Final Report Evaluation of the Workforce Development Partnership Program in 1994, 1995 and 1996

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Prepared by

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Prepared for

State Employment and Training Commission State of New Jersey

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Any opinions expressed in this report are those of the authors and do not necessarily represent the views of Rutgers University or the New Jersey State Employment and Training Commission.

PREFACE AND ACKNOWLEDGMENTS

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Executive Summary Evaluation of the Workforce Development Partnership Program

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January 25, 2000

EXECUTIVE SUMMARY

This report contains the findings of the John J. Heldrich Center for Workforce Development's two-year evaluation of the Workforce Development Partnership (WDP) Program in the state of New Jersey. The New Jersey State Legislature created the WDP program in 1992 to "provide qualified, displaced, disadvantaged and employed workers with the employment and training services most likely to provide the greatest opportunity for long-range career advancement with high levels of productivity and earning power."

The WDP program is composed of two principal initiatives: an Individual Training Grant (ITG) program, which awards individual grants to the long-term unemployed to help them obtain new skills and jobs, and the Customized Training (CT) program, which awards grants to firms and consortia to train current employees. During the 1994-1996 period, the New Jersey Department of Labor awarded 8,910 Individual Training Grants totaling \$27.9 million, and awarded 226 Customized Training grants totaling \$48.7 million to firms and consortia.

The Legislature required that an outside evaluation of the program be performed on a regular basis to assess the effectiveness of the program. This evaluation is in fulfillment of this requirement and focuses on ITG and CT grants awarded in 1994, 1995, and 1996. This evaluation also includes a supplementary survey of individuals who received ITG grants in 1997. Grants were chosen from this time period to allow for an assessment of the long-term impact of the programs.

This evaluation was performed over a 28 month period, and assessed the effect of the WDP program on the employment and earnings of individuals who received training through both the ITG and CT programs, and the performance of firms that participated in the CT program.²

Principal Conclusions

The evaluation concludes, after using multiple means of assessment, that both the ITG and CT programs are beneficial to those individuals and firms that receive grants and concludes that both programs fulfill the purposes for which the statute was enacted.

More specifically, the evaluation finds that:

Training received through the ITG program assisted individuals to recover lost wages and to become and remain employed.

Other components of the WDP program, including occupational safety and health, youth transitions to work, 8% funds and Additional Benefits during Training, were not included in this evaluation.

² The evaluation does not assess the administration of the program, selection of grants, or financial issues. In addition, the evaluation cannot compare the effectiveness of the ITG and CT programs, since one program serves unemployed individuals and the other serves firms, consortia and employed individuals.

- People who participated in the ITG program generally did as well or better in recovering lost wages and better in finding new jobs than similarly unemployed individuals not enrolled in the program.
- Women and individuals with lower levels of formal education benefit more from the ITG program than other individuals enrolled in the program.
- A substantial majority of ITG recipients were satisfied with the program and believed that the training they received was valuable to them.
- The CT program assisted New Jersey firms to provide more training to employees, who often had few previous opportunities to increase their skill levels.
- Firms that received CT grants were very satisfied with the program and believed the additional training, made possible by the grant, played a significant role in assisting them to increase employee productivity and firm profitability.
- Individuals who received training through the CT program were satisfied with the training they received and reported that it was very valuable to them.

I. Individual Training Grant (ITG) Program

The Individual Training Grant (ITG) program assists the long-term unemployed to obtain new skills by offering them a training grant of up to \$4,000. Individuals who obtained grants were also eligible to receive extended Unemployment Insurance (UI) benefits during the time they received training. In 1994, 1995 and 1996, the New Jersey Department of Labor awarded a total of 8,910 Individual Training Grants.

The evaluation found that during this time period, 62% of the grants were awarded to women and 55% were awarded to recipients between the ages of 35 and 55. Other characteristics of ITG recipients include the following:

- Slightly more than half of all recipients had earned no more than a high school degree before participating in the program. Eighteen percent had earned at least a college degree.
- Half of all recipients had worked in clerical, sales, and administrative occupations before participating in the ITG program.
- ITG recipients earned an average of \$28,000 per year (in 1996 dollars when adjusting for inflation) before losing their jobs.

In 1994, 1995 and 1996, ITG recipients enrolled in training programs for an average of 5.8 months. Nearly half of all grantees received business and administration training. Slightly over one in ten recipients enrolled in computer and information technology

training. The majority of grantees (68%) received training from a for-profit proprietary school and more than a quarter of recipients (28%) enrolled in training at a two-year county college.

Findings: Wage Recovery and Employment

The Heldrich Center used Unemployment Insurance (UI) wage records to construct wage recovery rates and re-employment rates for the ITG recipients and for a group of similarly unemployed individuals (the comparison group) who did not participate in the program.³

Wage and employment changes for ITG recipients and the comparison group were measured in two ways: 1.) from the time an individual lost his or her job and filed for Unemployment Insurance benefits *and* 2.) from the time that an individual completed training and began to search for employment. The first approach assumes that ITG recipients continued to search for employment while enrolled in training. The second approach assumes that ITG recipients did not begin to search for employment until after they had completed their training. As a result, the two approaches provide contrasting estimates of wage recovery and re-employment.

It should be kept in mind that it is not possible to make *identical* comparisons between the ITG recipients and the comparison group, who were observed only through UI wage record analysis. Individuals received training through the ITG program because they believed, and the local ITG program staff believed, that they did not possess the skills necessary to obtain employment and needed additional training. As a result, individuals who received an ITG grant may have faced larger barriers to employment and earnings improvement than the unemployed as a whole.

People who participated in the ITG program generally did as well or better in recovering lost wages and better in finding new jobs than similarly unemployed individuals who did not participate in the program.

wage records do not include the wages of individuals who are self-employed, enlisted in military service or employed in New York, Pennsylvania, Delaware and other states outside of New Jersey. These individuals comprise an estimated 17% of employed residents of the state.

³ The comparison group was selected from individuals receiving Unemployment Insurance benefits utilizing stratified random sampling. The stratification of the sample was based on gender, educational attainment, year of the Unemployment Insurance (UI) claim, and amount an individual received per week in UI benefits. Wage recovery was calculated using average quarterly wages earned by individuals four quarters before they filed for Unemployment Insurance (UI) benefits as a baseline. Averages were computed only for those people who are employed in jobs covered by the New Jersey UI system. UI

The loss of a job can have a long-term effect on an individual's employment and earnings. After facing initial difficulties in finding a new job, individuals who lose their jobs can expect to earn less than they had previously for a long period of time.⁴ One study concluded that two years after losing their jobs, individuals earned an average of 10% - 20% less than they had in their previous job.⁵

Unemployed individuals who participated in the ITG program and those in the comparison group experienced earnings losses in the period after losing their jobs. ITG recipients, however, generally did as well or better in recovering lost wages as members of the comparison group.

Measured three years after they had lost their jobs, ITG recipients recovered 91% of their pre-unemployment wages, when adjusting for inflation, compared to 94% for members of the comparison group (Chart 1). Measured three years after they had completed their training program, however, ITG recipients recovered 102% of their pre-employment wages, a higher percentage than the comparison group (94%) (Chart 2).

In addition, the evaluation found that ITG recipients were more likely to be employed than individuals in the comparison group. Three years after job loss, 68% of ITG recipients were employed in jobs covered by the New Jersey Unemployment Insurance system, compared to only 62% of the comparison group (Chart 3). Three years after completing training, 65% of ITG recipients were employed in such jobs (Chart 4).

Women and individuals with lower levels of formal education benefit more from the ITG program than other individuals.

Women

Without the benefit of training, women in the comparison group do not recover their pre-unemployment earnings. Three years after losing their jobs, women in the comparison group recovered 92% of their earnings. Women who receive training through the ITG program fared better, recovering 100% of their pre-unemployment earnings three years after completing training.

The evaluation found that men who do not participate in the ITG program come extremely close to recovering their pre-unemployment earnings without the assistance of training. Three years after losing their jobs, men in the comparison group recovered 99% of their earnings. Men in the ITG program recovered 104% of their earnings three years after completing training.

⁴Huff Stevens, Ann. 1997. "Persistent Effects of Job Displacement: The Importance of Multiple Job Losses." *Journal of Labor Economics*, Vol. 15, No. 1, pp. 165-188.

⁵ Jacobson, Louis S., Robert LaLonde and Daniel Sullivan. *The Costs of Worker Dislocation*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Chart 1.
Post-Unemployment Wage Recovery
Measured from the Time an Individual Files for Unemployment Insurance Benefits

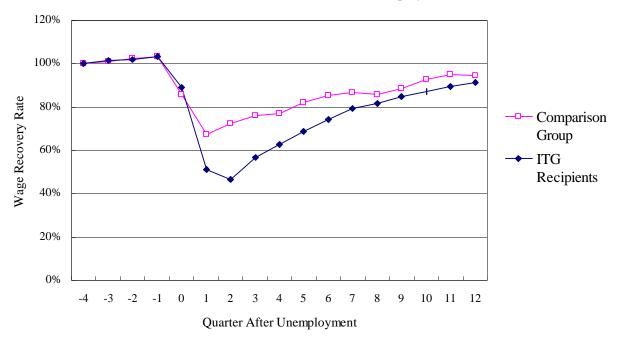


Chart 2.
Post-Training Wage Recovery
Measured from the Time an Individual Re-Enters the Labor Market

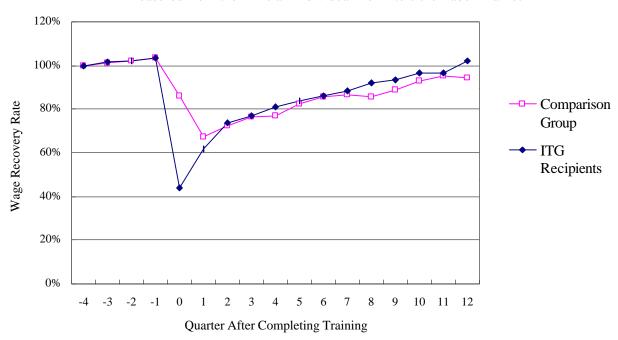


Chart 3.

Post-Unemployment Re-employment Rates
Percentage of Individuals Employed in Jobs Covered by the New Jersey UI System
Measured from the Time an Individual Files for Unemployment Insurance Benefits

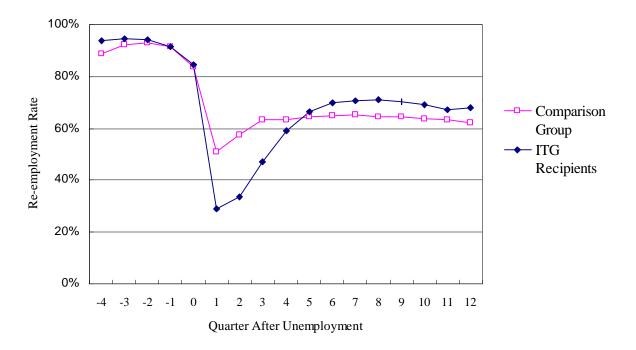


Chart 4.
Post-Training Re-employment Rates
Percentage of Individuals Employed in Jobs Covered by the New Jersey UI System
Measured from the Time an Individual Re-enters the Labor Market



Women who received training through the ITG program were more likely to be employed than were women in the comparison group. Three years after losing their jobs, 70% of women who received an ITG grant and 63% of women in the comparison group were employed in jobs covered by the New Jersey Unemployment Insurance system. Men in the ITG program and in the comparison group had more similar re-employment rates (64% to 61%).

Individuals with Lower Levels of Formal Education

Without the benefit of training, unemployed individuals without high school degrees recovered only 85% of their pre-unemployment earnings three years after losing their jobs. This is the lowest wage recovery rate of any education group. Unemployed individuals who received training through the ITG program fared far better, recovering 100% of their pre-unemployment earnings three years after losing their jobs *and* 102% of their earnings three years after completing training.

ITG recipients with higher levels of formal education had mixed results. For example, ITG recipients with a college degree recovered 89% of their wages three years after losing their job and 105% of their earnings three years after completing training. Similar individuals in the comparison group recovered 95% of their earnings.

Without the assistance of training, individuals without a high school degree had the lowest re-employment rates of all education groups. Three years after losing their jobs, 56% of these individuals were employed in jobs covered by the New Jersey Unemployment Insurance system. ITG participants without a high school degree had higher re-employment rates than similar individuals in the comparison group both three years after losing their jobs (62% to 56%) *and* three years after completing training (59% to 56%). College graduates who participated in the ITG program and those in the comparison group had similar re-employment rates.

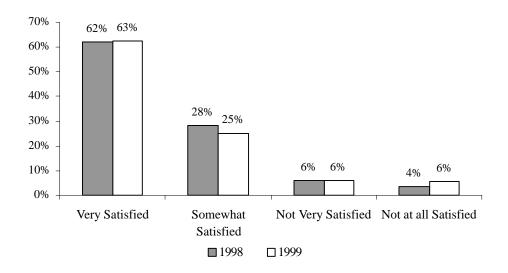
Findings: Participant Satisfaction and Assessment

The Heldrich Center also assessed the ITG program by interviewing participants about their satisfaction and experience with the program. In 1998, the Heldrich Center conducted an extensive telephone survey with 1,572 individuals who received an ITG grant in 1994, 1995 or 1996. These same individuals were surveyed by telephone again in 1999. Also, in 1999, an additional supplemental survey was conducted by telephone with 503 individuals who received an ITG grant in 1997.

ITG recipients expressed strong levels of satisfaction with the program.

Over 86% of recipients polled in the main survey in 1998 rated their experience with the ITG program as good or excellent. Sixty-two percent said they were very satisfied with the training they received (Chart 5).

Chart 5. Level of Satisfaction with the ITG Program Main Survey: 1998 and 1999



More than two-thirds (67%) of the 1997 ITG grant recipients polled in the supplementary survey said they were very satisfied with the program. Almost half of the respondents (45%) rated the training program as excellent, and an additional 43% reported the ITG program was good.

A strong majority of ITG participants believed that the ITG program was valuable to them.

Most (86%) recipients interviewed in the main survey said that the training they received was extremely valuable or very valuable. While nearly two-thirds (64%) of ITG recipients reported that training had helped them to get a job more quickly, 59% said the training helped them get a better job.

Table 1.
ITG Recipients' Perception of the Effect of Training
1998 Survey

The training received through the ITG program...

	Helped me get a job more quickly	Helped me get a better job	Helped me hold on to next job longer
Strongly Agree	41%	37%	25%
Mildly Agree	24%	23%	21%
Mildly Disagree	15%	17%	16%
Strongly Disagree	14%	16%	15%
Don't Know/Refused	7%	8%	22%

In addition, nearly three-quarters (72%) of respondents to the main survey in 1999 reported that they used the skills gained through the ITG program in their first job after training. A similar percentage reported that they used the skills they learned in their current or most recent job.

Even the individuals who had *not* recovered their pre-unemployment earnings at the time of the survey, believed that training had been helpful to them. Nearly two-thirds of these individuals reported that training had helped them to get a job more quickly and 84% of them said that training was valuable.

In addition, a strong majority of individuals who received ITG grants in 1997 also reported that training was valuable to them.

II. Customized Training (CT) Program

The Customized Training (CT) Program provides grants to companies and consortiums of similar firms or labor unions to assist them in providing training to their employees or union members. From 1994 to 1996, a total of 226 grants were awarded to 200 companies and 26 consortiums for a total of \$48.7 million in funding. Firms and consortia contributed another \$88.7 million to training activities based on these grants and planned to train 54,000 workers.

The CT evaluation drew on administrative data from the New Jersey Department of Labor, Unemployment Insurance wage records, telephone interviews with decision makers at 114 grantees, telephone interviews with 300 individuals that received on-the-job training through the program, and in-depth case studies with nine firms or consortia that received CT grants. These case studies were selected to be representative of all CT grants awarded and included in-depth in-person interviews with key decision-makers at each grant and interviews with employees that received training.

Findings:

Grants were awarded primarily to firms with less than 1,000 employees in the manufacturing industry that would not have otherwise invested in training.

Previous studies have concluded that firms with a small number of employees and firms in the manufacturing industry are less likely to provide formal training to their employees than are other firms. The CT program effectively targeted these firms. Two-thirds of CT grant funds and 88% of CT grants were awarded to firms with less than 1,000 employees. In addition, nearly 80% of CT grants to firms and 86% of the total amount awarded to firms were awarded to those engaged in manufacturing.

Over half of the firms surveyed, 54%, reported that training would not have occurred without the receipt of the CT grant. An additional 31% of firms reported that training would have occurred even without the CT grant, but that it would have been on a smaller scale. Nearly all of the firms studied in-depth reported that training would have occurred at the firm without the CT grant, but on a much smaller scale.

Firms and consortia tended to use Customized Training grant funds to provide training to individuals who have low levels of formal education and have received little formal training.

Previous studies have concluded that workers with lower levels of formal education are less likely to receive workplace training from their employers than

Hollenbeck, Kevin and William Anderson. 1992. "Workplace Education Programs in Small and Medium-Sized Michigan Firms." Staff Working Paper 92-13. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

⁶ Frazis, Harley J., Diane E. Herz, and Michael W. Harrigan. 1995. "Employer-Provided Training: Results from a New Survey." *Monthly Labor Review*, Vol. 118, No. 5, pp. 3-17.

Lynch, Lisa M. and Sandra E. Black. 1998. "Beyond the Incidence of Employer-Provided Training." *Industrial and Labor Relations Review*, Vol. 52, No. 1, pp. 64-81.

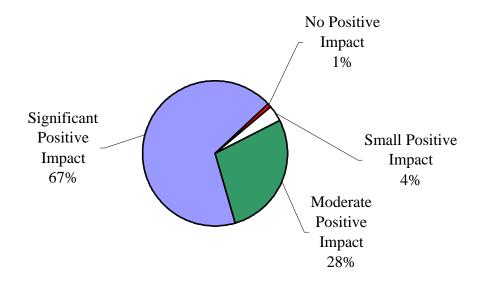
are individuals with higher levels of education.⁷ The CT grant program gave individuals with lower levels of formal education an opportunity to receive training and upgrade their skill levels.

The vast majority (82%) of firms that received a CT grant provided training primarily to individuals with a high school diploma or less. In addition, 85% of those individuals who received on-the-job training had not earned a college degree. Less than one-fourth (23%) of those individuals that received on-the-job training participated in any type of training prior to the CT program.

A majority of firms were very satisfied with the CT program and believed it played a significant role in assisting them to increase employee productivity, firm profitability and market share.

Nearly all (95%) of surveyed firms would recommend that other companies participate in the program. Over two-thirds said that the CT grant had a significant, positive impact on their company (Chart 6).

Chart 6. Firms' Perception of the Impact of CT Grant on the Firm



The majority of firms indicated that they experienced some growth in the number of full-time employees, in worker productivity, or in market share during the past

.

⁷ See footnote 4.

four years (Table 2). A majority of these firms said that the training grant played a role in this success.

Of the 44% of firms that reported a dramatic increase in employee productivity during the last four years, nearly two-thirds believed that the CT grant was very important to this increase.

Of the 46% of firms that reported an increase in the number of full time employees in the last four years, 68% believed that the CT grant was very important or important to this growth.

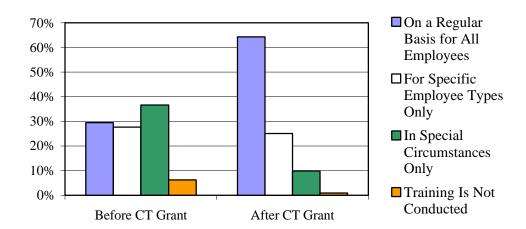
Table 2. Importance of CT Grant to Economic Gains

	Percentage of Firms Reporting	Importance of C to these Gains Very	Somewhat	
	Gains	Important	Important	Important
Dramatic Growth in Employee Productivity	44%	64%	22%	14%
Growth in the Number of Full-time Employees	46%	38%	30%	17%
Growth in Market Share	59%	27%	16%	33%

Firms provided training to more employees and on a more frequent basis than they did before they participated in the CT program.

Slightly less than 30% of the firms reported that, prior to the receipt of the CT grant, training was provided to all employees on a regular basis (Chart 7). Nearly two-thirds of firms reported that they provided training on a regular basis to all of their employees after the completion of the grant.

Chart 7.
Level of Training Provided by Firms
Before and After Receipt of a Customized Training Grant



Prior to receiving the grant, only 35% of firms had comprehensive strategies for upgrading the skills of their employees. After the grant, 62% of the firms adopted a long-term human resource development plan and currently provide training to all employees on a regular basis.

The CT grant program has a minimal impact on firm's decisions to remain in New Jersey but does appear to have an impact on firm's decision to relocate to the state.

The grant was not at all important to the decision of four out of ten firms to remain in the state. Of the ten firms surveyed that located in the state after the inception of the program, 8 responded that the grant was very important to the firm's decision to locate in New Jersey.

Individuals who received training through the CT program were satisfied with the training they received and reported that it was very valuable to them.

Nearly nine in ten individuals who received on-the-job training were satisfied with the training they received. Similar strong majorities said the training program was well run, was extremely valuable, had given them the skills they expected, and met all their needs.

The earnings of individuals receiving on-the-job training increased in the period after they received training. Between the year before and two years after training began at the company, average quarterly wages of individuals receiving on-the-job training increased by 11%, when adjusting for inflation.

Chapter 1: Evaluation of the Individual Training Grant Program

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I. Introduction

The Individual Training Grant (ITG) program provides eligible dislocated workers with grants of up to \$4,000 dollars to fund training at state approved providers such as community colleges, universities, or proprietary schools. The program is designed to assist these individuals to obtain the skills they need to become employed.

This evaluation used Unemployment Insurance (UI) wage records to determine the wage and employment outcomes of individuals who received an ITG grant in 1994, 1995 and 1996. To estimate the impact of training on employment and earnings, UI wage records were used to determine the wage and employment outcomes of similar unemployed individuals who did not participate in the program. In addition, telephone surveys were conducted with recipients to determine their perceptions of the impact the program had on employment and earnings.

II. Profile of ITG Grants Awarded in 1994, 1995 and 1996

A. Source of Information

Administrative data collected by the New Jersey Department of Labor for all individuals that received an ITG grant during the study period were used to create a profile of the individuals that received grants and of the training they received. These administrative data were collected when an individual first became a participant in the ITG program and were updated when an individual was issued a training contract. The administrative data contained two types of information. First, the data contained information on the demographic characteristics of individuals that receive a grant. Information was collected on an individual's age, race, educational attainment, and union membership. Second, detailed information was collected on the type of training an individual would receive under the ITG program. This includes the amount of the ITG grant, the dates that training will occur, the type of training to be provided and the type of provider of this training.

B. Summary of Grants Awarded: 1994, 1995 and 1996

The New Jersey Department of Labor awarded 8,910 Individual Training Grants in 1994, 1995 and 1996. A total of \$27.9 million was awarded to in grants during these three years. Only 527 grants were awarded in 1994. In 1995, the amount of grants peaked at 4,975. In 1996, 3,408 grants were awarded.

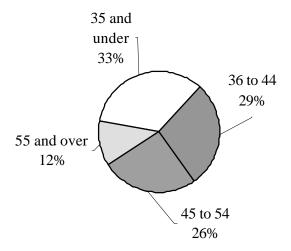
While 8,910 grants were awarded, 8,532 individuals received grants as some individuals received multiple grants. Specifically, 344 individuals (4% of all ITG recipients) received multiple grants. While 315 individuals received two grants

during the study period, 24 individuals received three grants and five received four grants. The majority, 86%, of the multiple grants were awarded to individuals simultaneously (see Appendix A).

C. Characteristics of Individuals Receiving ITG Grants

The majority of grants (62%) were awarded to women, a percentage that was consistent throughout 1994, 1995 and 1996. The ages of ITG recipients was diverse with the majority (55%) of grant recipients between the ages of 36 and 54 (Chart 1). One-third of all recipients were under the age of 36. Lastly, 68% of all grant recipients were white, 18% of recipients were African-American and 11% of all grant recipients were Hispanic.

Chart 1. Age of ITG Recipients, 1994 – 1996



1. Educational Attainment and Occupation of Recipients

Slightly more than half of all recipients had earned only a high school degree prior to participating in the ITG program (Chart 2). An additional 6% of recipients had not earned a high school degree. Nearly 18% of ITG grant recipients had earned at least a college degree.

The majority of ITG recipients worked in clerical, sales and administrative occupations before participating in the ITG program (Table 1). While 37% of ITG recipients worked in clerical and sales occupations, an additional 14% were employed in administrative occupations. Approximately 10% of ITG recipients had worked in production-related fields such as machine trade and bench-work occupations.

Chart 2. Educational Attainment of ITG Grant Recipients, 1994 - 1996

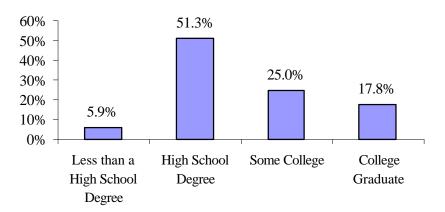


Table 1.

Previous Occupation of ITG Recipients, 1994 – 1996

Occupation	Total	Percent
Clerical and Sales Occupations	3,296	37%
Administrative Specializations ¹	1,203	14%
Miscellaneous Occupations ²	772	9%
Mangers, Officials, Professional and Technical Occupations ³	745	8%
Service Occupations ⁴	402	5%
Machine Trade Occupations ⁵	335	4%
Structural Work Occupations ⁶	266	3%
Occupations in law, libraries, art, writing, and entertainment	205	2%
Benchwork Occupations ⁷	194	2%
Processing Occupations ⁸	104	1%
Agricultural, Fishery, and Forestry related Occupations	30	0%
Sub total	7,552	85%
Unavailable	1,358	15%
Total	8910	100%

includes, accountants, auditors, public relations management, and advertising management

⁸ includes processing of metals, ore, food, wood, and glass

² includes, motor freight occupations, graphics arts occupations, and mineral extraction occupations

³ includes managers and officials in construction, manufacturing, transportation, communications, finance, insurance, and public administration; occupations in social work, airplane pilots, and ship personnel.

⁴ includes occupations in food and beverage services, lodging services, apparel and furnishing services, and domestic services

⁵ includes metal machining occupation, metal working, printing, and textile machining

⁶ includes welders, cutters, paintings, and construction occupation

⁷ includes fabrication, assembly, and repair of metal, scientific, electrical, and medical products

2. Grant Allocation by County

Nearly one-quarter of all ITG grants awarded between 1994 and 1996 were awarded to residents of Essex, Hudson and Bergen Counties. One-fourth of all grants were awarded to residents of Middlesex, Passaic, Union and Camden counties. Essex County, alone, was home to nearly 10% of all ITG recipients. In 1994, less than 2 tenths of 1 percent (0.19%) of all individuals that were unemployed in New Jersey received an ITG grant (Table 2). By 1995, this figure had increased to 1.9%, but then decreased to 1.3% in 1996. Sussex County consistently had the highest percentage of unemployed residents receiving an ITG grant. In 1995, over 5% of the unemployed residents of that county received a grant. Cape May County consistently had the smallest percentage of unemployed residents receiving ITG grants.

Table 2.
Percentage of Total Unemployed Residents Receiving an ITG Grant,
1994 - 1996

1994		1995		1996	
Top Three Countie	S	ı		•	
Sussex	0.85%	Sussex	5.01%	Sussex	3.30%
Burlington	0.59%	Hunterdon	4.14%	Hunterdon	2.10%
Warren	0.59%	Somerset	Somerset 3.02%		2.05%
Bottom Three Cour	nties	I			
Essex	0.05%	Ocean	1.01%	Passaic	0.93%
Cumberland	0.03%	Atlantic	0.76%	Hudson	0.77%
Cape May	0.02%	Cape May 0.29%		Cape May	0.71%
New Jersey Total		ı			
Total	0.19%	Total	1.91%	Total	1.33%

Source: New Jersey Department of Labor.

D. Training Received through ITG Program

Approximately 46% of all grant recipients received business and administration training through the ITG program; such training includes general office / clerical training and accounting (Table 3). The second most frequent training was computer and information technology training, with 12% of participants receiving this type of training. Women were more likely to be enrolled in business and

administration training than were men. While over half (61%) of women received training in business and administration, only 26% of men received this type of training.

Table 3.

Distribution of Grants by Type of Training Received, 1994 – 1996

Training Program	Total	Percentage	
Business & Administration	4,130	46.4%	
Computer / Information Technology	1,065	12.0%	
Health	727	8.2%	
Transportation	720	8.1%	
Construction Trades/ Repair	515	5.8%	
Engineering related	440	4.9%	
Education	245	2.7%	
Marketing / Distribution	208	2.3%	
Other	860	9.6%	
Total	8,910	100.0%	

1. Providers of Training

A majority of grant recipients received their training from proprietary training institutions or two-year county colleges (Chart 3). Proprietary institutions provided 63% of all training in the ITG program. An additional 28% of grant recipients received training from two-year county colleges. Only 5% of recipients received training from four-year colleges.

White recipients were more likely to receive training from two-year colleges than were African-American and Hispanic recipients. Approximately one-third (32%) of white recipients enrolled in two-year colleges. Nearly one-fifth (19%) of African-American recipients and 13% of Hispanic recipients received their training from these providers. While 71% of African-American recipients and 76% of Hispanic recipients enrolled in proprietary schools, 58% of white recipients received training from these schools.

Seventy-two percent of individuals who enrolled in marketing and distribution training programs received this training at two-year colleges. In addition, over 40% of those individuals receiving training in health-related fields enrolled at a two-year college. While vocational/technical institutions provided training to only 1% of all recipients, these providers served nearly 18% of those individuals that received training in personal and miscellaneous services.

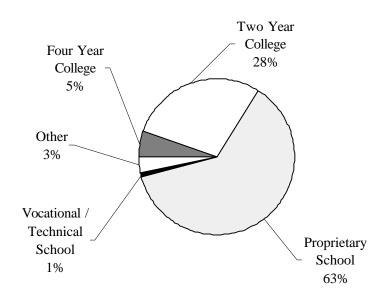


Chart 3.
Distribution of Grants by Type of Training Provider, 1994 - 1996

2. Average Grant Amount and Duration of Training

After adjusting for inflation, the average ITG grant that was awarded between the years of 1994 and 1996 was \$3,187 (Table 5). Average grant size awarded to ITG recipients increased from \$2,747 in 1994 to \$3,254 in 1995 and decreased slightly in 1996. The average grant amount varied from a high of \$3,824 in Hudson County to a low of \$2,231 in Sussex County (Table 6). An average of \$3,414 was awarded to individuals that received engineering-related training (Table 7). An average of \$1,979 was awarded to individuals receiving training in marketing and distribution.

Table 5.

Average Grant Amount by Year

Adjusted for Inflation with a Base Year of 1996

Year Average Grant		
	Amount	
1994	\$2,747	
1995	\$3,254	
1996	\$3,157	
All three years	\$3,187	

⁹ Average grant amounts in nominal dollars (not adjusted for inflation) can be found in appendix A.

Table 6.

Average Grant Amount by County, 1994 – 1996

Adjusted for Inflation with a Base Year of 1996

County	Average Grant Amount	County	Average Grant Amount
Hudson	\$3,824	Middlesex	\$3,169
Essex	\$3,593	Morris	\$3,126
Bergen	\$3,557	Gloucester	\$3,116
Passaic	\$3,476	Somerset	\$3,121
Union	\$3,423	Mercer	\$3,019
Ocean	\$3,313	Salem	\$2,942
Cumberland	\$3,286	Monmouth	\$2,773
Burlington	\$3,266	Cape May	\$2,649
Atlantic	\$3,225	Hunterdon	\$2,553
Camden	\$3,207	Warren	\$2,414
		Sussex	\$2,231

Table 7.

Average Grant Amount by Type of Training Program, 1994 – 1996

Adjusted for Inflation with a Base Year of 1996

Type of Program	Average Grant Amount
Engineering-related	\$3,414
Construction Trades/ Repairers	\$3,359
Business & Administration	\$3,353
Education	\$3,181
Computer/ Information Technology	\$3,139
Health	\$2,990
Transportation	\$2,829
Marketing & Distribution	\$1,979
Other	\$2,983

The average duration of training funded by the ITG program was 5.8 months. While 36% of training programs lasted less than 3 months, 34% were more than 6 months in length.

The average ITG grant amount for those individuals who received training from proprietary schools between 1994-1996 was \$3,552 (Table 8). The length of the average training program administered by these providers was 4.1 months. Two-year colleges provided longer training to ITG recipients and did so at a lower average cost. The average ITG grant amount awarded to individuals that received training from a two-year college was \$2,519. The average duration of this training was 8.6 months. The average ITG grant amount by provider displayed little fluctuation between 1994 and 1996. The one exception pertains to vocational/technical institutions. The average ITG grant amount for vocational/technical institutions increased from \$1,869 in 1994 to \$2,451 in 1995.

Table 8.

Average Duration and Grant Amount by Type of Provider, 1994 – 1996

Grant Amounts Adjusted for Inflation with a Base Year of 1996

	Average	Average	Average	Average	Average
Type	Duration	Grant	Grant	Grant	Grant
Of	Of	Amount	Amount	Amount	Amount
Provider	Training	1994	1995	1996	1994-96
Proprietary schools	4.1 months	\$3,516	\$3,562	\$3,488	\$3,552
Four-year colleges	11.0 months	\$3,013	\$3,143	\$3,030	\$3,093
Vocational/Technical Institutions	4.0 months	\$1,869	\$2,451	\$2,348	\$2,644
Two-year colleges	8.6 months	\$2,390	\$2,627	\$2,427	\$2,519

III. Wage and Employment Outcomes of ITG Recipients

The ITG program is designed to assist dislocated workers to obtain the skills they need to become employed and to increase their earnings. Unemployment Insurance wage records obtained from the New Jersey Department of Labor were used to estimate the wages and employment status of individuals that received an ITG grant during the study period.

A. Wage Outcomes of ITG Recipients

1. Measuring Wage Recovery

Wage recovery for ITG recipients was calculated using Unemployment Insurance wage records for 1992 through 1998 obtained from the New Jersey Department of Labor. All wages were adjusted for inflation using the Consumer Price Index (CPI) with a base year of 1996.

Wage recovery can either be measured from the time when an individual loses his or her job **or** from the time that the individual completes the training program. Individuals that receive an ITG grant implicitly decide that they are willing to forego potential short-term earnings in the interest of obtaining additional skills. The first way of measuring wage recovery is a measure of post-unemployment wage recovery. It includes the time an individual spends in training. The second approach, a measure of post-training wage recovery, measures wage recovery beginning after individuals have completed training.

The advantage of measuring from the time an individual loses his or her job is that it accounts for foregone earnings during training. However, it also includes time where an individual has less time to spend on searching for a new job because some of the individual's time is consumed by training. Measuring wage recovery after completing training alleviates the latter concern since without the time constraint of training an individual can concentrate on job search. However, measuring recovery from the quarter of training completion ignores the wages lost during training.

Wage histories were created for all ITG recipients using both approaches. Thus, average quarterly wages were calculated for the four quarters before recipients lost their jobs and filed for Unemployment Insurance benefits, for the twelve quarters after an individual filed for UI benefits and for the twelve quarters after individuals completed training.

Average quarterly wages were calculated for only those individuals whose wages were reported in the Unemployment Insurance wage records. Unemployment Insurance wage records are not reported for those individuals who are employed outside of the state, employed by religious organizations or by the US military, or

who are self-employed. These individuals accounted for an estimated 17% of all employed New Jersey residents in 1990.

In a small number of cases, quarterly wages of over \$100,000 are reported for ITG recipients. It was assumed that these observations are the result of errors in the collection of data and they were excluded from the calculation of average quarterly wages. In addition, those individuals on temporary layoff, who represent 7% of ITG recipients, were excluded from the analysis in order to avoid measuring the erratic wage patterns of cyclical workers.

In both the post-unemployment and post-training approaches, average quarterly earnings in the fourth quarter before individuals lose their job and file for Unemployment Insurance benefits was used to estimate pre-unemployment earnings.

2. Wage Recovery for ITG Recipients

In the fourth quarter before filing for Unemployment Insurance benefits, ITG recipients earned an average of \$7,007 per quarter (approximately \$28,000 per year). In the second quarter after filing for UI benefits, many ITG recipients have enrolled in training and average wages decreased to 47% (Table 11) of preunemployment earnings. As these individuals complete training and become employed, average quarterly wages increase. Three years after filing for UI benefits, ITG recipients recovered 91% of their pre-unemployment earnings.

In the first full quarter after completing training, ITG recipients recovered 62% of their earnings. As more individuals became employed and obtained better paying jobs, average quarterly earnings increased steadily. Three full years after completing training, ITG recipients recovered 102% of their earnings.

3. Differences in Wage Recovery for Sub-Groups

a. Differences in Wage Outcomes by Gender

Male and female ITG recipients experienced similar levels of wage recovery. Three years after filing for UI benefits, female ITG recipients recovered 91% of earnings while male recipients recovered 93% of their earnings. When wage recovery was measured three years after individuals completed training, male recipients recovered 104% of their earnings while female recipients recovered 100% of their earnings.

Table 11.
Wage Recovery of Individuals That Received an ITG Grant in 1994, 1995 or 1996

	Post-Train	ning Appr	oach ¹⁰	Post-Unemployment Approach			
Quarter	Mean wage	Wage	Sample	Mean	Wage	Sample	
		recovery	size	wage	recovery	size	
4 quarters before ui claim	\$7,007	na	7,169	\$7,007	na	7,169	
3 quarters before ui claim	\$7,124	102%	7,220	\$7,124	102%	7,220	
2 quarters before ui claim	\$7,145	102%	7,207	\$7,145	102%	7,207	
1 quarter before ui claim	\$7,247	103%	7,005	\$7,247	103%	7,005	
quarter end training or ui claim	\$3,096	44%	2,924	\$6,245	89%	6,462	
1st quarter after training or ui claim	\$4,349	62%	4,296	\$3,588	51%	2,221	
2nd quarter after training or ui claim	\$5,158	74%	4,598	\$3,263	47%	2,564	
3rd quarter after training or ui claim	\$5,394	77%	4,616	\$3,982	57%	3,605	
4th quarter after training or ui claim	\$5,693	81%	4,545	\$4,398	63%	4,507	
5th quarter after training or ui claim	\$5,884	84%	4,555	\$4,808	69%	5,086	
6th quarter after training or ui claim	\$6,018	86%	4,506	\$5,196	74%	5,351	
7th quarter after training or ui claim	\$6,205	89%	4,459	\$5,556	79%	5,406	
8th quarter after training or ui claim	\$6,454	92%	4,330	\$5,724	82%	5,430	
9th quarter after training or ui claim	\$6,539	93%	3,790	\$5,951	85%	5,346	
10th quarter after training or ui claim	\$6,771	97%	3,252	\$6,111	87%	5,013	
11th quarter after training or ui claim	\$6,774	97%	2,631	\$6,269	89%	4,553	
12th quarter after training or ui claim	\$7,158	102%	2,033	\$6,399	91%	4,113	

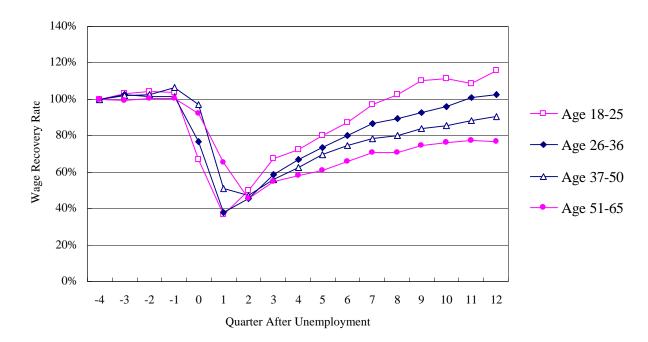
b. Differences in Wage Outcomes by Age Groups

ITG recipients below the age of 37 recover their pre-unemployment wages three years after filing for UI benefits, while older recipients did not. Those ITG recipients who were ages 18 to 25 at the time they received a grant regained 116% of their earnings three years after filing for UI benefits (Chart 5). In contrast, those ITG recipients age 37 to 50 recover 91% of their earnings after three years, while those in the 51 to 65 age group recover only 77% of their earnings.

Three years after completing training, ITG recipients age 37 to 50 recovered 102% of the earnings. However, those ITG recipients over the age of 50 did not recover their earnings three years after they completed training.

¹⁰ In the later quarters, the sample sizes are smaller in the post-training approach than the post-unemployment approach because the 60% of ITG participants who completed training in 1996 do not have three years worth of post-training data. This is a consequence of wage record information being limited to 1998. Approximately 20% of ITG participants claimed UI in 1996.

Chart 5.
Post-Unemployment Wage Recovery of ITG Recipients, by Age
Measured from the Time an Individual Files for Unemployment Insurance Benefits



Those ITG recipients with lower pre-unemployment earnings experienced higher wage recoveries than those who had higher pre-unemployment earnings. For this analysis, the weekly benefit rate (WBR) for Unemployment Insurance benefits was used as a measure of pre-unemployment earnings. This weekly benefit rate was determined by the Unemployment Insurance system based upon an individuals pre-unemployment wage and employment history. For the purposes of this analysis, ITG recipients were divided into four income groups: the bottom 25th percentile, the second 25th percentile, the next 17th percentile, and the top 33th percentile. The imbalance at the top occurs because 33% of ITG recipients received the maximum WBR. Many individuals with high pre-unemployment earnings receive the maximum weekly benefit rate. For example, in1994, individuals with pre-unemployment weekly wages over \$580 received the maximum weekly benefit amount of \$347. However, 67% of ITG recipients did not receive the maximum amount in 1994.

Those ITG recipients with the lowest pre-unemployment earnings recovered their pre-unemployment earnings within one and a half years after filing for UI benefits. Three years after losing their jobs, those individuals in the lowest WBR quartile recovered 132% (Table 12) of their earnings and those in the 2nd WBR quartile

recovered 105%. In contrast, those individuals in the top third of earnings recovered only 78% of their earnings three years after claiming UI. Furthermore, those individuals just below the top WBR percentile, recover 91% of their wages three years after claiming UI. Three years after completing training, those recipients in the top income group recovered only 89% of their earnings.

Table 12.
Post-Unemployment Wage Recovery of ITG Recipients,
by Pre-Unemployment Earnings¹¹

·	Wage Recovery	Wage Recovery
	Three Years After	Three Years After
	Unemployment	Training
Over all	91%	102%
lowest earnings group	132%	143%
middle earnings group	105%	115%
upper middle earnings group	91%	103%
highest earnings group	78%	89%

d. Differences in Wage Recovery by Race

ITG recipients who were Hispanic or Asian/Pacific Islander had a higher level of wage recovery than those who were white or African-American. By the 12th quarter after filing for UI benefits, Hispanic recipients recovered 103% (Chart 6) of their earnings. Three years after completing training, these recipients recovered 116% of their earnings. Asian and Pacific Islander recipients recovered 96% of their earnings three years after filing for UI benefits and 122% of their earnings three years after completing training.

These levels of wage recovery are higher than that of white and African-American recipients. White recipients recovered only 90% of their earnings three years after filing for UI benefits and 100% of earnings three years after completing training. African-American recipients recovered similar levels of wages three years after filing for UI benefits (92%) and three years after completing training (100%).

Native Americans and Alaska Natives have an erratic wage recovery trend due to the small number of individuals in this group (less than 20). However, as a group these individuals had wage recoveries that are well below 100% in each quarter.

¹¹ The lowest income group includes those individuals in the 1^{st} to 25^{th} percentile of the weekly benefit rate for UI benefits (UI WBR). The middle income group includes individuals in the 26^{st} to 50^{th} percentile of UI WBR. The upper middle earnings group includes individuals in the 51^{st} to 67^{th} percentile, and the highest earnings group includes individuals in the in the 68- 100^{th} percentile.

120% 100% White Wage Recovery Rate 80% - African-American 60% Hispanic 40% - Asian or 20% Pacific Islander 0% -3 -2 -1 2 3 10 11 Quarter After Unemployment

Chart 6.
Post-Unemployment Wage Recovery of ITG Recipients, by Race
Measured from the Time an Individual Files for Unemployment Insurance Benefits

e. Differences in Wage Outcomes by Education

When post-unemployment wage recovery was measured, those individuals with less than a high school education had higher levels of wage recovery than those individuals with higher educational levels. ITG recipients with less than a high school education recovered 102% of their earnings three years after filing for UI benefits. Those individuals with a high school diploma (91%), with some college education (93%) and with a college degree (89%) have lower levels of wage recovery.

When post-training wage recovery is measured, all educational attainment groups had similar levels of recovery. Three years after completing training, individuals with less than a high school education and those with a high school diploma were earning as much as they did before filing for UI benefits. Those recipients with some college education (106%) and those with a college degree (105%) had higher levels of wage recovery.

4. Wage Recovery by Type of Provider and Type of Training

In order to estimate the effect that the type of training provider and the type of training received has on wage recovery, ordinary least squares (OLS) regression was used. ¹² The level of wage recovery of individuals was determined by a large number of factors.

Nearly all ITG recipients enroll in training at county/community colleges, proprietary schools, four-year colleges and university or vocational schools. The particular type of provider was not found to have an effect on wage recovery of ITG recipients. The estimates of the relationship among the different types of providers and wage recovery were not statistically different from zero for all providers. Likewise, different types of training did not seem to have much of an impact on the rate of wage recovery.

B. Employment Outcomes of ITG Recipients

1. Measuring Employment Outcomes for ITG Recipients

Unemployment Insurance wage records were used to estimate the employment status of all ITG recipients in the period of time after they filed for UI benefits and completed training. Due to limitations of this source of information, the employment rates reported here underestimated the percentage of ITG recipients that were employed at any given time. As a result, these employment rates were most instructive when used to compare the employment outcomes of particular sub-groups of ITG recipients.

It was assumed that an individual was employed if an Unemployment Insurance wage record was available for them in a given quarter. However, UI wage records are not available for all employed residents of the state. Unemployment Insurance wage records are not reported for those individuals who are employed outside of the state, or employed by the US military, or who are self-employed. These individuals accounted for an estimated 17% of all employed New Jersey residents in 1990. In a survey of ITG recipients conducted in 1999, 14.3% reported that they were employed out of state, self-employed, or by the United States military.

2. Re-Employment Rates for ITG Recipients

In the first to the sixth quarter after recipients lost their jobs, the percentage of individuals employed in jobs covered by the New Jersey Unemployment Insurance system steadily increased, as individuals completed training and found

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 $^{^{12}}$ OLS regression analysis is a statistical method that can be used to control for the effects of different demographic and training characteristics on wage recovery.

employment. One and a half years after losing their jobs, 70% (Table 13) of ITG recipients were employed in jobs covered by the New Jersey UI system. This estimated re-employment rate stays stable in subsequent quarters. Three years after losing their jobs, 68% of recipients were employed in such jobs.

In the first full quarter after individuals completed training, an estimated 55% were employed. This re-employment rate increased gradually in subsequent quarters until two years after training was completed when 65% of recipients were employed in jobs covered by the New Jersey UI system.

Table 13. Re-employment rates for ITG Recipients

Quarter after	1	2	3	4	5	6	7	8	9	10	11	12
Training completed	55%	59%	60%	59%	60%	61%	65%	68%	67%	66%	67%	65%
Unemployment	29%	34%	47%	59%	66%	70%	71%	71%	70%	69%	67%	68%

3. Differences in Re-employment Rates for Sub-Groups

a. Differences in Re-employment rates by Gender

Female ITG recipients tended to have slightly higher re-employment rates than did male recipients, particularly in the 4th to 11th quarters after filing for UI benefits. Three years after losing their jobs, 70% (Table 14) of women and 64% of men were employed in jobs covered by the New Jersey UI system. Three years after completing training, 67% of women and 62% of men were employed in these jobs.

b. Differences in Re-employment rates by Age

Those ITG recipients between the age of 51 and 65 experience lower reemployment rates than younger recipients. These individuals, who comprised 19.7% of all ITG recipients, had a 62% re-employment rate three years after filing for UI benefits. ITG recipients between the ages of 37 and 50 and between the ages of 26 and 36 had re-employment rates of 69% and 70% respectively. Nearly three-fourths (73%) of the youngest recipients (ages 18 to 25) were employed in jobs covered by the New Jersey UI system. Three years after completing training, the re-employment rate for recipients between the ages of 51 and 65 is 57%. All younger groups had re-employment rates between 65% and 69%.

c. Differences in Re-employment rates by Race

Very little variation in the re-employment rates of different racial groups existed. Three years after filing for UI benefits, re-employment rates ranged from 68% for white recipients to 64% for recipients who were Asian or Pacific Islander.

Table 14.
Post-Unemployment Re-employment Rates,
by Age, Gender and Race

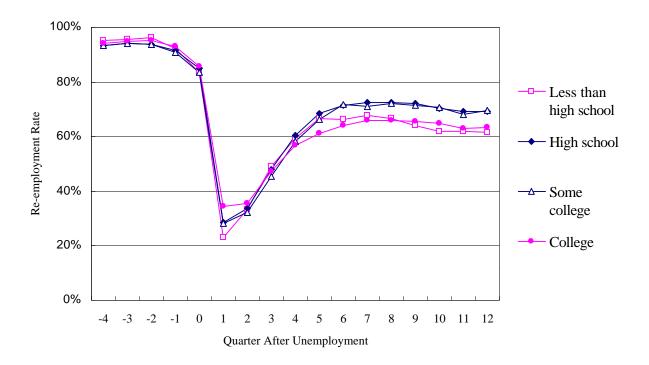
Quarter	Age	Age	Age	Age				African		Asian/Pacific
	18-25	26-36	37-50	51-65	Male	Female	White	-American	Hispanic	Islander
1	23%	28%	30%	32%	31%	28%	29%	32%	23%	30%
2	34%	33%	34%	35%	36%	32%	34%	36%	28%	31%
3	47%	47%	48%	46%	48%	47%	48%	49%	42%	41%
4	63%	60%	60%	55%	58%	60%	59%	59%	57%	55%
5	71%	68%	67%	63%	63%	69%	67%	65%	65%	63%
6	77%	71%	71%	65%	67%	72%	70%	70%	79%	67%
7	75%	72%	72%	66%	67%	73%	71%	70%	71%	70%
8	76%	71%	73%	66%	68%	73%	71%	72%	70%	60%
9	75%	70%	73%	66%	67%	73%	70%	70%	70%	70%
10	74%	69%	71%	63%	67%	70%	69%	68%	69%	66%
11	74%	68%	69%	61%	64%	69%	68%	67%	67%	59%
12	73%	70%	69%	62%	64%	70%	68%	68%	67%	64%

d. Differences in Re-employment rates by Education

Recipients with moderate levels of education (a high school education or some college education) had higher re-employment rates than recipients with higher or lower levels of education. The re-employment rate for recipients with a high school degree was 69% (Chart 7) three years after individuals lost their jobs. Those recipients with some college education had a re-employment rate of 70%. In contrast, the re-employment rate for college graduates was 63% and for individuals without a high school degree it was 62% after filing for UI benefits. In the 12th quarter after losing their jobs, the re-employment rate for those individuals in the second 25th percentile of weekly UI benefit rate was 72%. At that point in time, the re-employment rate was 67% for the lower income group (lowest 25th percentile) and 69% for the upper middle income group. Those in the top income group (top 33rd wbr percentile) had a re-employment rate of 65% three years after filing for UI. Re-employment rates measured after an individual completed training showed a similar pattern.

Chart 7. Post-Unemployment Re-employment Rates by Education

Percentages of Individuals Employed in Jobs Covered by the New Jersey UI System Measured from the Time an Individual Files for Unemployment Insurance Benefits



e. Differences in Re-employment rates by Pre-Unemployment Earnings

Those ITG recipients in the middle income group for pre-unemployment earnings had slightly higher re-employment rates than other recipients two to three years

4. Additional Measures of Employment

a. Weeks Worked After Completing Training

ITG recipients were employed an average of 46% of the first 156 weeks after losing their jobs. When the time spent in training was taken into account, ITG recipients worked an average of 58% of the first 156 weeks after completing training.

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¹³ The number of base weeks in a quarter was obtained from the Unemployment Insurance wage records. Weeks worked by individuals in jobs not covered by the New Jersey UI system are not included.

b. Employment Retention

In the first quarter after training was completed, 55% of ITG recipients were employed in jobs covered by the New Jersey UI system. Of these individuals, 81% were employed in every quarter of the first year and 44% worked for the same employer. One quarter of ITG recipients, who gained employment in the first quarter after finishing training, were employed for every quarter during the first three years after completing training. Less than 1% were employed for the same employer in all twelve quarters of the three years.

IV. Wage and Employment Impacts of the ITG Program

To place the outcomes of ITG recipients in a larger context, the wage recovery and re-employment rates of ITG recipients were compared to those of similarly unemployed individuals who did not participate in the ITG program. In addition, wage recovery and re-employment rates were calculated for dislocated workers that received training through Title III of the federal Job Training Partnership Act (JTPA) as an additional point of comparison.

A. Selecting a Comparison Group

A comparison group of 7,786 individuals was selected through stratified random sampling of all individuals that received Unemployment Insurance benefits from the state of New Jersey during the time that benefits were received by ITG recipients in 1994, 1995 or 1996. ITG recipients were not similar to those individuals that received Unemployment Insurance benefits from the state of New Jersey. As a result, the stratification of the sample was based on gender, educational attainment, year of Unemployment Insurance claim and amount an individual received per week in UI benefits (as a measure of pre-unemployment earnings). The random sample was then weighted to correct for differences between the ITG group's and the comparison group's within WBR quartile-race-sex-education distributions. A full comparison of the observable characteristics of ITG recipients and of the comparison group is included in Appendix B.

While the comparison group and those receiving an ITG grant were similar in many observable characteristics, there are many unobservable characteristics on which they may differ. For example, ITG recipients may have had more barriers to becoming re-employed than those members of the comparison group. In most cases, individuals received training through the ITG program because they believed--or the local ITG program staff believed-- that they did not possess the skills necessary to obtain employment and were in need of additional training. Conversely, during the study period, individuals who were identified by program staff as possessing skills needed by employers were encouraged to continue their search for employment and were not offered the opportunity to receive an ITG grant. In addition, the ITG program was a voluntary program. Those individuals who believed that they did not need additional skills to obtain employment were not likely to pursue an ITG grant. It was not possible to take these unobservable characteristics into account when selecting a comparison group, but instead this knowledge must be used to critically interpret results.

Unemployment Insurance wage records were used to construct wage histories and to calculate wage recovery rates for the comparison group and for the JTPA Title III participants. Wage recovery was measured from the time an individual filed for Unemployment Insurance (UI) benefits *and* from the time an individual completed training. Since the comparison group did not receive training, post-

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¹⁴ **Post-Unemployment Approach**: Measurement of wage recovery and re-employment begins

unemployment earnings were compared to post-training earnings of those individuals that received training. A full discussion of the methodology for determining wage recovery and re-employment rates is included in Section III-A and III-B of this report.

B. Impact of the ITG Program on the Wages of Recipients

1. Post-Unemployment Wage Recovery

Three years after filing for Unemployment Insurance (UI) benefits, the average quarterly earnings of ITG recipients and of the comparison group were similar. However due to higher levels of pre-unemployment earnings, ITG recipients had a lower level of wage recovery.

Examination of absolute wage levels, which have been adjusted for inflation, reveals that three years after filing for UI benefits, ITG recipients earned a small amount more than members of the comparison group. ITG recipients had average quarterly wages of \$6,399 (Table 15), while members of the comparison group had average quarterly wages of \$6,504. There is no statistically significant difference between the wages of these two groups.

Despite this parity in post-unemployment earnings, ITG recipients had slightly higher levels of pre-unemployment earnings, and as a result recovered a slightly lower percentage of their pre-unemployment earnings than did members of the comparison group.

In the first quarter after filing for UI benefits, members of the comparison group recovered 67% of their earnings. This percentage increased gradually until the eleventh quarter after filing UI benefits, when the comparison group recovered 95% of their pre-unemployment earnings. In the following quarter, the comparison group recovered 94% of their earnings.

Wage recovery rates for ITG recipients were substantially lower than the comparison group in the first quarters after losing their jobs. Wage recovery rates for ITG recipients began to increase as individuals complete training. Three years after filing for UI benefits, ITG recipients recovered 91% of their earnings.

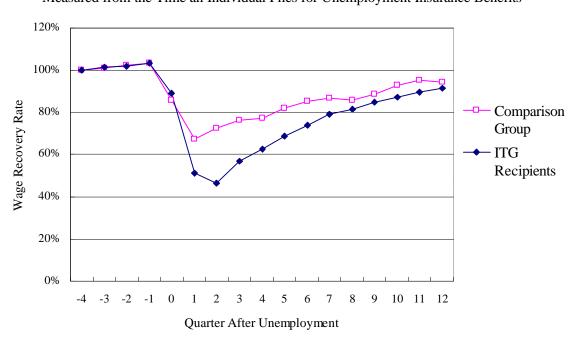
the first quarter after an individual file for UI benefits for ITG, JTPA, and control groups. **Post-Training Approach**: For ITG and JTPA participants, measurement of wage recovery and reemployment begins the first quarter after an individual completes training. For the comparison group, measurement of wage and re-employment begins the first quarter after an individual file for UI benefits

Table 15.
Post-Unemployment Wage Recovery

Post-Unemployment wage Recovery							
	ITG R	ITG Recipients Comparison Group		rison Group	JTPA	Participants	
Post-Unemployment	Mean	Wage	Mean	Wage	Mean	Wage	
Quarters	Wage	Recovery	Wage	Recovery	Wage	Recovery	
4 quarters before ui claim	\$7,007	na	\$ 6,823	na	\$6,865	na	
3 quarters before ui claim	\$7,124	102%	\$ 6,968	101%	\$6,968	101%	
2 quarters before ui claim	\$7,145	102%	\$ 7,042	102%	\$7,015	102%	
1 quarter before ui claim	\$7,247	103%	\$ 7,136	104%	\$7,193	105%	
quarter of ui claim	\$6,245	89%	\$ 5,921	86%	\$7,030	102%	
1 quarter after ui claim	\$3,588	51%	\$ 4,646	67%	\$3,818	56%	
2 quarters after ui claim	\$3,263	47%	\$ 4,996	73%	\$3,189	46%	
3 quarters after ui claim	\$3,982	57%	\$ 5,254	76%	\$3,533	51%	
4 quarters after ui claim	\$4,398	63%	\$ 5,310	77%	\$4,016	59%	
5 quarters after ui claim	\$4,808	69%	\$ 5,662	82%	\$4,599	67%	
6 quarters after ui claim	\$5,196	74%	\$ 5,892	86%	\$4,935	72%	
7 quarters after ui claim	\$5,556	79%	\$ 5,973	87%	\$5,209	76%	
8 quarters after ui claim	\$5,724	82%	\$ 5,907	86%	\$5,482	80%	
9 quarters after ui claim	\$5,951	85%	\$ 6,114	89%	\$5,653	82%	
10 quarters after ui claim	\$6,111	87%	\$ 6,397	93%	\$5,803	85%	
11quarters after ui claim	\$6,269	89%	\$ 6,554	95%	\$5,924	86%	
12 quarters after ui claim	\$6,399	91%	\$ 6,504	94%	\$6,056	88%	

Individuals who participated in training funded by the JTPA Title III program had a wage recovery pattern similar to that of the ITG group. These individuals recovered 88% of their wages three years after losing their jobs.

Chart 8.
Post-Unemployment Wage Recovery
Measured from the Time an Individual Files for Unemployment Insurance Benefits



2. Post-Training Wage Recovery

When measured from the time that individuals completed training and began to search for employment, ITG recipients recovered their pre-unemployment earnings in three years. Wage recovery rates for ITG recipients were slightly higher than those of the comparison group and of the JTPA Title III participants. Three years after completing training, the recovery rate was 102% (Table 16) for ITG recipients, 94% for the comparison group, and 99% for the JTPA Title III participants. In terms of absolute wage levels, the average ITG wage in the twelfth quarter after completing training was \$7,159. The average wages of ITG recipients exceeded the average wage of \$6,504 for the comparison group and, the difference is statistically significant.

Table 16.
Post-Training Wage Recovery

1 ost-11 anning wage Recovery							
	ITG Recipients Compa			son Group	JTPA I	Participants	
Post-Training Quarters	Mean	Wage	Mean	Wage	Mean	Wage	
	Wage	Recovery	Wage	Recovery	Wage	Recovery	
4 quarters before ui claim	\$7,007	na	\$ 6,823	na	\$6,865	na	
3 quarters before ui claim	\$7,124	102%	\$ 6,968	101%	\$6,968	101%	
2 quarters before ui claim	\$7,145	102%	\$ 7,042	102%	\$7,015	102%	
1 quarter before ui claim	\$7,247	103%	\$ 7,136	104%	\$7,193	105%	
quarter end training	\$3,096	44%	\$ 5,921	86%	\$3,658	53%	
1 quarter after training	\$4,349	62%	\$ 4,646	67%	\$5,035	73%	
2 quarters after training	\$5,158	74%	\$ 4,996	73%	\$5,225	76%	
3 quarters after training	\$5,394	77%	\$ 5,254	76%	\$5,490	80%	
4 quarters after training	\$5,693	81%	\$ 5,310	77%	\$5,732	83%	
5 quarters after training	\$5,884	84%	\$ 5,662	82%	\$5,822	85%	
6 quarters after training	\$6,018	86%	\$ 5,892	86%	\$5,943	87%	
7 quarters after training	\$6,205	89%	\$ 5,973	87%	\$6,101	89%	
8 quarters after training	\$6,454	92%	\$ 5,907	86%	\$6,292	92%	
9 quarters after training	\$6,539	93%	\$ 6,114	89%	\$6,404	93%	
10 quarters after training	\$6,771	97%	\$ 6,397	93%	\$6,463	94%	
11quarters after training	\$6,774	97%	\$ 6,554	95%	\$6,514	95%	
12 quarters after training	\$7,159	102%	\$ 6,504	94%	\$6,790	99%	

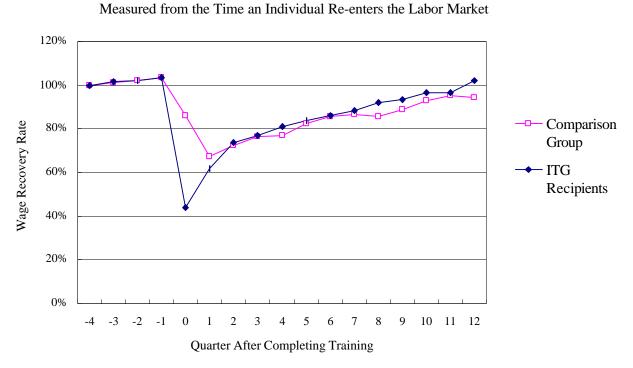


Chart 9.
Post-Training Wage Recovery

3. Basic Regression Analysis

Ordinary least squares (OLS) ¹⁵ regression was employed in order to estimate the complex relationship among participation in the ITG and JTPA Title III programs and wage recovery and control for differences in numerous demographic and administrative differences. The level of wage recovery of individuals maybe determined by a large number of factors. Some of these, including gender, educational attainment, age, race, union status, repeated Unemployment Insurance claims and full quarter employment. These factors can be measured and included in a regression model.

Full-scale regressions with indicator variables for receipt of an ITG grant, participation in the JTPA Title III program, year of unemployment, gender, educational attainment, age, and race produced estimates that were inconclusive. These models, using the post-unemployment and post-training approaches, explained only a small amount of the variation in wage recovery. The R-square (a measure of how much variation in wage recovery is explained by the variables) value was extremely low, at less than .02 for both approaches. Thus, these

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 $^{^{15}}$ OLS regression analysis is a statistical method that can be used to control for the effect of different demographic characteristics on wage recovery.

regression models can explain less than 2 percent of the variation in wage recovery.

These results are due, in part, to the nature of the data. Unemployment Insurance (UI) wage records did not allow for an accurate determination of hourly wages. As a result, there was not a way to distinguish full-time from part-time employment. Further, hourly wages would allow for a more detailed measure of an individual's wage. Without controlling for hours worked during a week or for part-time or full-time employment status, the model estimations are limited.

Because of the indeterminacy of the full-regression, complete interaction between the race, gender, and educational attainment variables were estimated in the second sets of analyses. This approach improves upon the first analysis by allowing each variable to have a different effect on wage recovery for each group of individuals. Thus, the relationship between the training groups and educational attainment is more flexible, allowing for different relationships (both negative and positive) for different educational levels. The relationship between ITG participation and wage recovery was generally positive but not statistically significant. Small sample sizes add uncertainty to the estimations. As a result all regression estimates should be viewed with great care.

4. Impact of ITG Program on Wages of Various Groups

Women and individuals with less formal education who received training through the ITG program had higher levels of wage recovery than those who did not participate in the program. The wage recovery trends of ITG recipients and comparison group members are consistent across all income and racial groups.

a. Education

Individuals Without a High School Degree

When wage recovery was measured after both filing for UI benefits and completing training, participation in the ITG program had a positive effect on the wage recovery of ITG participants with less than high school education. These ITG recipients recovered pre-unemployment earnings three years after filing for UI benefits. In contrast, members of the comparison group recovered no more than 85% (Chart 10) of their earnings in the three years after filing for UI benefits. The wage recovery of the ITG group was consistently higher than the wage recovery of the comparison group in all quarters following the 8th quarter after filing for UI benefits.

Chart 10. Post-Unemployment Wage Recovery Individuals Without a High School Diploma

Measured from the Time an Individual Files for Unemployment Insurance Benefits



Three years after completing training, ITG recipients had higher wage recovery rates than the comparison group. In the 12th quarter after completing training, ITG recipients recovered 102% of the pre-unemployment wage, compared to only an 85% recovery for those individuals that did not receive training. JTPA Title III participants without a high school degree had wage recovery rates higher than those of the comparison group but lower than the recovery rates of ITG recipients.

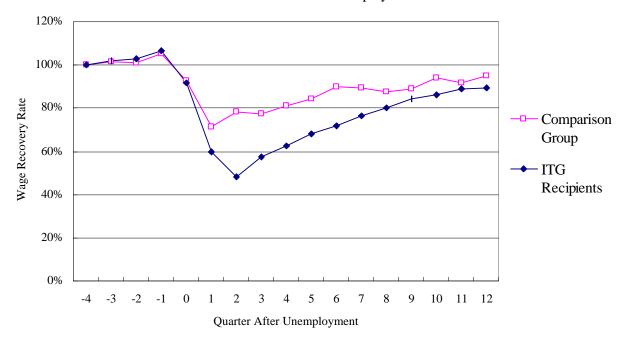
College Graduates

ITG recipients with higher levels of formal education had mixed results. For example ITG recipients with a college degree recovered 89% (Chart 11) of their earnings three years after losing their job and 105% of their earnings three years after training. Similar individuals in the comparison group recovered 95% of their earnings 3 years after losing their job.

JTPA Title III participants with a college degree recovered their earnings in the 9th quarter after receiving training and their recovery rates were consistently higher than those of the ITG group. Three years after filing for UI benefits, JTPA Title III participants with a college degree recovered 92% of their earnings. When measured three years after completing training, JTPA Title III recipients recovered 102% of their earnings.

Chart 11.
Post-Unemployment Wage Recovery
Individuals With a College Degree

Measured from the Time an Individual Files for Unemployment Insurance Benefits



b. Gender

Men who received training had higher levels of wage recovery than women. However, women who received training through the ITG program recovered a greater percentage of their earnings than women in the comparison group.

When measured three years after filing for UI benefits, women who participated in the ITG program (91%) and those in the comparison group (92%) have similar levels of wage recovery. Those women who received training through the JTPA Title III program also had similar levels of wage recovery.

Men who received training through the ITG program had lower levels of wage recovery than those in the comparison group, when measured after filing for UI benefits. Three years after losing their jobs, men in the ITG program recovered 93% (Chart 12) of their earnings. By that time, men in the comparison group had recovered 99% of their earnings.

Three years after completing training, women who received ITG grants recovered 100% (Chart 13) of their earnings. While this is lower than the 104% wage recovery rate for men in the program, it is significantly higher than the 92% recovery rate for women who did not receive training. Men in the comparison group had similar wage recovery rates to those men who received an ITG grant. These results suggest that, relative to a comparison

Chart 12.
Post-Training Wage Recovery
Men

Measured from the Time an Individual

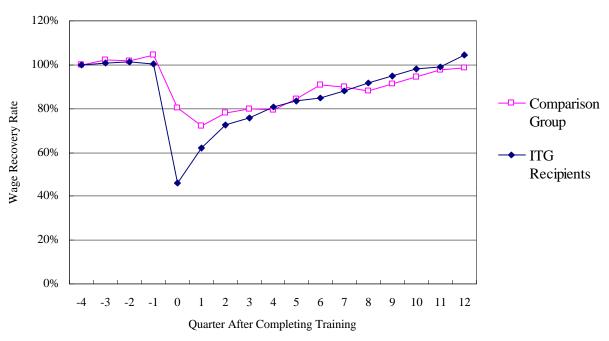
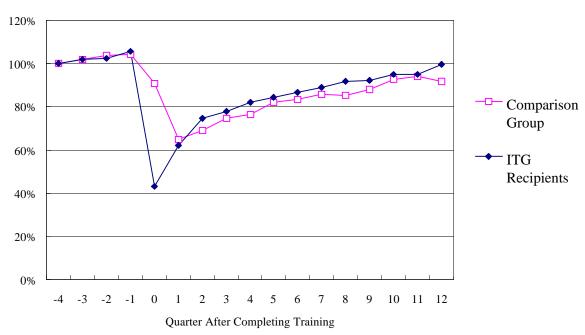


Chart 13.
Post-training Wage Recovery
Women

Measured from the Time an Individual Re-enters the Labor Market



5. Regression Analysis for Wage Recovery by Sex, Race, and Educational Level

To better understand the relationship between participation in the ITG and JTPA Title III program and wage recovery for specific groups, ordinary least squares regression was employed. Separate regression models were created for a variety of different gender, race, educational attainment and earnings groups. Small sample size restricted estimates to wage recovery rates from 8 quarters after claiming UI and 8 quarters after training ended.

When post-unemployment wage recovery was used as a dependent variable, participation in either training program was negatively related to wage recovery in the full regression model. However, for women, non-white individuals and those

without a high school diploma, participation in the ITG program seemed to have a positive (although not statistically significant) effect on earnings.

When post-training wage recovery was used as a dependent variable, participation in the ITG program and participation in the JTPA Title III program both had a positive influence on wage recovery in the full-observation model. However, when separate regression analyses were conducted by educational level, only the lower education group (less than high school degree) had a consistently positive estimated relationship for the two training interventions ITG and JTPA.

Table 17.
Post-unemployment Approach
Regression results by educational group

Dependent Variable=percent change between wage 4 quarters before claiming UI and 8 quarters after

quarters ages:	Less th	an high	school	High so				college	;	Colleg		
	n=506			n=3683	3		n=260	-		n=123		
	$R^{2=}.03$			$R^{2=}.01$			$R^{2=}.01$			$R^{2=}.03$		
Variable	Coeff.	Std	t value	Coeff.	Std	t	Coeff	Std	t value	Coeff	Std	t value
		Er			Er	value		Er			Er	
male	-3.12	15.5	-0.201	-0.43	3.05	-0.1	-5.67	5.17	-1.098	5.94	5.81	1.021
white	14.9	15.3	0.973	3.77	3.09	1.22	0.725	5.02	0.144	-8.1	6.79	-1.196
union	-1.55	20.5	-0.076	-8.84	5.24	-1.7	0.194	10.3	0.019	-24	15.4	-1.531
age	-0.03	3.88	-0.008	-1.65	0.85	-1.9	-2.29	1.39	-1.641	-5	1.9	-2.652
age squared	-0.01	0.05	-0.213	0.01	0.01	0.95	0.018	0.02	1.05	0.05	0.02	2.207
itg	23.2	20.4	1.136	-5.41	3.52	-1.5	-13.7	5.9	-2.321	3.53	6.66	0.53
jtpa	-16.2	20.3	-0.799	-4.4	3.61	-1.2	-10.7	6.43	-1.668	-0.4	7.73	-0.053
multiple ui claim	6.58	15.8	0.415	-3.01	3.07	-1	-6.49	5.4	-1.203	6.04	6.61	0.914
1995 ui claim	9.99	16	0.623	4.13	2.98	1.39	8.807	5.17	1.704	10.4	6.05	1.714
1996 ui claim	-17	54.6	-0.311	-1.31	8.35	-0.2	25.86	13.7	1.881	38.9	21.2	1.839
main wage earner	10.5	19.5	0.539	-1.85	3.02	-0.6	3.631	5.45	0.666	-1.3	6.9	-0.184
worked part quarter	34.5	16.7	2.063	0.67	3.31	0.2	3.343	5.75	0.581	12.5	6.58	1.903
multiple employers	-19.6	20.9	-0.937	-7.49	3.59	-2.1	-11	6.0	-1.804	-15	6.9	-2.113
same industry	-7.85	18.5	-0.424	4.69	3.36	1.39	12.4	5.6	2.185	14.4	6.4	2.24

Table 18. Post-training Approach Regression results by educational group

Dependent Variable=percent change between wage 4 quarters before claiming UI and 8

quarters after

4	Less than high school		High school		Some college			College				
	n=351			n=267	'9		n=1857	7		n=912		
	$R^{2=}.09$			$R^{2=}.01$			$R^{2=}.01$			$R^{2=}.03$		
Variable	Coeff.	Std	t value	Coeff	Std Er	t value	Coeff.	Std Er	t value	Coeff.	Std Er	t value
		Er										
male	5.48	8.66	0.634	-1.34	4.4	-0.3	-3.92	6.92	-0.566	2.58	6.85	0.377
white	-0.2	8.5	-0.024	7.88	4.45	1.77	1.645	6.74	0.244	-1.1	8.1	-0.132
union	-13.7	11.9	-1.155	-3.38	7.4	-0.5	0.935	13.2	0.071	-27	20.4	-1.312
age	-0.13	1.98	-0.064	-1.16	1.2	-1	-2.14	1.79	-1.196	-5.7	2.01	-2.825
age squared	-0.01	0.02	-0.601	0	0.01	0.07	0.015	0.02	0.682	0.05	0.02	2.302
itg	10.8	10.5	1.031	9.84	4.88	2.02	-2.26	7.69	-0.294	10.5	7.9	1.329
jtpa	1.97	11.2	0.176	2.15	5.31	0.41	3.891	8.97	0.434	17.7	9.76	1.811
multiple ui claim	5.81	9.06	0.641	-0.11	4.51	-0	0.711	7.42	0.096	16.6	8.09	2.047
1995 ui claim	6.35	9.46	0.671	2.3	4.49	0.51	10.03	7.14	1.404	11.4	7.38	1.539
1996 ui claim	45.4	15.7	2.892	0.92	7.49	0.12	25.24	12.7	1.995	18	14.5	1.244
main wage earner	11.3	11	1.029	2.5	4.4	0.57	3.56	7.21	0.494	7.11	8.15	0.873
worked partquarter	-11	9.67	-1.135	0.1	4.9	0.02	7.723	8.2	0.942	24.2	8.36	2.898
multiple employers	15.9	12.4	1.28	-12.3	5.46	-2.3	-13.7	8.46	-1.618	-6.7	8.37	-0.797
same industry	11.7	9.43	1.244	3.77	4.68	0.81	11.99	7.37	1.627	14.3	7.37	1.937
intercept	13.9	43.4	0.321	41.9	24.9	1.68	62.19	35.4	1.756	110	42.5	2.585

C. Impact of ITG Program on Employment Outcomes

Individuals that received ITG grants tended to have higher levels of re-employment than members of the comparison group. Three years after filing for UI benefits and three years after completing training, ITG recipients were more likely to be employed in jobs covered by the New Jersey UI system than were members of the comparison group.

1. Determining Re-employment Rates

Unemployment Insurance wage records were used to estimate the percent of individuals that were employed in a given quarter. UI wage records are available for those individuals who are employed in jobs covered by the New Jersey Unemployment Insurance system. An estimated 17% of employed New Jersey residents are not included in the UI wage records. As a result, UI wage records can only be used to estimate employment rates in this covered sector. However, these rates can be useful in comparing the re-employment rates of different groups. For a full discussion of the calculation of re-employment rates, see Section III-B.

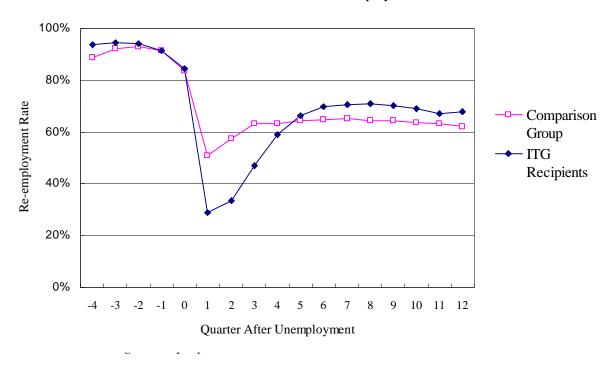
2. Impact of ITG Program on Re-employment Rates

a. Post-Unemployment Re-employment Rates

In the first quarters after filing for UI benefits, ITG recipients were enrolled in training and therefore had lower employment rates than the comparison group. However, as ITG recipients completed training and found jobs, their reemployment rates increased. By the 5th quarter after losing their jobs, ITG recipients (66%) (Chart 14) were more likely to be employed in jobs covered by the New Jersey UI system than were members of the comparison group (64%). Three years after filing for UI benefits, 68% of ITG recipients and 62% of the comparison group were employed. Further, the re-employment rates of the ITG recipients and the comparison group were statistically different from one another in all quarters except the quarter before and quarter of UI claim. Individuals that received training through the JTPA Title III program had similar re-employment rates to the ITG recipients.

Chart 14.
Post-Unemployment Re-employment Rates

Percentage of Individuals Employed in Jobs Covered by the New Jersey UI System Measured from the Time an Individual Files for Unemployment Insurance Benefits

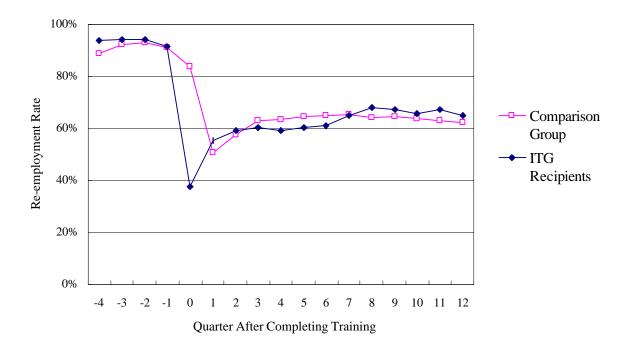


From the seventh to the twelfth quarter after completing training, ITG recipients had higher employment rates than the comparison group. Three years after completing training, 65% (Chart 15) of ITG recipients were employed in jobs

covered by the New Jersey UI system. Three years after filing for UI benefits, 62% of the comparison group were employed in similar jobs. The re-employment rates for the two groups were statistically different from each other in all quarters except for the quarter training ended and for the seventh quarters after completing training. Re-employment rates for those individuals who receive training through the JTPA Title III program tended to be similar to those of the ITG recipients.

Chart 15.
Post-Training Re-employment Rates

Percentage of Individuals Employed in Jobs Covered by the New Jersey UI System Measured from the Time an Individual Re-enters the Labor Market



3. Re-employment Rates within Demographic Groups

There were some substantial variations in the re-employment rates among ITG recipients and comparison group members by educational attainment, race and age.

a. Education

Participation in the ITG program had a substantial positive effect on reemployment rates for those individuals without a college degree. In addition, there was no distinguishable difference between the re-employment of the comparison group and the ITG group among those individuals with a college degree.

Following the fifth quarter after filing for UI benefits, ITG recipients without a college degree had statistically higher re-employment rates than the comparison group. Three years after filing for UI benefits, ITG recipients without a high school

diploma had a re-employment rate of 62%. Comparison group members without a high school diploma had a re-employment rate of 56%. Similarly, ITG recipients with only a high school degree had a re-employment rate of 66%, while the corresponding comparison group had a re-employment rate of 61% three years after filing for UI.

Among those with a college degree, ITG recipients and the comparison group had statistically similar re-employment rates from the 6th to the 12th quarter after claiming UI benefits. In the 12th quarter after losing their job, both the ITG group and the comparison group had a re-employment rate of 63%.

A similar trend occurred when re-employment rates were measured starting from the time an individual completed training. This suggests that, relatively speaking, training had more of an effect on the re-employment rates of the less advanced educational groups than more advanced education groups.

b. Race

ITG recipients of all racial groups tended to have higher re-employment rates than the comparison group, both 12 quarters after filing UI and 12 quarters after completing training. However, this was not the case for all racial groups time periods. ITG recipients who were Asian, African-American and Native American had re-employment rates that were lower but not statistically different than those of the comparison group in the 10th to 12th quarters after completing training.

c. Age

Participation in the ITG program may not have an effect on the re-employment rates of the middle-aged (37-50). Three years after training, a similar percentage of ITG recipients and comparison group members between the age of 37 and 50 were employed in jobs covered by the New Jersey UI system. However for the younger (18-25) and the older (over 50) workers training had a positive impact on re-employment rates.

4. Impact of the ITG Program on Weeks Worked After Completing Training

In addition to having higher re-employment rates in many quarters, ITG recipients also had longer periods of post-training employment in jobs covered by the New Jersey UI system than do members of the comparison group. Both ITG recipients and JTPA Title III participants worked an average of 46% of the first 156 weeks after losing their jobs. These individuals spent some of this time in training and out of the labor force. Members of the comparison group worked an average of

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¹⁶ The number of weeks worked in a quarter was obtained from the Unemployment Insurance wage records. Weeks worked by individuals in jobs not covered by the New Jersey UI system are not included.

49% of the 156 weeks.

When time spent in training was taken into account, both the ITG recipients and the JTPA Title III participants had higher percentages of weeks worked than the comparison group. ITG recipients worked an average of 58% for the first 156 weeks after completing training. JTPA Title III participants work an average of 65% of these weeks. Both percentages are higher than the 49% of weeks worked by members of the comparison group.

5. Impact of ITG Program on Employment Retention

In the first quarter after training was completed, 55% of ITG recipients were employed in jobs covered by the New Jersey UI system. Of these individuals, 81% were employed in every quarter of the first year and 44% worked for the same employer. One quarter of ITG recipients, who gained employment in the first quarter after finishing training, were employed for every quarter during the first three years after completing training. Less than 1% were employed for the same employer in all twelve quarters of the three years.

Half of all members of the comparison group were employed in the first quarter after filing for UI benefits. Seven in ten of these individuals were employed for all quarters of the first year. Only four in ten were employed by the same employer in all four quarters. In the three years after losing their jobs, 33% of the comparison group who gained employment in the quarter after UI claim were employed in all twelve subsequent quarters and 5% were employed by the same employer.

V. Perceived Impact of and Level of Satisfaction with the ITG Program: Individuals Receiving a Grant in 1994, 1995 or 1996

A. Introduction

The majority of individuals that received ITG grants in 1994, 1995 or 1996 were satisfied with the ITG program and with the training they received. While there was some variation in the level of satisfaction with the program, all groups of individuals were satisfied with the training and the program. There was little variation in the responses of individuals that received grants in different years, among individuals of different educational attainment levels and ages, and among individuals that received different types of training from different types of providers.

In addition, the majority of respondents believed that the training had a positive impact on the employment situation. Again, there was little variation in the responses among different groups of individuals.

Even those individuals that did not regain their pre-unemployment earnings when adjusting for inflation were satisfied with the program and believed that it had helped them to get a better job.¹⁷

B. Methodology

Two surveys were conducted with individuals who had received ITG grants in 1994, 1995 or 1996. In February and March of 1998, 1,573 individuals that had received Individuals Training Grants in 1994, 1995 or 1996 were surveyed. The response rate for this survey was 59%.

In July of 1999, these same individuals were contacted again to determine if their opinions of the ITG program had changed and to find out additional information on their perceptions about the impact of the program. Nearly two-thirds (64%) of those individuals surveyed in 1998 were successfully contacted. Surveys were completed with 1,002 individuals. The majority of those individuals who were not contacted could not be reached because they had moved or had changed their telephone number or could not be reached after repeated attempts at various times of the day, week and month. The response rate for this survey was 94%.

All survey instruments and results are included in Appendix D.

The 1,573 individuals surveyed in 1998 were similar to all individuals receiving ITG grants during the study period. While 68% of all survey respondents were women, 62% of all ITG recipients during this study period were women. Nearly 51% of survey respondents were awarded ITG grants in 1995.

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¹⁷ Change in earnings was measured using New Jersey Unemployment Insurance wage records from the fourth quarter before individuals lost their jobs to the 2nd quarter of 1998, when the survey was conducted.

Some groups, however, were slightly underrepresented among survey respondents. One quarter of the survey respondents were 35 years old and younger. Approximately 33% of the ITG population were 35 and under. Individuals with only a high school degree were also underrepresented in the sample. Over 39% of all respondents had only earned a high school diploma. Over half of all grant recipients during the study period had earned a high school diploma only.

The 1,002 ITG recipients surveyed in 1999 were also similar to all individuals receiving an ITG grant in 1994, 1995 or 1996. Over two-thirds (68%) of respondents were women. During the study period, 62% of grants were awarded to women. Over half of the respondents (57%) had earned a high school diploma or had some high school education. This is only slightly higher than the 51% of all ITG recipients during the study period with similar educational attainment levels. Finally, over half of the respondents had received an ITG grant in 1995.

C. Experience with ITG Program

1. Training Received Prior to ITG

For the vast majority of respondents surveyed in 1998, the training that they received through the ITG program was the first formal training that they had gotten since completing school. Nearly 95% of those surveyed did not report participating in any formal training before the ITG program.

Of the 5% of respondents that received training before ITG, 84% received occupational training and 14% received basic-skills training. In addition, two-thirds of these respondents received training that was funded by the state (38%) or federal government (28%). An additional 17% of these respondents received training that was funded by their employer.

2. Reasons for Receiving Training

The majority of respondents to the 1999 survey (70%) received training in order to assist them to change careers. Those respondents with the highest levels of educational attainment were slightly less likely to receive training in order to help them change careers. Less than two-thirds of these recipients agreed that they received training in order to help them change careers. In comparison, 71% of respondents without a college degree sought training to help them gain employment in a new career field.

Almost eight out of ten respondents agreed that they received training in order to increase their skill level in their current occupation. Women (79.9%) were slightly more likely than men (76.6%) to seek training to help them to increase their skill

level in their current field.¹⁸

More than three out of four respondents agreed either strongly or mildly that they received training through the ITG program because they were unable to find suitable employment. Men (80%) were more likely than women (75%) to seek training because they were unable to find a job otherwise. In addition, respondents with a high school degree and some college education (73%) were less likely that those with greater and lesser levels of educational attainment (78%) to receive training because they could not find a suitable job.

3. Training Received Through ITG

Nine in ten (91%) ITG recipients surveyed in 1998 were referred to the ITG program through the Employment Service or the Unemployment office. Only 3% of all respondents were referred to the program by a training school.

86% of the survey respondents reported receiving occupational training through the ITG program. Over 12% of respondents received basic skills training. This distribution is consistent across all demographic categories. Those individuals with lower levels of formal education were more likely to receive basic training than those with higher levels of education. Twenty percent of those respondents that had not earned a high school diploma received basic skills training through the ITG program.

The majority of respondents received training that involved the use of computers. Nearly 57% of the survey respondents reported that they participated in a computer-training program. According to the administrative data for the ITG program, 12% of all ITG recipients during the study period received training in computer and information technology. This difference is most likely due to the fact that computer training is often a major component of business administration and other types of training.

Older recipients were more likely to participate in computer training than younger participants. Nearly 73% those recipients age 55 and over reported participating in computer training. In addition, men were more likely than women to receive training in transportation related fields. Nearly 14% of men participate in transportation training, while 5.1% of all survey respondents participate in transportation training.

More than one in ten (11%) of all survey respondents worked part time while enrolled in training. One quarter of respondents that had earned a graduate or

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¹⁸ While many respondents agreed that they wanted to increase their skill level in their current occupation, many of these same individuals also agreed that they sought training in order to help them change careers. In fact, 52% of all respondents agreed with both of these seemingly contradictory statements. It is believed that some individuals agreed with this statement because they wanted to increase their skill level and not because they wanted to stay in the same occupation.

professional degree before entering the ITG program worked part-time while enrolled in training. Only 8% of high school respondents worked part time.

4. Receipt of Unemployment Insurance Benefits During Training

Nearly all respondents (92%) to the 1998 survey reported that they received Unemployment Insurance (UI) benefits while participating in the ITG program. This distribution is approximately the same across age, gender, and year of participation. However, while 6% of all respondents did not receive UI benefits while participating in the ITG program, 11% of college graduates did not receive UI benefits.

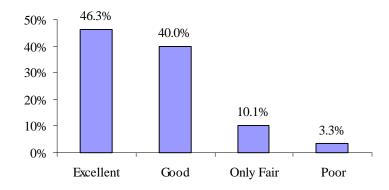
Of the respondents that reported receiving UI benefits during training, 86% felt that without the additional benefits they would not have participated in training and instead would have gotten a job. Eleven percent would still have participated in the ITG program even without the additional benefits.

D. Perceptions of the ITG Program and Training Received

1. Level of Satisfaction with ITG Program

Survey respondents had very positive opinions of the ITG program. A sizable majority of the respondents in 1998 (86%) rated the ITG program as either excellent or good (Chart 16). While 46% of respondents rated the program as excellent, an additional 40% rated the experience as good. Only 13% of respondents rated the program as only fair or poor.

Chart 16.
Rating of Overall Experience with ITG Program
1998 Survey



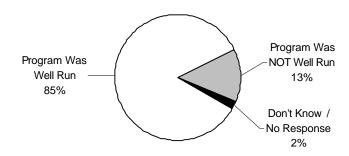
The distribution of responses by gender, age, year of participation, educational

attainment and type of training program were quite similar. However, 16% of those respondents that received training from a for-profit proprietary school rated their experience as only fair or poor, compared to 9% of respondents that received training from a two-year county college.

Only 13% of all respondents believed that the training program was not well run (Chart 17). Those respondents that attended proprietary schools for their training were more likely than others to believe that the training program they attended was not well run. Sixteen percent of those respondents felt that the program they attended was not well run. Only 9% of all other respondents shared this feeling about the programs that they attended.

Chart 17.
Assessment of the Training Program Attended

1998 Survey



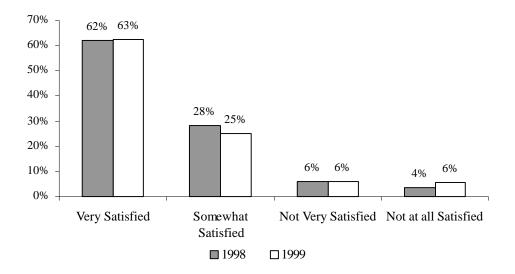
The participants surveyed in 1998 were asked what they liked best and what they liked least about the program. The aspects that the respondents liked the best focused on the quality of the program. Quality training / education (16% of respondents) and quality teachers / counselors (14%) were identified most frequently as the aspect of the program that individuals liked best. The opportunity to learn or advance (10% of respondents) was the only other area to account for as many as 10% of respondents. The remaining responses generally related to the positive effect of the program on the individuals, including that the program had helped to build self-confidence and led to an increased pay level.

A sizable minority of respondents (42%) indicated that there was "nothing" that they disliked about the ITG program. An additional 5% could not identify a specific area that they disliked. The highest specific areas of criticism were that the program was too short (9%) or that enrollment was too complicated or took too long (6%).

3. Level of Satisfaction with Training Received

Survey respondents in 1998 and 1999 expressed a strong level of satisfaction with the training they received through their ITG grant (Chart 18). In 1998, 62% of the respondents were very satisfied with the training. An additional 28% described themselves as somewhat satisfied. These responses were the same within all demographic groups, and even respondents who were not employed at the time of the survey were generally satisfied with the training they received. Individuals that received training from a proprietary school had slightly lower levels of satisfaction with the training they received. Twelve percent of respondents that received training from a proprietary school reported that they were not very satisfied or not at all satisfied with the training they received. Six percent of respondents that received training from a two-year college reported that they were dissatisfied with the training.

Chart 18.
Level of Satisfaction with the ITG Program
1998 and 1999 Surveys



Over one year after being surveyed in 1998 and after an additional 16 months in the labor market, recipients remain satisfied with the training they received. Sixty-three percent of respondents were very satisfied with the training they received while an additional 25% of respondents were somewhat satisfied. These figures are nearly identical to those collected in the 1998 survey.

While white and African-American respondents had similar levels of satisfaction, Hispanic respondents were more likely to be satisfied with training than were other individuals. Nearly all (96%) Hispanic respondents were either very satisfied or somewhat satisfied with the training they received.

As in the 1998 survey, individuals that received training from proprietary institutions were slightly less likely to be very satisfied with training than were individuals that received training from two-year county colleges. While 69% of individuals that received training from two-year county colleges were very satisfied with training, 58% of individuals that received training from proprietary institutions were very satisfied.

Over two-thirds of those surveyed in 1999 were as satisfied with training as they had been in 1998. While 15% of respondents were more satisfied in 1999 than they were in 1998, 17% were less satisfied than they had been 16 months earlier. Five percent of respondents reported that they were not satisfied with the training they received although they had been satisfied a year earlier. Three percent of individuals reported that they were satisfied with the training although they had reported that they were not satisfied with training in 1998.

3. Perceived Value of Training

A sizable majority of respondents in both 1998 and 1999 believed that the training they received was either extremely valuable or very valuable to them. In 1998, 86% of respondents indicated that training was either extremely valuable (38%) or very valuable (48%) to them (Chart 19).

Those respondents that received training from a four-year college and those respondents with a graduate or professional degree were more likely than others to rate the training as extremely valuable. Over 59% of respondents that received training from a four-year college and 48% of those with a graduate or professional degree believed that the training was extremely valuable to them.

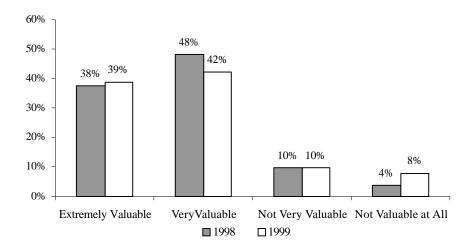
Those respondents that received basic skills training were less likely to feel that the training they received was very valuable to them. Only one-quarter of those that received basic skills training reported that training was extremely valuable to them. Within the remaining demographic groups, the distribution of responses was fairly consistent.

Recipients' perceptions of the value of the training remained fairly constant between 1998 and 1999. There was a small decrease in the percentage of people who believed that training was very valuable to them and a slight increase in the percentage of individuals who felt that training was not very valuable at all. Despite these small changes, in 1999, 81% of respondents believed that training was extremely valuable or very valuable to them

Women (82%), Hispanics (85%) and African-Americans (83%) were slightly more likely than other respondents to believe that training was valuable to them. In addition, those individuals with a college degree (85%) were also more likely to believe that training was valuable to them than were recipients with lower levels of educational attainment. Individuals that received training from a two-year county

college (86%) were more likely to believe that training had been valuable to them than were individuals that received training at for-profit proprietary schools (78%).

Chart 19.
Perceived Value of Training
1998 and 1999 Surveys



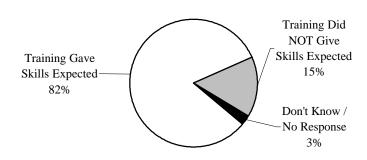
The additional year of labor market experience affected how a number of individuals felt about the ITG program. 11% of individuals reported in 1999 that training had not been valuable to them although they had reported in 1998 that training had been valuable to them. However, 6.5% of individuals reported that training had in fact been valuable to them although they had reported that it had not been valuable to them when contacted in 1998.

4. Skills Received Through the ITG Program

More than eight out of ten respondents (82%) in 1998 reported that they received the skills that they had expected to receive (Chart 20). Only 15% did not receive the skills that they expected. Again, the distribution of responses is stable across all demographic and training groups.

Less than 4% of the survey respondents in 1998 reported that they participated in training after the ITG program. No demographic group was more likely than others to have received additional training. Of the few individuals that did receive training, 88% received occupational training and 9% received basic skills training.

Chart 20.
Percent of Respondents That Received the Skills They Had Expected



1998 Survey

Only 23% of those who sought additional training did so because they did not find the training they had received through the ITG program to be adequate. Three-quarters of those who obtained additional training agreed that they pursued this training in order to get a better job. Six out of ten agreed that the additional training was for pursuit of another degree or certificate. Three out of ten agreed that their employer required the additional training. Three-fourths indicated that the additional training was either extremely valuable or very valuable to them.

The means of payment for the additional training varied greatly. One-third of the respondents that received additional training reported that their employer funded this training. An additional one-third of these respondents indicated that federal and state government funded the training they received. An additional 27% of respondents paid for the additional training themselves.

5. Use of Skills Received in First Job After the Program

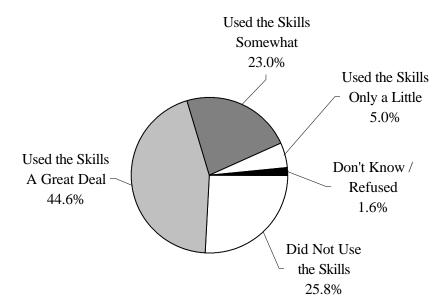
Six out of ten respondents in 1999 agreed that the ITG program gave them all of the skills that they needed for their first job after training. Nearly three-fourths of Hispanic respondents and 57% of African-American recipients believed that training had given them the skills they needed for their first job.

In that first job after training, 72% used the skills they received through the ITG program on the job. This percentage is slightly higher for Hispanic respondents (76%) and slightly lower for African-American respondents (65%). Those with higher levels of educational attainment were more likely to use the skills learned through the ITG program that those with lower levels of educational attainment. While 79% of college graduates used the skills in their first job, 69% of individuals

with a high school education or less used their skills on the job.

Forty-five percent of all respondents in 1999 used the skills a great deal in their first job (Chart 21). An additional 23% of respondents used these skills somewhat.

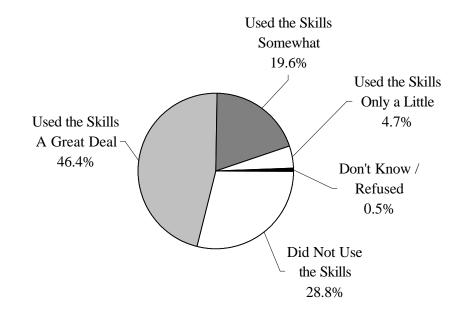
Chart 21.
Use of Skills Learned Through the ITG Program in First Job After the Program 1999 Survey



In 1999, more than two and a half years after the most recent ITG recipient in the study period received a grant, the ITG program continued to have an impact on the individuals that received training. Over half (52%) believed that the program they attended gave them the skills they need for their current or, if they were unemployed, their most recent job. Hispanic recipients (61%) and those who received training from four year colleges (67%) were morel likely to report that they received the skills they needed for the current or most recent job.

In their current or most recent job, seven out of ten respondents used the skills they received through the ITG program on the job (Chart 22). Women (73%) were slightly more likely to use the skills they received through ITG in their current job than were men (66%). Nearly eight out of ten of those who received an ITG grant in 1994 used on the job the skills learned through the program. This is significantly higher than the 67% of 1995 recipients and 73% of 1996 recipients that currently used the skills they learned in the ITG program on the job. Nearly half (46%) of all recipients used these skills a great deal in their current or most recent job.

Chart 22.
Use of Skills Learned Through the ITG Program in Current or Most Recent Job
1999 Survey



E. Perceived Impact of Training on Employment and Earnings

1. Perceived Impact of Training on Employment

The majority of respondents in 1998 believed that the training they received through the ITG program had a positive impact on their post-training employment prospects. Nearly two-thirds of respondents (64%) reported that the training they received helped them get a job more quickly (Table 19). Four out of ten respondents strongly believed that the ITG program had helped them to become employed again.

A majority of respondents (59%) agreed that the training had helped them to get a better job. One-third of all respondents did not agree that training had helped them to get a better job. A near majority of respondents (47%) agreed that the training they received helped them to hold onto their next job longer. Three out of ten respondents believed that training did not help them to remain in their job. Two out of ten respondents did not answer this particular question.

All groups believed that the training had a positive effect on their employment situation. There are, however, some variations in responses among different

groups. Those respondents with a high school diploma or less were not as likely to agree that training helped them to get a job more quickly. While 41% of all respondents strongly agreed that training had helped them to get a job more quickly, only 27% of those respondents with only a high school diploma or less strongly agreed with this statement. In addition, only 28% of those respondents that received basic skills training believed that training helped them to get a better job.

The youngest recipients of ITG grants were more likely to agree that training helped them to get a better job. 46% of respondents under the age of 36 and 41% of all respondents strongly agreed that training had helped them to get a better job.

Table 19.
Perceived Impact of Training

1998 Survey

The training received through the ITG program...

	Helped me get a job more quickly	Helped me get a better job	Helped me hold on to next job longer
Strongly Agree	40.50%	36.50%	25.40%
Mildly Agree	23.80%	22.70%	21.30%
Mildly Disagree	14.80%	16.50%	16.00%
Strongly Disagree	14.30%	16.10%	15.20%
Don't Know/Refused	6.50%	8.30%	22.10%

In 1999, individuals were asked to assess the impact of the program on their current job or, if unemployed at the time of the survey, on their most recent job. Nearly three out of four respondents agreed that the training helped them to get their current or most recent job (Table 20). Half of all respondents believed that the training they received had helped them a great deal to get their current or most recent job. Hispanic recipients (57%) were more likely than other demographic groups to believe that training had helped them a great deal to get their job.

Nearly two-thirds of all respondents (64%) believed that the training they received had helped them to hold onto their current or most recent job longer. Over half (56%) of Hispanics recipients believed that the training had helped them a great deal to hold onto their current job. This is considerably higher than the 41% of all respondents who believed that training had significantly increased their job security.

Six in ten respondents believed that training had helped them to advance with their current or most recent employer. One-third of respondents believed that training had helped them a great deal to advance with their employer. Again, Hispanic recipients were more likely to believe that training had a significant impact on their

employment situation. 44% of Hispanic respondents agreed that training had helped them a great deal to advance with their current employer.

Table 20. Perceived Impact of Training1999 Survey

Extent to which training received through the ITG program...

	Helped me to get current job	Helped me to hold onto current job	Helped me to advance with current employer
A great deal	49.7%	41.1%	33.4%
Somewhat	24.3%	22.8%	26.5%
Only a Little	19.6%	25.0%	28.0%
Don't Know/Refused	6.5%	11.1%	12.0%

2. Perceived Impact of Training on Earnings

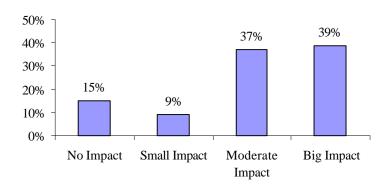
More than four out of ten respondents (42%) to the 1998 survey reported that at the time of the survey they earned more than they did before they entered the ITG program. The distribution of these responses was generally constant across all demographic groups. However, older respondents were less likely to report that they earn more after training than were younger respondents. While 70% of those age 55 and older report that they earn the same or less than they did before training, over 58% of all respondents did not report an increase in earnings.

Of those individuals that reported an increase in earnings, 37% reported that training had a big impact on their earnings (Chart 21). An additional 39% of these respondents reported that training had a moderate effect on their earnings. 81% indicated that the pay increase was a result of a new job, and 13% indicated that the increase was the result of a pay raise.

Of those who received basic training and experienced an earnings increase, 31% indicated that the training had no impact on the earnings increase. This rate is twice the rate for all survey respondents that reported an increase. Of those respondents that were employed either full time or part time when the survey was conducted, 35% have changed jobs within the last two years. Of those who changed jobs, 62% felt that the training they received helped them get the new job. Older respondents were less likely to believe that the ITG training had helped them get the new job. Approximately 44% of those respondents age 55 years and older reported that the training helped them get the new job. In addition, 70% of college graduates expressed that the training helped with their job change.

Chart 21.
Impact of Training on Earnings
for Those Individuals Reporting an Increase in Earnings in 1998

1998 Survey



F. Employment Status and Earnings of Recipients

Seventeen percent of all respondents to the 1998 survey reported that they were not employed. At the time of the survey, two-thirds were employed full time and 14% were employed part time. Of those who were employed part time, 14% were enrolled as a part-time student or in part-time training. Respondents were not asked if they were unemployed due to voluntary reasons such as retirement or family commitments. Of respondents who are 55 and older, 22% work part time and 24% are not employed.

In 1999, more detailed questions were asked to determine the reasons that individuals were unemployed. These questions allow for a more accurate determination of unemployment among ITG recipients.

In the 1999 survey, 9% of respondents reported that they were not actively looking for work at the time of the survey (Table 21). Most of these individuals were not looking for work because they had retired or had health problems that prevented them from working.

In addition, less than 1% of the respondents were full-time students.

Of the remaining respondents who were in the labor force (either employed or actively looking for work), 7% were unemployed. At the time of the survey, the unemployment rate in the state of New Jersey was 4.8%. ¹⁹

The unemployment rates were slightly higher for men (8.8%), for African-Americans (10.2%) and for those respondents with a college degree (10.6%). While the unemployment rate for women was only 6.1%, only 82% of women with

¹⁹ Source: New Jersey Economic Indicators, NJ Department of Labor, No. 406, August 18, 1999.

jobs were employed full-time. This is slightly lower than the 95% of employed men who were employed full-time. Many of the women employed part-time (24%) were actively looking for full-time employment.

Table 21.
Employment Status: July 1999
1999 Survey

	In the Labor	Force		r Force		
	Employed Full-time	Employed Part-time	Unemployed Looking for Work	Unemployed Not Looking for Work	Full-time Student	Estimated Unemployment Rate*
All Respondents	72%	11%	6%	9%	1%	7.0%
<u>Gender</u>						
Women	69%	15%	5%	10%	0%	6.1%
Men	79%	4%	8%	8%	1%	8.8%
<u>Race</u>						
White	73%	11%	6%	10%	1%	6.3%
African-American	71%	10%	10%	9%	1%	10.6%
Hispanic	78%	11%	7%	4%	0%	7.7%
Educational Attainment						
High School or Less	73%	10%	5%	11%	1%	5.8%
Some College	73%	12%	7%	8%	0%	7.2%
College	70%	13%	9%	7%	1%	10.2%

^{* -} Percent of Individuals in the Labor Force that are Unemployed and Looking for Work.

G. Level of Satisfaction with and Perceived Impact of Individuals That Did not Experience an Increase in Earnings

The results of the wage recovery analysis presented in an earlier section of the report show that many individuals who received an ITG grant did not regain their pre-unemployment wages for quite some time. However, the majority of individuals that did not recover their pre-unemployment earnings have positive feelings about the ITG program and believe that the program helped them.

Four out of ten (41%) of the 1,007 respondents to the 1998 survey for whom Unemployment Insurance Wage Records were available experienced an increase in wages from the fourth quarter before to the second quarter of 1998 when the survey was conducted when adjusting for inflation.

Those individuals that experienced an increase in earnings had more positive

feelings about the ITG program than those that did not recover their preunemployment earnings. However, even those that did not experience an increase in earnings had positive feelings about the program.

A sizable majority (84%) of respondents that did not experience an increase in earnings believed that the training was valuable to them and 91% were satisfied with the program (Table 22).

Table 22.
Level of Satisfaction with and Perceived Impact of the ITG Program
Individuals That Did NOT Experience an Increase in Quarterly Earnings

	Did NOT Experience an Increase in	Experienced an Increase in Quarterly
	Quarterly Earnings*	Earnings*
<u>1998 Survey</u>		
Satisfied with ITG Program	91%	93%
Training Was Valuable	84%	90%
Program Was Excellent or Good	87%	87%
Earn More than Before Participating in the Program ITG Program Had a Moderate or Big Impact	29%	65%
on Earnings Gain	76%	75%
ITG Program Helped Me to		
Get a Job More Quickly	64%	73%
Get a Better Job	55%	71%
Hold onto My Job Longer	45%	58%

^{* -} As measured by New Jersey Unemployment Insurance wage records from the fourth quarter before individuals filed for UI benefits to the second quarter of 1998 when the survey was conducted.

Less than three out of ten (29%) respondents, who according to the Unemployment Insurance wage records did not experience an increase in earnings, reported that their earnings had increased. Of these individuals, 76% believed that the ITG program had a moderate or large impact on their earnings gain.

Nearly two-thirds (64%) of respondents that did not experience an increase in earnings reported that the training they received had helped them to get a job more quickly. More than half (55%) said that training helped them to get a better job.

VI. Perceived Impact of and Level of Satisfaction with the ITG Program: Individuals Receiving a Grant in 1997

A. Introduction

ITG recipients, across all demographic groups, expressed high levels of satisfaction with the training they received through the ITG program. In addition, the majority of 1997 recipients believed that the training they received through the ITG program had a positive impact on their post-training employment prospects. Nearly seven in ten respondents reported that the training they received helped them get a job more quickly. Over half of the respondents agreed that the training had helped them to get a better job.

B. Methodology

This report outlines the findings from a survey of 503 individuals who received Individual Training Grants (ITG) in 1997 as part of the Workforce Development Partnership Program. Respondents, randomly selected from a list of all 1997 ITG recipients, were contacted by telephone in July 1999. Once selected, each telephone number was contacted a minimum of four times to attempt to reach an eligible respondent. Respondents with whom a viable contact was made were called additional times. The response rate for the survey was 86%.

The survey instrument with results is included in Appendix D.

The 503 individuals surveyed were similar to all individuals that received an ITG grant in 1997. While half of all ITG recipients in 1997 were under the age of 45, 43% of the survey respondents were in these youngest age groups. Women comprised over two-thirds of survey respondents (69%) and 63% of all ITG recipients in 1997. Half of all ITG recipients in 1997 had a high school education or less. Forty-eight percent of the survey respondents had a similar level of formal education.

C. Experience with ITG Program

1. Training Received Before ITG

For the vast majority of respondents (93%), the 1997 Individual Training Grant program was the first job-training program in which they participated. Only 7% said they participated in a job-training program prior to the ITG program. Of the seven percent who had previous job-training program experience, four percent reported receiving occupational training and two percent said they received basic skills training. Almost half of the seven percent say their previous job-training

program was part of a state job-training program. For others it was either part of a federal job-training program or a program sponsored by their employer.

2. Training Received Through ITG

Three-quarters (75%) of the respondents said that the training they received under ITG was occupational training. Almost one in five (18%) report receiving basic skills training. Five percent of 1997 ITG recipients report receiving some "other" type of training and one percent did not remember. African-American and Hispanic respondents (26%) were more likely than white respondents (16%) to report participation in basic skills training.

3. Receipt of Unemployment Insurance (UI) Benefits During Training

The overwhelming majority of 1997 ITG recipients (93%) reported that they received Unemployment Insurance (UI) benefits while receiving training through the ITG program. Six percent reported that they did not receive such UI benefits and one percent could not recall.

Over three-fourths of recipients (77%) who received Unemployment Insurance benefits while in training reported that they would not have been able to participate in the ITG program without the checks. Slightly more than one in ten (13%) would have participated in the training program even without UI benefits. Of those who reported that they did not receive UI benefits during training, almost all say it would have helped a great deal.

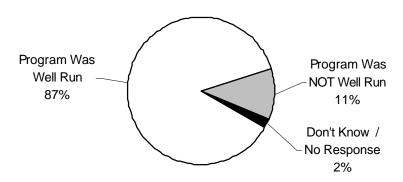
D. Perceptions of the ITG Program and Training Received

1. Level of Satisfaction with ITG Program

Respondents gave the job training they received under the ITG program high ratings. Almost half of the respondents (45%) rated the training program as excellent and an additional 43% gave the ITG programs a good rating. The distribution of responses by gender, age, year of participation, educational attainment and type of training program were quite similar. While all respondents of all ages rated their experience positively, those age 45 and older were more likely to give the programs an excellent rating (48%) than respondents under 45 years old (38%).

Eighty-seven percent of all respondents said the program they attended was well run (Chart 24). Thirteen percent reported that the training was not well run and two percent did not know or refused to answer.

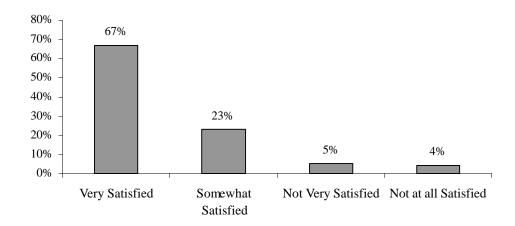
Chart 24.
Assessment of Training Program Attended
1997 ITG participants



Respondents reported high levels of satisfaction with the ITG program they attended (Chart 25). More than two-thirds (67%) reported being very satisfied with the training they received and an additional 23% said they were somewhat satisfied. Only nine percent say they were not satisfied with the training they received.

Respondents with a college or post-graduate degree reported the highest levels of satisfaction – 95% said they were very or somewhat satisfied compared to 88% of those with only some college and 86% of those with a high school diploma or less.

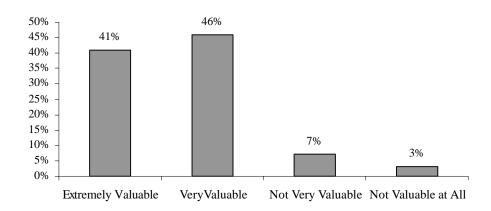
Chart 25.
Level of Satisfaction with the ITG Program
1997 ITG participants



2. Perceived Value of Training

1997 ITG recipients placed high value on the job training they received. Almost nine in ten said the training was extremely (41%) or very (46%) valuable (Chart 26). Only one in ten (10%) saw their training as not valuable. Those individuals who received training from two-year college were slightly more likely than those who had received training from a proprietary school to believe that training had been valuable to them. While 93% of individuals enrolled in a two-year college believed training was valuable to them, 85% of those who received training from a proprietary school shared this belief.

Chart 26.
Perceived Value of Training
1997 ITG participants



3. Skills Received Through the ITG Program

More than eight in ten (85%) said the training program they attended in 1997 gave them the types of skills they expected. Only 13% said the program did not match their expectations. For nearly two-thirds of the respondents (64%) the training they received under the ITG program met their entire job–training needs. One-third (33%) required additional training. White participants (67%) were more likely than Hispanic and African-American participants (59%) to say the training they received under the ITG program met all of their needs.

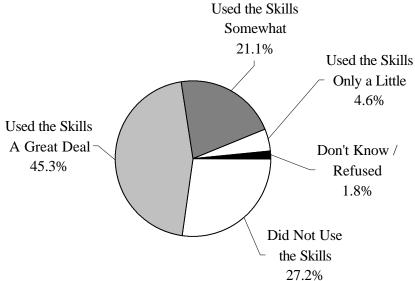
Despite one-third of the respondents reporting a need for additional training only four percent of the 1997 ITG grant recipients interviewed went on to participate in a subsequent job-training program. Most of those who did participate in additional training enrolled in an occupational training program. Half of the respondents who received additional training did so through programs sponsored by their employer, one-quarter attended a state job-training program and one-quarter paid for the training themselves.

The most common reasons for participating in additional training after the ITG program were getting a better job and earning another certificate or degree. Respondents strongly disagreed with the idea that they attended additional training because they were dissatisfied with the training they received through the ITG grant.

4. Use of Skills Received in First Job After the Program

In their current or most recent job, 71% reported that they used, on the job, the skills they received through the ITG program (Chart 27). While 45% of respondents said that they used the skills a great deal, 21% reported that they used their skills somewhat in their current job. Over one-quarter of respondents (27%) reported that they did not use the skills they learned in the ITG program in their current job.

Chart 27.
Use of Skills in Current Job
1997 ITG participants



E. Perceived Impact of Training on Employment and Earnings

1. Impact on Employment

The majority of 1997 recipients believed that the training they received through the ITG program had a positive impact on their post-training employment prospects. Nearly seven in ten respondents (68%) reported that the training they received

helped them get a job more quickly (Table 23). Half of all respondents strongly believed that the ITG program had helped them to become employed again. An additional 19% of respondents mildly agreed that training had helped to get a job.

A majority of respondents (58%) agreed that the training had helped them to get a better job. This is most true for respondents under age 55. Fifty-five percent of 1997 ITG recipients age 35 and younger strongly agreed with the statement compared to 49% of those 36 to 44 years old, 44% of respondents ages 45 to 54 and 30% of those age 55 and older. More than half (52%) believed that their training helped them hold onto their post-training job longer than they would have without training.

Individuals receiving training from proprietary schools were slightly more likely to report that training had helped them to get a job more quickly or to get a better job. For example, 52% of individuals enrolled at a proprietary school and 44% who enrolled at a two-year college strongly agreed that training had helped to find a job more quickly.

Table 23.
Perceived Effect of Training
1997 ITG participants

The training received through the ITG program...

	Helped me get a job more quickly	Helped me get a better job	Helped me hold on to next job longer
Strongly Agree	49.5%	43.9%	32.3%
Mildly Agree	18.9%	23.5%	19.5%
Mildly Disagree	10.9%	9.5%	12.3%
Strongly Disagree	15.9%	18.1%	19.3%
Don't Know/Refused	4.8%	5.0%	16.7%

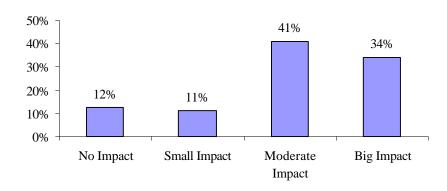
2. Impact on Earnings

More than four in ten (45%) 1997 ITG recipients reported that they currently earned more than they did before enrolling in the program. In fact, 16% (Chart 28) said the training had a big impact on their earnings and 19% said training had a moderate impact. The younger the respondent, the more likely he or she was to earn more after WDP training than they did prior to enrolling in the program. Six in ten respondents who are 35 years old or younger said their earnings have increased since training. This was true for 51% of 1997 ITG recipients 36 to 44 years old, 47% of those 45 to 54 years old and only 25% of respondents age 55 and older.

The majority of those who earn more (32% of all respondents) said that this was due to the new job they found as a result of training as opposed to working more hours (3%) or a pay raise (8%). This was especially true for white respondents. Hispanic and African-American respondents were more likely to report increased earnings as a result of working more hours or a pay raise than a change in jobs.

Chart 28.
Reported Impact of Training on Earnings
1997 ITG participants

for Those Individuals Reporting an Increase in Earnings in 1999



F. Employment Status and Earnings of Recipients

Nearly one in ten (9%) of respondents reported that they were not actively looking for work at the time of the survey. Many of these individuals were not looking for work because they had retired or had health problems that prevented them from working. Less than 1% of the respondents were full-time students. Nearly three-quarters of all respondents (73%) were employed full-time and an additional 12% were employed part-time.

Of those respondents who were in the labor force (either employed or actively looking for work), 5.7% reported that they were unemployed. At the time of the survey, the unemployment rate in the state of New Jersey was $4.8\%^{20}$.

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 $^{^{20}}$ Source: New Jersey Economic Indicators, New Jersey Department of Labor, No. 406, August 18, 1999.

Chapter 2: Evaluation of the Customized Training Program

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I. Introduction

The Customized Training (CT) grant program provided firms, consortia of firms and labor unions with grants to assist firms in upgrading the skills of their employees. The program was designed to assist firms to remain competitive and increase the skills of employed individuals.

This evaluation used five different sources of information. Administrative data was analyzed to create a profile of Customized Training grants awarded in 1994, 1995 and 1996. To estimate the impact that the grants had on companies, a telephone survey was conducted with firms that received a grant. To determine the impact of training on employees, telephone surveys were conducted with individuals that received on-the-job training funded by a CT grant. Unemployment Insurance (UI) wage records were used to determine the employment status and earnings of individuals who received on-the-job training. Finally, in-depth case studies were conducted with 7 firms and 2 consortia that received a CT grant.

II. Evaluation Methodology

A. Profile of Customized Training Activities

The profile of Customized Training (CT) activities provided an in-depth description of Customized Training grants that were awarded in 1994, 1995 and 1996 by the New Jersey Department of Labor. This profile contained a description of the grants that were awarded, the characteristics of firms and consortiums receiving grants, and a description of planned training activities. In addition, the profile utilized administrative data to summarize training activities that have been completed.

The Division of Business Services of the New Jersey Department of Labor collected administrative data for the Customized Training Program on a regular basis. This data served as the primary source of information for this profile. This dataset included descriptive information on the grant, including amount of the grant and planned training activities, and descriptive information on the recipient of the grant.

Grant recipients were required to submit close-out reports to the Department of Labor when training through the program has been completed. These reports contained a self-reported synopsis of the actual training activities that were completed. The New Jersey Department of Labor provided copies of all available close-out reports for Customized Training grants awarded in 1994, 1995 and 1996. Key information from these reports were entered into a database and served as an additional source of information on the progress of CT grant activities.

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B. Survey of Firms Receiving Customized Training Grants

The survey of firms receiving Customized Training (CT) grants had two main purposes. First, the survey was designed to gather information that would help assess the impact of Customized Training grants on firms. The survey focused primarily on the degree to which receipt of the grant had altered training practices at the firms and the degree to which receipt of the grant had affected the economic performance of the firms. The second goal of the survey was to gather additional information on training activities through the CT grant that was not reported in the administrative data collected by the New Jersey Department of Labor. This includes more detailed information of the type of training provided and on the employees that received training.

Key individuals at 114 firms that received Customized Training grants in 1994, 1995 and 1996 were surveyed during April and May of 1998. Each survey took approximately 15 to 20 minutes to complete. The survey instrument used and the results of the survey are included in Appendix D.

All 114 individuals surveyed stated that they were familiar with their company's receipt of the grant. At the time of the survey, nearly 30% of respondents were the Human Resource Manager or Personnel Manager for the firm that received the grant. An additional 13% were currently serving as the Training Manager or Training Director for their firm. All the remaining respondents served in high-level management positions at the firm and included company presidents, vice-presidents, facility plant managers and finance directors.

The survey sample consisted of all 200 firms that received individual CT grants during the study period and thirteen firms that participated in the CT program through a consortium. One firm was selected randomly for each of thirteen consortiums. The remaining thirteen consortiums that did not consist of individual firms or for which individual firms could not be identified were not represented in the survey sample due to their unique characteristics.

The names of individual contact people at firms were obtained from the Division of Business Services of the New Jersey Department of Labor. In most cases, the individual interviewed was the person who had managed the implementation of the CT grant at the firm. In the event that the contact person at a company had been replaced, an attempt was made to identify an employee of the firm that was familiar with the grant. Attempts were also made to identify new telephone numbers for firms when necessary.

Exhaustive attempts were made to complete surveys with all 213 firms in the survey sample. At least five telephone calls were placed to each firm. In many cases, interviews were scheduled ahead of time to adjust to the schedules of the respondents. Only four individuals refused to complete the survey. Most of the remaining firms could not be surveyed due to incorrect contact information. In a small number of cases, a contact person that was familiar with the grant could not be identified.

The 114 firms that were surveyed were quite similar to all firms that received CT grants during the study period. Of the 114 respondents, 105 were companies that received

individual CT grants. The remaining 9 firms received a CT grant as part of a consortium. Over 80% of the firms surveyed that received an individual CT grant were engaged in manufacturing. This mirrors the 79% of firms receiving individual CT grants during this time period that were engaged in manufacturing (Table 1). Over 53% of the firms surveyed were medium sized firms with between 50 and 250 employees at the location that received the grant. Again, this is quite similar to the distribution of the entire population. Nearly 50% of all firms directly receiving a CT grant were medium-sized firms.

Table 1.
Comparison of Survey Sample to All Firms Receiving CT Grants

	Č	Percentage of Survey Respondents
Year Grant was Awarded		
1994	31.9%	24.6%
1995	33.2%	29.8%
1996	35.0%	45.6%
Consortiums	11.5%	7.9%
Firms	88.5%	92.1%
Manufacturing Firms	79.0%	80.0%
Medium Size Firms (50-250 employees)	49.0%	53.3%

Firms receiving a CT grant in 1996 were slightly over-represented in the sample, while those receiving grants in 1994 were slightly under-represented. Contact information was more likely to be accurate for those firms receiving grants in recent years than for those receiving grants in previous years. The contact information provided by the Department of Labor was maintained during the course of the CT grant contract, but in most cases was not updated after the grant contract ended. The two largest impediments to the completion of surveys were turnover of contact individuals and changing addresses and telephone numbers of firms. These impediments were more severe for firms that received grants nearly four years ago. Despite these differences between the firms surveyed and all grant recipients, the sample size for each year was sufficient for analysis.

C. Survey of Individuals Receiving On-the-Job Training from Customized Training Grant Firms

The survey of individuals who obtained on-the-job training from firms who received Customized Training grants had three main goals. First, the survey was designed to gather information on the characteristics of individuals that received on-the-job training. The

second goal was to determine the level of satisfaction of recipients with the training that they had received. Finally, the third goal of the survey was to gather additional information that could be used to determine the affect that training had on individuals.

Telephone interviews were conducted with 300 individuals that received on-the-job training provided by a firm that had received a Customized Training (CT) grant in 1994, 1995 or 1996. These individuals received training from 23 different firms. The survey was conducted during March and April of 1998. Each survey took approximately 15 to 20 minutes to administer. The survey instrument and the results of the survey are included in Appendix D.

1. Data Collection

The names of individuals who received on-the-job training were obtained from the Division of Business Services of the New Jersey Department of Labor. The home telephone numbers of individuals were obtained directly from the firms where they had received training.

Customized Training grants could be used to subsidize the wages of individuals that received on-the-job training. In order to be reimbursed for these expenses, firms were required to submit the names and social security numbers of individuals receiving on-the-job training as supporting information for the invoices that they submitted to the New Jersey Department of Labor. Firms were not required to submit the names of individuals receiving classroom training through the CT program to the Department of Labor. These individuals could not be identified and as a result were not included in the survey.

The Division of Business Services provided invoices from 73 firms that provided on-the-job training through the CT program during the study period. The names of 10,000 individuals were entered into a database. These 73 firms were asked to provide the home telephone numbers of individuals receiving on-the-job training funded through the CT grant. The Division of Business Services of the New Jersey Department of Labor mailed a letter to these firms requesting their assistance. A list of all of their employees receiving on-the-job training from these firms was included with the letter to simplify the process. Follow-up telephone calls were then placed to each firm to encourage cooperation and to answer any questions about the request.

A total of 23 firms agreed to provide the home telephone numbers of the relevant employees. In one case, a firm that had provided on-the-job training through the CT program had since gone out of business. Most of the remaining 50 firms did not respond to repeated requests. A sizable minority of these firms would not disclose the home telephone numbers of their employees due to privacy concerns. In most cases, firms only provided the home telephone numbers of existing employees. In a small number of cases, firms provided the home telephone numbers of individuals that were retired or otherwise no longer employed by the firm.

2. Description of Individuals Surveyed

The 300 respondents to the survey received on-the-job training when employed by 23 separate firms that had received a CT grant. No one firm accounted for more than 15% of the respondents. Over 57% of respondents received training from an employer that had received a CT grant in 1995. Nearly 13% of individuals received training from a firm that received a grant in 1996. This small response rate for 1996 was most likely due to the fact that many firms receiving grants in 1996 were still providing training with CT funds and had not submitted invoices to the Department of Labor.

Nearly two-thirds (63%) of respondent were employed by firms in the manufacturing industry. An additional one-quarter of respondents were employed by a firm in the service industry. Over one-third (37%) of respondents were employed by firms that had a unionized workforce. An additional 50% of the respondents worked for a firm without a union. The union status of the employers of the remaining 12% of respondents is unknown.

D. Wage Outcomes of Individuals Receiving On-the-Job Training from Firms Receiving Customized Training Grants

Unemployment Insurance wage records were used to determine the wage and employment outcomes of individuals receiving on-the-job training from firms receiving Customized Training grants.

The social security numbers of 7,637 individuals that received on-the-job training from firms were identified through the invoices that firms submitted for reimbursement. The CT grant program subsidized the wages of individuals while they received on-the-job training. In order to be reimbursed for these expenses, firms were required to submit the names and social security numbers of individuals receiving on-the-job training when they submitted invoices to the New Jersey Department of Labor (NJDOL). These invoices detailed the total amount to be reimbursed. Firms were not required to submit the names of individuals receiving other types of training through the CT program. As a result, this analysis is limited to individuals that received on-the-job training.

Unemployment Insurance (UI) wage records were then used to determine the wage and employment history of these individuals. The vast majority of employers in the State of New Jersey are required to report the wages of all of their employees to the State Department of Labor on a quarterly basis when they file their Unemployment Insurance payroll taxes. Employers report four pieces of information for each employee on a quarterly basis: social security number, earnings during that quarter, number of weeks worked during the quarter, and the employers unique identification number.

An individual's earnings include all monetary payments made to an employee by the employer. The value of non-monetary benefits, such as health insurance, is not reported.

In addition, tips are not included. Any income not earned from an employer is not included in the UI wage records. Dividend and interest earnings, for example, are not included.

Quarterly wages are not reported to the New Jersey Department of Labor for certain employed residents of the state of New Jersey. This includes individuals that are self-employed, individuals enlisted in the military and individuals that are employed by religious organizations, not including religious schools and hospitals. In addition, quarterly wages are not reported for New Jersey residents that are employed in another state.

All UI wage records in 1992 through 1998 were obtained from the New Jersey Department of Labor for all 7,637 individuals receiving on-the-job training during the study period from the firms studied in-depth. UI wage records were used to construct a wage history for those individuals whose employers had begun their training program prior to 1996, to allow for a lengthy follow-up period. Wages were adjusted for inflation using the Consumer Price Index (CPI) with a base year of 1996.

E. In-Depth Case Studies with Nine Customized Training Grant Recipients

In year two of the evaluation, in-depth case studies were conducted with nine firms or consortia that received grants during the study period. These nine case studies were selected to be representative of all grants awarded in 1994, 1995 are 1996 (table 2). Three grant recipients in each of the three study years were selected. In addition, two of the case studies were conducted with consortia. Since the majority of grants (70%) awarded to firms were awarded to those in the manufacturing industry, six of the nine case studies were conducted with firms and consortia in manufacturing.

Table 2. Selection Criteria

Type of Recipient	Number of Firms	Number of Consortia	Total
Total	7	2	9
Industry			
Manufacturing	5	1	6
Non-manufacturing	2	1	3
Year Grant was Awarded			
1994	3	0	3
1995	2	1	3
1996	2	1	3
Size of the CT Grant			
Small (less than \$100,000)*	3	0	3
Medium (\$100,000 to \$450,000)**	2	1	3
Large (Greater than \$450,000)	2	1	3

 $[\]ast$ - Over 45% of CT Grants were less than \$100,000

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^{** -} The average CT Grant was \$215,602

The size of the CT grant was also used as a selection criterion for the case studies. Three small grants (less than \$100,000), three medium sized grants (between \$100,000 and \$450,000) and three large grants (over \$450,000) were studied. During the study period, a total of twenty grants (8.8% of the total) over \$450,000 were awarded. While these grants represented only a small percentage of the total grants awarded, they accounted for 43.6% of the total amount awarded to firms and consortia during the study period. In addition, case study firms and consortium were selected to insure geographic diversity and to represent firms with both unionized and non-unionized workforces.

Three firms and one consortium studied in-depth received more than one grant during the study period. For these three firms, the training activities funded by both grants were studied.

The nine case studies include the following grant recipients:

1994

Manufacturer of Windows for Residential Uses: This medium sized firm with approximately 170 employees is located in the southern part of the state. The company received a grant for \$150,000 in 1994 and a second grant for \$136,000 in 1996.

Manufacturer of Laminated Boxes: This firm, located in an urban area in the northern part of the state, received a grant for \$255,000 in 1994 and a grant for \$151,000 in 1996. This medium size firm has approximately 200 employees. The firm's employees are represented by a labor union.

Marketing Services Firm: This mid-size firm with nearly 400 employees received a grant for \$60,000. The firm is located in an urban area in central New Jersey.

1995

Major Daily Newspaper: This firm received a grant for \$5.2 million to assist the company to open a new printing facility in an urban area in the northern part of the state. This large firm has over 1,700 employees, many of whom are represented by a labor union.

Consortium of Small and Medium Service Firms: these consortia, organized by a local business organization, received a \$416,000 grant. The seven participating firms had over 600 employees and are located in northern New Jersey.

Manufacturer of Glass for Residential and Commercial Uses: This firm received a grant for \$200,000 to assist in the re-opening of a glass making facility that had been closed due to an economic downturn. The firm is located in southern New Jersey and employs approximately 240 individuals.

1996

Producer of Tape for Industrial Uses: This firm, located in central New Jersey, received a grant for \$1.8 million to assist in the transfer of new technology from the company's Japanese parent company. Many of the firm's 450 employees are members of a labor union. In 1994, the firm received a grant for \$102,000.

Telecommunications Company: This small firm located in northern New Jersey had 30 employees in 1996. The firm received a grant for \$20,000.

Consortium of Small Manufacturing Firms: This consortium of 19 small firms located in northern New Jersey was organized by a small business development center located in a state university. The consortia received a grant in the amount of \$1.3 million.

These nine in-depth case studies included in-person interviews with a variety of management staff of companies, including company Presidents, Chief Financial Officers, Directors of Human Resources and individuals that supervised the work of individuals who received training. These interviews were used to gather additional information on the activities funded by the CT grant, on the level of satisfaction with the program, and on the perceived impact of the training on employee productivity, firm productivity and competitiveness and training practices. The outline of questions explored in the in-person interviews is included in Appendix E.

In addition, employees who had received training funded by the CT grant were also interviewed whenever possible. In some cases, grant recipients were reluctant or unable to remove their employees from their regular duties to be interviewed. In two cases, a formal focus group was held with employees who had received training. In other cases, interviews were conducted with employees while they were completing their jobs. Employees were asked about their perceptions of the value of training that was received and their perceptions about the effect of the training on individual and overall employee productivity.

Finally, UI wage records were used to determine the wage and employment outcomes of 1,113 individuals that had received on-the-job training from the case study firms. Wage and employment histories were constructed from 1992 to 1998 for all individuals that had received on-the-job training. Average quarterly wages were calculated for the employees of each firm for each of the seven years. Average quarterly wages were averaged for each year to best measure wage trends and minimize variations in earnings created by a small sample size. Wages were adjusted for inflation using the Consumer Price Index (CPI) with a base year of 1996.

III. Profile of Customized Training Activities in New Jersey in 1994, 1995 and 1996

From 1994 through 1996, the New Jersey Department of Labor awarded 226 customized training grants to firms and consortiums. Over \$48.7 million was awarded during this time period. Firms and consortiums contributed an additional \$88.7 million to the training

activities and planned to use these combined resources to train 54,818 individuals and to create 145,640 training slots.

Of the 226 firms and consortiums receiving grants, 163 had submitted close-out reports to the Department of Labor by 1997. These firms and consortiums trained 44,419 individuals, 9% more individuals than they had originally planned to train. Despite this increase in the number of individuals trained these firms and consortiums contributed 94% of the amount that they had originally pledged to contribute.

A. Overview of Grants Awarded by Year

1. Overview of Grants Awarded in 1994

In 1994, a total of 91 firms or consortiums applied for Customized Training grants (table 3). Nearly 80% of these applicants received a grant from the New Jersey Department of Labor. Of these 72 Customized Training (CT) grants, 58 were awarded to individual firms. The remaining 14 grants were awarded to consortiums, groups of firms or labor unions that shared similar training needs.

Nearly \$14 million was awarded to the 72 grant recipients. Firms and consortiums that received grants were required to contribute their own resources to the training effort as well. On average, the grant recipients in 1994 planned to contribute \$1.73 to training activities for every dollar awarded to them from the CT program. In total, \$24 million in private funds were to be used for training activities.

Customized training grants awarded in 1994 ranged in size from a low of \$3,600 to a high of \$2.3 million. The average grant totaled \$194,419 but over half of all grants were less than \$100,000 in size. Two firms, Allied Signal Guidance and Control and Hill Refrigeration, received grants over \$1 million. These two grants represented 25% of the total amount awarded during the year.

Junuary 23, 2000

Table 3. *Year by Year Comparison of Grants*

	1994	1995	1996	Total
Number of Grant Applicants	91	95	90	276
Number of Grant Recipients	72	75	79	226
Number of Consortiums Receiving Grants	14	5	7	26
Amount Awarded in Grants	13,998,180	19,903,851	14,824,237	48,726,268
Minimum Grant Awarded	3,600	6,574	7,159	-
Maximum Grant Awarded	2,301,135	5,200,000	1,806,991	-
Average Grant Amount	194,419	265,384	187,648	215,602.96
Percentage of Grants Less Than \$100,000	51.4%	41.3%	44.3%	45.6%
Total Firm or Consortium Contribution	24,155,794	36,586,195	28,033,276	88,775,265
Number of Individuals to be Trained	13,182	24,059	17,577	54,818
Number of Training Slots to be Created	41,090	45,039	59,511	145,640

The average grant awarded in 1994 was expected to fund training activities over a period of 18 months. Firms and consortiums planned to create 41,000 training slots and to train over 13,000 individuals.

By 1997, firms and consortiums that received a grant in 1994 had invoiced nearly \$9 million, 64% of the total awarded. An additional \$3.3 million, or 24%, of the \$14 million in grant money had been de-obligated by the recipients. Three firms and no consortiums de-obligated the total amount of their grant.

2. Overview of Grants Awarded in 1995

In 1995, a total of 95 firms and consortiums applied for CT grants. As in the previous year, grants were awarded to 79% of applicants. Of the 75 grants that were awarded, 5 were awarded to consortiums, a substantial decrease from the previous year.

While the number of grant recipients increased slightly, the amount awarded in grants increased significantly from 1994 to 1995. Nearly \$20 million was awarded in CT grants in 1995, an increase of 42% from 1994. The average size of a CT grant also increased from \$194,419 to \$265,384.

Over 41% of the grants awarded were less than \$100,000 in size. The largest CT grant awarded during 1995 totaled \$5.2 million while the smallest grant totaled \$6,574. Two

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firms, the New York Daily News and Lucent Technologies, received grants of over \$1 million. Together, these two grants represent 35% of the total amount awarded to firms and consortiums in 1995.

On average, firms and consortiums planned to contribute \$1.83 for every dollar awarded in grants. These combined resources were to be used to train 24,000 individuals and to create 45,000 training slots, a substantial increase from 1994. The average grant recipient expected to provide training activities over a period of 15 months.

By 1997, firms and consortiums receiving grants had invoiced nearly \$16 million, 80% of the total awarded. \$1.5 million, or 7.6%, of the \$19.9 million in grant money was de-obligated by the firms and consortiums. As in 1994, three firms and no consortiums de-obligated the entire amount of the grant.

3. Overview of Grants Awarded in 1996

A total of 90 firms and consortiums applied for a CT grant in 1996. In 1996, the Department of Labor awarded grants to 88% of applicants for a total of 79 Customized Training Grants. Of these grants, 7 were awarded to consortiums, a slight increase over 1995. Nearly \$15 million was awarded in CT grants in 1996, a 26% decrease from the previous year.

CT grants ranged in size from \$7,159 to \$1.8 million. The average size of a CT grant was \$187,648 but more than 44% of grants were less than \$100,000 in size. One firm, Permacel, and one consortium, the New Jersey Small Business Development Center in Newark, each received grants of over \$1 million. These two grants account for 21% of the total amount awarded in 1996.

Grant recipients planned to contribute \$1.89 for every dollar awarded in grants. Through the CT grants, firms and consortiums planned to create 59,500 training slots and to train over 17,500 individuals. The average grant contract starting in 1996 was to extend over a period of 13.5 months.

By 1997, firms and consortiums receiving grants had invoiced \$4.3 million or 29% of the total awarded. Nearly 3% of the \$14.8 million in grant money was de-obligated by the firms and consortiums. Two firms and no consortiums de-obligated the entire amount of their grant.

B. Location of Firms and Consortiums Receiving Grants

Over 40% of the 226 CT grants were awarded to firms and consortiums in three New Jersey counties. Over 14% of the grants were awarded to firms or consortiums in Middlesex County while over 13% of the grants were awarded to firms or consortiums in Bergen County (Chart 1). Over 12% of the grants were awarded to firms or consortiums in Essex County. No other county in the state accounted for more than 7% of the CT grants awarded in 1994, 1995 and 1996. The distribution of CT grants by county was

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fairly stable for each of the three years.

In addition, 44% of grants to manufacturing firms were awarded to firms in these same three counties. In 1995, Middlesex, Bergen and Essex counties were home to 34% of the state's manufacturing firms and 31.5% of the state's private sector employers (County Business Patterns, 1995).

Over \$18.5 million, 39% of the total amount was awarded in CT grants to firms and consortiums in Middlesex, Bergen and Essex counties. However, firms and consortiums in these three counties planned to train 17,490 individuals, 32% of the total number of individuals to be trained.

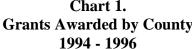
Over 28% of the grants were awarded to firms or consortiums located in urban aid municipalities, while over 21% of the grants were awarded to firms or consortiums located within an Urban Enterprise Zone. Firms and consortiums located in New Jersey's five largest cities, Newark, Jersey City, Camden, Trenton and Paterson received 17% of the grants awarded from 1994 to 1996.

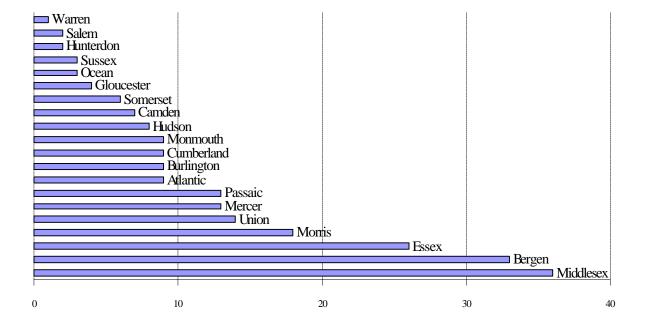
C. Description of CT Grants Received by Consortiums

Customized training grants were awarded to 26 consortiums in 1994, 1995 and 1996. Over half of these grants (14) were awarded in 1994. In 1995, five grants were awarded to consortiums.

These consortiums took a variety of forms. Ten of the consortiums were administered by educational institutions such as community colleges. While seven consortiums were administered by labor unions, the remaining nine consortiums were coordinated by economic development organizations or business groups.

Chart 1. **Grants Awarded by County**





Nearly two-thirds of all grants awarded to consortiums were awarded to consortiums located in three counties, Essex, Mercer and Bergen. Over 30% of the consortium grants were awarded in Essex County. Over 19% of consortium grants were awarded in Mercer County, a county that received 4% of all grants awarded to individual firms.

Over \$5.3 million, 18.8% of the total, was awarded to consortiums in 1994, 1995 and 1996. The size of the average grant to consortiums increased steadily from 1994 to 1996. While in 1994, the average consortium received \$135,000, the average consortium in 1996 received \$339,000. In 1996, nearly \$2.4 million was awarded to seven consortiums. In 1996, one consortium, the New Jersey Small Business Development Center in Newark, received a CT grant in the amount of \$1.3 million.

Consortiums relied heavily on funding through the CT program to complete their training activities. While individual firms planned to contribute \$1.99 for every dollar received through the CT program, consortiums planned to contribute \$1.20 for every dollar received.

Thirty percent of the individuals trained through the CT program were to be trained by consortiums, although consortiums received 18.8% of CT grant funds. Consortiums planned to train 16,283 individuals and to create 27,286 training slots. On average,

consortiums planned to spend an average of \$999 for each individual trained. This is far less than the average of \$1,499 to be spent per employee trained by individual firms.

Classroom training was the dominant form of training offered by consortiums. All but one of the consortiums planned to provide classroom training. Five consortiums planned to provide on-the-job training and 2.5% of the training slots were for on-the-job training.

Over \$2.9 million, 54% of the total awarded, had been invoiced by consortiums. However, \$654,000 had been de-obligated by consortiums. None of the 26 consortiums participating in the CT grant program between 1994 and 1996 de-obligated their full grant.

D. Description of CT Grants Received by Individual Firms

In 1994, 1995 and 1996, \$43.4 million in Customized Training grants were awarded to 200 individual firms. These firms planned to contribute \$82.4 million to the training efforts and to train 38,535 individuals and create 118,354 training slots.

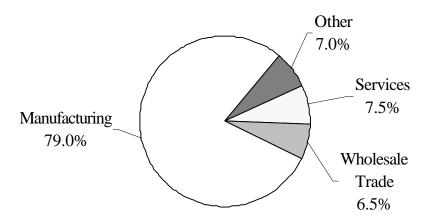
1. Description of Firms Receiving Grants

a. Industry of Firms Receiving Grants

Manufacturing firms have consistently received the largest number of grants and the largest proportion of grant money awarded to individual firms. During 1994, 1995 and 1996, nearly 80% of CT grants were awarded to firms engaged in manufacturing (Chart 2). While 14% of CT grants were awarded to firms engaged in either wholesale trade (6.5%) or in services (7.5%), the remaining 7% of grants were awarded to firms in other industries. This distribution remained fairly stable throughout the three years.

Over \$37 million, 76% of the total amount, was awarded to firms engaged in manufacturing. Over \$23 million, 78% of the total invoiced, was invoiced by firms engaged in manufacturing.

Chart 2.
Distribution of CT Grants to Firms by Industry
1994 - 1996



b. Size of Firms Receiving Grants

Firms receiving CT grants had an average of 482 employees. Firm size ranged from a low of 6 employees to a high of 7,139. Half of the firms receiving grants had fewer than 185 employees.

Nearly 49% of the CT grants were awarded to medium sized firms, with between 50 and 250 employees. These 97 firms received 31% of the total amount awarded to individual firms. Medium sized firms expected to train 9,358 individuals, 24% of the total planned to be trained by firms.

An additional 26% of grants were awarded to firms with 250 to 1,000 employees. These firms received 34% of the grant funds and planned to train 12,537 individuals, 41% of the total number planned to be trained by firms. CT grants were awarded to 26 firms with more than 1,000 employees. Over \$14 million, 33% of the total, was awarded to these large firms. Large firms planned to train 16,169 individuals, 42% of the total, with CT grant funds.

Table 4.

Distribution of Grants to Firms By Number of Employees 1994 - 1996

		Grants Awarded		Amount Awarded		
Number of Em	ployees	total	%	total	%	
Small	Less than 50	25	13%	\$ 774,253	2%	
Medium Size	50 to 250	97	49%	\$ 13,548,172	31%	
Mid Size	250 to 1,000	52	26%	\$ 14,891,765	34%	
Large	More than 1,000	26	13%	\$ 14,151,970	33%	

c. Composition of the Workforce of Firms Receiving Grants

Firms receiving CT grants tended to employ a large percentage of hourly workers. On average, two-thirds of the employees of the firms receiving CT grants were paid on an hourly basis. Eight out of ten firms receiving CT grants paid a majority of their employees on an hourly basis.

The average wage of individuals employed by firms receiving CT grants was \$13.70 per hour. Over 70% of firms receiving CT grants had an average wage of less than \$15 per hour. The four firms in the finance, insurance and real estate industries had an average wage of \$16.48 per hour. Manufacturing firms had an average wage of \$14 per hour. The 13 firms in the wholesale trade industry had an average wage of \$11.60 per hour.

d. Level of Unionization of Firms Receiving Grants

Over 42% of the firms receiving CT grants from 1994 to 1996 employed individuals that were members of a labor union. This percentage peaked in 1994, when 52% of firms receiving grants had a unionized workforce. By 1996, less than one-third of firms receiving grants had a unionized workforce. Over half the manufacturing firms employed individuals that were union members, while 23% of firms in the wholesale trade industry that received grants had a unionized workforce.

e. Reasons that Firms Applied for Grants

The majority of firms that received a CT grant were firms already located in New Jersey that needed to upgrade the skills of their workforce. Of the 200 firms receiving grants between 1994 and 1996, eighteen (9% of the total) were moving to New Jersey from another state. Four out of ten firms that received grants during this time period were in need of training due to a planned expansion of their workforce. An additional 18% of the firms that received grants were in need of workforce training due to the imminent or probable closing of their business.

f. Firm Contribution to Training Activities

On average, firms planned to contribute \$1.99 to training activities for every \$1 received in CT grants. Nearly 18% of the firms planned to contribute less than the amount of the CT grant. Approximately one-third of all firms planned to contribute more than \$2 for every \$1 received through the CT program. While firms planned to contribute \$1.68 per \$1 received in grants in 1995, the amount of the contribution increased to \$2.21 in 1996.

Large firms with more than 1,000 employees planned to contribute over \$3 to training activities for every \$1 received. The 13 firms in the retail trade, finance, insurance and real estate and the transportation and public utility industries planned to contribute \$4 for every \$1 in CT grants received.

2. Overview of Planned Training Activities

a. Scope of Training Planned

On average, firms receiving CT grants planned to train 63% of their employees. Over 40% of the firms planned to use their CT grants to train more than 75% of their workforce. An additional 21% of firms planned to train less than half of their employees.

Firms in the wholesale trade industry planned to train an average of 72% of their employees, while manufacturing firms planned to train 64% of their employees. Service industry firms planned to train 49% of their employees.

Small firms planned to train a higher percentage of their employees than did larger ones. While firms with less than 50 employees planned to train an average of 80% of their employees, firms with more than 1,000 employees planned to train 35% of their workforce.

b. Types of Training Planned

Nearly all firms, 198 of the 200, planned to use their CT grant to provide occupational training to their employees. Over 97% of the total amount awarded to firms during this three-year period was to be spent on occupational training. The remaining funds were to be used for occupational safety and health training and for remedial training.

Thirty firms, 15% of the total, planned to conduct occupational safety and health training. Nearly 4% of the firms planned to spend a portion of their CT grant on remedial training for their employees.

on-the-Job Training

Over 72% of firms, 145 in all, planned to use their CT grant to fund on-the-job training (OJT). Nearly 23% of firms receiving grants planned to provide training exclusively on-the-job rather than a classroom setting. Over \$21 million, 44% of the total, was awarded to firms for OJT. CT grants were to be used to create 33,165 OJT training slots. More than three-quarters of all firms planned to conduct both on-the-job training and classroom training.

Firms in the service industry were less likely than other firms to fund on-the-job training. Less than half of these firms planned on-the-job training. In addition, 87% of these firms planned to fund both on-the-job training and classroom training.

Classroom Training

Over 80% of firms, 161 in all, planned to use their CT grant to fund classroom training. Nearly 83% of manufacturing firms planned to use their CT grant to fund classroom training. Over \$27 million, 55% of the total, was awarded to firms for classroom training. CT grants were to be used to create 106,851 classroom training (CRT) slots.

Nearly 70% of firms in the wholesale trade industry planned to fund classroom training. Nearly all of the firms with more than 1,000 employees planned to provide classroom training while 68% of small firms planned to provide classroom training.

c. Cost Per Individual Trained

On average, firms planned to spend \$1,499 per individual trained. Small firms tended to spend twice as much per individual trained than did large firms. On average, firms in the manufacturing and wholesale trade industries planned to spend over \$1,500 of their CT grant on each individual trained (Chart 3). Firms in the service industries planned

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to spend \$1,137 of their CT grant amount to train one employee. The amount spent per individual was stable between 1994 and 1995 but decreased from \$1,566 to \$1,369 between 1995 and 1996.

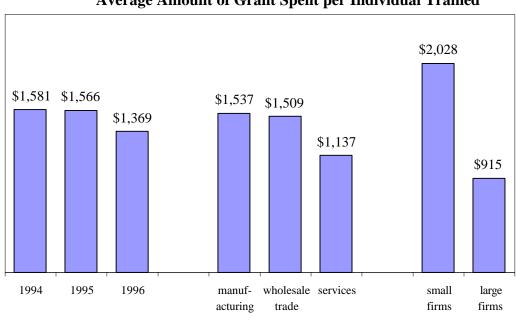


Chart 3.
Average Amount of Grant Spent per Individual Trained

Average per Year

All Firms, 1994 - 1996

d. Cost Per Training Slot

On average, firms planned to spend \$899 of their CT grant to create one training slot. In 1996, an average of \$709 was to be spent on each training slot. Small firms, with less than 50 employees, planned to spend \$1,303 per individual while large firms, with more than 1,000 employees, planned to spend \$548. Manufacturing firms planned to spend \$911 per individual while service firms planned to spend \$707.

The average firm planned to spend \$544 to provide classroom training for each training slot. In 1995, the average firm planned to spend \$628 to provide classroom training for each training slot. Large firms planned to spend an average of \$455 to provide classroom training for each training slot.

The cost of the average on-the-job training slot is significantly higher than the cost of the average classroom training slot. On average, firms planned to spend \$1,106 for each on-the-job training slot. Large firms planned to spend an average of \$650 per on-the-job training slot.

E. Level of Progress of Training Activities

1. Amount of Grant Funds Invoiced by Firms and Consortiums

Nearly \$49 million, or 60% of the total awarded in CT grants in 1994, 1995 and 1996, was invoiced by firms and consortiums by 1997 (table 5). While 41% of firms and consortiums receiving grants invoiced more than 75% of their grant, 15% invoiced the entire amount of their grant. Consortiums were slightly more likely to invoice a greater percentage of their grant. While the average consortium invoiced 68% of their grant, the average firm invoiced 60% of their grant.

Over 64% of the amount awarded in CT grants in 1994 was invoiced by 1997. This low invoice rate is the result of a small number of grants. Of the 72 grant recipients in 1994, 58% invoiced more than 75% of their grant.

A larger percentage of grant money awarded in 1995 was invoiced by 1997. Of the \$20 million awarded in grants in 1995, \$16 million, 81% of the total, has been invoiced. On average, firms and consortiums invoiced 76% of the grants awarded to them.

As of the fall of 1997, 27% of the total amount awarded in 1996 was invoiced. The average grant recipient invoiced one-third of his grant amount. 11% of recipients invoiced more than 75% of their grant.

2. Amount of Grant Funds De-Obligated by Firms and Consortiums

Of the 226 grants awarded to firms and consortiums in 1994, 1995 and 1996, eight had de-obligated the entire amount of their grant by 1997. These firms had planned to train 1,498 individuals and create 5,123 training slots. An additional 9% of award recipients de-obligated more than half of their grant.

Among grants awarded in 1994, 52 firms and consortiums de-obligated a portion of their CT grant. Over \$3.3 million was de-obligated, 23.8% of the total originally awarded. Three firms de-obligated the entire amount of their grant. These firms account for over 52% of the total amount de-obligated

Table 5.

Amount Invoiced and De-Obligated by All Grant Recipients by 1997

	1994	1995	1996	Total
Amount Awarded in Grants	13,998,180	19,903,851	14,824,237	48,726,268
Amount Invoiced Percentage of Total Awarded	8,920,896	16,125,741	4,339,070	29,385,707
	63.7%	81.0%	29.3%	60.3%
Amount De-Obligated Percentage of Total Awarded	3,324,745	1,506,712	414,437	5,245,894
	23.8%	7.6%	2.8%	10.8%

Of the 79 CT grants awarded in 1996, 9 have de-obligated all or a portion of their grant. Less than 3%, or \$414,000, of the total amount awarded has been de-obligated. Two firms de-obligated the entire amount of their grant, 39% of the total amount de-obligated. Nearly 8% of the total amount awarded in CT grants in 1995 was de-obligated by 1997. Among grants awarded in that year, 51 firms and consortiums de-obligated a total of \$1.5 million. Three firms de-obligated the entire amount of their grant accounting for 23% of the total amount de-obligated.

3. Training Activities Completed

a. Consortiums

Of the 26 consortiums receiving CT grants, 16 submitted close-out reports to the Department of Labor by 1997 summarizing the training activities that had been completed. These consortiums provided training to 8,882 individuals, 75% of the number of individuals they had expected to train. Three-fourths of consortiums did not train as many individuals as had been planned. Over 21% of the consortiums trained more individuals than had been planned.

b. Individual Firms

Over 73% of the firms receiving grants during the study period had submitted close-out reports to the Department of Labor by fall 1997. These 147 grant recipients planned to train 28,761 individuals. Training was in fact provided to 35,537 individuals, an increase of 24% over the initial plans. These increases were due largely to the efforts of a relatively small number of firms. While 28% of these firms trained more individuals than they had planned, more than 44% of these firms trained fewer individuals than had planned. In their applications, these firms pledged to commit \$65 million towards the training of their employees. In actuality, these firms contributed \$61 million to the effort.

Of the 72 firms receiving grants in 1994, 38 (53%) submitted a closeout report to the Department of Labor. These firms reported providing training to 12,631 individuals, an increase of 90% over their initial plans. Nearly 38% of these firms actually provided training to more individuals than had been planned. The company contribution to training, however, fell short of expectations. Instead of contributing \$13.1 million as planned, these firms contributed \$11.9 million.

Of the 75 firms receiving grants in 1995, 63 (84%) submitted a closeout report. These grant recipients trained 13,824 individuals, a decrease of 7% from the original plans. Nearly 46% of firms submitting a closeout report trained fewer individuals than originally had been planned. Over 23% of these firms trained more individuals than had been expected. These firms, however, contributed \$32.7 million to training activities, 98% of the amount that had originally been pledged.

Of the 79 firms and consortiums receiving grants in 1996, 46 (58%) submitted a close-out report. More than 45% of these recipients trained fewer individuals than had been planned, while 28% trained more individuals than had been planned. These firms trained a total of 9,082 individuals, an increase of 24.4% over their initial plans.

Over 53% of all manufacturing firms receiving grants and filing close-out reports trained more individuals than originally had been planned. These firms reported providing training to 30,496 individuals, an increase of 48% over original plans. Large firms provided training to 18,807 individuals, an increase of 54%. Mid-sized firms with between 250 and 1,000 employees provided training to 95% of the individuals that they had planned to train. Slightly less than half of all medium and mid-sized firms trained fewer individuals than originally had been planned.

F. Description of Individuals Receiving Training from CT Grants

While much is known about the firms that receive CT grants, very little is known about their employees that received training through the CT grant program. Limited information on the employees that received training is reported in the administrative data collected by the New Jersey Department of Labor. The survey of firms receiving CT grants and the survey of individuals receiving on-the-job training from CT firms provided additional opportunities to determine the characteristics of these individuals.

1. Firm's Description of Individuals Receiving Training

Most firms surveyed provided training to production workers, who were paid on an hourly basis. The vast majority of firms surveyed, 86%, utilized CT grant funds to train production workers. A sizable majority, 59%, trained administrative or office staff, while 40% trained individuals in management positions.

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The majority of surveyed firms reported that they provided training mainly to hourly wage employees who were not in supervisory positions in the company. Over half of the firms reported that over 60% of the individuals that were trained were hourly wage employees. Nearly 17% of firms reported that more than 20% of the individuals that received training were in supervisory positions in the company.

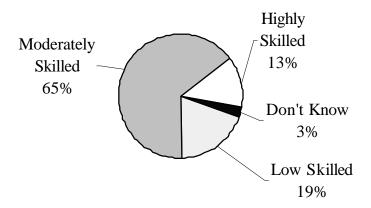
Training was also provided mostly to individuals with a high school diploma or less and who, according to the surveyed firms, had a moderate level of skills. The vast majority of firms, 82%, provided training primarily to individuals with a high school diploma or less. Nearly 65% of firms surveyed reported that the majority of employees that received training possessed a moderate level of skills (Chart 4). Only 13% of firms reported training primarily high skilled workers. The skill level of individuals trained was highest among firms receiving grants in 1994. One-quarter of these respondents reported training high skilled workers.

Over 42% of firms required all individuals employed by the company to be engaged in training. In 30% of the firms, management selected the individuals that received training, and in 14% of the firms, individuals volunteered to participate in training. Management and labor unions worked together to select the training participants in 13% of firms surveyed. While nearly 9% of firms trained only newly hired employees, nearly 60% of respondents reported training both existing employees and newly hired individuals. The remaining firms trained only existing employees.

2. Characteristics of Individuals Receiving On-the-Job Training

The majority of on-the-job training recipients who were surveyed were white men, between the ages of 36 and 55 and with only a high school diploma or less. The vast majority of respondents, 71%, were men. Nearly one-third of respondents were between the ages of 36 and 45 years old and an additional one-third of respondents were between the ages of 46 and 55. Only 18.0% were older than 55 years old and 15.7% were 35 years old or less. While 57% of respondents were white, 9% were African-Americans. An additional 20% of respondents reported that they were Hispanic.

Chart 4. Firm's Assessment of the Skill Level of a Majority of Employees Trained

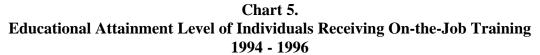


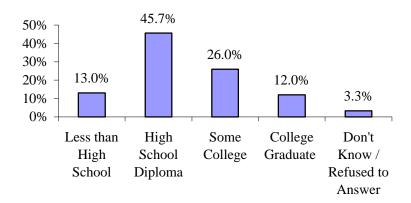
Nearly 46% of respondents earned only a high school diploma (Chart 5). An additional 13% of respondents had only some high school or grade school level education. Only 12% earned a college degree.

Half of all respondents reported that their household income was greater than \$40,000 a year. 11% reported a household income of more than \$75,000. Over 15% of respondents refused to give information on their household income.

Over 92% of respondents were employed on a full time basis at the time of the survey. An additional 2% of respondents were employed in a part-time job. At the time of the survey, over 89% of respondents were still employed by the firm that provided them training. Since most firms did not provide the telephone numbers of employees that were no longer employed at its firm, this percentage under-represented the percentage of individuals that remained with the employer that provided them training.

Individuals surveyed, who were still employed by the firm that had provided them with on-the-job training, tended to have long tenures with their employer. Nearly two out of ten (18%) respondents were employed by the firm for less than 6 years. Nearly half (47%) were employed by the firm for more than 10 years.





a. Training Received Prior to the CT Program

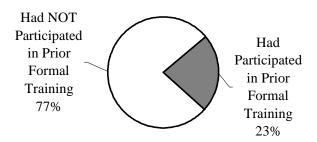
For most respondents, the training they received through the CT program was the first formal training that they received since high school. Survey results showed that 23% of respondents reported that they participated in training prior to the Customized Training program (Chart 6). Nearly 31% of individuals employed at firms with unionized workforce had received training prior to the CT program, while only 16% of all other respondents received prior training.

Only 3% of respondents reported that they participated in a training program that was funded by state or federal government before receiving on-the-job training. For the vast majority of respondents, this training was their first occasion of receiving training from an employer. Approximately 17% received training that was funded by their employer prior to the CT program. Further, nearly 16% of respondents received prior occupational training. While 8% of respondents received prior safety and health training, 7% received basic skills training.

b. Training Funded by CT Grant

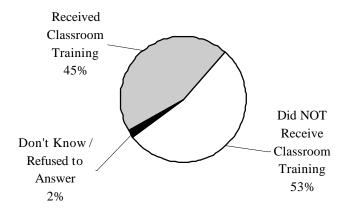
A sizable minority of individuals surveyed received classroom training to supplement the on-the-job training they received. 45% of those surveyed received additional training in a classroom setting. An additional 53% of respondents received only on-the-job training.

Chart 6.
Percentage of Respondents That Received Training Prior to the On-the-Job
Training They Received Through the CT Program



Of those individuals that received classroom training, 22% of respondents received basic skills training while one-third received safety and health training. Nearly 52% received occupational training. Over 11% received Total Quality Management training and 8% received ISO-9000 training, which describes training that helps companies obtain independent certification of high standards of quality control. Over 59% of respondents were required by their employer to participate in training. 28%, however, volunteered to receive the training.

Chart 7.
Percentage of Respondents That Also Received Classroom Training in Addition to On-the-Job Training



c. Training Received After the CT Program

The majority of respondents had not received training since participating in the program. Close to a quarter of respondents reported receiving training after CT. Nearly 32% of individuals employed by firms with a unionized workforce reported receiving training following the CT program. Only 20% of respondents reported receiving training that was funded by an employer after receiving on-the-job training through the CT program.

Individuals who received on-the-job training through the CT program were not usually served by the public workforce development system. Only 1% of respondents reported participating in training funded by the state or federal government after receiving on-the-job training. This indicates that the CT program provides a unique opportunity to reach residents that normally would have a limited amount of interaction with the workforce development system.

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IV. Firms' Experiences with CT Grant

A. Sources of Information on the CT Grant Program

The firms surveyed received initial information on the CT program from a wide variety of sources. While 22% of respondents first learned about the CT program directly from state government, an additional 13% of respondents learned about the program from educational institutions, including technical training schools and local community colleges. One out of ten learned about the program from another company. The remaining firms received initial information on the CT program from a variety of other sources.

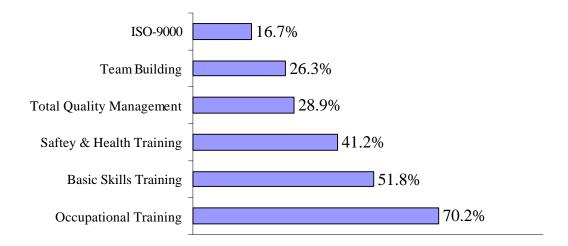
B. Description of Training Activities

1. Type of Training Provided

While the majority of firms provided occupational training for their employees, a substantial minority also reported providing other specific types of training. Over 70% of the firms surveyed utilized CT grant funds to provide occupational training - training related directly to the performance of a job (Chart 8). Nearly 52% of firms reported providing basic skills training, while 41% reported providing health and safety training.

Chart 8.

Type of Training Provided



Nearly 29% of firms surveyed provided total quality management training. A smaller percentage of firms, 17%, reported providing training that allowed the company to become ISO-9000 certified. The prevalence of ISO-9000 training peaked in 1995, when

nearly a quarter of firms provided this type of training. Over one-fourth of all firms surveyed provided team building training. Of those firms receiving a grant in 1996, 35% of the firms surveyed provided team building training.

2. Provider of Training

In half of the firms surveyed, employees of the company were the primary providers of training (Chart 9). More than two-thirds of the surveyed firms that received grants in 1995 utilized their own employees as the main providers of training. In 1996, this figure decreased to 45%. In 21% of the firms surveyed, two-year colleges were the main providers of training. Only 17% of firms utilized a private outside firm to provide the training.

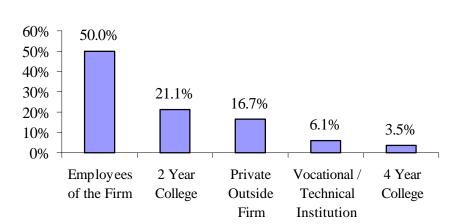


Chart 9. **Primary Provider of Training**

3. Location of Training

The vast majority of the firms primarily provided training at the job site. In less than 3% of the surveyed firms, training was conducted predominately at a facility outside of the job site. For 58% of firms, training was conducted primarily on the job. The remaining 39% of firms surveyed conducted training primarily in classrooms at the job site.

4. Labor Union Involvement

The Customized Training grant program strongly encourages employers to involve labor unions in the design of training activities. To ensure union involvement, labor unions representatives are required to sign the application for a Customized Training grant. Despite this requirement, in most cases, labor unions did not play a significant role in the design of training activities funded by the Customized Training grant.

Over 40% of the firms responding to the survey had employees that were members of a labor union. This is consistent with the 42% of all firms receiving a CT grant that had

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unionized workforces.

These firms with a unionized workforce were asked to assess the level of involvement of unions in the design of the training that was funded by the CT program. In 34% of these firms, labor unions played a significant or moderate role in the design of training that was funded by the CT program, according to the respondents. In an additional 28% of these firms, labor unions were involved in the design of training on a small scale. However, one-third of firms (32%) reported that labor unions were not at all involved in the design of training activities. The level of labor union involvement in the design of training activities varied among those firms studied in depth. However, labor unions did not play a significant role in the design of any of the customized training grants studied.

V. Level of Satisfaction with and Perceived Impact of CT Grant on Firms

A. Assessment of the Impact of a CT Grant on Firms

1. Impact of CT Grant on Ability of Firm to Provide Training

Over half of the firms surveyed, 53.5%, reported that training would not have occurred without the receipt of the CT grant. An additional 31% of firms reported that training would have occurred even without the CT grant, but that it would have been on a smaller scale. Two-thirds of both small firms, with less than 50 employees, and large firms, with more than 1,000 employees, reported that training would not have occurred without a CT grant.

Most of the firms studied in-depth reported that training would have occurred at the firm, but on a smaller scale. For example, a company that produces pressure-sensitive tape for industrial uses asserted the intensive training gave employees the skills necessary to adjust to new, more complex technologies. Without the training grant, the company would have slowed the pace of this transfer of new technology. According to company executives, this would have slowed the company's growth, and greatly reduced the company's ability to remain competitive.

Officials of a major daily newspaper said the CT grant enabled the company to quickly train the newspaper's employees to operate a new state-of-the-art printing plant. This infusion of resources prevented expensive production delays that might have been caused by inexperienced and ill-prepared employees. The newspaper is printed every night of the year under tight deadlines. Delays in production would have been very costly to the company.

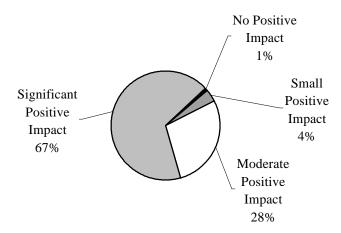
2. Perceived Impact of CT Grant on Firm Competitiveness

Over two-thirds of those surveyed believed that the CT grant had a significant positive impact on their firm (Chart 10). The CT grant had a moderate positive impact on an additional 28% of firms surveyed. Satisfaction with the CT grant program was stable across all three years. Satisfaction with the CT grant was highest among firms in the service industry and lowest among the largest firms. Over 44% of large firms with more than 1,000 employees characterized the grant as having a significant positive impact. However, 90% of firms in the service industry reported that the grant had such an impact.

The majority of firms responding to the survey reported that they experienced some growth in the number of fulltime employees, in worker productivity or in market share during the past four years. A majority of these firms believed that the Customized Training grant played a role in this economic success.

Chart 10.

Impact of Customized Training Grant on the Firm



Nearly 44% of firms surveyed reported that the productivity of their employees grew dramatically during the last four years (table 6). The productivity of employees at an additional 41% of firms grew slowly during this period. Of those firms reporting dramatic increases in productivity, 64% reported that the CT grant played a very important role in this change. An additional 22% felt that the CT grant played an important role in this increase.

Over 46% of the firms responding reported that the number of full-time employees increased during the last four years. Employment levels remained stable at an additional 30% of firms surveyed. Nearly 68% of those firms with employment growth concluded that the CT grant played a very important or important role in this growth.

Table 6.
Importance of CT Grant to Economic Gains

	Percentage of Firms Reporting Gains	Importance of C to these Gains Very Important		Somewhat Important
Dramatic Growth in Employee Productivity	44%	64%	22%	14%
Growth in the Number of Full-time Employees	46%	38%	30%	17%
Growth in Market Share	59%	27%	16%	33%

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Nearly a quarter of firms surveyed reported that their firm's market share grew dramatically in the last four years. In addition, the market share of over one-third of respondents grew slowly during this period. Only 10% of the firms responded that their market share decreased. Over three-quarters of the firms that experienced a growth in market share believed that the CT grant played a role in these increases. Over 43% of firms reported that the CT grant was important or very important to these gains in market share.

Many of the firms studied in-depth had experienced increases in employee productivity and market share that they at least partially attributed to the Customized Training grant. For example, a small metalworking company that had participated in a CT grant through a consortium reported that the company's sales had increased in the past four years. The company's management attributed these sales gains to three factors; the training made possible by the CT grant, hard work of the company's employees and investment in new equipment.

In addition, a company with approximately 450 employees that produced tape for industrial uses had in recent years experienced a dramatic economic turnaround. The company's executives strongly believed that this turnaround would not have been so dramatic or so timely without the customized training grant. In the early 1990's, despite large capital investments from the Japanese parent company, the company was not profitable. Investments in new technology and in the skills of the employees have been successful and the company has again become profitable. In 1997, the firm was named "Turn-around Company of the Year" in 1997 by a state business organization. The company's executives attributed this new success to the transfer of technology from the Japanese parent company. This transfer of technology could not have occurred as quickly as it did or to the extent without the Customized Training grant. The company used the grant to upgrade the skills of the employees, allowing them to successfully produce new products.

Many of the firms studied during in-depth case studies said the training improved the productivity of employees. For example, a company that produces laminated packaging containers initially applied for a customized training grant when the company was having difficulties remaining competitive. The firm lacked the resources to invest in new technology, but concluded that investing in the skills of their employees would help substantially. The state training grant has increased the productivity of employees. The amount of materials lost due to waste has been reduced, making the company more profitable.

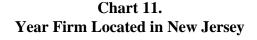
One other grant recipient, a marketing firm, needed to train its employees to operate personal computers and office software. Prior to training, many office employees did not use a computer or relied on the company's mainframe computer. The state training grant enabled the company to furnish basic computer training to all office employees and enhance their productivity.

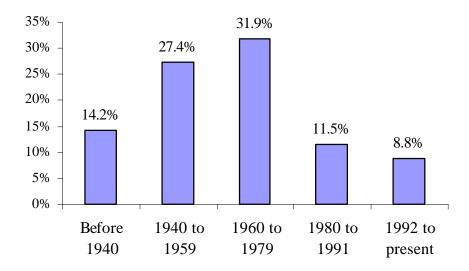
Only one of the firms studied in-depth, a manufacturer of windows for residential uses,

experienced substantial increases in the number of full time employees. Executives at this company reported that the CT grant was one of many other factors, including the healthy economy, that helped the company achieve this level of growth. Many firms reported that the CT grant had assisted the company to remain competitive and to continue to employ residents of the state.

3. Impact of Grant on Firms' Decisions to Remain in New Jersey

The CT grant program has tended to serve established firms that have been located in New Jersey for some time. Well over half of the firms surveyed, 54%, were established before 1960 (Chart 11). An additional 24% of firms responding were founded between 1960 and 1980. Only 9% of the firms surveyed located in New Jersey after 1991 after the creation of the customized training grant program.



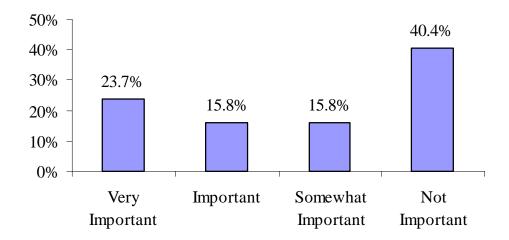


The CT grant program had a small impact on firms' decisions to remain in the state. Only 24% of firms surveyed reported that the customized training grant was very important to their company's decision to remain in New Jersey (Chart 12). In addition, the grant was not important to the decision of four out of ten firms to remain in the state.

The grant did have an effect on the decision of one of the firms studied in-depth to remain in the state. Executives at a medium-size metal stamping firm with approximately 340 employees were seriously considering moving the company out of New Jersey. The firm was having difficulty finding qualified employees. In addition, the company was interested

in the tax incentives that were offered to businesses that relocated to other states within the U.S.

Chart 12.
Importance of the Customized Training Grant to a Company's Decision to Remain in New Jersey



The CT grant helped convince this company to remain in New Jersey. The company believed that the training was successful at increasing the skills of production workers and they were encouraged by the state's commitment to the company. However, the company is again considering relocating to another state to take advantage of tax incentives offered in other states.

Nearly all of the firms studied in the case studies had strong ties to the state and did not realistically consider moving from the state. For example, a company that produces laminated packaging containers has been located in New Jersey for fifty years. The executives of the family-owned company have a strong preference for remaining in the state. Even when the company was having difficult times it never seriously considered moving to other states, regions of countries. The company also professed a strong commitment to its current employees, many of whom had been employed by the company for decades.

Other firms remained in New Jersey for traditional business reasons. For example, a small telecommunications company that received a grant provided services to customers located in close proximity to the company. As a result, the company never considered moving. The firm that produces pressure-sensitive tape remained in New Jersey to take advantage of the state's skilled labor force. For this firm, the cost of materials, not the cost of labor, is the dominant cost of production. In the early 1990s, the company began to pursue a

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strategy of producing high quality specialized tape for industrial uses. As a result, the company needed a skilled workforce capable of meeting stringent quality standards set by purchasers.

4. Impact of Grant on Firm's Decision to Relocate to New Jersey

The CT grant program did play a role in some companies' decisions to move to New Jersey. Of the firms that had located in the state in recent years, most reported that their decision to move to New Jersey had been influenced by their receipt of a customized training grant. Of the 10 firms surveyed that located in the state after the inception of the Customized Training grant program, 80% responded that the customized training grant was very important or important to their firm's decision to locate in New Jersey.

The role that customized training grants can play in location decisions is illustrated by a large daily newspaper serving portions of the states of New Jersey, New York and Connecticut that surround New York City. In the early 1990s, this newspaper, due to competition from other daily newspapers as well as competition from radio and television stations, was forced to declare bankruptcy. To minimize losses, the ownership decided to sell the newspaper. The new buyer of the newspaper realized that in order to remain competitive the newspaper needed to consolidate its printing facilities into a state of the art offset printing facility. This would allow the newspaper to maintain a level of printing quality comparable to its competitors and to ultimately reduce the costs of production.

The new technology being installed by the company required that the company's existing employees learn new skills. It also required that the company find a new location for the printing plant. Senior executives of the firm maintain that the customized training grant was a factor in the newspaper's decision to construct the printing facility in the state. The company certainly needed a facility in a central location within the region and with easy access to the region's transportation network. While these requirements reduced the options available to the newspaper, the customized training grant was part of a package of incentives that helped to convince the company that locating in New Jersey was in the best interest of the company.

5. Impact of Grant on Training Practices

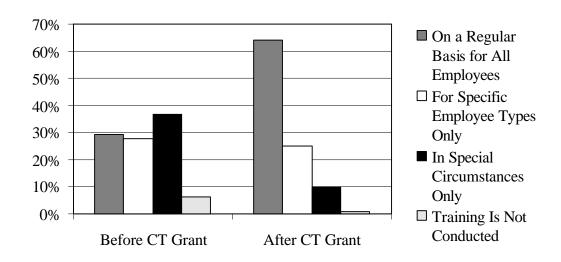
The CT grant program had an impact on the training practices of firms. Prior to receipt of the CT grant, most firms did not have a long-term human resource development plan and provided training to specific types of employees or in special circumstances. Most firms surveyed have since adopted a long-term human resource development plan and currently provide training to all employees on a regular basis.

Prior to the receipt of the grant, over 69% of firms surveyed provided training in special circumstances, for specific employees, or did not provide training to any of their

employees. Following the receipt of the grant, nearly 63% of firms reported providing training on a regular basis for all employees (Chart 13).

Over half of the firms surveyed reported that the percentage of employees receiving training on a regular basis increased since receipt of the CT grant. Before the CT grant, 30% of firms trained more than 60% of their employees on a regular basis. After the grant, nearly 58% of firms trained this percentage of their employees.

Chart 13. **Level of Training Provided by Firms** Before and After Receipt of a Customized Training Grant



Nearly two-thirds (62%) of firms surveyed reported that their company currently has a long-term human resource development plan. Prior to the CT grant, 36% had such a plan for the development of their workforce.

A number of the firms that were studied closely reported that the company increased the amount of training provided to the employees. In some cases, these increases in training can be traced to the firm's experience with the grant. For example, a small metalworking company that received a customized training grant as part of a consortium has since made a company-wide commitment to continuously upgrading employee skills. The firm utilized the training grant to become ISO-9002 certified and adopted a continuous quality improvement program. Training has remained a core component of the company's business strategy.

In some instances, however, an increase in training was caused by technological changes at the company and is only indirectly linked to the CT grant. For example, one firm, the manufacturer of pressure-sensitive tape, used funds from the program to assist employees

to adjust to new technology. This training was successful and as a result the transfer of technology has allowed the company to produce more types of products. The transfer of technology has continued, making continued training essential.

In a small number of firms studied in-depth, the customized training grant was used to assist the firm during a critical period when training was needed. In these cases, the grant did not have an effect on the training practices of the firm. A glass-manufacturing firm received a customized training grant to assist the company to re-open an existing facility that had been closed due to economic hardship. The firm provided a short period of intensive training for the newly hired employees.

B. Overall Opinion of the Customized Training Grant Program

The level of satisfaction with the CT grant program was quite high. Nearly 95% of respondents recommended that other companies participate in the CT program. Among the things that firms liked most about the program included the quality of training received through the program and the flexibility of the program. Many of the grant recipients studied in depth reported that the program had helped their company because it was closely tailored to their specific needs.

When asked what they liked least about the program, nearly 38% of those surveyed mentioned the paperwork that was required for reimbursement. 20% of respondents suggested that the amount of paperwork associated with the program should be reduced. An additional 15% of respondents suggested that the application process be streamlined to allow for quicker responses to applications. Only one recipient studied in depth voiced a concern about the amount of paperwork associated with the program. A number of recipients, however, agreed that the application process for a CT grant was too long.

VI. Wage and Employment Outcomes of Individuals Receiving On-the-Job Training

A. Wage Outcomes

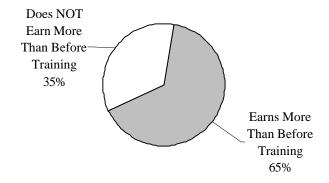
1. Perceived Impact of Training on Wages

A significant majority of individuals who received on-the-job training from an employer with a customized training grant reported that their earnings had increased in the period after training. Over 65% of respondents reported that they earned more than they did before they had received training through the CT program (Chart 14). The distribution of responses was similar for individuals employed at firms with and without a unionized workforce. In addition there was no difference in post-training wages by industry or by the year the CT grant was awarded.

While these increases cannot be solely attributed to the new skills acquired by the individuals, nearly half of the individuals surveyed (46%) believed that the training had at least a small impact on their earnings. More than 7% of all respondents felt that the training had a big impact, while nearly 23% of respondents felt that it had a moderate impact.

Individuals employed by a firm without a unionized workforce and those employed by firms receiving grants in 1994 were more likely to believe that training had impacted their wages. 39% of respondents that were employed by a firm with a unionized workforce felt that training had an impact on their wages. Over 51% of all individuals that received training from a firm who received a grant in 1994 believed that the training had impacted their earnings.

Chart 14.
Percentage of Respondents Who Reported
That They Currently Earn More Than They Did Before Training



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2. Wage Outcomes of Individuals Receiving On-the-Job Training

An analysis of the wage histories of individuals receiving on-the-job training from firms found that when adjusting for inflation, average quarterly wages increased gradually between the year before and in the two years after training began for individuals that received on-the-job training. One year before the CT grant began, individuals that received on-the-job training earned an average of \$8,316 per quarter when adjusting for inflation in 1996 dollars (chart 15). Two years after the training began at the company, these individuals earned an average of \$9,194 per quarter, an increase of 10.6%. Two-thirds of the individuals that received training experienced an increase in wages during the time.

Those individuals employed by large firms, with more than 1,000 employees, experienced the most substantial gain in average quarterly wages (table 7). The average quarterly wages for the individuals employed by these firms increased from \$7,304 per quarter before training to \$8,564 per quarter after training, an increase of 17.3%.

Chart 15. **Average Quarterly Wages for Individuals Receiving On-the-Job Training from Firms** Adjusted for inflation with a base year of 1996

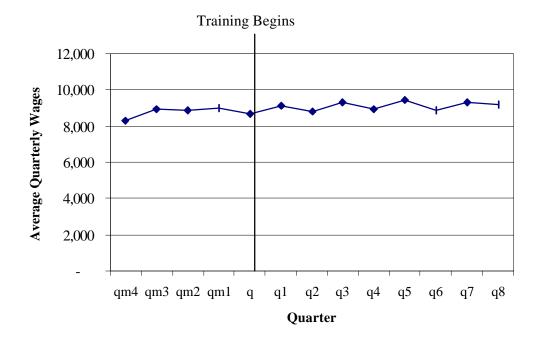


Table 7.

Changes in Average Quarterly Wages for Individuals Receiving On-the-Job Training, By Type of Firm

Adjusted for inflation with a base year of 1996

	Average Quarterly Wages 1 Year BEFORE Training	Average Quarterly Wages 2 Years AFTER Training	Percent Increase in Average Quarterly Wages
All individuals	\$8,316	\$9,194	10.6%
Type of Employer Manufacturing Firm	\$8,430	\$9,312	10.5%
Firms with Unionized Workforce	\$8,663	\$9,447	9.0%
Small and Medium Size Firms (less than 250 employees)	\$8,503	\$9,059	6.5%
Mid-Size Firms (250 - 1,000 employees)	\$8,385	\$9,472	13.0%
Large Firms (more than 1,000 employees)	\$7,304	\$8,564	17.3%

For all of the companies studied in-depth, the average wages of employees who received on-the-job training also increased in the period after training when adjusting for inflation. The average wages of individuals that received training while employed in the printing process of the major daily newspaper increased by 48% from 1995 when the company received the grant to 1998. Those individuals employed by the company in 1998 had average quarterly wages that were slightly lower than those employed by other New Jersey companies. In addition, employees of the small metalworking company that had received a grant as part of a consortium also experienced an increase in earnings of 20% from 1995, before the training began, to 1998.

B. Employee Retention

In the fourth quarter of 1998, two-thirds of the individuals that had received on-the-job training from the case study firms were still employed by these firms. An additional 18% of these individuals were employed by other companies in New Jersey. Unemployment Insurance wage records were not available for the remaining 16.1% of individuals because they were either employed out of state, self-employed, unemployed or otherwise employed by firm that did not report the wages of their employees to the state.

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A small number of firms experienced high levels of employee retention. For example, the small metal working company that participated in one of the consortia studied in depth provided on-the-job training in 1996 to 11 employees. All 11 individuals had been employed by the company for at least a year and 7 had been employed since 1992. In the fourth quarter of 1998, 10 of the 11 individuals were still employed by the company.

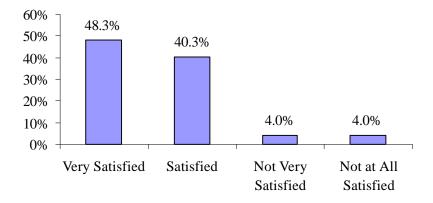
Other companies have had a more difficult time with employee retention. For example, the company that manufactured windows for residential uses received a CT grant in 1996 to provide both on-the-job training and classroom training to their employees. The grant that the company received in 1994 was used only to fund classroom training and the employees that received this training could not be identified. In the second quarter of 1996, 99% of the individuals that received on-the-job training from the company were employed by that company. One year later, only 54% of the individuals that received on-the-job training were still employed by the company. In the second quarter of 1998, the percentage of those individuals who had received training that were still employed by the company had decreased to 41%.

VII. Level of Satisfaction with and Perceived Impact of On-the-Job Training Received

A. Level of Satisfaction with Training

The majority of individuals that received on-the-job training through the CT program were satisfied with the training they received. Over 86% of respondents rated their experience with the on-the-job training program as either good or excellent. Nearly half (48%) of respondents were very satisfied with the training received (Chart 16). An additional 40% of respondents were somewhat satisfied.

Chart 16.
Level of Satisfaction with Training
Individuals Receiving On-the-Job Training through the CT Program



While 89% of respondents felt that the training program was well run, 83% felt that the training had given them the skills that they had expected. Three-quarters of respondents believed that the training had met all their needs and did not feel that they needed additional training. Nearly 20% of respondents felt that they needed additional training.

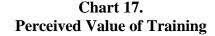
Those individuals that were employed by firms with a unionized workforce were slightly less satisfied with the training they received than those employed by firms without a union. However, the level of satisfaction with the program is still quite high for all individuals. Eighty-five percent of those individuals employed by a unionized firm and 91% of those individuals that were not unionized reported that they were either somewhat satisfied or very satisfied with the training they received. In addition, 82% of individuals employed by

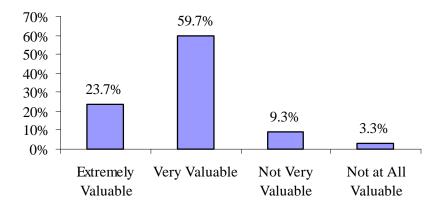
unionized firms and 91% of those employed by non-unionized firms believed that the training program they had attended was well run. Finally, three-fourths of those individuals employed by a unionized firm and 89% of those employed by a non-unionized firm reported that the training had given them the skills that they expected.

When interviewed individuals or in focus groups, those individuals that received training from firms studied in-depth also reported high levels of satisfaction with the training they received.

B. Perceived Impact of Training

More then eight out of ten (83%) of those surveyed believed that training was either very valuable or extremely valuable (Chart 17). Only 3% of respondents felt that the training was not at all valuable. Individuals receiving on-the-job training from firms that received a CT grant in 1994 were more likely to report that the training they received was valuable. Over nine out of ten (93%) of these individuals felt that training was either very valuable or extremely valuable.





Over seven out of ten (71%) respondents believed that training helped to make their job more secure. Nearly one-quarter of respondents strongly agreed that the training made their job more secure. Individuals receiving training from a firm with a unionized workforce were less likely to feel that training had improved their job security. While 65% of individuals training by firms with a unionized workforce felt that training had made their job more secure, 77% of individuals that worked for a firm without a unionized workforce reported feeling the same way.

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Over one-quarter of respondents strongly agreed that the training helped them advance more quickly. Close to one-third of respondents mildly agreed. However, a full one-third of respondents did not believe that training helped them to advance more quickly. Women were more likely to believe that training improved their job opportunities with their employer. Nearly 36% of women and 22% of men strongly agreed that training helped them to advance more quickly.

Those individuals that received training from firms studied in-depth also reported that training had been valuable to them. Employees of the manufacturer of laminated boxes, interviewed as part of the case study, believed that training had helped them to advance with the company. Many had started at the company in entry-level positions and through training funded by the CT grant had learned the skills necessary to obtain better jobs with the company. Employees of the marketing services firm reported in a focus group that the training they received had given them the skills they needed to remain employed with the company. The company made a large investment in personal computers for all employees and all employees had to learn to be proficient with the new technology. Without the training, all reported that they would not have been able to perform their jobs adequately.