

Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Adult Basic Education/English as a Second Language

Program Details

Adult Basic Education (ABE) and English as a Second Language (ESL) are provided by community and technical colleges and, to a lesser extent, community-based organizations. Among the ABE/ESL participants included in this report, 98 percent received their education at community and technical colleges and 2 percent received instruction at community-based organizations. This report is limited to adults who identified employment-related reasons for enrolling in basic skills courses and who proceeded to take only basic skills courses. Those who took basic skills courses for non-employment-related reasons are not included, although their learning progress is tracked by the State Board for Community and Technical Colleges.

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.

ABE provides instruction in reading, writing, and mathematics for adults whose skills are at or below the eighth grade level; GED Test Preparation in basic academic skills beyond ABE for participants whose goal is to pass the high school equivalency examination; and High School Completion instruction for adults who want to earn an adult high school diploma. Students enrolled in Integrated Basic Education and Skills Training (I-BEST), for those transitioning into professional technical/academic certificate and degree programs, are briefly discussed in the net benefit section of this chapter, but are more extensively analyzed as part of the student population studied in the chapter on Community and Technical Colleges (CTC) Professional-Technical Education.

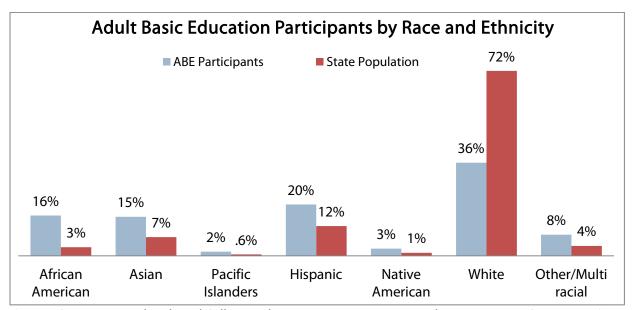
ESL provides basic skills instruction and non-transfer level instruction across a wide range of competency levels in reading, writing, speaking, and listening in English. Some I-BEST programs also include ESL instruction.

¹ Individuals taking both vocational courses and basic skills are included in the chapter on CTC Professional-Technical Education, which presents net impact estimates for participants taking a blend of basic skills and vocational training.

Participant Profile

For this 2014 report, researchers studied the results of 25,825 participants who left an ABE/ESL program during the most recent reporting year.² ABE/ESL serves the most racially and ethnically diverse participants of any workforce development program in this report. The percentage of African Americans in ABE is higher than the percentage of African Americans statewide (16 percent versus 3 percent), Asians (15 percent versus 7 percent), Hispanics (20 percent versus 12 percent), and Pacific Islanders (2 percent versus .6 percent).

The percentage of ABE/ESL participants who are an ethnic/racial minority is significantly higher than the percentage of minorities statewide. Non-whites comprised 64 percent of the participants, the same percentage as last year's report.³

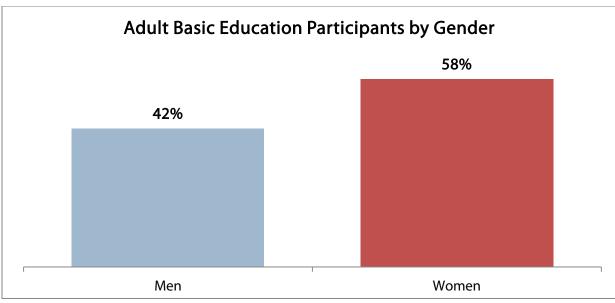


Source: Community and Technical Colleges Administrative Data 2011-12 and 2011 American Community Survey.

Some 58 percent of participants were women, the same percentage as the previous report.

² The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.

³In 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 Asians); 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 are Native American; 7 percent are Asian; 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.



Source: Community and Technical Colleges Administrative Data 2011-12.

The median age of participants leaving an ABE/ESL program was 29 years old. A quarter of participants were under age 23, while a quarter of the participants were over age 39.

Tracking ABE/ESL 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?

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, 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.

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 sideby-side comparison of participants
vs. similar non-participants,
answering the question of whether
the program is making a
difference.

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

According to record matches, 49 percent of ABE/ESL participants had employment during the third quarter after they left the program- nearly the same percentage of employed participants observed in 2013 (48 percent). Their median hourly wage of \$11.17, and median annual earnings of \$17,074, was very similar the prior program year.⁵ After a decline from 2008 to 2011, employment has increased slightly and earnings have stayed flat since 2012.

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.

Employment and Earnings for Adult Basic Education/English as a Second Language Participants, 2014

Performance Measure	Results
Employment Rate*	49%
Full Time Employment **	49%
Median Hourly Wage***	\$11.17
Median Quarterly Hours	384
Median Annualized Earnings***	\$17,074

^{*} 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.

Earnings of ABE/ESL 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

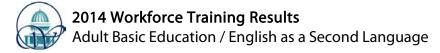
ABE/ESL participants were able to support a median 2.4 people at the poverty level—meaning they could support themselves plus one and a half other people. They did not have enough earnings to support themselves, let alone others, at 200 percent of the poverty level (.7 people).

Number of People Supported at Poverty Level by Participant Income

Performance Measure	2010	2011	2012	2013	2014
Number of people supported at poverty level	2.8	2.5	2.4	2.4	2.4
	people	people	people	people	people
Number of people supported at 200 percent poverty*	0.8	0.8	0.7	0.7	0.7
	people	people	people	people	people

^{*}The number of people supported at the 200 percent of poverty level appears to stay the same because of rounding.

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.



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

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

The next table shows employment and earnings over the course of five study periods. This data is also represented in a graph on the following page for the years 2010-2014.

Employment and Earnings Trends for ABE/ESL Participants

Performance Measure	2010	2011	2012	2013	2014	
Employment Rate (Self-Reported)	N/A	61%	N/A	N/A	N/A	
Employment Rate* (State Records)	55%	55% 46%		46% 48%		
Full Time Employment**	53%	49%	48%	50%	49%	
Median Quarterly Hours	402	385	382	386	384	
Median Hourly Wage***	\$18,537	\$17,471	\$17,071	\$17,007	\$17,074	
Median Annualized Earnings***	\$11.94	\$11.51	\$11.32	\$11.17	\$11.17	

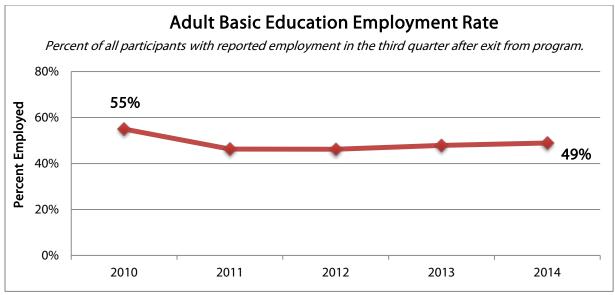
^{*}These figures apply to those with employment reported to the state's Employment Security Department six to nine months after leaving program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

A survey conducted in 2011 of Adult Basic Education participants revealed that 38 percent received medical benefits, and 28 percent received retirement benefits.

The percentage of participants who were employed on the 2014 report is very similar to those employed on the 2013 report (48 percent vs 49 percent).

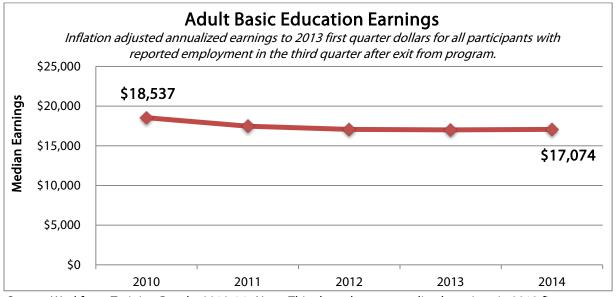
^{**}Full-time employment averages 30 or more hours per week.

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



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.

Median annualized earnings for ABE/ESL participants are similar to the two previous reports, \$17,074 this year compared to \$17,007 in 2013 and \$17,071 in 2012.



Source: Workforce Training Results 2010-14. Note: This chart shows annualized earnings in 2013 first quarter dollars to account for inflation.

Adult Basic Education Employment by Industry

Employment among ABE/ESL participants is heavily concentrated in services, retail trade, and manufacturing industries. The percentage of participants employed in services is four percentage points above last year (59 versus 55 percent). Employment in the retail trades and manufacturing has increased one percentage point each.

Industry (Group
	Services
15%	Retail Trades
10%	Manufacturing
3%	Construction
3%	Natural Resources and Mining
3%	Transportation, Warehousing and Utilities
	Wholesale Trade
2%	Financial Services
1%	Public Administration
0.5%	Information
	of Services Industry
	Accommodation and Food Services
	Administrative and Support and Waste Management and Remediation Services
	Health Care
	All Other Services
	Social Assistance
	Arts, Entertainment, and Recreation
	Education Services
	Professional, Scientific, and Technical Services
	of Retail Trade Industry
	Department Stores and Warehouse Clubs
	Groceries, Supermarkets & Specialty Foods
	All Other Retail
	Clothing and Accessories Stores
	Gas Stations/Convenience Stores
	Motor Vehicle and Accessories Sales
	Home furnishings, Garden, Hardware
	of Manufacturing
	Food & Beverage
	All Other Manufacturing
	Transportation Equipment
	Fabricated Metal Products
	Wood & Paper Products
Note: Indi	ustry groups are based on North American Industry Classification System codes.

Source: Matches with Employment Security Department data in third quarter after exiting program.

Relationship of Training to Employment

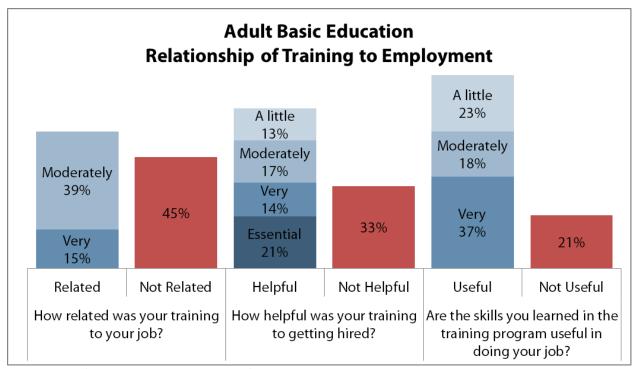
In 2011, the Workforce Board surveyed ABE/ESL participants who had left their program in 2009-10. The survey provided data on employment and participant satisfaction with the training. The survey was conducted by telephone and was completed by 253 participants.

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 ABE participants employed six to nine months after leaving a program, 15 percent said their training was "very related" to their job. A further 39 percent reported the training was "moderately related" to their job. Compared to 2008, participants in 2011 reported slightly lower rates of training related to employment, by 3 percentage points in each category.



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, 21 percent indicated their training was an "essential requirement," another 14 percent indicated it was "very important," and 17 percent reported it was "moderately important." Thirteen percent said it was "a little helpful." Some 33 percent indicated their training was "not important at all" to getting their job.

Three out of four participants said the skills they learned in their training program were useful in doing their job. Some 37 percent of participants indicated the skills were "very useful," 18 percent said "moderately useful," and 23 percent "a little useful." The remaining 21 percent of ABE 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 answered negatively to both. Some 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

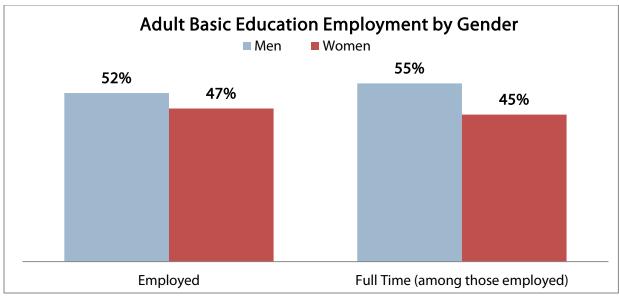
Wage and employment results can vary by gender, race and ethnicity, and disability. Among participants employed during the third quarter after exit, there is a substantial gender gap in labor market outcomes. Female ABE/ESL participant's employment rate, hours worked, hourly wage, and annual earnings are lower than men's. The ratio between men's and women's employment rates, hours worked, earnings, and wages have stayed relatively flat since the last report.

Gender Differences in Labor Market Outcomes Among ABE/ESL Students in the Third Quarter After Leaving Program								
Men Women Ratio								
Employment Reported to ESD	52%	47%	91%					
Median Quarterly Hours Worked	421	358	85%					
Median Hourly Wage \$11.79 \$10.76 91%								
Median Annual Earnings*	\$19,536	\$15,417	79%					

Source: Matches with Employment Security Department data.

The following chart shows the percentage of men and women ABE/ESL participants who reported being employed. Also broken out is the percentage of those working that held full-time jobs. Male Adult Basic Education participants were more likely than women to be employed (52 percent compared to 47 percent) and also more likely to be working full time (55 percent compared to 45 percent).

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



Source: Matches with Community and Technical Colleges Administrative Data and Employment Security Department data.

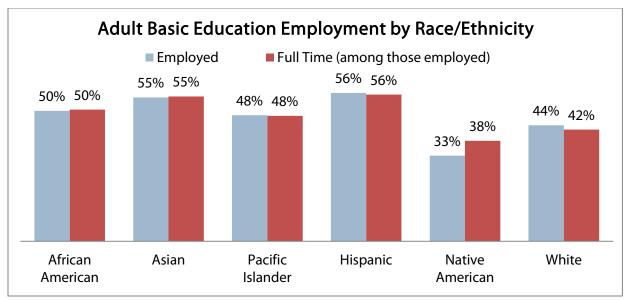
Race/Ethnicity Plays Role

ABE/ESL program graduates had different employment rates when comparing race and ethnicity. The highest employment rate was found among Hispanics (56 percent), followed by Asians (55 percent), African Americans (50 percent), Pacific Islanders, (48 percent) whites (44 percent), and Native Americans (33 percent).

Of those ABE/ESL participants who were working, the percentage with full-time employment also varied according to race and ethnicity. Hispanics had the highest percentage working full time (56 percent), followed by Asian (55 percent), African Americans (50 percent), Pacific Islanders (48 percent), and whites (42 percent). The lowest percentage working full time was Native Americans (38 percent).

The highest wages were earned by Hispanics (\$11.76), Asians (\$11.43), and Native Americans (\$11.22) and slightly lower wages among whites (\$10.95), Pacific Islanders (\$10.83), and African Americans (\$10.82).

Hispanics have the highest earnings, at \$19,147, followed by Asians (\$18,917), African Americans (\$16,503), Pacific Islanders (\$16,186), whites (\$14,840), and Native Americans (\$13,010).



Source: Matches with Community and Technical Colleges Administrative Data and Employment Security Department data.

Disability Impacts Employment, Earnings

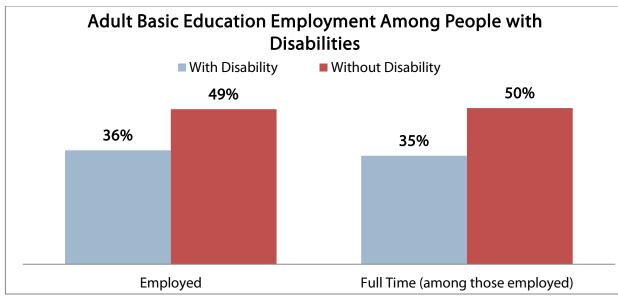
Among 2014 ABE/ESL participants, 3.1 percent had a disability (less than the 12.5 percent of the general population who have a disability).⁷ Participants with disabilities did less well in the labor market than other participants; they were less likely to have employment reported to the state's Employment Security Department (36 percent versus 49 percent for participants without a disability). This is similar to the percentage observed in the last report (34 percent compared to 49 percent).

Participants with disabilities were also less likely to work full time than participants without a disability (35 percent compared to 50 percent).

The median hourly wage of participants with disabilities was 93 percent of the amount earned by participants without a disability (\$10.44 compared to \$11.17), and median annual earnings were 73 percent of those without a disability (\$12,468 compared to \$17,157).

⁷ 2011 U.S. Census Bureau estimates from the American Community Survey, Table S0201 - Selected Population Profile in the United States.



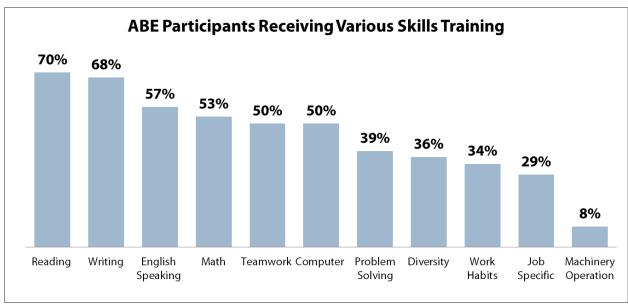


Source: Community and Technical Colleges Administrative Data and Employment Security Department data matches 2011-12.

Participant Survey

According to survey results, 73 percent of participants indicated they entered an ABE/ESL program to learn skills for a new job. Participants also said they enrolled for their own personal enjoyment or improvement (91 percent), or to improve their English speaking or reading skills (70 and 72 percent respectively).

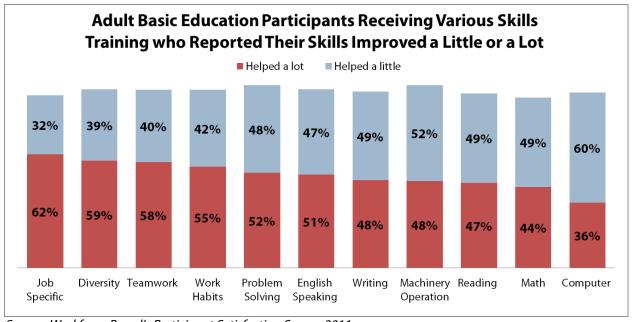
As in previous studies, the large majority of participants received instruction in reading and writing. About half of participants received instruction in math. Fewer received training in workplace skills such as problem solving, diversity, and work habits. The highest percentage of participants, 76 percent, said they gained reading skills, followed closely by 75 percent who reported writing skills.



Source: Workforce Board's Participant Satisfaction Survey 2011.

As in the previous study, most participants reported their skills improved in the areas where they received instruction. Participants tended to report higher levels of improvement with workplace skills, such as teamwork, diversity and work habits than with basic skills such as computer, writing or math.

The percentage of participants who reported a lot of improvement in work habits increased 7 percentage points (from 48 percent to 55 percent). In all other areas the percent who reported their skills improving a lot remained the same or changed only marginally compared to the prior study.

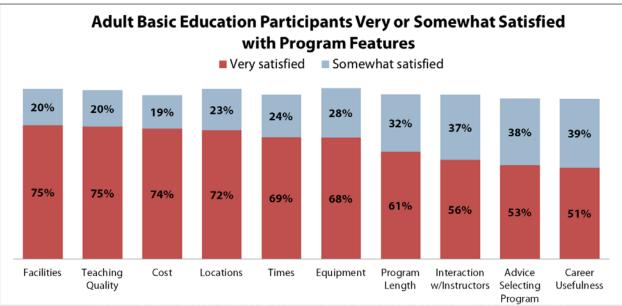


Source: Workforce Board's Participant Satisfaction Survey 2011.

Participant Satisfaction

In general, participants were satisfied with the training they received. Some 93 percent of participants reported being satisfied with their program overall. However, the percentage who stated that they had met their educational objectives decreased from 78 percent in the previous study to 68 percent this year. A majority of participants indicated satisfaction with various program features. Three-quarters of participants reported they were "very satisfied" with program facilities and teaching quality.

Compared to the 2008 survey, the program feature with the largest increase of participants reporting they were "very satisfied" was equipment (which increased from 63 to 68 percent). The only feature to have a decrease in the percentage of students reporting they were "very satisfied" was career usefulness, which dropped from 56 percent to 51 percent since the last survey.

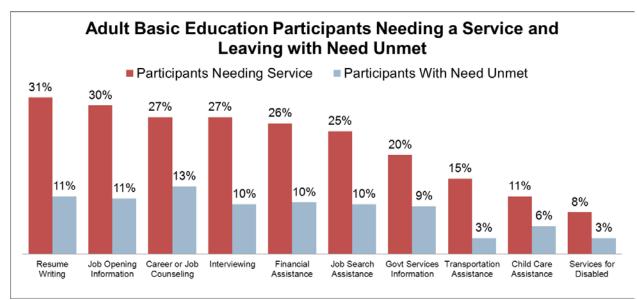


Source: Workforce Board's Participant Satisfaction Survey 2011.

The support services that participants were most likely to report needing more services related to finding a job (including resume writing, job opening information, interviewing and career counseling). Participants were more likely than not to receive the services they needed. However, a relatively high 13 percent said they left the program with their need for job counseling unmet. An unmet need for resume writing, other government services, interviewing, and job opening information was reported by about one in every 10 students.⁸

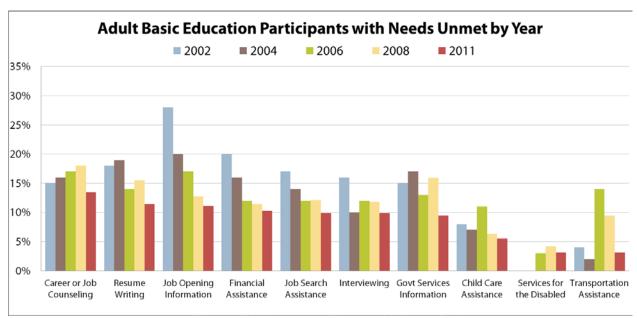
⁸ Unmet need refers to cases where the student reports that either they did not receive the required service or what was provided did not meet their needs.





Source: Workforce Board's Participant Satisfaction Survey 2011.

The percentage of participants who reported leaving the program with an unmet need has declined in nearly every category, not only since the last participant survey, but since 2004. The largest decrease in unmet need came in transportation assistance, which dropped from 9 percent to 3 percent since the last survey.



Source: Workforce Board's Participant Satisfaction Surveys 2002-11.

Net Impact - Did Program Make a Difference in Participant Success?

Every four years the Workforce Board conducts net impact and cost-benefit analyses 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 Adult Basic Education program has positive net impacts on annualized earnings.

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 an ABE 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 ABE/ESL Training 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

ABE/ESL Participants	Short-term^	Long-term^
Net Employment Impact*	No significant positive impact	No significant positive impact
Net Hourly Wage Impact**	No significant positive impact	No significant positive impact
Net Quarterly Hours Impact	15.4	15.1
Annualized Earnings**	\$995	\$895

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

To estimate these impacts, individuals who received employment-related ABE/ESL education were compared to individuals who had similar characteristics within the state's employment

^{*}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 ABE/ESL participants who got jobs and those in the control group who were employed.

service, but who did not participate in any of the programs included in the study. Additional estimates were made for a cohort of ABE/ESL participants who also participated in CTC Professional Technical Education.

As can be seen above, Adult Basic Education participants worked more hours per quarter than non-participants in the control group. They also garnered higher annualized earnings than those who did not participate. However, the program did not have a significant positive impact on employment and hourly wages.

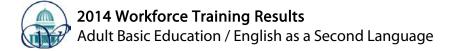
Costs and Benefits

The cost-benefit analysis estimates the value of the net impact on earnings, employee benefits (estimated at 25 percent of earnings), unemployment insurance benefits, and certain taxes.

Program costs include both direct program costs and support payments borne by the government and the earnings students gave up while participating in the program. Benefits and costs are calculated for both the observed period of time and based upon a statistical model that estimated the benefits and costs out to the age of 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. The results are for those students who took only basic skills courses in the colleges.

For each student in ABE/ESL only, the public (taxpayer) cost is about \$2,843 over the length of their enrollment, and the student cost is \$117 in foregone earnings while in school. The average ABE/ESL student makes no net gains in earnings in either the first two and one-half years after leaving college or during the course of working life to age 65 compared to similar individuals who did not participate in any of the workforce development programs.

⁹ The net impact study excludes individuals who enrolled in ABE/ESL programs for personal enhancement or non-employment-related purposes.



Participant and Public Benefits and Costs per Participant in Community and Technical Colleges ABE Programs

Benefit/Cost		First 2.5 y	ears	Lifetime (u	Sum of Costs an	
Deficitl/Cost	Par	Participant Public		Participant	Public	Benefits
Benefits *						
Earnings	-		-	-	-	
Fringe Benefits	-	-	-	-	-	
Taxes	-	-	-	-	-	
Transfers						
UI		-\$736	\$736	-\$1,103	\$1,103	
Costs						
Foregone net earnings		\$117	\$13	\$117	\$13	
Program costs		\$0	-\$2,843	\$0	-\$2,843	
Benefits	-			-	-	
Costs		\$117	-\$2,830	\$117	-\$2,830	
Total (Net)	-			-	_	

Note: Benefits and costs are expressed in 2013 first quarter dollars. Upjohn estimated the impact of the net change in earnings of Social Security, Medicare, federal income, and state sales taxes.

Again, the above findings are for students who participated in ABE/ESL only and do not include students who also participated in professional-technical education or other training. In contrast, Integrated Basic Skills Education and Training (I-BEST), that combines adult education with professional-technical training, has significant positive impacts on participant employment and earnings.

Impact on Employment and Earnings: I-BEST Participants vs. Control Group

I-BEST Participants	Short-term^
Net Employment Impact*	3.9 percentage points
Net Hourly Wage Impact**	\$1.40
Net Quarterly Hours Impact	35.3
Annualized Earnings**	\$2,645

[^]Short-term is three quarters after program exit. Long-term results are not yet available for I-BEST.

^{*}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 I-BEST participants who got jobs and those in the control group who were employed.

Summary and Areas for Improvement

As reported in previous studies, the employment and earnings results are weak for students who participate in Adult Basic Education without also receiving professional-technical training. Although participants report high levels of satisfaction with their program, the study does not find a positive impact on the average student's employment and hourly wages. On a positive note, there has been a clear trend over time toward meeting more students' needs for support services.

The findings show a substantial net impact on employment and earnings for students who participated in I-BEST, combining adult education with professional-technical training. These results are strong evidence of the importance of investing resources in I-BEST and similar alternative methods of delivering adult education.



Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Apprenticeship

Program Details

Apprenticeship combines classroom studies with extensive on-the-job training under the supervision of a journey-level craft person or trade professional. Apprentices receive wages and may receive health, pension, and other benefits while learning occupational skills. This "earn while you learn" model has proven successful across a range of industries—from asbestos workers to tile layers. Apprenticeships require applicants be at least 16 years old (18 for construction trades), and most require at least a high school diploma or GED for entrance. Apprenticeship in Washington is governed by the Washington State Apprenticeship and Training Council and administered by the Department of Labor and Industries.¹

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

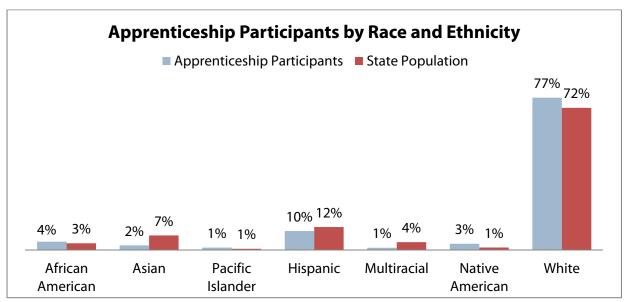
For this 2014 report, researchers studied the results of 3,713 apprentices who left an apprenticeship program during the most recent reporting year.² Apprentices reflect the racial and ethnic diversity of the state population. African Americans, whites, and Native Americans are represented above their proportions of the state population. Asians, Hispanics, and those with a multiracial background enroll in apprenticeship programs in lower numbers than their share of the state population.³ African Americans and Hispanics do not complete the

¹ This report focuses solely on Washington apprenticeships. More information at the federal level is available at www.doleta.gov/oa/.

² The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.

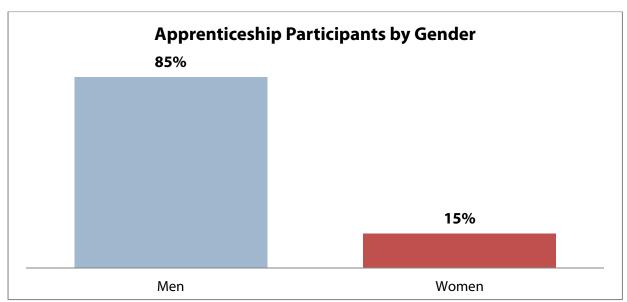
³ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); 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

apprenticeship programs at the same rates as they enroll, with relatively fewer reaching the finish line in their apprenticeships than those of other backgrounds.



Source: 2011-12 Apprenticeship Administrative Data, Department of Labor and Industries, Washington State Office of Financial Management and 2011 U.S. Census Data from the American Community Survey.

Relatively few women enter apprenticeship programs compared to men. Some 15 percent of apprentices were women in the current study. This is a higher percentage than the last study; women comprised 9 percent of apprentices on the 2013 report.



Source: 2011-12 Apprenticeship Administrative Data, Department of Labor and Industries.

Survey, 72 percent of state residents are white; 3 percent are African American; 1 percent are Native American; 7 percent are Asian; 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.



The median age at program exit was 30. One quarter of those enrolled in apprenticeship programs were under age 26, and another quarter were age 38 or older.

Completion Rates

Overall, apprentices spent a median of 30 months in their program. This is a decrease of 6 months over the 2013 cohort of apprentices. The median program length was 51 months for Apprenticeship completers. Among apprentices leaving their program in the most recent program year, slightly less than half (48 percent) completed their program, three percentage points less than on the prior report. The length of participation varied widely. The number of years spent in apprenticeship programs is reflected in the following table, comparing those who completed with those who did not complete.

It's worth noting that apprenticeship programs cover a broad array of occupations, from construction trades and early learning to dispensing optician and cosmetologist. Not only are apprenticeship occupations wide-ranging, the length of time it takes to complete a program varies considerably. For example, a Washington resident training to become a construction electrician can expect an apprenticeship to last at least five years to reach journey level status, while those training to become an esthetician require 2,000 hours, or approximately one year, to complete.

Because apprenticeship programs can last many years, a significant number of people do not reach the finish line.

Number of Years Apprentices Participated in their Program							
Years in	Completers	Non					
Program	Completers	Completers					
less than 1	0%	0%					
1-2	6%	30%					
2-3	6%	16%					
3-4	11%	8%					
4-5	21%	12%					
5-6	30%	10%					
6-7	20%	4%					
7-8	5%	3%					
8-9	1%	6%					
9-10	0%	11%					
more than 10	0%	0%					

Source: 2011-12 Apprenticeship Administrative Data, Department of Labor and Industries.

However, even those who exit early still show wage gains from the skills they acquired.

Tracking Apprenticeship 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 20 for the Net Impact Study. Conducted every four years, this in-depth report adds extra value to the 2014 Workforce Training Results. The study provides a side-byside comparison of participants vs. similar non-participants, answering the question of whether the program is making a difference.

Data Comes From State Wage Files & Employer Survey

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. Information on employer satisfaction among firms that hired new employees who recently exited an apprenticeship program was assessed through the Workforce Board's 2012 Employer Survey.

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 Have a Job and How Much Were They Paid?

To determine the employment rate and earnings of apprenticeship participants, their records were matched with Employment Security Department wage files from Washington and neighboring states.⁴ Labor market outcomes for apprenticeships are significantly higher than for other programs the Workforce Board studies. The quality of apprenticeship training, the higher wage levels of many apprenticeship-related occupations, and the typically long length of training are factors.

Record matches found 74 percent of apprentices had reported employment during the third quarter after they left the program. This is 5 percentage points above that observed in the last report. Their median wage was \$28.61 per hour - down \$1.66 from \$30.27 the prior year - and annualized earnings were \$44,578, a decrease of nearly \$3,100 from the 2013 Workforce Training Results report.⁵ Although the median wage of apprentices is high, there is considerable variation in how much apprentices earn, as can be seen in the table below.

Hourly Wages of Apprentices (Quartiles)					
Quartile	Hourly Wage				
Highest	Above \$38.40				
Third	\$28.68-\$38.39				
Second	\$17.85-\$28.67				
Lowest	Below \$17.85				

^{*}Third quarter after exit, this table excludes those enrolled in higher education.

When looking only at those who had completed their apprenticeship program, rather than at all exiters, the outcomes are even better. The median annualized earnings of completers was \$63,869. The median hourly wage was \$36.46. These results illustrate the value of completing an apprenticeship program.

⁵Annual 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.



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).

Employment and Earnings for Apprentices, 2014

Performance Measure	Results
Employment Rate*	74%
Employment Rate* (Completers)	84%
Full Time Employment **	62%
Median Quarterly Hours	460
Median Hourly Wage***	\$28.61
Median Annualized Earnings***	\$44,578
Median Annualized Earnings (Completers)	\$63,869

^{*} 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.

Earnings of Apprenticeship 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 Apprenticeship participants were able to support a median 9.2 people at the poverty level - meaning they could support themselves just over eight other people. They could support 3.7 people, including themselves, at 200 percent, or double, the poverty level.

Number of People Supported at Poverty Level by Participant Income

	20	2010		11	2012		2 2013		2014	
	Сотр.	AII	Comp.	AII	Сотр.	AII	Сотр.	AII	Comp.	AII
Number of people supported at poverty level	14.5	9.6	13.3	8.4	13.3	10.4	14.0	10.0	14.0	9.2
Number of people supported at 200 percent poverty	6.3	3.9	5.7	3.3	5.7	4.3	6.1	4.1	6.1	3.7

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.



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

^{***}Earnings/wages expressed in first quarter 2013 dollars to account for inflation.

The next table shows employment and earnings information over five study periods.

Employment and Earnings Trends for Apprentices

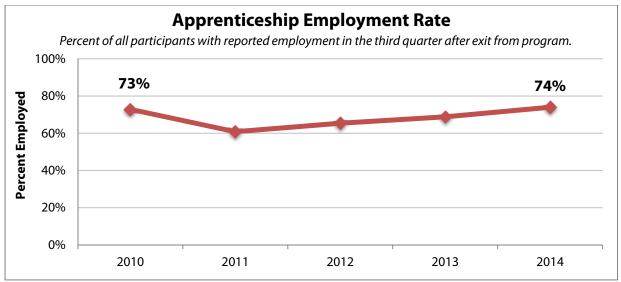
Performance Measure	2010	2011	2012	2013	2014
Employment Rate (Self-Reported)	N/A	78%	N/A	N/A	N/A
Employment Rate* (State Records)	73%	61%	65%	69%	74%
Full Time Employment**	65%	59%	64%	65%	62%
Median Quarterly Hours	465	444	468	472	460
Median Hourly Wage***	\$27.17	\$26.34	\$29.46	\$30.27	\$28.61
Median Annualized Earnings***	\$46,111	\$41,241	\$49,307	\$47,673	\$44,578

^{*}These figures apply to those with employment reported to the state's Employment Security Department six to nine months after leaving program for all Apprenticeship participants, and are not limited to those who completed a program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

A survey conducted in 2011 of Apprenticeship participants revealed that 85 percent received medical benefits, and 81 percent received retirement benefits.

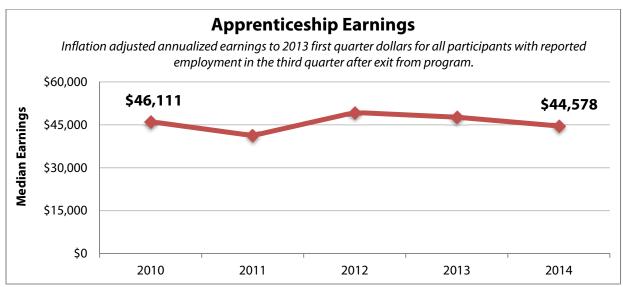
^{**}Full-time employment averages 30 or more hours per week.

^{***}Earnings/wages expressed in first quarter 2013 dollars to account for inflation.



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.

Employment has increased for apprenticeship participants since 2011; employment has increased to 74 percent from a low of 61 percent in 2011. Median annual earnings fell slightly to \$44,578 on this report from \$47,673 on the 2013 report.



Source: Workforce Training Results 2010-14. Note: This chart shows annualized earnings in 2013 first quarter dollars to account for inflation.



Apprenticeship Employment by Industry

The majority of Apprenticeship program participants who were reported to be employed held jobs in construction (48 percent), services (22.4 percent), manufacturing (9 percent), and public administration (8.6 percent). The percentage of apprentices working in public administration dropped nearly 3 percentage points, while the percent in services increased 4 percentage points.

Industry			
48.0%	Construction (see breakout below)		
22.4%	Services (see breakout below)		
9.0%	Manufacturing		
8.6%	Public Administration		
3.9%	Retail Trade		
3.6%	Transportation and Warehousing and Utilities		
2.1%	Wholesale Trade		
1.2%	Natural Resources and Mining		
1.0%	Financial Services		
0.3%	Information		
Breakout of Construction Industry			
19.2%	Building Equipment Contractors		
7.1%	Heavy & Civil Engineering Construction		
6.8%	Foundation, structure & Building Exterior Contractors		
6.1%	Construction of Buildings		
5.3%	Building Finishing Contractors		
3.6%	All Other Specialty Contractors		
Breakou	t of Services Industry		
10.7%	Education Services		
4.9%	Administrative, Support, Waste Management, & Remediation Services		
1.8%	Professional, Scientific, and Technical Services		
1.6%	Accommodation and Food Services		
1.1%	Health Care		
1.0%	All Other Services		
0.7%	Social Assistance		
0.5%	Arts, Entertainment, and Recreation		
Note: Ind	lustry groups are based on North American Industry Classification System		
codes.			

Relationship of Training to Employment

In 2011 the Workforce Board surveyed Apprentices who had left their program in 2009-10. The survey provided data on employment and participant satisfaction with the training. The survey was conducted by telephone and was completed by 317 participants.

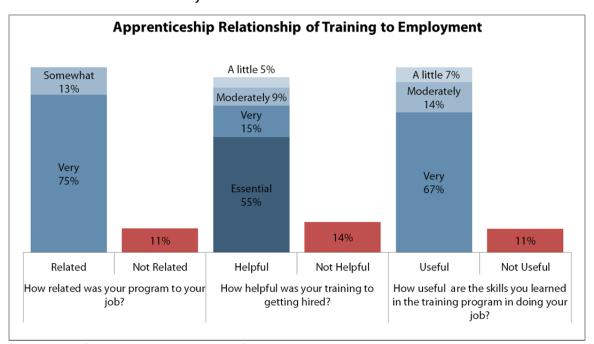


To measure the extent to which a participant's education program and training related to employment, we asked participants three questions:

- 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 apprenticeship participants employed seven to nine months after leaving a program, 75 percent said their training was "very related" to their job. A further 13 percent reported the training was "somewhat related" to their job. Just 11 percent indicated that the training was not related to their job. In 2008, employed participants reported lower rates of training related to employment; only 72 percent indicated their training was either "very" or "somewhat" related to their job.



Source: Workforce Board's Participant Satisfaction Survey 2011.

Apprenticeship participants surveyed in 2011 also indicated the training was helpful to them in getting their job. Of those participants, 55 percent indicated their training was an "essential requirement," another 15 percent indicated it was "very important," and 9 percent reported it was "moderately important." Only 14 percent indicated their training was "not important at all" to getting their job.

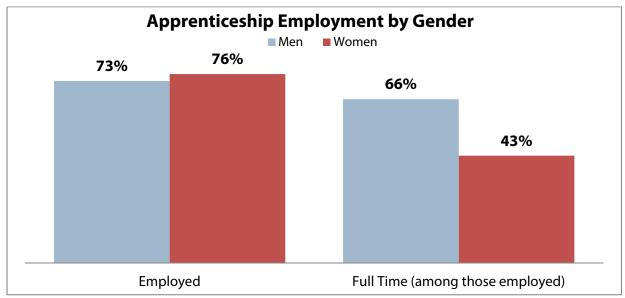
Nearly 90 percent of participants said the skills they learned in their training program were useful in doing their job. Some 67 percent of participants indicated the skills were "very useful," 14 percent said "moderately useful," and 7 percent "a little useful." The remaining 11 percent of participants 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 7 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

Wages and employment results can vary by gender, race and ethnicity, and disability.⁷ Men and women were just as likely to be employed in the third quarter after leaving their apprenticeship (76 percent compared to 73 percent), however men were more likely to be working fulltime (66 percent versus 43 percent). Of those employed, women had median hourly wages (\$17.47), which was 56 percent of men's wages (\$31.36). Women had median annualized earnings that were also 53 percent of males (\$26,213 compared to \$49,401).



Source: 2011-12 Apprenticeship Administrative Data, Department of Labor and Industries.

Race/Ethnicity Plays Role

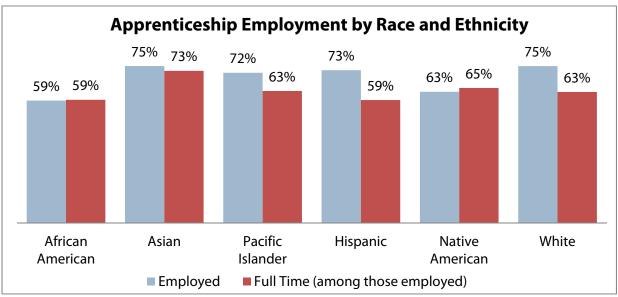
White (75 percent), Asian (75 percent), Hispanic (73 percent), and Pacific Islander (72 percent) Apprentices all had similarly high employment rates in the third quarter after leaving their programs. Native American and African American apprentices were less likely than others to be employed in the third quarter after leaving their programs (63 percent and 59 percent).

For those employed, Asians had the highest median hourly wage at \$30.73, followed by closely by whites at \$29.40, Hispanics (\$25.81), Native Americans (\$25.04), Pacific Islanders (\$24.42), and African Americans (\$23.13).

⁷ Apprenticeship administrative records do not include information on disability status.



In terms of median annualized earnings, Asians earned the most (\$47,578) followed by whites (\$46,026), Hispanics (\$40,281), Native Americans (\$37,859), African Americans (\$35,800), and Pacific Islanders (\$32,416).



Source: 2011-12 Apprenticeship Administrative Data, Department of Labor and Industries.

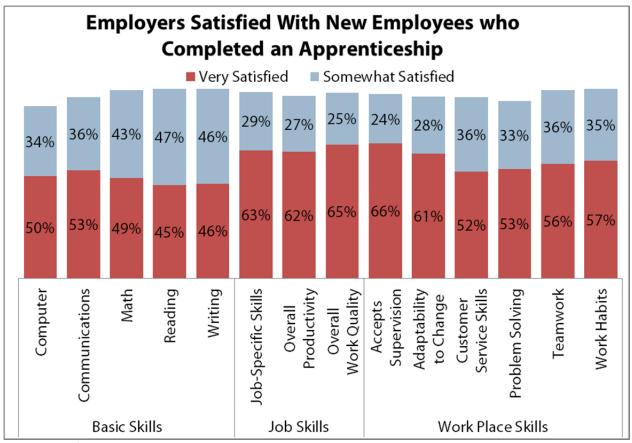
Were Employers Satisfied with the Preparation Workers Received?

The Workforce Board's Employer Survey, administered during 2012, asked firms to evaluate new employees who had recently completed an apprenticeship program. Some 91 percent of employers said they were either "somewhat satisfied" or "very satisfied" with the overall work quality of these new employees.

Employer satisfaction is broken down into three categories: Basic Skills, Job Skills and Work Place Skills. Basic skills refer to reading, writing, math, communication and computer skills. Job skills refer to skills specific to the job, as well as overall work quality and productivity. Work place skills refer to the skills necessary to get along in the workplace such as the ability to accept supervision, the ability to adapt to changes in duties and responsibilities, teamwork, customer service, problem solving or critical thinking skills, and having positive work habits and attitudes.

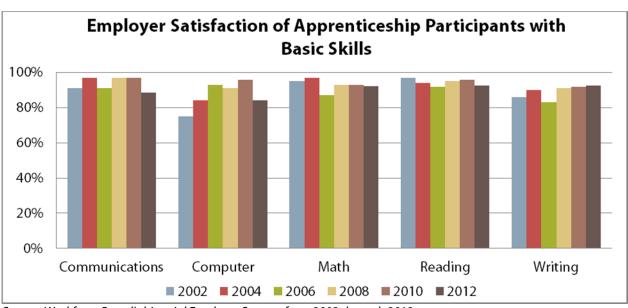
In 2012, employers were most likely to report they were very satisfied with the overall work quality, productivity, and job specific skills of apprentices. Employers were least likely to be very satisfied with the basic skills of reading, writing, and math, although nearly half of employers were very satisfied with the basic skills and almost all the remainder were somewhat satisfied.





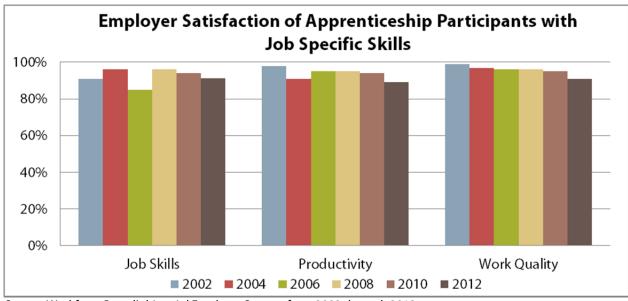
Source: Workforce Board Employer Survey conducted in 2012.

The following three charts show the trends in satisfaction of employers with new employees who recently completed an apprenticeship program.

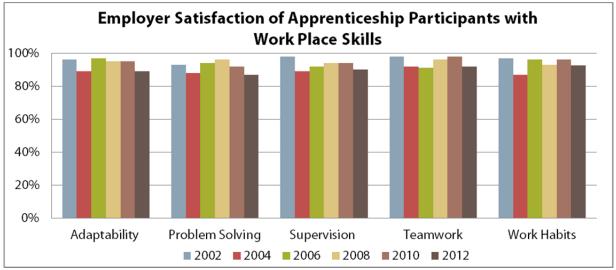


Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.





Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

Participant Survey - Did Participants Get the Skills They Needed?

Of the apprentices leaving their program who answered questions for the 2011 Participant Survey, 37 percent completed their apprentice program, which is a decrease of 5 percentage points from the previous survey conducted in 2008.

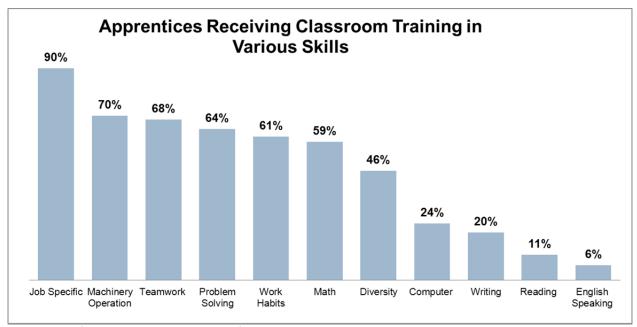
By definition, people enter an apprenticeship program to acquire occupation or industry-specific training. As they gain these skills, they are paid to work and hold down jobs that both bolster their resume and pay the bills. Many apprentices also receive training in general



workplace skills such as teamwork and problem solving. They receive both on-the-job training and classroom training.⁸

Classroom Training

Apprentices receive various skills training, both in the classroom and during on-the-job training. During classroom training, apprentices were least likely to receive basic skills training such as English speaking, reading, and writing skills. One exception is the 59 percent of apprentices who received math skills training. Apprentices were most likely to receive training in job specific skills (90 percent). These results are similar to surveys completed in previous years.

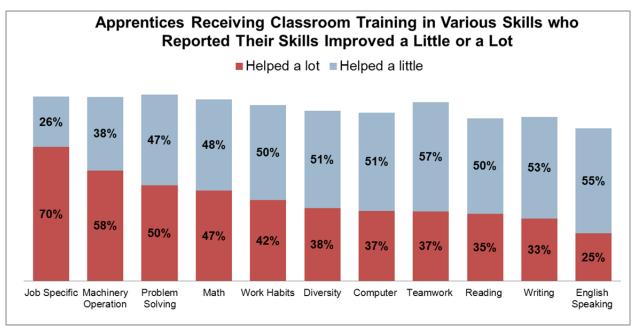


Source: Workforce Board's Participant Satisfaction Survey 2011.

In both the previous and current studies, apprentices reported their skills in many areas improved as a result of classroom training. The apprentices from the 2011 survey indicated similar levels of improvement overall when compared with apprentices from 2008. However, compared to 2008, fewer apprentices reported the training they received in problem-solving, math and job specific skills helped "a lot." An increasing number reported that training in those areas helped "a little." One significant drop was in work habits. Apprentices reporting that work habits training helped "a lot" dropped by 9 percentage points.

⁸ Apprentices are required to participate in at least 144 hours of classroom training annually.

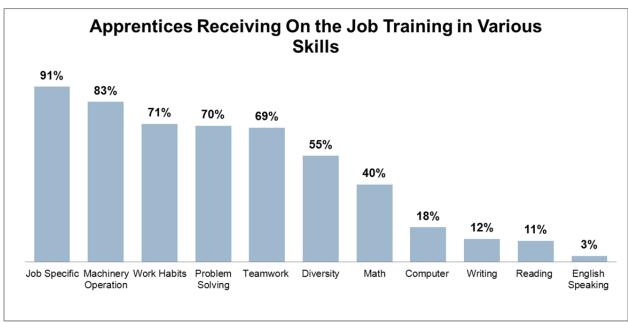




Source: Workforce Board's Participant Satisfaction Survey 2011.

On-the-Job Skills Training

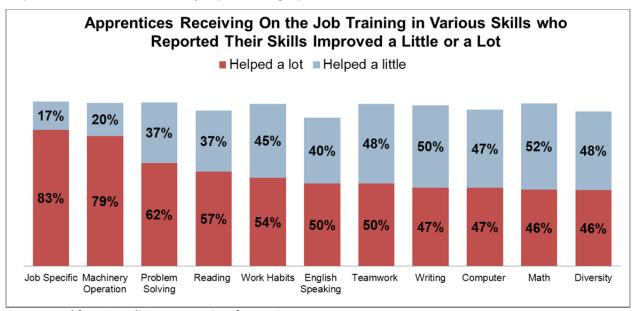
As in the previous survey, high percentages of apprentices reported receiving on-the-job training in job-specific skills, machinery operations, work habits, and teamwork. The percentage of apprentices receiving training in various skills has remained mostly the same between 2008 and 2011. The exceptions are the level of apprentices receiving training in work habits and math skills, both of which increased 7 and 6 percentage points respectively. However, the number of apprentices receiving training in problem solving skills declined 10 percentage points in the same time period.



Source: Workforce Board's Participant Satisfaction Survey 2011.



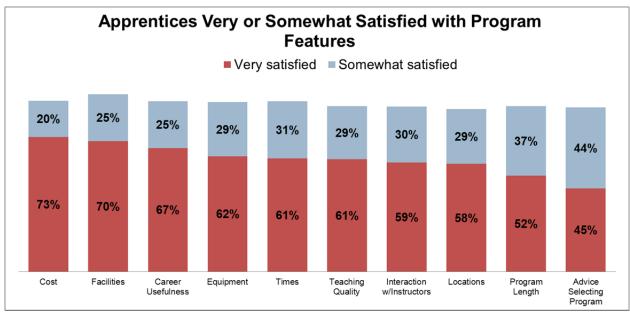
Apprentices continue to highly rate the skills received from on-the-job training. As expected, the highest percentages indicated "a lot" of improvement in their job-specific and machinery operation skills. In fact, the percentage of apprentices who indicated their job-specific skills improved "a lot" increased by 7 percentage points.



Source: Workforce Board's Participant Satisfaction Survey 2011.

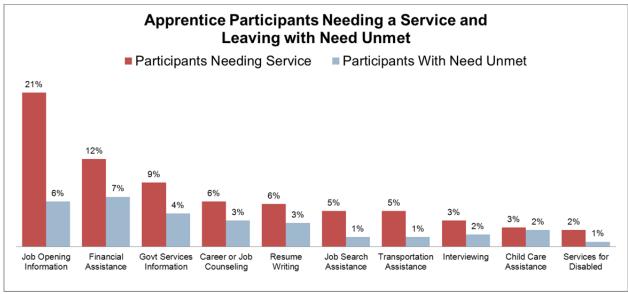
Participant Satisfaction

The apprentices surveyed in 2011 expressed high levels of overall satisfaction that was similar to the previous study: 90 percent expressed satisfaction with their classroom training and another 88 percent with their on-the-job training. Some 86 percent met their educational objectives by participating in the training, up from the 75 percent of the apprentices in the 2008 survey. Overall satisfaction with program features has increased in every category. The largest gains in satisfaction have been in cost ("very satisfied" up 15 percentage points) and in location ("very satisfied" up 15 percentage points). However, apprentices reporting that they are "very satisfied" with program facilities and career usefulness has dropped 9 percentage points in both categories.



Source: Workforce Board's Participant Satisfaction Survey 2011.

Apprentices reported a much lower need for support services than participants in the other programs included in the survey. Their greatest needs were for information on job openings, financial assistance, and government services information. In some cases their needs were not met. Of apprentices leaving their program, 7 percent left with an unmet need of for financial assistance, and 6 percent left with an unmet need for job opening information.

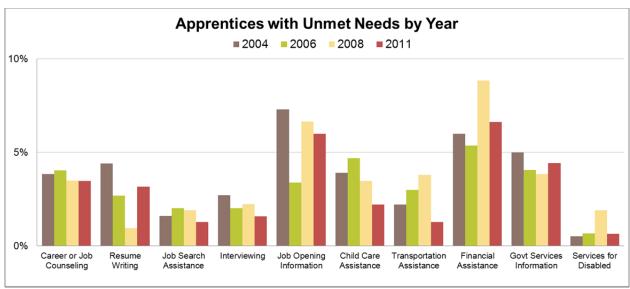


Source: Workforce Board's Participant Satisfaction Survey 2011.

⁹ 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.



The percentage of apprentices with unmet needs has dropped in nearly every category since the last survey. However, the percentage reporting unmet needs for government services information and resume writing has increased since 2008.



Source: Workforce Board's Participant Satisfaction Survey 2011.

Net Impact - Did Program Make a Difference in Participant Success

Every four years the Workforce Board conducts net impact and cost-benefit analyses 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 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 an Apprenticeship program were compared to individuals who had similar demographic characteristics, but who did not participate in any of the

Apprenticeship programs have very large, positive impacts on employment, wages, hours worked, and earning. Training substantially increases the lifetime earnings of apprentices.

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 Apprenticeship training 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.

Ammunationalis	All Apprenticeship			Completers			
Apprenticeship	Short Term^	Long Term^		Short Term^	Long Term^		
Net Employment Impact*	7.80 percentage points	9.80 percentage points		24.70 percentage points	24.00 percentage points		
Net Hourly Wage Impact**	\$8.49	\$9.44		\$14.29	\$15.68		
Net Hours Employed per Quarter Impact	46.9	26.4		71.8	43.0		
Net Annualized Earnings Impact**	\$19,976	\$19,042		\$34,882	\$32,494		

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

As can be seen above, apprenticeship programs had significant positive net impacts on employment, wages, hours worked, and annualized earnings when apprenticeship participants are compared with non-participants. These impressive results get even stronger for those who complete an apprenticeship, yielding nearly twice as much in annualized earnings, hourly wages and employment compared with those apprenticeship program participants who exited a program early. The benefits of not only starting but completing an apprenticeship program are clear.

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.¹⁰ Program costs include both direct program costs and support payments borne by taxpayers and the tuition paid by participants, as well as the earnings participants would have otherwise received had they continued working.

Benefits and costs are calculated for both the observed period of time and based upon a statistical model that estimated the benefits and costs out to age 65. To compare benefits and costs in terms of net present values, post-program benefits and costs are discounted by 3

¹⁰ Upjohn estimated the impact of the net change in earnings on Social Security, Medicare, federal income, and state sales taxes.



^{*}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 Apprenticeship participants who got jobs and those in the control group who were employed.

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 apprentices 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 Apprentice

Powerful Cont	First 2.5 years		Lifetime (un	Sum of Costs and	
Benefit/Cost	Participant	Public	Participant	Public	Benefits
Benefits					
Earnings	\$38,059	\$0	\$325,870	\$0	
Fringe Benefits	\$7,612	\$0	\$65,174	\$0	
Taxes	-\$9,983	\$9,983	-\$85,476	\$85,476	
Transfers					
UI	\$890	-\$890	\$1,592	-\$1,592	
Costs					
Foregone net comp.	\$23,422	\$6,220	\$23,422	\$6,220	
Program costs	-\$1,854	-\$3,606	-\$1,854	-\$3,606	
Benefits	\$36,578	\$9,094	\$307,160	\$83,884	
Costs	\$21,568	\$2,614	\$21,568	\$2,614	
Total (Net)	\$58,146	\$11,708	\$328,728	\$86,498	\$415,226

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

For each apprentice in training, the public (taxpayer) cost is \$3,606 over the length of their enrollment, and the participant cost is \$1,854 in tuition. By definition, apprentices work during their program participation and their net earnings during training was \$23,422 higher than those who were not in training. During the course of working life to age 65, the average apprentice will gain about \$349,292 in net earnings (net impact earnings plus earnings while in apprenticeship training) and about \$65,174 in employee benefits. These are net gains compared to the earnings of similar individuals who did not participate in a program included in this study. Including program costs and the net impacts on taxes and unemployment insurance benefits, the total net benefit per participant is \$328,728.

Projected participant net benefits to age 65 far outweigh public investment in apprenticeship training by a ratio of \$91 to 1, or \$328,728 to \$3,606.

From the time of leaving training to age 65, the public is expected to gain about \$85,476 per apprentice in net additional Social Security, Medicare, federal income, and state sales taxes. The estimated lifetime net benefit to taxpayers is \$86,498 per participant.

¹¹ This employee benefits amount does not account for the employee benefits associated with the earnings during participation. If the same benefit percentage (20 percent) were applied to such earnings, the gain in employee benefits in the longer term would be about \$50,000.



Projected taxpayer net benefits to age 65 outweigh public costs invested in apprenticeship training by a ratio of \$23 to 1 or \$83,884 to \$3,606.

Summary and Areas for Improvement

Apprenticeship is an extremely successful training program with strong net impacts on employment and earnings. Moreover, the cost to the public is very low as the bulk of the costs are covered by the trust funds established by employers and workers. Employers report high levels of satisfaction with the skills of those who completed an apprenticeship program, and participants report their satisfaction with the program.

This evaluation does find some areas that could be stronger. The median age of those leaving apprenticeships is 30. More should be done to enroll younger people into apprenticeships. Only 15 percent of apprentices are women. Also, the hourly wages and annual earnings of women are only 56 and 52 percent, respectively, those of men. More should be done to enroll women in apprenticeships, especially in higher paying fields. Finally, while Washington's apprenticeship program continues to enroll people of color at rates similar to their population in the state, there continues to be disparities between the post-program wages and earnings for people of color compared to whites. This suggests that minority groups may not be enrolling in the higher paying fields. This issue needs continued attention.

The Apprenticeship Section of the Department of Labor and Industries and the apprenticeship community are well aware of the importance of recruiting and retaining more women and people of color into high paying apprenticeship programs. They are engaged in activities to make this happen. For example, the Apprenticeship Section is partnering with the Department of Transportation to prepare women and people of color for jobs related to highway construction and maintenance. The Apprenticeship Section is also addressing the need to enroll younger participants; for example by establishing culinary arts and early child care programs that begin in secondary schools. The Washington State Apprenticeship and Training Council has developed and formalized an Apprenticeship Preparation Program recognition process for preparatory or pre-apprenticeship programs. The purpose is to build a recognized pipeline for apprenticeship preparation throughout the state.





Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Community and Technical Colleges Professional-Technical Education

Program Details

Washington's 34 community and technical colleges offer professional technical training that provides participants with skills required for specific occupations. Community and Technical Colleges (CTC) Professional-Technical Education training covers a broad range of occupational fields and credentials, from one-year certificates to two-year technical degrees. However, it does not include participants who intend to transfer to a four-year college or university; participants who enroll in a program to raise their basic skills to a high school level; or working adults who take a few classes to improve skills for their current jobs.¹

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 2014 report, researchers examined 34,240 CTC Professional-Technical participants who completed or left the community or technical college system.² These participants comprise the Professional-Technical cohort included in this study.³ The median length of enrollment for these participants was 18 months.

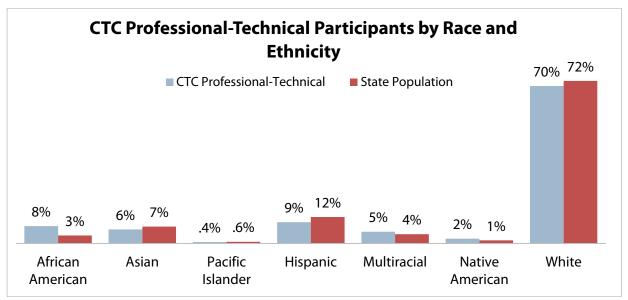
³ The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.



¹ While the Worker Retraining program at the community and technical colleges also provides occupational training, the results for participants who participated in this program are evaluated separately.

² CTC Professional-Technical Education participants identified themselves as vocational participants and have either enrolled for six or more vocational credits or have completed three or more vocational credits. Additionally, the participants included in this study exited their program during the academic year and did not enroll in a community or technical college for a period of one full year.

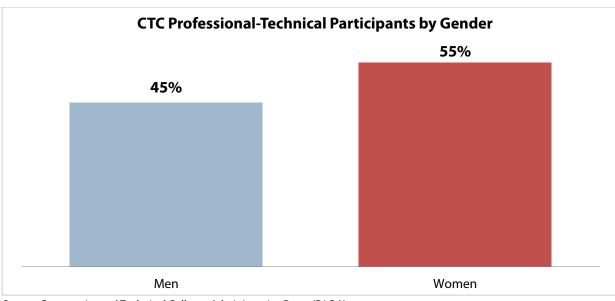
Participants from racial and ethnic minority backgrounds continue to be well represented among CTC Professional-Technical participants, especially among African Americans whose participation rate was over twice their representation in the state population. Native Americans are also slightly overrepresented in this program in comparison to their state population representation.⁴



Source: Community and Technical Colleges Administrative Data. Data Linking for Outcomes Assessment (DLOA) and 2011 U.S. Census Data from the American Community Survey.

Gender differences were also examined. Among CTC Professional-Technical participants, 45 percent were men. Men and women completed their programs at the same rate, 45 percent of completers were men.

⁴In 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 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 are Native American; 7 percent are Asian, 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.



Source: Community and Technical Colleges Administrative Data. (DLOA)

When they enrolled, 53 percent of the participants had not previously attended college; 21 percent had attended college without receiving a credential; 11 percent had a certificate or associate's degree; 10 percent had a baccalaureate or higher degree; and 5 percent had some other credential.

The median age in the last quarter of training was 29, with one quarter of the participants under age 23, and another quarter of the participants over age 39.

Tracking CTC Professional-Technical 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?

Data Comes From State Wage Files & Employer Survey

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. Information on employer satisfaction among firms that hired new employees who recently completed a CTC Professional-Technical program was assessed through the Workforce Board's 2012 Employer Survey.

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 received the skills they needed, this study tracks the credentials and degrees earned by participants.

Among CTC Professional-Technical participants leaving programs:

- 23 percent received an associate's degree.
- 20 percent received a vocational certificate.
- 14 percent were deemed ready for work because they completed 45 or more credits.
- 2 percent completed a non-credit vocational program that led to a certificate.

Taken together, 59 percent of participants earned a credential.⁵

Turn to page 20 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.

⁵ Upon exiting a college, the system determines whether the participant is considered to have completed the program. The percentages do not sum to 59 percent due to rounding.



2014 Workforce Training Results

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

To find out whether participants obtained jobs and how much they earned, participant records were matched with Employment Security Department wage files from Washington and neighboring states.⁶ The study looks at employment and earnings three calendar quarters after the participant left the CTC Professional-Technical program. The table below displays the employment and earnings of participants who exited the program during the prior year. Over 65 percent of the CTC Professional-Technical participants were employed. Of those who were working, 60 percent were employed full time. The median hourly wage was \$15.67; this is \$6.48 per hour more than Washington's minimum wage of \$9.19 an hour in 2013. However, there is considerable variation in wages. While one quarter earned more than \$22.00 an hour, another quarter had jobs that paid less than \$11.65 an hour. Median annualized earnings are \$26,360, very similar to earnings on the 2013 report.

Employment and Earnings for Community and Technical College Professional-Technical Education Participants, 2014

Performance Measure	Results
Employment Rate* (State Records)	66%
Employment Rate (Completers)	70%
Full Time Employment **	60%
Median Hours Worked Quarterly	416 hours
Median Hourly Wage***	\$15.67
Median Annualized Earnings***	\$26,360
Median Annualized Earnings (Completers)	\$28,812

^{*} 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.

⁶ 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).



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

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

Earnings of CTC Professional-Technical 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.⁷

CTC Professional-Technical participants were able to support a median 4.7 people at the poverty level - meaning they could support themselves plus nearly four other people. They could support just slightly more than themselves (1.4) at 200 percent of the poverty level.

Number of People Supported at Poverty Level by Participant Income

Performance Measure	2010	2011	2012	2013	2014
Number of people supported at the poverty level	5.4	4.8	4.4	4.7	4.7
	people	people	people	people	people
Number of people supported at 200 percent poverty	1.8	1.4	1.3	1.4	1.4
	people	people	people	people	people

The following table shows employment and earnings information over the course of five study periods. Performance results are shown for *all* CTC Professional-Technical participants and broken down further to focus on program completers.

⁷ 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 Community and Technical College Professional-Technical Education Participants

Performance	20	2011		11	2012		2013		2014	
Measure	All	Comp.								
Employment Rate (Self-Reported)	N/A	-	76%	-	N/A	-	N/A	-	N/A	-
Employment Rate* (State Records)	71%	77%	61%	65%	63%	69%	65%	70%	66%	70%
Full Time Employment**	65%	67%	59%	60%	54%	56%	62%	64%	60%	66%
Median Quarterly Hours	455	455	429	442	416	429	429	442	416	442
Median Hourly Wage***	\$16.41	\$17.10	\$15.75	\$16.64	\$15.45	\$16.25	\$15.23	\$16.12	\$15.67	\$16.45
Median Annualized Earnings***	\$29,184	\$31,371	\$26,580	\$28,785	\$25,269	\$27,663	\$26,448	\$29,219	\$26,360	\$28,812

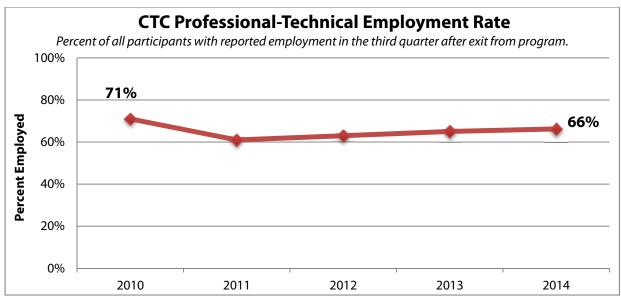
Source: Matches of Community and Technical College Administrative data with employment wage files.

A survey conducted in 2011 of CTC Professional-Technical participants revealed that 55 percent received medical benefits, and 44 percent received retirement benefits.

^{*}These figures apply to those with employment reported to the state's Employment Security Department six to nine months after leaving program for all CTC Professional-Technical participants, and are not limited to those who completed a program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

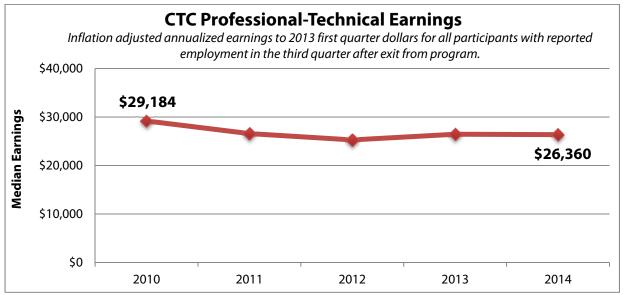
^{**}Full-time employment averages 30 or more hours per week.

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



Source: Workforce Training Results 2010-2014. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

The program results in the table above indicate that employment among all CTC Professional-Technical participants remained stable prior to a sharp decline in 2011, and then subsequently increased both in 2012 and 2013. In terms of earnings, CTC Professional-Technical participants experienced increases from 2004 to 2010, after which earnings declined the following two study periods, before beginning to recover.



Source: Workforce Training Results 2010-14. Note: This chart shows annualized earnings in 2013 first quarter dollars to account for inflation.

CTC Professional-Technical Participant Employment by Industry

Employment is concentrated in the services industry followed by retail trade, public administration, and manufacturing.

Industry	Group
	Services (see breakout)
	Retail Trade (see breakout)
	Public Administration
7.4%	Manufacturing (see breakout)
	Construction
3.0%	Financial Services
2.6%	Transportation and Warehousing and Utilities
	Wholesale Trade
1.3%	Information
1.3%	Natural Resources and Mining
	t of Services Industry
	Health Care
8.6%	Accommodation and Food Services
	Administrative, Support, Waste Management & Remediation Services
	Social Assistance
	Education Services
	All Other Services
	Professional, Scientific, and Technical Services
	Arts, Entertainment, and Recreation
	t of Retail Trades Industry
	Department and Warehouse Stores
	Food and Liquor Stores
	Vehicle Sales
	Clothing and Accessories Stores
	Miscellaneous Store Retailers
	Hardware, Garden and Farm Supplies
	Books, Music and Hobbies Sales
	Health Care and Beauty Products
	Electronics and Appliance Stores
	Gasoline Stations
	Home Furnishings Sales
	t of Manufactauring Industry
	Aerospace
	All Other Manufacturing
	Food & Beverage
	Fabricated Metal Products Wood & Paper Products
0.40/	

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

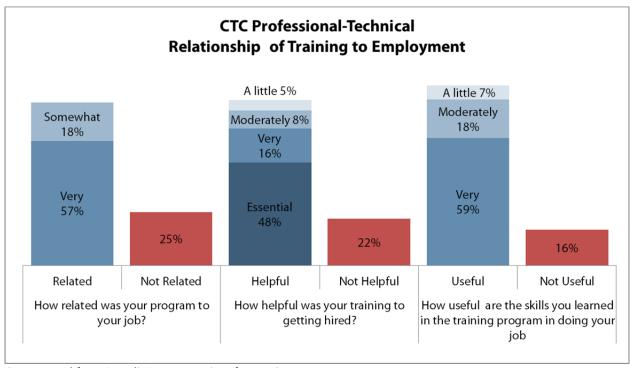
In 2011, the Workforce Board surveyed CTC Professional-Technical Education Participants who had left their program in 2009-10. The survey provided data on employment and participant satisfaction with the training. The survey was conducted by telephone and was completed by 379 participants.

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 Community and Technical College Professional-Technical participants employed six to nine months after leaving a program, 57 percent said their training was "very related" to their job. A further 18 percent reported the training was "somewhat related" to their job. Only 25 percent said that the training was "not related at all" to their job. In 2008, employed participants reported slightly higher rates of training related to employment (79 percent reported training was related to their job versus 75 percent this year).



Source: Workforce Board's Participant Satisfaction Survey 2011.

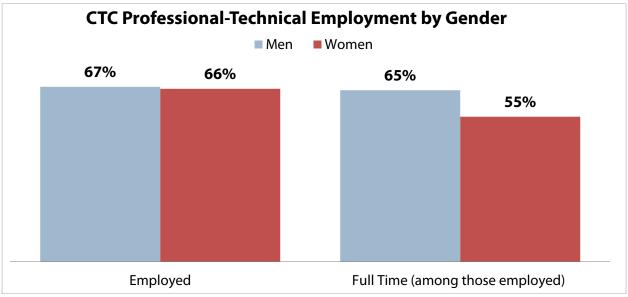
Participants interviewed in 2011 also indicated the training was helpful to them in getting their job. Of those participants, 48 percent indicated their training was an "essential requirement," another 16 percent indicated it was "very important," and 8 percent reported it was "moderately important." Five percent said it was "a little helpful." Only 22 percent indicated their training was "not important at all" to getting their job.

Most participants said the skills they learned in their training program were useful in doing their job. Some 59 percent of participants indicated the skills were "very useful," 18 percent said "moderately useful," and 7 percent "a little useful." The remaining 16 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 14 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

Wage and employment results may vary by gender, race and ethnicity, and disability. However, female participants (66 percent) were just as likely to be employed in the third quarter after leaving their programs as male participants (67 percent). Men were more likely to be employed full time than women (65 percent vs 55 percent).



Source: Matches with Community and Technical Colleges Administrative Data and Employment Security Department data.

Among employed participants, women's median annual earnings were \$24,634, or 86 percent of men's (\$28,543). Women's median hourly wages were \$15.31, or 96 percent of men's hourly wages (\$15.91). An earnings gap persists; one possible reason is that women and men tend to enroll in different types of programs, which lead to jobs that pay different amounts.

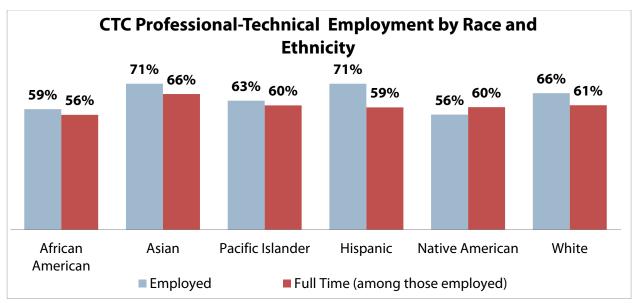


The service industry, for example, has a heavily female workforce. Some 70 percent of women CTC Professional-Technical participants obtained work in the service industry compared to 40 percent of men. Conversely, 14 percent of men obtained work in manufacturing while 3 percent of women obtained manufacturing jobs. Slightly more men than women work in retail trades. However, men were more likely to work in such jobs as vehicle sales while women were more likely to work in clothing and health care and beauty products stores.

Race and Ethnicity Play Roles

Native Americans (56 percent) were the least likely racial/ethnic group to be employed in the third quarter after leaving their programs. This compares to employment rates of 71 percent for Asians and Hispanics, 66 percent for whites, 63 percent for Pacific Islanders, and 59 percent for African Americans. Among those employed, the percent employed full time was highest for Asians (66 percent); lowest full time employment was African Americans (56 percent). The percentage of full time employment for whites (61 percent), Native Americans and Pacific islanders (60 percent), and Hispanics (59 percent) was very similar.

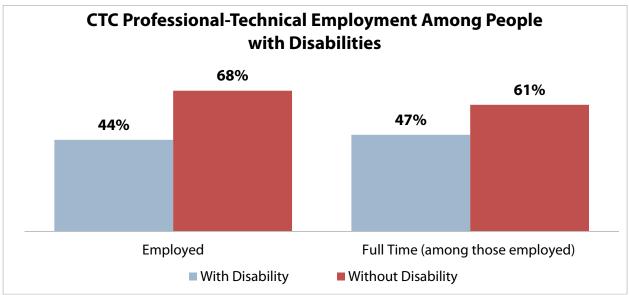
Of those employed, the median hourly wages were highest Asians at \$16.95, followed by Native Americans (\$16.38), whites (\$15.90), African Americans (\$13.77), Hispanics (\$13.72) and Pacific Islanders (\$13.39). Asians had the highest median annual earnings (\$30,977), followed by whites (\$26,939) and Native Americans (\$26,820). Hispanics (\$23,045), African Americans (\$22,871), Pacific Islanders (\$21,412) all had lower median annual earnings.



Source: Matches with Community and Technical Colleges Administrative Data and Employment Security Department data.

Disability Impacts Employment and Earnings

Employment outcomes and earnings also varied by disability status. College records indicate that 7 percent of the participants included in this study had a disability. These participants were less likely to have employment during the third quarter after exit (44 percent versus 68 percent of those without a disability). This slightly higher to the prior year, in which 41 percent of disabled participants were employed, compared to 66 percent of the non-disabled. Disabled participants were also less likely to work full time (47 percent versus 61 percent for non-disabled). Among those working, the median hourly wage rate of those with a disability (\$13.25) was 84 percent of those without a disability (\$15.75), and their median annual earnings (\$18,861) were 71 percent of those with no reported disability (\$26,747).



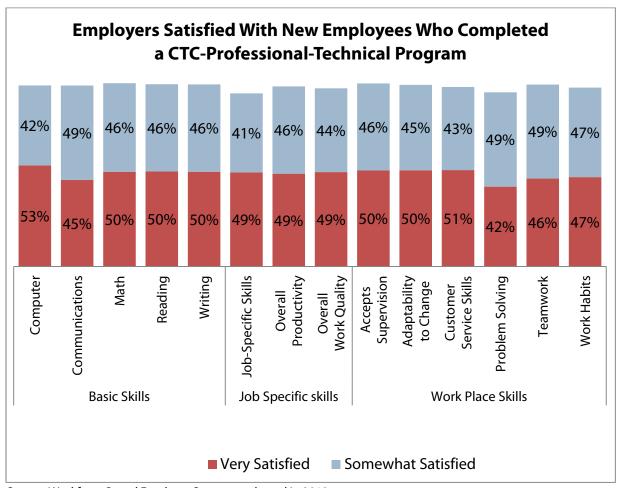
Source: Matches with Community and Technical Colleges Administrative Data and Employment Security Department data.

Were Employers Satisfied with the Preparation Workers Received?

The Workforce Board's Employer Survey, administered during 2012, asked firms to evaluate new employees who had recently completed a CTC Professional-Technical program. Some 93 percent of employers said they were either "somewhat satisfied" or "very satisfied" with the overall work quality of these new employees.

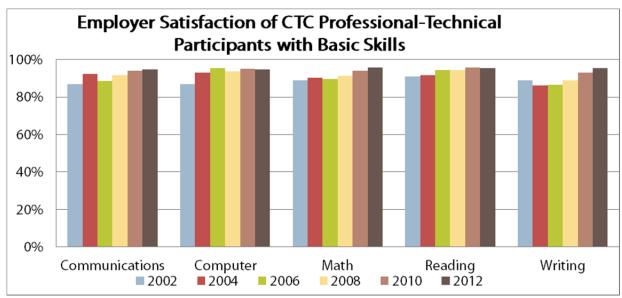
Employer satisfaction is broken down into three categories: Basic Skills, Job Skills and Work Place Skills. Basic skills refer to reading, writing, math, communication and computer skills. Job skills refer to skills specific to the job, as well as overall work quality and productivity. Work place skills refer to the skills necessary to get along in the workplace such as the ability to accept supervision, the ability to adapt to changes in duties and responsibilities, teamwork, customer service, problem solving or critical thinking skills, and having positive work habits and attitudes.

In 2012, employer satisfaction was consistently high across skill types, with just slightly lower satisfaction with new employees' problem-solving and communication skills.

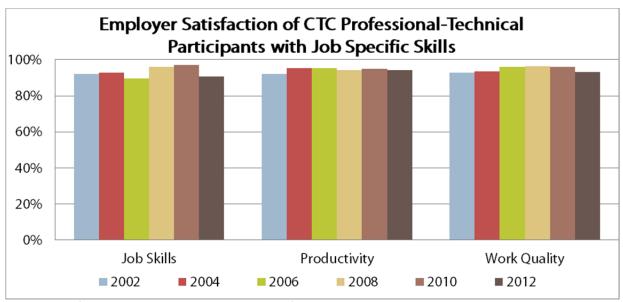


Source: Workforce Board Employer Survey conducted in 2012.

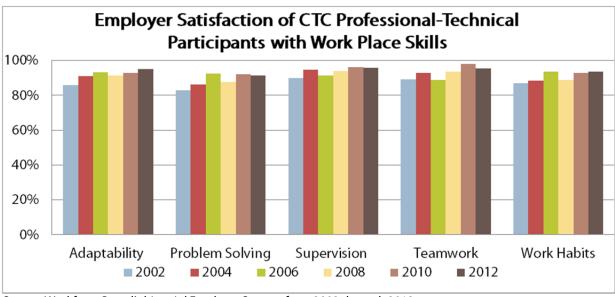
Overall, employer satisfaction has increased in most categories over the last decade, and has remained stable since the last survey. The following three charts show the trends in satisfaction of employers with new employees who recently completed a CTC Professional-Technical program.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

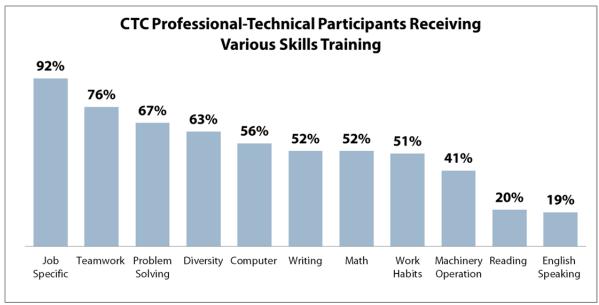


Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

Competency Gains

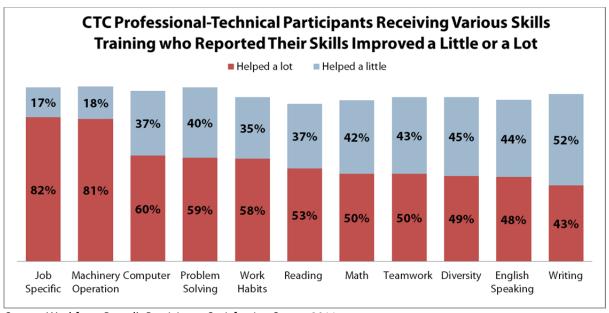
The primary goal of workforce training and education is to provide individuals with the skills and abilities required in the workplace. CTC Professional-Technical participants appear to agree: 86 percent of the participants surveyed for the 2011 Workforce Board Participant Survey indicated that they enrolled in college to learn skills for a new job, which is similar to participants in the previous study. At 87 percent, the number one reason participants decided to enroll was to either obtain or finish a degree or certificate.

In addition to learning job-specific skills, CTC Professional-Technical participants also receive other types of training. Over 76 percent received training in teamwork, and 67 percent received training in problem solving. In comparison to the 2008 study, participants from 2011 appear to have received a wider variety of skills training. The percentage of participants indicating they received training increased in the areas of machinery operation, diversity, teamwork and problem solving. However, the percentage of participants indicating they received training in English speaking dropped 5 percentage points.



Source: Workforce Board's Participant Satisfaction Survey 2011.

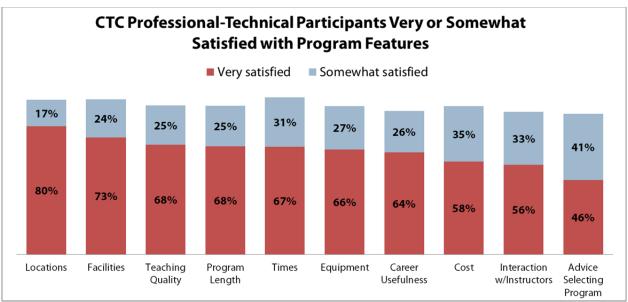
As in the previous study, most participants reported their skills improved as a result of training, and higher percentages reported substantial improvements in their job specific skills than in their workplace or basic skills. Compared with the study in 2008, slightly higher or similar percentages of participants this year reported their skills improved "a lot" across most skills training. However, participants indicating that the training improved their writing and diversity skills "a lot" decreased by around 7 percentage points.



Source: Workforce Board's Participant Satisfaction Survey 2011.

Participant Satisfaction

In the 2011 Workforce Board Participant Satisfaction Survey participants expressed high levels of satisfaction, similar to previous studies. Some 96 percent of participants reported they had met their educational objectives. And 91 percent reported they were "very satisfied" or "somewhat satisfied" with the program as a whole. Participants tended to be "very satisfied" with various features of their programs including location, facilities, quality of teaching, times offered, and usefulness of the program to their career. They were less satisfied with advice on selecting a training program.

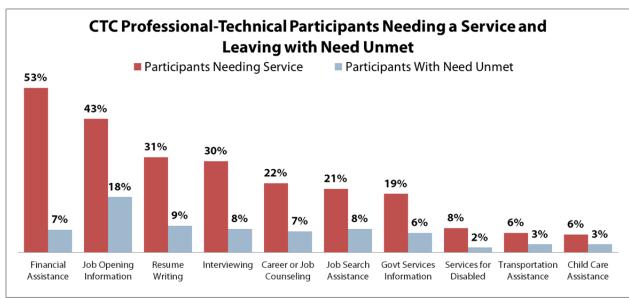


Source: Workforce Board's Participant Satisfaction Survey 2011.

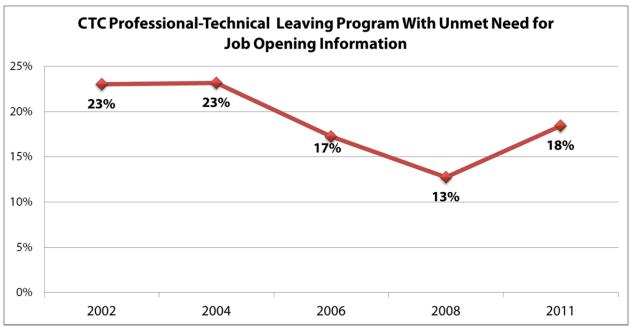
Similar to previous studies, participants indicated financial assistance and information about job openings as the support services they most needed while enrolled. Fewer participants needed transportation or child care assistance. Participants tended to receive the support services they needed; the exception continues to be information about job openings. In 2011 an increased percentage of participants reported leaving the program with an unmet need in this area.⁸

⁸ 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.



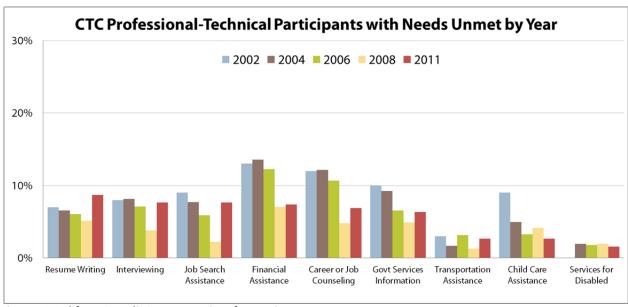


Source: Workforce Board's Participant Satisfaction Survey 2011.



Source: Workforce Board's Participant Satisfaction Survey 2011.

After a nearly a decade of declines in unmet needs, the percentage of participants reporting that they left the program with an unmet need has increased in nearly every category. The largest jumps in unmet need were in job opening information, interviewing and job search assistance, all of which increased by 6 percentage points. However, one program reported a decline in the percentage of participants indicating they left with an unmet need: child care assistance, which dropped slightly to 2.6 percent from 4.1 percent in 2008 and 9 percent in 2002.



Source: Workforce Board's Participant Satisfaction Surveys 2002-2011.

Net Impact – Did the 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 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

CTC Professional-Technical training has strong positive net impacts on employment, wages, hours worked, and earnings. Training substantially increases the lifetime earnings of participants.

Community or Technical College Professional-Technical Education 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 CTC Professional-Technical Training 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.



2014 Workforce Training Results

Impact on Employment and Earnings: Participants vs. Control Group

Community and Technical College Professional-Technical Education	Short-term^	Long-term^
Net Employment Impact*	6.6 percentage points	10.1 percentage points
Net Hourly Wage Impact**	\$3.26	\$3.45
Net Quarterly Hours Impact	59.8	59.5
Net Annualized Earnings Impact**	\$8,793	\$9,362

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

As can be seen above, Community and Technical College Professional-Technical Education participants fared better in both the short- and long-term in employment, hourly wages, hours worked and annualized earnings than those with similar demographic characteristics who did not participate in a workforce program. These net gains hold up and even increased over time.

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. Program costs include both direct program costs and support payments borne by taxpayers and the tuition and foregone earnings borne by program participants.

Benefits and costs are calculated for both the observed period of time and 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.

⁹ Upjohn estimated the impact of the net change in earnings on Social Security, Medicare, federal income, and state sales taxes.



^{*}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 CTC Professional-Technical participants who got jobs and those in the control group who were employed.

Participant and Public Benefits and Costs per Participant in Community and Technical Colleges Professional-Technical Programs

Donofit/Cost	First 2.5	years	Lifetime (u	Sum of Costs	
Benefit/Cost	Participant	Public	Participant	Public	and Benefits
Benefits					
Earnings	\$15,945	\$0	\$145,748	\$0	
Fringe Benefits	\$3,986	\$0	\$36,437	\$0	
Taxes	-\$3,293	\$3,293	-\$30,097	\$30,097	
Transfers					
UI	-\$1,031	\$1,031	-\$931	\$931	
Costs					
Foregone net earnings	-\$3,357	-\$663	-\$3,357	-\$663	
Program costs	-\$5,503	-\$11,026	-\$5,503	-\$11,026	
Benefits	\$15,608	\$4,324	\$151,156	\$31,028	
Costs	-\$8,860	-\$11,689	-\$8,860	-\$11,689	
Total (Net)	\$6,747	-\$7,366	\$142,296	\$19,339	\$161,635

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

For each student in CTC Professional-Technical Education, the public (taxpayer) cost is \$11,026 over the length of their enrollment, and the student cost is \$5,503 in tuition and \$3,357 in foregone earnings while training. During the first two and one-half years after leaving college, the average student will gain \$15,945 in earnings. During the course of working life to age 65, the average student will gain about \$142,391 in net earnings (earnings minus foregone earnings) and about \$36,437 in employee benefits. These are net gains compared to the earnings of similar individuals who did not receive the training. Including program costs and the net impacts on taxes and unemployment insurance benefits, the total net benefit per participant is \$142,296.

Projected participant net benefits to age 65 outweigh public costs invested in college training by a ratio of about \$13 to 1, or \$142,296 to \$11,026.

From the time of leaving training to age 65, the public is forecasted to gain about \$30,097 per participant in net additional Social Security, Medicare, federal income, and state sales taxes and to save \$1,031 in UI benefits—far greater than the direct cost of college training. The estimated lifetime net benefit to taxpayers is \$19,339 per participant.

Projected taxpayer net benefits to age 65 outweigh public costs invested in college training by a ratio of \$3 to 1, or \$31,028 to \$11,026.

Summary and Areas for Improvement

The report finds very strong results for community and technical colleges' professional-technical education. Professional-Technical education has very substantial net impacts on participant employment and earnings and returns more revenue to taxpayers than the program costs. Employer and participant satisfaction are very high. While participant employment and earnings remain below the peaks reported in 2010, they are recovering from the effects of the Great Recession.

The findings suggest some areas to focus on for improvement. Participant satisfaction with support services (especially career counseling, job search assistance, and information on job openings) is lower than it used to be. This likely reflects reductions in these services due to budget cuts. Also, the breakdown of results by subpopulations reveals the greatest disparities in labor market outcomes for students with disabilities. The employment rate for people with a disability is 14 percentage points lower than for people without a disability. The annual earnings for people with a disability is 71 percent of the earnings of those with no reported disability. Enhancing support services, especially services related to post-program employment and services for students with a disability, are areas for improvement.



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

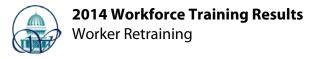
Every year, the Workforce Board measures the performance of key workforce programs. In this report, you'll find out more about the program and who is served, the metrics used to measure performance and how the program performed.

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.

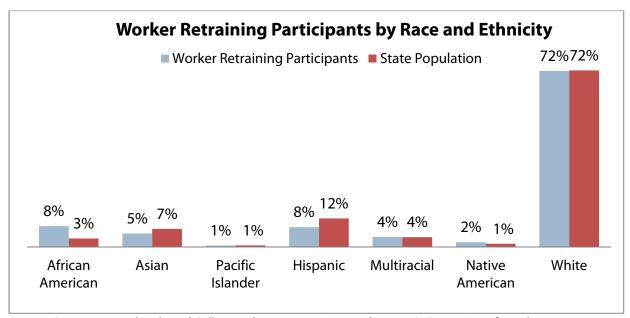
Participant Profile

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. 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

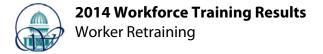


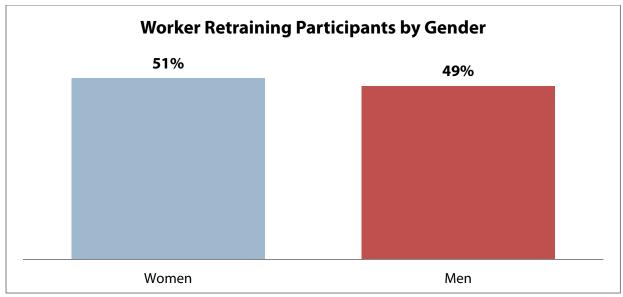
Source: Community and Technical Colleges Administrative Data and 2011 U.S. Census Data from the American Community Survey.

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.

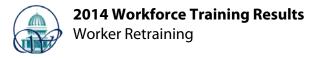
Tracking Worker Retraining Progress

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 sideby-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.

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.



^{**}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).

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	5.2	5.2	5.8	5.3
	people	people	people	people	people
Number of people supported at 200 percent poverty	2.1	1.7	1.7	2.0	1.7
	people	people	people	people	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

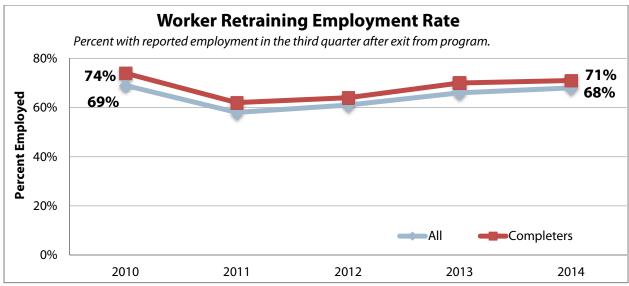
^{*}These figures apply to those with employment reported to the Employment Security Department six to nine months after leaving program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

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.

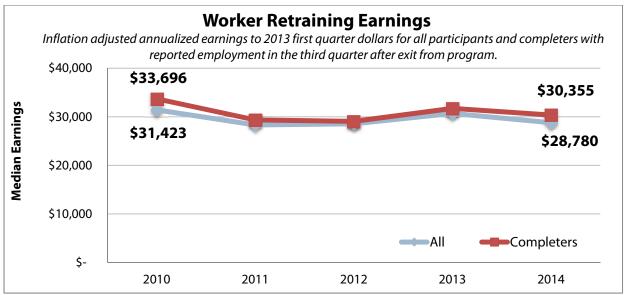
^{**}Full-time employment averages 30 or more hours per week.

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



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, earning 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.

le du eter (Cue une						
Industry (
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	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

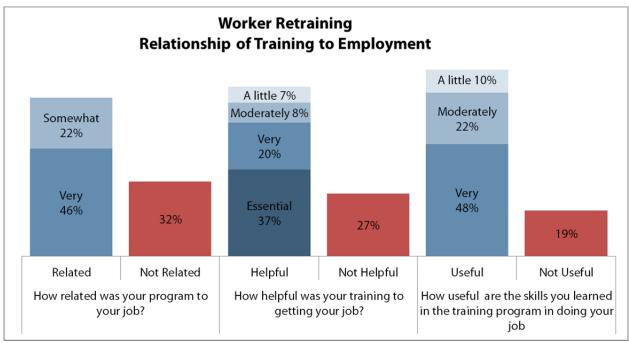
In 2011, the Workforce Board surveyed Worker Retraining participants who had left their program in 2009-10. The survey provided data on employment and documented how satisfied participants were with their training. The Participant Satisfaction Survey was conducted by telephone and was completed by 365 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.

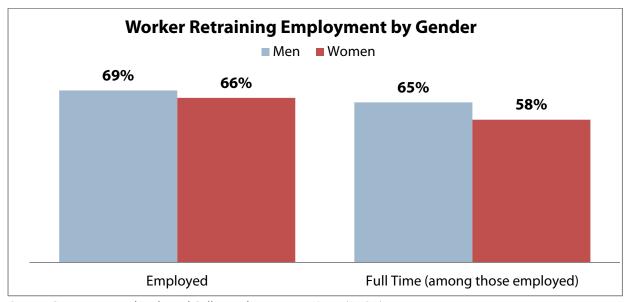
Most participants said skills they learned in their training program were useful in doing their job. Some 48 percent of participants indicated the skills were "very useful," 22 percent said "moderately useful," and 10 percent "a little useful." Only 19 percent of participants who were employed indicated 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)

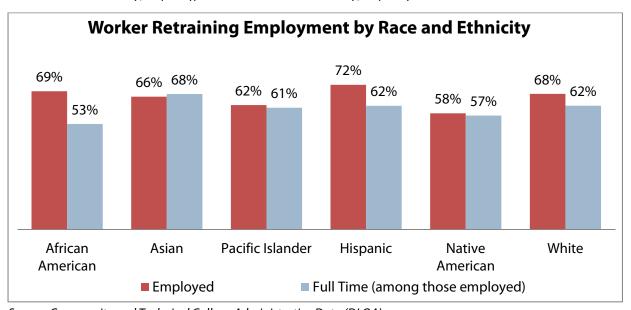
Race and Ethnicity Play Role

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).

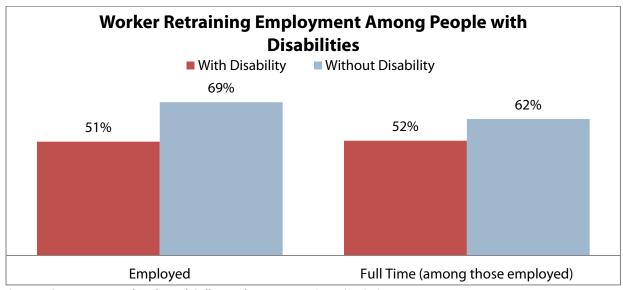
The breakdown for annual earnings among different racial and ethnic groups was distributed slightly differently from that of median hourly wages. Asians had the highest earnings (\$33,103), followed by whites (\$29,263), Pacific Islanders (\$28,594), Hispanics (\$25,723), African Americans (\$25,213), 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).

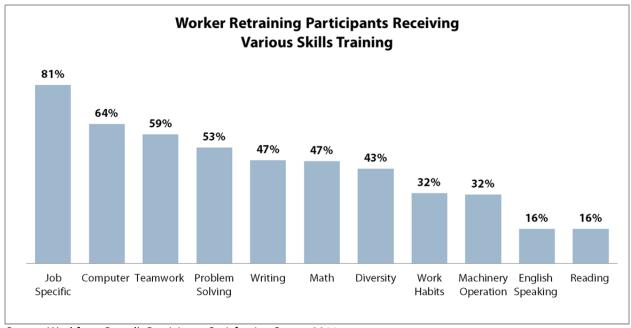


Source: Community and Technical College Administrative Data (DLOA)

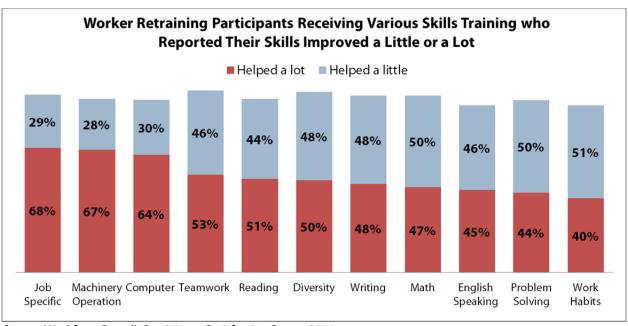
Competency Gains

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.



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.



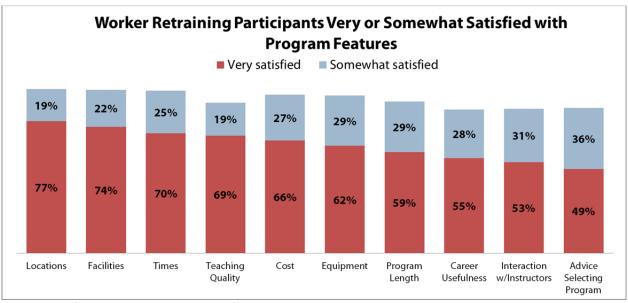
Source: Workforce Board's Participant Satisfaction Survey 2011.



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."

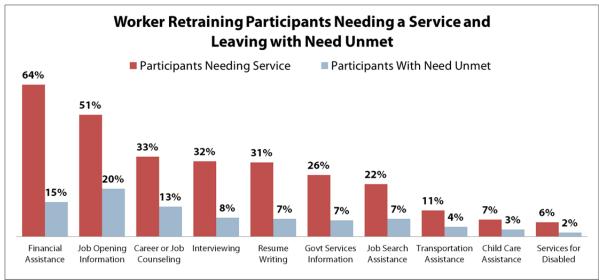


Source: Workforce Board's Participant Satisfaction Survey 2011.

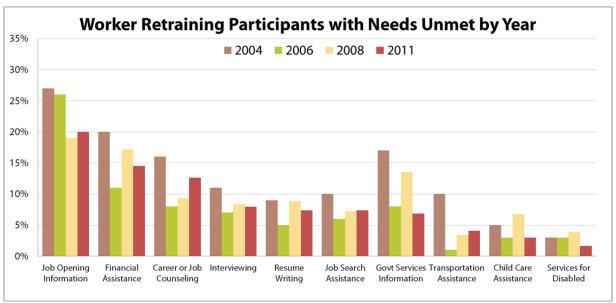
As in the past, the two most frequently needed support services while enrolled were financial assistance and job opening information. The percentage of participants who reported needing financial assistance dropped from 71 percent to 64, and the percentage that left with an unmet need⁷ in this area dropped 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.





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.

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.



^{*}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.

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. 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.

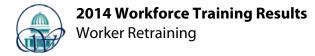
Participant and Public Benefits and Costs per Participant in Community and Technical College Worker Retraining Programs

Popolit/Cost	First 2.5 years		Lifetime (until 65)		Sum of Costs
Benefit/Cost	Participant	Public	Participant	Public	and Benefits
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.





Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Division of Vocational Rehabilitation

Program Details

The Division of Vocational Rehabilitation (DVR) within the state's Department of Social and Health Services offers services to help individuals with disabilities become employed. Depending on the individual and their functional limitations, this may include part-time employment, self-employment, or supported employment. Services are based on the needs of the individual and include: assessment; counseling; vocational, academic, and other training services; physical and mental restoration services; assistive technology; independent living services; mobility and transportation; communication services; and job search and placement.

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.

Eligibility requires certification by DVR that the individual:

- Has a physical, mental, or sensory impairment that constitutes or results in a substantial impediment to employment.
- Requires vocational rehabilitation services to prepare for, enter into, engage in, or retain employment.
- Can benefit from vocational rehabilitation services in obtaining a job.

These strict eligibility requirements should be considered when reviewing the outcomes of DVR clients.

Participant Profile

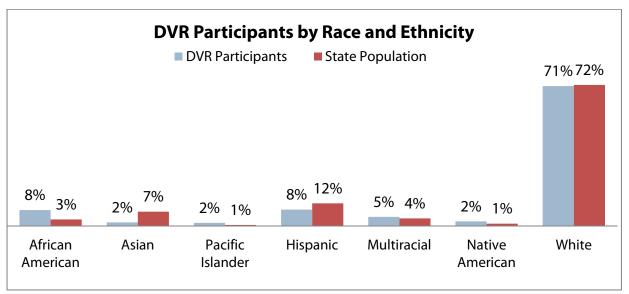
For this 2014 report, researchers studied the results of 5,047 participants who left DVR programs during the most recent program year. The median length of time DVR clients engaged in individualized employment plans was 12 months.

¹ The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.



Significant programmatic changes need to be considered when examining outcomes for DVR clients over time. The most important of these is the adoption of an order-of-selection policy. Since the end of 2000, when program funds and staff resources were insufficient to serve all eligible applicants, DVR was required to maintain a waiting list for services. In initiating services to individuals on the waiting list, priority was given to those with the most significant disabilities: Priority 1 was individuals with most severe disabilities; Priority 2 was individuals with severe disabilities. By revamping the order-of-selection policy, and implementing other service improvements, DVR was able to eliminate the waiting list for clients in 2008.

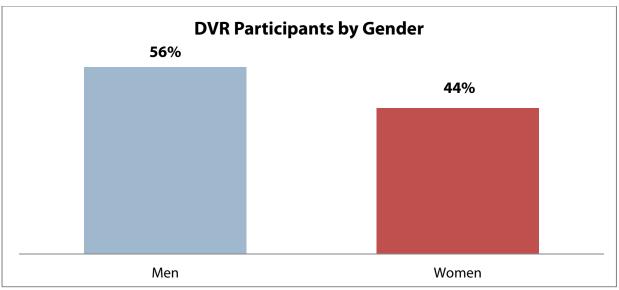
The racial/ethnic composition of the DVR clients roughly reflects those of the general population in Washington, though the African American population is over represented and the Asian and Hispanic populations are underrepresented.



Source: Division of Vocational Rehabilitation administrative records 2011-12 and 2011 U.S. Census Data from the American Community Survey.

Nearly 44 percent of the clients were women, identical to the prior three program years. Women were just as likely as men to finish the program.





Source: Division of Vocational Rehabilitation administrative records.

The median age upon entering a plan in the program was 39. One quarter of participants were under age 25 at entry, while another one quarter of participants were age 49 or older.

Tracking DVR 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?

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 2012-13.²

² The Workforce Board's 2012 Employer Survey, which measures the satisfaction of Washington's employers with workforce programs such as DVR, is not included in this report because DVR's sample size is not large enough.



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 workforce programs, 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 15 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 sideby-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?

Some 55 percent of the DVR clients were classified as rehabilitated upon leaving the program (that is, they were working for 90 days prior to exit). This rehabilitation rate is 3 percentage points higher than the 52 percent observed in the last report.

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.³ The study looks at employment and earnings three calendar quarters after the participant left the DVR program. Record matches found 50 percent had reported employment during the third quarter after they left the program. This is up from 47 percent the prior program year. The median hourly wage was \$11.46, and median annualized earning was \$13,655.⁴ Both median hourly wages and median annual earnings are down from the prior program year. Individuals deemed rehabilitated upon leaving the program—that is, those who had been working for 90 days—tended to have better employment and earnings

⁴ 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.



³ 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).

outcomes than those not considered rehabilitated (76 percent employed and median earnings of \$14,691).

DVR clients observed for the 2014 Workforce Training Results had employment rates 3 percentage points higher than those in 2013. Full time employment decreased 2 percentage points. When looking at those considered to be rehabilitated, the employment rate was 2 percentage points higher than employment for rehabilitated clients in the previous report. Participants that are considered rehabilitated had their inflation-adjusted median hourly wage decrease from \$12.01 to \$11.65 and annual earnings decreased by just over \$1,125 from the 2013 report.

Employment and Earnings DVR Participants, 2014

Performance Measure	Results
Employment Rate* (State Records)	50%
Full Time Employment**	38%
Median Hours Worked Quarterly	297 hours
Median Hourly Wage***	\$11.46
Median Annualized Earnings***	\$13,655
Median Annualized Earnings (rehabilitated)	\$14,691

^{*} 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.

Earnings of DVR 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.⁵

⁵ 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.



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

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

In the 2014 report, DVR participants were able to support a median 1.5 people at the poverty level—meaning they could support themselves and half of another person. They did not have enough earnings to support themselves, let alone others, at 200 percent of the poverty level (.6 people).



Number of People Supported at Poverty Level by Participant Income

Performance Measure	2010	2011	2012	2013	2014
Household size- poverty level	1.1 people	1.2 people	1.5 people	1.8 people	1.5 people
Household size- poverty level at 200 percent	0.5 people	0.5 people	0.6 people	0.6 people	0.6 people

The following table shows employment and earnings information over the course of five study periods.

Employment and Earnings Trends for DVR Participants, 2010-2014

Performance Measure	2010	2011	2012	2013	2014
Employment Rate (Self-Reported)	N/A	56%	N/A	N/A	N/A
Employment Rate* (State Records)	53%	46%	43%	47%	50%
Full Time Employed **	37%	28%	38%	40%	38%
Median Quarterly Hours	284	285	294	307	297
Median Hourly Wage***	\$11.12	\$11.53	\$11.57	\$11.79	\$11.46
Median Annualized Earnings***	\$11,977	\$12,487	\$13,563	\$14,692	\$13,655

^{*}These figures apply to those with employment reported to the state's 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.

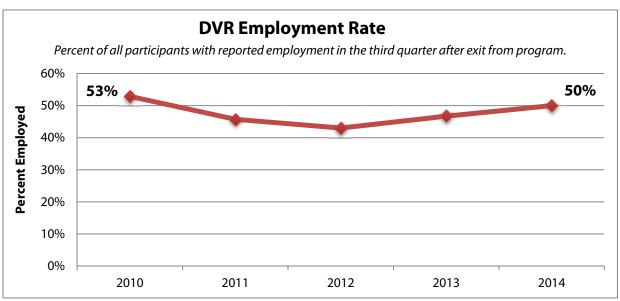
A survey conducted in 2011 of DVR participants revealed that 55 percent received medical benefits, and 31 percent received retirement benefits.



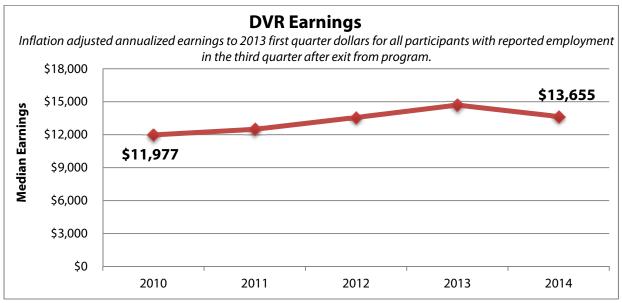
^{**}Full-time employment averages 30 or more hours per week.

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

The state employment rate among all participants increased 3 percentage points to 50 percent. Median hourly wages and median annual earnings have decreased since the last report.



Source: Workforce Training Results 2010-2014 reports. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.



Source: Workforce Training Results 2010-2014 reports. Note: This chart shows annualized earnings in 2013 first quarter dollars to account for inflation.



DVR Employment by Industry

Employment among DVR clients continued to be heavily concentrated in services. Within services, social assistance (12 percent) was the largest employer of DVR program exiters.

Indust	Industry Group				
58.2%	Services (see breakout)				
18.3%	Retail Trades (see breakout)				
7.6%	Manufacturing				
3.2%	Financial Activities				
3.1%	Transportation and Warehousing and Utilities				
2.4%	Construction				
2.2%	Wholesale Trade				
2.0%	Public Administration				
1.6%	Information				
1.5%	Natural Resources and Mining				
Breako	out of Services				
21.1%	All Other Services				
12.0%	Social Assistance				
10.8%	Administrative & Support & Waste Mgmnt & Remediation				
9.5%	Health Care				
4.8%	Educational Services				
Breako	Breakout of Retail Trades				
7.5%	All Other Retail Trade				
5.4%	General Merchandize Stores				
4.8%	Food & Beverage Stores				
0.5%	Gasoline Stations				

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 DVR participants who had left their program in 2009-10. The survey provided data on employment and participant satisfaction with the training. The survey was conducted by telephone and was completed by 75 participants.

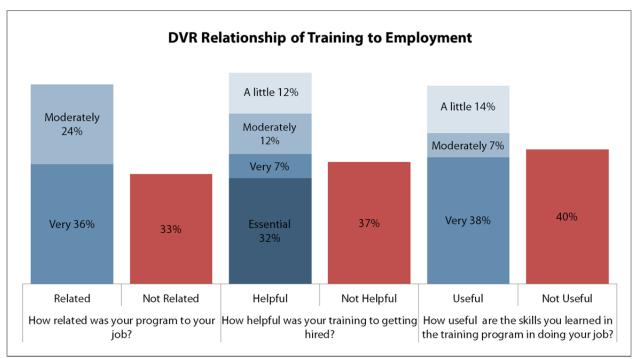


To measure the extent to which a participant's education program and training related to employment, we asked participants three questions:

- 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 participants employed six to nine months after leaving a program, 36 percent said their training was "very related" to their job. A further 24 percent reported the training was "somewhat related" to their job. In 2008, slightly lower rates of employed participants reported their training was "very related" (30 percent) while a similar percentage of participants said the training was "somewhat related."



Source: Workforce Board's Participant Satisfaction Survey 2011.

DVR participants interviewed in 2011 also indicated the training was helpful to them in getting their job. Of those participants, 32 percent indicated their training was an "essential requirement," another 7 percent indicated it was "very important," and 12 percent reported it was "moderately important." Twelve percent said it was "a little helpful." The remaining 37 percent indicated their training was "not important at all" to getting their job.

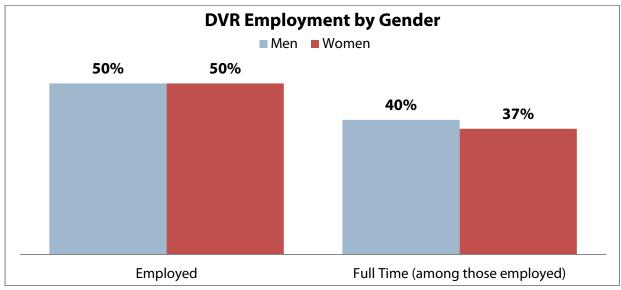


Most participants said the skills they learned in their training program were useful in doing their job. Some 38 percent of participants indicated the skills were "very useful," 12 percent said "moderately useful," and 10 percent "a little useful." The remaining 40 percent of participants who were employed indicated the skills were "not useful at all."



Wages and Employment Results Vary by Population

Wage and employment results can vary by gender, and race and ethnicity. Women and men in the DVR program were just as likely to be employed (50 percent). Women's median hourly wages were nearly identical to men's (\$11.42 versus \$11.49); however, their median annual earnings were 89 percent of men's (\$12,749 versus \$14,290).



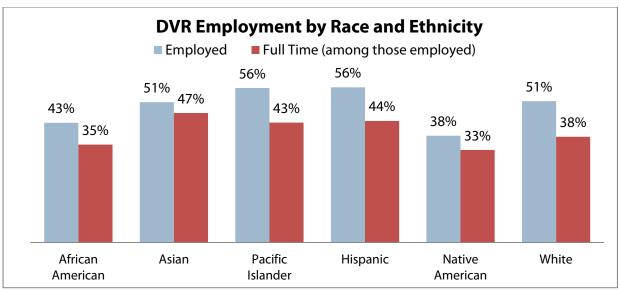
Source: Matches with Employment Security Department data.

Race/Ethnicity Plays Role

Substantial variation was found among employment rates by race and ethnicity. Pacific Islanders and Hispanics had the highest employment rate at 56 percent, followed by Asians and whites (51 percent) and African Americans (43 percent), and Native Americans (38 percent). Full time employment rates also varied. Asians had the highest full time employment rate (47 percent), followed by Hispanics (44 percent), Pacific Islanders (43 percent), whites (38 percent), African Americans (35 percent) and Native Americans (33 percent).

Native Americans had the highest hourly wage at \$13.05, followed by Asians (\$12.26), whites (\$11.54), African Americans (\$11.41), Hispanics (\$11.13) and Pacific Islanders (\$10.83). Asians had the highest median annual earnings at \$16,426, followed by Hispanics (\$15,582), Pacific Islanders (\$15,030), whites (\$13,661), African Americans (\$11,940), and Native Americans (\$11,773).

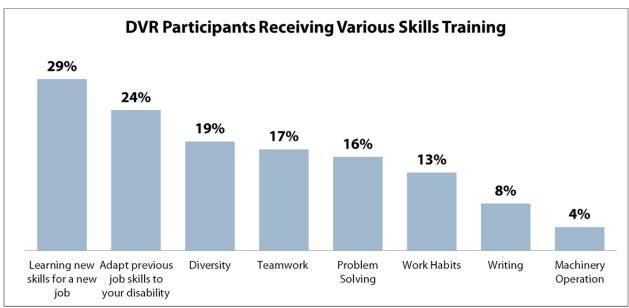




Source: Matches with Employment Security Department data.

Competency Gains

Of those responding to the Participant Survey, 80 percent entered the DVR program to get job search assistance and 68 percent of DVR clients enrolled in the program to learn skills for a new job. Among the skills provided by DVR, most clients received training in learning new skills for a new job (29 percent) and adapting previous job skills to their disability (24 percent).



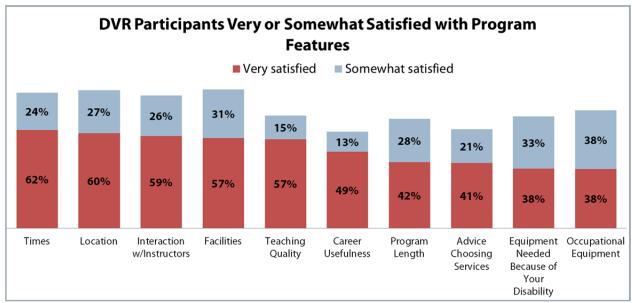
Source: Workforce Board's Participant Satisfaction Survey 2011.

Among those employed in the third quarter after leaving the program, 58 percent indicated their training was related to their job, which was up from 55 percent on the 2008 survey.



Participant Satisfaction

Some 75 percent of clients said they were "very satisfied" or "somewhat satisfied" with their DVR program, slightly lower than the satisfaction level reported in 2008. Respondents reported relatively high overall levels of satisfaction with times, location, interaction with instructors, and the program's facilities. Overall satisfaction (participants indicating they were either very or somewhat satisfied) was lowest with respect to usefulness of the program to their careers. However, since 2008 the percentage of participants who indicated they were "very satisfied" with DVR's career usefulness has increased 10 percentage points.

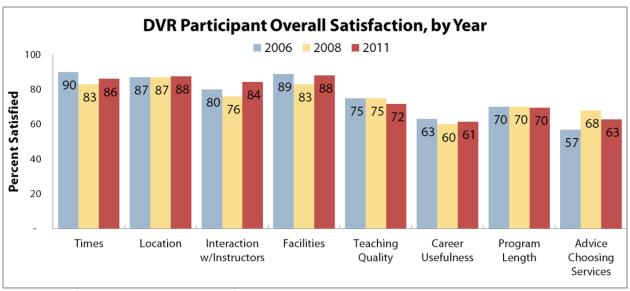


Source: Workforce Board's Participant Satisfaction Survey 2011.

Over the past three surveys, participant satisfaction with various program features has remained fairly steady. The largest gain in satisfaction was with interaction with instructors. Participant satisfaction with instructors increased by 8 percentage points, from 76 percent in 2008 to 84 percent in 2011. Participant satisfaction with program facilities also increased, from 83 percent in 2008 to 88 percent in 2011. The largest decrease was in advice choosing services, which dropped from 68 percent in 2008 to 63 percent in 2011. All other programs had changes of 3 percentage points or lower, or did not change at all. Satisfaction with program length held steady for the last three surveys, with 70 percent of participants indicating they were satisfied with the length of the program.

⁶ The Division of Vocational Rehabilitation employs vocational rehabilitation counselors who work with clients.

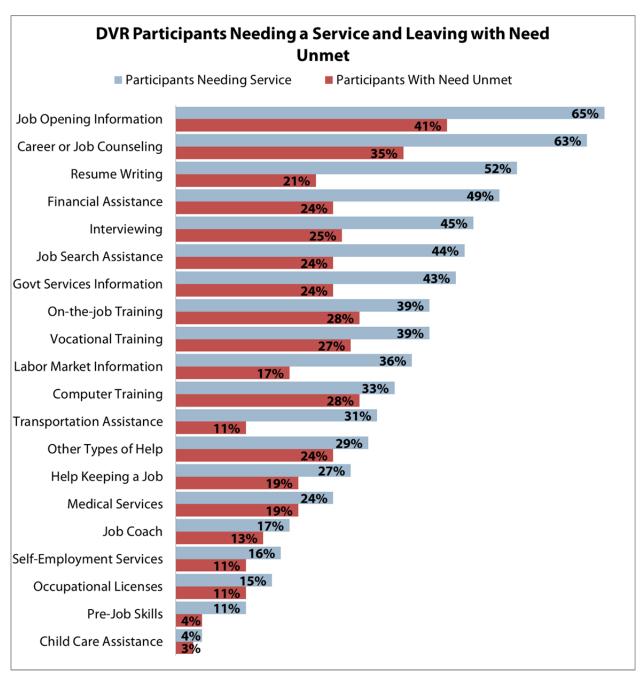




Similar to 2008, DVR clients indicated information about job openings and job counseling as the support services they needed most while participating in the program. While the majority of clients had their support service needs met, over 40 percent left with an unmet need for job opening information, and 35 percent left with an unmet⁷ need for information about job counseling.

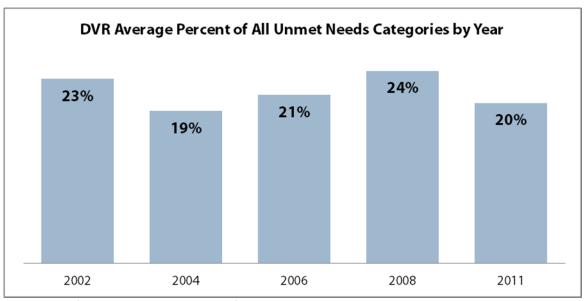
⁷ Unmet need refers to cases where the student reports that either they did not receive the required service or what was provided did not meet their needs.





Overall, the percentage of unmet needs reported by DVR participants has decreased since the last participant survey in 2008.





Net Impact - Did Program Make a Difference in Participant Success

Every four years the Workforce Board conducts net impact and cost-benefit analyses 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 Division of Vocational Rehabilitation program has positive net impacts on employment and hours worked each guarter. 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 Division of Vocational Rehabilitation 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 had been found eligible for DVR services, but chose not to participate.

The most recent net impact analyses examined experiences of participants who left Division of Vocational Rehabilitation programs 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

Vocational Rehabilitation	Short-term^	Long-term^	
Net Employment Impacts*	12.80 percentage points	12.40 percentage points	
Net Hourly Wage Impacts**	No significant positive impact	No significant positive impact	
Net Quarterly Hours Impacts	No significant positive impact	47.4	
Net Annualized Earnings**	\$1,355	\$1,445	

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

As can be seen above, the DVR program had a significant impact on employment, and boosted wages when comparing participants with non-participants. Also, the long-term impact on the number of hours worked each quarter was substantial for program participants.

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. Program costs include both direct costs and support payments borne by the taxpayers and the tuition and foregone earnings borne by program participants. Benefits and costs are calculated for both the observed period of time and based upon a statistical model that estimated the benefits and costs out to age 65. 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 clients leaving programs in 2005-2006 (observed from 2006-07 through 2008-09), because a longer-term follow-up is required for this analysis.

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



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

^{**}Wages and earnings, expressed in first quarter 2013 dollars; they represent the average difference between DVR participants who got jobs and those in the control group who were employed.

Participant and Public Benefits and Costs per Participant in Division of Vocational Rehabilitation

Popolit/Cost	First 2.5 years		Lifetime (until 65)		Sum of Costs
Benefit/Cost	Participant	Public	Participant	Public	and Benefits
Benefits					
Earnings	\$4,526	\$0	\$19,042	\$0	
Fringe Benefits	\$1,131	\$0	\$4,761	\$0	
Taxes	-\$692	\$692	-\$2,912	\$2,912	
Transfers					
UI	-\$243	\$243	-\$281	\$281	
Costs					
Foregone net earnings	\$830	\$115	\$830	\$115	
Program costs	\$0	-\$7,551	\$0	-\$7,551	
Benefits	\$4,723	\$935	\$20,610	\$3,192	
Costs	\$830	-\$7,437	\$830	-\$7,437	
Total (Net)	\$5,553	-\$6,502	\$21,440	-\$4,244	\$17,196

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

For each client in a DVR program, the public (taxpayer) cost is \$7,551 over the length of their enrollment. Typically while participating in employment and training programs, individuals forego earnings. DVR clients, however, had net earnings during participation of \$830 over non-participants. During the first two and one-half years after leaving DVR, the average client will gain \$4,526 in earnings. During the course of working life to age 65, the average client will gain about \$19,872 in net earnings (net impact earnings plus earnings during participation) and about \$4,761 in employee benefits.

These are net gains compared to the earnings of similar individuals who did not receive DVR services. Including program costs and the net impacts on taxes and unemployment insurance benefits, the total net benefit per participant is \$21,440.

Projected participant net benefits to age 65 outweigh public costs for the DVR program by a ratio of \$3 to \$1, or \$21,440 to \$7,551.

From the time of leaving the DVR program to age 65, the public is forecast to gain about \$2,912 per participant in net additional Social Security, Medicare, federal income, and state sales taxes and to save \$281 per client in UI benefits. The estimated lifetime net cost to taxpayers is \$4,244 per participant.



Projected taxpayer net benefits to age 65 are less than public costs invested in DVR services by a ratio of \$.4 to \$1 or \$3,192 to \$7,551.

Summary and Areas for Improvement

DVR serves individuals with significant challenges to employment, yet achieves positive net impacts on employment and earnings. The return to participants far exceeds the cost of the services. This evaluation reveals some strong results, and some possibilities of how this return could be made stronger.

The participant survey suggests that more should be done to provide individuals with job counseling and information about job openings. Some 41 percent of survey respondents indicated their need for job opening information was not met. When asked about program features, most participants were somewhat or very satisfied with each aspect of their program, but a substantial percentage (38 percent) were not satisfied with the career usefulness of the services. Among DVR participants who became employed, between 33 and 40 percent found the services were either not related to their job, were not helpful in getting hired, or not useful for their job. While this means that most did find a relationship between their DVR experience and their job, there is room for improvement.

Under the 2014 State Plan, DVR will, among other steps, make greater use of labor market and postsecondary training information to improve vocational assessments and assist participants in better selecting employment goals that match the availability of jobs; develop more relationships with employers to create opportunities for participants to gain work experience through internships and obtain employment; and meet regularly with staff from workforce partners in order to identify current trends in local labor markets.





Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Department of Services for the Blind

Program Details

The Department of Services for the Blind (DSB) provides vocational rehabilitation services including information, assessment, and referral; vocational counseling including guidance, referral, and placement; and rehabilitation training in adaptive skills, job skills, and assistive technology. DSB also provides occupational licenses, tools, equipment, technological aids, and other goods and services that can be reasonably expected to help clients achieve successful employment outcomes.

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.

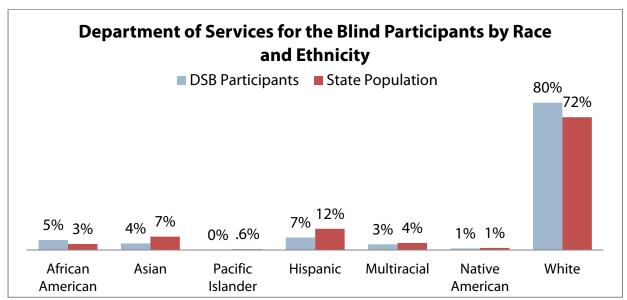
To receive services, an individual must be legally blind or have a visual disability that causes an impediment to employment, and vocational rehabilitation services are required for the individual to prepare for, enter, engage in, or retain employment.

For this 2014 report, researchers studied the results of 219 clients who left DSB programs during the most recent reporting year.¹ The median length of program enrollment from application to exit was 15 months. Program participants were more likely to be white (80 percent) or African American (5 percent); however, they were slightly less likely to be Hispanic (7 percent) or Asian (4 percent) than the general population of Washington.² Fifty-five percent of the DSB clients were women, up from 50 percent the prior program year.

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

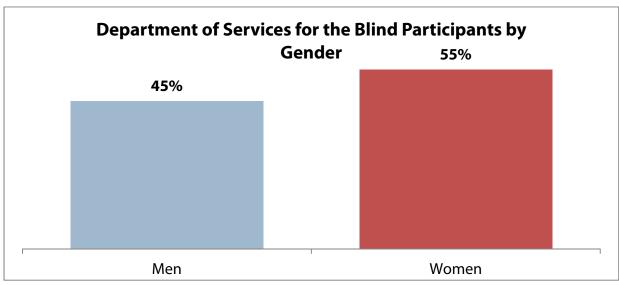


¹ The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.



Source: Department of Services for the Blind Administrative Records and 2011 U.S. Census Data from the American Community Survey.

The median age upon applying for the program was 43, with one quarter under age 29 and another quarter over age 53.



Source: Department of Services for the Blind Administrative Records

When they applied for the program, 28 percent had not previously received postsecondary education, 26 percent had postsecondary education but no degree or certificate, 16 percent had an associate's degree or a vocational certificate, and 30 percent had a bachelor's degree or higher.

American; 1 percent are Native American; 7 percent are Asian; 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.



Tracking Department of Services for the Blind 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?³

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.

Did Participants Get the Skills They Needed?

Some 51 percent of DSB clients were classified as rehabilitated upon leaving the program (that is, they were working for at least 90 days prior to leaving the program), 14 percentage points lower than the last report.

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. Record matches found 39 percent of DSB clients had reported employment three quarters after program exit. Among those who were considered rehabilitated upon leaving the program (that is, those who had been working for 90 days prior to exit), 66 percent still had reported employment the third quarter after exit, about 9 percentage points more than for the last cohort of participants. Among participants who were working during the third quarter after leaving the program, the median hourly wage

⁴ These files contain quarterly earnings and hours-worked information on those individuals with employment reported for 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).



³ Due to small sample size and difficulty in identifying a comparison group, DSB participants were not included in the 2009 Net Impact Study and Cost-Benefit analysis that detailed the performance of several of Washington's workforce programs by comparing participant outcomes with non-participants. Also, DSB 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.

was \$14.15 and the median annualized earnings were \$23,706.⁵ As expected, rehabilitated clients had better employment and earnings outcomes than all clients combined.

Employment and Earnings for Department of Services for the Blind Participants, 2014

Performance Measure	Results
Employment Rate* (State Records)	39%
Full Time Employment **	50%
Median Hours Worked Quarterly	398
Median Hourly Wage***	\$14.15
Median Annualized Earnings***	\$23,706

^{*} 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.

Earnings of DSB 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

DSB participants are able to support a median 4 people at the poverty level—meaning they could support themselves plus three other people. They could support themselves plus a tenth of another person (1.1) at the 200 percent of poverty level.

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.



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

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

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.

Number of People Supported at Poverty Level by Participant Income

	20	10	20	11	20	12	20	13	20	14
	AII	Rehab.								
Number of people supported at poverty level	3.8	5.0	3.7	4.0	4.3	4.5	3.9	4.2	4.0	4.3
Number of people supported at 200 percent poverty	1.0	1.6	0.9	1.1	1.2	1.3	1.0	1.2	1.1	1.2

The following table shows employment and earnings information over the course of five study periods. Employment rates among DSB participants have declined since 2010. Earning levels among all participants have fluctuated since 2010.

Employment & Earnings Trends for Department of Services for the Blind

	2010	2011	2012	2013	2014
Employment Rate* (Self-Reported)	N/A	60%	N/A	N/A	N/A
Employment Rate* (State Records)	45%	45%	43%	42%	39%
Full Time Employed**	50%	59%	57%	48%	50%
Median Quarterly Hours	388	441	424	370	398
Median Hourly Wage***	\$15.31	\$13.29	\$16.42	\$14.98	\$14.15
Median Annual Earnings***	\$22,712	\$22,171	\$24,731	\$23,071	\$23,706

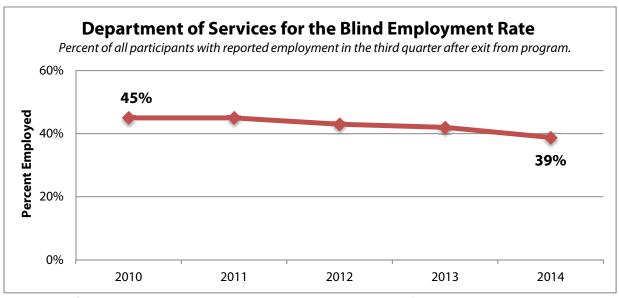
^{*}These figures apply to those with employment reported to the state's Employment Security Department six to nine months after leaving program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

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

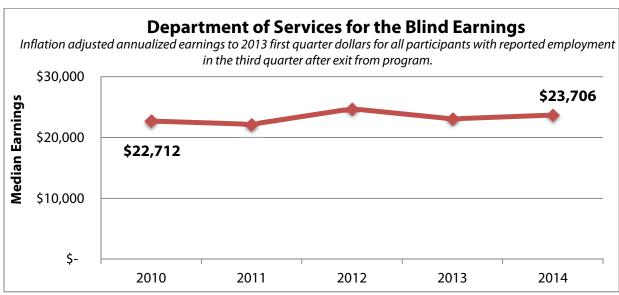


^{**}Full-time employment averages 30 or more hours per week.

A survey conducted in 2011 of DSB participants revealed that 57 percent received medical benefits, and 39 percent received retirement benefits.



Source: Workforce Training Results 2010-14 reports. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.



Source: Workforce Training Results 2010-14 reports.



DSB Employment by Industry

Most DSB participants were employed in Services, including 16 percent in Educational Services. Manufacturing accounted for 17 percent of employment.

Industry Gro	ир
16.9%	Manufacturing
15.7%	All Other Services
15.7%	Educational Services
15.7%	Social Assistance
8.4%	Health Care
6.0%	Food & Beverage Stores
4.8%	Information
4.8%	Public Administration
3.6%	General Merchandize Stores
3.6%	Financial Activities
1.2%	Natural Resources and Mining
1.2%	All Other Retail Trade
1.2%	Transportation and Warehousing and Utilities
1.2%	Administrative & Support & Waste Mgmnt & Remediation

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 DSB participants who had left their program in 2009-10. The survey provided data on employment and participant satisfaction with the training. The survey was conducted by telephone and was completed by 111 participants.

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

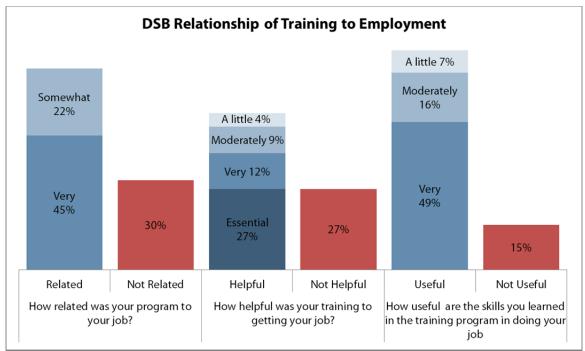
- 1. How related was the program to their job?
- 2. How important was the training in getting hired?
- 3. Are the skills they learned useful in their job?

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 DSB participants employed six to nine months after leaving the program, 45 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, lower rates of employed participants reported their training was "very related" to their job (36 percent).



Source: Workforce Board's Participant Satisfaction Survey 2011.

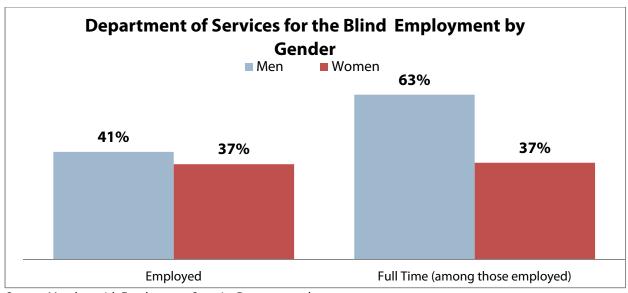
Participants interviewed in 2011 also indicated the training was helpful to them in getting their job. Of those participants, 27 percent indicated their training was an "essential requirement," another 12 percent indicated it was "very important," and 9 percent reported it was "moderately important." Some 27 percent indicated their training was "not important at all" to getting their job.

Most participants said the skills they learned in their training program were useful in doing their job. Some 49 percent of participants indicated the skills were "very useful," 16 percent said "moderately useful," and 7 percent "a little useful." Only 15 percent of participants who were employed indicated the skills were "not useful at all."

Wages and Employment Results by Population

Employment and earnings can vary by gender, race and ethnicity, and disability status. Women were just as likely to be employed as men (37 vs. 41 percent), but women were less likely to be employed full time than were men (37 percent vs. 63 percent). Women's hourly wages were lower than men's hourly wages (\$13.60 vs. \$14.40). The ratio of women's median hourly wages versus men's was 94 percent, higher than last year's ratio of 84 percent. Women's earnings were also lower than men's (\$19,750 compared to \$24,717). The ratio of women's earnings to men's was higher during this reporting year compared to the previous year (80 percent vs. 48 percent).





Source: Matches with Employment Security Department data.

Race/Ethnicity Plays Role

Although data from other chapters provide evidence that employment rates, wages and earnings vary among racial and ethnic groups, the sample size for non-white program participants was too small to make valid statistical inferences among DSB participants.

Competency Gains

Based on survey results, most DSB clients (75 percent) enrolled to get equipment they needed because of their disability. Some 56 percent of all clients enrolled to learn skills for a new job and 56 percent to get job search help. Clients were more likely to report receiving training in job skills, such as machinery operation (30 percent) or learning skills for a new job (34 percent), rather than general workplace skills, such as work habits (10 percent) or teamwork (14 percent).

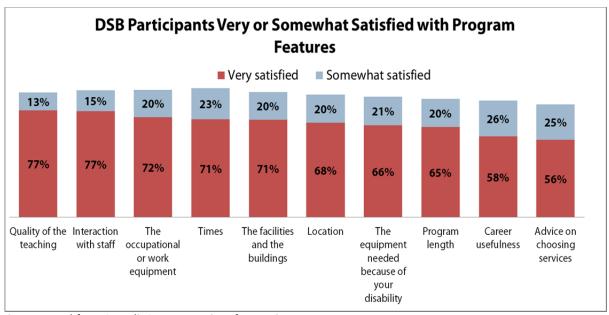


Source: Workforce Board's Participant Satisfaction Survey 2011.



Participant Satisfaction - Did Participants Get the Skills They Needed?

Some 63 percent of DSB clients were classified as rehabilitated upon leaving the program (that is, they were working at least 90 days prior to exit). This is 8 percentage points higher than reported in 2008. Some 81 percent of clients said they were "very satisfied" or "somewhat satisfied" with their DSB program, down from 89 percent of the DSB clients in the last participant survey. Over three-quarters of the respondents were "very satisfied" with the teaching quality and the level of interaction with staff. Fewer participants were "very satisfied" with career usefulness (58 percent) and advice on choosing services (56 percent).

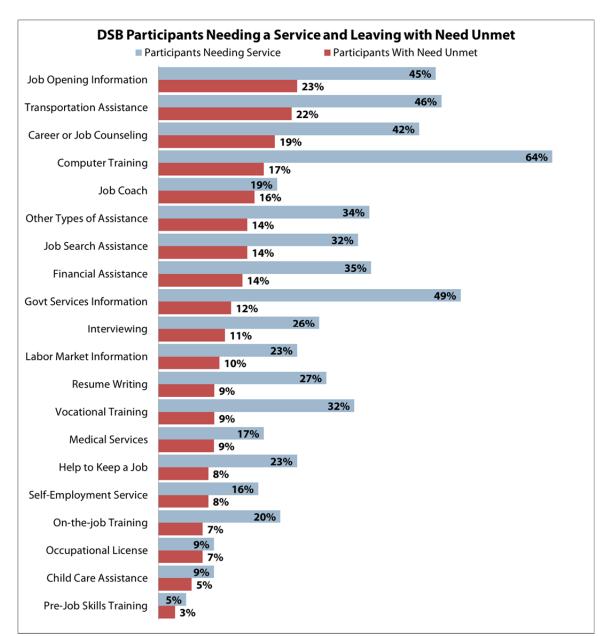


Source: Workforce Board's Participant Satisfaction Survey 2011.

Similar to two years ago, DSB clients indicated computer training, information about government services, transportation assistance, and information about jobs as the support services most needed while participating in the program. Also similar to two years ago, a relatively high percentage left with an unmet need⁷ for information about job openings (23 percent) and other job related services (career counseling 19 percent, job coach 16 percent, interviewing 11 percent). In addition, 22 percent left with an unmet need for transportation assistance.

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.



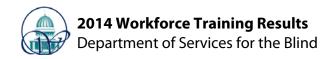


Source: Workforce Board's Participant Satisfaction Survey 2011.

Summary and Areas for Improvement

DSB serves individuals who are legally blind or have a visual disability that causes an impediment to employment. Although their level of prior educational attainment tends to be high (45 percent have a college degree) this population faces serious challenges. DSB's results should be interpreted in this light. The employment and earnings results are relatively low (39 percent reported employment and median earnings of \$23,706). We do not know, however, if these results represent positive net impacts compared to what happens to similar individuals who do not take part in a workforce development program. It was not feasible to construct a comparison group because of the unique characteristics of the participant population.

DSB participants report high degrees of satisfaction with the services they receive. The top three areas that could be stronger, based upon the participant survey, are providing information on job openings, transportation assistance, and career counseling.





Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Private Career Schools

Program Details

Private career schools are independent businesses that provide participants with training in a variety of occupations. No public funds are appropriated for private schools, but eligible participants may:

- Obtain federal grants and loans to pay for educational expenses if the school they choose has been authorized to participate in federal student aid programs.
- Secure funding under the state's Worker Retraining program.
- Use "Individual Training Account" vouchers, funded under the Workforce Investment Act (WIA) Title I-B.

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.

During the time of this study, there were approximately 325 private career schools in Washington. Of these, the Workforce Training and Education Coordinating Board (Workforce Board) licensed approximately 288 certificate-granting vocational institutions. Program results in this study were limited to those institutions licensed by the Workforce Board.

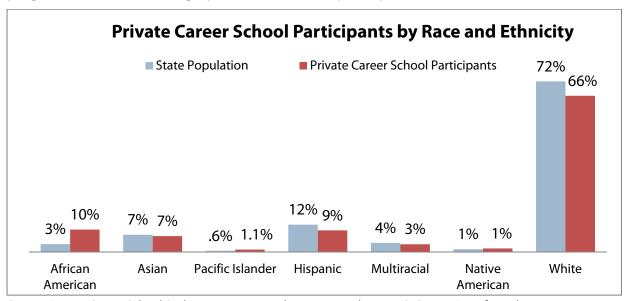
For this 2014 report, records were collected on 15,893 participants who left programs during the most recent reporting year. The median length of enrollment for these participants was two months. However, the duration of private career school programs vary widely. One quarter of participants had enrollment lengths of nine months or longer, while another quarter was enrolled for one month or less.

¹ The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.



Participant Profile

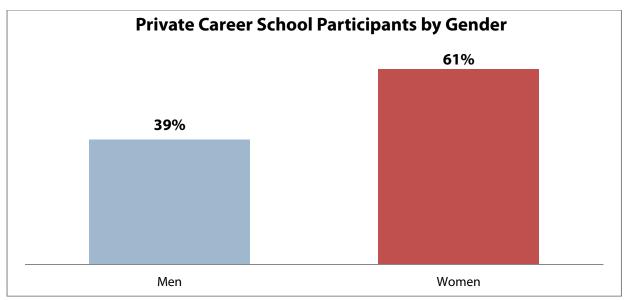
Washington residents from racial and ethnic minorities are well represented among private career school participants.² African Americans accounted for 10 percent of participants, a representation that is more than triple their portion of the state's population. Asians participated at the same rate as their overall percentage of the state population. However, Hispanics accounted for 9 percent of participants, which is 3 percentage points below their representation in the general state population. Whites comprised 66 percent of participants, 6 percentage points below their general population representation in the state. Overall, the racial and ethnic make-up of those who successfully completed their private career school program mirrors the demographic distribution of participants.



Source: Private Career Schools' administrative records 2011-12 and 2011 U.S. Census Data from the American Community Survey.

Among those exiting private career schools, 61 percent were women, a higher percentage than the last report (55 percent). Of the completers, 61 percent were women. Women and men completion rates were almost identical (84 percent versus 85 percent).

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 are Native American; 7 percent are Asian; 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.



Source: Private Career Schools' administrative records 2010-11.

Education Level

When Private Career School participants enrolled they had the following education levels:

- 65 percent had not previously attended college.
- 18 percent had attended college without receiving a credential.
- 8 percent had a certificate or associate's degree.
- 9 percent had a bachelor's degree or higher credential.

The typical student, based on the median, was age 26 when enrolled. One quarter of the participants were under age 21 at enrollment, while another quarter were over 36 years old.

Tracking Private Career School 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?



Data Comes From State Wage Files & Employer Survey

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. Information on employer satisfaction among firms that hired new employees recently exited a Private Career School program was assessed through the Workforce Board's 2012 Employer Survey.

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.

Turn to page 19 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 sideby-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 for whether participants got the skills they needed, this study tracks the credential and degrees earned by participants, along with completion rates. Of this year's participants, 85 percent had completed their program by receiving a credential. This percentage is up from 78 percent observed in the last report.

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.³ The study looks at employment and earnings three calendar quarters after the participant left a Private Career School program. The chart below shows the employment and earnings of participants who left a program during the most recent

³ These files contain information on only those individuals with employment reported for unemployment insurance (UI) benefits purposes (approximately 90 percent of in-state employment, with self-employment, active military duty, and those working for religious, nonprofit organizations being the major groups of employees not included).



reporting year. Some 63 percent of participants were employed, with a median hourly wage of \$13, and median annualized earnings of \$20,638.⁴ Those who completed their programs had a higher employment rate and earnings: 65 percent and \$21,286 respectively.

Employment and Earnings for Private Career School Participants, 2014

Performance Measure	Results
Employment Rate* (State Records)	63%
Employment Rate (Completers)	65%
Full Time Employment **	53%
Median Quarterly Hours	406 hours
Median Hourly Wage***	\$13.00
Median Annualized Earnings***	\$20,638
Median Annualized Earnings (completers)	\$21,286

^{*} These figures apply to those with employment reported to ESD 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.

Earnings of Private Career School 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.⁵

Private Career School participants were able to support a median 3.3 people at the poverty level—meaning they could support themselves and more than two other people. They did

⁵ 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.



^{**}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 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.

not have enough earnings to support themselves, let alone others, at 200 percent of the poverty level (.7 people).

Number of People Supported at Poverty Level by Participant Income

Performance Measure	2010	2011	2012	2013	2014
Number of people supported at poverty level	4.2	3.7	3.4	3.4	3.3
	people	people	people	people	people
Number of people supported at 200 percent poverty	1.2	0.9	0.8	0.8	0.7
	people	people	people	people	people

The following table shows employment information for Private Career School participants over five study periods.

Private Career School Participants Employment and Earnings Trends

Performance Measure	2010	2011	2012	2013	2014
Employment Rate (Self-Reported)	N/A	74%	N/A	N/A	N/A
Employment Rate* (State Records)	63%	60%	58%	62%	63%
Full Time Employment**	56%	52%	52%	53%	53%
Median Quarterly Hours	423	402	399	411	406
Median Hourly Wage***	\$15.08	\$14.46	\$13.87	\$13.50	\$13.00
Median Annualized Earnings***	\$24,434	\$22,215	\$21,168	\$21,058	\$20,638

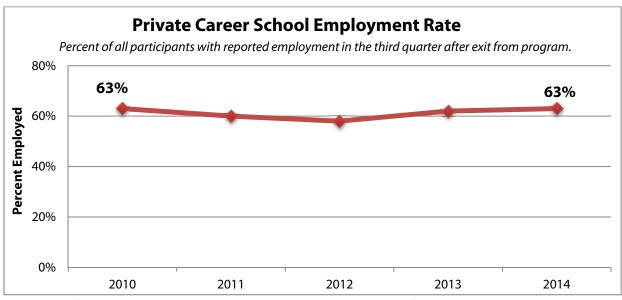
^{*}Employment reported to the state's Employment Security Department six to nine months after leaving program. Rate is not limited to those who completed a program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

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



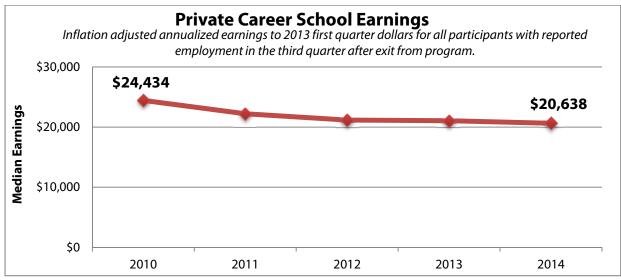
^{**}Full-time employment averages 30 or more hours per week.

A survey conducted in 2011 of Private Career School participants revealed that 60 percent received medical benefits, and 34 percent received retirement benefits.



Source: Workforce Training Results 2010-14 reports. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

After declining in 2011 and 2012, Private Career School participant's employment has increased 5 percentage points since 2012. Full time employment has stayed stable over the last four reports. Median hourly wage and median annual earnings decreased each year between 2010 and 2014.



Source: Workforce Training Results 2010-14 reports.



Private Career School Student Employment by Industry

As in the previous study, employment of Private Career School students is concentrated in services (69 percent), especially health services (33 percent). Overall, employment in services increased 7 percentage points from the last report.

Industry	Group
	Services
	Retail Trades
5.4%	Transportation and Warehousing and Utilities
3.5%	Manufacturing
3.1%	Construction
2.5%	Wholesale Trade
2.3%	Financial Services
1.4%	Public Administration
1.1%	
0.6%	Natural Resources and Mining Information
	it of the Services Industry
	Health Care
10.3%	Accommodation and Food Services
7.3%	
6.3%	Administrative, Support, Waste Management and Remediation Services Social Assistance
4.8%	All Other Services
-	
3.1% 2.4%	Education Services
1.9%	Professional, Scientific, and Technical Services
	Arts, Entertainment, and Recreation
2.5%	t of the Retail Trade Industry
1.7%	Department and Warehouse Stores
1.7%	Food and Liquor Stores
	Health Care and Beauty Products Vehicle Sales
1.2%	
1.1%	Clothing and Accessories Stores
0.8%	Miscellaneous Store Retailers
0.6%	Hardware, Garden and Farm Supplies
0.6%	Gasoline Stations
0.5%	Books, Music and Hobbies Sales
	Electronics and Appliance Stores
0.1%	Home Furnishings Sales

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

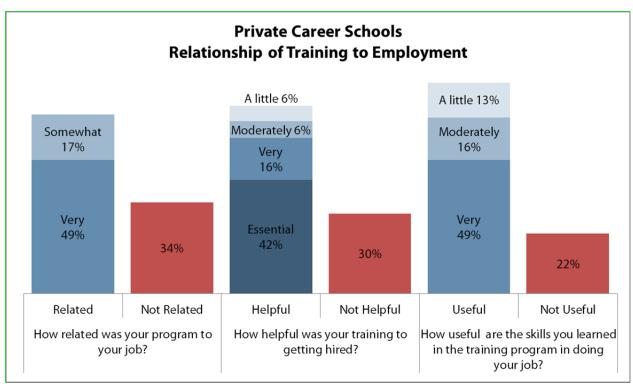
In 2011, the Workforce Board surveyed Private Career School participants who had left their program in 2009-10. The survey provided data on employment and participant satisfaction with the training. The survey was conducted by telephone and was completed by 362 participants.

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 participants employed six to nine months after leaving a program, 66 percent indicated their training was related to their job. This is broken down further, with 49 percent saying their training was "very related" to their job. An additional 17 percent reported the training was "somewhat related" to their job. In 2008, the same rate of employed participants reported their training was related to their job (66 percent).



Source: Workforce Board's Participant Satisfaction Survey 2011.



Most participants interviewed in 2011 also indicated the training was helpful to them in getting their job. Of those participants, 42 percent indicated their training was an "essential requirement," another 16 percent indicated it was "very important," and 6 percent reported it was "moderately important." Six percent said it was "a little helpful." The remaining 30 percent indicated their training was "not important at all" to getting their job.

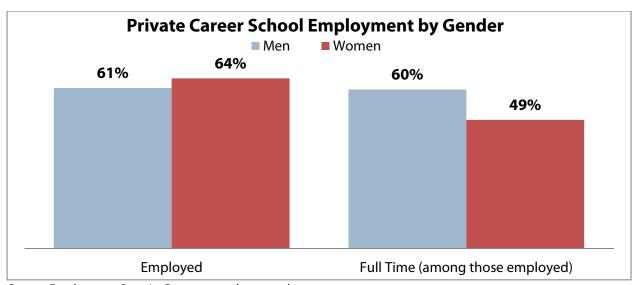
Most participants said the skills they learned in their training program were useful in doing their job. Some 49 percent of participants indicated the skills were "very useful," 16 percent said "moderately useful," and 13 percent "a little useful." Some 22 percent of participants who were employed indicated 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 certain percentage of participants answered negatively to both. Some 18 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

Wage and employment results can vary by gender, race and ethnicity, and disability. The following chart shows the percentage of women and men private career school participants who were reported to be employed. Also broken out is what percentage of those working held a full-time job.

Women (64 percent) were more likely to be employed in the third quarter after leaving their programs than men (61 percent). Women, however, were less likely than men to be employed full-time (49 percent compared to 60 percent), and among those employed, women's median hourly wage was 85 percent of men's (\$12.37 compared to \$14.55). An even greater disparity was found in terms of median annual earnings, with women earning only 77 percent of men's yearly income (\$18,889 compared to \$24,492).



Source: Employment Security Department data matches.



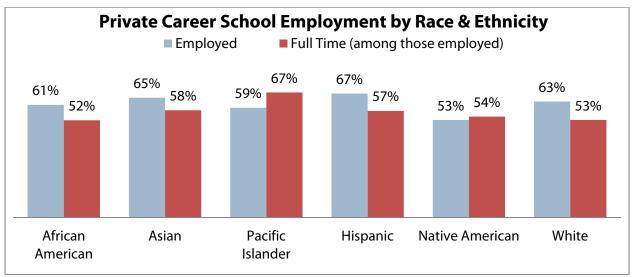
Race-Ethnicity Plays Role

Employment rates varied between racial and ethnic groups. Hispanics had the highest employment (67 percent), the Native Americans had the lowest employment three quarters after exit, at 53 percent.

Pacific Islanders had the highest rate of full time employment at 67 percent, followed by Asians (58 percent), and Hispanics (57 percent). Native Americans (54 percent), whites (53 percent), and African Americans (52 percent) all had very similar levels of full time employment.

Among those employed, median hourly wages were highest for whites at \$13.64; followed by Native Americans (\$13.18), Hispanics (\$12.85), Asians (\$12.66), Pacific Islanders (\$12.48), and African Americans (\$11.52).

In terms of median annual earnings, Pacific Islanders earned the most at \$23,803, followed by Hispanics at \$21,192. Asians earned \$21,403, whites earned \$20,990, Native Americans (\$20,684), and African Americans had the lowest median annual earnings at \$20,252.

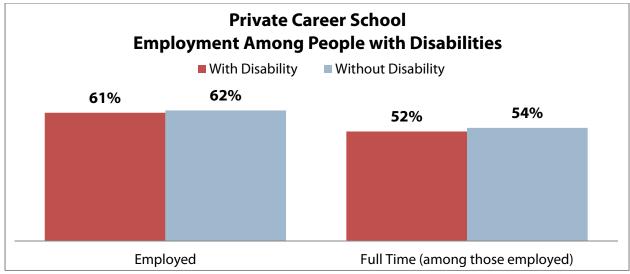


Source: Matches with Employment Security Department data.

Disability Impacts Employment, Earnings

Employment outcomes and earnings also varied by disability status. College records indicate that less than two percent of the participants included in this study had a disability. Compared to participants without disabilities, participants with disabilities were just as likely to have reported employment during the third quarter after exit (61 percent versus 62 percent) and just as likely to be working full-time (52 percent versus 54 percent). Participants with a disability earned about 93 percent of median wages as those without a disability (\$19,651 compared to \$21,192). In terms of median hourly wages, participants with a disability earned 91 percent of non-disabled participants (\$12.21 compared to \$13.38).





Source: Matches with Employment Security Department data.

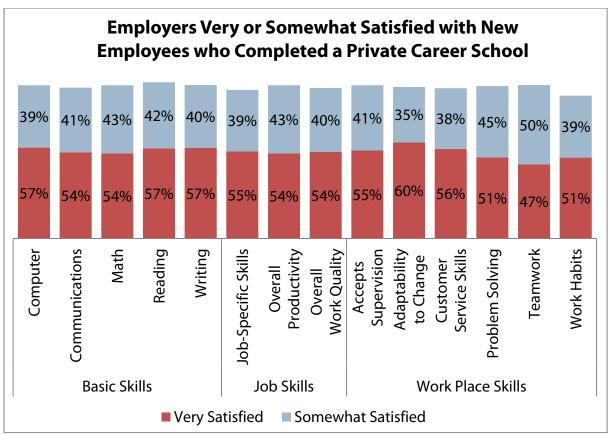
Were Employers Satisfied with the Preparation Workers Received?

The Workforce Board's Employer Survey, administered during 2012, asked firms to evaluate new employees who had recently completed a program at a Private Career School. Some 95 percent of employers said they were either "somewhat satisfied" or "very satisfied" with the overall work quality of these new employees.

Employer satisfaction is broken down into three categories: Basic Skills, Job Skills and Work Place Skills. Basic skills refer to reading, writing, math, communication and computer skills. Job skills refer to skills specific to the job, as well as overall work quality and productivity. Work place skills refer to the skills necessary to get along in the workplace such as the ability to accept supervision, the ability to adapt to changes in duties and responsibilities, teamwork, customer service, problem solving or critical thinking skills, and having positive work habits and attitudes.

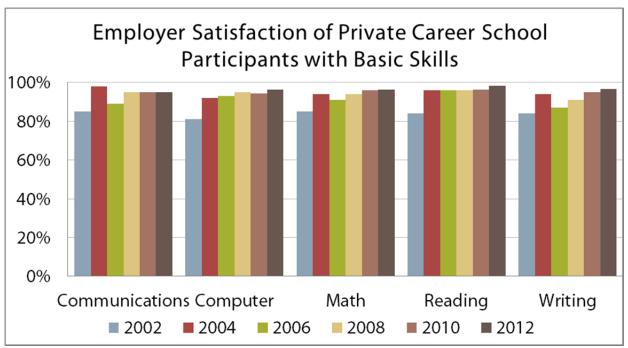
In 2012, employers reported high levels of satisfaction with the skills of new employees who had recently completed a private career school program. The majority of employers were very satisfied with their basic skills, workplace skills, and job-specific skills.



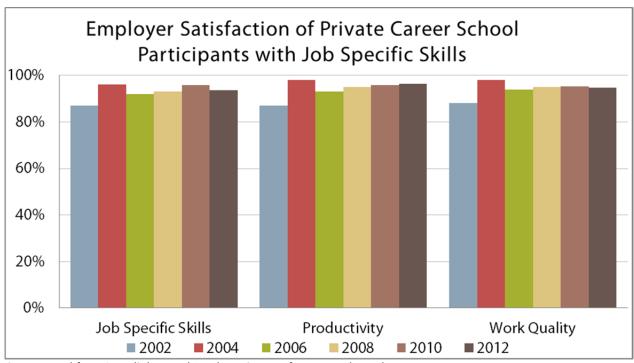


Source: Workforce Board Employer Survey conducted in 2012.

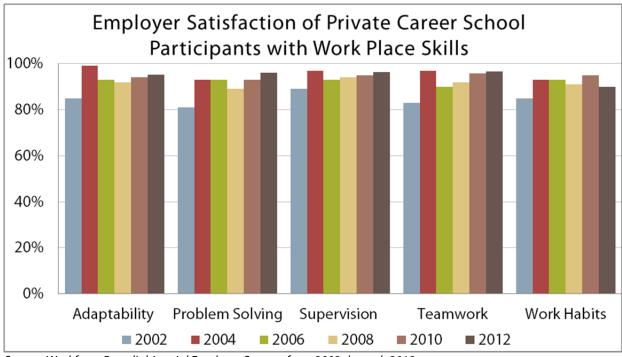
Overall, the levels of employer satisfaction reported in the Workforce Board's 2012 Employer Survey were similar to the previous survey, conducted in 2010. The following three charts show the trends in satisfaction of employers with new employees who recently completed a program at a Private Career School. From 2002 to 2012, an upward trend is apparent.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

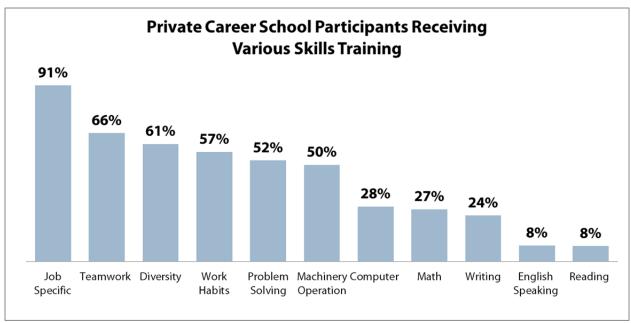


Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

Participant Survey - Did Participants Get the Skills They Needed?

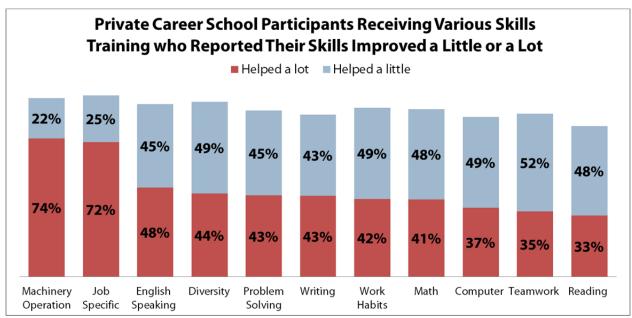
According to Participant Survey results, 88 percent of participants indicated they entered a private career school to learn skills for a new job, similar to two years ago. Participants also indicated that they enrolled for their own personal enjoyment or improvement (77 percent), to get a degree or certificate (75 percent), or to improve skills for a job they already had (21 percent).

The highest percentage of participants, 91 percent, reported receiving job specific skills. In addition, participants received training in basic and workplace skills. As in previous studies, the majority of participants received training in workplace skills such as teamwork (66 percent), diversity (61 percent) and work habits (57 percent). Fewer received training in basic skills like reading, English speaking, math, and writing.



Source: Workforce Board's Participant Satisfaction Survey 2011.

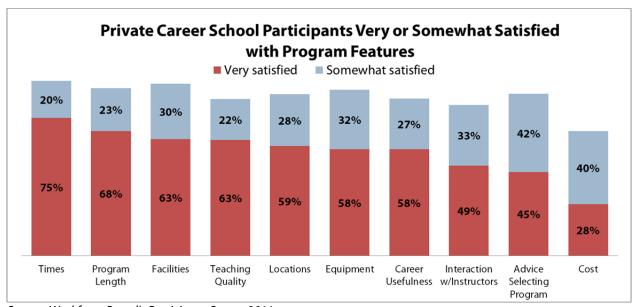
Participants tended to report their skills improved as a result of training. Participants were more likely to report "a lot" of improvement in technical skills such as job-specific skills and machinery operations, and less likely to report "a lot" of improvement in basic skills such as writing, math and computer skills. Compared to previous surveys, a slightly lower percentage of participants reported "a lot" of improvement in job-specific skills (72 percent in 2011 versus 79 percent in 2008).



Source: Workforce Board's Participant Satisfaction Survey 2011.



The participants in the current survey reported nearly identical levels of satisfaction with their programs as participants from the previous survey. Some 86 percent reported they had met their educational objectives. The percentage indicating that they were "very" or "somewhat" satisfied with their program overall was 85 percent. When asked about specific program features, satisfaction was highest with program times and length. Satisfaction was lower this year with teacher quality and interaction with instructors outside the classroom. Overall, participants were most satisfied with time, length of program, facilities and teacher quality and least satisfied with program cost.

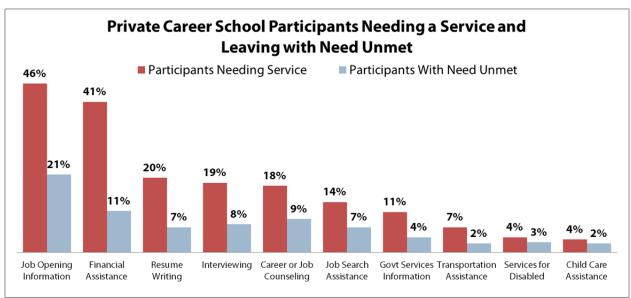


Source: Workforce Board's Participant Survey 2011.

In most cases the needed services were provided. As in previous studies, participants said they were most in need of information about job openings and financial assistance. However, participants also reported the highest percent of unmet needs⁶ in these two areas. Just over one fifth of participants reported their need for job opening information was not met. Eleven percent indicated that their need for information regarding financial assistance was not met.

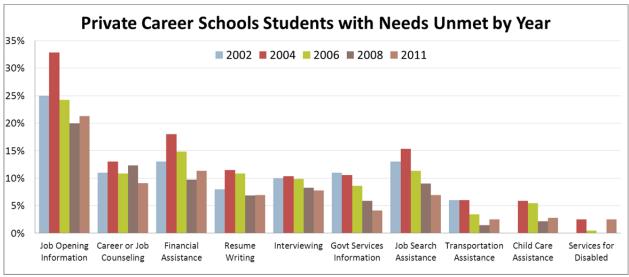
⁶ Unmet need refers to cases where the student reports that either they did not receive the required service or what was provided did not meet their needs.





Source: Workforce Board's Participant Survey 2011.

In the past decade there has been an overall decline in the percentage of participants reporting they left private career schools with unmet needs.



Source: Workforce Board's Participant Surveys 2002-11.

Net Impact - Did Program Make a Difference in Participant Success?

Every four years the Workforce 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.

Private Career School programs have positive net impacts on hourly wages and annualized earnings.

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 Private Career School 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 Private Career Schools 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

Private Career Schools	Short-term^	Long-term^
Net Employment Impact*	No significant positive impacts	3.40 percentage points
Net Hourly Wage Impact**	\$1.10	\$0.66
Net Hours Employed per Quarter Impact	20.8	27.1
Net Annualized Earnings Impact**	\$2,644	\$2,226

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

As can be seen above, Private Career School participants experienced positive long-term net impacts on their employment, hours worked per quarter and on annualized earnings. In the short-term, Private Career School participants did not experience the same positive net impact on employment but did benefit from higher hourly wages; hours worked per quarter and increased annualized earnings.



^{*}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 Private Career School participants who got jobs and those in the control group who were employed.

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. Program costs include both direct program costs and support payments borne by the state and the tuition and foregone earnings borne by students. Benefits and costs are calculated for both the observed period of time and 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 Private Career Schools

David State	First 2.5 y	ears	Lifetime (un	til 65)	Sum of Costs and
Benefit/Cost	Participant	Public	Participant	Public	Benefits
Benefits					
Earnings	\$3,040	\$0	\$15,225	\$0	
Fringe Benefits	\$760	\$0	\$3,806	\$0	
Taxes	-\$567	\$567	-\$2,839	\$2,839	
Transfers					
UI	-\$717	\$717	-\$730	\$730	
Costs					
Foregone net earnings	-\$2,029	-\$355	-\$2,029	-\$355	
Program costs	-\$10,501	\$0	-\$10,501	\$0	
Benefits	\$2,516	\$1,284	\$15,462	\$3,569	
Costs	-\$12,530	-\$355	-\$12,530	-\$355	
Total (Net)	-\$10,014	\$929	\$2,932	\$3,214	\$6,145

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

For each student in a private career school program, tuition is estimated at an average of \$10,501, although there is wide variability among schools and programs, and students frequently receive financial aid. Student costs include an average of \$2,029 in foregone earnings while in training, and the public (taxpayer) costs include \$355 in lost tax revenues from the foregone earnings. During the first two and one-half years after leaving a school, the average trainee will gain about \$3,040 in earnings. During the course of working life to age 65, the average trainee will gain about \$13,196 in net earnings (earnings minus foregone earnings) and \$2,839 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 \$2,932.

From the time of leaving training to age 65 the public is expected to gain \$2,839 in net additional Social Security, Medicare, federal income, and state sales taxes and to save \$730 in UI benefits. The estimated lifetime net benefit to taxpayers is \$3,214 per participant.⁷

Summary and Areas for Improvement

Private career schools are private businesses that provide a wide variety of vocational training programs. The schools reviewed here offer certificated programs, with a median attendance of two months. Consistent with this length of training, the completion rate is high (85 percent) and the employment and earnings results are modest (63 percent reported employment and a median of \$20,638 in annual earnings).

Both employer and participant satisfaction with private career schools is high. An area of some concern to the participants, however, is the cost. Also, information about job openings could be better. The long-term net impact on employment and earnings is positive, but whether or not the net impact is sufficient to offset the cost of training depends on a particular program's tuition and fees (tuition and fees vary widely among the schools), the financial aid students receive, and the post-program employment and earnings of students. As a result, there is a premium on students being well-informed consumers when they choose a school.

⁷ Financial aid is outside the scope of this study and is not included in either the public or participant cost estimates.





Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Secondary Career and Technical Education (CTE)

Program Details

Secondary Career and Technical Education (CTE) serves high school-age youth in approximately 233 school districts and 14 Skills Centers throughout the state. CTE is a planned program of courses and learning experiences that begin with the exploration of career options, supports basic academic and life skills, and enables achievement of high academic standards, leadership, options for employment preparation, and advanced and continuing education.

Instructional programs are organized within the following 16 career clusters:

- Agriculture, Food and Natural Resources
- Architecture and Construction
- Arts, AV Technology and Communications
- Business, Management and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections and Security
- Manufacturing
- Marketing
- Science, Technology, Engineering and Mathematics
- Transportation, Distribution and Logistics

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.

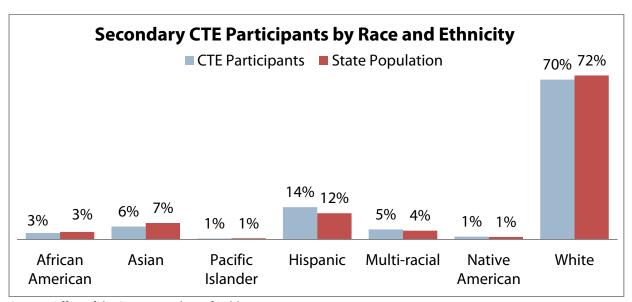


Because of data limitations, this program's evaluation was restricted to students identified by their districts as CTE completers. (School districts define a CTE completer as someone who completed a CTE sequence, whether or not the participant earns a diploma).¹

This study focuses on 18,400 CTE completers who left their senior year during the 2011-12 school year. This study includes information from the Office of Superintendent of Public Instruction's student records and Employment Security Department wage files. Enrollment data from Washington community and technical colleges, public four-year institutions, and private career schools were analyzed to examine the extent to which CTE completers continued their education.

Participant Profile

CTE completers have nearly the same racial and ethnic diversity as the state population, with whites comprising 70 percent, Hispanics (14 percent), Asians (6 percent), African Americans (3 percent), Native Americans (1 percent), and Pacific Islanders (1 percent).²



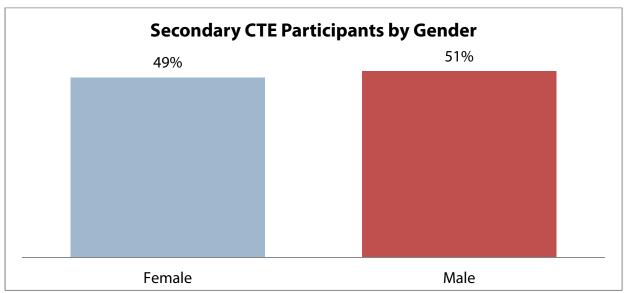
Source: Office of the Superintendent of Public Instruction.

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 are Native American; 7 percent are Asian; 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.



¹ The state defines a student who completes 360 hours of instruction in a single CTE program area with grades of D or better as a CTE completer.

Among CTE completers, females and males are equally represented among the program participants. This is equivalent to what was reported in the last two reports.



Source: Office of the Superintendent of Public Instruction.

Tracking Secondary CTE 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 or continue their education and training?
- 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?

Data comes from state wage files, Employer Survey

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. Information on employer satisfaction among firms that hired new employees who recently exited a Secondary CTE program was assessed through the Workforce Board's 2012 Employer Survey.



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.

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 sideby-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?

This study is limited to students who completed a sequence of CTE courses. While completing a secondary CTE sequence, in itself, provides students with significant skills for the labor market, more importantly, it provides a pathway to postsecondary education and training where students can learn additional skills. Most good paying jobs require some form of postsecondary education or training. During the most recent reporting year, 56 percent of CTE completers continued on with their postsecondary education—3 percentage points lower than the previous reporting year.³

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

For some students, employment is the next step after high school. To find out whether participants had jobs and how much they earned, participant records were matched with Employment Security Department wage files from Washington.⁴ Record matches found 68 percent of CTE completers who were not enrolled in higher education had reported employment, and 86 percent of all CTE completers were either employed or were enrolled in higher education during the third quarter after leaving.

⁴ These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance (UI) 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).



³ Matches are made against enrollments at Washington's community and technical colleges, public four-year institutions, and private career schools. However, in-state private four-year colleges and universities and out-of-state postsecondary enrollments are not included in the match. Therefore, the percentage enrolled in higher education is understated.

Among those not enrolled in higher education the median annualized earnings were \$11,815.⁵ Though these earnings seem low, it is important to remember these are young, entry-level workers fresh from high school.

The chart below shows employment and earnings results for CTE completers.

Employment and Earnings for Secondary CTE Completers, 2014

Performance Measure	Results
Postsecondary Education and/or Employment*	86%
Employment Rate* (State Records)	53%
Enrolled in Higher Education	57%
Full Time Employment**	29%
Median Quarterly Hours **	273 hours
Median Hourly Wage***	\$10.03
Median Annualized Earnings***	\$11,815

^{*} 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 of Washington or military service and thus understates total employment by approximately 10 percent. Employment rate (state records) is only those not enrolled in further education.

Earnings of Secondary CTE Completers

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

Secondary CTE completers were able to support themselves at the poverty level.⁷ They did not have enough earnings to support themselves, let alone others, at 200 percent of the poverty level (.5 people).

⁷ This reflects CTE completers who are not in school and working.



^{**} Of those not enrolled in higher education. Full-time employment averages 30 or more hours per week.

^{***} Earnings/wages expressed in first quarter 2013 dollars in order to account for inflation. Of those not enrolled in higher education.

⁵ Annual earnings are calculated as third quarter earnings multiplied by four. All wages and earnings are stated in first quarter 2013 dollars.

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.

Number of People Supported at Poverty Level by Participant Income*

Performance Measure	2010	2011	2012	2013	2014
Number of people supported at poverty level	0.9	1.0	0.9	1.0	1.1
	people	people	people	people	people
Number of people supported at 200 percent poverty	0.5	0.5	0.5	0.5	0.5
	people	people	people	people	people

^{*}For those not enrolled in higher education.

The Workforce Board's 2011 Participant Survey found that 19 percent of secondary CTE participants reported receiving medical benefits, and 5 percent reported receiving pension benefits. The following table shows employment and earnings information over the course of five study periods.

Employment and Earnings Trends for Secondary CTE Participants

improvincing and Editings from Secondary CTE Furtherparts								
Performance Measure	2010	2011	2012	2013	2014			
Postsecondary Education and/or Employment	73%	72%	83%	84%	86%			
Employment Rate (Self-Reported)	N/A*	43%	N/A*	N/A*	N/A*			
Employment Rate** (State Records)	51%	49%	60%	63%	68%			
Enrolled in Higher Education	46%	45%	58%	56%	57%			
Full Time Employment***	29%	29%	27%	30%	29%			
Median Quarterly Hours	280	265	265	270	273			
Median Hourly Wage****	\$10.72	\$10.72	\$9.55	\$9.84	\$10.03			
Median Annualized Earnings****	\$10,873	\$10,954	\$10,701	\$11,223	\$11,815			

^{*} Due to budget limitations, the Workforce Board's Participant Survey was not conducted in 2010 or 2013.

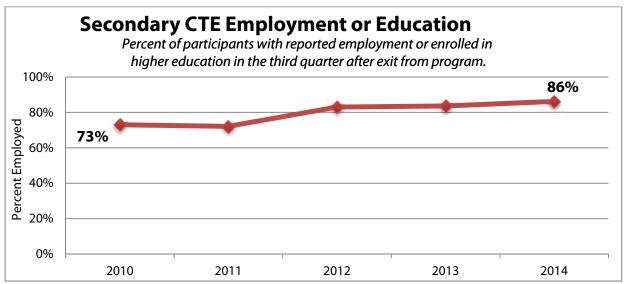
^{***}Earnings/wages expressed in first quarter 2013 dollars in order to account for inflation. Those not enrolled in higher education.



^{**}These figures apply to those with employment reported to ESD six to nine months after leaving program. Rate does not include self-employment, employment outside Washington or military service and thus understates total employment by approximately 10 percent. Employment rate (state records) is only those not enrolled in further education.

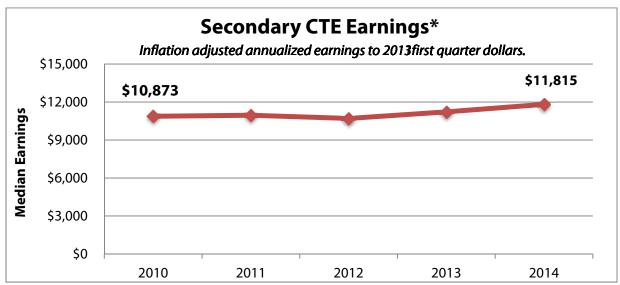
^{***}Full-time employment averages 30 or more hours per week, of those not enrolled in higher education.

The percentage of secondary CTE participants who were in higher education or employed rose 13 percentage points since the 2010 report.



Source: Workforce Training Results 2004-2013. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

Young people, who suffer unemployment rates higher than the general population, were especially hard hit by the recent recession.⁸ However, the earnings of CTE completers have risen over the past five years.



Source: Workforce Training Results 2004-2013. *Does not include those enrolled in higher education.

⁸ See "Multiple Pathways for Young Adults," a 2012 report to the Washington Legislature from the Workforce Training and Education Coordinating Board.



Secondary CTE Employment by Industry

Employment of CTE completers continued to be heavily concentrated in services (51 percent) and retail trade (30 percent). Within the service industry, the largest category was accommodation and food services at 25 percent (compared to 24 percent on the last report), followed by health care and social assistance at 8 percent, which reported the same level of employment the prior year.

Industra C	· · · · · · · · · · · · · · · · · · ·
Industry G	I .
51.2%	Services (see breakout)
30.0%	Retail Trades (see breakout)
5.3%	Manufacturing
3.5%	Construction
2.3%	Wholesale Trade
2.1%	Natural Resources and Mining
1.8%	Financial Services
1.5%	Transportation and Warehousing and Utilities
1.2%	Information
1.1%	Public Administration
Breakout	of Services Industry
25.4%	Accommodation and Food Services
8.2%	Health Care and Social Assistance
5.4%	Administrative and Support and Waste
5.4 %	Management and Remediation Services
4.3%	Other Services (except Public Administration)
3.6%	Arts, Entertainment, and Recreation
2.3%	Education Services
1.9%	Professional, Scientific, and Technical Services
0.1%	Management of Companies and Enterprises
Breakout	of Retail Trade Industry
7.8%	All Other Retail Trade
7.6%	General Merchandize Stores
6.6%	Clothing and Clothing Accessories Stores
5.9%	Food & Beverage
2.1%	Motor Vehicle and Parts Dealers
	and the first of the control of the

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



Relationship of Training to Employment

In 2011, the Workforce Board surveyed CTE completers. The survey provided data on employment and participant satisfaction with the training. The survey was conducted by telephone and was completed by 334 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.

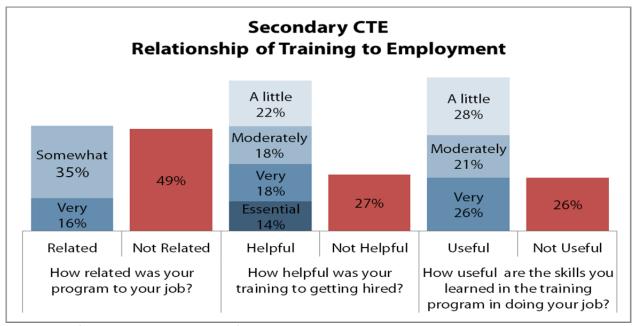
Among Secondary CTE participants employed seven to nine months after leaving a program, 16 percent said their training was "very related" to their job. A further 35 percent reported the training was "somewhat related" to their job. In 2008, similar rates of employed participants reported their training was related to their job.

Participants interviewed in 2011 also indicated the training was helpful to them in getting their job. Of those participants, 14 percent indicated their training was an "essential requirement," another 18 percent indicated it was "very important," 18 percent reported it was "moderately important," and 22 percent reported it was "a little helpful." The remaining 27 percent indicated their training was "not important at all" to getting their job.

Most participants said the skills they learned in their training program were useful in doing their job. Some 26 percent of participants indicated the skills were "very useful," 21 percent said "moderately useful," and 28 percent "a little useful." Some 26 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 answered negatively to both. Just 22 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.

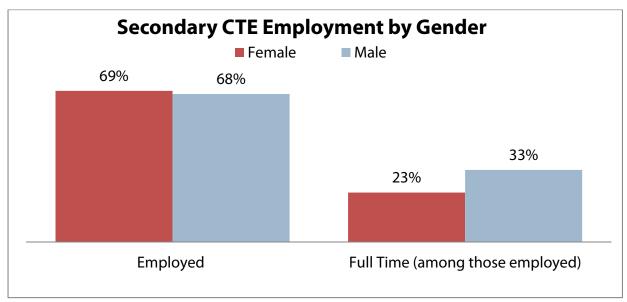




Source: Workforce Board's Participant Satisfaction Survey 2011.

Wages and Employment Results Vary by Population

Wages and employment results of CTE completers who are not enrolled in higher education can vary by gender, race and ethnicity, and disability. Female (69 percent) and male (68 percent) Secondary CTE completers were employed at a similar rate. Females had a 23 percent full-time employment rate, 10 percentage points lower than males who had a 33 percent full-time employment rate. Women have median annual earnings that are 85 percent of men (\$10,800 versus \$12,711). Women's hourly wages were 95 percent of wages earned by men (\$9.80 versus \$10.30).

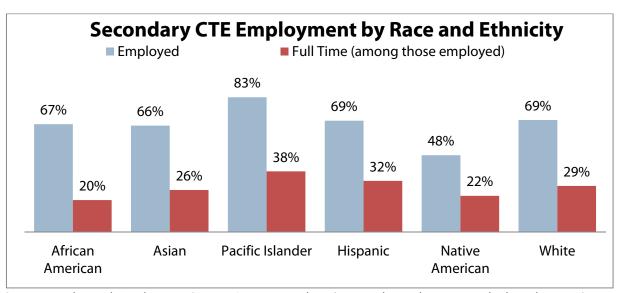


Source: Matches with Employment Security Department data. Among those who are not in higher education.



Race/Ethnicity Plays Role

Wages and employment results also differ by Race and Ethnicity. Pacific Islanders had the highest reported employment (83 percent), followed by whites and Hispanics (69 percent), African Americans (67 percent), Asians (66 percent), and Native Americans (48 percent). Pacific Islanders also have the highest reported full time employment (38 percent), followed by Hispanics (32 percent), whites (29 percent), Asians (26 percent), Native Americans (22 percent) and African Americans (20 percent). Pacific Islanders had the highest median hourly wage at \$10.74, followed by \$10.37 for Native Americans, \$10.06 for whites, \$9.99 for Hispanics, \$9.90 for Asians, and \$9.66 for African Americans. The breakdown for annual earnings among different racial and ethnic groups was distributed slightly differently from that of median hourly wages. Typically, differences between hourly wages and annual earnings occur because of variances in the number of hours worked. Among those not in school, Pacific Islanders had the highest earnings (\$12,568), followed by Hispanics (\$12,177), whites (\$11,831), Asian (\$11,105), Native Americans (10,925), and African Americans (\$10,018).

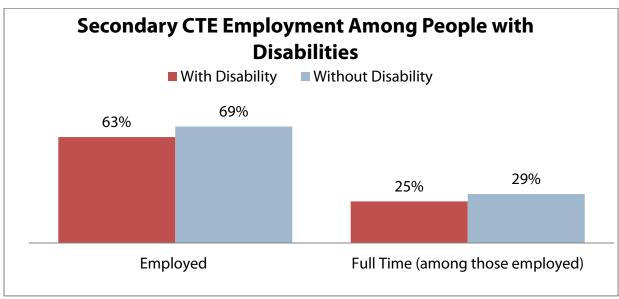


Source: Matches with Employment Security Department data. (Among those who are not in higher education.)

Disability Impacts Employment, Earnings

Earnings and employment outcomes also varied by disability status. Records from the Office of Superintendent of Public Instruction indicate 8 percent of secondary CTE completers included in this study had a disability. When comparing completers who were not in school, those with a disability were less likely to have employment than completers who didn't have a disability (63 percent versus 69 percent). Disabled participants not enrolled in higher education were also less likely to have full-time employment than those without a disability (25 percent versus 29 percent). The median annualized earnings of those with a disability (\$9,738) were lower than those without a disability (\$12,009). Students with a disability had median hourly wages that were very similar to students without a disability (\$10.02 versus \$10.04).

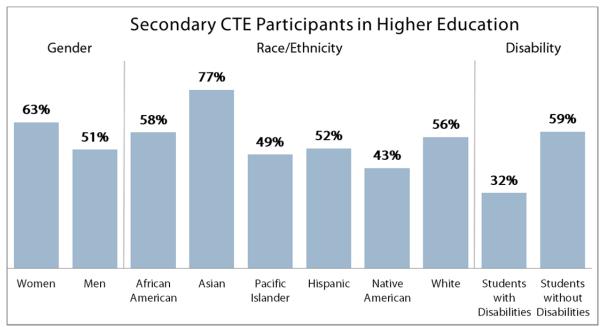




Source: Matches with Employment Security Department data. (Among those who are not in higher education.)

CTE completers also progressed to postsecondary education at different rates, depending on ethnicity and gender.

Of the CTE completers, the following percentages of each group were enrolled in higher education: Females, 63 percent; males, 51 percent; students with disabilities, 32 percent; students without disabilities, 59 percent; whites, 56 percent; African Americans, 58 percent; Asians, 77 percent; Pacific Islanders, 49 percent; Hispanics, 52 percent; and Native Americans, 43 percent.



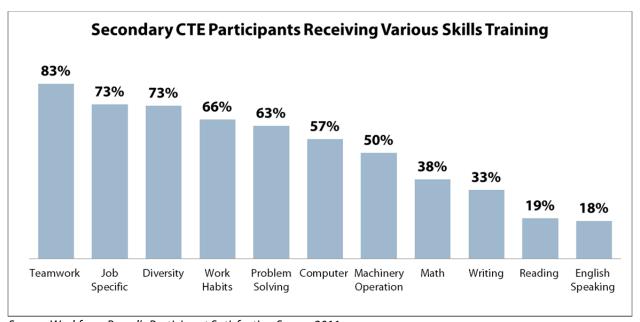
Source: Matches with State Board for Community and Technical Colleges' postsecondary data.



Participant Survey

According to the survey, the highest percentage of CTE students indicated that they enrolled for personal enjoyment and improvement (96 percent). In addition, 72 percent enrolled to prepare for postsecondary education, and a further 68 percent of CTE participants enrolled to gain skills for a job or to get work place experience.

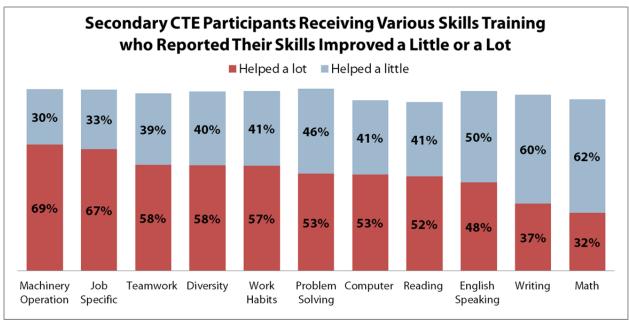
Students who completed CTE received training in many different skill areas. The largest percentage of CTE students, 83 percent, reported that they received training in teamwork. This is an increase of 6 percentage points since 2008. Other skill areas where large percentages of students reported that they received training are diversity and job-specific skills (73 percent each).



Source: Workforce Board's Participant Satisfaction Survey 2011.

Most participants said their skills improved as a result of taking CTE classes. Similar to participants from both 2006 and 2008, higher percentages indicated "a lot" of improvement in technical and general workplace skills than in basic skills. However, the percentage of secondary CTE students who indicated that their reading skills improved "a lot" went up 17 percentage points.





Source: Workforce Board's Participant Satisfaction Survey 2011.

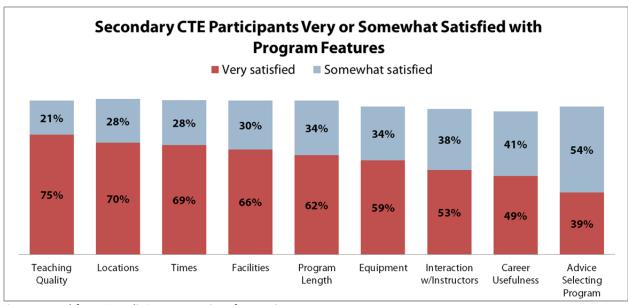
Many of the participants continued their education at a community or technical college or public four-year university. In the third quarter after completing their program, 45 percent of the completers were enrolled in postsecondary education.

Participant Satisfaction

According to the survey, participants were very satisfied with their CTE programs. Some 98 percent said the program met their objectives and 99 percent were satisfied with the program overall. These high levels of satisfaction are slightly higher than those reported two years earlier.

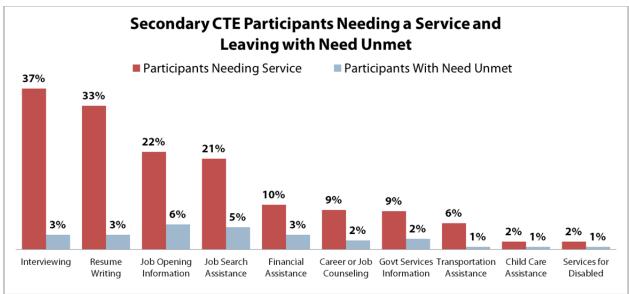
Three-fourths of participants were "very satisfied" with the quality of teaching, and 70 percent were "very satisfied" with the location of classes. Their satisfaction level was much lower with respect to advice on selecting a program, with just under 40 percent being "very satisfied."





Source: Workforce Board's Participant Satisfaction Survey 2011.

In general, CTE participants reported needing fewer support services than other groups studied, and when they did need these services, they generally received them. The services most frequently needed by participants were assistance with job interviewing and resume writing. The percentage of students indicating they needed these services increased by 7 and 4 percentage points respectively since 2008. The highest unmet needs⁹ were for job opening information (6 percent) and job search assistance (5 percent).

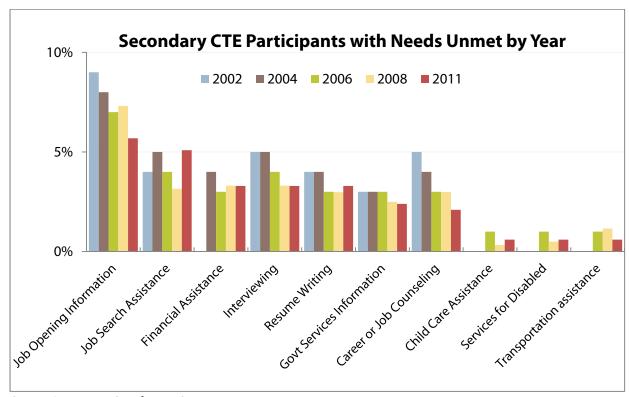


Source: Workforce Board's Participant Satisfaction Survey 2011.

⁹ 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.



Over the past decade the unmet needs reported by CTE students have mostly decreased. However, students leaving the program with an unmet need for job search assistance increased sharply this year.



Source: Participant Satisfaction Surveys 2002-11.

Net Impact - Did the Program Make a Difference in Participant Success?

Every four years the Workforce Training and Education Coordinating Board conducts net impact and cost-benefit analyses 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 net impact and the return on investment (next section) analyses were conducted by the W.E. Upjohn Institute for Employment Research (Upjohn), a national leader in evaluating training programs. To do the analyses, Upjohn studied program participants to see what results they achieved and compared these results with a control group. Individuals who completed a Secondary CTE program were compared to similar secondary students who were not CTE completers.



The most recent analyses examined the experience of participants who left secondary CTE programs, including the short term impacts on participants leaving in 2007-08 and the long term impacts on those who left in 2005-06.

Impact on Employment and Earnings: Participants vs. Control Group

Secondary CTE	Short-term^	Long-term^	
Net Employment Impact*	6 percentage points	8.4 percentage points	
Net Hourly Wage Impact**	No significant positive impact	No significant positive impact	
Net Hours Employed per Quarter Impact	19.2	32.2	
Net Annualized Earnings Impact**	\$747	\$2,133	

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

As can be seen above, secondary CTE participants experienced positive net impacts in employment, hours worked, and net annualized earnings, particularly over the long-term, when compared with the control group. Net hourly wages weren't boosted significantly by the program, however.

Benefits and Costs

The cost-benefit analysis examines the value of the net impact on earnings, employee benefits (estimated at 25 percent of earnings), and certain taxes. Program costs include both direct program costs and support payments borne by taxpayers and the tuition and foregone earnings borne by program participants. The program cost is the *difference* in the cost of a student completing CTE compared to the cost of a student completing another type of high school program. (The difference is primarily due to smaller student/teacher ratios in CTE.) The intent of the cost-benefit evaluation is to analyze the net value of exiting high school having completed a CTE program, rather than exiting not having completed a CTE program.

Benefits and costs are evaluated for both the observed period of time and based upon a statistical model that estimated the benefits and costs out to the age of 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 participants leaving programs in 2005-2006, because a longer-term follow-up is required for this analysis.



^{*}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 secondary CTE participants who got jobs and those in the control group who were employed.

Participant and Public Benefits and Costs per Participant in Secondary CTE

	First 2.5 years		Lifetime (until 65)		Sum of
Benefit/Cost	Participant	Public	Participant	Public	Costs and Benefits
Benefits					
Earnings	\$5,085	\$0	\$70,634	\$0	
Fringe Benefits	\$1,271	\$0	\$17,658	\$0	
Taxes	-\$661	\$661	-\$9,190	\$9,190	
Transfers					
UI	-\$6	\$6	\$615	-\$615	
Costs					
Foregone net	-\$774	-\$90	-\$774	-\$90	
earnings	-3//4	-390	-3//4	-390	
Program costs	\$0	-\$911	\$0	-\$911	
Benefits	\$5,689	\$667	\$79,718	\$8,575	
Costs	-\$774	-\$1,001	-\$774	-\$1,001	
Total (Net)	\$4,916	-\$334	\$78,944	\$7,574	\$86,518

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

Secondary CTE enhances the lifetime earnings of program completers. Gains in earnings and employee benefits outweigh the costs of CTE to the public. For each CTE completer, the marginal cost to the public (taxpayer) is roughly \$911 over the length of their enrollment. During the first two and one-half years after leaving school, the average completer will gain \$5,085 in earnings. During the course of their working life to age 65, they will gain about \$69,861 in net earnings (earnings minus foregone earnings) and \$9,190 in employee benefits. These are net gains compared to the earnings of similar individuals who were not CTE completers. Including program costs and the net impacts on taxes and unemployment insurance benefits, the total net benefit per participant is \$78,944.

Projected participant net benefits to age 65 outweigh public costs invested in college training by a ratio of \$87 to 1, or \$78,944to \$911.

From the time of leaving the senior year in high school to age 65, the public is forecast to gain about \$9,190 in net additional Social Security, Medicare, federal income, and state sales taxes and to save \$615 per participant in total UI benefits and other social welfare costs—greater than the cost of CTE completion. The estimated lifetime net benefit to taxpayers is \$7,574 per completer.



Projected taxpayer net benefits to age 65 outweigh public costs invested in secondary CTE by a ratio of \$9 to 1, or \$8,575 to \$911.

Summary and Areas for Improvement

Students who completed secondary CTE and the employers who hired them were very satisfied. Some 98 percent of the students were satisfied with their program overall and 96 percent of employers were satisfied with the overall work quality of these new employees, and employer satisfaction has trended upward over the last decade. There has also been an upward trend in secondary CTE students going on to higher education—56 percent for the most recent cohort of graduates. Also, the net impact evaluation shows a strong net impact on employment rates and earnings, and the cost-benefit evaluation shows that Secondary CTE returns more money in tax revenue than the program costs taxpayers.

Still, there are areas for improvement. Among all CTE graduates who were employed, 56 percent were employed in retail trade or accommodations and food services. Most students reported they did not receive instruction in math, reading, or writing as part of their CTE program. And only 39 percent were very satisfied with the advice they received in selecting a program of study. These findings suggest that secondary CTE should continue efforts to integrate core academic instruction into CTE courses and grow the number of courses in higher paying occupational clusters. Also, more needs to be done to improve career and education planning in middle and high schools. Finally, only 32 percent of students with disabilities continued on to postsecondary education—another challenge that merits attention.





Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Workforce Investment Act Title I-B Adult Program

Program Details

All customers age 18 and older who walk into a WorkSource Center are eligible for core services through the federal Workforce Investment Act (WIA) Title I-B Adult program - from skill assessments to job search and placement assistance.

These core services include:

- Skill assessment.
- Labor market information.
- Consumer reports on training programs.
- Information on job openings.

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.

Core services tend to be self-service and do not require participants to meet certain eligibility requirements. Instead, they are part of the primary offerings at Washington's WorkSource Centers, helping a wide variety of job-seekers find their way back into employment.

For some, particularly those unable to land a job through the above core services, the WIA Adult program provides intensive services. These services include:

- More intensive assessments.
- Individual counseling.
- Career planning.
- Short-term pre-vocational services.

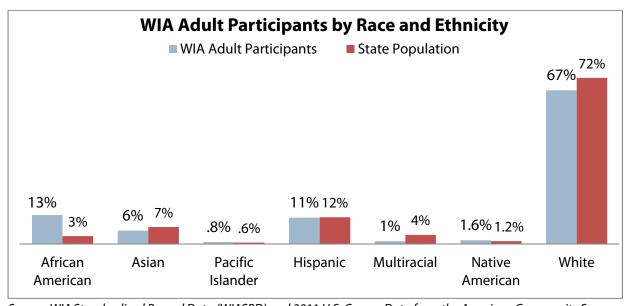
Nearly half of the program participants (approximately 49 percent) also participated in job training where training costs are supported by the WIA Adult Program. For this 2014 report, researchers studied the results of 2,660 participants who left the WIA Adult program during the most recent reporting year.¹

¹ The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.



Participant Profile

Participants in the WIA Adult program were more likely to be a racial or ethnic minority than the general population in Washington, largely due to the overrepresentation of African Americans in the program.² Among program participants, 11 percent were Hispanic (versus 12 percent in the general population), 13 percent were African American (versus 3 percent in the general population). Representation among white participants was 67 percent, 5 percentage points below their proportion of the state population.

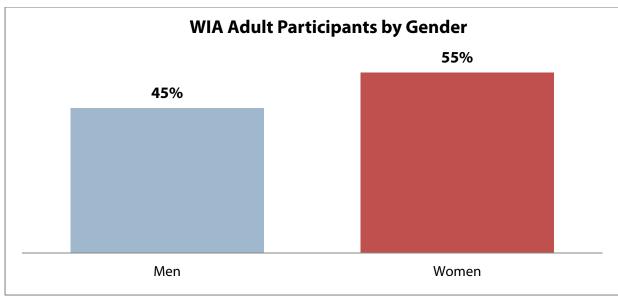


Source: WIA Standardized Record Data (WIASRD) and 2011 U.S. Census Data from the American Community Survey.

A higher percentage of women than men participated in the WIA Adult program (55 percent versus 45 percent). This rate is similar to last year (57 versus 43 percent).

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 are Native American; 7 percent are Asian; 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.





Source: WIASRD and Office of Financial Management.

Upon enrollment, 9 percent of the participants had neither a high school diploma nor a GED, 32 percent had a high school diploma as their highest credential, 16 percent had a GED, and 43 percent had previously attended college.³ Eight percent had limited English proficiency and 52 percent received public assistance while enrolled in the program.⁴

The median age of participants when leaving the program was 38. One quarter of the participants were age 29 or below when leaving the program and one quarter were over 49 years of age at program exit.

Tracking WIA Adult 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.

⁴ Public assistance recipients includes 53 percent who received cash assistance from state or local General Assistance, Refugee Cash Assistance, or Supplemental Security Income; 9 percent who received Temporary Aid for Needy Families (TANF) assistance; and 8 percent who received both types of assistance.



³ According to the 2012 U.S. Census Bureau estimates from the American Community Survey, Table S1501, of those over the age of 25 in Washington, 33 percent have the equivalent of a high school diploma or less, and 66 percent have at least attended college.

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?

Data Comes From State Wage Files, Employer Survey

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. Information on employer satisfaction among firms that hired new employees who recently completed a WIA program was assessed through the Workforce Board's 2012 Employer Survey.⁵

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.

Turn to page 19 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 sideby-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?

The study follows the progress of all WIA Adult participants who left the program during the most recent reporting year. The median amount of time spent in the WIA Adult program by this cohort was 10 months. There is some variation, however, as one quarter of participants are enrolled less than 4 months and one quarter longer than 19 months.

⁵ The Employer Survey includes employers who hired a participant who completed at least one of the three WIA programs: Adult, Dislocated Worker, or Youth.



An estimated 49 percent of these WIA Adult participants received training as part of their program. This means that 1,298 of those who left the WIA program received one or more types of training:

- Occupational skills training.
- Programs that combine workplace training with related instruction.
- Training programs operated by the private sector.
- Skill upgrading and retraining.
- Entrepreneurial training.
- Job readiness training.
- Customized training.
- On-the-Job Training.⁶

As a measure of whether participants got the skills they needed, this study tracks the credentials and degrees earned by participants. Among those leaving the WIA Adult program:

- 5 percent received an associate's degree.
- 10 percent received an occupational skills license.
- 19 percent received an occupational skills certificate/credential.
- Less than one percent received another type of credential.

Taken together, 36 percent of all participants, or 74 percent of those participants who received training, earned a credential. Most participants who received training through the WIA Adult program attended a state community or technical college to advance their education and skill levels.

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.⁷ The study looks at employment and earnings three calendar quarters after the participant left the WIA program. The chart below shows the employment and earnings of participants who left the program during the most recent reporting year. Some 69 percent of WIA Adult participants were employed. Of those who were working, 60 percent were employed full time. The median hourly wage of those working was \$14.16, nearly \$5 per hour higher than Washington's minimum wage of \$9.19 an hour in 2013. The median annual earnings among program participants was \$24,178.

⁷ 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).



⁶ Some 7 percent of participants received On-the-Job training. This refers to training provided by an employer to a paid participant engaged in productive work that (a) provides knowledge or skills essential to the performance of the job; (b) provides reimbursement to the employer or up to 50 percent of the wage of the participant; and (c) is limited to the period of time required for a participant to become proficient in the occupation.

Employment and Earnings for WIA Adult Participants, 2014

Performance Measure	Results
Employment Rate* (State Records)	69%
Full Time Employment**	60%
Median Quarterly Hours	443 hours
Median Hourly Wage***	\$14.16
Median Annualized Earnings***	\$24,178

^{*} 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.

Earnings of WIA Adult 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.8

WIA Adult participants were able to support a median of 4.2 people at the poverty level meaning they could support themselves and a three other people. They could support themselves at the 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	3.8	3.7	4.0	3.7	4.2
	people	people	people	people	people
Number of people supported at 200 percent poverty	1.0	1.0	1.0	1.0	1.1
	people	people	people	people	people

⁸ 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.



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

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

The following table shows employment and earnings information over the course of five study periods.

Employment and Earnings Trends for WIA Adult Participants

Performance Measure	2010	2011	2012	2013	2014
Employment Rate (Self-Reported)	N/A	74%	N/A	N/A	N/A
Employment Rate* (State Records)	66%	65%	62%	67%	69%
Full Time Employment**	59%	60%	63%	61%	60%
Median Quarterly Hours	439	435	452	442	443
Median Hourly Wage***	\$22,689	\$22,413	\$23,553	\$22,262	\$24,178
Median Annualized Earnings***	\$13.58	\$13.81	\$13.57	\$13.49	\$14.16

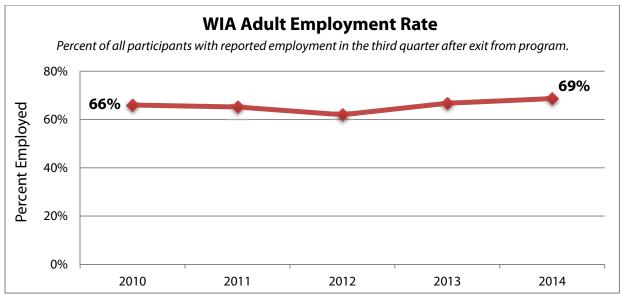
^{*}These figures apply to those with employment reported to the state's Employment Security Department six to nine months after leaving program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

A survey conducted in 2011 of WIA Adult participants revealed that 63 percent received medical benefits, and 32 percent received retirement benefits.

WIA adult participants' employment has increased each year since the 2012 Workforce Training Results.

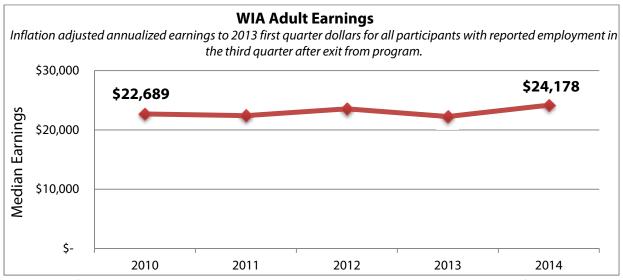
^{**}Full-time employment averages 30 or more hours per week.

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



Source: Workforce Training Results 2010-14 reports. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

WIA Adult participant's median annual earnings rose about \$2,000 between the 2013 and 2014 Workforce Training Results, from \$22,262 to \$24,178.



Source: Workforce Training Results 2010-14 reports. This chart shows annualized earnings in 2013 first quarter dollars to account for inflation.

WIA Adult Participant Employment by Industry

The majority of employed WIA Adult program participants held jobs in three main areas:

- Services (60 percent)
- Manufacturing industries (13 percent)
- Retail trade (10 percent)

Employment in services decreased 3 percentage point, retail trade stayed the same, and manufacturing increased 4 percentage points.

Industry	Group
59.5%	Services
12.7%	Manufacturing
9.7%	Retail Trade
5.8%	Transportation and Warehousing and Utilities
3.1%	Construction
3.1%	Financial Activities
2.3%	Wholesale Trade
1.7%	Public Administration
1.4%	Natural Resources and Mining
0.5%	Information
Breakou	t of the Services Industry
25.2%	Health Care
11.4%	Administrative and Support and Waste Management and Remediation Services
6.5%	Accommodation and Food Services
5.3%	Social Assistance
3.8%	All Other Services
2.7%	Education Services
2.6%	Professional, Scientific, and Technical Services
2.0%	Arts, Entertainment, and Recreation

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

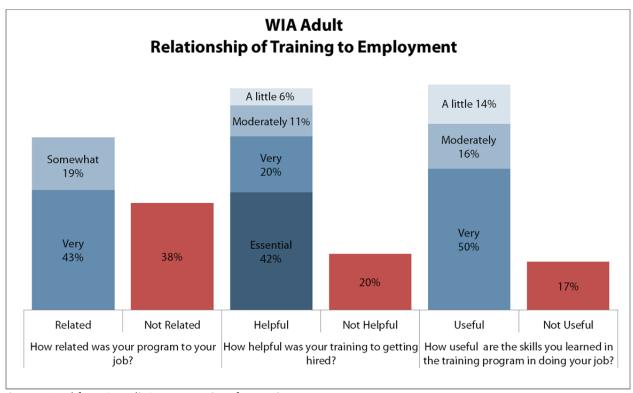
In 2011, the Workforce Board surveyed WIA participants who had left their program in 2009-10. The survey provided data on employment and participant satisfaction with the training. The survey was conducted by telephone and was completed by 492 participants.

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 participants employed six to nine months after leaving a program, 43 percent said their training was "very related" to their job. A further 19 percent reported the training was "somewhat related" to their job. In 2008, the same rate of employed participants reported their training was related to their job.



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, 42 percent indicated their training was an "essential



requirement," another 20 percent indicated it was "very important," 11 percent reported it was "moderately important," and 6 percent said it was "a little useful." Some 20 percent indicated their training was "not important at all" to getting their job.

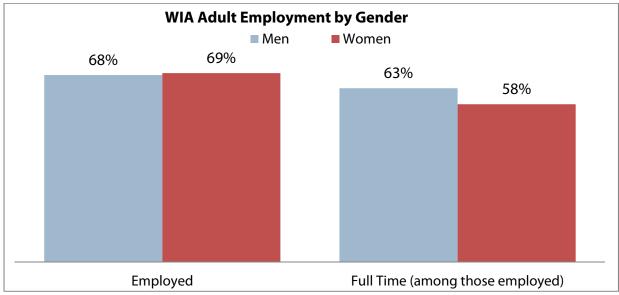
Most participants said the skills they learned in their training program were useful in doing their job. Half of participants indicated the skills were "very useful," 16 percent said "moderately useful," and 14 percent "a little useful." Only 17 percent of participants who were employed indicated the 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 answered negatively to both. Just 14 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

Wage and employment results can vary by gender, race and ethnicity, and disability. The next chart shows the percentage of men and women WIA Adult participants who were reported to be employed. Also broken out is what percentage of those working held full-time jobs.

During the third quarter after leaving the program, women participants were just as likely to be employed as men. Women were employed full time at a lower rate than men (58 percent versus 63 percent). Among those employed, the hourly wage rate for women (\$13.56) was 90 percent of men (\$15.01). The median annual earnings of women (\$22,615) were 85 percent of men's (\$26,483).



Source: Matches with Employment Security Department data and WIASRD.

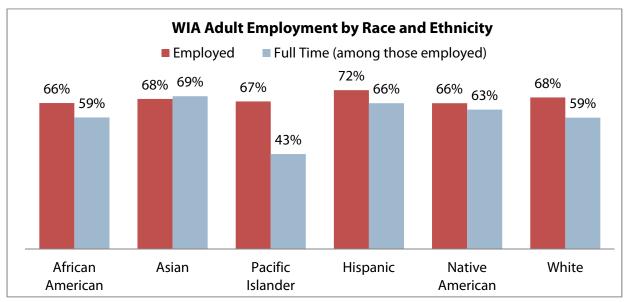
Race/Ethnicity Plays Role

Participants from racial and ethnic minority backgrounds were just as likely to be employed as white participants. Hispanics had the highest employment rate at 72 percent, with all racial groups falling between 66 and 68 percent.

For full time employment, Asians had the highest rate at 69 percent, followed by Hispanics at 66 percent, Native Americans (63 percent), whites and African Americans (59 percent); Pacific Islanders had the lowest full time employment at 43 percent.

Asian participants had the highest median hourly wage at \$15.44 followed by Native Americans (\$14.64), whites (\$14.45), Pacific Islanders (\$14.28), African Americans (\$13.69), and Hispanics (\$13.30).

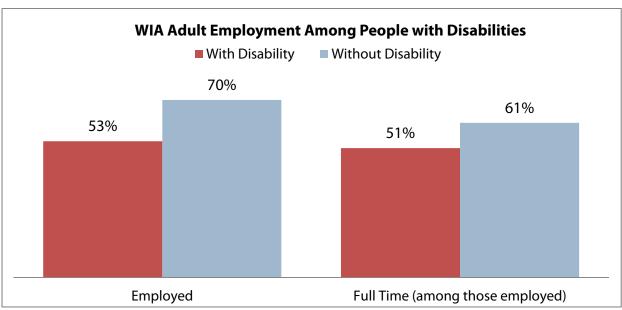
Among program participants Asians had the highest median annual earnings at \$29,007, followed by whites (\$24,349), African Americans (\$23,986), Hispanics (\$23,682), and Native Americans (\$22,742), and Pacific Islanders (\$11,400).



Source: Matches with Employment Security Department data and WIASRD.

Disability Impacts Employment, Earnings

Administrative records show 6 percent of the WIA Adult participants included in this study reported having a disability. These participants were less likely to have employment reported to a state's Employment Security Department (53 percent compared to 70 percent for those without a disability). Only 51 percent of the people employed who were disabled were employed in full-time jobs versus 61 percent among those without a disability. The median wage of participants who had a disability (\$12.86) was 90 percent of those without a disability (\$14.23). This is a decrease over last year when participants with disabilities earned 92 percent of those without a disability. Median annual earnings of those with disabilities were 79 percent of those without a disability (\$19,118 compared to \$24,299).



Source: Matches with Employment Security Department data and WIASRD.

Were Employers Satisfied with the Preparation Workers Received?

The Workforce Board's Employer Survey, administered during 2012, asked firms to evaluate new employees who had recently completed a WIA program. All three WIA Title I programs (Adult, Dislocated Worker, and Youth) were grouped together because there are relatively few participants in each category and employers would find it difficult to distinguish one from another. This section presents findings on employer satisfaction with new employees who completed *any type* of WIA program. Some 89 percent of employers said they were either "somewhat satisfied" or "very satisfied" with the overall work quality of these new employees.

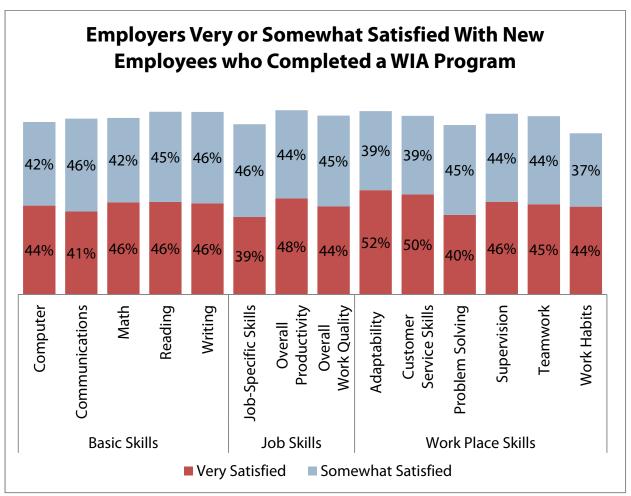
Employer satisfaction is broken down into three categories: Basic Skills, Job Skills and Work Place Skills. Basic skills refer to reading, writing, math, communication and computer skills.

⁹ In accordance with the Americans with Disabilities Act of 1990 a disability is defined as "a physical or mental impairment that substantially limits one or more of the person's major life activities."



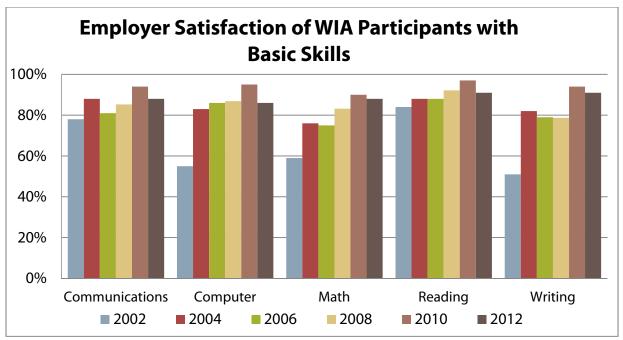
Job skills refer to skills specific to the job, as well as overall work quality and productivity. Work place skills refer to the skills necessary to get along in the workplace such as the ability to accept supervision, the ability to adapt to changes in duties and responsibilities, teamwork, customer service, problem solving or critical thinking skills, and having positive work habits and attitudes.

In 2012, between 39 and 52 percent of employers were very satisfied with the new employees' skills, depending on the skill type. Virtually all the remaining employers were somewhat satisfied.

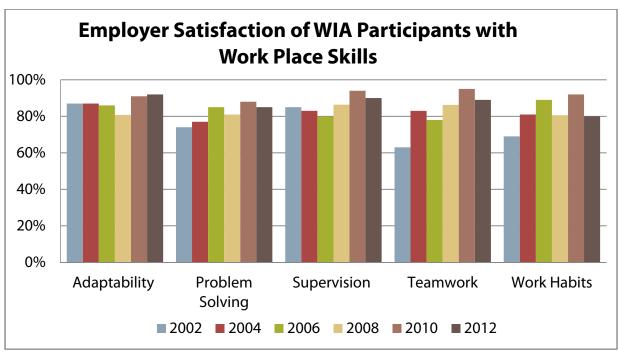


Source: Workforce Board Employer Survey conducted in 2012.

Overall, the levels of employer satisfaction reported in the Workforce Board's 2012 Employer Survey are slightly lower than on the previous survey, conducted in 2010. The following three charts show the trends in satisfaction of employers with new employees who recently completed a WIA program. During the past decade there has generally been an upward trend in employer satisfaction.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

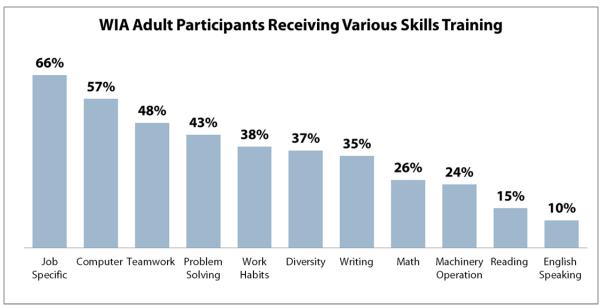


Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

Participant Survey

Most participants enroll in the WIA Adult program for employment-related reasons. Based on Participant Survey results, 79 percent of adults entered the program to learn skills for a new job, 70 percent enrolled to get job search assistance, and 51 percent enrolled for on-the-job training. Participants also indicated that they enrolled to improve basic skills (math 20 percent, reading 17 percent, and English speaking 13 percent).

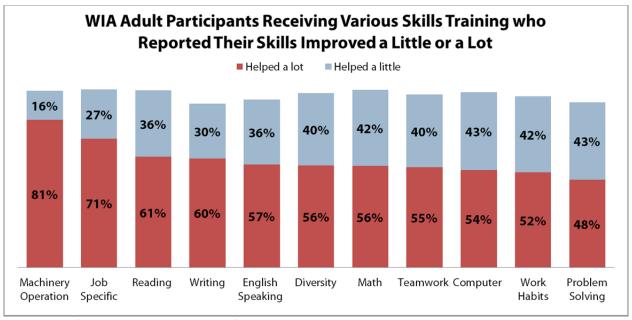
Some 58 percent of WIA Adult participants reported receiving some type of training as part of their program. As in the previous study, the most common types of training were in computer and job- specific skills, among those who received training, 66 percent received job specific skills training and 57 percent received computer skills training.



Source: Workforce Board's Participant Satisfaction Survey 2011.

The large majority of WIA Adult participants who received training felt it improved their skills. Similar to the 2008 survey, the percentage reporting their skills improved "a lot" was highest for occupational training; particularly machinery operation and job-specific skills.

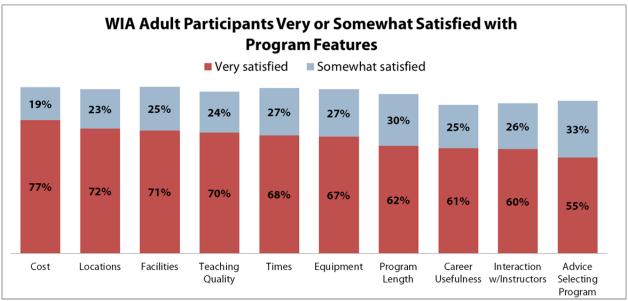
Compared to the previous survey, participants reported much higher levels of "a lot" of improvement in basic skills; writing increased 14 percentage points, while math increased 16 percentage points. Overall, participants were much more likely to respond that the training helped "a lot" versus helped "a little."



Source: Workforce Board's Participant Satisfaction Survey 2011.

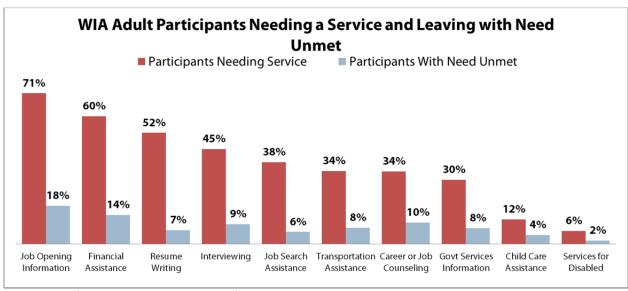
Participant Satisfaction

Some 90 percent of participants reported they were satisfied with the overall quality of the program. Also, 86 percent said their educational objectives were met; higher levels than the last survey. Participants tended to be "very satisfied" with various features of the program including program cost, location, and facilities. Participants were less likely to indicate "a lot" of satisfaction with advice on selecting programs or interaction with instructors.



Source: Workforce Board's Participant Satisfaction Survey 2011.

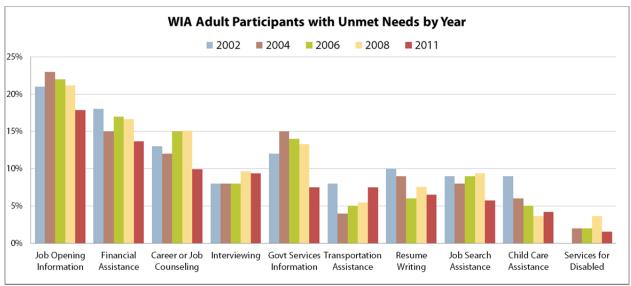
Similar to previous surveys, WIA Adult participants frequently reported needing information on job openings and financial assistance. Most participants who needed services received them.



Source: Workforce Board's Participant Satisfaction Survey 2011.



The largest unmet need¹⁰ was for information about job openings. This is not a new problem. Although the percentage reporting leaving the program with this need unmet has decreased in the past decade, it is still quite high. WIA Adult participants reporting unmet needs have declined in nearly every category since the previous survey, and in fact since 2002. An exception is the percentage leaving with an unmet need for transportation assistance, which has doubled from a low of 4 percent in 2004 to 8 percent this year.



Source: Participant Satisfaction Surveys 2002-2011.

Net Impact - Did Program Make a Difference in Participant Success

Every four years the Workforce 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 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

The WIA Title I-B Adult program has positive net impacts on employment, wages, hours worked, and earnings.

Participation increases lifetime earnings.

results with a control group. Individuals who participated in a WIA Adult 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

¹⁰ Unmet need refers to cases where the participant reports that either they did not receive the required service or what was provided did not meet their needs.



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 WIA Adult training 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

The analysis also separates out WIA Adult participants who received job training, in addition to other WIA services. Roughly 49 percent of WIA adult participants received some type of formal training or education while the rest received core or intensive services only. (See program details at beginning of chapter for explanation of the range of services.)

In the table below, the WIA Adult participant employment rate in the short-term was 12.8 percentage points higher than the rate of those in the comparison group. WIA participants who received training achieved an employment rate that was 15.4 percentage points higher than their comparison group.

Similarly, the average annualized earnings of WIA participants who found jobs is higher (by the amounts listed below) than those non-participants who were employed.

	All WIA Adult	t Participants	Received Training		
WIA Adult	Short-term^	Long-term^	Short-term^	Long-term^	
Net Employment Impact*	12.8 percentage points	10.8 percentage points	15.4 percentage points	13.2 percentage points	
Net Hourly Wage Impact**	\$1.78	\$1.73	\$3.05	\$3.14	
Net Hours Employed per Quarter Impact	73.6	43.6	91.2	56.6	
Net Annualized Earnings Impact**	\$7,385	\$4,511	\$10,720	\$7,529	

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

As can be seen above, WIA Adult program participants experienced gains in employment, hourly wages, hours worked per quarter and net annualized earnings, when compared to the control group. Gains tended to be somewhat more pronounced in the short-term than the long-term but were evident several years after completing the program.

^{*}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 WIA Adult participants who got jobs and those in the control group who were employed.

Benefits and Costs

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. Program costs include both direct costs and support payments borne by the state and the foregone earnings borne by participants.

Benefits and costs are calculated for both the observed period of time and based upon a statistical model that estimated the benefits and costs out to age 65. 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. The benefits and costs presented here are based on impacts estimated for participants 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 WIA Adult

Programs

Don of the Coat	First 2.5 years		Lifetime (until 65)		Sum of Costs
Benefit/Cost	Participant	Public	Participant	Public	and Benefits
Benefits					
Earnings	\$9,479	\$0	\$42,869	\$0	
Fringe Benefits	\$2,370	\$0	\$10,718	\$0	
Taxes	-\$1,616	\$1,616	-\$7,310	\$7,310	
Transfers					
UI	-\$211	\$211	\$439	-\$439	
Costs					
Foregone net earnings	-\$2,427	-\$384	-\$2,427	-\$384	
Program costs	\$0	-\$5,708	\$0	-\$5,708	
Benefits	\$10,022	\$1,827	\$46,716	\$6,870	
Costs	-\$2,427	-\$6,092	-\$2,427	-\$6,092	
Total (Net)	\$7,595	-\$4,266	\$44,289	\$778	\$45,067

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

For each participant in WIA Adult programs, the public (taxpayer) cost is \$5,708 over the length of their enrollment, and the participant cost is \$2,427 in foregone earnings while enrolled. During the first two and one-half years after leaving the program, the average participant will gain \$9,479 in earnings. During the course of working life to age 65, they will gain about \$40,442 in net earnings (earnings minus foregone earnings) and about \$10,718 in

employee benefits. These are net gains compared to the earnings of similar individuals who did not participate in a workforce program. Including program costs and the net impacts on taxes and unemployment insurance benefits, the total net benefit per participant is \$44,289.

Projected participant benefits to age 65 outweigh public costs for WIA Adult services and training by a ratio of \$8 to \$1, or \$44,289 to \$5,708.

From the time of leaving the program to age 65, the public is forecast to gain almost \$7,310 per participant in net additional Social Security, Medicare, federal income, and state sales taxes; the public, however, is expected to pay out \$439 per participant in total UI benefits. The estimated lifetime net benefit to taxpayers is \$778 per participant.

Projected taxpayer net benefits to age 65 outweigh public costs invested in WIA Adult services by a ratio of \$1.20 to \$1, or \$6,870 to \$5,708.

Summary and Areas for Improvement

The WIA program for disadvantaged adults provides a wide variety of services to participants such as career counseling, job search assistance, and vocational training. Services depend on what participants need to find suitable employment. Approximately 49 percent of participants reviewed in this study received vocational training.

Employment results are beginning to recover from the effects of the Great Recession. Some 69 percent of participants were in reported employment. Only 14 percent of the participants reported their program was neither helpful in finding a job or related to their employment. A large majority of participants reported their program helped improve their skills a lot, and the results for reading and math, in particular, have increased in recent years. Participants reported being very satisfied with their program.

The program has strong net impacts on participants' employment and earnings. The strongest net impacts are for those who receive vocational training. This suggests the importance providing vocational training to a majority of program participants.

An area that could be stronger is providing participants with information on job openings. Although better than in the past, 18 percent of participants left their program with an unmet need for job opening information.

The Workforce Development Councils indicate they will continue to work with partners to provide job seekers with information on job openings: educating job seekers on the value of online tools; utilizing resource rooms, job clubs, workshops, and one-on-one meetings with WorkSource counselors; developing social media resources; and following up with participants one year after exit.



Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Workforce Investment Act Title I-B Program for Dislocated Workers

Program Details

The Workforce Investment Act (WIA) Dislocated Worker program provides employment and training services to meet dislocated workers' needs; establishes early intervention for workers and firms facing substantial layoffs; and fosters labor, management, and community partnerships with government to address worker dislocation. In general, dislocated workers are individuals who lost jobs due to plant closures, or company downsizing, and are unlikely to return to their industry or occupation.

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.

Dislocated workers are eligible for "core services" that include:

- Skills assessment.
- Labor market information.
- Consumer reports on training programs.
- Job search and placement assistance.

Intensive services and training are available for eligible dislocated workers unable to land a suitable job through the above core services. These services include:

- More intensive assessments.
- Counseling.
- Pre-vocational and vocational training.

For this 2014 study, program records were obtained on 3,475 individuals who left the program during the most recent reporting year. Employment-related information was

¹The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.

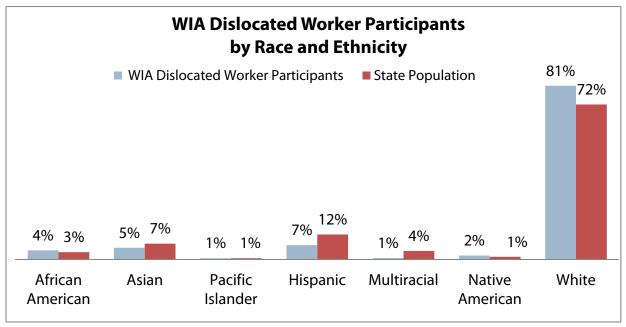


obtained through a match with the Employment Security Department (ESD) wage files from Washington, Idaho, and Oregon, and federal employment records.²

The typical participant was enrolled in the program for 16 months. There was, however, considerable variation in the amount of time participants spent in the program. One quarter of participants were enrolled for seven months or less, while another quarter were enrolled for over 27 months.

Participant Profile

Participants roughly mirrored the state's racial-ethnic population distribution with whites represented slightly above the state population estimate, and Hispanics and participants of more than one race slightly lower.³ An estimated 81 percent of participants were white.



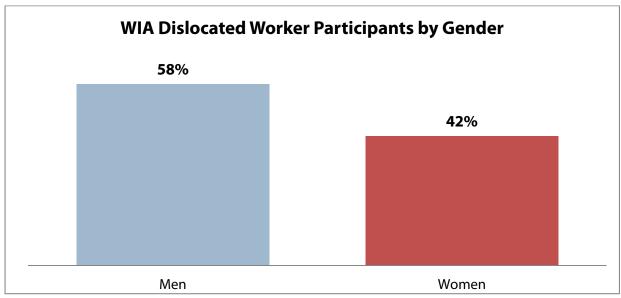
Source: WIA standardized record data (WIASRD) and 2011 U.S. Census Data from the American Community Survey.

The median age at program registration was 45, with one quarter age 52 and older and one quarter under age 36.

² The employer survey includes employers who hired a participant who completed at least one of the three WIA Title I-B programs: Adult, Dislocated Worker, or Youth.

³ 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 are Native American; 7 percent are Asian; 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.

Women represented 42 percent of dislocated workers, down two percentage points from the program last year.



Source: WIA standardized record data (WIASRD).

At the time participants enrolled,

- 45 percent had not previously attended college.
- 35 percent had some college or an associate's degree.
- 19 percent had a bachelor's degree or higher.4

Tracking WIA Dislocated Worker 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?

⁴ Do not add to 100 percent due to rounding.



Data Comes From State Wage Files, Employer Survey

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. Information on employer satisfaction among firms that hired new employees who recently completed a WIA program was assessed through the Workforce Board's 2012 Employer Survey.⁵

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 detailed analysis as to whether the participant and the public received a return on their investment in the program.

Turn to page 19 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 sideby-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?

The study follows the progress of all WIA Dislocated Worker participants who left the program during the most recent reporting year.

As a measure of whether participants got the skills they needed, this study tracks the credentials and degrees earned by participants. Among those leaving the WIA Dislocated Worker program:

- 13 percent received an associate's degree.
- Less than one percent received a bachelor's degree
- 8 percent received a license.
- 31 percent received a certificate.
- Less than one percent received another type of credential.

Taken together, 53 percent of all participants received a recognized credential; this is 76 percent of participants who received training.

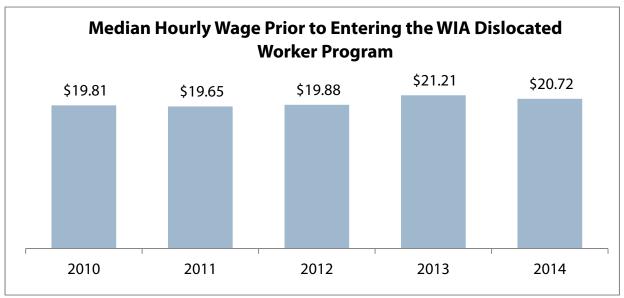
⁵ The Employer Survey includes employers who hired a participant who completed at least one of the three WIA programs: Adult, Dislocated Worker, or Youth.



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.⁶ The study looks at employment and earnings three calendar quarters after the participant left the WIA program.

At the time of program entry, 2014 WIA Dislocated Worker participants had slightly lower wages than those enrolled during the prior program year.



Source: Matches with Employment Security Department data.

The chart below shows the employment and earnings of participants who left the program during the 2011-12 program year. Record matches found 67 percent had reported employment the third quarter after leaving the program. The median hourly wage was \$18.05, and median annualized earnings were \$34,504.7 The typical (median) hourly wage replacement rate was 87 percent.8

 $^{^8}$ Median wage replacement rate calculated using third quarter prior to registration compared to the third quarter post-program. (The median replacement rate was hourly post-wage (\$18.05)/pre-wage (\$20.72) = 87.1 percent.)



⁶ 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).

⁷ 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.

Employment and Earnings for WIA Dislocated Workers, 2014

Performance Measure	Results
Employment Rate* (State Records)	67%
Full Time Employment**	73%
Median Quarterly Hours	484 hours
Median Hourly Wage***	\$18.05
Median Annualized Earnings***	\$34,504

^{*}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.

The median hourly wage of WIA Dislocated workers is relatively high at \$18.05, but there is considerable variation in wages. While one quarter of dislocated workers had a median hourly wage of over \$24.51 after program exit, another quarter had median hourly wages below \$13.64.

Distribution of	Distribution of Hourly Wages 3rd Quarter After Leaving				
Quartile	Hourly Wage				
Highest	\$24.52 and up				
Third	\$18.05-24.51				
Second	\$13.64-18.04				
Lowest	Below \$13.63				

Source: Employment Security Department data matches.

Earnings of WIA Dislocated Worker 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.⁹

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

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

⁹ 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.

WIA Dislocated Worker participants were able to support a median of 6.7 people at the poverty level—meaning they could support themselves and almost six other people. At the 200 percent of poverty level, they could support themselves and one and a half other people.

Number of People Supported at Poverty Level by Participant Income

Performance Measure	2010	2011	2012	2013	2014
Number of people supported at poverty level	6.3	5.9	6.9	6.7	6.7
	people	people	people	people	people
Number of people supported at 200 percent poverty	2.2	2.0	2.5	2.4	2.4
	people	people	people	people	people

The following table shows employment and earnings information over the course of five study periods.

Employment and Earnings Trends for WIA Dislocated Workers

Performance Measure	2010	2011	2012	2013	2014
Employment Rate (Self-Reported)	N/A	74%	N/A	N/A	N/A
Employment Rate* (State Records)	77%	71%	69%	65%	67%
Full Time Employment**	73%	68%	56%	73%	73%
Median Quarterly Hours	484	480	491	488	484
Median Hourly Wage***	\$17.09	\$16.78	\$17.72	\$18.26	\$18.05
Median Annualized Earnings***	\$32,938	\$31,153	\$35,058	\$34,294	\$34,504

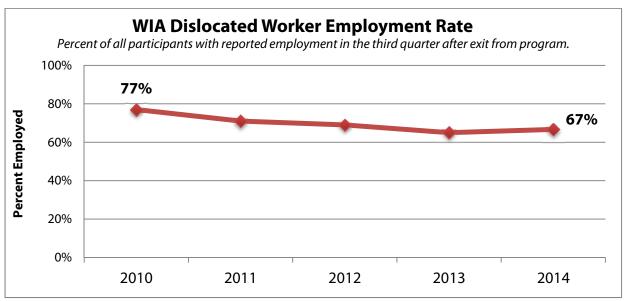
^{*}These figures apply to those with employment reported to the state's Employment Security Department six to nine months after leaving program, and are not limited to those who completed a program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

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



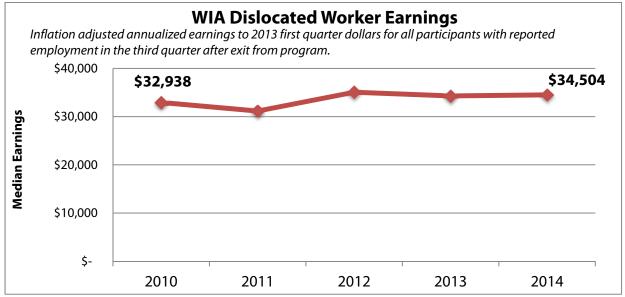
^{**}Full-time employment averages 30 or more hours per week.

A survey conducted in 2011 of WIA Dislocated Worker participants revealed that 68 percent received medical benefits, and 42 percent received retirement benefits.



Source: Workforce Training Results 2010-14 reports. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

The employment rate among participants has decreased 10 percentage points since 2010. However, the employment rate is up 2 percentage points since the 2013 report. Median annual earnings have stayed flat on the past three reports.



Source: Workforce Training Results 2010-14 reports. This chart shows annualized earnings in 2013 first quarter dollars to account for inflation.

WIA Dislocated Workers Find New Jobs in New Fields

Prior to program participation, 34 percent of participants were working in services, 24 percent were employed in manufacturing, 10 percent in construction and eight percent in retail trade. After training, 43 percent were employed in services, a nine percentage point increase. There was a decrease of six percentage points for WIA Dislocated Worker participants working in the Manufacturing industry. The percentage of those working in construction also declined.

	Pre-Program	Post-Program
Industry	Employment	Employment
Services	34%	43%
Manufacturing	24%	18%
Retail Trade	8%	8%
Construction	10%	7%
Transportation and Warehousing and Utilities	3%	7%
Financial Activities	7%	5%
Public Administration	4%	5%
Wholesale Trade	5%	5%
Natural Resources and Mining	2%	2%
Information	3%	1%
Breakout of Services		
Health Care	4%	12%
Administrative and Support and Waste Management ar	8%	11%
Professional, Scientific, and Technical Services	7%	8%
Education Services	3%	4%
All Other Services	7%	4%
Social Assistance	2%	3%
Leisure and Hospitality	4%	2%
Breakout of Manufacturing		
All Other Manufacturing	10%	5%
Aerospace	1%	5%
Wood & Paper Products	7%	4%
Fabricated Metal Products	2%	2%
Food & Beverage	1%	1%
Computer & Electronic Products	2%	1%

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

Among the four key industries in which program participants were employed after program exit, many went to work in new industries—with the service sector the primary destination of many, especially health care.



Source: Matches with Employment Security Department data seven to nine months prior to entering and likewise after exiting program.

Relationship of Training to Employment

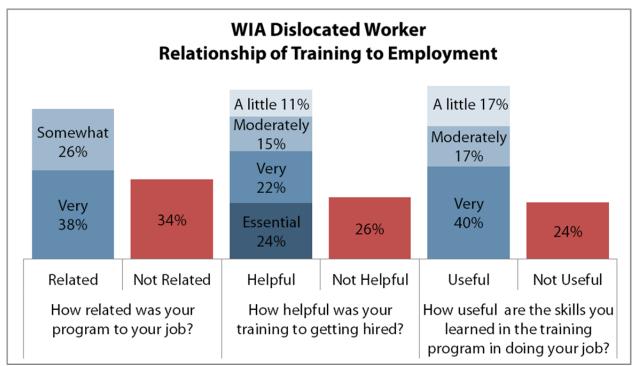
In 2011, the Workforce Board surveyed WIA Dislocated Worker participants who had left their program in 2009-10. The survey provided data on employment and participant satisfaction with the training. The survey was conducted by telephone and was completed by 545 participants.

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 participants employed six to nine months after leaving a program, 38 percent said their training was "very related" to their job. A further 26 percent reported the training was "somewhat related" to their job. In 2008, similar rates of employed participants reported their training was related to their job.



Source: Workforce Board's Participant Satisfaction Survey 2011.

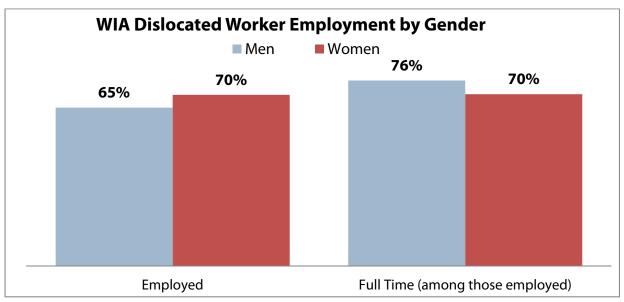
Participants also indicated the training was helpful to them in getting their job. Of those participants, 24 percent indicated their training was an "essential requirement," another 22 percent indicated it was "very important," and 15 percent reported it was "moderately important." Eleven percent said the training was "a little helpful." The remaining 26 percent indicated their training was "not important at all" to getting their job.

Most participants said the skills they learned in their training program were useful in doing their job. Some 40 percent of participants indicated the skills were "very useful," 17 percent said "moderately useful," and 17 percent "a little useful." Some 24 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 certain percentage of participants answered negatively to both. Some 18 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

Wages and employment results can vary by gender, race and ethnicity, and disability. During the third quarter after exit, women were more likely than men to be working (70 percent versus 65 percent). However, men were more likely to be working full time (76 percent versus 70 percent). The median hourly wage for women was 83 percent of men (\$16.23 compared to \$19.52). Women had median annual earnings comprising 78 percent of men's (\$29,671 compared to \$38,054).



Source: Employment Security Department and WIASRD

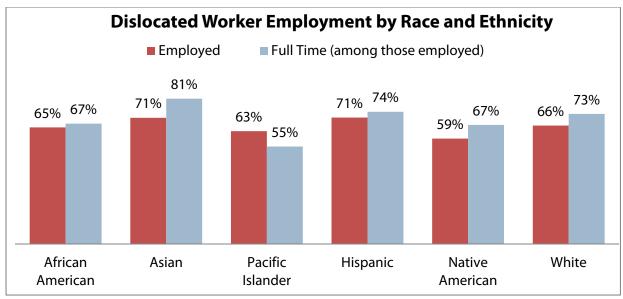
Race/Ethnicity Plays Role

Hispanics and Asians have the highest employment rate at 71 percent, followed by whites (66 percent), African Americans (65 percent), Pacific Islanders (63 percent), and Native Americans (59 percent). Program participant's full time employment also varies by race/ethnicity.

Asians also had the highest full time employment at 81 percent, followed by Hispanics (74 percent), whites (73 percent), African Americans (67 percent), Native Americans (67 percent), and Pacific Islanders (55 percent).

There is also variation among median hourly wages. Whites had the highest median hourly wage at \$18.27, followed by Native Americans (\$17.89), African Americans (\$17.15), Pacific Islanders (\$16.99), Hispanics (\$16.58), and Asians (\$16.50).

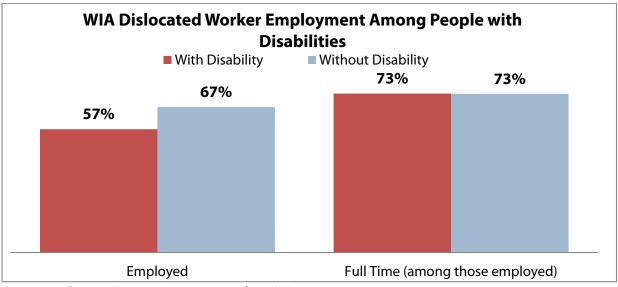
African Americans (\$31,609), Native Americans (\$31,610), and Pacific Islanders (\$31,565) had very similar median annual earnings. Whites (\$34,878) and Asians (\$34,125) earned more per year and Hispanics (\$30,942) earned less.



Source: Employment Security Department and WIASRD

Disability Impacts Employment, Earnings

Employment and earnings also varied by disability status. Administrative records suggest 4 percent of the participants included in this study had a disability. Dislocated workers with disabilities were less likely to be employed (57 percent versus 67 percent for those without a disability), and are just as likely to be working full time (73 percent versus 73 percent). Their median hourly wages were the same as those with no reported disability (\$17.72 versus \$18.10). Median annual earnings among dislocated workers with a disability were 95 percent of those without a disability (\$32,858 versus \$34,524).



Source: Employment Security Department and WIASRD

¹⁰ In accordance with the Americans with Disabilities Act of 1990, a disability is defined as a "physical or mental impairment that substantially limits one or more of the person's major life activities."

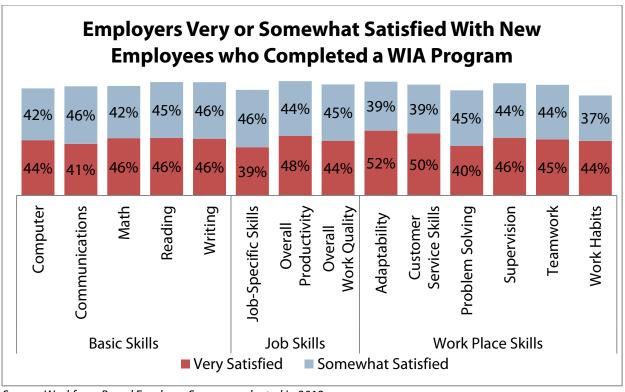


Were Employers Satisfied with the Preparation Workers Received?

The Workforce Board's Employer Survey, administered during 2012, asked firms to evaluate new employees who had recently completed a WIA program. All three WIA Title I programs (Adult, Dislocated Worker, and Youth) were grouped together because there are relatively few participants in each category and employers would find it difficult to distinguish one from another. This section presents findings on employer satisfaction with new employees who completed *any type* of WIA program. Some 89 percent of employers said they were either "somewhat satisfied" or "very satisfied" with the overall work quality of these new employees.

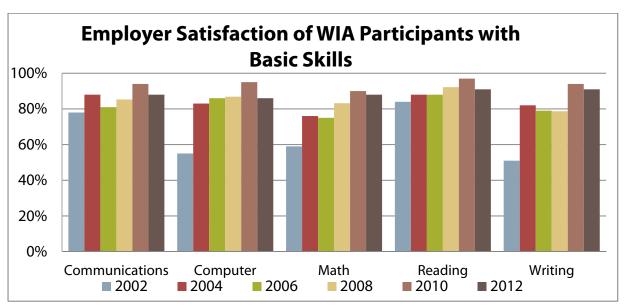
Employer satisfaction is broken down into three categories: Basic Skills, Job Skills and Work Place Skills. Basic skills refer to reading, writing, math, communication and computer skills. Job skills refer to skills specific to the job, as well as overall work quality and productivity. Work place skills refer to the skills necessary to get along in the workplace such as the ability to accept supervision, the ability to adapt to changes in duties and responsibilities, teamwork, customer service, problem solving or critical thinking skills, and having positive work habits and attitudes.

In 2012, employers report highest overall satisfaction in the basic skills category with reading, and writing. For job skills, their highest overall satisfaction was with overall productivity. Among work place skills, employers were most satisfied with WIA participant's adaptability.

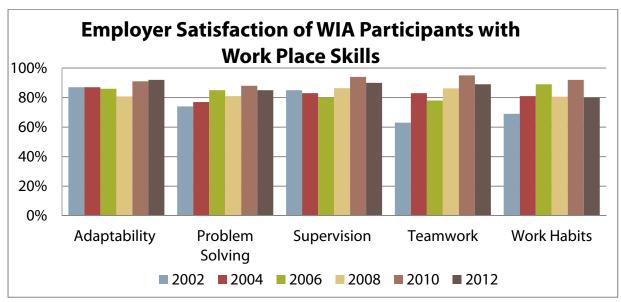


Source: Workforce Board Employer Survey conducted in 2012.

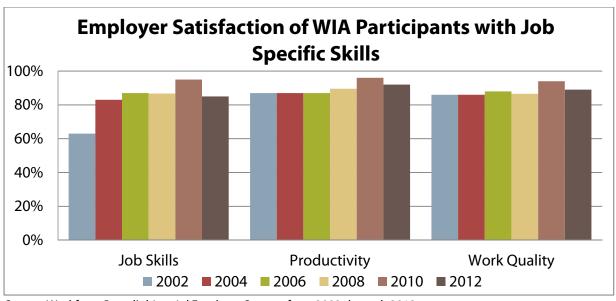
Overall, the levels of employer satisfaction reported in the Workforce Board's 2012 Employer Survey are lower than on the previous survey, conducted in 2010. The following three charts show the trends in satisfaction of employers with new employees who recently completed WIA program.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

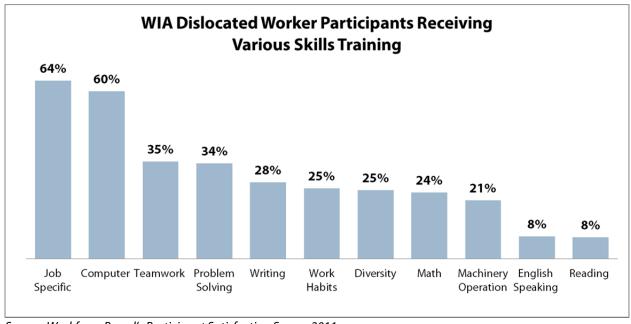


Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

Participant Survey

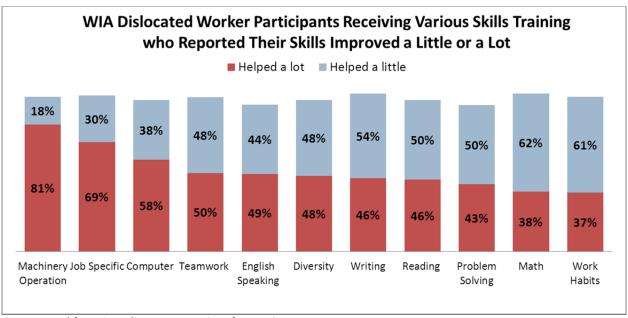
Most participants enroll in the WIA Dislocated Worker program for employment-related reasons. Based on Participant Survey results, 82 percent of adults entered the program to learn skills for a new job, 65 percent enrolled to get job search assistance, and 38 percent enrolled for on-the-job training. Participants also indicated that they enrolled to finish a degree or a certificate (51 percent).

Some 64 percent of WIA Dislocated Workers reported receiving some type of training as part of their program. As in the previous study, by far the most common types of training were in computer and job-specific skills.



Source: Workforce Board's Participant Satisfaction Survey 2011.

The vast majority of WIA Dislocated Workers who received training felt it improved their skills. The percentage reporting their skills improved "a lot" was highest for occupational training, particularly machinery operation and computer skills.

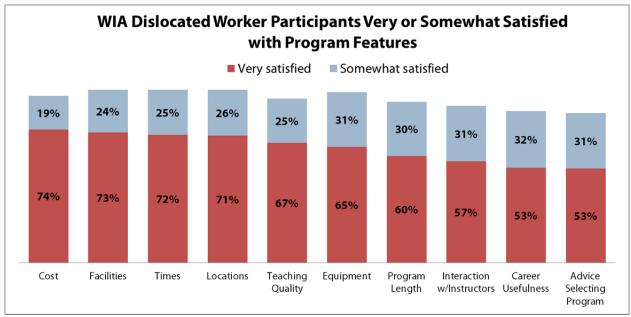


Source: Workforce Board's Participant Satisfaction Survey 2011.

Participant Satisfaction

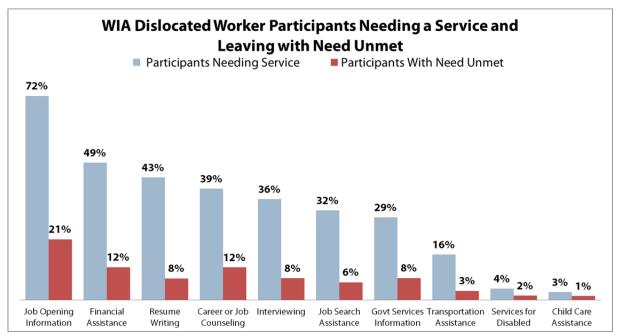
Survey results indicate participants were generally satisfied with the program. Some 88 percent of participants reported they were satisfied with the overall quality of the program. Eighty-three percent said their educational objectives had been met. These were similar levels of satisfaction as reported in the last survey.

Participants tended to be "very satisfied" with various features of the program including program cost, location, facilities, and times. Participants were less likely to indicate "a lot" of satisfaction with advice provided on selecting programs and career usefulness.



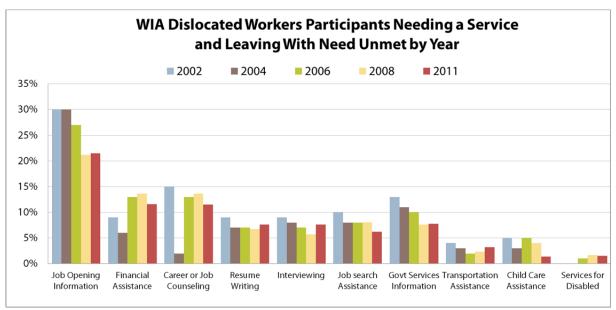
Source: Workforce Board's Participant Satisfaction Survey 2011.

Similar to previous surveys, WIA Dislocated Workers most frequently reported needing information on job openings. (Nearly three out of every four participants needed job opening information.) However, one out of every five participants left without that need met. Nearly 50 percent of participants required financial assistance, and many participants also indicated that they needed help with resume writing and job counseling.



Source: Workforce Board's Participant Satisfaction Survey 2011.

Most of the participants needing support services received them. The largest unmet need¹¹ was for information about job openings. Both this year and in 2008, 21 percent of participants left with an unmet need in this area. This is down from a high of 30 percent in 2002 and 2004. WIA Dislocated Worker participants reporting unmet needs declined in most categories since the previous survey.



Source: Workforce Board's Participant Satisfaction Surveys 2002-2011.

Net Impact - Did the Program Make a Difference in Participant Success?

Every four years the Workforce Board conducts net impact and cost-benefit analyses 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 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.

The WIA Dislocated Worker program has strong, positive net impacts on long-term employment, hourly wage, hours worked, and earnings.

Participation increases lifetime earnings of dislocated workers.

Individuals who participated in a WIA Dislocated Worker program were compared to individuals who had similar demographic characteristics, but who did not participate in any of

¹¹ 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.



the programs included in this 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 WIA Dislocated Worker 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.

The analysis also separates out WIA Dislocated Worker participants who received job training, in addition to other WIA services. Roughly 76 percent of WIA Dislocated Worker participants received some type of formal training or education while the rest received only core or intensive services.

In the table below, the employment rate in the short-term for WIA Dislocated Worker participants was 10.1 percentage points higher than the comparison group's employment rate. Also, long-term average earnings of WIA Dislocated Worker participants who found jobs are higher than for employed non-participants. A wide range of training is provided to WIA participants who qualify, including occupational skills training, skill upgrading and retraining, on-the-job training, and Adult Basic Education when delivered in combination with career and technical education.

Impact on Employment and Earnings: Participants vs. Control Group

WIA Dislocated Worker Program	All WIA Dislocated Worker Participants				ated Worker Recipients
Worker Program	Short-term^	Long-term^		Short-term^	Long-term^
Net Employment Impact*	10.1 percentage points	4.7 percentage points		10.2 percentage points	5.0 percentage points
Net Hourly Wage Impact**	No significant positive impacts	\$1.52		No significant positive impacts	\$2.03
Net Hours Employed per Quarter Impact	42.4	28.4		41.7	29.7
Net Annualized Earnings Impact**	No significant positive impacts	\$3,582		No significant positive impacts	\$4,818

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

As can be seen above, WIA Dislocated Worker Program participants saw significantly higher employment and hours worked when compared to the control group. Long-term impacts for

^{*}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 WIA Dislocated Worker participants who got jobs and those in the control group who were employed.

annualized earnings were significant among all WIA Dislocated Worker participants and for those who received training. The long-term impacts were stronger for workers who received training in addition to other WIA services.

Benefits and Costs

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. Program costs include both direct program costs and support payments borne by the state and the foregone earnings borne by program participants. Benefits and costs are calculated for both the observed period of time and 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. The benefits and costs presented here are based on impacts estimated for participants 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 the WIA Dislocated Worker Program

Donofit/Cost	First 2.5	years	Lifetime (u	Sum of Costs	
Benefit/Cost	Participant	Public	Participant	Public	and Benefits
Benefits					
Earnings	\$9,309	\$0	\$53,233	\$0	
Fringe Benefits	\$2,328	\$0	\$13,308	\$0	
Taxes	-\$2,441	\$2,441	-\$13,963	\$13,963	
Transfers					
UI	-\$760	\$760	\$1,703	-\$1,703	
Costs					
Foregone net earnings	-\$13,802	-\$3,665	-\$13,802	-\$3,665	
Program costs	\$0	-\$6,203	\$0	-\$6,203	
Benefits	\$8,435	\$3,202	\$54,282	\$12,260	
Costs	-\$13,802	-\$9,868	-\$13,802	-\$9,868	
Total (Net)	-\$5,367	-\$6,667	\$40,479	\$2,392	\$42,871

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

For each participant in the program, the public (taxpayer) program cost is \$6,203 over the length of their enrollment, and the participant cost is about \$13,802 in foregone earnings. During the course of working life to age 65, the average participant will gain \$39,431 in net earnings (earnings minus foregone earnings) and \$13,308 in employee benefits. These are net

gains compared to the earnings of similar individuals who did not receive services or training. Including program costs and the net impacts on taxes and unemployment insurance benefits, the total net benefit per participant is \$40,479.

Projected participant benefits to age 65 outweigh public costs invested in the WIA Dislocated Worker program by a ratio of about \$7 to 1, or \$40,479 to \$6,203.

From the time of leaving the program to age 65, the public is forecasted to gain about \$13,800 per participant in net additional Social Security, Medicare, federal income, and state sales taxes. However, the public is forecasted to spend \$1,703 in total UI benefits. The estimated lifetime net benefit to taxpayers is \$2,392 per participant.

Projected taxpayer net benefits to age 65 outweigh public costs invested in WIA Dislocated Worker services by a ratio of \$2 to 1, or \$12,260 to \$6,203.

Summary and Areas for Improvement

The WIA Dislocated Worker program helps individuals who lost their jobs gain new employment and this evaluation takes place during the worst economic times since the Great Depression. It is in this context that the report finds only 67 percent of the participants had reported employment, and 18 percent of those who were employed said their job was not related to their program and their program did not help them get their job.

Compared to similar individuals who did not participate in a workforce development program, WIA Dislocated Worker participants were much better off after going through the program. The evaluation finds the program had strong positive net impacts on employment rates and earnings. The results were especially strong for participants who received vocational training. The report finds that approximately 76 percent of recent participants received training, of whom 76 percent received a credential—a very high rate of credential attainment that would be desirable to continue.

The participants reported a high level of satisfaction with the program. Some 88 percent were satisfied with the overall quality of the program. One area that could be stronger is providing information on job openings. Some 18 percent of participants say they left the program with an unmet need for job opening information. This does, however, represent a substantial improvement over the past decade. The 2002 and 2004 reports found 30 percent of participants had unmet needs for job opening information.

The Workforce Development Councils indicate that they will continue to work with partners to provide job seekers with information on job openings: educating job seekers on the value of online tools; utilizing resource rooms, job clubs, workshops, and one-on-one meetings with WorkSource counselors; developing social media resources; and following up with participants one year after exit.



Workforce Training and Education Coordinating Board

2014 Workforce Training Results

Workforce Investment Act Title I-B Program for Youth

Program Details

The WIA Youth program prepares youth for academic and employment success. To receive services, youth must be 14 through 21 years old, low income, and meet other criteria such as needing additional assistance to complete an education program or to secure and hold employment. To be considered low income, potential participants must be a welfare or food stamp recipient, homeless, a foster child, a youth with a disability or in a family with income below 70 percent of the lower living standard income level.

Eligible youth are assessed to determine academic, skill level, and support service needs. Strategies are developed for each person based on the assessment results. They may receive:

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.

- Counseling.
- Tutoring.
- Job training.
- Mentoring.
- Work experience.

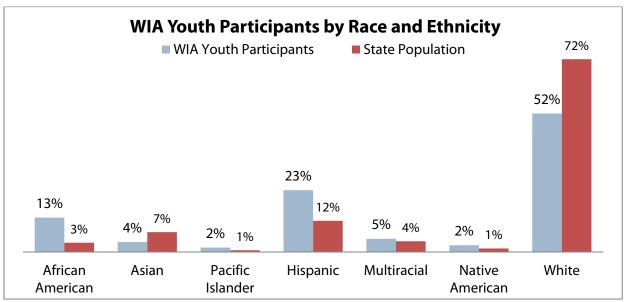
Other strategies include summer employment, study skills training, or instruction in obtaining a GED or equivalent. Youth may access information services through WorkSource, the state's one-stop career center system. Youth ages 18 through 21 may be co-enrolled in WIA Adult programs. At least 30 percent of the WIA Youth funds must be used to provide activities for eligible out-of-school youth.

The Employment Security Department administers the program at the state level. Twelve local workforce development councils, in consultation with chief local elected officials, oversee WIA activities in local areas. Local youth councils assist with the WIA program.

Participant Profile

For this 2014 report, researchers studied the results of 1,835 participants who left the WIA Youth program during the most recent reporting year. The median length of time a participant was in the program was 13 months. There was, however, considerable variation in the amount of time participants spent in the program. One quarter of the participants enrolled for less than eight months, while another quarter enrolled for over 21 months.

WIA Youth program participants were more racially and ethnically diverse than the state population.² Among program participants, 52 percent were white, 23 percent were Hispanic, 13 percent were African American, 4 percent were Asian, 2 percent were Pacific Islander and 2 percent Native American.



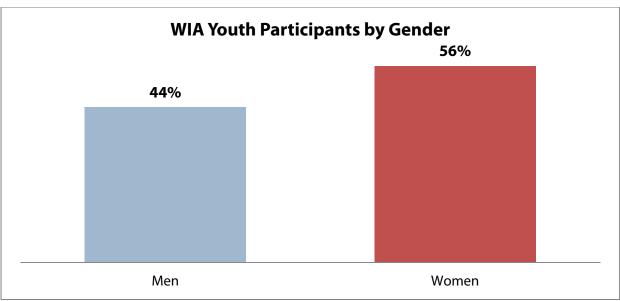
Source: WIA Standardized Record Data (WIASRD) and 2011 U.S. Census Data from the American Community Survey.

Among those leaving the program, 56 percent were female—three percentage points higher than last year.

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 are Native American; 7 percent are Asian; 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.



¹The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12.



Source: WIA Standardized Record Data (WIASRD).

Many WIA Youth participants faced substantial barriers to success in school and the labor market.

- 33 percent were high school dropouts when they entered the program.³
- 19 percent had records of arrest or conviction.
- 12 percent reported a disability.
- 47 percent lived in households that were receiving public assistance.⁴

Tracking WIA Youth 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?

⁴ Those on public assistance includes 45 percent who received cash assistance from state or local General Assistance, Refugee Cash Assistance, or Supplemental Security Income; 7 percent who received Temporary Assistance to Needy Families (TANF); and 5 percent who received both.



³ These are defined as youth who had no high school diploma and who were not enrolled in school at registration.

Data Comes From State Wage Files, Employer Survey

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. Information on employer satisfaction among firms that hired new employees recently completed a WIA program was assessed through the Workforce Board's 2012 Employer Survey.⁵

Net Impact Study Adds More Insight into Program Performance

In addition, the report includes a comprehensive Net Impact Study. Conducted every four years, this indepth, detailed 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 workforce programs, 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 18 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 sideby-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?

Promoting academic success is an objective of the WIA Youth program. Administrative records provide information on school enrollment and high school completion.⁶ Among younger participants,⁷ data indicate nearly the same level of school enrollment and completion as last year.

⁷ These youth were ages 14 to 18 when registering in WIA.



⁵ The Employer Survey includes employers who hired a participant who completed at least one of the three WIA programs: Adult, Dislocated Worker, or Youth.

⁶ These records are collected through the Service, Knowledge, and Information Exchange System (SKIES) maintained by the state's Employment Security Department.

Educational Status of WIA Youth Upon Leaving the Program

Educational Status	2010	2011	2012	2013	2014
Obtained a High School Diploma	31%	28%	30%	30%	31%
Obtained a GED	21%	28%	25%	26%	25%
Still Enrolled in High School at Exit	12%	6%	12%	11%	11%
Not in School, no Diploma or GED	35%	38%	33%	34%	33%

Source: WIA Standardized Record Data (WIASRD).

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

To find out about the participants' post-program employment and earnings, participant records were matched with Employment Security Department wage files from Washington and neighboring states. The study looks at employment and earnings of participants who left the program during the most recent reporting year. Some 50 percent of all participants were employed. The employment rate goes up 2 percentage points when the 11 percent of the WIA Youth participants still enrolled in high school upon exiting the program were removed from consideration. Of WIA participants who were employed, 32 percent of participants were working full time.

Were Participants Enrolled in Higher Education?

When it comes to young people, a measure of success isn't only employment but whether they continued with their education. As can be seen in the following chart, 63 percent of WIA Youth were either employed or enrolled in higher education. Of those participants who were not enrolled in high school or higher education and were employed, 35 percent were working full time. Median annualized earnings for WIA Youth participants who were not in school were \$12,109, very similar to earnings on the 2013 report.

⁹ Higher education enrollment figures obtained from data matches with the State Board for Community and Technical Colleges and National Student Clearinghouse.



⁸ 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).

Employment and Earnings for WIA Youth Participants, 2014

Performance Measure	Results
Employment or Higher Education*	63%
Full Time Employed**	35%
Median Hours Worked Quarterly	303 hours
Median Hourly Wage***	\$10.16
Median Annualized Earnings***	\$12,109

^{*} 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.

Earnings of WIA Youth 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.¹⁰

WIA Youth participants were able to support a median of one person at poverty level—meaning they could support themselves. They did not have enough earnings to support themselves, let alone others, at 200 percent of the poverty level (.5 people).

Number of People Supported at Poverty Level by Participant Income

Performance Measure	2010	2011	2012	2013	2014
Number of people supported at poverty level	0.9	1.0	1.0	1.0	1.0
	people	people	people	people	people
Number of people supported at 200 percent poverty*	0.5	0.5	0.5	0.5	0.5
	people	people	people	people	people

^{*}The number of people supported appears to stay the same because of rounding.

The next table shows employment and earnings over the course of five study periods.

¹⁰ 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.



^{**}Full-time employment averages 30 or more hours per week for those not enrolled in high school or higher education.

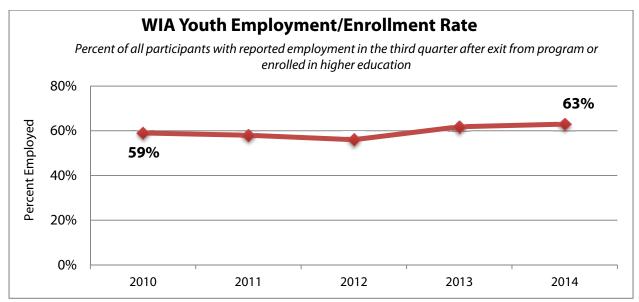
^{***}Earnings/wages are for those not enrolled in high school or higher education and are expressed in first quarter 2013 dollars in order to account for inflation .

Employment and Earnings Trends for WIA Youth Participants

Performance Measure	2010	2011	2012	2013	2014
Employment or Higher Education*	59%	58%	56%	62%	63%
Employment Rate (Self-Reported)	N/A	63%	N/A	N/A	N/A
Percentage Employed Full Time**	28%	32%	29%	36%	35%
Median Quarterly Hours	270	281	306	306	303
Median Hourly Wage***	\$10.33	\$10.45	\$10.30	\$10.30	\$10.16
Median Annualized Earnings ***	\$11,752	\$11,180	\$12,197	\$12,294	\$12,109

^{*}These figures apply to those with employment reported to the state's Employment Security Department six to nine months after leaving program, and is not limited to those who completed a program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

A survey conducted in 2011 of WIA Youth participants revealed that 42 percent received medical benefits, and 21 percent received retirement benefits.



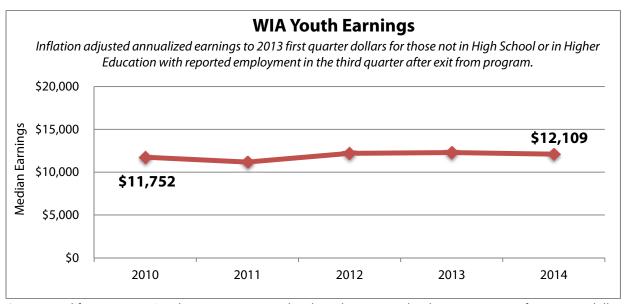
Source: Workforce Training Results 2010-14 reports. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

^{**}Full-time employment averages 30 or more hours per week for those not enrolled in high school or higher education.

***Earnings/wages are for those not enrolled in high school or higher education and are expressed in first quarter

2013 dollars in order to account for inflation.

After hitting a low of 56 percent in the 2012 report, the percentage of participants who were employed or in higher education increased seven percentage points over the last two years. Median hourly wages and median annualized earnings have stayed stable over the last three years.



Source: Workforce Training Results 2010-14 reports. This chart shows annualized earnings in 2013 first quarter dollars to account for inflation.

Among those not enrolled in high school or higher education, the median hourly wage was \$10.16, and median annualized earnings were \$12,109.¹¹ These earnings levels are low, but need to be considered within the proper context: these participants were young, entry-level workers, and faced substantial barriers to success in the labor market.

Distribution of Hourly Wages of WIA Youth in the Third Quarter After Leaving Program					
Quartile	Hourly Wage				
Highest	Above \$11.56				
Third	\$10.17 – \$11.56				
Second	\$9.52 - \$10.16				
Lowest	Below \$9.52				

Wage rates among WIA Youth participants reflected less variation than programs serving adults. One quarter of participations had median hourly wages above \$11.56, while another quarter had wages below \$9.52—slightly above the 2013 state minimum wage of \$9.19.

¹¹ 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.



WIA Youth Participant Employment by Industry

Employment among WIA Youth continues to be concentrated in services (59 percent) and retail trade (21 percent). Participants who worked in Services mostly worked in Accommodation and Food Services.

Industry Group	
59%	Services (see breakout below)
21%	Retail Trades (see breakout below)
6%	Manufacturing
4%	Natural Resources and Mining
3%	Construction
2%	Wholesale Trade
2%	Financial Activities
2%	Transportation and Warehousing and Utilities
1%	Public Administration
1%	Information
Services Industry	
23%	Accommodation and Food Services
20%	All Other Services
11%	Health Care
6%	Social Assistance
Retail Trade Industry	
15%	All Other Retail Trade
4%	Food & Beverage Stores
2%	Department 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 WIA Youth participants who had left their program in 2009-10. The Participant Satisfaction Survey provided data on employment and documented how satisfied participants were with the training. The survey was conducted by telephone and was completed by 309 participants.

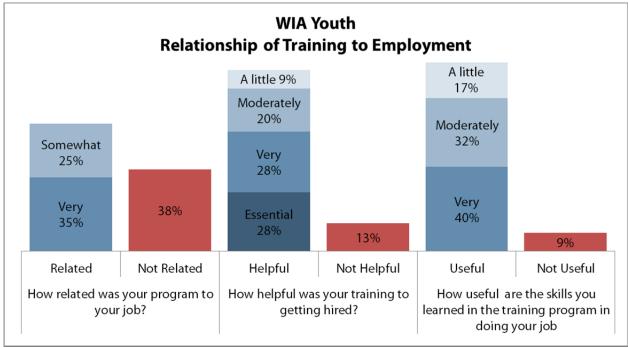
To measure the extent to which a participant's education program and training related to employment, we asked participants three questions:

- 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 participants employed six to nine months after leaving a program, 35 percent said their training was "very related" to their job. A further 25 percent reported the training was "somewhat related" to their job. In 2008, a lower percentage of employed participants reported their training was "very related" to their job (27 percent), while a higher percentage indicated the training was "somewhat related" (35 percent).



Source: Workforce Board's Participant Satisfaction Survey 2011.

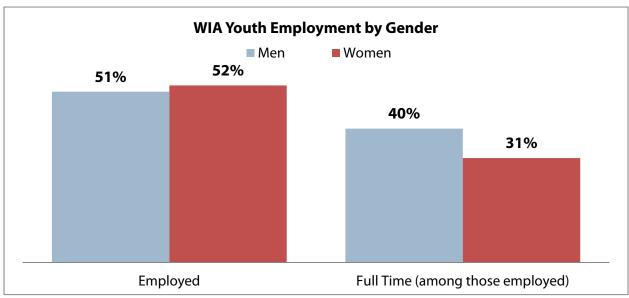
Participants interviewed in 2011 also indicated the training was helpful to them in getting their job. Of those participants, 28 percent indicated their training was an "essential requirement," another 28 percent indicated it was "very important," and 20 percent reported it was "moderately important." Nine percent said it was "a little helpful." Only 13 percent indicated their training was "not important at all" to getting their job.

Most participants said the skills they learned in their training program were useful in doing their job. Some 40 percent of participants indicated the skills were "very useful," 32 percent said "moderately useful," and 17 percent "a little useful." Only 9 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 6 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 outcomes by gender, race/ethnicity, and disability status were less likely to be significant for WIA youth participants than for participants in other programs. Women were just as likely as men to be employed in the third quarter after program exit (52 percent compared to 51 percent). However, women were less likely to work full time than men (31 percent versus 40 percent). Of those employed, women had median hourly wages (\$10.10) that were 98 percent of men's wages (\$10.26), and median annualized earnings that were 84 percent of males (\$11,333 compared to \$13,413).



Source: Matches with Employment Security Department data and WIASRD.

Race and Ethnicity Play a Role

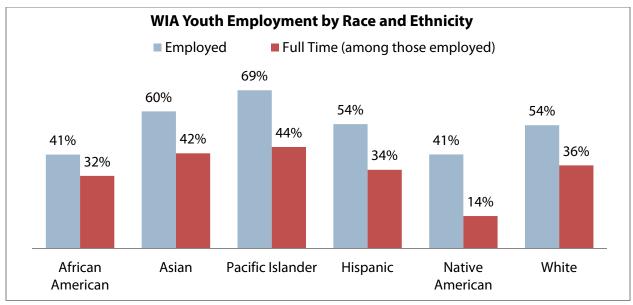
Pacific Islanders had the highest employment rate (69 percent) among different race/ethnic groups. Asians followed with an employment rate of 60 percent, followed by Hispancs and whites (54 percent), and Asians and African Americans (41 percent).

Among those working, Pacific Islanders had the highest rate of full-time employment (44 percent), followed by Asians (42 percent) and whites (36 percent), Hispanics (34 percent), African Americans (32 percent) and Native Americans (14 percent).

Hispanics had the highest median hourly wage at \$10.29, followed by whites at \$10.17, Asians at \$10.09, and Pacific Islanders at \$10.03, and African Americans at \$9.69. Native Americans had the lowest median hourly wage at \$9.28. There was more variation in the median annual earnings than there was with hourly wages. Asians earned the most, with median annual earnings of \$13,807, followed by Hispanics (\$12,818), whites (\$12,111), African Americans (\$10,020), Native Americans (\$9,239), and Pacific Islanders (\$8,922).

¹² These employment and earnings group comparisons were based on data from youth who were not in high school at exit.

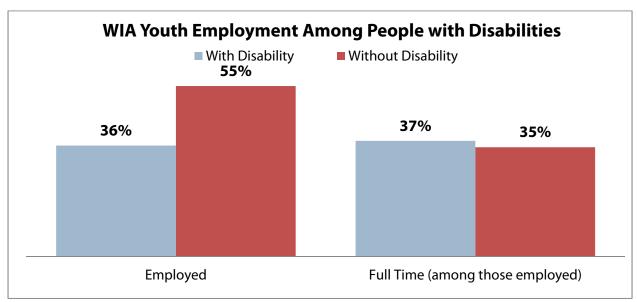




Source: Matches with Employment Security Department data and WIASRD.

Disability Impacts Employment and Earnings

Youth with disabilities had lower rates of employment than those without disabilities (36 percent versus 55 percent). However, youth with disabilities had similar rates of full-time employment (37 percent versus 35 percent). Disabled youth had median hourly wages 98 percent of those without a disability (\$10.00 versus \$10.16) and median annual earnings that were 95 percent of youth without disabilities (\$11,591 versus \$12,139).



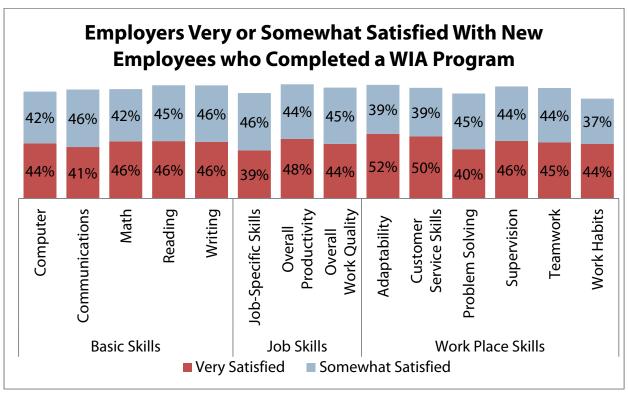
Source: Matches with Employment Security Department data and WIASRD.

Were Employers Satisfied with the Preparation Workers Received?

The Workforce Board's Employer Survey, administered during 2012, asked firms to evaluate new employees who had recently completed a WIA program. All three WIA Title I programs (Adult, Dislocated Worker, and Youth) were grouped together because there are relatively few participants in each category and employers would find it difficult to distinguish one from another. This section presents findings on employer satisfaction with new employees who completed *any type* of WIA program. Some 89 percent of employers said they were either "somewhat satisfied" or "very satisfied" with the overall work quality of these new employees.

Employer satisfaction is broken down into three categories: Basic Skills, Job Skills and Work Place Skills. Basic skills refer to reading, writing, math, communication and computer skills. Job skills refer to skills specific to the job, as well as overall work quality and productivity. Work place skills refer to the skills necessary to get along in the workplace such as the ability to accept supervision, the ability to adapt to changes in duties and responsibilities, teamwork, customer service, problem solving or critical thinking skills, and having positive work habits and attitudes.

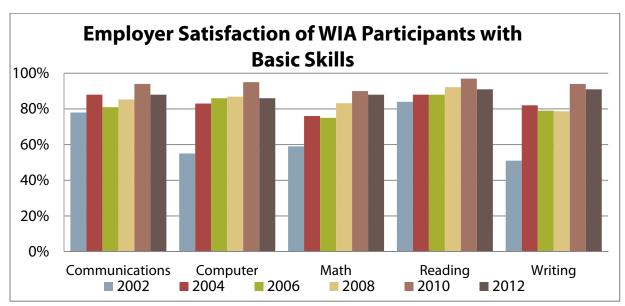
In 2012, employers reported highest overall satisfaction in the basic skills category with reading, and writing. For job skills, their highest overall satisfaction was with overall productivity. Among work place skills, employers were most satisfied with WIA participants' adaptability.



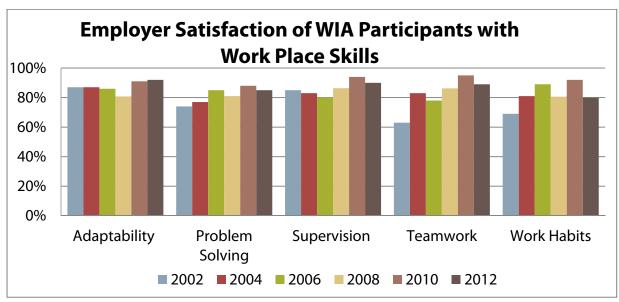
Source: Workforce Board Employer Survey conducted in 2012.



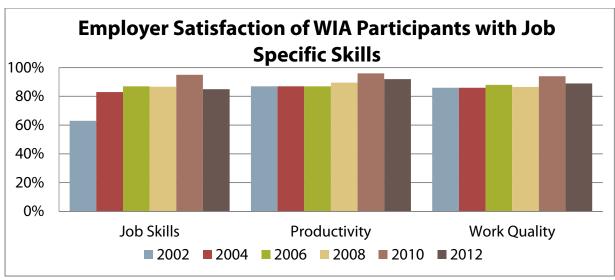
Overall, the levels of employer satisfaction reported in the Workforce Board's 2012 Employer Survey were lower than on the previous survey, conducted in 2010. The following three charts show the trends in satisfaction of employers with new employees who recently completed a WIA program.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.



Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

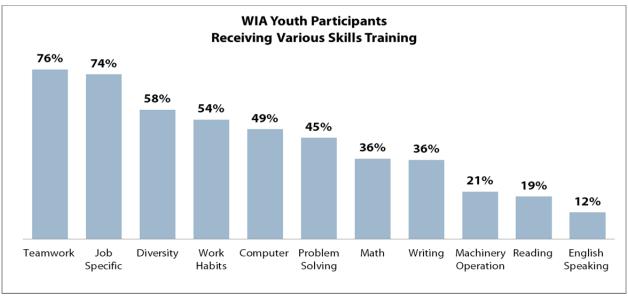


Source: Workforce Board's biennial Employer Surveys from 2002 through 2012.

Participant Survey

Based on Participant Survey results, most WIA Youth participants entered the program for employment-related reasons: 85 percent enrolled to get work experience and 84 percent to learn skills for a new job. Some 82 percent also enrolled for personal improvement.

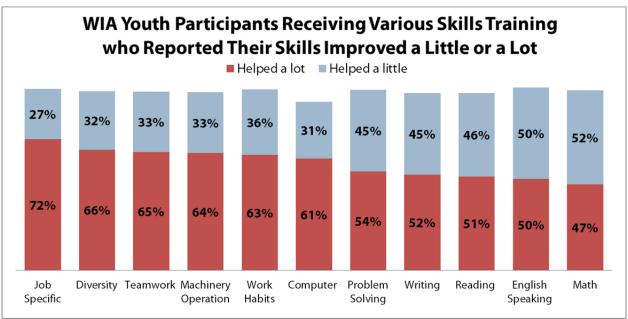
The majority of WIA Youth participants reported they received some type of training (60 percent). As in the previous study, the two most common types of training received were teamwork (76 percent among those who received training) and job-specific skills (74 percent among those who received training). This is an increase from the previous Participant Survey, when only 50 percent received teamwork training, and only 45 percent in job specific skills. Similar to the previous survey, fewer participants received training in basic skills like reading and English speaking.



Source: Workforce Board's Participant Satisfaction Survey 2011.

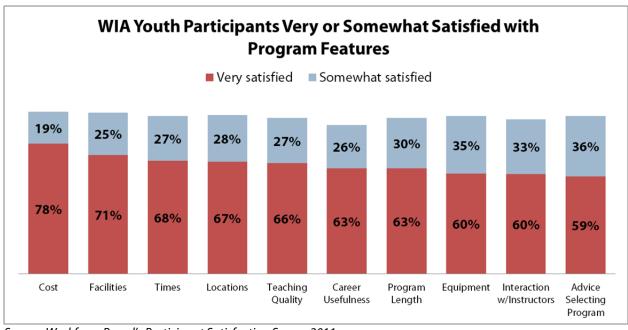


As in the past, nearly all WIA Youth participants reported their skills improved as a result of training. Higher percentages reported "a lot" of improvement in job-specific skills than did so in basic skills. The percentage of WIA Youth participants who reported that the diversity training helped "a lot" fell 10 percentage points. However, the percentage that reported it helped "a little" increased 11 percentage points. In a similar fashion, the percentage of participants who said job-specific skills training helped "a lot" increased 7 percentage points, but those reporting it helped "a little" declined by the same percentage. Another increase in training that helped "a lot" was computer skills, which rose 17 percentage points from 44 percent in 2008 to 61 percent in 2011.



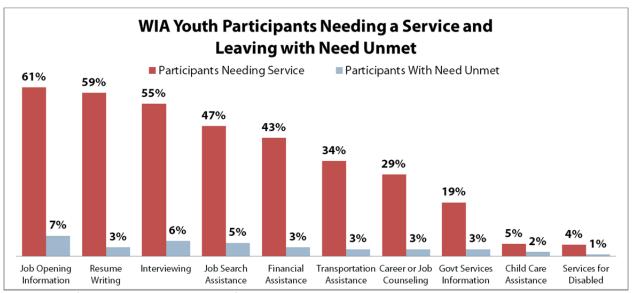
Source: Workforce Board's Participant Satisfaction Survey 2011.

Survey results revealed participants were satisfied with the training and support services they received as part of their WIA Youth program. Some 93 percent of the participants surveyed said they had met their educational objectives in the program, about the same as in 2008. Overall satisfaction with the program was also higher than reported in 2008 (96 percent vs. 93 percent). When asked about specific program features, satisfaction was highest with program facilities and cost, followed by times, location, equipment and advice selecting the program. Satisfaction was lower this year with career usefulness.



Source: Workforce Board's Participant Satisfaction Survey 2011.

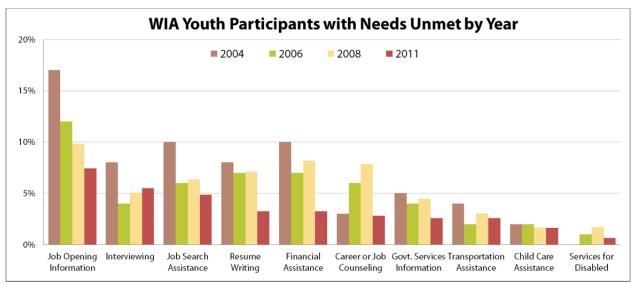
Most of the participants who needed support services while enrolled received them. As in previous studies, participants said the services most frequently needed were information on job openings, assistance with interviewing, and job search assistance. Most youth had their needs met in these areas. The greatest unmet need¹³ remains job opening information (10 percent in 2008 vs. 7 percent in 2011).



Source: Workforce Board's Participant Satisfaction Survey 2011.

¹³ 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.

The percentage of WIA Youth participants who left their program with an unmet need has declined since 2004. The largest declines since the 2008 Participant Survey were in financial assistance and career or job counseling. The percentage of participants indicating an unmet need dropped from 8 percent to 3 percent in each of these categories.



Source: Workforce Board's Participant Satisfaction Surveys 2004-11.

Participants report high levels of satisfaction with 93 percent saying they met their educational objectives and few leaving with unmet needs for support services. After participation, 62 percent were either in higher education, were working, or both, and among those employed virtually all said their program was either helpful in getting their job or related to their job.

Net Impact - Did the Program Make a Difference in Participant Success?

Every four years the Workforce Board conducts net impact and cost-benefit analyses 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 WIA Title I-B Youth program has positive net impacts on employment, hours worked and earnings. Participation increases lifetime earnings.

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 studies program participants to see what results they achieved and compared these results with a control group. Individuals who participated in a WIA Youth 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 WIA Youth 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

In the next table, the WIA Youth participant employment rate in the short-term was 8 percentage points higher than the rate of those in the comparison group. WIA participants who received training achieved an employment rate that was 13.1 percentage points higher than their comparison group. Training included occupational skills training, skill upgrading and retraining, on-the-job training, and Adult Basic Education when delivered in combination with career and technical education.

Similarly, the average annualized earnings of WIA participants who found jobs is higher (by the amounts listed below) than those non-participants who were employed.

MIA V 4h	All WIA Youth Participants			Received Training		
WIA Youth	Short-term^	hort-term^ Long-term^		Short Term^	Long-term^	
Net Employment Impact*	8 percentage points	4.3 percentage points		13.1 percentage points	4.5 percentage points	
Net Hourly Wage Impact**	No significant positive impact	No significant positive impact		No significant positive impact	\$1.17	
Net Hours Employed per Quarter Impact	46.5	30.8		52.2	50.5	
Net Annualized Earnings Impact**	\$1,701	\$2,032		\$3,317	\$4,630	

 $^{^{\}wedge}$ Short-term is three quarters after program exit; Long-term is average across three 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 WIA Youth participants who got jobs and those in the control group who were employed.

Benefits and Costs

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. Program costs include both direct costs and support payments borne by the state and the foregone earnings borne by program participants.

Benefits and costs are calculated for both the observed period of time and 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. The benefits and costs presented here are based on impacts estimated for youth participants 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 Net Benefits and Costs per Participant in WIA Youth Programs

Don of the out	First 2.5 years		Lifetime (u	Sum of Costs	
Benefit/Cost	Participant	Public	Participant	Public	and Benefits
Benefits					
Earnings	\$5,101	\$0	\$37,751	\$0	
Fringe Benefits	\$1,275	\$0	\$9,438	\$0	
Taxes	-\$663	\$663	-\$4,911	\$4,911	
Transfers					
UI	\$167	-\$167	\$1,583	-\$1,583	
Costs					
Foregone net earnings	-\$1,301	-\$150	-\$1,301	-\$150	
Program costs	\$0	-\$7,075	\$0	-\$7,075	
Benefits	\$5,879	\$496	\$43,861	\$3,329	
Costs	-\$1,301	-\$7,226	-\$1,301	-\$7,226	
Total (Net)	\$4,578	-\$6,729	\$42,561	-\$3,897	\$38,664

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

For each WIA Youth participant, the public (taxpayer) program cost is about \$7,226 over the length of enrollment, and the student cost is \$1,301 in foregone earnings while training. During the first two and one-half years after leaving the program, participation increases the average youth participant's earnings by \$5,101. During the course of working life to age 65, the average youth participant will gain about \$36,451 in net earnings (earnings minus foregone earnings) and about \$9,438 in employee benefits. These are net gains compared to the earnings of similar individuals who did not participate in a program. Including program

costs and the net impacts on taxes and unemployment insurance benefits, the total net benefit per participant is \$42,561.

Projected participant benefits to age 65 outweigh public costs for the WIA Youth program by a ratio of \$6 to \$1, or \$42,561 to \$7,075.

From the time of leaving the program to age 65, the public is expected to gain about \$4,911 per youth participant in net additional Social Security, Medicare, federal income, and state sales taxes. However, the public is expected to spend about \$1,583 per youth participant in Unemployment Insurance benefits. The estimated lifetime net cost to taxpayers is \$3,897 per participant. Projected taxpayer net benefits to age 65 are less than public costs invested in WIA Youth services by a ratio of \$0.47 to \$1 or \$3,329 to \$7,075.

Summary and Areas for Improvement

The WIA Youth program serves young people with substantial barriers to success in school and employment. This affects the program's outcomes. After participation, 33 percent still did not possess a high school diploma or GED and were not enrolled in school. The median earnings of those working and not enrolled in education was \$12,109.

These results may seem a bit disappointing, but they should be viewed in the context of the population served. Comparing the results to demographically similar individuals who did not participate in a workforce development program, the study found a positive net impact of 4.3 percentage points on their rate of employment and a \$2,032 net impact on annual earnings. Moreover, the net impact on annual earnings for those who received training was \$4,630—a very strong result.

The Workforce Development Councils indicate they will continue to work with school districts and community partners on re-engagement, retention and completion strategies for out-of-school young adults; consortia-based service delivery approaches with multiple youth agencies; and strong connections with school staff to provide support services and address barriers to student completion.





Workforce Training and Education Coordinating Board

2014 Workforce Training Results

WorkFirst

Program Details

Washington's WorkFirst program began in 1997 to help low-income families achieve self-sufficiency. The program provides job search assistance, support services, basic skills and vocational education to help parents get a job, keep a job, and move up their career ladder. WorkFirst is unique among workforce development programs in its sole focus on families receiving cash assistance, or Temporary Assistance to Needy Families (TANF).¹ It is an important population in terms of state workforce development and overlaps partially with the population served by several of the other workforce development programs in this study. It

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.

should also be noted that the WorkFirst population is diverse, especially with respect to job readiness and employability, as it includes parents who face barriers such as language, domestic violence, mental and physical health problems, chemical dependency, and long-term disabilities.

Participant Profile

For this 2014 report, researchers studied the results of 23,530 participants who took part in one or more WorkFirst employment and training related services during the most recent reporting year. All participants received Temporary Assistance for Needy Families (TANF) payments during participation. Participating in WorkFirst employment and training services did not necessarily mean completion of TANF.

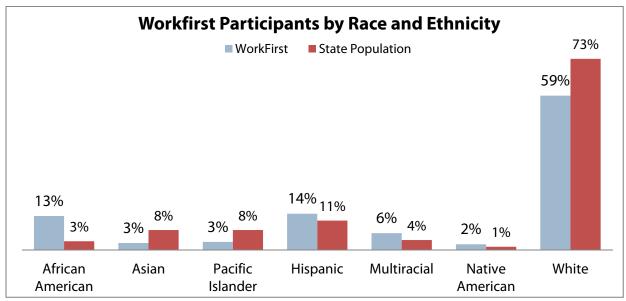
² The 2014 Workforce Training Results reports are based on data observed as recently as 2012-2013 for individuals exiting programs during 2011-12. For WorkFirst this includes those in services between July 1, 2011 and June 30, 2012.



¹ The TANF program serves families, where parents receives a grant for their needs as well as their children, and is subject to federal participation requirements.

WorkFirst participants who exited services were racially and ethnically diverse with Hispanics, African Americans, multiracial residents, and Native Americans represented at a significantly higher percentage than their portion of the state's general population.³

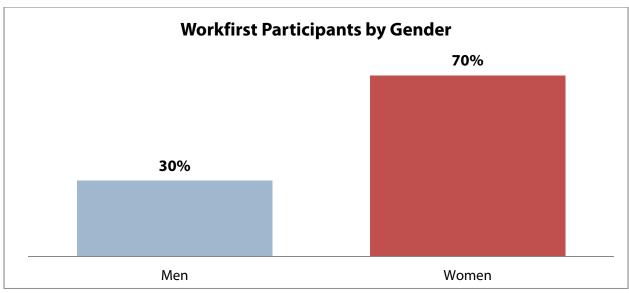
Some 59 percent of participants were white, 13 percent African American, 14 percent Hispanic, 3 percent Asian, 3 percent Pacific Islander, and 2 percent Native American.



Source: Department of Social and Health Services, Administrative Records and 2011 U.S. Census Data from the American Community Survey.

Some 70 percent of participants were women, 8 percentage points less than last year.

³ 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 are Native American; 7 percent are Asian; 1 percent are Pacific Islander; 4 percent are multiracial; and 12 percent are Hispanic.



Source: Department of Social and Health Services, Administrative Records.

Education Level

WorkFirst participants entered the program with the following education levels:

- 29 percent had not completed high school.
- 53 percent had a high school diploma or GED but no post-high school education.
- 15 percent had attended one to three years of postsecondary education.
- 3 percent had completed four or more years of postsecondary education.

The median age of participants when leaving the program was 29 years, with one quarter over age 37 and another quarter of participants under age 24.

Tracking WorkFirst 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 several core questions, including:

- Did participants get the skills they needed?
- Did participants get a job and how much were they paid?

For WorkFirst, these questions are the sole focus of this Workforce Training Results report. Additional questions asked of other workforce programs are not addressed. Those questions include: Were employers satisfied with the preparation workers received; has the program made a difference in the participant's success; and did participants and the public receive a



return on their investment. WorkFirst was not included in the Workforce Board's 2012 Employer Survey and was not included in a net impact study or cost-benefit analysis.

Did Participants Get the Skills they Needed?

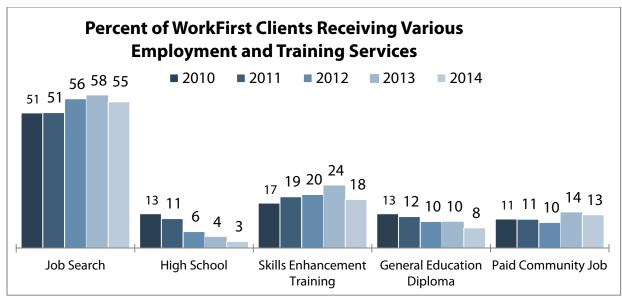
This report focuses exclusively on participants who participated in one or more of the following employment and training components.

- Community Jobs (subsidized employment)
- Job Search
- Customized Job Skills Training
- Basic Education
- English as a Second Language
- General Education Diploma
- High School
- High Wage / High Demand
- Skills Enhancement Training
- On-the-Job Training
- VE Vocational Education
- VU Vocational Education Unapproved
- Work Experience
- Structured Community Service

It should be noted that unlike participants of other workforce development programs, WorkFirst parents can be sanctioned (have their grant reduced) for not complying with employment and training activity requirements (typically 32-40 hours of activities per week, which can include full- or part-time employment).

Among the employment and training components provided to WorkFirst participants, job search was used most frequently (55 percent); this was a 3 percentage point decrease in the participant use of job search assistance over the last year. The percentage of WorkFirst participants attending high school has decreased each year since 2010; going from 13 percent to 3 percent. Use of Skills Enhancement Training also decreased this year, dropping 6 percentage points from 24 percent on the 2013 report, to 18 percent on the 2014 report.





Source: State Board for Community and Technical Colleges, Administrative Records

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, Idaho, Oregon, and federal wage records for 2012-13.⁴ This study looks at employment and earnings three calendar quarters after the participant left a WorkFirst program. The following table displays the employment and earnings of participants who left the program during the most recent reporting year.

According to state records, 53 percent of WorkFirst participants were employed. Of those who were working, 44 percent were employed full time. The median hourly wage of those working was \$10.92, with median annualized earnings of \$15,479.5 Employment rates and earnings are typically low for this population compared to other workforce training programs the Workforce Board assesses, and this year earnings were somewhat higher than prior program years.

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.



⁴ These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance (UI) 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).

Employment and Earnings for WorkFirst Participants, 2014

Performance Measure	Results
Employment Rate*	53%
Full Time Employment**	44%
Median Quarterly Hours	356 hours
Median Hourly Wage***	\$10.92
Median Annualized Earnings***	\$15,479

^{*} 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.

Earnings of WorkFirst Participants

In order 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

WorkFirst participants were able to support a median of 2 people at the poverty level—meaning they could support themselves and another person. They did not have enough earnings to support themselves, let alone others, at 200 percent of the poverty level (.7 people).

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.



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

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

Number of People Supported at Poverty Level by Participant Income*

Performance Measure	2010	2011	2012	2013	2014
Number of people supported at poverty level	1.5 people	1.5 people	1.4 people	1.3 people	2.0 people
Number of people supported at 200 percent poverty	0.6 people	0.6 people	0.6 people	0.5 people	0.7 people

^{*}There are fewer reporting years for WorkFirst than other programs included in this study, as data collection on this program started more recently.

The table below shows employment and earnings over five study periods.

Employment and Earnings Trends for WorkFirst Participants

Performance Measure	2010	2011	2012	2013	2014
Employment Rate*	39%	37%	38%	40%	53%
Full Time Employment**	37%	37%	37%	37%	44%
Median Quarterly Hours	305	304	304	303	356
Median Hourly Wage***	\$11.55	\$10.90	\$10.58	\$10.46	\$10.92
Median Annualized Earnings***	\$13,458	\$13,405	\$12,953	\$12,573	\$15,479

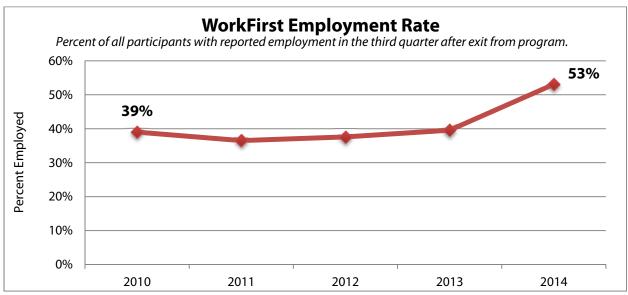
^{*}These figures apply to those with employment reported to the state's Employment Security Department six to nine months after program exit and is not limited to those who completed a program. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.



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

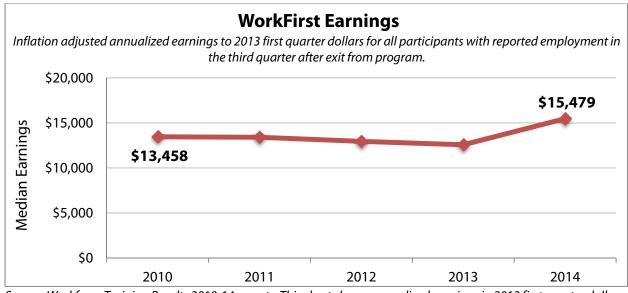
^{***}Earnings/wages expressed in first quarter 2013 dollars in order to account for inflation.

Since the last report in 2013, employment among WorkFirst participants has increased by 13 percentage points, to 53 percent on this year's report.



Source: Workforce Training Results 2010-14 reports. Rate does not include self-employment, employment outside the Northwest or military service and thus understates total employment by approximately 10 percent.

Earnings of WorkFirst participants declined on each report between 2010 and 2013. However, earnings increased significantly—nearly \$3,000—between the 2013 and 2014 reports.



Source: Workforce Training Results 2010-14 reports. This chart shows annualized earnings in 2013 first quarter dollars to account for inflation.

WorkFirst Employment by Industry

The majority of WorkFirst participants who were working were employed in the service sector (60.7 percent) or retail trade (16.1 percent). Looking more in depth at the service sector, participants were largely working in Accommodation and Food Services (15.5 percent), Administrative and Support and Waste Management (13.3 percent), and Health Care (11.5 percent).

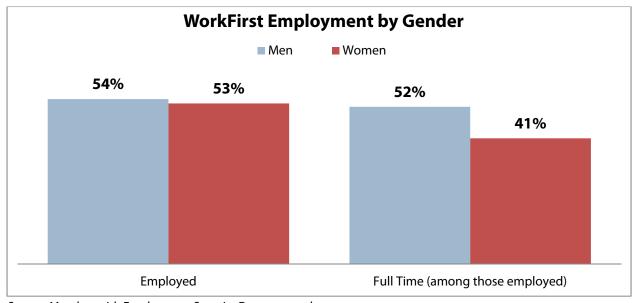
Industry Gr	Industry Group				
60.7%	Services				
16.1%	Retail Trades				
6.6%	Manufacturing				
3.6%	Construction				
3.2%	Financial Activities				
2.9%	Natural Resources and Mining				
2.5%	Wholesale Trade				
2.5%	Transportation and Warehousing and Utilities				
1.1%	Public Administration				
0.7%	Information				
Breakout o	Breakout of Services				
15.5%	Accommodation and Food Services				
12.20/	Administrative and Support and Waste Management and				
13.3%	Remediation Services				
11.5%	Health Care				
9.8%	Social Assistance				
3.7%	All Other Services				
2.5%	Professional, Scientific, and Technical Services				
2.4%	Education Services				
2.0%	Arts, Entertainment, and Recreation				
Breakout o	Breakout of Retail Trades				
5.0%	Department Stores and Warehouse Clubs				
3.0%	All Other Retail				
2.8%	Groceries, Supermarkets & Specialty Foods				
1.5%	Gas Stations/Convenience Stores				
1.5%	Clothing and Accessories Stores				
1.2%	Home furnishings, Garden, Hardware				
1.2%	Motor Vehicle and Accessories Sales				

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



Wages and Employment Results Vary by Population

Wage and employment results can vary by gender, race and ethnicity, and disability. Men were employed at a slightly higher rate than women (54 percent compared to 53 percent for women), and men were employed full time at a higher rate (52 percent compared to 41 percent for women). Women had an hourly wage that was 90 percent of men (\$10.59 versus \$11.79). Women's median annual earnings were 79 percent of men's (\$14,536 vs \$18,408).

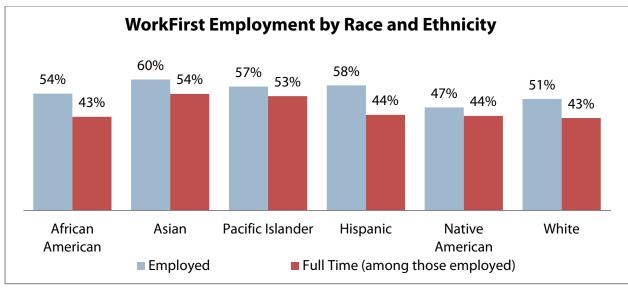


Source: Matches with Employment Security Department data.

Race/Ethnicity Plays Role

Employment rates were highest among Asians (60 percent), followed by Hispanics (58 percent), Pacific Islanders (57 percent), African Americans (54 percent), whites (51 percent), and Native Americans (47 percent). However, when looking at full-time work among those employed, Asians and Pacific Islanders had the highest rate of full-time employment (54 and 53 percent respectively); African Americans, whites, Native Americans, and Hispanics had 10 percentage points fewer participants with full time employment.

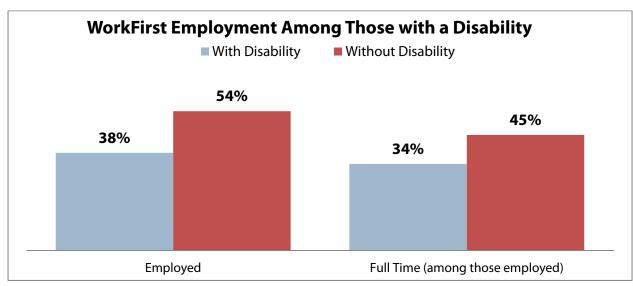
For those employed, median hourly wages did not vary much by race and ethnicity. Whites and African Americans had the highest median hourly wage at \$11.01, followed closely by Native Americans at \$11.00. Pacific Islanders had median hourly wages of \$10.89, then Asians (\$10.66), and Hispanics (\$10.52). In terms of annual earnings, Asians had the highest (\$17,309), followed by Pacific Islanders (\$16,953). Whites (\$15,247), Native Americans (\$15,127), Hispanics (\$15,078), and African Americans (\$14,979) had similar annual earnings.



Source: Matches with Employment Security Department data.

Disability Impacts Employment, Earnings

Earnings and employment outcomes also varied by disability status. Participant records suggest 6 percent of the WorkFirst participants included in this study had a disability. Participants with disabilities were less likely than those without disabilities to have employment reported to the state's Employment Security Department during the third quarter after exit (38 percent versus 54 percent) and were less likely to be employed full time (34 percent versus 45 percent). Among those working, the median hourly wage of those with a disability was 96 percent of those without a disability (\$10.54 versus \$10.94), but the median annual earnings of those reporting a disability was 79 percent of those not reporting a disability (\$12,260 versus \$15,607).



Source: Matches with Employment Security Department data.



Summary and Areas for Improvement

WorkFirst participants' employment and earnings increased significantly in the 2014 report over last year's report.

Much of the boost in earnings was tied to the increased hours WorkFirst participants worked. Median quarterly hours jumped from 303 to 356 for the three-month reporting period. This resulted in nearly \$3,000 more in median annualized earnings (\$12,573 to \$15,479).

The employment rate among WorkFirst participants also rose by almost a third -- from 40 percent in the 2013 report to 53 percent in this year's report. The percent of participants working full-time also increased – from 37 percent to 44 percent. Several factors may have influenced the increase in employment and earnings levels among WorkFirst participants. The state's improving economy may be a key factor, as the rates here are similar to pre-Great Recession levels (a 53 percent employment rate and 41 percent full time employment rate for WorkFirst participants were reported in 2005-06).

Recent policy and service delivery changes to Washington's Temporary Assistance for Needy Families (TANF) program may have also spurred higher employment and earnings rates. For example, TANF payment standards were reduced by 15% effective February 1, 2011. The state's annual increase in the minimum wage and lower cash benefits may have acted as an incentive for WorkFirst families to work more hours or move to higher paying jobs. In addition, as part of the state's redesign of the program that started in 2011, the Employment Security Department implemented a new approach to employment services for WorkFirst participants, including post TANF employment and job retention services and supports. The new ESD Career Scope model was piloted in 2011 and implemented statewide in 2012.

