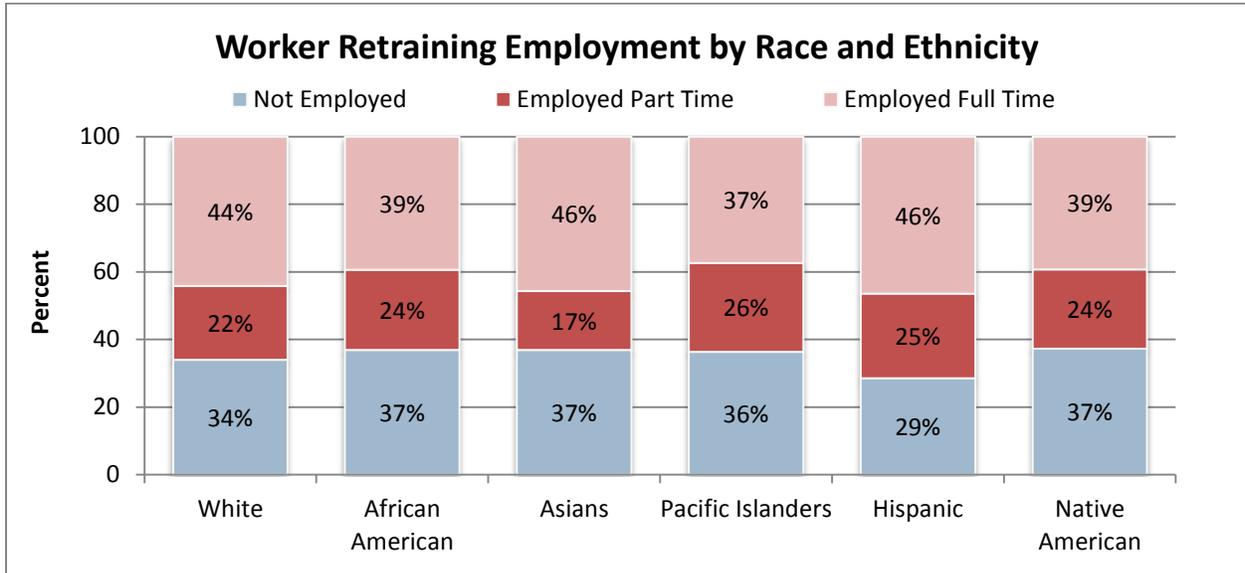
Variation was also found for employment rates among racial and ethnic groups. Hispanics had the highest overall rate of employment at 71 percent (46 percent full time and 25 percent part time), followed by whites (66 percent overall, 44 percent full time), and Pacific Islanders, African Americans, Asians and Native Americans all at 63 percent.

Racial and ethnic variation was also found with full-time employment. Asians and Hispanics were most likely to be working full time (46 percent); Pacific Islanders had the lowest percentage of people working full time (37 percent).

Pacific Islanders had the highest median hourly wage at \$18.58, followed by Asians (\$17.76), whites (\$17.22), Native Americans (\$16.15), Hispanics (\$15.41), and African Americans (\$14.83)



The breakdown for annual earnings among different racial and ethnic groups was distributed slightly differently from that of median hourly wages. Asians had the highest earnings (\$35,511), followed by Pacific Islanders (\$34,346), whites (\$32,070), Native Americans (\$28,781), Hispanics (\$28,401), and African Americans (\$27,236).



Source: Community and Technical College Administrative Data (DLOA)

Disability Impacts Employment, Earnings

Earnings and employment outcomes also varied by disability status. College records indicate 7 percent of the Worker Retraining participants included in this study had a disability. Twenty-nine percent of participants with a disability were employed full time, and 19 percent part time to reach an overall rate of 48 percent. These participants were less likely to have overall employment reported to the Employment Security Department during the third quarter after exit than participants without a disability (48 percent versus almost 69 percent) and were less likely to be employed full time (29 percent versus 46 percent). Among those working, the median hourly wage rate of those with a disability (\$15.55) was 91 percent of those without a disability (\$17.05), whereas the annual earnings of those with a disability (\$26,162) was 83 percent of those without a disability (\$31,625).



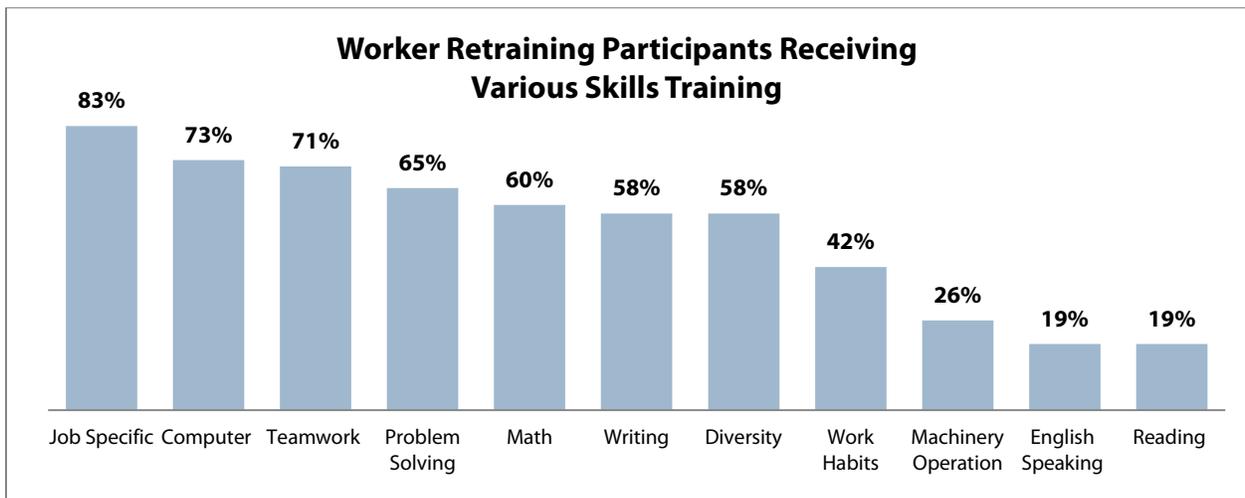


Source: Community and Technical College Administrative Data (DLOA)

Competency Gains

The primary goal of Worker Retraining is to prepare dislocated workers for new jobs. Worker Retraining participants agree; 95 percent indicated one of the main reasons they enrolled was to learn skills for a new job, and 93 percent reported they enrolled to get or finish a degree or certificate. In addition, 73 percent decided to enroll for personal improvement or enjoyment.

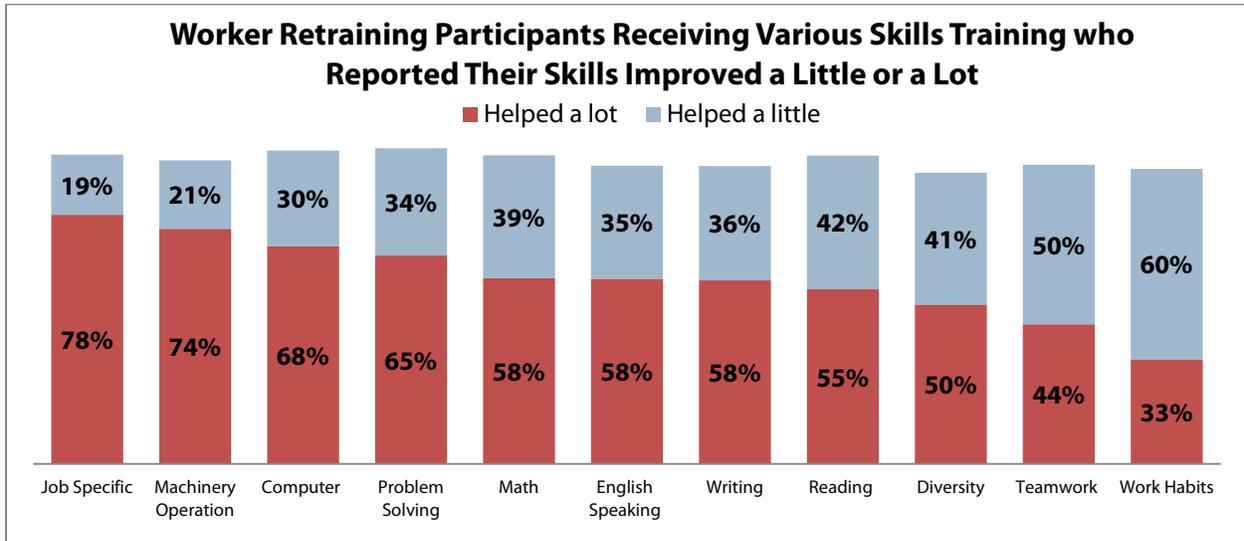
Complementing job specific skills, many participants also received other types of training. Compared to the 2011 Workforce Board Participant Survey, the current participants received more of the most common types of training. For example, the percentage of participants receiving job specific, computer, teamwork, and problem solving training rose in 2013. In fact, the only skill training that saw a decrease in participants receiving training between the two surveys was machinery operation.



Source: Workforce Board's Participant Satisfaction Survey 2013.



Compared to the participants in the 2011 survey, the participants in the 2013 survey saw increasing percentages of “helped a lot.” All skill areas saw increases in “helped a lot” with the three exceptions: teamwork and work habits declined in 2013, and diversity showed no change.



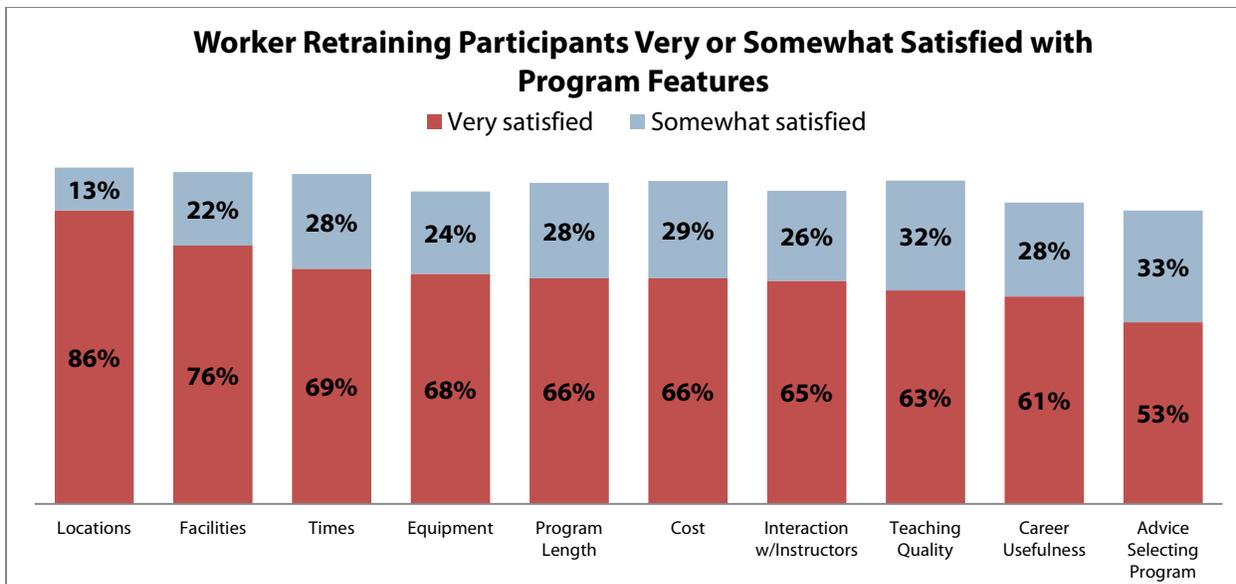
Source: Workforce Board's Participant Satisfaction Survey 2013.

Participant Satisfaction

Similar to the previous study, participants expressed very high levels of satisfaction with their program. Some 86 percent reported they had met their educational objectives compared to 83 percent in 2011 and 84 percent in 2008.

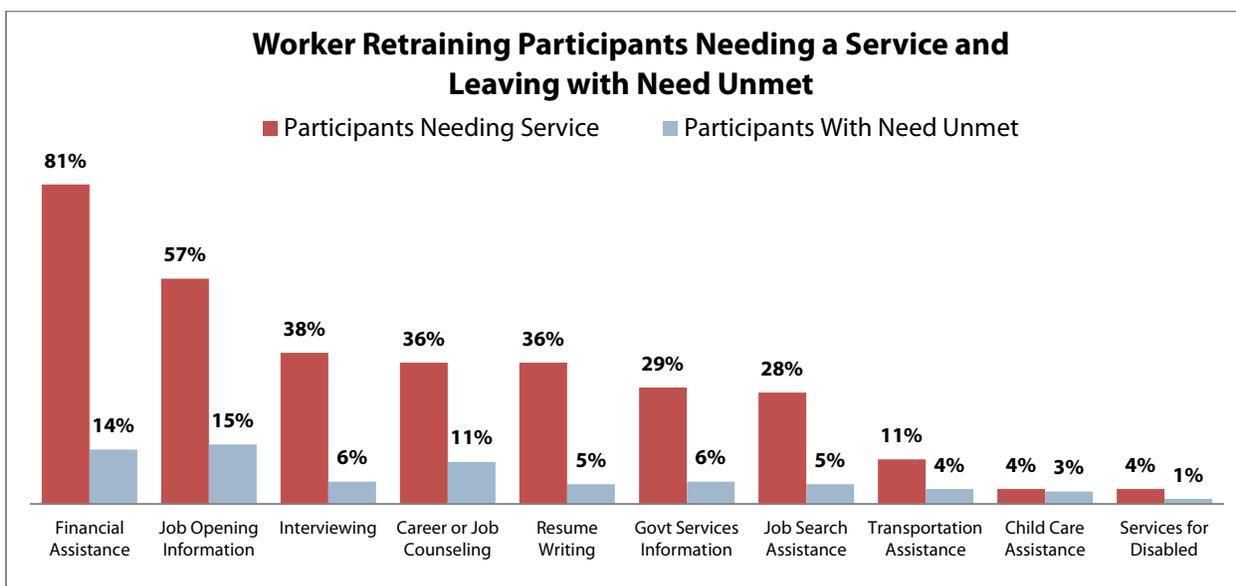
Similarly, 91 percent of the participants reported they were “very satisfied” or “somewhat satisfied” with the program, up from 86 percent in 2011 and 90 percent in 2008. Participants tended to be “very satisfied” with most aspects of the program, particularly location, facilities, and the times held. Advice selecting a program and career usefulness showed the lowest percentage reporting being “very satisfied.”





Source: Workforce Board's Participant Satisfaction Survey 2013.

As in the past several surveys, the two most frequently needed support services while enrolled were financial assistance and job opening information. The percentage of participants who reported needing financial assistance rose from 64 percent to 81, and the percentage that left with an unmet need⁶ in this area dropped from 15 to 14 percent. While most participants received the support services needed, 15 percent of participants left the program with an unmet need for job opening information.

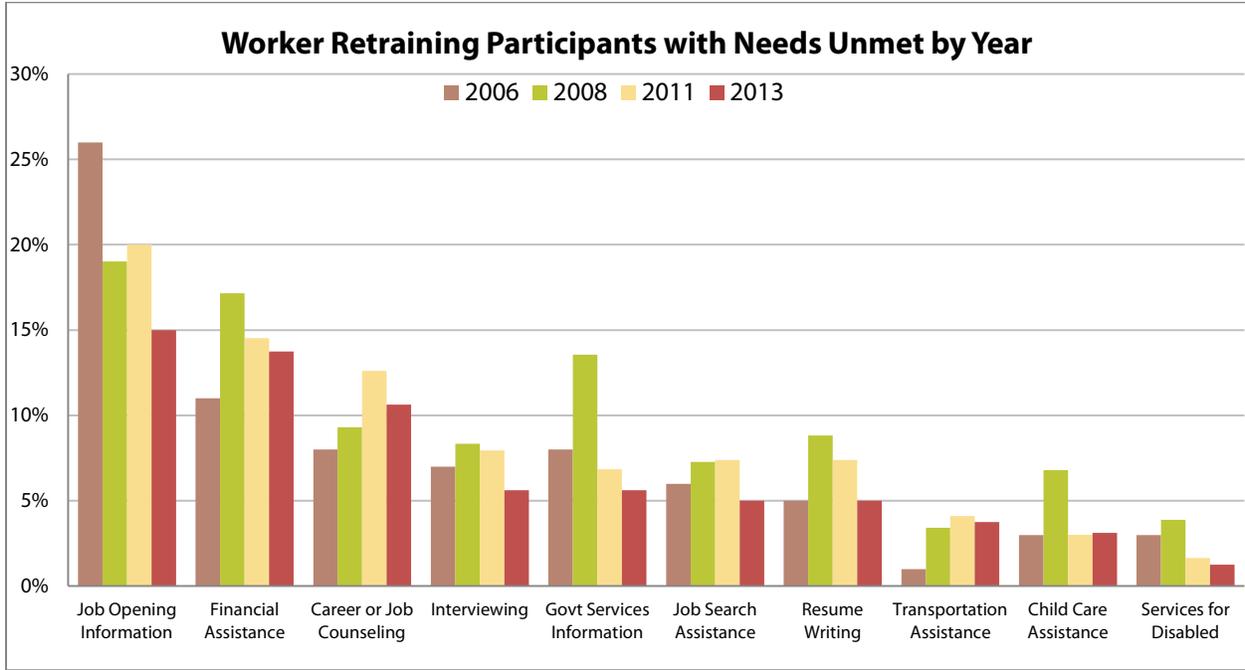


Source: Workforce Board's Participant Satisfaction Survey 2013.

⁶ Unmet need refers to cases where the student reports that either they did not receive the required service, or what was provided did not meet their needs.



Overall, during the past three surveys there has been a decline in participants reporting that they left their program with an unmet need in most categories. In addition, most need areas have shown decline when compared with previous surveys. The need for career counseling and transportation assistance decreased since the 2011 survey



Source: Workforce Board Participant Satisfaction Surveys 2006-2013.



Net Impact - Did Program Make a Difference in Participant Success

Every four years, the Workforce Training and Education Coordinating Board conducts a net impact analysis of workforce development programs. This detailed study compares participants and non-participants. The net impact part of this study attempts to measure whether the program made a difference in the participant's success. Washington is the only state to periodically conduct rigorous net impact evaluations of its workforce programs.

The Worker Retraining program has positive net impacts on employment and wages.

The net impact analysis was conducted by the W.E. Upjohn Institute for Employment Research (Upjohn), a national leader in evaluating training programs. To do the analysis, Upjohn studied program participants to see what results they achieved and compared these results with a control group. Individuals who participated in a community or technical college Worker Retraining program were compared to individuals who had similar demographic characteristics, but who did not participate in any of the programs included in the study. The comparison group members were selected from among those who registered with WorkSource, Washington's one-stop career center system.

The most recent net impact analyses examined experiences of participants who left the Worker Retraining program through 2009. The short-term impact (Program Year 2007-08) was observed in 2008-09, while the long-term impact (Program Year 2005-06) was observed from 2006-07 through 2008-09.

Impact on Employment and Earnings: Participants vs. Control Group

Worker Retraining	Short-term [^]	Long-term [^]
Net Employment Impact*	8.80 percentage points	7.50 percentage points
Net Hourly Wage Impacts**	No significant positive impacts	\$1.08
Net Quarterly Hours Impacts	26.6	23.5
Net Annualized Earnings**	\$1,759	\$3,004

[^]Short-term is 3 quarters after program exit; Long-term is average across 3 years since program exit.

*Percentages listed are employment percentage points above those of the control group of non-participants.

**Wages and earnings, expressed in first quarter 2014 dollars, represent the average difference between Worker Retraining participants who got jobs and those in the control group who were employed.



As can be seen in the previous table, the Worker Retraining Program had a positive impact on employment, hours worked and annualized earnings. The long-term net impacts on hourly wages were also positive among Worker Retraining participants versus the control group.

Costs and Benefits

The cost-benefit analysis estimates the value of the net impact on earnings, employee benefits (estimated at 25 percent of earnings), UI benefits, and certain taxes.⁷ Program costs include both direct program costs and support payments borne by taxpayers and the tuition and foregone earnings borne by students. Benefits and costs are calculated for both the observed period of time based upon a statistical model that estimated the benefits and costs out to age 65 in order to compare benefits and costs in terms of net present values, post-program benefits and costs are discounted by 3 percent per year and all figures are stated in 2014 Q1 dollars to control for inflation. The benefits and costs presented here are based on impacts estimated for students leaving programs in 2005-2006 (observed from 2006-07 through 2008-09), because a longer-term follow-up is required for this analysis.

Participant and Public Benefits and Costs per Participant in Community and Technical College Worker Retraining Programs

Benefit/Cost	First 2.5 years		Lifetime (until 65)		Sum of Costs and Benefits
	Participant	Public	Participant	Public	
Benefits					
Earnings	\$10,247	\$0	\$80,310	\$0	
Fringe Benefits	\$2,561	\$0	\$20,078	\$0	
Taxes	-\$2,115	\$2,115	-\$16,584	\$16,584	
Transfers					
UI	-\$159	\$159	\$1,188	-\$1,188	
Costs					
Foregone net earnings	-\$12,781	-\$2,529	-\$12,781	-\$2,529	
Program costs	-\$3,808	-\$7,408	-\$3,808	-\$7,408	
Benefits	\$10,533	\$2,275	\$84,993	\$15,395	
Costs	-\$16,590	-\$9,937	-\$16,590	-\$9,937	
Total (Net)	-\$6,057	-\$7,662	\$68,403	\$5,459	\$73,862

Note: Benefits and costs are expressed in 2014 first quarter dollars.

⁷ Upjohn estimated the impact of the net change in earnings on social security, Medicare, federal income, and state sales taxes.



For each student in a community or technical college Worker Retraining program, the public (taxpayer) cost is about \$7,408 over the length of their enrollment, and the student costs are about \$3,808 in tuition and \$12,781 in foregone earnings while training. During the course of working life to age 65, the average trainee will gain about \$67,529 in net earnings (earnings minus foregone earnings) and \$20,078 in employee benefits.

These are net gains compared to the earnings of similar individuals who did not receive training. Including program costs and the net impacts on taxes and unemployment insurance benefits, the total net benefit per participant is \$68,403.

Projected participant net benefits to age 65 outweigh public costs invested in college training by a ratio of \$9 to 1, or \$68,403 to \$7,408.

From the time of leaving training to age 65, the public is forecasted to gain \$16,584 in net additional Social Security, Medicare, federal income, and state sales taxes. The estimated lifetime net benefit to taxpayers is \$5,459 per participant.

Projected taxpayer net benefits to age 65 outweigh public costs invested in college training by a ratio of \$2 to 1 or \$15,395 to \$7,408.

Summary, Areas for Improvement, and Further Research

The Worker Retraining program provides dislocated workers and the long-term unemployed with access to job retraining for a new career. The Worker Retraining program has strong net impacts on participant's long-term employment and earnings, and provides a positive return to taxpayers. In addition, participants report high levels of satisfaction, with 86 percent meeting their educational objectives. While results for post-program employment rates and earnings are still lower than prior to the Great Recession, employment rates and earnings are on the rebound. Earnings were 4 percent higher for those that completed training, compared to all participants.

Community and technical colleges are launching innovative programs to increase student completion rates through "intrusive" outreach and one-stop advising enrollment centers. For the 2015-17 biennium, the State Board for Community and Technical Colleges is requesting \$18 million in new funding for advising, career planning, and development services. These support services help keep students on track with program requirements to ensure they graduate on time.

There is some room for improvement in the Worker Retraining program. While the program has relatively high participation by women and African Americans, they, and those with disabilities, tend to have lower labor market outcomes. These poorer employment outcomes are not particular to the Worker Retraining program but are generally the case for these populations, overall. However, lower employment and earnings are also tied to program choice. Better career and job counseling, and advice on program selection, could help more students prepare for higher-paying, in-demand occupations. Career and job counseling



support services were rated less highly by Worker Retraining program participants than other services. Also, more than one in six students reported their need for job opening information was not met. Strengthening these services would likely benefit all students, including those program participants whose results have been lagging.

