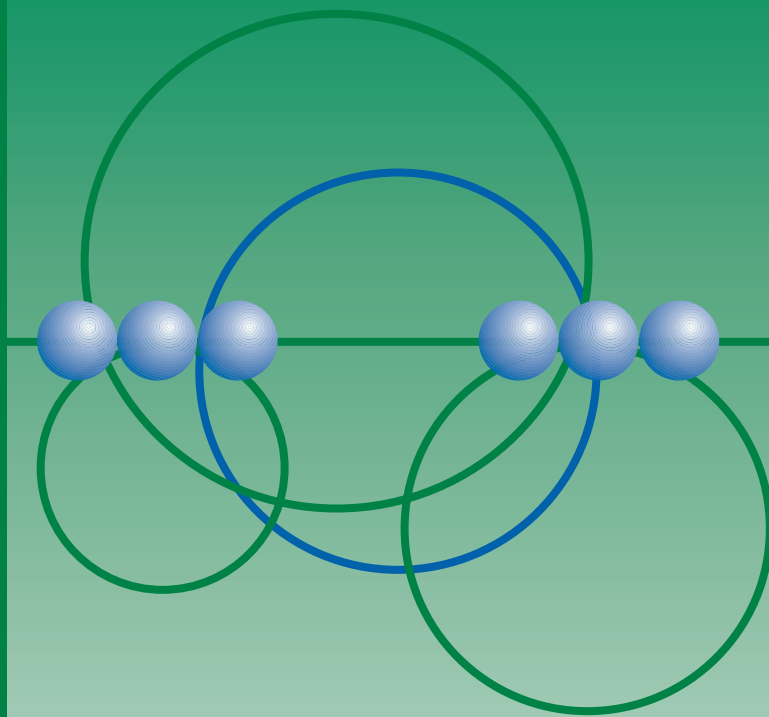


WORKFORCE *training results* **2004**



EXECUTIVE SUMMARY

**WASHINGTON STATE
Workforce Training and
Education Coordinating Board**

WASHINGTON STATE
Workforce Training and Education Coordinating Board

Our Vision

Washington’s Workforce Training and Education Coordinating Board is an active and effective partnership of labor, business, and government leaders guiding the best workforce development system in the world.

Our Mission

We shape strategies to create and sustain a high-skill, high-wage economy.

To fulfill this Mission, the Board will:

- Advise the Governor, Legislature, and other policymakers on workforce development policy and innovative practice.
- Promote a seamless workforce development system that anticipates and meets the lifelong learning and employment needs of our current and future workforce.
- Advocate for the training and education needed for success in the 75–80 percent of jobs that do not require a baccalaureate degree
- Ensure quality and accountability by evaluating results, and supporting high standards and continuous improvement.

Board Members

David Harrison
Chair

Rick Bender
Representing Labor

Terry Bergeson
*Washington State Superintendent of
Public Instruction*

Don Brunell
Representing Business

Earl Hale
*Executive Director, Washington State Board
for Community and Technical Colleges*

Julianne Hanner
Representing Business

Tony Lee
Representing Target Populations

Asbury Lockett
Representing Business

John McGinnis
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Sylvia Mundy
*Commissioner, Washington State
Employment Security Department*

Beth Thew
Representing Labor

Participating Officials

Dennis Braddock
*Secretary, Washington
State Department of
Social and Health Services*

Vacant
Representing Local Elected Officials

Ellen O’Brien Saunders
Executive Director

The Workforce Training and Education Coordinating Board does not discriminate or deny services on the basis of race, color, national origin, sex, age, religion, or disability.

This publication is available in alternative format upon request.

WORKFORCE TRAINING RESULTS 2004

EXECUTIVE SUMMARY



**WASHINGTON STATE
Workforce Training and Education Coordinating Board**

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Workforce Training Results Executive Summary 2004

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Does your organization provide training services to clients? Yes ___ No ___

Would you like to be contacted about future WTECB initiatives in this field? Yes ___ No ___

If we have any questions about what you have written here, may we contact you? Yes ___ No ___
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EXECUTIVE SUMMARY

Introduction

This is the fifth biennial outcome evaluation of Washington State's workforce development system. It analyzes the results of eleven of the state's largest workforce programs. These programs account for over 90 percent of public expenditures in the workforce development system.

The purpose of this evaluation is to report the results of workforce development and to recommend areas for improvement. The report discusses program results in terms of the seven desired outcomes for the state workforce development system established by the Workforce Training and Education Coordinating Board (Workforce Board). These desired outcomes are not static targets, but are conditions that should be increasingly true for all people.

Key Findings

During the follow-up period used in this evaluation the state's unemployment rate was between 7 and 8 percent. For the 2002 evaluation, the state's unemployment rate was about 5 percent. This economic downturn contributed to a decline in employment and earnings results for many programs.

Participant satisfaction remains high, although satisfaction declined slightly in some programs from its levels of two years ago.

Participants in workforce development programs generally reflect the diversity of the state population, or are more diverse.

As in previous evaluations, the wage outcomes for women continue to be substantially lower than for men.

Also, as in previous evaluations, a substantial number of participants reported that their need for information on job openings was not met.

Seven Desired Outcomes for the State Workforce Development System

Competencies: Washington's workforce possesses the skills and abilities required in the workplace.

Employment: Washington's workforce finds employment opportunities.

Earnings: Washington's workforce achieves a family-wage standard of living from earned income.

Productivity: Washington's workforce is productive.

Reduced Poverty: Washington's workforce lives above poverty.

Customer Satisfaction: Workforce development participants and their employers are satisfied with workforce development services and results.

Return on Investment: Workforce development programs provide returns that exceed program costs.

Finally, there were some major programmatic changes since the last evaluation that should be noted. The Workforce Investment Act (WIA) emphasizes services other than occupational skills training, and fewer disadvantaged adults have received such training than under the Job Training Partnership Act (JTPA). Also, due to budget constraints, the Division of Vocational Rehabilitation (DVR) entered an Order of Selection limiting service to individuals with the most severe disabilities.

The Programs

The programs included in this evaluation are grouped into three categories based on participant characteristics. Five programs serve adults, four serve adults with barriers to employment, and two serve youth.

Programs for Adults

Community and Technical College Job Preparatory Training: Training and education for a vocational associate of arts degree or a vocational certificate. This training does not include retraining of unemployed workers and classes taken by current workers to upgrade skills for their current jobs, nor does it include the other two mission areas of the colleges—academic transfer education and basic skills instruction.

Private Career Schools: Training provided by private businesses for students intending to complete vocational certificates or degrees. The schools are licensed by the Workforce Board or, if they grant a degree, by the Higher Education Coordinating Board.

Apprenticeship: Training that combines classroom instruction with paid on-the-job training under the supervision of a journey-level craft person or trade professional. Apprenticeships are governed by the Washington State Apprenticeship and Training Council and administered by the Department of Labor and Industries.

Worker Retraining at Community and Technical Colleges: Provides dislocated workers and the long-term unemployed with access to job retraining for a new career. About 5 percent of worker retraining participants receive their training at private career schools. This evaluation, however, is limited to the colleges.

WIA Title I-B Dislocated Worker Program: Federal employment and training program for dislocated workers. The Employment Security Department (ESD) 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. On July 1, 2000, WIA replaced JTPA.

Programs Serving Adults With Barriers to Employment

Adult Basic Skills Education (ABE/ESL): Literacy and math instruction for adults who are at a high school level or below. Includes courses in four categories: Adult Basic Education for adults whose skills are at or below the eighth grade level; English as a Second Language (ESL); GED Test Preparation; and High School Completion for adults who want to earn a high school diploma. Students receiving both basic skills instruction and job training are

included in the evaluation of the job preparatory training or worker retraining programs, and not the evaluation of basic skills instruction. Community and technical colleges and other organizations such as libraries and community-based organizations provide basic skills instruction.

WIA Title I-B Adult Program: Federal employment and training program for adults who experience significant barriers to employment. ESD 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.

DVR: DVR offers services to help eligible individuals with disabilities become employed. Eligibility requires that the individual have a physical, mental, or sensory impairment that constitutes or results in a substantial impediment to employment, and that they require DVR services to enter or retain employment.

Department of Services for the Blind (DSB): DSB provides vocational rehabilitation services, counseling, training, and assistive technology to help participants achieve successful employment outcomes. In order 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.

Programs Serving Youth

Secondary Career and Technical Education: Training and vocational education in high schools and vocational skills centers in agriculture, business, marketing, family and consumer sciences, technology, trade and industry, and health occupations.

WIA Title I-B Youth Program: The program prepares youth for academic and employment success. In order 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 educational program or to secure and hold employment. ESD 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 the councils with the Title I-B Youth Program.

We caution against making improper comparisons among these programs—the populations served, the types of services provided, and the lengths of training vary substantially from program to program.

Data

Findings are based on the following sources of data:

- Program records on over 96,600 individuals who left one of these programs during the 2001-02 program year. These records include information on all or most participants leaving these programs.

- Mail survey responses from 1,839 firms that hired new employees who had recently completed one of the programs.
- Telephone survey responses from approximately 8,000 participants who left one of these programs during 2001-02.¹
- For employment and earnings results, computer matches with Washington State ESD employment records and those of four other states (Idaho, Montana, Alaska, and Oregon), federal, and military personnel records. The data are incomplete, however, and employment rates among participants are underestimated. Such ESD records do not contain information on self-employment, and employment in states outside the Pacific Northwest is not included in this analysis.
- For postprogram enrollment in postsecondary education, computer matches with enrollment data from community and technical colleges and all public four-year institutions in the state. These data underestimate postprogram enrollment rates; private four-year colleges and out-of-state schools are not included in the record matches.

¹The sample sizes for the telephone survey vary by program. Samples are larger for programs that required a regional component to the analysis. As a result, the precision of reported statistics vary. For example, the 95 percent confidence interval for overall satisfaction with the program is about plus/minus 1 percentage point for community and technical college job preparatory training and plus/minus 5 percentage points for apprenticeship.

Note that, except for secondary career and technical education, the participant results presented in this report are for all participants, not just those who completed their program. Participants are defined as individuals who entered a program and demonstrated the intent to complete a sequence of program activities. The number of participants who leave their program before completion affects program results.

Summary of Findings

Participant Characteristics

The demographic characteristics of program participants are an important factor in determining program results. Programs serving participants with significant work experience and basic skills can be expected to have higher labor market outcomes than those serving participants with little work experience, low levels of literacy, and other barriers to employment.

Twenty-one percent of Washington residents, according to the 2000 Census, were people of color (i.e., non-White or Hispanic). The racial and ethnic composition of participants in six of the programs was more diverse than the state's general population (see Figure 1). The composition of the other five programs are roughly comparable to the general population in the state. Diversity was greatest in the ABE/ESL and WIA Youth programs.

Competency Gains

Desired Outcome: Washington State's workforce possesses the skills and abilities required in the workplace.

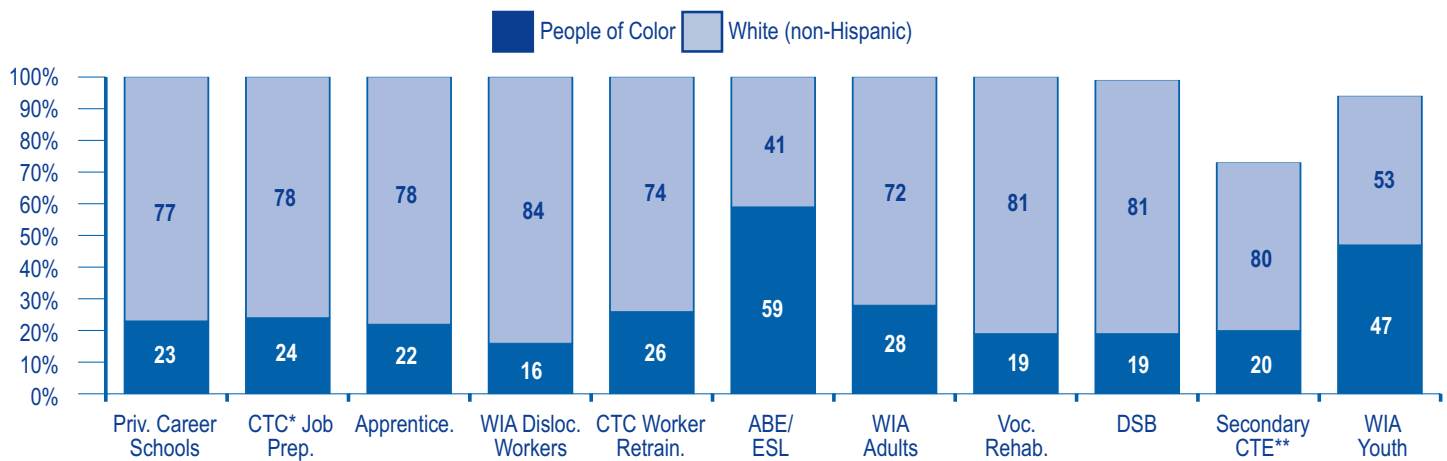
In four programs² all participants, by definition, received job-specific skills training. At the other extreme, none of the ABE/ESL students included in this study received vocational training.³ In the remaining six programs, survey results suggest that the proportion receiving job-specific skills training varied substantially (see Figure 2).

²These include Community and Technical College Job Preparatory Training, Private Career Schools, Apprenticeship, and Worker Retraining.

³This report is limited to adults who identified employment-related reasons for enrolling in ABE/ESL courses and who proceeded to take only basic skills courses. Individuals who took vocational courses in addition to basic skills are included in the analysis of Community and Technical College Job Preparatory Training.

FIGURE 1

Racial and Ethnic Composition of Program Participants in Percentages

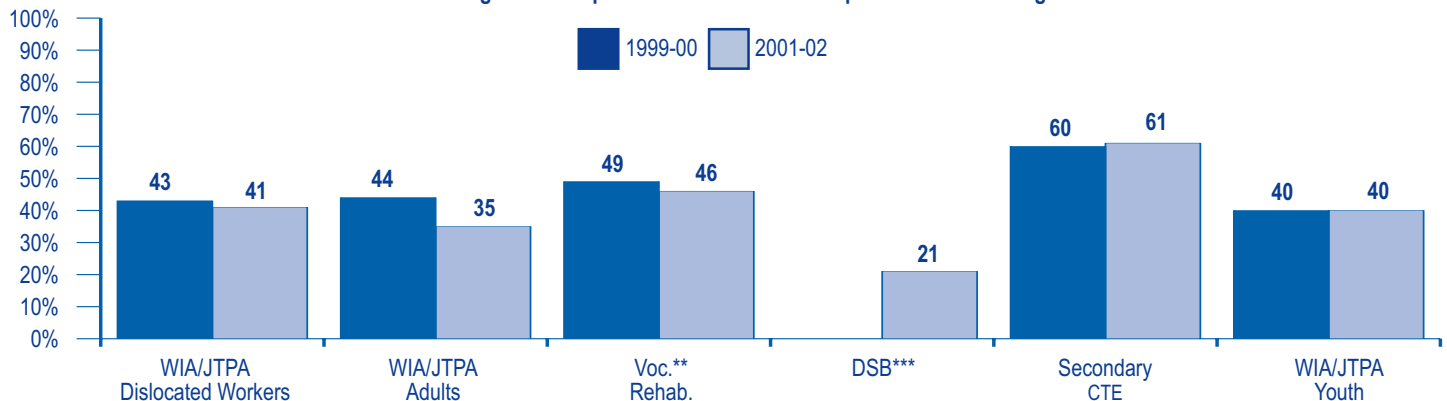


*Community and Technical Colleges (CTC)

**Secondary Career and Technical Education (CTE)

FIGURE 2

Percentage of Participants Who Received Job-Specific Skills Training*



* In some programs, such as CTC job preparation, all participants by definition receive job-specific skills training.

** Refers to receipt of job-specific skills training for new job; some also receive training to adapt previous skills to their disability.

*** First year measured for DSB.

Among those leaving programs in 2001-02, 46 percent of DVR clients and 21 percent of DSB clients said they received job-specific skills training for a new job. Note that many clients in these two programs also received training to adapt their previous job skills to their disabilities.⁴ Moreover, DVR and DSB offer other work-related services in addition to training; for example, some clients receive physical and mental restoration services, assistive technology, and communication services.

According to survey responses, 41 percent of WIA dislocated workers and 35 percent of WIA adults received job-specific skills training. (Administrative data suggest that more received training.)⁵ Figure 2 also includes information from survey responses for those leaving JTPA programs during 1999-00. The reported incidence of job-specific training for WIA dislocated workers and for youth are similar to those reported in 1999-00 for the JTPA, predecessor to WIA. Survey data suggest, however, that the percentage of adult

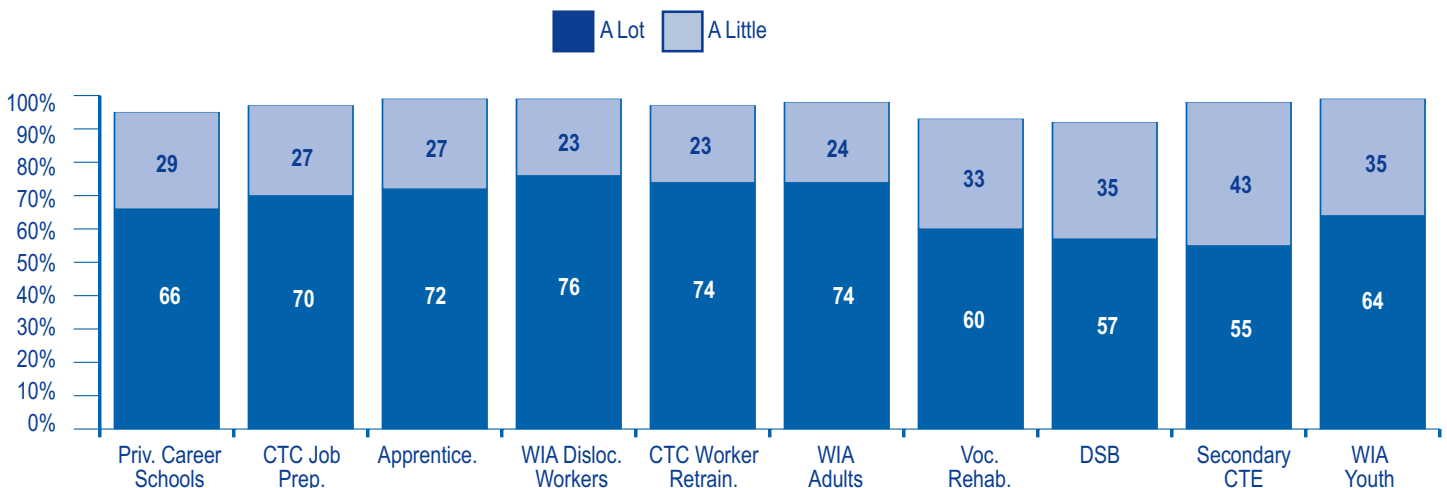
program participants receiving this training is lower under WIA. Under WIA, core services, such as skill assessment and job search assistance, are available to all adults. Intensive services and job-specific skills training are available for eligible adults unable to obtain jobs through core services alone.

Among program participants who received job-specific skills training, almost all said their job-specific skills improved, and in most cases, the participants said their skills improved a lot (see Figure 3).

⁴Among those leaving programs in 2001-02, 27 percent of DVR clients and 31 percent of DSB clients reported receiving training in how to adapt previous skills to a disability.

⁵According to administrative data, collected in the SKIES reporting system, 59 percent of dislocated workers and 46 percent of WIA adults received “occupational skills training.” Occupational skills training in the administrative records data could include a wide range of services—occupational skills training, programs that combine workplace training with related instruction, training programs operated by the private sector, skill upgrading and retraining, entrepreneurship training, job readiness training, and customized training.

FIGURE 3 Percentage of Participants Who Said Their Job-Specific Skills Improved a Little or a Lot (among those receiving training)

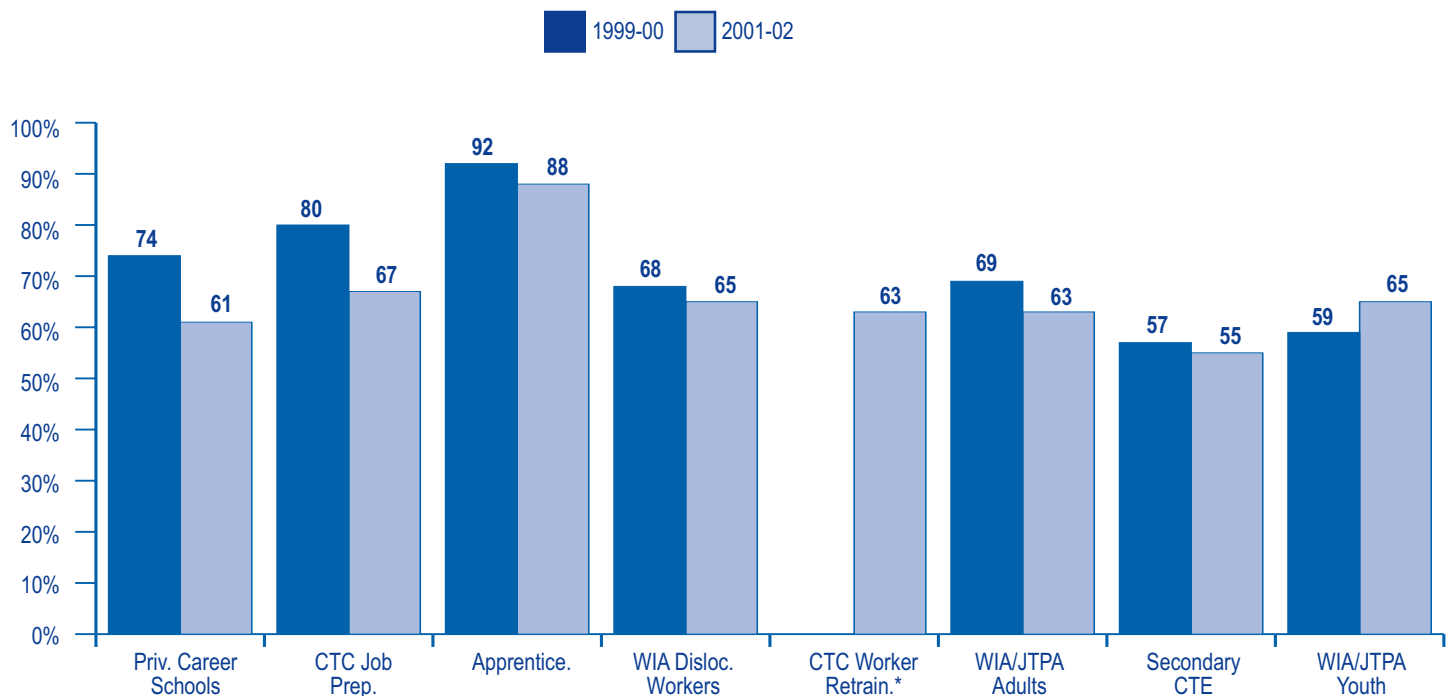


Another measure of whether training provided participants with the right skills is whether the former participants believed their training was related to their postprogram employment (see Figure 4). In all cases, a majority of program participants indicated their training was related to the job that they held nine months after leaving the program. In several programs, the percentages of former participants who said that their

training was related to their jobs decreased from the levels reported two years ago. This is especially true among private career school students, community and technical college job preparatory students, and WIA/JTPA adults. Economic conditions probably contributed to this decline. Participants leaving programs during 2001-02 faced a much weaker labor market than those leaving during 1999-00. The economic downturn may have made it more difficult to find employment in chosen fields, especially in occupations related to information technology (IT).

FIGURE 4

Training Related to Employment
 Percentage of Employed Former Participants Who Said Training Was Related to Job Held Nine Months After Leaving Program



*Estimate for 1999-00 not available.

Employment

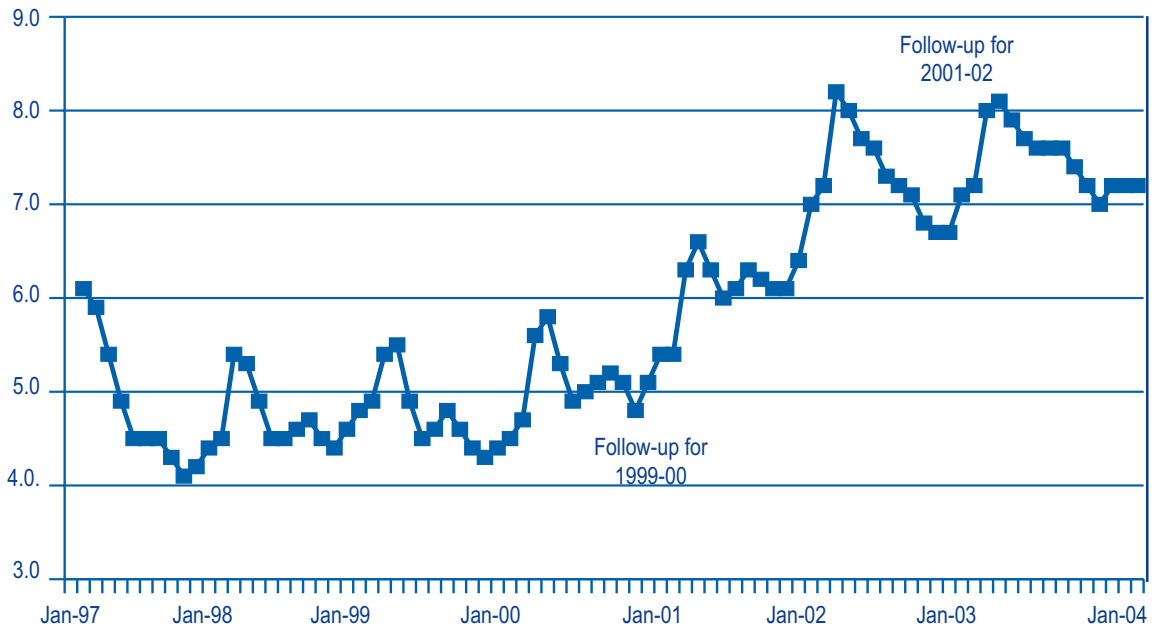
Desired Outcome: Washington's workforce finds employment opportunities.

We evaluated the labor market outcomes of program participants by examining their employment and earnings during the third quarter after leaving a program. Again, when considering outcomes over time, please note that those who left programs during 2001-02 encountered a much weaker labor market than those leaving two years

earlier. The unemployment rate was substantially higher (see Figure 5). In addition to the general weakening of the labor market, the downturn in the IT sector had a large impact on outcomes for several programs. Many participants in community and technical college job preparatory training, private career schools, and the Worker Retraining program received training in IT-related fields.

FIGURE 5

Unemployment Rate in Washington State (not seasonally adjusted)



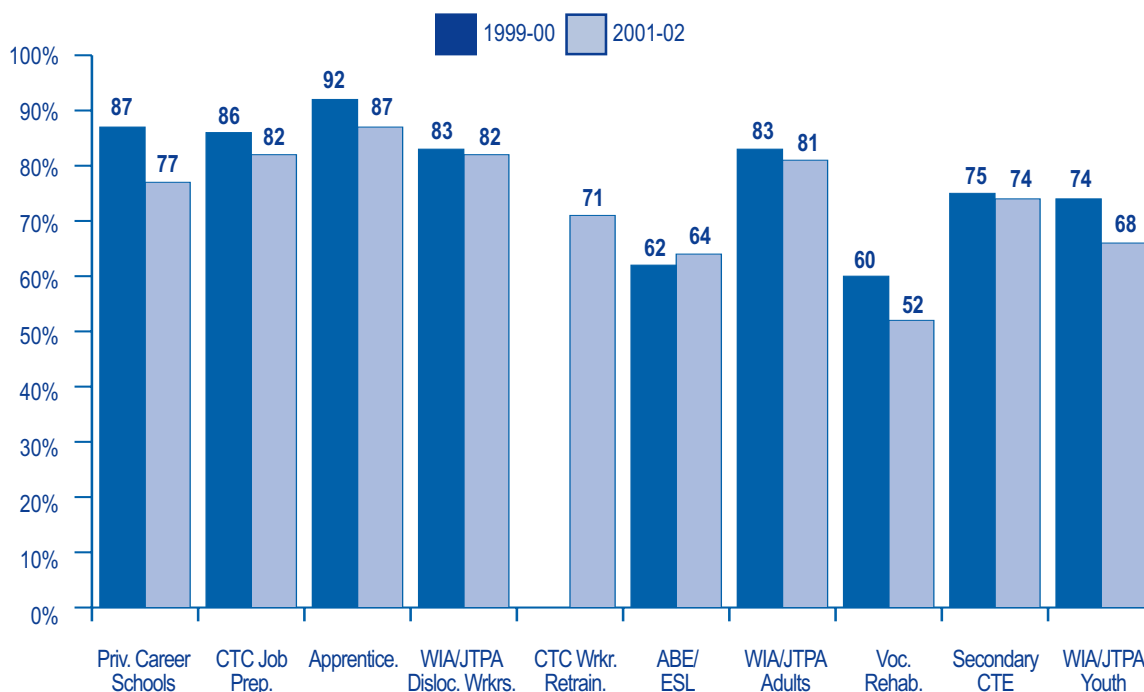
Most former program participants we surveyed reported having a job during the third quarter (six to nine months) after they left their program (see Figure 6). Employment rates vary across programs. They are highest for programs serving adults and, as expected, lower for programs serving youth.

We used ESD wage records to examine changes in employment rates between participants who left programs during the 1999-00 and 2001-02 program years.⁶ Employment rates in most programs declined due to the economic downturn. Programmatic changes also affected some outcomes.

DVR’s entering an Order of Selection contributed to the decline in reported employment among those clients. Since the end of 2000, due to insufficient staff and financial resources, federal regulations require that those with the most significant disabilities be served first. As a result, DVR clients leaving the program during 2001-02 tended to have more significant disabilities than did those in earlier cohorts.

⁶Employment rates based on matches are lower than those based on survey results. ESD records do not contain information on self-employment. The estimates also exclude employment in states that are not included in our matching process.

FIGURE 6
Percentage of Participants Self-Reporting Employment Six to Nine Months After Leaving Their Program



There were also significant changes in the WIA program for disadvantaged youth. WIA replaced JTPA on July 1, 2000; the results for 1999-00 in Figure 7 are for JTPA Title II-C. The characteristics of youth participants changed. Especially important is the greater enrollment of younger youth under WIA than was the case during the last year of JTPA. Younger youth are less likely to be employed than older youth.

Earnings

Desired Outcome: Washington's workforce achieves a family-wage standard of living from earned income.

Research has shown that postprogram earnings are very much affected by the characteristics of the participants who entered the program. Youth had the lowest postprogram hourly wages and quarterly earnings, and adults the highest (see Figure 8). Earnings and hourly wages were

FIGURE 7
Percentage of Participants With Employment Reported to ESD Six to Nine Months After Leaving Their Program

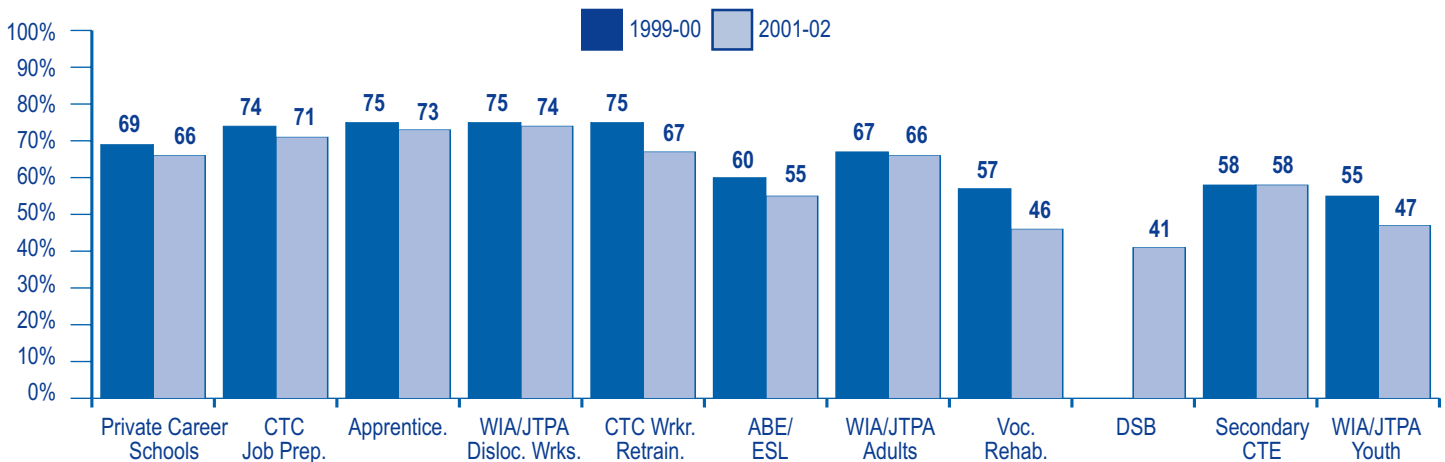


FIGURE 8
Median Hourly Wages and Annualized Earnings Six to Nine Months After Leaving the Program

		Hourly Wages of 2001-02 Participants	Annualized Earnings of 2001-02 Participants	Percentage Change From 1999-00* Hourly Wages	Percentage Change From 1999-00* Earnings
PROGRAMS FOR ADULTS	CTC Job Preparatory Training	\$12.50	\$21,436	-1%	-5%
	Private Career Schools	\$11.72	\$19,453	1%	-3%
	Apprenticeship	\$20.91	\$31,380	5%	-6%
	WIA Dislocated Workers	\$13.84	\$26,297	4%	6%
	CTC Worker Retraining	\$12.75	\$21,648	-5%	-13%
PROGRAMS FOR ADULTS WITH BARRIERS	ABE/ESL	\$9.20	\$15,104	-4%	-4%
	WIA Adults	\$10.35	\$16,937	3%	6%
	Vocational Rehabilitation	\$9.91	\$12,446	5%	-8%
	DSB	\$13.55	\$20,006	na	na
PROGRAMS FOR YOUTH	Secondary CTE	\$8.25	\$10,354	-3%	-2%
	WIA Youth**	\$7.97	\$8,213	na**	na**

*All wages and earnings are reported in 2003 Quarter One dollars.

**Wages and earnings for 2001-02 WIA Youth are for those not enrolled in high school. Comparable estimates are not available for 1999-00 JTPA Youth.

particularly high for individuals who participated in apprenticeship. In addition to the quality of the program, this finding reflects the length of the training and the labor market in their occupations and industries. In most programs, due to the weaker labor market, earnings were lower than reported two years ago.

For most programs, postprogram earnings and hourly wages were lower for women than for men who participated in the same program (see Figure 9). The especially large wage gap in apprenticeship is due to the concentration of women in relatively new apprenticeship programs that provide training outside the construction and machinist trades. Among those leaving apprenticeships during 2001-02, 44 percent of women (and virtually no men) left programs in cosmetology, early childhood education, and teaching/library

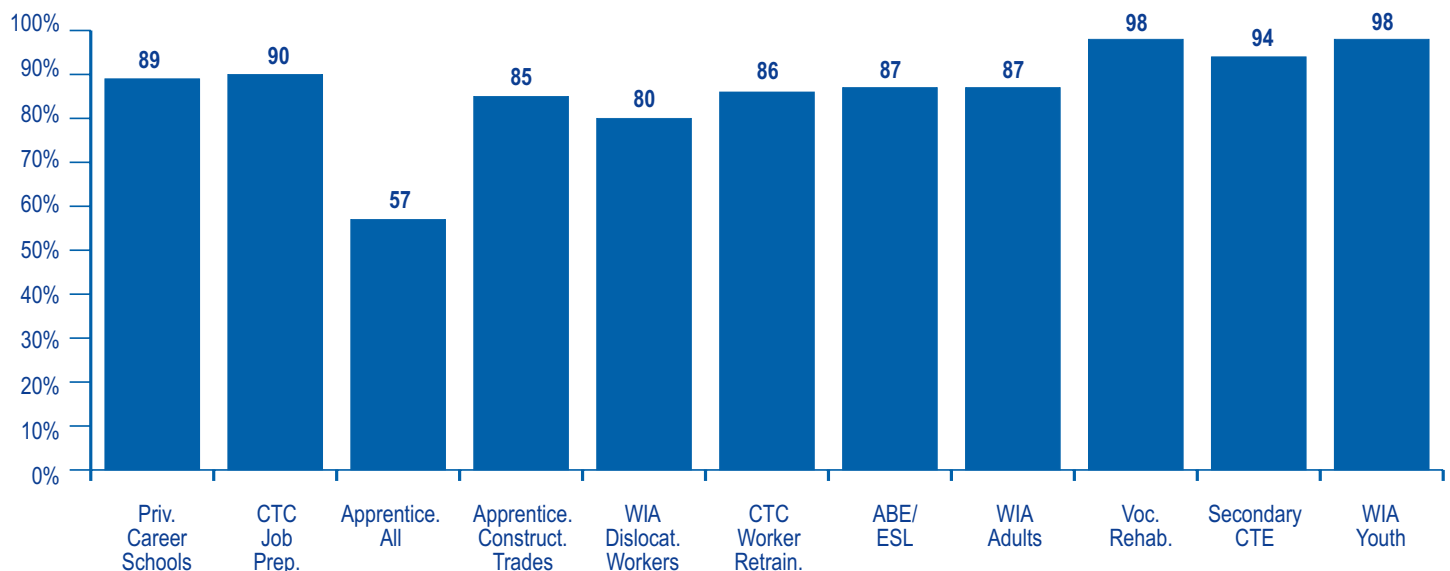
assistantship. Within the construction trades, especially among those who completed their apprenticeships, male and female journey level workers earned closer to the same wage.

Earnings were also lower for people with disabilities. Earnings were lower for people of color than for whites in eight of the eleven programs.⁷ These differences in postprogram wages and earnings by gender, disability status, and race/ethnicity generally reflect differences observed in the overall labor market and may be due to some combination of occupational choice, as seen above in apprenticeship, and labor market discrimination.

⁷No substantial racial/ethnic earnings differentials were observed for ABE/ESL and the WIA Youth program. There were too few cases to examine racial differences in outcomes among DSB clients.

FIGURE 9

Median Hourly Wages of Women Relative to Men During Third Quarter After Training in Percentages



Participant Satisfaction

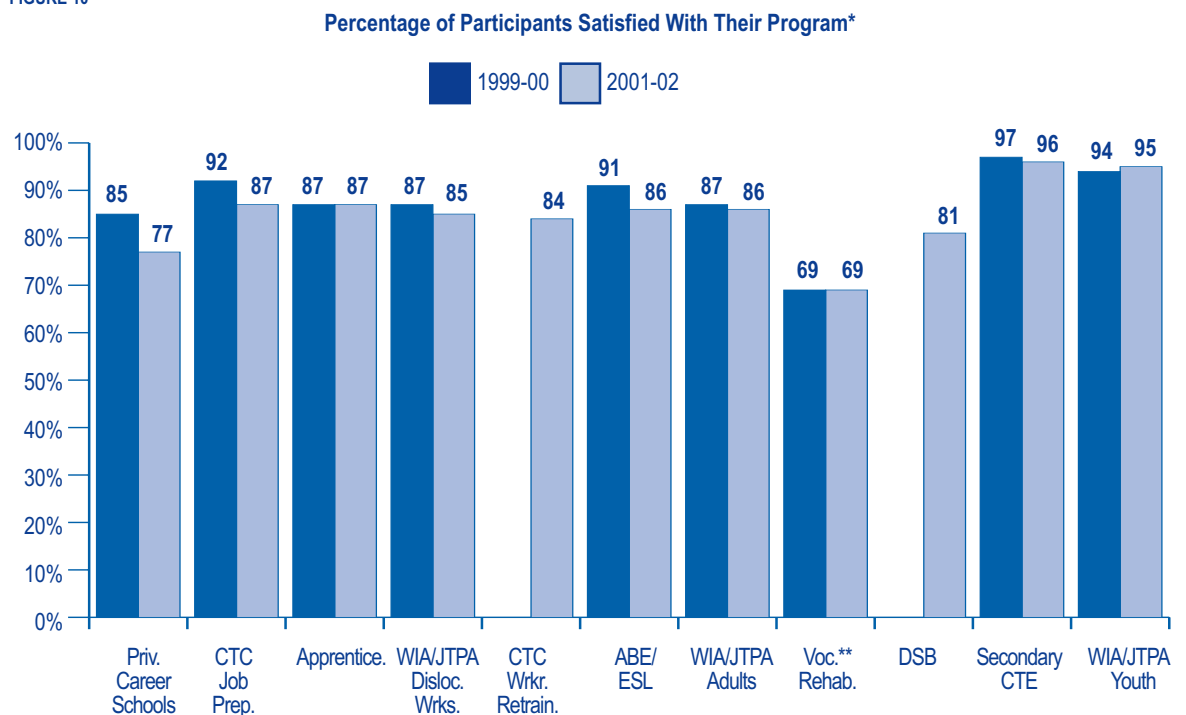
Desired Outcome: Workforce development participants and their employers are satisfied with workforce development services and results.

The vast majority of participants were satisfied with their program (see Figure 10). Satisfaction levels, measured by averaging the percentage reporting that they met their educational objectives and the percentage satisfied with the overall quality of their programs, are high for all programs. Reported levels of satisfaction decreased somewhat among private career school, community and technical college job preparatory, and ABE/ESL participants.

Satisfaction levels for other programs are similar to those reported by 1999-00 participants.

Although results vary by program, the aspects of programs that tend to have the lowest participant satisfaction were support services. Most participants reported receiving the services they required. Many participants in several programs, however, reported an unmet need for information on job openings. Cohorts of program participants reported this unmet need in previous evaluations.

FIGURE 10



*Average of percentage meeting educational objectives and percentage satisfied with overall quality of their program.

**Figure is the percentage reporting overall satisfaction with the program.

Employer Satisfaction

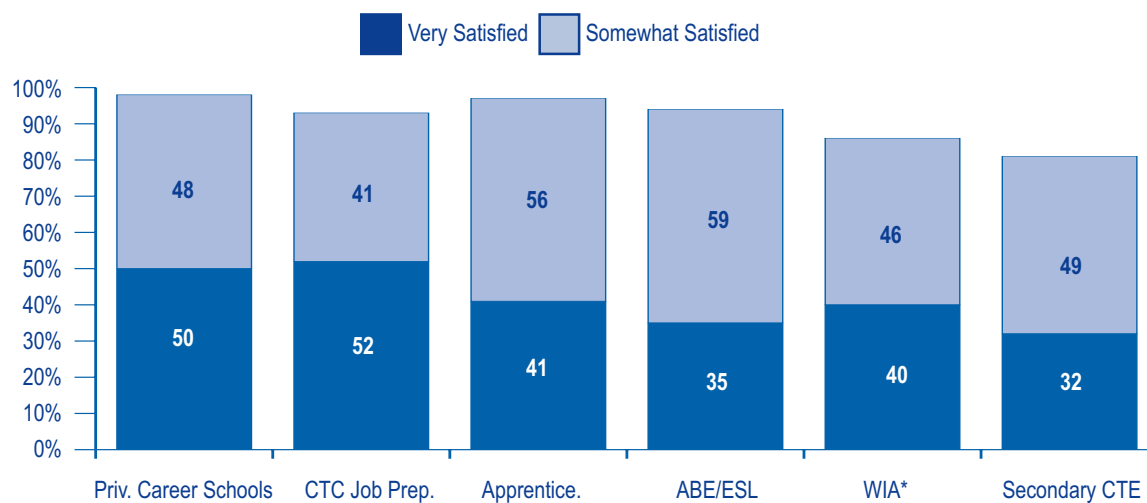
Desired Outcome: Workforce development participants and their employers are satisfied with workforce development services and results.

Employers were generally satisfied with the overall work quality of new employees who recently completed one of these programs

(see Figure 11). Still, there is substantial room for improvement in the percentages of employers reporting they are very satisfied with the quality of new hires.

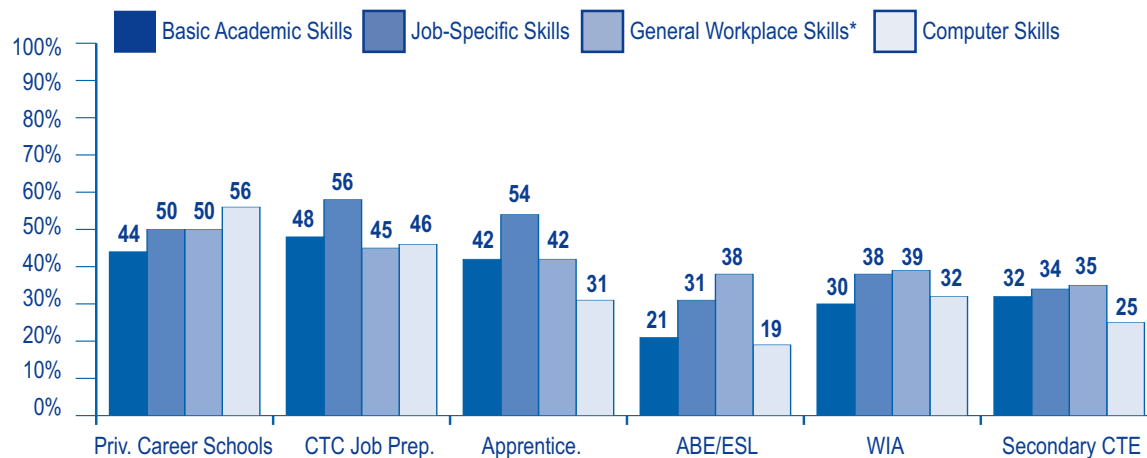
Figure 12 shows the percentage of employers reporting they are very satisfied with employees mastery of each type of skill.

FIGURE 11
Percentage of Employers Satisfied With the Overall Work Quality of New Employees Who Recently Completed a Program



*Refers to all WIA participants (adult, dislocated worker, and youth).

FIGURE 12
Percentage of Employers Very Satisfied With Skills of New Employees (average across skills in the selected categories)



*General workplace skills include team work, problem-solving, communication, work habits, accepting supervision, and adaptability to change.

Net Impact and Cost-Benefit Evaluation

Return on Investment

Desired Outcome: Workforce development programs provide returns that exceed program costs.

Every four years the Workforce Board conducts net impact and cost-benefit analyses of workforce development programs. The last net impact study, which was conducted in 2002, examined the experience of participants who left programs during the 1999-00 and 1997-98 program years. Study results were presented in the last edition of *Workforce Training Results*, and these results are reproduced here for informational purposes. (The next such study will occur in 2006 and will examine the experience of participants leaving programs in 2003-04 and 2001-02.)

Net impact and cost-benefit evaluations attempt to estimate what happens to program participants compared to what would have happened if they had not participated in a workforce development program. The objective is to determine the difference that the program makes for the participant. The Workforce Board contracted with the W.E. Upjohn Institute for Employment Research⁸ to conduct the net impact and cost-benefit evaluations. Upjohn performed these evaluations for nine of the ten programs.⁹

Individuals who participated in these workforce development programs were compared to similar individuals who didn't. The comparison groups were selected from

people who registered for services with the state's Employment Service.¹⁰ An empirical approach, called statistical matching, was used to find Employment Service registrants who most closely matched each program's participants in terms of a long list of characteristics.¹¹

For the cost-benefit analyses, Upjohn calculated the value of the net impacts on participant earnings, employee benefits, social welfare benefits, Unemployment Insurance (UI) benefits, and taxes.¹² Benefits and costs were estimated for both the observed postprogram period and out to the age of 65,¹³ the normal age for labor force withdrawal.

⁸Dr. Kevin Hollenbeck headed the team.

⁹Net impacts were not estimated for the DVR Program, because no statistically viable comparison group was available for DVR clients.

¹⁰A different source of data was used for the comparison group for secondary CTE. The Office of Superintendent of Public Instruction collects data on high school seniors. This Graduate Follow-Up Study was used to identify both students completing CTE as well as comparable students who had not.

¹¹These include demographics (e.g., race, ethnicity, gender, disability status, prior education, age, region, or the state), preprogram earnings and employment history, UI benefit receipt history, and preprogram receipt of public assistance.

¹²Upjohn estimated the impact of the net change in earnings on social security, Medicare, federal income, and state sales taxes.

¹³In order to compare benefits and costs in terms of net present values, postprogram benefits and costs are discounted by 3 percent per year and all figures are stated in 2001 dollars.

Upjohn found that during the third year after program participation, the payoffs to education and training are strong and pervasive (see Figure 13). The employment impacts for all programs are positive against those of the comparison group. For example, CTC program completers had, on average, an employment rate 7 percent above that of the comparison group. Seven of the nine programs increased the average earnings of participants. JTPA Title II-C for disadvantaged youth and adult basic education, however, have earning impacts that are essentially zero. While no effect was found for these two programs on the average earnings among those working, total earnings among participants of these two programs increased because more participants had found employment than the comparison group. All other programs show sizeable earnings impacts among those working that, in percentage terms, are approximately 20 percent. The combined effects on average earnings and employment rates are associated with sizable impacts on total lifetime earnings.

Figure 14 compares lifetime participant benefits to public costs. For example, during the course of working life (to age 65), the average community and technical college job preparatory student will gain about \$151,000 in net earnings (earnings minus foregone earnings while in training) and employee benefits. These are net gains compared to the earnings of similar individuals who did not receive training (discounted at 3 percent and expressed in 2001 dollars).

The ratio of participant benefits to program costs, not considering impacts on social welfare benefits or taxes, is \$151,365 to \$6,916, or almost 22 to 1. Lifetime participant benefits far exceed public costs for each of the programs presented in

FIGURE 13
Long-Term Employment and Earnings Net Impacts

	Employment Rate Impact	Quarterly Earnings Impact (among those working)	Lifetime Earnings Impact**
CTC Job Preparatory Training	7.0%	\$1,185	\$127,283
Apprenticeship	5.3%	\$1,908	\$162,443
JTPA III Dislocated Workers	7.3%	\$466	\$75,293
CTC Worker Retraining	6.3%	\$423	\$66,268
JTPA II-A Adults	7.4%	\$543	\$61,565
Adult Basic Skills	1.6%	*	\$5,263 ¹⁴
Secondary CTE	5.7%	\$451	\$59,363
JTPA II-C Youth	5.3%	*	\$30,510 ¹⁵

Long-term refers to impacts observed 8 to 11 quarters after leaving the program.

* Not statistically significant at the 0.10 level.

**This is the increase in earnings (above that of the comparison group) projected to age 65 and discounted at 3 percent. Includes effects from increased employment and increased earnings among those employed.

Long-term impacts were not estimated for private career school programs because of data constraints.

¹⁴Increases in employment more than offset the small negative earnings impacts among the employed.

¹⁵Increases in employment more than offset the small negative earnings impacts among the employed.

Figure 14. Cost-benefit comparisons were not calculated for apprenticeship and private career school programs because of data constraints. However, the participant benefits from these programs, discussed in the full report, were achieved with little taxpayer expense.

Tax revenues are also affected by the change in participant earnings (see Figure 14). For example, during the entire post-training period to age 65, the public gains an estimated \$18,936 in tax revenues for each JTPA Title III participant. Estimated increases in tax receipts alone outweigh public costs for each program. Moreover, several of the programs were found to reduce reliance on social welfare (Temporary Assistance for Needy Families, food stamps, and medical benefits). The JTPA programs for disadvantaged adults and youth, in particular, were estimated to substantially reduce social welfare receipts during participant’s lifetime.

FIGURE 14
Participant Benefits, Public Costs, and
Increases in Tax Receipts to Age 65

	Participant Benefits*	Public Costs**	Increased Tax Receipts***
CTC Job Preparatory Training	\$151,365	\$6,916	\$32,012
JTPA III Dislocated Workers	\$78,177	\$2,575	\$18,936
CTC Worker Retraining	\$65,025	\$4,692	\$16,666
JTPA II-A Adults	\$73,518	\$3,384	\$15,484
Adult Basic Skills	\$6,038	\$983	\$1,324
Secondary CTE	\$71,236	\$870	\$14,930
JTPA II-C Youth	\$36,269	\$2,325	\$7,673

* Present value of the additional lifetime earnings and employee benefits less foregone earnings during program participation.

**State and federal program costs per participant.

***Present value of additional social security, Medicare, federal income, and state sales taxes generated by increased participant earnings to age 65.