



Workforce Training and Education Coordinating Board

2014 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 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.

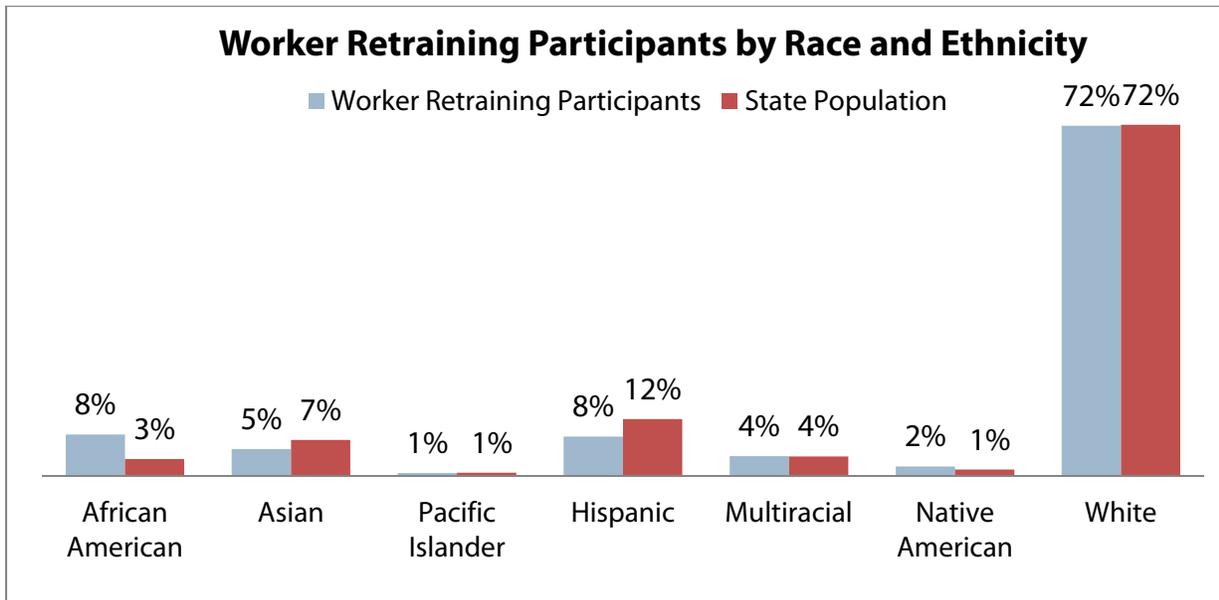
Participant Profile

For this report, researchers studied the results of 7,879 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 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.



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 (72 percent). African Americans (8 percent) are represented at a greater percentage than their portion of the general population, whereas Hispanics (8 percent) and Asians (5 percent) are at a slightly lower percentage.²



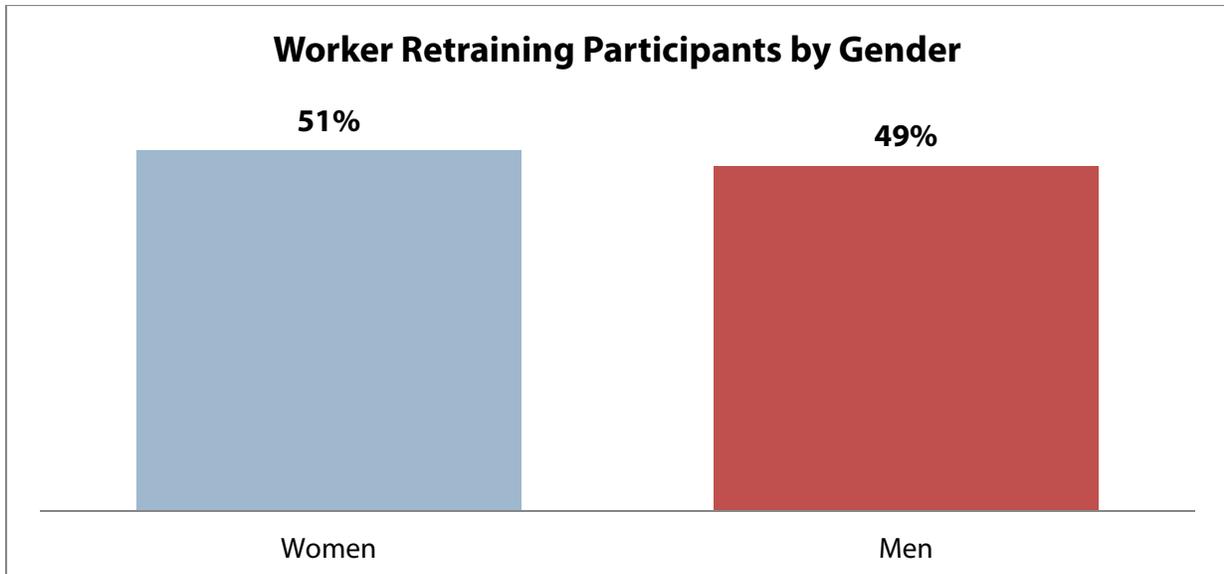
Source: Community and Technical Colleges Administrative Data and 2011 U.S. Census Data from the American Community Survey.

In terms of program completion by racial and ethnic groups, the rates are nearly identical to the proportion participating in the program. However, whites make up slightly more of the completers (74 percent): Hispanics (7 percent) and African Americans (7 percent) make up slightly less of the completers.

Among Worker Retraining participants, 51 percent were women, and 49 percent were men.

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). According to the 2011 U.S. Census Bureau estimates for Washington from the American Community Survey, 72 percent are white; 3 percent are African American; 1 percent is Native American; 7 percent are Asian; 1 percent is Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.





Source: Community and Technical Colleges Administrative Data.

When they enrolled in the program, 43 percent of participants had not previously attended college, 25 percent had attended college without receiving a credential, 15 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.

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?³
- Has the program made a difference in the participant’s success?
- Did participants and the public receive a return on their investment?

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.



Data Comes From State Wage Files

The 2014 Workforce Training Results includes information obtained from Employment Security Department wage files in Washington, Idaho, and Oregon, and federal employment records for 2012-13.

Net Impact Study Adds More Insight into Program Performance

In addition, this 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.

Turn to page 17 for the Net Impact Study. Conducted every four years, this in-depth report adds extra value to 2014 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.

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 2011-12:

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

Another 19 percent were defined as completers because they completed 45 or more credits or a unique (non-degree) program.

Altogether, 62 percent of participants completed their program. This completion rate is higher than the 57 percent for those who left Worker Retraining programs in the 2013 report. In that report, 22 percent received an associate's degree, 17 percent received a certificate, and 16 percent were defined as completers because they completed 45 or more credits or a unique (non-degree) program.



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 left a Worker Retraining program. Record matches found that 68 percent of the participants had reported employment during the third quarter after they left their program, 2 percentage points higher than that reported in the last report.

Their median hourly wage was \$16.30, and they had median annualized earnings of \$28,780.⁵ Program completers were more likely to be working full time than those who did not complete their training programs (64 percent compared to 61 percent) and had higher annual earnings (\$30,355 compared to \$28,780).

Employment and Earnings for Worker Retraining Participants, 2014

Performance Measure	Results
Employment Rate* (State Records)	68%
Employment Rate (Completers)	71%
Full Time Employment**	61%
Median Quarterly Hours	455
Median Hourly Wage***	\$16.30
Median Annualized Earnings***	\$28,780
Median Annualized Earnings (completers)	\$30,355

* 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 2013 dollars in order to account for inflation.

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 2013 dollars.



Earnings of Worker Retraining Participants

To better gauge the financial effectiveness of Washington’s workforce programs, it helps to frame income levels. One common yardstick is the federal poverty level. In 2013, the federal poverty level for one person was \$11,490 per year.⁶

Worker Retraining participants were able to support a median 5.3 people at the poverty level—meaning they could support themselves and a little more than four other people. They could support themselves and almost one other person (1.7) at 200 percent of poverty level.

Number of People Supported at Poverty Level by Participant Income

Performance Measure	2010	2011	2012	2013	2014
Number of people supported at poverty level	6.0 people	5.2 people	5.2 people	5.8 people	5.3 people
Number of people supported at 200 percent poverty	2.1 people	1.7 people	1.7 people	2.0 people	1.7 people

The next table shows employment and earnings information over five study periods, starting with 2010. Wages continue to be widely distributed among Worker Retraining participants. Although the median hourly wage was \$16.30, one quarter earned more than \$22.43 an hour, while another quarter had jobs that paid less than \$12.33 an hour. This wide distribution of wages is reflected in the dispersion of employment across higher and lower-wage industries.

⁶ Poverty levels from 2013 were used in this edition of Workforce Training Results to measure the results of workforce programs on participants observed in 2012-13. The federal poverty level is determined by the Department of Health and Human Services. The level varies according to family size. The number is adjusted for inflation and reported annually in the form of poverty guidelines. Public assistance programs typically define eligibility income limits as some percentage of the federal poverty level.



Employment and Earnings Trends for All Worker Retraining Participants

Performance Measure	2010	2011	2012	2013	2014
Employment Rate (Self-Reported)	N/A	67%	N/A	N/A	N/A
Employment Rate* (State Records)	69%	58%	61%	66%	68%
Full Time Employment**	67%	57%	58%	64%	61%
Median Quarterly Hours	468	429	442	468	455
Median Hourly Wage***	\$17.27	\$16.86	\$17.50	\$17.47	\$16.30
Median Annualized Earnings***	\$31,423	\$28,319	\$28,550	\$30,690	\$28,780

*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.

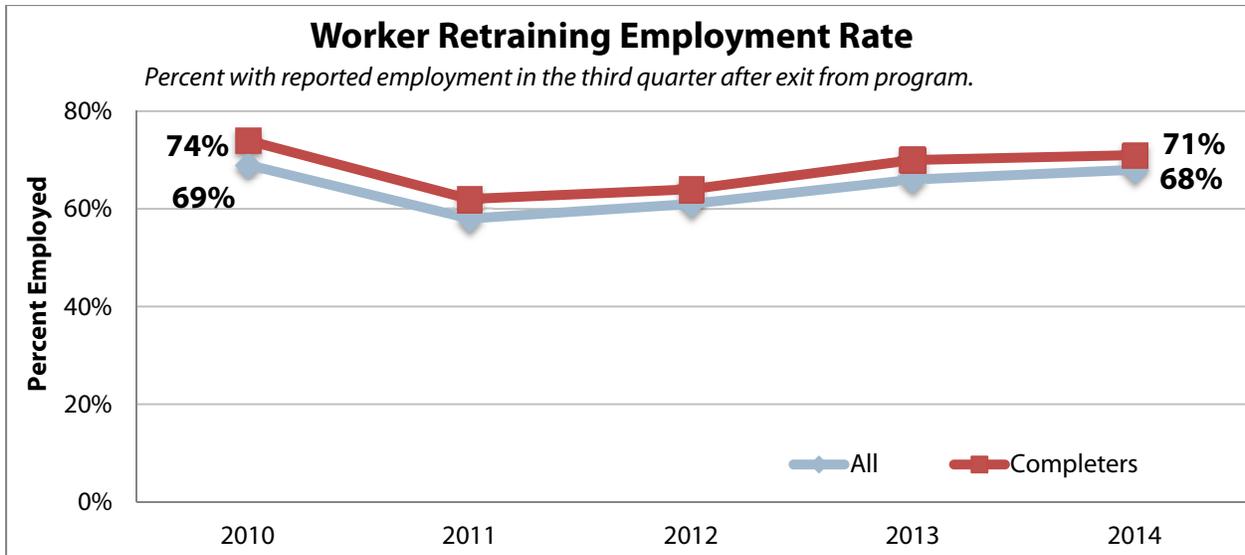
**Full-time employment averages 30 or more hours per week.

***Earnings/wages expressed in first quarter 2013 dollars in order to account for inflation.

A survey conducted in 2011 of Worker Retraining participants revealed that 64 percent received medical benefits, and 38 percent received retirement benefits.

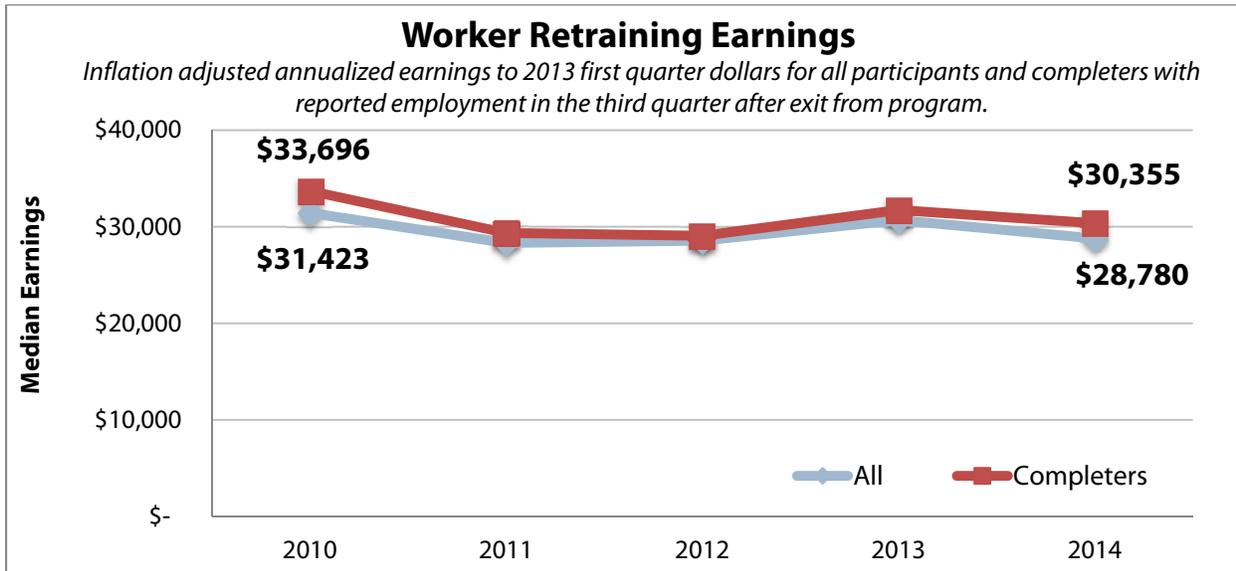
The employment rate among all Worker Retraining participants declined during the Great Recession. However, there has been increase in employment from a low of 58 percent on the 2011 report, to 68 percent on the 2014 report. The employment rates are higher among those completing the Worker Retraining program.





Source: Workforce Training Results 2010-14. 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 decreased between the 2013 and 2014 Workforce Training Results. Earnings were higher for those participants who completed the program.



Source: Workforce Training Results 2010-14 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 9 percent in construction.

Industry Group	
54%	Services
10%	Manufacturing
9%	Retail Trades
9%	Construction
4%	Financial Services
4%	Transportation and Warehousing and Utilities
4%	Public Administration
4%	Wholesale Trade
1%	Information
1%	Natural Resources and Mining
Breakout of Services	
16%	Health Care
13%	Administrative, Support, Waste Management, & Remediation Services
6%	Professional, Scientific, and Technical Services
5%	Education Services
4%	All Other Services
4%	Social Assistance
4%	Accommodation and Food Services
2%	Arts, Entertainment, and Recreation
Breakout of Manufacturing	
3.9%	All Other Manufacturing
3.1%	Aerospace
1.2%	Wood & Paper Products
1.1%	Fabricated Metal Products
1.1%	Food & Beverage
Breakout of Retail Trades	
1.9%	Department and Warehouse Stores
1.1%	Vehicle Sales
1.1%	Food and Liquor Stores
1.1%	Miscellaneous Store Retailers
1.0%	Hardware, Garden and Farm Supplies
0.6%	Clothing and Accessories Stores
0.6%	Books, Music and Hobbies Sales
0.6%	Health Care and Beauty Products
0.5%	Gasoline Stations
0.4%	Home Furnishings Sales
0.3%	Electronics and Appliance Stores

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



Relationship of Training to Employment

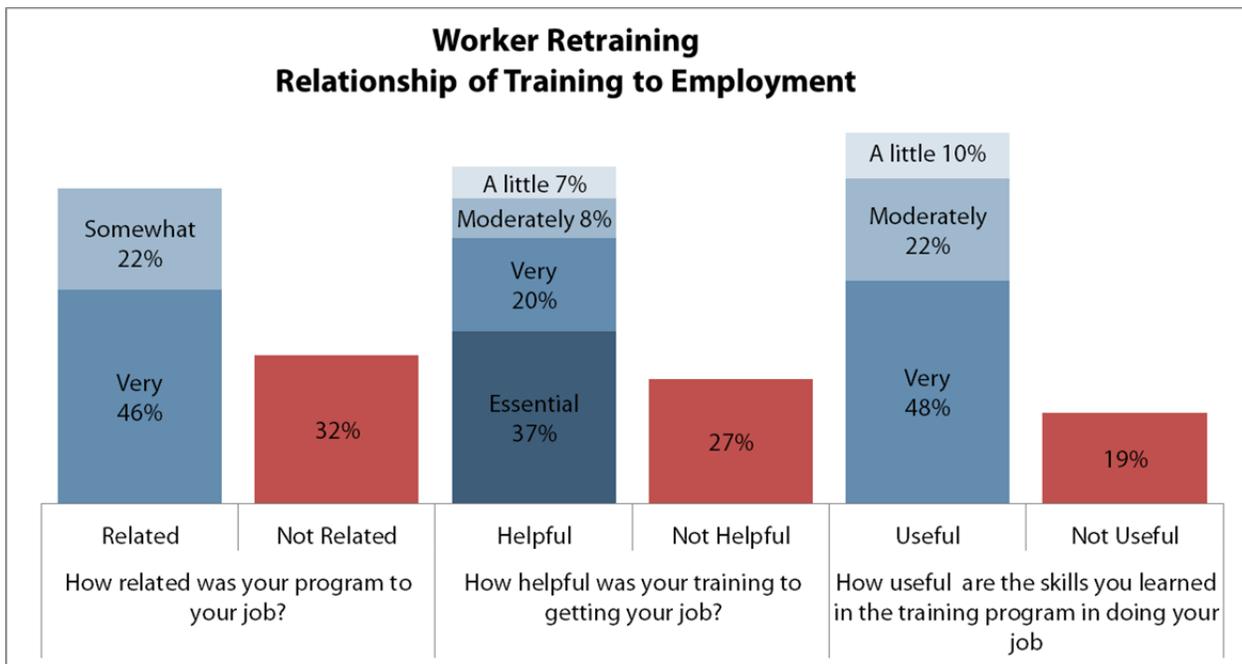
In 2011, the Workforce Board surveyed Worker Retraining participants who had left their program in 2009-10. The survey provided data on employment and documented how satisfied participants were with their training. The Participant Satisfaction Survey was conducted by telephone and was completed by 365 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, 46 percent said their training was “very related” to their job. A further 22 percent reported the training was “somewhat related” to their job. In 2008, slightly lower rates of employed participants reported their training was “very related” (41 versus 46 percent) while 8 percent more participants said the training was “somewhat related.”



Source: Workforce Board’s Participant Satisfaction Survey 2011.

Participants interviewed in 2011 also indicated the training was helpful to them in getting their job. Of those participants, 37 percent indicated their training was an “essential requirement,” another 20 percent indicated it was “very important,” and 8 percent reported it



was “moderately important.” Seven percent said it was “a little helpful.” The remaining 27 percent indicated their training was “not helpful” to getting their job.

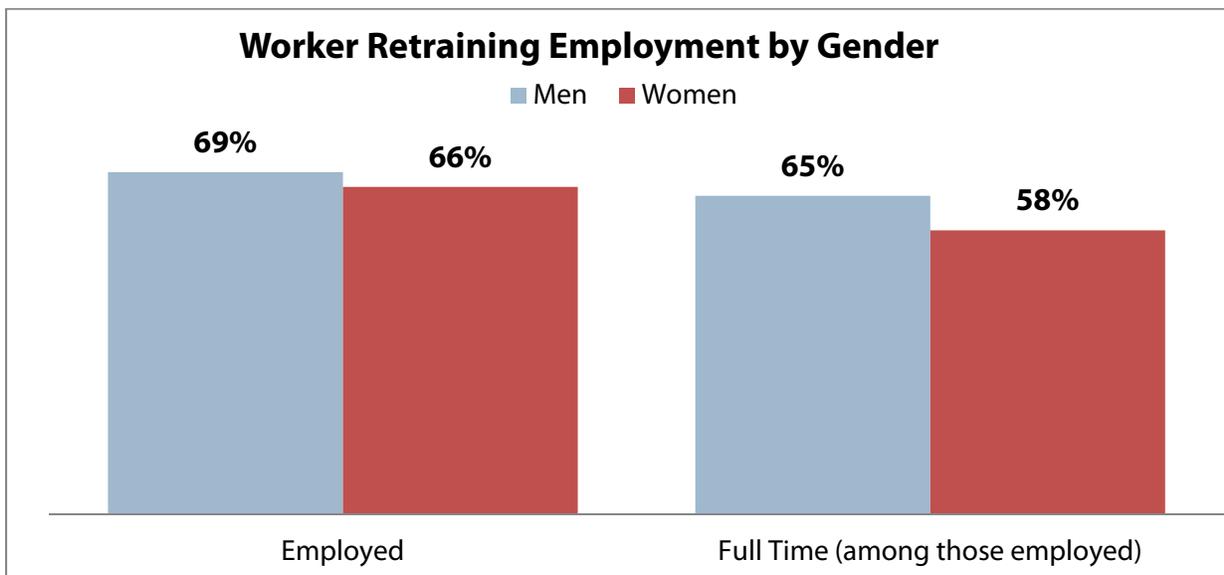
Most participants said skills they learned in their training program were useful in doing their job. Some 48 percent of participants indicated the skills were “very useful,” 22 percent said “moderately useful,” and 10 percent “a little useful.” Only 19 percent of participants who were employed indicated 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 19 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. There was no marked difference between men and women in employment rates, however, men were more likely to be employed full-time than women (69 percent versus 66 percent).

The wage gap between men and women in the Worker Retraining program is notable. Women’s hourly wages were 84 percent of men’s (\$15.13 vs. \$18.04) and their annual earnings were 76 percent of men’s (\$25,208 vs. \$33,201).



Source: Community and Technical College Administrative Data (DLOA)



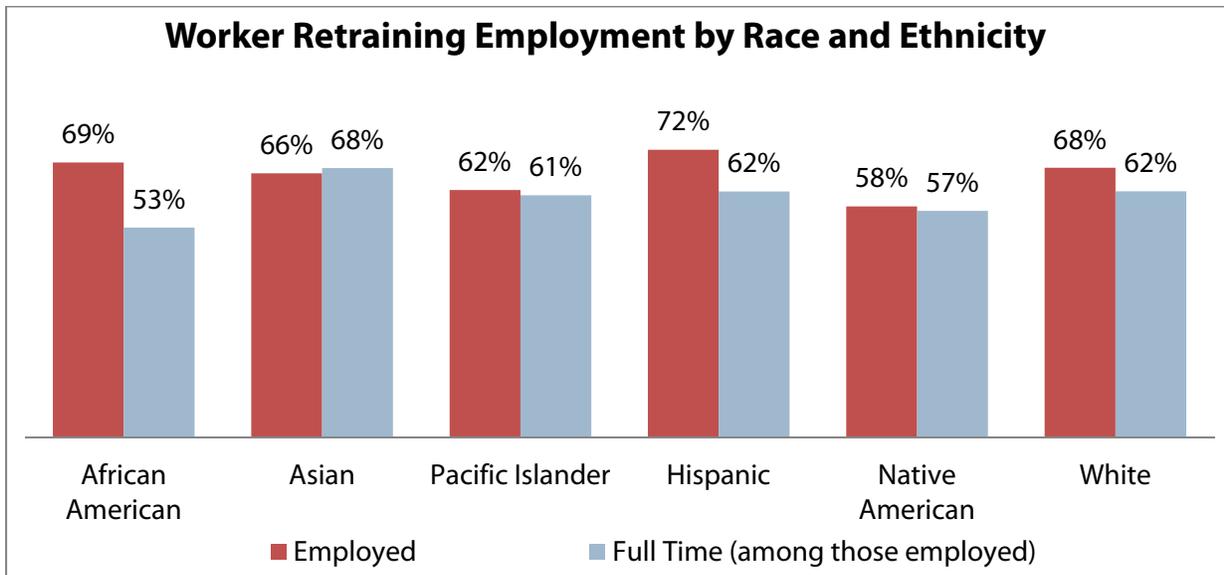
Race and Ethnicity Play Role

Variation was also found for employment rates among racial and ethnic groups. Hispanics had the highest rate of employment at 72 percent, followed by African Americans (69 percent), whites (68 percent), Asians (66 percent), Pacific Islanders (62 percent), and Native Americans (58 percent).

Racial and ethnic variation was also found with full time employment. Asians were most likely to be working full time (68 percent); African Americans had the lowest percentage of people working full time (53 percent).

Asians had the highest median hourly wage at \$17.02, followed by Pacific Islanders (\$16.82), whites (\$16.39), Native Americans (\$15.53), African Americans (\$15.01), and Hispanics (\$14.41).

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 (\$33,103), followed by whites (\$29,263), Pacific Islanders (\$28,594), Hispanics (\$25,723), African Americans (\$25,213), and Native Americans (\$24,445).

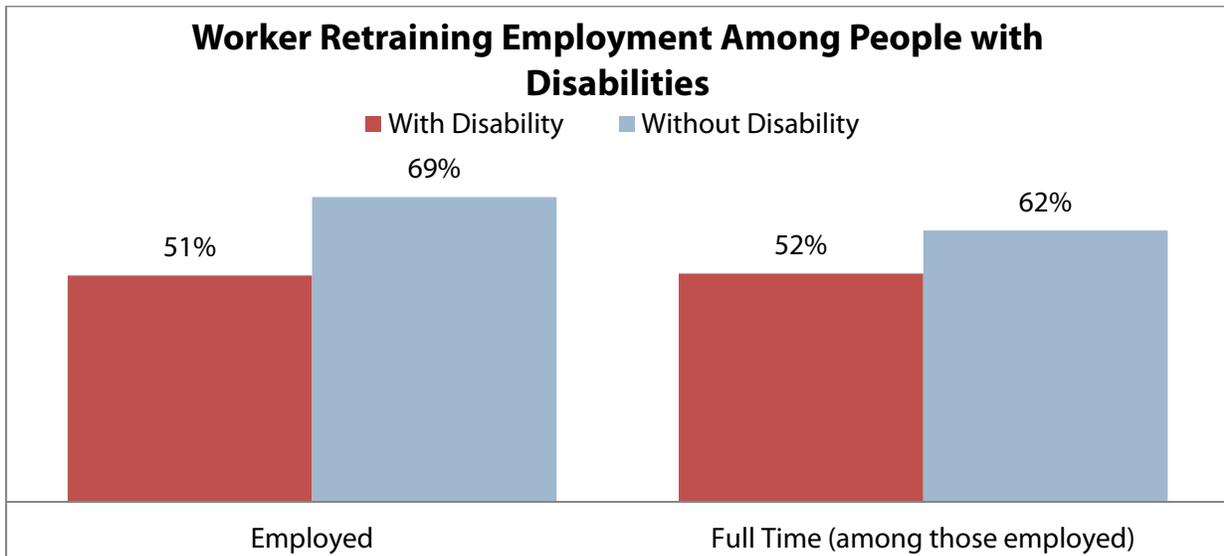


Source: Community and Technical College Administrative Data (DLOA)



Disability Impacts Employment, Earnings

Earnings and employment outcomes also varied by disability status. College records indicate 8 percent of the Worker Retraining participants included in this study had a disability. These participants were less likely to have employment reported to the Employment Security Department during the third quarter after exit (51 percent versus 69 percent) and were less likely to be employed full time (52 percent versus 62 percent). Among those working, the median hourly wage rate of those with a disability (\$15.16) was 93 percent of those without a disability (\$16.37), whereas the annual earnings of those with a disability (\$23,765) was 81 percent of those without a disability (\$29,228).



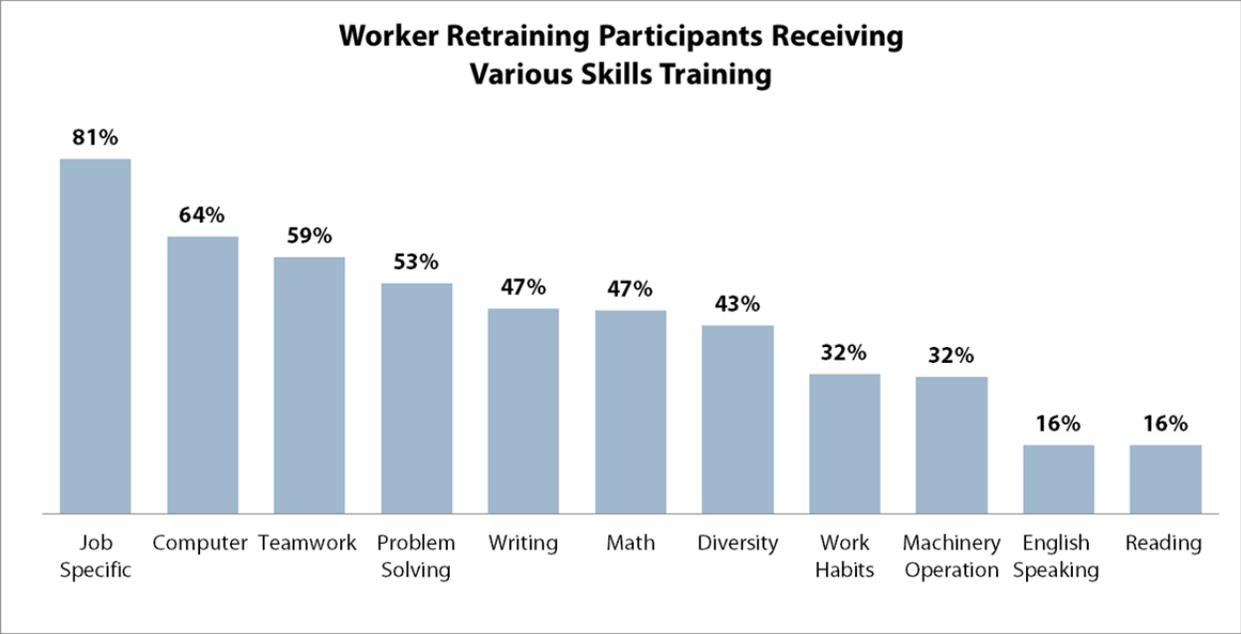
Source: Community and Technical College Administrative Data (DLOA)

Competency Gains

The primary goal of Worker Retraining is to prepare dislocated workers for new jobs. Worker Retraining participants agree: 90 percent indicated one of the main reasons they enrolled was to learn skills for a new job, and 76 percent reported they enrolled to get or finish a degree or certificate. In addition, 70 percent decided to enroll for personal improvement or enjoyment.

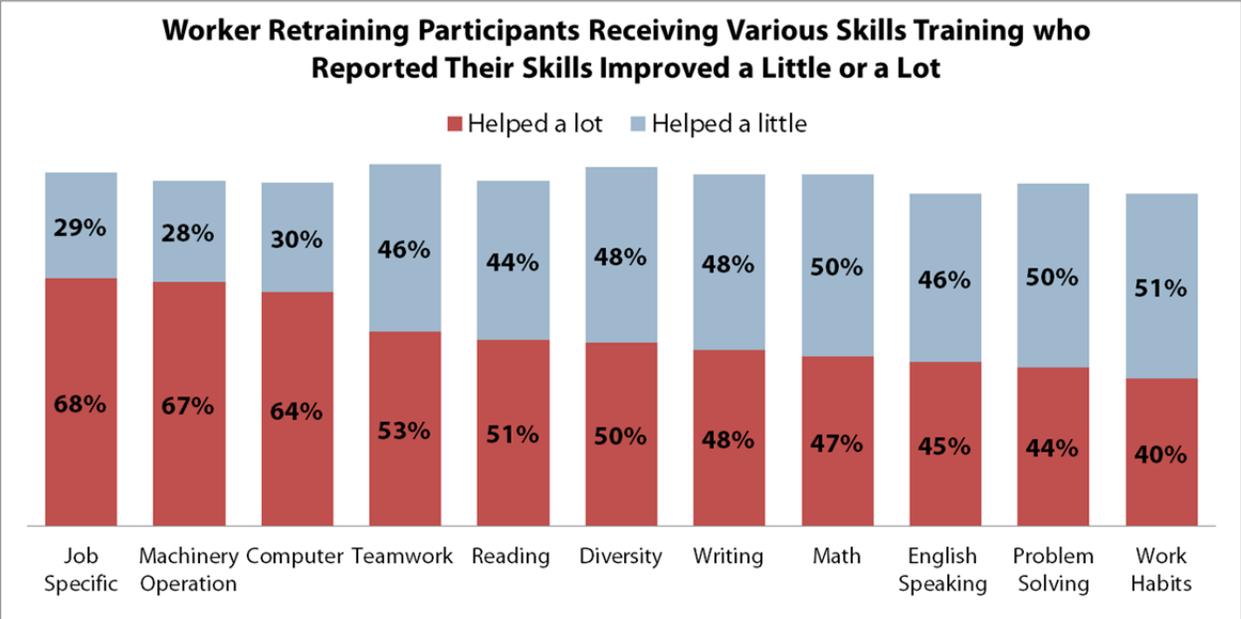
Complementing job specific skills, many participants also received other types of training. Compared to the 2008 Workforce Board Participant Survey, the current participants appear to have received less of some types of training. For example, the percentage of participants receiving computer skills, diversity, and writing skills training dropped by 11 percentage points. Math skills training dropped the most, going from 61 percent in 2008 to 47 percent this year, a drop of 14 percentage points. One exception to this decrease in skills training has been machinery operations, which increased by 12 percentage points.





Source: Workforce Board's Participant Satisfaction Survey 2011.

Compared to the participants in the 2008 survey, the participants in the 2011 survey tended to respond that their skills improved "a little" versus "improved a lot." For example, participants responding that their job specific skills had "improved a lot" declined from 81 percent in 2008 to 68 percent in 2011, and the percentage indicating their skills improved "a little" increased from 17 percent in 2008 to 29 percent in 2011. The percentage of participants reporting overall improvement in teamwork, diversity, and work habits skills as a result of training increased from 2008 to 2011.



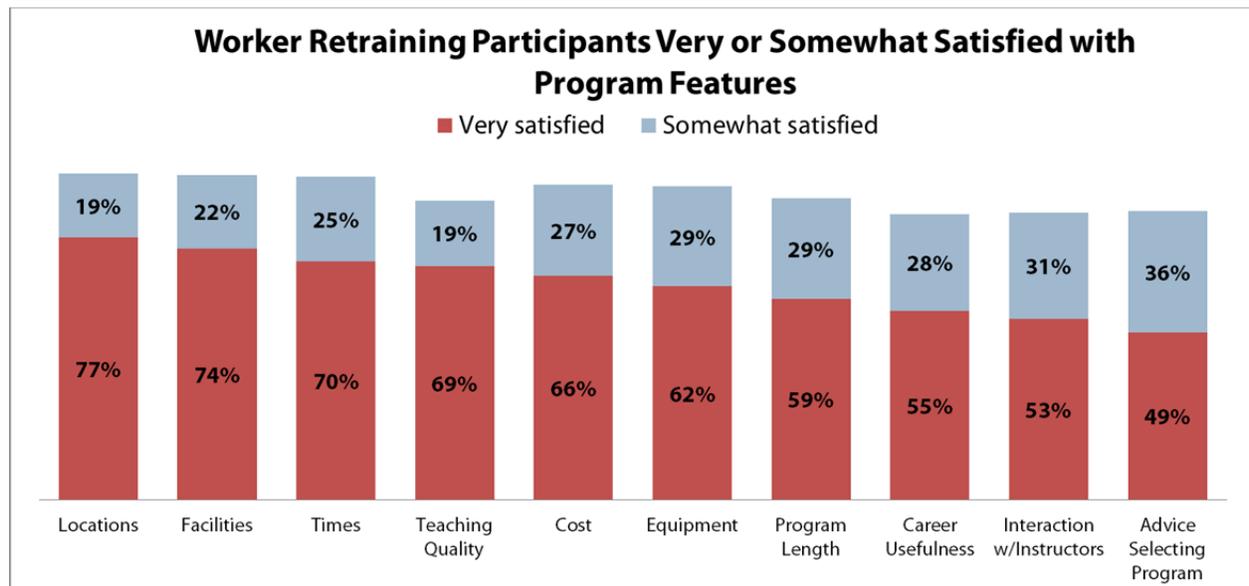
Source: Workforce Board's Participant Satisfaction Survey 2011.



Participant Satisfaction

Similar to the previous study, participants expressed very high levels of satisfaction with their program. Some 83 percent reported they had met their educational objectives compared to 84 percent in 2008 and 90 percent in 2006.

Similarly, 86 percent of the participants reported they were “very satisfied” or “somewhat satisfied” with the program, down from 90 percent in 2008 and 93 percent in 2006. Participants tended to be “very satisfied” with most aspects of the program, particularly location, facilities, and the times held. Advice selecting a program and interaction with instructors showed the lowest percentage reporting being “very satisfied.”

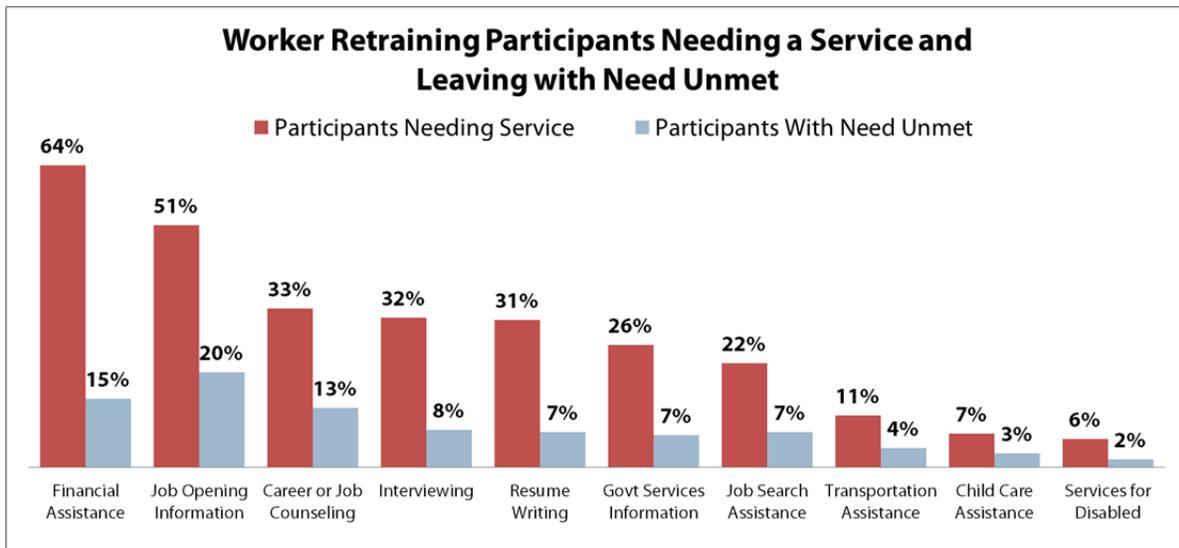


Source: Workforce Board's Participant Satisfaction Survey 2011.

As in the past, 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 dropped from 71 percent to 64, and the percentage that left with an unmet need⁷ in this area dropped from 17 to 15 percent. While most participants received the support services needed, the same as was found in 2008, one in five participants left the program with an unmet need for job opening information.

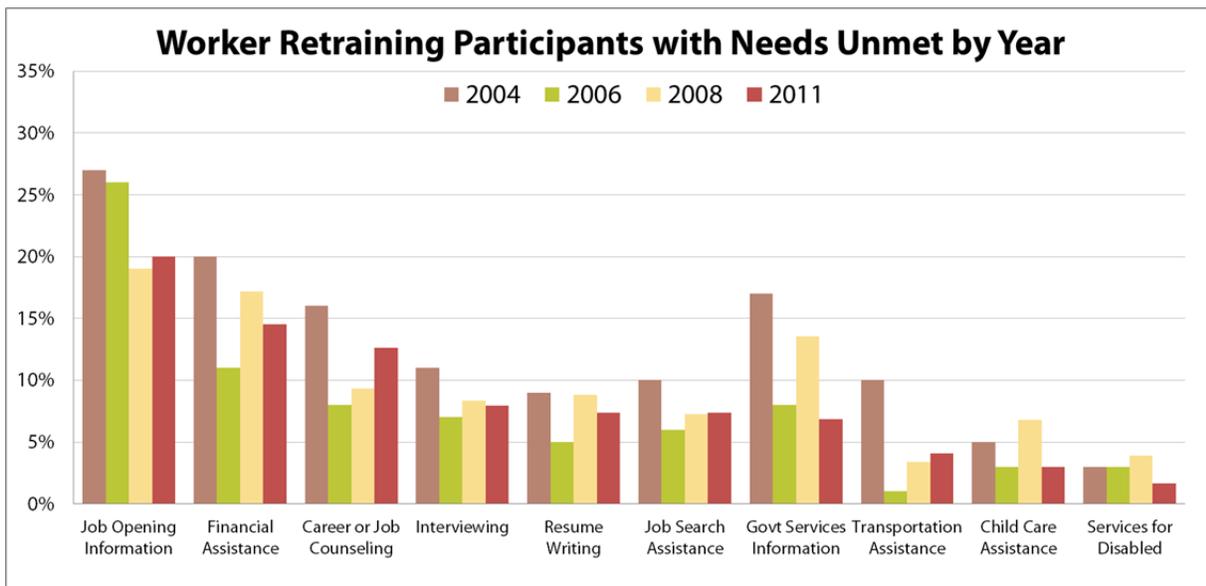
⁷ Unmet need refers to cases where the student reports that either they did not receive the required service or what was provided did not meet their needs.





Source: Workforce Board's Participant Satisfaction Survey 2011.

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. However, there are a few exceptions. The percent leaving with an unmet need in career or job counseling increased in the past five years, although it is still not as high as it was in 2004.



Source: Workforce Board Participant Satisfaction Surveys 2002-2011.



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*	8.8 percentage points	7.5 percentage points
Net Hourly Wage Impacts**	No significant positive impacts	\$1.07
Net Quarterly Hours Impacts	26.6	23.5
Net Annualized Earnings**	\$1,739	\$2,971

[^]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 2013 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.⁸ 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 2013 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	\$10,133	\$0	\$79,415	\$0	
Fringe Benefits	\$2,533	\$0	\$19,854	\$0	
Taxes	-\$2,092	\$2,092	-\$16,399	\$16,399	
Transfers					
UI	-\$158	\$158	\$1,175	-\$1,175	
Costs					
Foregone net earnings	-\$12,639	-\$2,501	-\$12,639	-\$2,501	
Program costs	-\$3,766	-\$7,325	-\$3,766	-\$7,325	
Benefits	\$10,416	\$2,249	\$84,046	\$15,224	
Costs	-\$16,405	-\$9,826	-\$16,405	-\$9,826	
Total (Net)	-\$5,989	-\$7,576	\$67,641	\$5,398	\$73,039

Note: Benefits and costs are expressed in 2013 first quarter dollars.

For each student in the Worker Retraining program, the public (taxpayer) cost is about \$7,325 over the length of their enrollment, and the student costs are about \$3,766 in tuition and \$12,639 in foregone earnings while training. During the course of working life to age 65, the average trainee will gain about \$66,776 in net earnings (earnings minus foregone earnings) and \$19,854 in employee benefits.

⁸ Upjohn estimated the impact of the net change in earnings on social security, Medicare, federal income, and state sales taxes.



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 \$67,641.

Projected participant net benefits to age 65 outweigh public costs invested in college training by a ratio of \$9 to 1, or \$67,641 to \$7,325.

From the time of leaving training to age 65, the public is forecasted to gain \$16,399 in net additional Social Security, Medicare, federal income, and state sales taxes. The estimated lifetime net benefit to taxpayers is \$5,398 per participant.

Projected taxpayer net benefits to age 65 outweigh public costs invested in college training by a ratio of \$2 to 1 or \$15,224 to \$7,325.

Summary and Areas for Improvement

The Worker Retraining Program has strong net impacts on participants' long-term employment and earnings, and provides a positive return to taxpayers. In addition, participants reported high levels of satisfaction, with 83 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.

There are some areas that could be stronger. Women and people with disabilities tend to have lower labor market outcomes than others. This is likely associated with more frequently enrolling in programs of study that prepare students for lower paying occupations. Better career and job counseling, and advice on program selection could help. These support services were rated less highly by Worker Retraining program participants than other services. Also, overall, about one in five 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.

