A Profile of the Workforce Development Partnership Program

Prepared by

John J. Heldrich Center for Workforce Development Edward J. Bloustein School of Planning & Public Policy Rutgers University

> Prepared for State Employment and Training Commission State of New Jersey



JOHN J. HELDRICH CENTER FOR WORKFORCE DEVELOPMENT E.J. Bloustein School of Planning & Public Policy Rutgers, The State University of New Jersey 33 Livingston Avenue, Fifth Floor New Brunswick, NJ 08901 732/932-4100, ext. 595 Fax: 732/932-3454 www.heldrich.rutgers.edu

September 2002

## PREFACE AND ACKNOWLEDGEMENTS

This profile of the Workforce Development Partnership Program's Individual Training Grant Program was prepared pursuant to a contract with the New Jersey State Employment and Training Commission (SETC). This report contains 3 chapters profiling the Workforce Development Partnership Program. The first chapter provides a description of the ITG participants between 1995-2001 and the type of training they received. The second chapter provides a picture of how ITG participants, who completed training bewteen 1995 and March 31<sup>st</sup>, of 2001, are faring in the labor market after completing training. The third chapter provides a description of the firms participating in the Customized Training Program between 1997-2001. For ease of reading, each chapter contains its own principal findings section and can be read as a stand-alone report.

The authors thank Dave Novak and Henry Plotkin of the State Employment and Training Commission for their assistance in this effort. The authors also thank James Curran, Ila Carter, Anthony Urban, Phil Lamanna, Chris Reimel, and Gary Nigh for their assistance in providing data for this report.

The principal authors of this report are Leela Hebbar, project director at the John J. Heldrich Center for Workforce Development at Rutgers University, Aaron Fichtner, senior project manager at the Heldrich Center, Carl Van Horn, professor of public policy and director of the Heldrich Center, and Sarah Gyarfas a graduate assistant at the center. Additionally, Defne Turker, Ariana Funaro, and Karin Garver research assistants at the center, provided technical support and contributed to the completion of the report.

TADLE OF CONTENTS.	TABLE	OF	<b>CONTENTS*</b>
--------------------	-------	----	------------------

Executive Summary	i - vi
Chapter 1: A Profile of the Individual Training Grant Participants, 1995 – 2	001
I. Introduction	1
II. Source of Information	1
III. Overview of Principal Findings	2
A. Demographic Profile, ITG vs. UI	2
<b>B.</b> Training Received Through the ITG Program	4
IV. The ITG Population vs. the General UI Population	6
A. Demographic Characteristics	6
<b>B.</b> Employment History	10
C. County	11
<b>D.</b> Previous Occupation of ITG Recipients	12
V. Grant Amount and Duration of Training	15
A. Grant Amount & Length of Training by Type of Provider	16
<b>B.</b> Grant Amount & Length of Training by Training Type	16
C. Average Grant Amount by County	18
VI. Type of Training Provider and Training	19
A. Type of Training Provider	19
<b>B.</b> Type of Training Obtained by ITG Recipients	20
C. Type of Training by Demographic Group	22

\* For ease of reading, each chapter contains its own principal finding section and can be read as a stand-alone report.

•	Introduction	25
I.	Methodology	25
	A. Source of Information and Data Limitations	25
	<b>B.</b> Measuring Employment and Wage Recovery	26
	C. Measuring Enforment in Figher Education	20
II	. Overview of Principal Findings	28
	A. Short-term Labor Market Outcomes	29
	<b>B.</b> Long-term Labor Market Outcomes	31
	C. Enrollment Rates in Higher Education	34
V	Short-term Labor Market Outcomes	36
	A. Entered Employment Rate	36
	<b>B.</b> Retention Rate in the 3 <sup>rd</sup> Quarter after Training	39
	C. Short-term Wage Recovery	39
7.	Long-term Labor Market Outcomes	41
	A. Employment Rates	41
	<b>B.</b> Wage Recovery After Training	45
<b>/I</b>	Labor Market Outcomes by Type of Training	51
	A. Employment Rates by Training Type	51
	<b>B.</b> Wage Recovery by Training Type	53
/I	I. Labor Market Outcomes by Type of Training Provider	56
	A. Employment Rates by Type of Provider	56
	<b>B.</b> Wage Recovery Rates by Type of Provider	57
/1	II. Post-Training Enrollment Rate In Higher Education	60

hapter 3: A Profile of New Jersey's Customized Training Program, 1997 – 2001	L
I. Introduction	63
II. Source of Information	63
III. Overview of Principal Findings	63
A. Overview of Grants Awarded in 2001	63
<b>B.</b> Description of Customized Training Grantees	64
C. Description of Firms and Their Customized Training Grants	66
IV. Overview of Grants Awarded in 2001	7(
V. Location of Firms and Consortia	72
A. County Distribution	72
B. Selected Urban Areas	74
VI. Consortia	75
A. Type of Training	7
VII. Previous Grant Recipients	78
VIII. Description of Firms and Their Customized Training Grants	79
A. Industry of Firms	79
<b>B.</b> Size of Firms	81
IX. Overview of Firm Planned Training Activities	82
A. Extent of Planned Training	83
<b>B.</b> Type of Training to be Provided	84
<b>C.</b> Type of Training Provider Used	8
<b>D.</b> Estimated Cost of Training	89
X. Planned vs. Actual Training	9
<b>A</b> Individual Firms	9

# **EXECUTIVE SUMMARY**

This report profiles the Individual Training Grant (ITG) and Customized Training (CT) programs of New Jersey's Workforce Development Partnership (WDP) Program. The ITG program provides training grant vouchers to dislocated workers, allowing them to pursue training at state approved providers such as community colleges, universities, or proprietary schools. Between 1995 and 2001, the New Jersey Department of Labor awarded ITG grants, totaling over \$107 million to approximately 30,000 individuals. The CT program provides grants to firms and consortia (groups of firms in the same industry) to train their current employees. Between 1997 and 2001, the Department awarded 650 customized training grants, amounting to \$149.2 million.<sup>1</sup>

## I. Individual Training Grant Program

## **Profile of Activity**

From 1995 to 2001, the Department awarded an average of 4,327 ITG grants per year, with a peak of nearly 6,000 grants in 1999 and a low of approximately 3,000 grants in 1996. The average grant amount over the period was \$ 3,645.

• Individuals receiving an ITG grant are more likely to be female, older and more educated than the general population of individuals who receive Unemployment Insurance (UI) benefits.

-Between 1994 and 2001 over half (57%) of ITG recipients were female compared to 44% of the UI population.<sup>2</sup>

-Over one-third of ITG recipients and 42% of the UI population were less than 37 years old.

-While nearly all (94%) ITG recipients had earned a high school diploma, 80% of UI recipients had received a high school diploma.

On average, ITG participants received an ITG grant 4.6 months after filing for UI benefits. The average grant amount is \$3,645, which remained stable during the study period and was used to fund training that was an average of 5 months in duration.

<sup>&</sup>lt;sup>1</sup> A longer time period is examined for the ITG program so that long-term outcomes can be observed. Strictly speaking, the outcome analysis does not provide a full evaluation because it does not include an estimate of the wage and employment outcomes for a group of similar unemployed individuals who did not participate in the program.

 $<sup>^{2}</sup>$  Some individuals who received training grants in 1995 claimed Unemployment Insurance (UI) in 1994. Therefore the time period 1995-2001 is used when describing grants, and the time period of 1994-2001 is used when comparisons are made to the UI population.



# Figure ES-1 Characteristics of UI claimants and ITG participants, 1994-2001

■ UI claimants ■ ITG participant

- Individuals tend to use their ITG grant to obtain business management and administrative services (41%), computer and information services (14%) or entrepreneurial training (10%).
  - The percentage of ITG recipients enrolling in Business, Management and Administrative Services training declined between 1995 and 2001 from 48% to 33%. The percentage of recipients enrolling in entrepreneurial training in 1995 was 0% and increased to 15% in 2001.
- Throughout the period from 1994 to 2001, two thirds of ITG partcipants received training at proprietary schools, while 27% of participants used their grants at community colleges. Another 3% of participants attended 4-year colleges.

#### **Post-Training Employment**

- ► Two thirds of ITG recipients were employed in jobs covered by the New Jersey UI system after completing training. One year after training, nearly seven of ten recipients were employed. This percentage decreases slightly from this point in time and by the sixth year after training, 61% of recipients were employed.<sup>3</sup>
  - o The entered employment rates have decreased slightly from a high of 69% in

<sup>&</sup>lt;sup>3</sup> The employment rates in this report are not comparable to results reported in the New Jersey Department of Labor's WIA annual report because this report only uses wage information from New Jersey, where as the New Jersey WIA report uses wage information collected by other states.

1995 to a low of 60% in early 2001. This decline may be due to the weakening economy. The decline in employment rate is less pronounced when those enrolled in entrepreneurship training (who may be self-employed and not covered by the UI system) are removed. When these individuals are removed from the analysis, the entered employment rate falls from 69% in 1995 to 64% in the first quarter of 2001.

	5	c		Entered Employment
			% in	Rate (excluding those in
		Entered	Entrepreneurship	Entrepreneurship
	# of Participants	Employment Rate*	Training	Training)
Overall	25,109	66%	8%	68%
Completed Training				
1995	3,068	69%	0%	69%
1996	3,429	67%	0%	67%
1997	4,018	68%	10%	71%
1998	4,206	65%	15%	68%
1999	4,861	66%	7%	68%
2000	4,587	63%	12%	65%
January to March 31st, 2001	940	60%	13%	64%

# Table ES-1. Entered Employment Rateby Year of Training Completion

• Females, individuals under the age of 37, and those with moderate levels of formal education consistently have the highest employment rates.



Figure ES-2. Employment Rate Five Years After Training

## **Post-Training Wage Recovery**

▶ In the second and third quarter after training, the median wage recovery for ITG recipients was 83%.<sup>4</sup> This rate increases steadily in the period after training, and six years after training the median wage recovery is 111%.



Figure ES-3. Median Wage Recovery Rate 6 years after Training

relative to wage 4 quarters before claiming

- The median wage recovery rates have remained fairly stable from 1995 to 2001.
- Hispanic individuals and individuals under the age of 37 have the highest levels of wage recovery.

Figure ES-4. Median Wage Recovery Rate 5 years After Training relative to wage 4 quarters before claiming UI



<sup>&</sup>lt;sup>4</sup> Wage recovery is measured relative to the wage in the 4<sup>th</sup> quarter prior to claiming unemployment insurance, and the rate is adjusted for inflation. For methodological reasons, this measure of wage recovery is not comparable to other measures of wage recovery. For details see the methodological section of chapter 2.

► A small percent (4%) of individuals enrolled in a state university or community college soon after obtaining training through the ITG program.

## II. Profile of the Customized Training Program

A total of 650 CT grants, totaling \$149.3 million, were awarded between 1997 and 2001.

- The amount awarded in CT grants declined from \$45.7 million in 2000 to \$20.4 million in 2001. According to officials at the New Jersey Department of Labor, the decline is likely due to the pending reduction in the state budget and the elimination of carry over funds in 2001. The number of grants awarded also declined from 198 in 2000 to 124 in 2001.<sup>5</sup>
- Consortia, an association of employers often organized by educational institutions, remain a small but significant part of the CT program. In 2001, the Department awarded 18 grants to consortia. These consortia received 17% of the total amount awarded and planned to train nearly 9,000 individuals (27% of the total number to be trained through the CT program).
- While the CT program remains focused on assisting firms in the manufacturing industry, the percentage of grants awarded to these firms has declined since 1997. In 2001, two-thirds of grants were awarded to manufacturing firms. In 1997, 80% of grants were awarded to these firms. This decline is offset by modest gains in the number of grants awarded to firms in the service, wholesale trade, and transportation and public utilities industries.
- In 2001, 28% of grantees were located in an urban area<sup>6</sup>. The share of urban grantees among all grantees has declined from 36% in 1997 to 28% in 2001, with a brief increase to 37% in 2000.

<sup>&</sup>lt;sup>5</sup> Carry over funds are those monies not expended during the previous fiscal year, but which get added onto the funding amount for the following fiscal year

<sup>&</sup>lt;sup>6</sup> Urban areas include municipalities or townships designated as Urban Enterprise Zones, Urban Coordinating Council Cities, Labor Surplus areas or targeted urban areas as defined by the Economic Development Authority.

	1997	1998	1999	2000	2001
Number of grant recipients	83	122	123	198	124
Number of consortium grants	11	14	11	32	18
Total Amount awarded (in \$ millions)	\$23.5	\$30.8	\$28.8	\$45.7	\$20.4
Average Grant Amount	\$283,667	\$253,261	\$234,244	\$230,584	\$164,538
Percentage of Grants Less than \$100K	38.60%	31.10%	43.10%	40.70%	48.40%
Planned contribution per Grant \$ Awarded	\$1.87	\$1.75	\$1.40	\$1.68	\$1.41
Number of Individuals to be Trained	41,243	34,331	34,076	54,345	33,555

# Table ES-2. Overview of Grants Awarded Between 1997-2001

## **Training Funded by the Program**

During the five year period, firms receiving a CT grant planned to train a total of 197,550 individuals. The number to be trained each year peaked in 2000 when the 198 firms that received a grant planned to train over 54,000 individuals.

- ▶ In 2001, 62% of firms planned to use their CT grants to fund classroom training exclusively. Only 3% of firms planned to use their grants to fund on-the-job training (OJT) exclusively. The remaining 35% planned to use their grants to fund both classroom and on-the-job training.
  - In total, 38% of firms planned to fund on-the-job training in 2001. This represents a decline in OJT training relative to previous years. In the 1997-2000 period, 50% of firms planned to offer OJT training compared to the 72% of firms in the 1994-1996 period that planned to offer OJT training.
- ▶ In 2001, 89% of firms planned to provide business-related training, 38% planned to provide computer training, and 28% of firms planned to provided engineering-related training.



Figure ES-5: Type of Classroom Training Planned by Firms

Based on 104 of 106 cases where information was available

# Chapter 1

## A Profile of the Individual Training Grant Participants, 1995-2001

# I. Introduction

This chapter contains a profile of the individuals participating in the Workforce Development Partnership (WDP) Program's Individual Training Grant program between 1995-2001. 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.

This chapter provides a comparison of the demographic profile of ITG participants and the general UI population. Additionally, this chapter details the average grant amount, the types of training that grants were used to fund, and the types of providers that provided the training.

# **II. Source of Information**

The data in this report are based on administrative data collected by the New Jersey Department of Labor for individuals that claimed Unemployment Insurance and received an ITG grant between 1995 and 2001. The administrative data contained information on the demographic characteristics of individuals and information on the type of training an individual received under the ITG program. The data on the population that claimed Unemployment Insurance (UI) in New Jersey was obtained from the UI administrative database, which is maintained by the New Jersey Department of Labor. The data contains demographic information for those who claimed UI in New Jersey between 1995 and 2001.

The remainder of this chapter presents a description of individuals who participated in the ITG program between 1995 and 2000 and the type of training they received. Section III provides a general overview of the findings, section IV compares the characteristics of ITG participants and the general UI population, section V reviews the grant amount and duration of training, and section VI examines the type of training and type of provider in detail.

## III. Overview of Principal Findings

## A. Demographic Profile, ITG vs. UI

Approximately 30,000 individuals claimed Unemployment Insurance between 1994 and 2001 and received Individual Training Grants (ITG) through New Jersey's Workforce Development Partnership Program.<sup>1</sup> Approximately 2 million Unemployment Insurance (UI) claims were filed in New Jersey between 1994-2001. While eligibility rules for the ITG program result in differences between ITG participants and the general population of unemployment insurance claimants, there are also some demographic differences between the populations. Specifically the two populations differed as follows:

- ▶ ITG recipients were predominantly female, whereas the general UI population was majority male. Between 1994 and 2001 over half (57%) of ITG participants were female, while 44% of the general UI population was female in the same period.
- ▶ ITG participants were generally older and more educated than the general UI population.
  - Between 1994 and 2001, 43% of ITG participants were between the ages of 37-50 when they claimed UI, while 35% of the general UI population fell into this age category. In contrast 34% of ITG participants were between the ages of 18-36, compared with 42% of UI claimants.
  - While approximately 6% of ITG participants had less than a high school education, 20% of UI recipients between 1994-2001 had less than a high school education. Another 28% of ITG participants had some college education prior to entering the program, while 20% of UI claimants had some college education.



# Figure 1 Gender and Education Distribution of UI claimants and ITG participants, 1994-2001

<sup>□</sup> UI claimants □ ITG participant

<sup>&</sup>lt;sup>1</sup> While ITG participants received training grants in 1995, many claimed UI in 1994. Therefore the time period for comparison between the ITG population and UI population is 1994 to 2001.



# Figure 2 Age and Race Distribution of UI claimants and ITG participants, 1994-2001

■ UI claimants ■ ITG participant

- ▶ Both the ITG population and the UI population had similar percentages of whites between 1994-2001 and slightly dissimilar percentages of African-Americans and Hispanics.
  - Nearly 62% of ITG participants were white, while 61% of UI claimants were white. In contrast, 12% of ITG participants were Hispanic, while 17% of UI claimants were Hispanic and 21% of ITG participants were African American, while 18% of UI claimants were African-American.
- ▶ Between 1994 and 2001, the geographic distributions of UI and ITG are very similar. Over all years, at most there is a 2% difference between the percent of ITG participants in a county and the percent of UI claimants in a county.
- ▶ With regard to employment history, ITG participants earned over 50% more than the general UI population earned four quarters prior to dislocation, and they had a longer tenure at their employer prior to dislocation than the general UI population.
  - ITG participants who claimed UI in 1998 had a median wage of \$6,722 in the fourth quarter prior to claiming UI, while those in the general UI population had a pre-unemployment median wage of \$4,151. Similar differences occurred in other years.
  - Nearly a third (32%) of ITG participants worked three years (12 quarters) at the same employer before being displaced, while only approximately 20% of the general UI population was employed at the same employer for three years prior to unemployment.

- ▶ Prior to dislocation, ITG participants generally were working in similar industries as the general UI population. The two exceptions are in the construction industry and the finance insurance, & real estate industry.
  - While 3% of ITG recipients were in the construction industry, 12% of UI claimants were in this industry. Similarly, while 12% of ITG recipients worked in the finance, insurance, & real estate industry, only 4% of UI claimants worked in the industry.
- ► Approximately 40% of ITG participants worked in administrative or clerical positions prior to obtaining an ITG grant.
  - Approximately 15% of ITG recipients came from occupations in administrative specializations, 14% came from clerical and sales occupations, and 11% were in stenography, typing, & filing, occupations. Another 12% worked in professional, technical, and managerial occupations.<sup>2</sup>

## **B.** Training Received through the Individual Training Grant program

► Approximately 30,000 individuals received an Individual Training Grant (ITG) between 1995 and 2001. While the number of individuals receiving grants each year was around 4,000, in 1996 only about 3,000 individuals received grants and in 1999 nearly 6,000 individuals received grants.<sup>3</sup>



Figure 3. Individuals Receiving Individual Training Grants, 1995-2001

<sup>&</sup>lt;sup>2</sup> Information on prior occupation was not available for general UI population.

<sup>&</sup>lt;sup>3</sup> Some individuals who received training grants in 1995 claimed UI in 1994. Therefore the time period 1995-2001 is used when describing grants, and the time period of 1994-2001 is used when comparisons are made to the UI population.

- ▶ The average duration between when a participant files for Unemployment Insurance (UI) and starts training was 4.6 months. The average grant amount is \$3,645. The average remained stable between 1995 and 2001, and the average was stable across New Jersey counties.
- ► The majority (55%) of participants obtained training in business or compute- related areas. Approximately 41% of participants used their grants for training in Business Management and Administrative Services, while about 14% used their grants for Computer and Information Services training. Another 11% pursued training in Marketing Operations & Distribution, of which 92% were enrolled in Entrepreneurship training.
  - The type of training pursued varied over time. Business and Management & Administrative Services training declined between 1995 and 2001 from 48% to 33%, while Marketing Operations & Distribution (primarily Entrepreneurship training) increased from 1% in 1995 to 16% in 2001.



# Figure 4. Type of Training Obtained by Participants, 1995-2001

- ► The majority (67%) of ITG participants obtained their training at proprietary schools, while 27% of participants used their grants at community colleges. Another 3% of participants attended 4-year colleges. This trend was generally the same between 1995-2001.
- ► The average length of training was 5 months. Though, the length varies by training provider and training type.

- Training lasted the longest at four-year colleges, where the average length of training was 9.4 months. The average length of training was the shortest at proprietary schools, where training lasted an average of 3.9 months. Training at community colleges lasted an average of 7.1 months.
- The longest average training (7.4 months) was in Health Professions & Related Sciences, while the average length of training in Business and Management & Administrative Services was 4.6 months. The average program length in computer related training is 5 months.

# IV. The ITG Population vs. the General UI Population

Approximately 30,000 individuals claimed Unemployment Insurance between 1994 and 2001 and received Individual Training Grants through New Jersey's Workforce Development Partnership Program.<sup>4</sup> Approximately 2 million Unemployment Insurance (UI) claims were filed in New Jersey between 1994-2001. Participants in the ITG program differed from the general population claiming unemployment insurance (UI) in terms of demographic characteristics and employment history prior to dislocation. Demographically, ITG recipients were predominantly female, whereas the general UI population was majority male. Also, ITG participants were generally older and more educated than the general UI population. With regard to employment history, ITG participants earned 50% more than the general UI population four quarters prior to dislocation than the general UI population. The next two sections describe these differences in more detail.

## A. Demographic Characteristics

## Gender

Between 1994 and 2001, the ITG population consistently had a higher percentage of females than the general UI population. Over half (57%) of ITG participants are female, while only 44% of those claiming UI between 1994-2001 were female (figure 1). However, the difference in the percentage of females in the two groups has decreased over this seven-year period. In 1994, the ITG population was almost 63% female, while the UI population was only 43% female. By 2001, 50% of ITG participants were female and 45% of the UI population was female. The share of women receiving training grants has generally declined, with women making up only 55% of the ITG population in 1998 and 1999, and only 50% in 2001. Also between 1994 and 2001 the percent of UI recipients who were female increased from 43% to 45%.

<sup>&</sup>lt;sup>4</sup> While ITG participants received training grants in 1995, many claimed UI in 1994. Therefore the time period for comparison between the ITG population and UI population is 1994 to 2001.

## Education

The education levels of the two populations are also consistently different. While approximately one-fifth (20%) of UI recipients between 1994-2001 had less than a high school education, only 6% of the ITG participants fell in that education category. Instead, ITG participants were slightly more likely to be high school graduates (about 48% compared to the UI recipients 45%) and much more likely to have had some college



## Figure 5. Gender and Education Distribution of UI claimants and ITG participants, 1994-2001

□ UI claimants □ ITG participant

education (28% of ITG group had some college education, while only 20% of the UI recipients were in that category). ITG participants were also slightly more likely to have finished a college education or higher (ITG: 18%, UI: 14%). These relative trends generally stayed the same throughout the seven-year period, fluctuating a few percentage points.

# Age

Like the percent of women, the percent of ITG participants who were between the ages of 37 and 50 when they claimed UI is higher than in the general UI population. Between 1994-2001, 43% of ITG participants were 37-50, while 35% of the general UI population fell into this age category (figure 2). In contrast, 34% of ITG participants were ages 18-36, whereas 42% of UI claimants were age18-36. While the percentage of younger workers in both populations decreased between 1994 and 2001, the ITG population was consistently older than the general UI population. Among the ITG population, the

percentage of younger workers (18-36) fell from almost 43% in 1994 to 31% in 2001. At the same time, the percentage of ITG participants 37-50 years increased from 39% to 44%, while the percentage of older workers 51-65 increased from 18% in 1994 to 24% in 2001. These changes parallel the changing age demographics in the overall UI population, where younger workers decreased from 46% in 1994 to 39% in 2001, and older workers (37-50 years of age) increased from 32% to 37% in the same time period.



### Figure 6. Age and Racial Distribution of UI claimants and ITG participants, 1994-2001

□ UI claimants □ ITG participant

## Race

Both the ITG population and the UI population had similar percentages of whites between 1994-2001 and slightly dissimilar percentages of African-Americans and Hispanics. Nearly 62% of ITG participants were white, while 61% of UI participants were white. In contrast, 12% of ITG participants were Hispanic, while 17% of UI claimants were Hispanic and 21% of ITG participants were African American, while 18% of UI claimants were African-American. These two patterns--African-Americans being slightly over-represented and Hispanics being slightly under-represented among ITG participants-- continued between 1994 and 2001. The trend was maintained because the racial and ethnic makeup of ITG and UI population followed parallel trends during this period. In particular, the portion of the UI population that was white declined steadily, from almost 67% in 1994 to 57% in 2001. Similarly the portion of whites in the ITG population decreased from 66% to 58%. Concurrently, the percentage of African-Americans and Hispanics increased among both populations. Also, among both populations the Asian and Pacific Islanders increased from about 2% to 4%.

#### Notable Variations within Demographic Groups:

#### Gender & Race

The gender distribution is generally consistent within race, age, and education groups with the following exceptions. Hispanics were the only population with a similar gender representation in both the ITG and the UI population. All other groups had male majorities in the general UI population and female majorities in the ITG population. Among ITG participants, Hispanics were the only group more likely to be male—54% of Hispanic participants were male, while all other race groups were less than 50% male. In contrast, in the general UI population all racial groups have a majority of male claimants.

	ITG		l	Ŭ <b>I</b>
	Male	Female	Male	Female
<b>Total All Races</b>	57%	43%	56%	44%
White	42%	58%	58%	42%
African-American	40%	60%	53%	47%
Hispanic	54%	46%	55%	45%
Asian /Pac. Islander	49%	51%	52%	48%

## Table 1. Race and Gender, 1994-2001

#### Gender & Age

A similar pattern occurs with regard to gender and age. In the ITG population, women outnumbered men in all age groups except the oldest. In contrast, in the overall UI population, males were the majority in all age categories, though they were less of a majority as age increased. Specifically, among ITG participants who are over 66, the majority (51%) were male. In contrast, among ITG participants who were 18-36, 46% were male and 54% were female, while among those 37-50 and those 51-65, 42% were male and 58% were female. In the overall UI population, males were the majority in all age categories, though they were less of a majority as age increases. While men were 58% of the18-36 age group, they were 55% of those 37-50, 53% of those 51-65, and 52% of those 66 and older.

## Gender & Education

Over this seven-year period, ITG male participants were a majority among those with less than a high school degree and those with a college degree. Whereas, among the general UI population, men were the majority in all categories. Among ITG participants, men were 58% of those with less than a high school education and 53% of those with a college degree or higher, while women were 61% of those with a high school degree or equivalent and 59% of those with some college. (Overall 57% of the ITG population was female.) In the general UI population, men were the majority in all categories. Men were 56% of the overall

UI population, 58% of those with less than a high school education, 56% of those with a high school degree, 54% of those with some college and 58% of those with college degrees.

## Race & Education

The other notable variation within demographic groups occurs in the area of race and education. In both the UI data and the ITG data, similar patterns exist in the race and education distribution. In particular, Hispanics were over-represented in the less than high school category among both populations. For example, while 6% of the ITG population had less than a high school education, 19% of Hispanic ITG participants had less than a high school education. Similar overrepresentation occurs in the general UI population: 20% of the general UI population had less than a high school degree while among Hispanics 43% had less than a high school degree.

Also, the white and Asian ITG participants were more likely to be college educated among both populations. For example, 20% of whites and 47% of Asian ITG participants had a college degree or higher, while overall 18% of ITG participants had a college degree or higher. A similar trend occurs in the UI population.

# **B.** Employment History

The median pre-unemployment wage for ITG participants is substantially higher than the median pre-unemployment wage for the general UI population between 1995 and 1999. ITG participants who claimed UI in 1998 had a median wage of \$6,722 in the fourth quarter prior to claiming UI, while those in the general UI population had a pre-unemployment median wage of \$4,151. In addition to having higher wages, the ITG population demonstrated a longer tenure at their employer prior to dislocation in the same period. Nearly a third (32%) of ITG participants had worked at least three years at the same employer before being displaced, while only approximately 20% of the general UI population had been employed at the same employer at least three years prior to dislocation.

	ITG	UI
Employed at same employer for 12 quarters prior to claiming UI	32%	20%
Employed at the same employer for 4 to 11 consecutive quarters prior to claiming UI	31%	27%
Median Wage in the 4th quarter prior to claiming UI	\$6,722	\$4,151

# Table 2. Job Tenure & Pre Unemployment WagesITG participants vs. the General UI population, 1998

Prior to dislocation, ITG participants generally were working in similar industries as the general UI population. The two exceptions are in the construction industry and the Finance Insurance, & Real Estate industry. While 3% of ITG recipients were in the Construction industry, 12% of UI claimants are in this industry. Similarly, while 12% of ITG recipients worked in the Finance, Insurance, & Real Estate industry, only 4% of UI claimants worked in the industry. Among all other industries the difference between the ITG and UI groups are 2% or less.

Industry	ITG	UI
Services	25%	27%
Manufacturing	20%	18%
Finance, insurance, & real estate	12%	4%
Retail trade	12%	14%
Wholesale trade	7%	7%
Transportation & pub. utilities	7%	7%
Construction	3%	12%
Public administration	3%	3%
Agriculture, forestry, & fishing	0%	2%
non-classifiable	0%	1%
unavailable	11%	4%

# Table 3. Industry Prior to Employment, 1994-2001ITG participants vs. the General UI population

ITG participants are less likely to belong to a union than individuals in the overall UI population. In 1994, for example, only 5% of trainees were in unions but 17% of UI recipients were in unions. This trend continues, though the number of ITG participants in unions has increased slightly over the seven years. In 2001, 7% of the ITG population was in a union, while 15% of the general UI population was in a union.

# C. County

Between 1994 and 2001, the distributions between UI and ITG recipients within counties are very similar. Over all years, at most there was a 2% difference between the percent of ITG participants in a county and the percent of UI claimants. Over time, most of the fluctuations within each county ranged from 1 to 3 percentage points.

County	ITG	UI
Essex County	11%	10%
Bergen County	9%	8%
Middlesex County	8%	9%
Hudson Couty	7%	9%
Camden County	7%	6%
Union County	7%	7%
Monmouth County	6%	6%
Passaic County	6%	7%
Burlington County	6%	4%
Morris County	5%	4%
Ocean County	4%	6%
Mercer County	4%	4%
Sussex County	3%	2%
Gloucester County	3%	3%
Atlantic County	3%	4%
Cumberland County	2%	3%
Somerset County	2%	3%
Warren County	2%	1%
Hunterdon County	1%	1%
Salem County	1%	1%
Cape May County	1%	3%

# Table 4. County of Residence , 1994-2001ITG participants vs. the General UI population

## **D.** Previous Occupation of ITG Recipients

The approximately 30,000 individuals who received Individual Training Grants between the years of 1995 and 2001 came from a variety of different occupational backgrounds.<sup>5</sup> The largest numbers of individuals were previously employed in occupations in administrative specializations (15.2%), clerical and sales occupations (13.7%), and professional, technical, and managerial occupations (11.6%). The occupational categories used in this section are based on the U.S. Department of Labor's Dictionary of Occupational Titles.<sup>6</sup> Unlike the industry information, previous occupation data was not

<sup>&</sup>lt;sup>5</sup> Some individuals who received training grants in 1995 claimed UI in 1994. Therefore the time period 1995-2001 is used when describing grants, and the time period of 1994-2001 is used when comparisons are made to the UI population.

<sup>&</sup>lt;sup>6</sup> The categorization of occupation used in this report is slightly different than the one used in the October 2001 report. The prior report used the one digit DOT code. This report uses a combination of 1 digit and 2 digit DOT codes. Most categories are 1 digit categories, with three exceptions: 1) Professional, Technical & Managerial is broken down into computer-related occupations; occupations in administrative specialization; and managers & officials; and the remaining are in the Professional, Technical, & Managerial category. 2) The Clerical & Sales category is broken down into stenography, typing, & filing occupations; computing & account recording occupations; and the remaining are in the Clerical and Sales

available for the general UI population. Therefore, this section only examines the previous occupations of ITG recipients.

OCCUPATIONS IN ADMINISTRATIVE SPECIALIZATIONS	15.20%
CLERICAL AND SALES OCCUPATIONS	13.70%
PROFESSIONAL, TECHNICAL, AND MANAGERIAL OCCUPATIONS	11.60%
STENOGRAPHY, TYPING, FILING, AND RELATED OCCUPATIONS	11.10%
COMPUTING AND ACCOUNT-RECORDING OCCUPATIONS	9.10%
MANAGERS AND OFFICIALS, N.E.C.	7.40%
MISCELLANEOUS OCCUPATIONS	5.20%
PACKAGING AND MATERIALS HANDLING OCCUPATIONS	5.10%
MACHINE TRADES OCCUPATIONS	4.90%
SERVICE OCCUPATIONS	4.80%
STRUCTURAL WORK OCCUPATIONS	3.40%
COMPUTER-RELATED OCCUPATIONS	3.10%
BENCHWORK OCCUPATIONS	1.90%
PROCESSING OCCUPATIONS	1.40%
AGRICULTURAL, FISHERY, FORESTRY, AND RELATED OCCUPATIONS	0.30%
Total	100.00%

### **Table 5: Previous Occupation of ITG Recipients**

From 1995 to 2001, the distribution of previous occupations of ITG recipients changed slightly in several professions. Three occupations dropped approximately 5% between 1995 and 2001: Managers and Officials fell from 8% in 1995 to 3% in 2001; Stenography, Typing, & Filing Occupations fell from 14% to 9%; and Computing and Account Recording Occupations fell from 11% to 6%. Another two occupations increased by 3 to 4% between 1995 and 2000. The percent of ITG participants in Administrative Specialization occupations increased from 14% in 1995 to 18% in 2000. Also Machine Trade occupations increased from 4% in 1995 to 7% in 2001.

## i). Variation Across Demographic Groups

The distribution of previous occupations among ITG recipients varies within gender, education, racial, and age groups. Females were generally overrepresented in clerical fields and under-represented in management positions and manual technical trades such as benchwork occupations. Males were overrepresented in computer related fields, management, and manual technical trades (e.g. machine trades occupations). Those with less than a high school education tend to be over-represented in clerical, service, and manual technical fields, while those with a college education tend to be over-represented in computer related fields and professional and managerial occupations. Whites tend to be overrepresented in the managers and officials category, while blacks and Hispanics tend to be under-represented in this category. Hispanics were also overrepresented in manual technical trades, such as machine trades and benchwork

Category. 3) The Miscellaneous occupation category is broken down in the Packaging and Materials Handling occupations and the remaining remain in the Miscellaneous occupation category.

occupations, and blacks were over-represented in service occupations. The below points summarize the over and under representation of demographic groups within the prior occupations of ITG recipients:

- While females were 56% of ITG participants, they were more likely to be in administrative specializations (72%), clerical and sales occupations (67%), and stenography, typing, & filing, occupations (90%), and computing and account-recording occupations (83%) prior to entering the ITG program than males.
- While males were 44% of ITG participants, they were 67% of those who were in computer-related occupations and 53% of those who were managers prior to entering the ITG program. Males were also over-represented in technical trades such as processing occupations (76%), machine trades occupations (79%), structural work occupations (89%), and packaging and materials handling occupations (84%).



# Figure 7: Previous Occupation of ITG Recipients, By Gender

• Nearly half (48%) of ITG participants were high school graduates with no college experience, but within several occupations (such as clerical, service, and manual technical trade occupations) the percent with a high school education is well above 50%. Approximately 62% of those whose pervious occupation was in stenography, typing or filing were high school graduates. Similarly, nearly 60% of those in service occupations, machine trade occupations, structural work occupations, and materials handling occupations were high school graduates.

Those without a high school degree were also over-represented in the above occupations.

- While ITG participants with a college education were 18% of ITG participants, they were over-represented in the following occupations: professional, technical, and managerial occupations (41%), computer-related occupations (36%), and managers and officials (30%). Those with only some college education were also over-represented in computer related occupations.
- Some races were also over-represented in some occupations. While whites make up 63% of ITG recipients, they were 75% of those in occupations in administrative specializations and 79% of managers and officials. Blacks, who were 21% of all ITG participants, were over-represented in service occupations (35%), and were under represented in the managers and officials occupation category (11%). Hispanics make up 12.5% of ITG participants, but were over-represented in the processing occupations (25%), machine trades occupations (26%), and benchwork occupations (31%), and packaging and materials handling occupations (31.1%). Hispanics were under-represented in professional, technical and managerial occupations (7%) and computer related occupations (7%).
- Generally the occupation distribution within the age groups is similar to the overall distribution of ITG recipients prior occupations, with the exception of packaging & materials handling and service occupations, where those 18-36 were over-represented. While those 18-36 were 33% of ITG recipients, they were 46% of those in packaging & materials handling occupations and 44% of those in service occupations.

# V. Grant Amount and Duration of Training

The average grant amount awarded to approximately 30,000 ITG participants between 1995-2001 was \$3,645.<sup>7</sup> The average grant amount remained relatively stable between 1995 and 2000. Similarly, the number of individuals awarded grants per year was relatively stable around 4,000. However in 1996 only about 3,000 individuals received grants and in 1999 nearly 6,000 individuals received grants. The average elapsed time between when a participant files a claim and starts a training program was approximately 4.6 months. The average duration of training was 5 months.<sup>8</sup> The average grant amount and training length varied by provider and by the type of training. The next two sections detail this variation.

<sup>&</sup>lt;sup>7</sup> The October 2001 report had a slightly lower average grant amount (\$3,207) because the data received for that report had 0.5% of the observations with total grant amount of \$8,000 or more, where as the data received for this report had 4.4% of observations with a grant amount of \$8,000 or more. Individuals had grant amounts greater than the grant cap of \$4,000 because 12% of participants received multiple grants. The percent of participants with multiple grants decreased from 14% in 1995 to 8% in 2001.

<sup>&</sup>lt;sup>8</sup> The operational definition for both the duration of training and the duration between UI claim and starting training can be found in Appendix A.

# A. Grant Amount and Length of Training by Type of Provider

Both the average grant amount and the length of training varied by the type of training provider. The highest average grant (\$6,409) was at four-year colleges, where 3% of participants received training. The average grant amount at proprietary schools and community colleges was \$3,608 and \$3,539, respectively. While overall the averages for community colleges and proprietary schools were the same, in 2000 and 2001 there was nearly a \$1,000 difference in averages. In 2000, the average grant at community colleges was \$2,780 and it was \$3,757 at proprietary schools.<sup>9</sup> Approximately 67% of ITG participants used their grants at proprietary schools, and 27% of participants used their grants at community colleges.

Training lasted the longest at four-year colleges, where the average length of training was 9.4 months. The average length of training was the shortest at proprietary schools, where training lasted an average of 3.9 months. Training at community colleges lasted an average of 7.1 months. The average duration of training is longer at community colleges than proprietary schools across nearly all types of training.

	Average Duration of Training in Months	Overall Grant Average	Number of Grants
Overall	5.0	\$3,645	30,521
Four-year Colleges	9.4	\$6,409	978
Community Colleges	7.1	\$3,539	8,142
Proprietary Schools	3.9	\$3,608	20,568
Other <sup>10</sup>	6.7	\$2,313	853

Table 6: Average Duration and Grant Amount by Training Provider

# **B.** Grant Amount and Length of Training by Training Type

The average grant amount varied, not just by training provider, but also by training type. Individuals enrolled in Health Professions & Related Sciences trainings activities (6% of participants) received one of the highest average grant amounts (\$4,390). In contrast, those enrolled in Marketing Operations and Distribution (11% of participants) received the lowest amount of funding (\$1,376). Approximately 92% of those in Marketing Operations & Distribution participated in entrepreneurial training. (The percent of participants in various types of training will be discussed in more detail later in the report.)

<sup>&</sup>lt;sup>9</sup> This decrease in the average amount at Community college is likely do to the increase in entrepreneurship training (a sub set of Marketing Operation & Distribution) which has the lowest average grant amount.

<sup>&</sup>lt;sup>10</sup> Other providers include: Adult Education Institute, Voc/Tech Institution, Consult. Service Organization., Commun. Service Organization, Government Agency, Private Employer, and Labor Organization

Those types of training with average amounts above the grant cap of \$4,000 had a higher than average number of participants with multiple grants. Overall 12% of ITG participants received more than one grant, however among those who received training in the Health Professions area 20% received multiple grants. Similarly among the 6% of participants engaged in 'other' types of training, 31% received multiple grants.<sup>11</sup>

The average length of the training programs also varied by program. The longest average training (7.4 months) was in Health Professions & Related Sciences training, while the shortest length of training was in Transportation and Materials Moving (1.2 months). Participants in Transportation-related training make up 9% of participants. Several programs (Business Management and Administrative Services, Precision and Production Trades, and Visual and Performing Art) all had average training lengths that were lower than the overall average training length (5.0 months). In contrast, the average length of training was significantly longer in the fields of Marketing Operations and Distribution, mechanics and repairers, and 'other' types of training.

Type of Program	Average	Average Length of
	Grant Amount	Grant (in months)
Health Professions and Related Sciences	\$4,390	7.4
Visual and Performing Arts	\$4,259	4.7
<b>Engineering-Related Technologies</b>	\$3,916	5.1
Computer and Information Sciences	\$3,899	5
Business Management and Administrative Services	\$3,890	4.6
Precision and Production Trades	\$3,632	3.6
Mechanics and Repairers	\$3,544	6.4
Transportation and Materials Moving Workers	\$3,066	1.2
Marketing Operations and Distribution	\$1,376	7
Others <sup>12</sup>	\$5,084	7.9
Total	\$3,645	5

 Table 7: Average Grant Amount and Length of Training by Training Type

<sup>&</sup>lt;sup>11</sup> other types of training include: Agricultural Business and Production, Agricultural Sciences, Conservation and Renewable Natural Sources, Architecture and Related Programs, Area, Ethnic and Cultural Studies, Communications, Communication Technologies, Consumer, Personal And Misc Services, Education, Foreign Languagesand Literatures, Home Economics, Vocational Home Economics, Technology Education/Industrial Arts, Law and Legal Studies, English Language and Literature/Letters, Liberal Arts and Sciences, General Studies andHumanities, Library Science, Biological Sciences/Life Sciences, Mathematics, Military Technologies, Multi/Interdisciplinary Studies, Parks, Recreation, Leisure and Fitness Studies, Basic Skills, Citizenship Activities, Health-Related Knowledge and Skills, Interpersonal & Social Skills, Leisure & Recreational Activites, Philosophy and Religion, Theological Studies and Religious Vocations, Physical Sciences, Sciences Technologies, Psychology, Protective Services, Public Administration, Social Sciences, Construction Trades, High Schoo/Secondary Diplomas and Certificates

 $<sup>^{12}</sup>$  See footnote 8 for the list of training types categorized under 'other'.

## **D.** Average Grant Amount by County

The average overall grant was \$3,645. Those counties that received the most grants had average grant amounts near the overall average. The three counties with the largest percentage of grants awarded in 1995-2001 were Essex County (11%), Bergen County (9%), and Middlesex County (8%). The average amounts of the Essex and Bergen County grants were \$3,488 and \$3,553, respectively. The average grant amount for Middlesex County was \$3,772.

	% of grants	Average Grant
County	awarded	Amount
	1995-2001	
Essex County	11%	\$3,488
Bergen County	9%	\$3,553
Middlesex County	8%	\$3,772
Hudson County	7%	\$3,726
Camden County	7%	\$3,683
Union County	7%	\$3,817
Monmouth County	6%	\$3,365
Passaic County	6%	\$3,831
Burlington County	6%	\$4,060
Morris County	5%	\$3,013
Ocean County	4%	\$3,544
Mercer County	4%	\$3,647
Sussex County	3%	\$2,805
Atlantic County	3%	\$3,963
Gloucester County	3%	\$3,404
Cumberland County	2%	\$6,101
Somerset County	2%	\$3,666
Warren County	2%	\$3,265
Hunterdon County	1%	\$3,310
Cape May County	1%	\$3,717
Salem County	1%	\$4,522
Out of state	3%	\$3,364
Total	100%	\$3,645

#### Table 8: Average Grant Amount by County of Residence

The largest average grant (\$6,101) was in Cumberland County, where 2% of participants resided. The average is likely high because 48% of those in Cumberland County received multiple grants, while overall 12% of participants received multiple grants. Sussex

County had the lowest overall average grant amount at \$2,805 and 3% of participants resided in that county. This low amount may be because 60% of those in Sussex attended community colleges, whereas overall 27% attended community colleges.<sup>13</sup>

Between 1995 and 2001, most counties served similar percentages of ITG recipients over time, however in Middlesex there appears to be a slight decline in recent years. In 1997, 9% of recipients were from Middlesex. This percent remained stable through 1998 and 2000 between 8% and 10%, but in 2001 the percentage dropped to 4%.

# VI. Type of Training Provider and Type of Training

# A. Type of Training Provider

Between 1995 and 2001, the majority of training grants (67%) were used at proprietary schools. Another 27% were used at community colleges, while 3% were used at 4-year colleges and 3% were used at other institutions.<sup>14</sup> There was some fluctuation in these trends over the years. Between 1995 and 1997 the percent of ITG recipients using their grants at community colleges increased from 24% to 35%. Concurrently, the percent of participants attending proprietary schools fell from 65% to 60% and the percent at 4 year colleges and other schools fell from 5% to 3%. Then, between 1997 and 2001, the percent of participants using their grants at community colleges fell from 35% to 26%, while the percent using their grants at proprietary schools increased from 60% to 68% in the same time period.

In addition to the variation over time, there was also variation in the type of training pursued at various providers. While overall, 67% of ITG participants attended proprietary schools, among some types of training over 80% of participants attended proprietary schools. Specifically, 95% of those in Transportation and Materials Moving and 82% in Engineering Related Technologies attended proprietary schools. Also, 78% of those in Computer & Information Sciences attended proprietary schools. In contrast, only 6% of those obtaining training in Marketing Operations & Distribution attended proprietary schools.

<sup>&</sup>lt;sup>13</sup> In Sussex county, the percent of participants enrolling in the least expensive type of training (marketing distribution and operations) is 14%, which is similar to the overall percent of 11%.

<sup>&</sup>lt;sup>14</sup> see footnote 8 for a list of schools categorized under 'other'.



Figure 8: Type of Training Provider, 1995-2001

Similar over and under representation occurred at community colleges. While 27% of all participants received training at a community college, 93% of those participants enrolled in marketing operations/ marketing distribution training received training at community colleges. Conversely, among those who received training in engineering only 11% used their ITG grant at community colleges and 19% of those enrolled in computer-related training used their grants at community colleges.

# **B.** Type of Training Obtained by ITG Recipients

Slightly over half (55%) of the approximately 30,000 Individual Training Grant recipients used their grants for business or computer training. Approximately 41% of participants used their grants for training in business management and administrative services, while about 14% used their grants for computer and information services training. In addition, about 11% of recipients used their grants for training in Marketing Operations and Distribution. It is important to note that 91% of those enrolled in Marketing Operations and Distribution are enrolled in Entrepreneurship training.

Type of Training	% of ITG Recipients 1995-2001
Business Management and Administrative Services	41%
Computer and Information Sciences	14%
Marketing Operations and Distribution	11%
Transportation and Materials Moving Workers	9%
Engineering-Related Technologies	7%
Health Professions and Related Sciences	6%
Mechanics and Repairers	2%
Precision and Production Trades	2%
Visual and Performing Arts	2%
Others <sup>15</sup>	6%
Total	100%

**Table 9: Type of Training Received by ITG Recipients** 

The type of training pursued fluctuated over the years. Business and Management & Administrative Services training declined between 1995 and 2001 from 48% to 33%, while Marketing Operations & Distribution (primarily Entrepreneurship training) increased from 1% in 1995 to 16% in 2001. Minor fluctuations also occurred in Computer and Information Sciences, where the percent of ITG participants using their grants for such training increased from 13% in 1995 to 19% in 1999, and dropped to 14% in 2001.





<sup>&</sup>lt;sup>15</sup> footnote 9 lists the types of training categorized under "other".
<sup>16</sup> This graph depicts the 3 major types of training (which capture 66% of ITG participants). Most fluctuation between 1995-2001 occurred in these 3 areas.

# C. Type of Training by Demographic Groups

The types of training received varied by demographics groups. In particular females were over-represented in the health related training and business-related training, while males were over-represented in transportation and engineering training. Overall, females were 56% of participants, however females were 88% of those enrolled in Health Professions & Related Sciences training, and 78% of those enrolled in Business Management & Administrative Services training. While males were 44% of all participants, males were over-represented in Transportation-related training (94.5%), and Marketing Operations & Distribution (59%). Males were also over-represented in other types of training: Mechanics & Repairers (89.7%), Engineering and Related Technologies (78.8%), and Precision Production (75.4%).



# Figure 10: Type of Training by Gender

Young participants (age 18-36) were over-represented in health training and transportation training. Overall young participants comprised 33% of ITG participants, but were 45% of those enrolled in health professions and related sciences training and 47% of those enrolled in transportation-related training

Similarly Hispanics were over-represented in transportation training and under represented in marketing operations & distribution. African-Americans were also under-represented in marketing & operations training and they were over-represented in health related training. Whites were over-represented in marketing & operations training and under-represented in transportation and health related training. While Hispanics were 12% of the ITG population, they were 32% of those pursuing transportation training and 5% of those in marketing operations & distribution training. Similarly, while African-Americans were 20% of ITG participants, they were 33% of those enrolled in health-
related training and 14% of those enrolled in marketing operations & distribution training. Conversely, whites were 62% of the overall population and 77% of those pursuing marketing operations & distribution training, 51% of those in health-related training, and 43% of those in transportation-related training.

Those with less than a high school education were over represented in transportation training and under-represented in marketing & operations training, while college graduates were under-represented in transportation training and over-represented in marketing & operations training. Those with less than a high school education were 6% of all ITG recipients, but they were 22% of those pursuing transportation-related training and 3% of those pursuing marketing & operations training. College graduates were 17% of all ITG participants, 31% of those in marketing & operations training, and 3% of those in transportation training.

#### Chapter 2 Labor Market Outcomes for Individual Training Grant Recipients, 1995-2001

## I. Introduction

This chapter presents the labor market outcomes of approximately 25,000 individuals who completed training through the Individual Training Grant program between January 1<sup>st</sup> 1995 and March 31<sup>st</sup>, 2001.<sup>1</sup> The Individual Training Grant (ITG) program, part of New Jersey's Workforce Development Partnership Program, is a training program for dislocated workers. The Individual Training Grant program is designed to assist these individuals to obtain the skills they need to become re-employed. After filing for unemployment insurance, individuals are eligible to receive a training grant of up to \$4,000 dollars to fund training in occupations, which are currently in demand. Individuals can use their training grant voucher at state approved providers including community colleges, universities, proprietary schools, and adult vocational schools.

The outcome analysis used Unemployment Insurance (UI) wage records from the New Jersey Department of Labor to determine the wage and employment outcomes of individuals whose ITG grant contract ended between 1995 and March 31<sup>st</sup>, 2001. The analysis also utilized enrollment records from New Jersey's Commission of Higher Education to determine the percent who were enrolled in higher education after training. Strictly speaking, this chapter does not provide a full evaluation because it does not include an estimate of the wage and employment outcomes for a group of similar unemployed individuals who did not participate in the program. As a result, Section II provides a review of the methodology used to determine the outcomes. Section III provides an overview of the principal findings and the remainder of the chapter describes the outcome results in more detail.

# **II.** Methodology

#### A. Source of Information and Data Limitations

Information on individuals participating in the Individual Training Grant program was obtained from the program's administrative database maintained by the New Jersey Department of Labor. 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 information on a participant's demographic characteristics and the type of training to be received.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Approximately 5,000 individuals who started training between 2000-2001 are not included in the outcome analysis because they had not completed training by March 31<sup>st</sup>, 2001. This cut off data was chosen because wage data is only available through the second quarter (June) of 2001.

<sup>&</sup>lt;sup>2</sup> Variables include individual's age, race, educational attainment, gender, the dates that training will begin and end, the type of training to be provided, and the type of provider of this training.

The administrative data was merged with Unemployment Insurance wage records, obtained from the New Jersey Department of Labor, for 1994 through the second quarter of 2001. Unemployment insurance wage records consist of quarterly wage information collected from employers covered by the New Jersey Unemployment Compensation Law. These employers are required to report wage data for their employees on a quarterly basis (every three months) to New Jersey's Department of Treasury. The wage data assists the state in determining eligibility for UI benefits for those who lose their jobs, and it is used to determine each employer's UI payroll tax. It is important to note that not all New Jersey residents who are employed are included in the UI wage database. New Jersey residents working out of state, who are self employed, employed by religious organizations, federal civilian employees, or who are military personnel are not included in New Jersey's UI wage records. Therefore, the employment rates and wage recovery reported in this chapter are only a measure of employment at employers in New Jersey covered by the UI trust fund. As a result of this limitation, the labor market outcomes reported in this report are not directly comparable to outcomes that were calculated using wage information from other states. In particular, the outcomes are not comparable to results reported in the New Jersey Department of Labor's WIA annual report, which used UI wage information collected by other states. Additionally, unlike this report the New Jersey WIA report allowed the use of supplemental wage information, such as pay stubs and customer recipients for the self-employed.

The administrative data was also merged with the New Jersey Commission on Higher Education's fall enrollment files from 1994 to 2001 and the spring enrollment files from 1998 to 2001. The files are not cumulative; they contain only those enrollees for the specific year and semester. The enrollment files are "snapshot" files and represent the enrollments at a specific point in time.

Data from the Commission on Higher Education includes students enrolled in New Jersey state universities and county community colleges. Beginning in 1995, the enrollment files include students from two private independent colleges (Bloomfield College, Drew University). In 1997, the students from Farleigh Dickinson University were added to the files. Ryder University, Stevens Institute of Technology, and Georgian Court College were each added in 1998, 1999, and 2001 respectively. It does not include data from private proprietary schools. Therefore, the enrollment rates reported in this chapter are only a measure of enrollment at schools that report to New Jersey's Commission on Higher Education.

# **B.** Measuring Employment and Wage Recovery

Employment and wage recovery rates are measured in the first 6 months after training and at yearly intervals, through the sixth year after training. The indicators defined in Section 136 of the Workforce Investment Act of 1998 serve as the short-term outcome measures (6 months after training). The long-term employment rates are computed similarly to those specified in WIA. The long-term wage recovery measures are based on the median wage recovery, a departure from the WIA definitions. The following two sections provide more detail on the measures, and Appendix B provides the specific definitions with the operational parameters and a comparison of the WIA definitions and the long-term measures. (Appendix C illustrates that the median wage recovery is a better measure than the mean wage recovery.)

# i. Short-term Outcomes: The WIA Indicators

Section 136 of the Workforce Investment Act of 1998 defines 17 indicators that are aimed at measuring the performance of programs funded by the act.<sup>3</sup> Using the data available, the WIA short-term indicators were defined in this report as follows<sup>4</sup>:

- The entered **employment rate** is defined as the percent of individuals that earned wages at an employer covered by the New Jersey UI trust fund in the first quarter after completing training.
- The **retention rate** is defined as the percent of those employed at an employer covered by the New Jersey UI trust fund in the first quarter after training who are also employed in the 3<sup>rd</sup> quarter after training.
- The **wage recovery rate** is defined as the ratio of total post-training earnings (earned at employers covered by the New Jersey UI trust fund) in the 2nd and 3rd quarter after training to the total pre-unemployment earnings in the 2nd and 3rd quarter prior to unemployment.

# ii. Long-term Outcomes

Employment rates and the median wage recovery rates were also measured at yearly intervals through the sixth year after training. The employment rate was calculated in the same manner as the short-term employment rate. The wage recovery rate was calculated by taking the ratio of the wages earned after training to the wages earned in the fourth quarter prior to claiming Unemployment Insurance (UI). All wages were adjusted for inflation before the ratio was computed. In particular, the long-term outcomes are defined as follows:

- The **employment rate** at one year after training is defined as the percent of individuals that had positive wages in the fourth quarter after completing training. The second through fifth year are defined

<sup>&</sup>lt;sup>3</sup> Strictly speaking, 5 of the 17 indicators apply to dislocated workers: entered employment rate, retention rate, wage recovery, credential rate, and combined credential & employment rate. But because information on credentials in not available only the first three were calculated for this report.

<sup>&</sup>lt;sup>4</sup>The outcomes in this report are not comparable to results reported in the New Jersey Department of Labor's WIA annual report because of differences in how the date of dislocation was measured and the wage information used. This report only uses wage information from New Jersey, where as the New Jersey WIA report uses wage information collected by other states. Also this report does not use supplemental wage information such as pay-stubs, where as the New Jersey WIA report does.

analogously using every fourth quarter, that is the 8<sup>th</sup>, 12<sup>th</sup>, 16<sup>th</sup>, 20<sup>th</sup>, 24<sup>th</sup> quarter after training.

- The **wage recovery rate** at one year after training is defined as the ratio of the total post-training earnings in the fourth quarter after training to the wages in the fourth quarter prior to claiming UI. This rate is calculated for each person in the sample who is employed both in the fourth quarter after training and the fourth quarter prior to claiming UI. The median value of the wage recovery is used to represent the overall wage recovery. The second through fifth year are defined analogously using every fourth quarter, that is the 8<sup>th</sup>, 12<sup>th</sup>, 16<sup>th</sup>, and 20<sup>th</sup> quarter. All wages in this measure are adjusted for inflation. (Appendix C illustrates that the median wage recovery.)

These outcomes were determined for ITG participants where data was available. For example, ITG participants completing training in the first quarter of 2000 will not be included in the outcomes at two years after training because UI wage data was only available through the second quarter of 2001.

# C. Measuring Enrollment in Higher Education

The enrollment rates in higher education are defined as follows: If a person is enrolled in a New Jersey college or university in the first semester following their training completion, the individual is counted as enrolled. A semester is defined as either the fall semester (which starts in September) or the spring semester (which starts in January). Therefore those completing training between February and September of a given year are matched against the fall enrollment file and those completing training between October and January are matched against the spring enrollment file. Prior to 1998 there is only a fall enrollment file. Therefore, prior to 1998, those completing training between January and September are looked for in the fall enrollment file of the same year and those completing training between October and December are looked for in the enrollment file of the subsequent year. Appendix B provides more detail on how the enrollment rate was calculated.

The remainder of this chapter presents the outcome results. Section III provides a general overview of the findings in a bulleted format, while section IV describes the short-term labor market outcomes, section V describes the long-term outcomes. Sections VI and VII describe how outcomes vary by type of training obtained and provider. Section VIII describes the post-training enrollment in higher education trends.

# **III. Overview of Principal Findings**

The following section provides a brief bullet-point overview of the labor market outcomes for approximately 25,000 Individual Training Grant participants completing their training contract between 1995 and March 31<sup>st</sup>, 2001. The subsequent sections provide a more detailed description of the post-training outcomes rates.

## A. Short Term Labor Market Outcomes

#### Employment Rate

- Approximately two-thirds (66%) of ITG participants were employed in the first quarter after completing training.<sup>5</sup>
  - Females and younger participants (age 18-36) had higher employment rates than their counterparts. Approximately 69% of females were employed in the first quarter after training, compared with 62% of men. Similarly, 70% of those age 18-36 were employed in the first quarter after training while those age 51-65 had an employment rate of 60%.
  - College graduates had an entered employment rate lower than other educational groups. While 59% of college graduates were employed in the first quarter after training, 68% of high school graduates were employed in the first quarter after training.
- ► Approximately 87% of those employed in the first quarter after training remained employed in the third quarter after training. There was very little variation in the retention rate among demographic groups.



# Figure 1. Employment Rate in the First Quarter After Training

<sup>&</sup>lt;sup>5</sup> All the employment rates in this report are not comparable to results reported in the New Jersey Department of Labor's WIA annual report because this report only uses wage information from New Jersey, where as the New Jersey WIA report uses wage information collected by other states.

► Those enrolled in Health Profession & Related Sciences training (7% of participants) had the highest entered employment rate (72%) among the various training types. Those enrolled in Business Management & Administration training (41% of participants) had an entered employment rate of 69%, while those enrolled in Computer & Information Sciences (14% of participants) training had an employment rate of 64%.

#### Wage Recovery

- ▶ By six months after training, ITG participants had recovered approximately 80% of their pre-unemployment wage.<sup>6</sup>
  - While males and females had the same level of wage recovery, Hispanics and younger ITG participants (age 18-36) had a higher wage recovery than their counterparts. The wage recovery at 6 months varied only slightly across educational groups. Hispanics had a median wage recovery of 89%, while both white and African-Americans had a median wage recovery of 82% in the 2<sup>nd</sup> and 3<sup>rd</sup> quarter after training. Those age 18-36 had a median wage recovery of 92%, while those age 37-50 and age 51-65 had wage recoveries of 82% and 71%, respectively.

**Figure 2. Real Median Wage Recovery in the 2<sup>nd</sup> & 3<sup>rd</sup> quarter after training** *relative to wage 4 quarters before claiming UI* 



<sup>&</sup>lt;sup>6</sup>For methodological reasons, this measure of wage recovery is not comparable to other measures of wage recovery. For details see the methodological section of this chapter.

► Those with Transportation & Materials Moving training had the highest median wage recovery rate with 88%, which were followed by those from Engineering-Related Technologies (86%), Computer & Information Sciences (84%), and Health Professions & Related Sciences (84%). Those trained in Business Management & Administrative Sciences recovered 82% of their pre-unemployment wages in the 2<sup>nd</sup> and 3<sup>rd</sup> quarter after training.

#### **B. Long Term Labor Market Outcomes**

#### <u>Employment Rate</u>

► The employment rate increases from an entered employment rate of 66% to 69% one year after (4 quarters) training, and then gradually falls to 66% in the 3rd year after training and 61% in the 5th and 6th year after training.



Figure 3. Employment Rate 1 quarter to 6 years after Training

► While all demographic groups experienced a general decline in employment rates over time, some demographic groups had higher employment rates than others. In the years following training completion, females and younger participants consistently had higher employment rates than males and older participants, while those with a college education tended to have lower employment rates than other education groups. There was little variation in employment rates between racial groups. These same trends occurred in the first quarter after training and generally continued through the 6th year after training



# Figure 4. Employment Rate Five Years After Training

▶ By the fifth year after training, there is less variation in employment rates across training types with the overall employment rate at 61%. Those who participated in training in Engineering-Related Technologies had the highest employment rate at 65%, while those in Business Management & Administrative Sciences and Computer & Information Sciences had an employment rate of 62% and 58%, respectively.

# Wage Recovery

▶ In the six years after completing training, the median wage recovery of employed ITG participants grew from 89% in the first year after training to a median wage recovery of 111% in the sixth year after training.





relative to wage 4 quarters before claiming



- ► All demographic groups experienced a general increase in wage recovery in the years after training. However, the level of wage recovery rates did vary across demographic groups. Specifically, Hispanics had a higher median wage recovery rate than other racial groups, and younger participants (age 18-36) also had a higher wage recovery than other age groups. Older participants (age 51-65) tended to have a lower median wage recovery than the other age groups. There were only slight differences in the median wage recovery levels of males and females and among the education groups.
- ► There was some overlap between the two groups with the highest median wage recovery in the fifth year after training (those age 18-36 and Hispanics). While one third of all participants were in the youngest age group, 50% of Hispanics were in the younger age group. However, even after removing the younger participants from the analysis, Hispanics still consistently have higher median wage recovery than the other racial groups.
  - For instance in the fifth year after training Hispanics (excluding the younger group) had a median wage recovery of 114% in comparison to whites (also excluding the younger group) who had a median wage recovery of 100%.



Figure 6. Median Wage Recovery Rate 5 years After Training

The trends in wage recovery rates by training types generally continued in the first through fifth years after training. Those who participated in Transportation maintained the highest wage recovery rate (128% by the fifth year after training), while those in Marketing training had the lowest rate (106% by the fifth year). Those who participated in Computer and Information Sciences training had a median wage recovery rate of 111% in the fifth year after training.

Ferrit Rest Proto 150 165 Hart High Charles Control College Depart

relative to wage 4 quarters before claiming UI

# C. Enrollment Rates in Higher Education

20 10

0

Overall

Male

- Approximately 1,100 ITG participants enrolled in a state university or community college after training through the Individual Training Grant program. This amounts to 4% of ITG participants.
- The enrollment rates varied slightly across demographic groups. While there was little variation across the race groups, females, those with some college, and those age 18-36, had higher enrollment rates than their counterparts.
  - Females have a slightly higher enrollment rate than males (4.8% vs. 3.1%). Those with some college education have an enrollment rate of 6.5% while those with a college degree have an enrollment rate of 3.7% and those with a high school degree have an enrollment rate of 3.2%.
  - Younger participants (age 18-36) have a higher enrollment rate than older

Africar Ancican Historic

participants: The enrollment rate of the younger age group (18-36) was 5.7%, while the enrollment rates of age group 37-50 and age group 51-65 were 4.1% and 1.6% respectively.



Figure 7. Enrollment Rates in Higher Education after Completing Training

# Labor Market Outcomes for Individual Training Grant Recipients

#### IV. Short-term Labor Market Outcomes

Two-thirds (66%) of ITG participants found a job in the 1<sup>st</sup> quarter after training. Of those finding a job in the first quarter after training, 87% were still employed in the third quarter of training. Those employed in the first quarter after training had a median wage recovery of 83%, relative to their pre-unemployment wages in the 2<sup>nd</sup> and 3<sup>rd</sup> quarter. The following three sections detail how each of these labor market outcomes vary across demographic groups.<sup>7</sup>

#### A. Entered Employment Rate

In the first quarter after completing a training program, 66% of ITG participants were employed. Among demographic groups there was some variation in the employment rate. Females and younger ITG participants tended to have a higher entered employment rate in the first quarter after training than their counterparts. Also, African-Americans and Hispanics had slightly higher entered employment rates than whites. Those with a college degree tended to have a lower entered employment rate than other education groups.<sup>8</sup>

Approximately 62% of male participants were employed in the first quarter after training, while 69% of the female participants were employed in the same quarter. This difference is statistically significant. Like females, younger ITG participants had a higher entered employment rate than older groups. Those who were between age 18-36 when they claimed UI had a 70% employment rate in the first quarter after training, while 66% of the age group 37-50, and 60% of the age group 51-65 were employed in the first quarter after training. Finally, the older age group, ages 66 and above, which comprised only 1% of all ITG participants had the lowest employment rate (40%) in the first quarter after training. The difference between the youngest group's employment rate and the rate for those between age 51-65 is statistically different.

African-American participants and Hispanics had a slightly higher entered employment rate than whites. African-Americans had an employment rate of 68% in the first quarter after training, and Hispanics closely followed them with 67%. White participants had an employment rate of 65%. Asians, 3% of all participants, had the lowest employment rate, 61%, in the first quarter after training. The number of Native-Americans is fewer than 60 participants (only 0.2% of all participants), and therefore because of small sample size, their statistics are not reported.

<sup>&</sup>lt;sup>7</sup> All employment rates and retention rates in this report are not comparable to results reported in the New Jersey Department of Labor's WIA annual report because this report only uses wage information from New Jersey, where as the New Jersey WIA report uses wage information collected by other states.

<sup>&</sup>lt;sup>8</sup>All the differences in entered employment rates reported here hold even after those enrolled in entrepreneurship training are removed. Those enrolled in entrepreneurship (10% of participants) may not be found in state wage records because of potential self-employment. The incidence of entrepreneurship training is discussed later in the report.



Figure 8. Employment Rate in the First Quarter after Training

Employment rates in the first quarter after training were similar for participants with different educational background, with the exception of participants with a college education or beyond. Those with less than high school degree had a 67% employment rate in the first quarter after training, while those with a high school diploma had 68% and those with some college attainment had a 66% employment rate in the same quarter. In contrast, those with at least a college degree had a 59% employment rate. The employment rate for those with a college degree is statistically different from the employment rate of those with a high school degree.

#### i. Notable variations within demographic groups

Overall, males had a 62% employment rate in the first quarter after training, while females had a 69% employment rate. Within some demographic subgroups there was less of a difference between the employment rates of males and females:

- Among Hispanics and African-Americans the difference between male and female employment rates was smaller than the corresponding difference among whites. African-American males and females had employment rates of 66% and 70%, and Hispanic males and females had employment rates of 67% and 68% employment rates, respectively. In contrast, white males and females had employment rates of 59% and 69%, respectively.
- ♦ For all age groups the employment rates of females were higher than the employment rates of males, but the difference was smaller among younger age groups. Within the age group 18 to 36, male participants had a 69% employment rate and female participants had a 72% employment rate, while males at ages 51 to 65 had 53% and females at the same age had 65% employment rate.

♦ The difference in employment rates of male and female ITG participants was smaller for those with less than a high school education than for college graduates. Males and females with a college degree had 56% and 64% employment rate in the first quarter after training, while males and females without a high school degree had 66% and 67% employment rate.

Generally, high school graduates had higher employment rates than those with higher education levels in the first quarter after training. However, the magnitude of the differential varied across racial groups.

◊ In the first quarter after training, Hispanics with a high school degree had an employment rate of 67% and Hispanics with a college degree had an employment rate of 64%. Similarly, African-Americans with a high school degree had an employment rate of 70% and those with a college degree had an employment rate of 64%. In contrast, whites with a high school degree had an employment rate of 67%, while whites with a college degree had an employment rate of 58%.

#### ii. Variation by Training-Completion Year

The entered employment rate gradually falls from 69% for those who completed training in 1995 to 60% for those who completed between January 2001 and March 31st, 2001. The decline in employment rate is less pronounced when those enrolled in entrepreneurship training (who are not likely to be found in state wage records because of potential self-employment) are removed.<sup>9</sup> Removing those individuals the rate falls from 69% for those completing in 1995 to 64% for those completing in the first quarter of 2001.

by Year of Training Completion				
			% in	Rate (excluding those in
		Entered	Entrepreneurship	Entrepreneurship
	# of Participants	Employment Rate*	Training	Training)
Overall	25,109	66%	8%	68%
Completed Training				
1995	3,068	69%	0%	69%
1996	3,429	67%	0%	67%
1997	4,018	68%	10%	71%
1998	4,206	65%	15%	68%
1999	4,861	66%	7%	68%
2000	4,587	63%	12%	65%
January to March 31st, 2001	940	60%	13%	64%

# Table 1. Entered Employment Rate by Year of Training Completion

<sup>&</sup>lt;sup>9</sup> The number of ITG participants enrolled in entrepreneurship training increased from 0 in 1995 and 1996 to 10% of participants in 1997. After 1997 the percent of participants enrolled in entrepreneurship training was consistently between 10%-15%, except in 1999 when it was 7%.

# **B.** Retention Rate in the 3<sup>rd</sup> Quarter after Training

Approximately 7 out of 8 (87%) ITG participants who were employed in the first quarter after training remained employed in the third quarter after training. There was little variation in this retention rate across demographic groups. Male participants had an 85% retention rate, and female participants had an 88% retention rate. White participants had a retention rate of 87%, and Hispanic participants had an 86% retention rate, while African-American participants had and 85% retention rate. The small group of Asians had an 89% retention rate. Those between ages 37-50 had the highest retention rate with 88%. The youngest group (ages 18-36) had the retention rate of 87%, and those at ages 51-65 had the rate 85%. Education groups also had similar retention rates. Those with high school education had a retention rate of 84%. Both those with some college education and college graduates had an 86% retention rate.

There was also little variation in the retention rates across cohorts of participants completing training between 1995 and 2000.<sup>10</sup> The 1995 and 1996 cohort had slightly higher retention rates of 89%, while cohorts 1997, 1998, and 2000 had retention rates of 86%. Those completing training in 1999 had a retention rate of 84%.

#### C. Short Term Wage Recovery

Using the 1998 Workforce Investment Act's definition of wage recovery for dislocated workers, ITG participants recovered 82% of their pre-unemployment wages by the  $2^{nd}$  and  $3^{rd}$  quarter after training.<sup>11</sup> Pre-unemployment wages are the wages earned in the  $2^{nd}$  and  $3^{rd}$  quarter prior to claiming unemployment. There was some variation in the wage recovery rate across demographic groups, with Hispanics, younger participants, and those without a high school education having a higher wage recovery than their counterparts. Hispanics had a wage recovery rate of 91%, while whites and African-Americans had wage recovery rates of 81% and 83%, respectively. The small group of Asian participants had a high wage recovery rate, at 89%.

The wage recovery rate in the  $2^{nd}$  and  $3^{rd}$  quarter after training was considerably higher for the younger age group than the older age groups. Those who were age 18-36 at the time they claimed UI had a wage recovery rate of 94%. In contrast the wage recovery rate for those age 37-50 and 51-65 was 82% and 69%, respectively. Those with less than high school had a wage recovery of 86%, while both high school graduates and those with some college experienced a wage recovery of 83%. For participants with a college degree or beyond, the wage recovery was 79%. Males and females both had a wage recovery rate of 82%, the same

<sup>&</sup>lt;sup>10</sup> Retention rates were not calculated for those who completed in 2001 because wage data was only available through the first two quarters in 2001.

<sup>&</sup>lt;sup>11</sup> The wage recovery rate in this report is not comparable to results reported in the New Jersey Department of Labor's WIA annual report because of differences in how the date of dislocation was measured and the wage information used. This report only uses wage information from New Jersey, where as the New Jersey WIA report uses wage information collected by other states. Also this report does not use supplemental wage information such as pay-stubs, where as the New Jersey WIA report does

as the overall rate.<sup>12</sup>



Figure 9. Wage Recovery in the 2<sup>nd</sup> & 3<sup>rd</sup> Quarter After Training (*WIA definition*)

The wage recovery rate in the  $2^{nd}$  and  $3^{rd}$  quarter after training was considerably higher for the younger age group than the older age groups. Those who were age 18-36 at the time they claimed UI had a wage recovery rate of 94%. In contrast, the wage recovery rate for those age 37-50 and 51-65 was 82% and 69%, respectively. Those with less than high school had a wage recovery of 86%, while both high school graduates and those with some college experienced a wage recovery of 83%. For participants with a college degree or beyond, the wage recovery was 79%. Males and females both had a wage recovery rate of 82%, the same as the overall rate.<sup>13</sup>

There was little variation in the wage recovery rate across cohorts of participants completing training between 1995 and 2000. The wage recovery rate for the 1995, 1996, and 1997 cohort was 82%, while the wage recovery rates for the 1998,1999, and 2000 cohort were 85%, 83%, and 84%, respectively.

<sup>&</sup>lt;sup>12</sup> The variation of wage recovery within demographic groups is discussed later in the report.

<sup>&</sup>lt;sup>13</sup> The variation of wage recovery within demographic groups is discussed later in the report.

#### V. Long Term Labor Market Outcomes

#### A. Employment Rates

The employment rate increases from an entered employment rate of 66% to 69% one year after (4 quarters) training, and then gradually falls to 66% in the 3<sup>rd</sup> year after training and 61% in the 5<sup>th</sup> and 6<sup>th</sup> year after training.<sup>14</sup> This gradual decrease in employment rate may be due to movement of some participants out of the State of New Jersey in the six years after training. Between 1990 and 1999, 69% of those who moved were from New Jersey, New York, and Pennsylvania.<sup>15</sup>





While all demographic groups experienced a general decline in employment rates over time, some demographic groups had higher employment rates than others. In the years following training completion, females and younger participants consistently had higher employment rates than males and older participants, while those with a college education tended to have lower employment rates than other education groups. There was little variation in employment rates between racial groups. These same trends occurred in the first quarter after training and generally continued through the 6<sup>th</sup> year after training.

Similar to the variations in the entered employment discussed in section IVA, 72% of females were employed a year after training, while 65% of men were employed one year after training. By the fifth year after training 64% of females were employed and 58% of males were employed. The differences between the female and male employment rate are statistically different.

<sup>&</sup>lt;sup>14</sup> All the employment trends reported here hold even after those enrolled in entrepreneurship training are removed. Those enrolled in entrepreneurship may not be found in state wage records because of potential self-employment. The incidence of those participating in entrepreneurship training is discussed earlier in the report.

<sup>&</sup>lt;sup>15</sup> Source U.S. Census Bureau, Populations Estimate Program, Table ST-99-2.

Similarly both age groups 18-36 and 37-50 consistently had higher employment rates than the age group 37-50 and 51-65. The age groups are defined by the age at which participants claimed unemployment insurance. In the first year after training those age 18-36 (37-50) had an employment rate of 72% (71%), while those age 51-65 had an employment rate of 63%. By the fifth year after training those who were age 18-36 had an employment rate of 65%, while those age 51-65 had an employment rate of 53%. As with the entered employment rate, the employment rate for the youngest group is statistically different from the rate for those age 51-65.

#### Figure 11. Employment Rate One & Five years after Training by demographic groups



One Year After Training

Similarly, both age groups 18-36 and 37-50 consistently had higher employment rates than the age group 37-50 and 51-65. The age groups are defined by the age at which participants claimed unemployment insurance. In the first year after training those age 18-36 (37-50) had an employment rate of 72% (71%), while those age 51-65 had an employment rate of 63%. By the fifth year after training those who were age 18-36 had an employment rate of 65%, while those age 51-65 had an employment rate of 53%. As with the entered employment rate, the employment rate for the youngest group is statistically different from the rate for those age 51-65.

Those whose highest level of education was high school tended to have the highest employment rate relative to the other education groups, while those with a college education tended to have the lowest employment rate in the years after training. In the first year after training, those with a high school degree had an employment rate of 72% while those with a college education had an employment rate of 64%. In the fifth year after training, those with a high school degree had an employment rate of 63%, while those with a college degree had an employment rate of 56%. The employment rate for those with a college degree is statistically different from the employment rate of those with a high school degree.

There was little variation in the employment rates among racial groups. For example, in the fifth year after training whites had an employment rate of 62% and both African-Americans and Hispanics had an employment rate of 61%. Additionally, Asians who make up 3% of participants had an employment rate of 61% five years after training.

# i)Trends within Demographic Groups

While overall females, younger participants and those with less than a college education had higher employment rates from the first to fifth year after training, there were some variations from these trends across subgroups.<sup>16</sup>

- Overall, females had a higher employment rate than males in the first year through fifth year after training, but there were smaller and larger differences between employment rates of females and males within race, age, and education subgroups.
  - o In the first, second and third years after training, Hispanic females and males have similar employment rates, while white females consistently have a higher employment rate than white males in the 1<sup>st</sup> to 3<sup>rd</sup> year after training. White females had a 72% employment rate, and white males had a 62% employment rate in the first year after training, while both Hispanic females and males had an employment rate of 70%. By the 4<sup>th</sup> and 5<sup>th</sup> year after training the Hispanic and white gender-employment differential is similar. African-American females and males have smaller differential in their employment rates than white females and males in the first year after training,

<sup>&</sup>lt;sup>16</sup> The subgroup analysis is only carried out through the 5<sup>th</sup> year, because the sample size for the  $6^{th}$  year after training yields sample sizes at the demographic level that are less than 100.

in the  $3^{rd}$  and  $4^{th}$  year the gender differential is comparable to the white differential, and by the  $4^{th}$  and  $5^{th}$  year after training the gender-employment rate differential is highest among African Americans. In the  $4^{th}$  year after training, African American men had an employment rate of 58% and African American females had an employment rate of 68%.

- In the first two years after training, the difference in male and female employment rates is smaller among younger participants than older participants. However this trend diminishes in the third through fifth year after training. In the first year after training the employment rate for males between the age of 18-36 is 70% compared with 74% for corresponding females. In contrast, for males between the age of 51-65 the employment rate in the first year after training is 58% and 68% for women in the same age category. Males and females in the middle age group (37-50) had employment rates of 66% and 74% in the first year after training, respectively. By the fourth year after training, males and females in the age group 51-65 had employment rates of 52% and 58%, respectively. Males and females in the 18-36 age group had employment rates of 65% and 68% by the fourth year after training.
- o In the five years after training, males and females with less than high school education had similar employment rates, while in the higher education groups females generally had an employment rate five to ten percentage points more than males. In the first year after training, females with less than a high school education had an employment rate of 69% compared with a rate of 68% for males. In contrast, female college graduates had an employment rate of 69% in the first year after training, compared to a rate of 59% for men. This trend was generally maintained through the years, though the differential diminished. In the fourth year after training, females with less than a high school education had an employment rate of 62% compared with a rate of 61% for males. In contrast, female college graduates had an employment rate of 63% in the first year after training, compared to a rate of 57% for male college graduates had an employment rate of 63% in the first year after training, compared to a rate of 57% for male college graduates had an employment rate of 63% in the first year after training, compared to a rate of 57% for male college graduates had an employment rate of 63% in the first year after training, compared to a rate of 57% for male college graduates.
- Overall, high school graduates had higher employment rates than college graduates in the first through fifth year after training, but there was some variation in this trend within racial subgroups.
  - While whites with a high school degree had an employment rate in the first year after training ten percentage points higher than college graduates (72% vs. 62%), Hispanics with a high school degree had an employment rate four percentage points lower than Hispanic college graduates (68% vs. 72%). A similar trend occurs in the second through fifth year after training. In the fourth year after training whites with a high school degree have an employment rate of 67%, compared to a 60% rate for white college graduates. The corresponding difference is less among Hispanics. Hispanics with a high

school degree have an employment rate of 62% four years after training, compared to a 64% rate for Hispanic college graduates.

#### **Trends by Training-Completion Year Cohorts**

There was generally little variation in yearly employment rates across cohorts who completed training between 1995 and 2000. In the first year after training, the cohort with the highest employment rate (73%) were those who completed in 1995 and 1997, while those who completed in 1999 had an employment rate of 68%. Four years after training employment rates are available for three cohorts: those completing in 1997 had an employment rate of 67%, while those completing in 1996 and 1995 had an employment rates of 63% and 65%, respectively.<sup>17</sup>

#### **B. Wage Recovery after Training**

Individual Training Grant participants experienced a median wage recovery of 83% in the 2<sup>nd</sup> & 3<sup>rd</sup> quarter after training relative to their wage in the 4<sup>th</sup> quarter prior to claiming unemployment.<sup>18</sup> By the second year after training, the median wage recovery is 98%. By the third year after training, the median wage recovery was over 100%, at 104%.



Figure 12. Real Median Wage Recovery 1 to 6 years after Training

relative to wage 4 quarters before claiming UI

#### Time after training

<sup>&</sup>lt;sup>17</sup> The number of people enrolled in entrepreneurship training increased from zero to 10% between 1995 and 1996 and those enrolled in entrepreneurship training may not be found in wage records because of potential self-employment. Therefore to avoid bias in the rates between 1995 and 1996 the cohort trends presented here do not include those in entrepreneurship training.

<sup>&</sup>lt;sup>18</sup> The wage recovery rates reported in the remainder of this report are not based on the WIA definition, but rather are the median wage recovery rates. See the methodology section of this chapter and appendix B for details.

At the sixth year after training the median wage recovery grew to 111%. The percent of participants who recover over 100% of their wages increased from over a third (36%) in the  $2^{nd}$  and  $3^{rd}$  quarter after training to 58% in the sixth year after training. The above wage recoveries are adjusted for inflation, as well the remaining wage recoveries in this report.<sup>19</sup>



# Figure 13. Percent of ITG Participants Recovering 100% or more of their Pre-Unemployment wage 1 to 6 years after Training



All demographic groups experienced a general increase in wage recovery in the years after training. However, the level of wage recovery rates did vary across demographic groups. Specifically, Hispanics had a higher median wage recovery rate than other racial groups, and younger participants (age 18-36) also had a higher wage recovery than other age groups. Older participants (age 51-65) tended to have a lower median wage recovery than the other age groups. There were only slight differences in the median wage recovery levels of males and females and among the education groups.<sup>20</sup> Generally the same trends were found when examining the outcome indicator that measures the

<sup>&</sup>lt;sup>19</sup> Without adjusting for inflation the wage recoveries would be higher. For instance, without adjusting for inflation the median wage recovery one year after training is 94%, relative to the inflation adjusted level of 89%. Similarly, in the sixth year after training the unadjusted median wage recovery is 135%, compared to the inflation adjusted median wage recovery of 111%. The wage recoveries in the October 2001 report were not adjusted for inflation, therefore the rates listed there are slightly higher than the numbers in this report.

 $<sup>^{20}</sup>$  The subgroup analysis is only carried out through the 5<sup>th</sup> year, because the sample size for the 6<sup>th</sup> year after training yields sample sizes at the demographic level that are less than 100.

percent of participants who recover over 100% in each year after training. The only exception is in the sixth year after training, 61% of females had recovered over 100% of their wages and 55% of males had. (However it should be noted that these numbers are based on sample size of 200 for each gender.)

#### Figure 14. Real Median Wage Recovery Rate Five years after Training by demographic groups

relative to wage 4 quarters before claiming UI



Hispanics consistently had a higher wage recovery through the fifth year after training than other racial groups. Whites and African-Americans had similar wage recovery rates through the fifth year after training. In the 2<sup>nd</sup> and 3<sup>rd</sup> quarter after training Hispanics had a median wage recovery of 89%, while both whites and African-Americans had a median wage recovery of 82%. In the second year after training, Hispanics had a median wage recovery greater than 100%, at 108%, where as, whites had a median wage of 96% and African-Americans had a median wage of 97%. Five years after training the differential remained—Hispanics had a median wage recovery of 109%, and African-Americans had a median wage recovery of 108%. The median wage recovery rate among Hispanics is statistically different from the median wage recovery among whites and African Americans.

Similar to Hispanics, Asians (who comprise 3% of all ITG participants) also had a median wage recovery rate that was consistently higher than the median wage recovery of whites and African-Americans. In the fourth year after training Asians had a median wage recovery rate of 117%.



#### Figure 15. Real Median Wage Recovery 1 to 6 years after Training by Race

As with Hispanics and Asians, younger ITG participants (age 18-36) consistently had a higher median wage recovery than other age groups through the fifth year after training. Older participants (age 51-65) consistently had median wage recovery rates lower than other age groups. The middle age group consistently had a median wage recovery that was near the overall median wage recovery. In the 2<sup>nd</sup> and 3<sup>rd</sup> quarter after training, the median wage recovery for those age 18-36 was 92%, while the median wage recovery for the older group (age 51-65) was 71% and it was 82% for those age 37 to 50. Similarly in the fifth year after training, the median wage recovery of their wages (with a median wage recovery of 88%). Those age 37 to 50 had a median wage recovery that fell between the latter two groups, at 106%. These results are similar to findings in general economic research on life-cycle earnings. Economic research has demonstrated that wage growth tends to be higher among younger people than among those who are older, and that wage growth tends to decline at the end of an individuals working career.<sup>21</sup>

There is some overlap between the two groups with the highest median wage recovery in the fifth year after training (those age 18-36 and Hispanics). While one third of all participants are in the young age group, 50% of Hispanics are in the younger age group. However, even after removing the younger participants from the analysis, Hispanics still consistently have higher median wage recovery than the other racial groups. For instance, in the fifth year after training Hispanics (excluding the younger group) have a median

<sup>&</sup>lt;sup>21</sup> Weiss, Yorman. "The Determination of Life Cycle Earnings: A Survey", in Handbook of Labor Economics, volume 1. Orley Ashenfelter and Richard Layard, Editors.

wage recovery of 114% in comparison to whites (also excluding the younger group) who have a median wage recovery of 100%.

Male and females had similar levels of wage recovery in the 2<sup>nd</sup> and 3<sup>rd</sup> quarter after training, and they remain similar through the third year after training, when males have a median wage recovery of 106% and females have a median wage recovery of 103%. By the fifth year after training, males had a median wage recovery of 113% and females had median wage recovery of 109%.

Generally, there was little variation in median wage recovery across education groups. Though beginning in the third year after training the median wage recovery for those with some college education and college graduates was slightly higher than those with a high school degree or less. In the 2<sup>nd</sup> and 3<sup>rd</sup> quarter after training, the median wage recovery of those with less than a high school degree was 83% and it was 82% for those with a high school degree. Those with some college education prior to entering the ITG program had a median wage recovery of 83%, while those with a college degree had a median wage recovery of 84% in the 2<sup>nd</sup> and 3<sup>rd</sup> quarter after training. By the fifth year after training, those with less than a high school degree had a median wage recovery of 110%, while those with a high school degree had a median wage recovery of 110%. In the fifth year after training, both those with some college education and a college degree had a median wage recovery of 112%. The difference between the median wage among college graduates and the median wage among high school graduates is statistically different.

# i)Trends within Demographic Groups

Overall, males had a slightly higher median wage recovery than females through the fifth year after training, however among college graduates and older participants (51-65) females had a higher median wage recovery than males. Additionally, among younger participants (18-36) and Hispanics, the male median wage recovery was markedly higher than the female median wage recovery. Specifically:

- In the third through fifth year after training female college graduates had a higher median wage recovery than male college graduates. For example in the third year after training, female college graduates had a median wage recovery of 113% in comparison to male college graduates' median wage recovery of 99%.
- Among participants age 51-65, females generally have a higher median wage recovery than males in the years after training. For example, in the fourth year after training females age 51-65 had a median wage recovery of 90% while males in the same age group had a median wage recovery of 82%.
- Among younger participants, males had a noticeably larger median wage recovery than females through the fifth year after training, when compared to the overall difference. While overall in the fourth year after training males had a median

wage recovery of 110% and females had a median wage recovery of 106%, among participants age 18-36 the difference was 20 percentage points--males had a wage recovery of 138% and females had a rate of 118%.

- Beginning in the third year after training, Hispanic males had a noticeably higher median wage recovery than females, when compared to the overall difference. For example, in the fourth year after training, Hispanic males had a median wage recovery of 127%, compared to a 112% median wage recovery for Hispanic females. Overall, in the fourth year after training the male median wage recovery was 110% and the median level for females was 106%.

Overall younger ITG participants (age 18-36) consistently had a higher median wage recovery than older participants (age 51-65). Among men and college graduates, the young-old differential was substantially greater than the overall differential. Specifically:

- Beginning in the 2<sup>nd</sup> year after training younger college graduates had a median wage recovery substantially larger than older college graduates. For example, in the third year after training, younger college graduates had a median wage recovery of 133% in comparison to older college graduates who had a median wage recovery of 84%.
- The young-old wage recovery differential is consistently higher among males than among females. For instance, in the third year after training, young (age 18-36) males had a median wage recovery of 129% and older males (51-65) had a median wage recovery of 82%, while young females had a median wage recovery of 114% and older females had a median wage recovery of 89%.

Among all ITG participants, Hispanics had a higher median wage recovery than whites and African-Americans in the years after training. This trend is maintained within all demographic groups although within some demographic groups the differential is larger than others. Specifically:

- Hispanic males had a median wage recovery of 127% in the 4<sup>th</sup> year after training and white males had a median wage recovery of 108%, while the differential between females was noticeably smaller, where Hispanic females had a median wage recovery of 112% and white females had a median wage recovery of 105%.

Overall, college graduates tend to have a slightly higher median wage recovery than high school graduates in the years after training. This trend is consistent within demographic groups, with the exception of males, where in the second to fifth year after training male high school graduates have a slightly higher wage recovery than male college graduates.

- For instance in the fourth year after training, male high school graduates had a median wage recovery of 109% in comparison to male college graduates who had a median wage recovery of 106%. In contrast, female high school graduates had a median wage recovery of 104% in the fourth year after training and female

college graduates had a median wage recovery of 109%.

#### **Trends by Training-Completion Year Cohorts**

The median wage recovery from the  $2^{nd}$  and  $3^{rd}$  quarter through the sixth year after training were consistent across cohorts, where a cohort is defined as a group who completed training in the same year. For example, in the third year after training the overall median wage recovery was 104%, and each cohort's median wage recovery fell between 102% and 105%.

# VI. Labor Market Outcomes by Type of Training

# A. Employment Rates by Training Type

The employment rates of ITG participants varied slightly by the type of training they received. Overall, 66% of ITG participants were employed in the first quarter after training. Participants from Health Professions and Related Sciences, which represents 6% of the overall ITG participants, had the highest employment rate of 72% in the first quarter after training (see figure 16). The lowest employment rate was among those trained in the Marketing Operations and Distribution program that represent 10% of the ITG participants and had an employment rate of 47% in the first quarter after training. Since over 90% of those in this area were enrolled in entrepreneurial training programs and the employment data (UI wage records) does not capture self-employment, the employment rate may actually be higher for participants trained in marketing fields. Because of this data limitation, Marketing Operations and Distributions is not included in the figure. The next lowest employment rate is 61% for those 2% of participants who obtained training in the area of Visual and Performing Arts



Figure 16. Employment Rate in the First Quarter After Training by Training Type

Those participants who received training in Business Management and Administrative Sciences and those who received training in Transportation and Materials Moving both had employment rates of 69% in the first quarter after completion. The largest segment of the ITG population (43%) pursued training in Business Management and Administrative Sciences, while 9% of the ITG population attended a Transportation and Materials Moving

program. Those participating in Computer & Information Sciences and Engineering-Related training had similar employment rates. Computer & Information Sciences training was pursued by 14% of the overall ITG participants, and had an employment rate of 64% in the first quarter following completion. Approximately 7% of ITG participants were trained in Engineering-Related training, and those participants had an employment rate of 62%.

As with the overall trend, younger participants (ages 18-36) had higher employment rates than any other age cohort in the first quarter after training across all types of training. However there were some cases where trends varied from the overall trends, namely:

- o Females had a higher employment rate in the first quarter after training than males in all types of training with the exceptions of Transportation where males had an employment rate of 69% and females had a rate of 66%.
- o Overall, Hispanics tended to have a higher employment rate than whites and African-Americans. However, there was only modest variation in employment rate by race within the various training types.
- Overall, ITG participants with a college degree had lower employment rates in the first quarter after training than those with only a high school degree with the exception of participants in Mechanics and Repairers training. Participants with a college degree in this training had an employment rate of 73%, while those with only a high school degree had an employment rate of 62%.

By the fifth year, the overall employment rate is 61%, and there is less variation in employment rates across training types than in earlier years. Those who participated in training in Engineering-Related Technologies had the highest employment rate at 65%, while those in Business Management & Administrative Sciences and Computer & Information Sciences had an employment rate of 62% and 58%, respectively.



Figure 17. Employment Rate in the Fifth Year After Training by Training Type

The variation in employment rates across demographic groups within training types in the fifth year after training generally resembled the variations in the first quarter after training.

#### **B.** Wage Recovery by Training Type

In the second and third quarters after training, the overall median wage recovery rate of ITG participants was 83%. There was variation from this rate across participants by types of training. Those who received Transportation & Materials Moving training had the highest median wage recovery rate with 88%, which were followed by those from Engineering-Related Technologies (87%), Computer & Information Sciences (84%), and Health Professions & Related Sciences (84%). Those trained in Business Management & Administrative Sciences recovered 82% of their pre-unemployment wages by the second and third quarters after training, and those from Marketing Operations & Distribution had the lowest median wage recovery of 74%.

# Figure 18. Median Wage Recovery in the 2<sup>nd</sup> & 3<sup>rd</sup> Quarter After Training by Training Type

relative to wage 4 quarters before claiming UI



Similar to the overall trend, Hispanic ITG participants had the highest median wage recovery across training types in the second and third quarters after training. Similarly, younger (age 18-36) ITG participants generally had a higher median wage recovery than older participants (age 51-65) across types of training. There were some deviations from the overall wage recovery trends among other demographic subgroups in the second and third quarters after training. Specifically:

- Although both males and females had an overall wage recovery rate of 83% in the second and third quarter after training, males had higher wage recovery rates in Mechanics and Repairers training (81% vs. 76% for females) and in Transportation and Materials Moving training (89% vs. 73% for females). At the same time, females had higher wage recovery in Health Professions & Related Science, with a median wage recovery rate of 85%, compared to a median wage recovery of 78% for males. Similarly, females in Business Management & Administrative Sciences had a median wage recovery of 83%, while males in the same type of training had a median wage of 80%.
- o Overall, college graduates had a slightly higher wage recovery rate than those with a high school degree, 84% and 82% respectively. However, this was not

the case for several training types. Participants with a high school degree had higher wage recovery rates than those with a college degree in the second and third quarters after training in Engineering and Related Technologies (89% vs.87%), Marketing (72% vs. 68%), Mechanics and Repairers (81% vs. 59%), and Transportation and Materials Moving (89% vs. 80%).

These trends in wage recovery rates by training types generally continued in the first through fifth years after training. Those who participated in Transportation training maintained the highest wage recovery rate (128% by the fifth year after training), while those in Marketing had the lowest rate (106% by the fifth year). Those who participated in Business Management & Administrative Services training had a median wage recovery of 108%.



**by Training Type**<sup>22</sup> relative to wage 4 quarters before claiming UI

Figure 19. Median Wage Recovery in the Fifth Year After Training

The variation of wage recovery rates across demographic groups and training types in the first through fifth year after training generally resembled the variation in the second and third quarter after training, as described above, with the following exceptions.

• While males and females had equal wage recovery rates in the second and third quarters after training, males had higher wage recovery rates than females in each of the first through fifth years after training. By the fifth year after training, males had a wage recovery rate of 113% while females had a rate of 109% overall. However, females who participated in Business and

<sup>&</sup>lt;sup>22</sup> This chart has fewer training categories than the previous chart because those categories where the wage recovery was based on a sample of 100 or less was not included.

Management and Administrative Services had a median wage recovery rate of 108% while men had a rate of 104%.

## VII. Labor Market Outcomes by Type of Provider

#### A. Employment Rates by Type of Provider

The employment rates varied slightly by the type of provider. The employment rate in the first quarter after training was 68% for both those trained at community college and those trained at proprietary school. Those at a four-year college/university (3% of participants) had an employment rate of 67%.<sup>23</sup>



## Figure 20. Employment Rate in the First Quarter After Training by provider

The variation in employment rate across demographic groups within provider types resembles the overall variation in employment rates across demographic groups, with the exceptions occurring among the 3% who enrolled at four-year college or university:

o Females had higher employment rates than males in the first quarter after training, with the exception of those who received their training at a four-year college or university. Within this subgroup, males had slightly higher employment rates than females in the first quarter after training, 68% and 66% respectively.

<sup>&</sup>lt;sup>23</sup> These employment rates exclude those enrolled in entrepreneurship training because of two interacting factors: 1)those enrolled in entrepreneurship training are likely to be self-employed and therefore not included in state wage records and not counted as employed and 2) one-third of those who attended community colleges were enrolled in entrepreneurship training and only 3% of those at proprietary schools were enrolled in entrepreneurship training.

o Overall, those who had a high school degree had a higher employment rate than those with a college degree in the first quarter after training. However, for those who received training at a Four-Year College/University, college graduates had a higher employment rate than those with a high school degree, 71% and 66%, respectively.

By the fourth and fifth year after training, there is less variation in employment rates across provider types. By the fourth year, the overall employment rate is 64%. For those who attended a Community College or a Proprietary School the rate is 65% and 64%, respectively. Participants who attended a Four-Year College/University had an employment rate of 65%.



Figure 21. Employment Rate in the Fifth Year After Training by provider

The variation in employment rates among demographic groups across provider types in the first through fifth year after training generally resembled the variation in employment rates in the first quarter after training.

#### **B.** Wage Recovery Rates by Type of Provider

In the second and third quarters after training, the overall median wage recovery rate of ITG participants was 83%. There were some variations in the median wage recovery rate across type of provider. Those trained at a four-year college/university (3% of participants) had the highest median wage recovery rate at 89%. Those trained at a

proprietary school had an 84% recovery rate, and those trained at a community college had a median wage recovery of 79%.<sup>24</sup>



# Figure 22. Median Wage Recovery in the 2<sup>nd</sup> & 3<sup>rd</sup> Quarter After Training by Provider Type

relative to wage 4 quarters before

Younger participants (aged 18-36) had higher wage recovery rates than older participants (51-65) in the second and third quarters after training across all provider types. Those aged 37-50 had wage recovery rates between the other two age cohorts. Similarly Hispanics generally had the highest median wage recovery across provider types. The variation in wage recovery rates across demographic groups within provider types resembles the overall variation in wage recovery rates across demographic groups. The primary exception is:

o Overall, males and females had the same median wage recovery rate in the second and third quarters after training, but there was some variation in this trend by provider type. While males and females who attended Community Colleges or Proprietary Schools had the same wage recovery rate, males who attended a Four Year College/University had a wage recovery rate of 92% in the second and third quarters after training, while females who attended a Four Year College/University only had an 85% wage recovery rate.

<sup>&</sup>lt;sup>24</sup> These wage recovery rates are the same even after removing those who received entrepreneurship training or transportation training.
In the first through fifth years after training, wage recovery rates across all provider types continue to increase, with variation in rates across provider types. Participants who attended a Four-Year College/University continued to have the highest wage recovery rate while those who attended a Community College continued to have the lowest wage recovery rate. By the fifth year, participants who had attended a Four-Year College/University had a wage recovery rate of 126%, those who attended a Proprietary School had a rate of 112% and those who attended a Community College had a median wage recovery of 103%.



Figure 23. Median Wage Recovery in the Fifth Year After Training by Provider Type

relative to wage 4 quarters before

The variation in wage recovery rates among demographic groups across provider types in the first through fifth year after training generally resembled the variation in wage recovery rates in the first quarter after training, with the following exceptions

- By the fourth and fifth year after training, the wage recovery rates of males and females were similar across all provider types, with the exception of Four-Year College/University. Males who attended training at this provider type continued to have higher wage recovery rates than females who attended a Four-Year College/University. Males had a rate of 135% in the fourth year while females had a rate of 111% in the fourth year after training.
- o Like the overall trend, those with a college degree tended to have higher wage recovery rates than those with a high school degree. However, for those who received training from a Community College provider, high school graduates had higher wage recovery rates than college graduates in the third through fifth years

after training. For instance in the fifth year after training high school graduates who attended Community Colleges had a median wage recovery of 104%, while college graduates who attended Community Colleges had a median wage recovery of 99%.

### VIII. Post-Training Enrollment Rate in Higher Education

Approximately 1,100 ITG participants enrolled in a state university or community college after training through the Individual Training Grant program.<sup>25</sup> This amounts to 4% of participants who completed training before September of 2001. This cut off date was chosen because enrollment data was available only through September 2001.

The enrollment rates varied slightly across demographic groups. While there was little variation across the race groups, females, those with some college, and those aged 18-36 had higher enrollment rate than their counterparts. Females have a slightly higher enrollment rate than males (5% vs. 3%). Those with some college education have an enrollment rate of 7% while those with a college degree have an enrollment rate of 4% and those with a high school degree have an enrollment rate of 3%. Younger participants (age 18-36) have a higher enrollment rate than older participants: the enrollment rate of younger age group (18-36) was 6%, while the enrollment rates of age group 37-51 and age group 51-65 were 4% and 1% respectively.



Figure 24. Enrollment Rates in Higher Education after Completing Training

<sup>&</sup>lt;sup>25</sup> A person is considered enrolled if they enrolled in a state university in the first full semester after completing training. For example, if an individual completed training in June of 1996 and enrolled at a state University in the fall semester (September) of 1996, he/she would be counted as enrolled. Starting in 1998, the spring and fall enrollment files are available. So if any individual completed training in November of 1998 and enrolled in a state University in the spring semester (January) of 1999, they would be counted as enrolled.

There was also variation in enrollment rates across types of providers and types of training. Those ITG participants who obtained training at 4 year colleges/universities had an enrollment rate of 22%, in comparison to 8% for those who used their grants at community colleges and 2% for those at proprietary schools.<sup>26</sup> Those who obtained training in health professions and related sciences had an enrollment rate of 8%, compared with 4% for other ITG participants.

#### A. Variation by Demographic Groups

While females have a higher enrollment rate than males within all race, education, and age groups, there is some variation with respect to the other overall trends. Specifically:

- Those with some college education have a higher enrollment than other education groups among both males and females and across all age categories. Those with some college education also have a higher enrollment rate than other education groups among whites and blacks, but among Hispanics those with a college degree have a higher enrollment rate than those with some college (6% vs 5%).
- Younger ITG recipients (age 18-36) have a higher enrollment rate than older participants among all education groups, both males and females, and all races except Hispanic. Among Hispanics, both those aged 37-51 and those aged 18-36 have an enrollment rate of 4%.
- Overall there is little variation in enrollment rates across race groups. This trend is maintained among males and females, and all age groups except the young. Among the young (age 18-36), whites have an enrollment rate of 7%, Hispanics have a rate of 5%, and young African-Americans have an enrollment rate of 4%. The overall trend also is maintained among high school graduates but not among the other education categories, where among those with a college degree the enrollment rate for whites is 3% and it is 5% and 6% among African Americans and Hispanics, respectively. Similarly, among those with some college the enrollment rate for whites is 7% and it is 7% and 5% among African Americans and Hispanics, respectively.

<sup>&</sup>lt;sup>26</sup> Concerned that the higher rates for those who attended community colleges and 4-year colleges may be a result of how the SURE enrollment files are maintained, staff at the Heldrich Center contacted the Commission on Higher Education. Staff there explained that an enrollment file for a given year would only contain those enrolled in that given year. So if someone enrolled in a computer class at a community college in 1994 and never received a degree, the individual would only appear in the 1994 enrollment file and not later years.

#### Chapter 3 A Profile of New Jersey's Customized Training Program, 1997-2001

# I. Introduction

This chapter contains a profile of the firms and consortia participating in the Workforce Development Partnership (WDP) Program's Customized Training program between 1997-2000. 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: the Customized Training (CT) program, which awards grants to firms and consortia to train current employees and an Individual Training Grant (ITG) program, which awards individual grants to the long-term unemployed to help them obtain new skills and jobs. This chapter provides a profile of the firms and consortia receiving grants and a description of the type of training they planned.

# **II. Source of Information**

This data in this report are based on the Customized Training program's administrative data from the New Jersey Department of Labor. The administrative data consists of application data, contract data, and a close out file that firms submit at the end of their grant period. The bulk of this chapter is based on the contract data. Section X. presents data on completed training activities, which was obtained from the close out file. Information on the type of training and the type of training school (used to train employees) was obtained from the course and training vendor data collected from grantees. The data includes firms that received grants between fiscal year 1997 and fiscal year 2000.

The remainder of this chapter presents a description of the Customized Training grants awarded between 1997 and 2000. Section III provides a general overview of the findings in a bulleted format, and Section IV provides an overview of the grants awarded each year. Section V examines the location of grantee firms and consortia. Sections VI to IX provide a description of consortia and their planned training activities and a description of firms and their planned training activities. Finally, Section X describes the completed training activities of those firms that submitted close-out reports.

# **III. Overview of Principal Findings**

# A. Overview of Grants Awarded in 2001

In 2001, a total of 124 grants were awarded, down from 198 grants the previous year. Approximately 85% of grants were awarded to firms and 14% were awarded to consortia, an association of employers, often organized by educational institutions. Slightly over one-fifth (22%) of grantees were previous recipients of customized training grants. The total amount awarded by the Customized Training program in 2001, \$20.4 million, was less than half of the total amount of money awarded in the previous year (\$45.6 million). Both the average grant size and number of individuals to be trained in 2001 were also less than 2000 levels. The average grant size was \$164,538, approximately 30% lower than the average amount in 2000. A total of 33,555 individuals were expected to receive training with 2001 CT grants, approximately 20,000 less than the number to be trained in 2000 (54,345). Grantees planned to contribute \$1.41 for every dollar contributed by the state in 2001.

Table 1. Overview of	<b>Grants Awarded</b>	Between 1997-2001

	1997	1998	1999	2000	2001
Number of grant recipients	83	122	123	198	124
Number of consortium grants	11	14	11	32	18
Total Amount awarded (in \$ millions)	\$23.5	\$30.8	\$28.8	\$45.7	\$20.4
Average Grant Amount	\$283,667	\$253,261	\$234,244	\$230,584	\$164,538
Percentage of Grants Less than \$100K	38.60%	31.10%	43.10%	40.70%	48.40%
Planned contribution per Grant \$ Awarded	\$1.87	\$1.75	\$1.40	\$1.68	\$1.41
Number of Individuals to be Trained	41,243	34,331	34,076	54,345	33,555

The majority (67%) of CT grantees in 2001 were from the manufacturing industry, and 49% of non-consortia grantees employed 51-250 employees. Grantees most commonly used their grants to provide classroom training in business and computer-related fields to incumbent employees. To a lesser extent, grantees also provided on-the-job training to employees. The following sections summarize the location, industry, and size of the firms as well as the type of training in which firms planned to engage.

# **B.** Description of Customized Training Grantees

# i. Grantees Home Counties

- ▶ Bergen, Middlesex, and Essex counties have consistently been among the five counties receiving the most Customized Training grants since 1997, while Camden county has increased its share of grants in recent years and Mercer county's share has decreased.
- ► The distribution of grants across counties generally resembles the distribution of all firms across New Jersey.<sup>1</sup> However, Mercer, Morris and Camden counties are slightly over represented in the distribution.

<sup>&</sup>lt;sup>1</sup> This comparison was only made for 1999 because this is the latest county business pattern data available from the U.S. Census Bureau.

▶ In 2001, 28% of grantees were located in a "selected urban area." These urban areas are municipalities or townships designated as Urban Enterprise Zones, Urban Coordinating Council Cities, Labor Surplus areas or targeted urban areas as defined by the Economic Development Authority. The share of urban grantees among all grantees has declined from 1997 to 2001, with a brief increase in 2000.

## ii. Consortia

- ▶ In 2001, consortia received 18 CT grants (14.5%) and firms received 106 CT grants (85.5%). The percent of consortia receiving CT grants has remained relatively stable over the last five years.
- ▶ While consortia grantees received 17% of grant money in 2001 (nearly \$3.5 million), they planned to train 27% of the total number of trainees (nearly 9,000 individuals). Similarly, from 1997-2000, consortia received 17% of the total grant money and expected to train one third of the total number of trainees.
- ► Approximately, 50% of consortia grantees in 2001 were previous grant recipients, while only 17% of firm grantees were prior recipients. The share of both firms and consortia that are previous grantees has increased over the last five years.



**Figure 1: Previous Grant Recipients: As a Share of Total Grantees** 

► A substantial majority (76%) of consortia, for which information on type of training was available, planned to offer employees classroom training in business-related fields, and nearly one quarter of consortia planned to train employees in engineering-related fields.

# C. Description of Firms and Their Customized Training Grants<sup>2</sup>

## i. Industry of Firms

- ▶ While the majority of firms receiving grants in 2001 were in the manufacturing industry (67%), their share of grants has declined since 1997. This decline is offset by modest gains in the share of service, wholesale trade, and transportation and public utilities firms over the same period.
- ► The industry representation among firms receiving CT grants is dissimilar from the state's industrial profile. In particular, manufacturing firms are over-represented, while service firms are under-represented.



Figure 2. Share of Total Number of Grants, By Major Industries

# ii. Size of Firms

▶ Nearly half of firms (49%) receiving a grant in 2001 employed 51-250 employees and another quarter (25%) employed 251 to 1000 employees. Eleven percent of grants were awarded to firms with more than 1000 employees and 15% were awarded to firms with 50 or fewer employees.

<sup>&</sup>lt;sup>2</sup> All numbers reported in this section are for firms receiving CT grants, consortia are not included.

► The average grant amount awarded increases as the size of the firm increases, from an average amount of \$48,310 for companies with 50 or fewer employees, to \$432,612 for companies with more than 1000 employees.

## iii. Planned Training Activities

- ▶ In 2001, firms receiving CT grants planned to train 24,575 individuals. The majority of firms (68%) planned to use their CT grant to train over 75% of their employees.
- ► Sixty-two percent of firms planned to use their CT grants to fund classroom training exclusively, while 3% of firms planned to use their grants to fund on-the-job training (OJT) exclusively. The remaining 35% planned to use their grants to fund both classroom and on-the-job training.
- ▶ Information on the type of classroom training provided was available for 104 (98%) of the 106 firms receiving 2001 grants. Among these firms, 89% of firms planned to provide business-related training, 38% planned to provide computer training, and 28% of firms provided engineering-related training.



Figure 3: Type of Classroom Training Planned by Firms

Based on 104 of 106 cases where information was available

- ► The training firms planned varied by industry. Firms in the manufacturing industry were far more likely to train employees in engineering related fields and the precision trades. Firms planning business-related and computer related training were generally distributed proportionally across industries.
- ► Thirty-eight percent (40/106) of all firms planned to use their CT grant to fund onthe-job training in 2001. This represents a decline in the provision of OJT relative to previous years.

- ▶ Information on the type of on-the-job training was available for 35 firms, or 83% of all firms planning to provide OJT in 2001. Of those firms, 10 (29%) planned to provide OJT in industrial manufacturing technology and 8 (23%) planned to provide OJT in the precision trades. This differs from previous years when business and engineering were the most common types of OJT.
- Vendor information was available for 88% of firms (93 of 106) receiving CT grants in 2001. These firms used a variety of vendor types including: proprietary schools (43%), community colleges (41%), state universities (20%), and Jewish Vocational Services (13%).
- ▶ In 2001, firms planned to contribute a total of \$885 per individual trained. From 1997 to 1999, firms' planned contribution per individual trained fell noticeably from \$2657 to \$1226. The planned contribution level then rose to \$1684 in 2000.
- ► Firms used community colleges and proprietary schools relatively equally between 1997 and 2000, while the percent of firms using state universities decreased and those using Jewish Vocational Services significantly increased.



Figure 4: Vendor Type

values sum to more than 100% because some grantees used more than one vendor type, n=93

## iv. Estimated Cost of Training

▶ On average, firms planned to spend \$924 of their grant money per individual trained in 2001. This was slightly less than the average amount firms planned to spend in the previous year (\$1090), and was consistent with the continuing decline in the number of grant dollars spent per trainee trained over the last several years.



▶ Of the three most common sectors to receive CT grants, the largest expenditure per individual was in the manufacturing sector (\$978). Firms in the retail trade industry spent the greatest amount (\$1023) amongst all industries, and the construction and FIRE industries spent the lowest amount of grant dollars per individual trained (\$482 and \$538, respectively).

# Figure 6: 2001 Average Grant Dollars Spent Per Individual, by Industry and Firm Size



In 2001, firms planned to contribute a total of \$885 per individual trained. Firms' planned contribution per individual trained fell noticeably from 1997 to 1999 (from \$2657 to \$1226). The planned contribution level then rose to \$1684 in 2000.

## A Profile of New Jersey's Customized Training Program, 1997-2001

## IV. Overview of Grants Awarded in 2001

In 2001, a total of 124 grants were awarded, down from 198 grants the previous year. Eighteen were awarded to consortia while the remaining 106 were awarded to firms. Consortium grants thus constituted 14.5% of all CT grants in 2001 and 85.5% were awarded to firms. This distribution of grant awards between firms and consortia is similar to 2000, when 16% of grants were awarded to consortia.

Despite the decrease in the total amount of grants awarded from 2000 to 2001 (\$45 million to \$20 million), the total number of grantees and individuals to be trained did not decline. There are two main reasons for the decline in funds noted by the Office of Customized Training. First, the pending budget crisis in 2001 resulted in a decrease in the funds available for the CT program. Second, the elimination of carry over funds greatly decreased the amount of funds available for the program. Carry over funds are those monies not expended during the previous fiscal year, but which get added onto the funding amount for the following fiscal year. The elimination of carry over funds significantly lessened the funds available for the CT program in fiscal 2001.

Approximately \$20.4 million was awarded in CT grants in 2001, less than half of the total amount of money awarded in the previous year (\$45.6 million). When taking into account the varying numbers of grants awarded between these two years, average grant size in 2001 (\$164,538) was still greatly diminished in comparison to average grant size in 2000 (\$230,585). Grantees planned to contribute \$1.41 for every dollar contributed by the state in 2001, compared to \$1.68 in the previous year. A total of 33,555 individuals were expected to be trained with 2001 CT grants, approximately 20,000 less than the number to be trained in 2000 (54,345).

Whereas some grant money in the 1997 to 2000 grant years was distributed to the mining industry and the agriculture, forestry and fishing industry, none of the 2001 grant money was awarded to firms or consortia in these two industries. Grant money in 2001 was distributed across eight industries. These industries, from those receiving the most CT grants to those receiving the least, include: manufacturing, services, wholesale trade, transportation and public utilities, finance, insurance and real estate (FIRE), retail trade, construction, and public administration.

The smallest grant totaled \$4,014 while the largest grant totaled \$1,002,844. However, this was the only grant in excess of \$1 million, whereas the 1999 and 2000 grant periods respectively distributed 7 and 10 grants exceeding \$1 million. Grants in 2001 were more likely to be moderate in size than in previous years. Whereas nearly half (48%) of all CT grants were less than \$100,000 in 2001, the number of grants that were less than \$100,000 from 1997 through 2000 ranged from 31 percent to 43 percent.

In 2001, 4.3% of the total grant money (\$881,291) had been deobligated. Only one firm and no consortia deobligated their entire grant amount. Approximately \$9.7 million, or 48% of the grants awarded in 2001, had been invoiced in the same year.

Table 2. CT Grant Overview 1997-2001							
	1997	1998	1999	2000	2001	Overall	
Number of grant recipients	83	122	123	198	124	650	
Number of consortium grants	11	14	11	32	18	86	
Amount awarded in grants	\$23,544,352	\$30,897,846	\$28,812,024	\$45,655,756	\$20,402,674	\$149,312,652	
Minimum Grant Awarded	\$10,608	\$4,500	\$5,200	\$3,200	\$4,014		
Maximum Grant Awarded	\$4,258,656	\$3,598,338	\$1,500,000	\$3,000,963	\$1,002,844		
Average Grant Amount	\$283,667	\$253,261	\$234,244	\$230,584	\$164,538	\$229,712	
Percentage of Grants Less than \$100K	38.6%	31.1%	43.1%	40.7%	48.4%		
Total Firm or Consortium Planned contribution	\$47,570,564	\$52,106,107	\$38,126,403	\$98,474,209	\$26,246,040	\$262,523,323	
Planned contribution per Grant Dollar Awarded	\$1.87	\$1.75	\$1.40	\$1.68	\$1.41		
Number of Individuals to be Trained	41,243	34,331	34,076	54,345	33,555	197,550	
Number of Training Slots to be Created	85,110	140,416	100,543	130,955	98,470	555,494	

In 2001, 124 CT grants were awarded, 37% less than in the previous year. The number of grants awarded in 1998 (122) and 1999 (123) is more similar to the number awarded in 2001. However, despite the similar number of awards among these years, the total amount awarded to 2001 grantees was 34% and 31% less than the total amount awarded in 1998 and 1999 respectively. Consequently, the average and maximum grant amounts

were significantly less in 2001 than in 1998 and 1999. While the average grant amount in 2001 was \$164,538, it was significantly larger at \$253,261 in 1998 and \$234,244 in 1999. Despite these funding differences, 2001 grantees planned to train a similar number of individuals (33,555) compared to grantees in 1998 (34,331 individuals) and 1999 (34,076 individuals). Grantees in 2001 also planned to create a similar number of training slots (98,470) compared to grantees in 1999 (100,543), although significantly less than grantees in 1998 (140,416).

# V. Location of Firms and Consortium

# A. County Distribution

More than two fifths of CT grants awarded in 2001 (44%) went to firms or consortia in three counties: Camden, Bergen, and Middlesex. The money awarded in these counties comprised half (50%) of the total awarded in 2001. The grants in these three counties represented 47% of the individuals to be trained (15,693 of a total 33,555 individuals), and 56% of the slots to be created (54,668 of a total 98,470 slots) with CT grant monies. The average number of employees expected to be trained by grant recipients in these leading three counties was 285, 10% more than the average number expected to be trained in the remaining counties (259).





Bergen and Middlesex counties have consistently been among the five counties receiving the most CT awards since 1997. Camden County, however, is a new leader in the

number of grants received. Its share of total grants ranged from 5% to 9% between 1997 and 2000, but jumped to 17% of the total number of grants in 2001. Conversely, Mercer County received far fewer grants in 2001 than in past years. In 1997, Mercer County received only 1% of that year's CT awards. However, the county's share of the total number of grants jumped to 11% in 1998, and the county maintained a strong share in 1999 (8%) and 2000 (11%). However, Mercer County's share fell to just 3 percent in 2001, receiving just 4 of the total 124 grants.

The average grant award for the three counties receiving the most CT grants (\$186,790) was dissimilar to the overall average of \$164,538. Bergen and Middlesex had average grant amounts of \$112,102 and \$171,699 respectively. The average grant amount in Camden County (\$262,306) far exceeded the overall average. The smallest average grant award was in Gloucester County, where the average grant award totaled only \$69,006. Atlantic County, although only receiving 4 CT grants, held the highest average grant amount (\$333,386). This average was influenced heavily by the grant awarded to the Atlantic Cape May Community College Casino Consortium, which received the second largest award (\$873,782) of all 2001 CT grants.

	# of grants	% of grants	Total amount	Average grant
			awarded	amount
Camden	21	16.9	\$5,508,436	\$262,306
Bergen	18	14.5	\$2,017,840	\$112,102
Middlesex	16	12.9	\$2,747,198	\$171,700
Essex	13	10.5	\$1,902,505	\$146,347
Union	7	5.6	\$898,395	\$128,342
Warren	6	4.8	\$500,164	\$83,361
Passaic	6	4.8	\$658,183	\$109,697
Atlantic	4	3.2	\$1,333,545	\$333,386
Gloucester	4	3.2	\$276,025	\$69,006
Mercer	4	3.2	\$758,907	\$189,727
Monmouth	4	3.2	\$1,046,438	\$261,610
Somerset	4	3.2	\$296,442	\$74,111
Morris	3	2.4	\$373,949	\$124,650
Ocean	3	2.4	\$319,376	\$106,459
Burlington	3	2.4	\$510,622	\$170,207
Hudson	3	2.4	\$778,771	\$259,590
Salem	2	1.6	\$159,818	\$79,909
Cumberland	2	1.6	\$216,300	\$108,150
Sussex	1	.8	\$99,760	\$99,760
Total	124	100.0	\$20,402,674	\$164,538

#### Table 3. Customized Training Grants Awarded by County

The distribution of grants across counties resembles the distribution of all firms across New Jersey.<sup>3</sup> For example, Middlesex county received 10% of grants in 1999 and was home to 9% of the state's business establishments. Bergen county received 16% of CT grants in 1999 and 14% of business establishments in 1999 were located in Bergen. Ocean county's share of CT grants was slightly lower than the share of firms located there. While Ocean County received 2% of CT grants in 1999, the county was home to 5% of the state's firms in the same year. In contrast, Mercer, Morris and Camden counties were slightly overrepresented. Mercer County received 8% of 1999 CT grants and was home to 4% of the state's firms. Finally, Camden County received 9% of CT grants and was home to 5% of the state's firms. Finally, Camden County received 9% of CT grants and was home to 5% of the state's firms.

#### **B.** Selected Urban Areas

In 2001, 28% of grantees were located in a "selected urban area." These urban areas are identified as municipalities or townships that have been designated as Urban Enterprise Zones, Urban Coordinating Council Cities, Labor Surplus areas or targeted urban areas as defined by the Economic Development Authority. The share of 2001 urban grantees among all grantees is smaller than the previous year when, in 2000, 37% of all grantees were located in a selected urban area. Prior to 2000, the share of grantees located in urban areas declined from 36% in 1997 to 26% in 1999.



Figure 8: Percent of Grantees Located in an Urban Area

<sup>&</sup>lt;sup>3</sup> This comparison was only made for 1999 because this is the latest county business pattern data available from the U.S. Census Bureau.

Overall, 2001 urban grantees planned to train 45% of all individuals to be trained through the 2001 CT program while receiving 36% of the total grant money awarded. However, in grant years 1998,1999, and 2000, the number of individuals to be trained and the share of total grant money were tied together more closely than in 2001.



Figure 9: Urban Share of Grant Money & Number to be Training

## i. Firms

One quarter of firms that received grants in 2001 (26 of 106) were located in a "selected urban area." Firms located in urban areas planned to train 7,323 individuals, or 30% of the total number to be trained by firms through the CT program. Although they only represented 25% of all grantees, these urban-based firms planned to create nearly half (48%) of all job slots to be created by firms. Urban firms received \$4.8 million in grant money, 29% of the total amount awarded to firms. Urban firms planned to create one third (33%) of the CRT slots and nearly one quarter (24%) of the OJT slots to be created by firms.

In 2001, urban-based firms planned to contribute \$1.41 for each grant dollar received, an amount slightly greater than that planned by non-urban based firms - \$1.32. The total planned contribution among urban firms was \$6.8 million. Urban-based firms, which comprised one quarter of 2001 firm grantees, planned to contribute 31% of the total firm planned contribution.

## ii. Consortia

Half of consortia (9 of 18) were based in a "selected urban area." These urban consortia received 71% of the total grant money awarded to consortia in 2001 (\$2.5 million).

Consortia located in these areas planned to train 7,735 individuals, 86% of the total number of individuals to be trained by consortia. Similarly, these urban-based grantees planned to create 15,077 training slots, 85% of the total number of slots to be created by consortia. More specifically, urban consortia planned to create all of the OJT slots to be created by consortia (97 of 97) and 85% of CRT slots to be created by consortia. Urban and non-urban consortia were distributed similarly across industries.

Urban-based consortia relied less heavily on grant money than other consortia. While non-urban based consortia planned to contribute \$1.16 for every grant dollar received, urban-based consortia planned to contribute \$2.53. The total planned contribution among urban-based consortia equaled \$3.5 million, while total planned contribution among non-urban based consortia totaled \$1.0 million.

# VI. Consortia

In 2001, consortia received 18 CT grants (14.5%) and firms received 106 CT grants (85.5%). A consortium is an association of employers, often organized by educational institutions. The percent of consortium receiving CT grants has remained relatively stable across grant years. Twelve percent of all CT grants between 1994 and 1996 went to consortia. Approximately 13% of grants were awarded to consortia in 1997 and 11% went to consortia in 1998. The low occurred in 1999, when 9% of grantees were consortia. The peak occurred in 2000, when 16% of grantees were consortia. The percent of grants awarded to consortia in 2001 declined slightly from 2000.

While consortia grantees received 17% of grant money in 2001 (nearly \$3.5 million), they planned to train 27% of the total number of individuals to be trained, nearly 9,000 individuals. In previous years (1997-2000), consortia, received 17% of the total grant money and expected to train one third of the total number of individuals to be trained.

In 2001, consortia planned to contribute \$1.85 for every dollar they received in grant money, down from the 2000 level. Consortia relied less heavily on CT grant money than firms in 2001. Consortium planned contributions have tended to increase, while firm planned contribution have tended to decrease. Consortia planned contribution increased from 1998 to 2000 from \$1.32 per grant dollar received to \$2.26 in 2000, while firm planned contribution decreased from \$1.80 in 1997 to \$1.34 per grant dollar received in 2001.



Figure 10: Company Planned contribution per Grant Dollar Awarded

Of the eighteen consortia, nine were from the service industry and six from the manufacturing industry. One wholesale trade consortium and two public administration consortia received CT grants in 2001. In 2001, consortia grantees were more heavily distributed in the service industry and less heavily distributed in the manufacturing industry than were firm grantees; amongst firms, just 7% were in the service industry and 65% were in the manufacturing industry. None of the 2001 consortium represents the retail trade, construction, finance, insurance and real estate, and transportation and public utilities industries. Conversely, none of the 2001 firms were in the public administration industry.

#### A. Type of Training

Nearly all (94%) of the training planned by consortia was exclusively classroom training. One consortium of the total 18 consortia planned to use both classroom and on-the-job training, and no consortium planned for exclusively on-the-job training. Information on type of planned classroom training was available for 17 of the 18 consortia awarded grants in 2001. A substantial majority (76%, or 13 of 17) planned to train employees in business-related fields, and nearly one quarter of consortia (24%, or 4 of 17) planned to train employees in engineering or engineering-related technologies. Three consortia planned to provide training in basic skills and one planned to provide training in social skills. Only one consortium planned to provide classroom training in the computer-related field. One public administration consortia and one services consortia planned to provide quality control courses. Six of the 17 consortia (35%) for which information was available provided classroom training in more than one field of training. Information on the type of on-the-job training was available for only one consortium. This consortium planned to provide training in agricultural sciences.

### **VII.** Previous Grant Recipients

The percent of 2001 grants awarded to previous grant recipients varied greatly from firms to consortia. Among firms, 17% of 2001 grantees were previous grant recipients, whereas among consortium, 50% of 2001 grantees were previous grant recipients. As time passes, consortia have become increasingly likely to receive additional grants. In 1997, only 27% of consortia grantees were previous grant recipients, a number which jumped to 43% in 1998. The share of repeat grantees grew among firms, although less dramatically, from 13% in 1997 to 17% in 2001. However, the 2001 level was down from 22% in 2000.

In 2001, Monmouth, Warren and Union counties had the highest shares of previous grant recipients. Between 50% and 57% of these counties' grantees had received a CT award in a previous year. The following counties had no grantees that were previous grant recipients: Cumberland, Gloucester, Hudson, Ocean, Salem, Somerset, and Sussex.



Figure 11: Previous Grant Recipients: As a Share of Total Grantees

Repeat grantees were distributed across four industries. The share of grantees that were previous grant recipients was 23% among manufacturing grantees, 18% among wholesale trade grantees, 44% among public administration grantees, and 50% among public administration grantees (or 1 of 2).

### VIII. Description of Firms and Their Customized Training Grants

As described in the previous section, 14.5% of grants were awarded to consortia and the remaining 85.5% of grants were awarded to individual firms. In 2001, firms received more than \$16.9 million in CT grants, 83% of the total amount awarded (the same percentage of funding received by firms between 1997 and 2000). In 2001, firms planned to train 24,575 employees, nearly three quarters (73%) of the total to be trained through the CT program. The strong majority of firms receiving CT grants (67%) in 2001 were in the manufacturing industry and a near majority of firms receiving CT grants (49%) were mid-sized with 51-250 employees.

The next two sections will provide more detail on the 106 CT grants awarded to firms in 2001. Specifically, they will detail the industry of firms, firm size, and firms' financial planned contributions to training activities.

#### A. Industry of Firms

The majority of firms receiving grants in 2001 (67%) were in the manufacturing industry. However, the share of firm grantees in the manufacturing industry has declined in recent years, down from 80% of all grantees in 1997. This decline in the manufacturing industry's share of total grantees has been offset by modest gains in the share of service, wholesale trade, and transportation and public utilities firms over the same period. However, while the service industry received 12% of all grants between 1997 and 2000 (and 19% in the year 2000 alone) service firms only received 7% of CT grants in 2001. These four industries (manufacturing, services, wholesale trade, and transportation and public utilities) combined garner 92% of all 2001 CT grants.



Figure 12. Share of Total Number of Grants, By Major Industries

The industry representation among firms receiving CT grants is dissimilar from the state's industrial profile. In particular, manufacturing firms are over-represented, while service firms are under-represented. In 1999, an estimated 5% of New Jersey firms were in the manufacturing sector while 47% were in the services sector. Eight percent were in wholesale trade and 15% were in retail trade (County Business Patterns, 1999). Among firms that received grants in 1999, 70% of firms were in the manufacturing sector and just 7% were in the services sector. Also, 10% of 1999 CT firms were in the wholesale trade sector and 5% were in the retail trade sector.<sup>4</sup>

Table 4: Industry of Firms						
	# of grants	% of grants	Planned contribution per Grant \$ Awarded	Average grant amount	% of total grant \$ awarded	% of indiv. to be trained
Manufacturing	69	65%	\$1.34	\$141,457	60%	55%
Wholesale Trade	10	9%	\$1.36	\$145,764	9%	11%
<b>Transport. &amp; Public Utilities</b>	8	8%	\$1.57	\$107,467	5%	4%
Services	7	7%	\$1.37	\$146,047	6%	8%
Finance, Insurance, & Real Estate (FIRE)	5	5%	\$0.81	\$506,305	16%	19%
Construction	2	2%	\$1.89	\$133,351	2%	3%
Retail Trade	2	2%	\$0.92	\$132,304	2%	1%
Information not available	3	3%	\$1.32	\$253,266	3%	3%
Total	106	100	\$1.34	\$159,650	100%	100%

The highest average grant amount was in the finance, insurance and real estate industry (FIRE), averaging \$506,305. The lowest average grant amount was in the transportation & public utilities industry. The overall average grant amount to firms was \$159,650 in 2001. This is 32% less than the average grant amount to firms from 1997 to 2000 (\$234,226). Grantees in nearly all industries experienced a decrease in the average grant amount between 2001 and previous years. The construction industry was the only industry to increase its average grant amount between these two periods, from \$110,777 between 1997 and 2000 to \$133,351 in 2001. However, only two construction firms were awarded a CT grant in 2001.

The planned company contribution per grant dollar awarded was lowest amongst firms in the FIRE industry - at \$0.81. Retail trade planned contribution was also low relative to most other industries - at \$0.92 per grant dollar awarded. The most generous planned contribution rates were among firms in the construction industry (\$1.89) and the transportation and public utilities industry (\$1.57). Firms in the manufacturing,

<sup>&</sup>lt;sup>4</sup> This comparison was only made for 1999 because this is the latest county business pattern data available from the U.S. Census Bureau.

wholesale trade, and service industries planned to contribute more moderately -138+ ranging between \$1.34 and \$1.37 per grant dollar awarded.

The distribution of grant money across industries was generally similar to the distribution of the number of individuals to be trained. The three industries receiving the most CT grants - manufacturing, wholesale trade, and transportation and public utilities—received 74% of the grant money awarded and planned to train 70% of individuals.

# **B. Size of Firms**

Nearly half of firms (49%) receiving a grant in 2001 employed 51-250 employees and another quarter (25%) employed 251 to 1000 employees. Eleven percent of grants were awarded to firms with more than 1000 employees and fifteen percent were awarded to firms with fifty or fewer employees. The share of awards among the largest firms (more than 1000 employees) grew in recent years from 5% in 1998 to 11% in 2001; the share of awards amongst the smallest firms has returned to its 1997 level of 15% after climbing to 21% in 2000. The percent of awards awarded to firms with 51 to 250 employees was around 45% to 49% across 1997 through 2001, except in 2000, when it was 39%.

Grant Year	0-50 employees	51-250 employees	251-1000 employees	1001 employees or more
1997	15%	46%	31%	8%
1998	17%	45%	34%	5%
1999	21%	45%	26%	9%
2000	21%	39%	31%	9%
2001	15%	49%	25%	11%

# Table 5: Share of Total Number of Grants, By Size of Firm

The average grant amount awarded increases as the size of the firm increases, from an average amount of \$48,310 for companies with 50 or fewer employees, to \$432,612 for companies with more than 1000 employees.

Average employer planned contribution also increased as firm size increased. However, the firm planned contribution per grant dollar awarded was larger for small firms than large firms. The average firm planned contribution for companies with fewer than 50 employees was over \$70,000, while at the other extreme, for companies with 1000 employees or more, company planned contributions averaged over \$460,000. However, the average firm planned contribution per grant dollar awarded among the smallest firms (\$1.39 among those with 50 employees or fewer) was 16% greater than the average firm planned contributions per grant dollar awarded also varied greatly among mid-sized firms. Firms with 251 to 1000 employees planned to contribute \$1.43 per grant dollar awarded while firms with 51 to 250 employees planned to contribute \$1.31 per grant dollar awarded.

Number of Employees	# of grants	% of grants	Planned contribution per Grant \$ Awarded	Average grant amount	% of total grant \$ awarded	% of indiv. to be trained
50 or fewer	16	15%	\$1.39	\$48,310	5%	3%
51 to 250	52	49%	\$1.31	\$98,664	30%	23%
251 to 1000	26	25%	\$1.43	\$224,156	34%	37%
<b>Over 1000</b>	12	11%	\$1.20	\$432,612	31%	37%
Total	106	100%	\$1.34	\$159,650	100%	100%

#### **Table 6: Variations by Firm Size**

Relative to the percent of individuals to be trained, smaller firms receive disproportionately large amounts of total CT funding. Smaller firms (250 employees or less) expected to train 26 percent of the total number of individuals to be trained, although they received 35 percent of the total amount awarded. Conversely, larger firms (more than 250 employees) expected to train 74 percent of the total number to be trained, although they only received 65 percent of the total amount awarded. Awards in previous funding years were more evenly distributed, relative to the percent of individuals to be trained, than in 2001. From 1997 through 2000, the smallest firms received 4% of the total funds to be awarded and planned to train 3% of the total individuals to be trained while the largest firms received 34% of total CT funding and planned to train 33% of the total number of individuals to be trained. Grant awards and planned training levels among mid-sized firms were also roughly proportional from 1997 to 2000.

## IX. Overview of Firm Planned Training Activities

As part of the firm's Customized Training application, each firm provided information on its planned training activities. Those planned training activities are summarized in this section. In 2001, firms planned to train 24,575 individuals. This amounts to 83% of the total amount of planned spending on training through the CT program. Firms planned to contribute a total of \$885 per individual trained. In 2001, firms planned contribution per individual trained has fallen significantly over time. In 1997, the planned firm contribution per individual trained was \$2657. This fell in 1998 to \$1732 and again in 1999 to \$1226. Although the planned contribution level rose in 2000 to \$1684, the 2001 planned firm contribution fell greatly to \$885 per individual trained, or just one third of the 1997 planned contribution level.

### A. Extent of Planned Training

Approximately 68% of all firms planned to use their CT grant to train over 75% of their employees. Smaller firms planned to train a higher percentage of their employees than larger firms. A larger share (94%) of firms with 50 or fewer employees planned to train over 75% of their employees in 2001 than between 1997 and 2000 (77%). Similarly, the share of mid-sized firms planning to train more than 75% of their workforce in 2001 increased from 68% to 75% for firms with 51 to 250 employees and from 54% to 69% for firms with 251 to 1000 employees.



Figure 13: Portion of Workforce to be Trained, By Firm Size

This trend did not hold for the largest firm category (those with more than 1000 employees), among which no firm planned to train more than 75% of their workforce. This varies greatly from previous years (1997-2000) when 27% of the largest firms planned to train more than 75% of their workforce.

## **B.** Type of Training To Be Provided

Sixty-two percent of firms planned to use their CT grants to fund classroom training exclusively, while 3% of firms planned to use their grants to fund on-the-job training (OJT) exclusively. The remaining 35% planned to use their grants to fund both classroom and on-the-job training.

# i) On-the-Job Training

Thirty-eight percent (40/106) of all firms planned to use their CT grant to fund on-the-job training (OJT) in 2001. This represents a decline in the provision of OJT training relative to previous years. In the 1997-2000 period, 50% of firms planned to offer OJT training and 72% of firms in the 1994-1996 period planned to offer OJT training.

In addition to fewer firms engaging in OJT training, the number of planned OJT slots also fell. In 2001, firms planned to use customized training grants to create 5,080 training slots, a fall of 68% from the 2000 level of 15,835 slots. This number of slots planned to be created by firms has greatly fluctuated in recent years. Customized training grants were to be used to create 5,080 OJT training slots within firms, less than one third of its planned slot creation in 2000 (15,835). The highest number of planned OJT slots occurred in 1998, with 31,477 slots.





Both firms in the construction industry receiving 2001 grants (100%) planned to provide OJT training. None of the firms in either the FIRE industry (0/5) or the services industry (0/7) planned to provide OJT slots. Thirty of the sixty-nine grantees in manufacturing (44%), the largest sector receiving CT grants, planned to provide OJT training.

Information on the type of on-the-job training was available for 35 firms, or 83% of the total number of firms providing OJT in 2001. Of those firms, 10 (29%) planned to provide OJT in industrial manufacturing technology and 8 (23%) planned to provide OJT in the precision trades. This differs from previous years when business and engineering were the most common type of OJT. From 1997 to 2000, 45% of firms offering OJT planned to train employees in engineering-related fields and 41% planned to train employees in business fields. In contrast, in 2001, just six of the 35 firms (17%) for which information was available planned to provide on-the-job training in engineering and four in business fields (11%).

## ii) Classroom training

Over 97% of firms (103 of 106) planned to use their CT grant to create classroom training (CRT) slots. This is similar to grantees between 1997 and 2000, when 96% planned to offer CRT. A strong majority of firms (62%) planned to use their CT grant money to provide CRT training exclusively.





In 2001, firms planned to create 56,995 classroom training (CRT) slots, 32% less than 2000's planned slot creation of 83,472 CRT slots, but still higher than the 1997 level. The planned level of CRT slot creation more than doubled between 1997 and 1998 from 34,581 to 85,127. The planned level of slot creation then fell by 17% the following year to 70,754 slots in 1999 before rising again in 2000 to 83,472 slots. The planned CRT slot creation declined in 2001 to 56,995 CRT slots, 32% less than the previous year. The decline in slot creation in 2001 was less severe than the decline in funding; 2001 firms planned to spend \$13.2 million on classroom training, 45% less than the level to be spent on CRT by 2000 firms (\$24.1 million).

Information on the type of classroom training provided was available for 104 (98%) of the 106 firms receiving 2001 grants. Among these firms, 89% of firms (93) planned to provide business-related training, dominating over other types of classroom training. Approximately 38% of firms provided training in the computer sciences, and 28% firms provided engineering-related training. Firms also trained employees in the areas of quality control (21% of firms), the precision trades (15%) and social skills (15%).



Figure 16: Type of Classroom Training Planned by Firms

Based on 104 of 106 cases where information was available

The training firms planned varied by industry. Firms in the manufacturing industry were far more likely to train employees in engineering related fields and the precision trades. While 65% of all firms receiving Customized Training grants were in the manufacturing industry, 74% of firms that planned to train their employees in engineering related fields and 73% of firms that plan to train their employees as mechanics and repairers were in the manufacturing industry. Similarly, 81% of firms that planned to train their employees in the precision trades were in the manufacturing industry. Firms planning business-related and computer related training were generally distributed proportionally across industries, although firms in the transportation and public utilities industry were less likely to provide business-related training and firms in the wholesale and retail trade industries were more likely to provide business-related training.

Overall, 16 firms (15%) planned to provide classroom-based training in social skills. Approximately, 15% (10/69 firms) of manufacturing firms planned CRT training in this field, while 30% (3/10) of wholesale trade firms planned to provide CRT training. Within the service, retail trade, and transportation and public utilities industries, one firm each planned social skills training.

In 2001, 22 firms (22%) planned to provide CRT training in quality control. One quarter of both the manufacturing (17/69) and transportation and public utilities firms (2/8) and a

slightly larger share of service firms (29% or 2/7) planned to provide quality control courses. One of the two firms in retail trade (50%) planned quality control courses.

# C. Type of Training Provider Used

Vendor information was available for 88% of firms (93 of 106) receiving CT grants in 2001. Of those firms, the strong majority (72%) planned to use just one provider. Most other firms used 2, 3, or 4 providers although three firms used 5, 7, and 8 different providers.

Firms used a variety of vendor types including: private vendors, community colleges, Jewish Vocational Services, and state universities such as Rutgers, Rowan and NJIT. Private vendors and community colleges were used roughly equally, with 43% of firms using private vendors and 41% using community colleges. One fifth (20%) used Rutgers, Rowan and NJIT and 13% used Jewish Vocational Services. One firm (1%) used a general vocational school.



# Figure 17: Vendor Type

values sum to more than 100% because some grantees used more than one vendor type, n=93

The five firms in the finance, insurance, and real estate industry used community colleges exclusively to provide training. Half of construction and retail trade firms (in both cases, one of a total of two firms) used a community college vendor. Three industries used Jewish Vocational Service vendors. Fifteen percent of manufacturing firms, 33% of transportation and public utilities firms and 50% of retail trade firms (or one of a total of two firms) used Jewish Vocational Services.

Forty out of ninety-three (43%) firms used a private vendor to train their employees.

Firms in the service industry and manufacturing industry used private vendors at a similar rate. Forty-two percent (25 of 60) of manufacturing firms and 43% (3 of 7) of service firms. In contrast, none of the five firms in the FIRE industry used a private vendor; and 67% (4 of 6) of transportation and public utilities firms, and 63% (5 of 8) of wholesale trade firms used a private vendor.

A larger share of urban firms (48%) than non-urban firms (38%) used a community college as a vendor source. Use of Rowan or Rutgers Universities, NJIT, and vocational school did not vary greatly amongst urban firms and non-urban firms. However, the share of urban firms using Jewish Vocational Services (8%) was roughly half the share of non-urban firms using Jewish Vocational Services (15%).

The use of community college and proprietary school remained stable between 1997-2001, while the percent of firms using state universities decreased and those using Jewish vocational services increased. From 1997 through 2000, nearly half of firms used a community college vendor, although this fell to 41% in 2001. The percent of firms using proprietary schools rose from 42% in 1997 to 53% in 2000, but fell near its 1997 level, to 43% in 2001. In 1997, 48% of firms used a state university whereas in 2001, less than half that level (22%) utilized a state university to provide training for employees. In contrast, the percent of firms using Jewish Vocational Services rose dramatically, from 2% in 1997 and 3% in 2000 to 13% in 2001





## **D. Estimated Cost of Training**

# i) Cost Per Individual Trained

(grant money divided by number to be trained)

On average, firms planned to spend \$924 of their grant money per individual trained in 2001. This is slightly less than the average amount firms planned to spend in the previous year (\$1090), and is consistent with the continuing decline in the number of grant dollars spent per trainee trained through the years. For instance, in 1997, CT recipients planned to spend significantly greater amounts on trainees, averaging \$1302 grant dollars per individual trained.





As with previous years, small firms tended to spend more per individual trained than large firms. In 2001, small firms with 50 employees or less spent \$1397 per individual trained - or 121% more than firms with more than 1000 employees (\$633).

Of the three most common sectors to receive CT grants (manufacturing, wholesale trade and transportation and public utilities), the largest expenditure per individual was in the manufacturing sector (\$978). Firms in the retail trade industry spent the greatest amount (\$1023) amongst all industries. The construction industry and the FIRE industry spent the lowest amount of grant dollars per individual trained, spending \$482 and \$538 respectively.



Figure 20: 2001 Average Grant Dollars Spent Per Individual, by Industry and Firm Size

(grant money divided by number of slots)

On average, firms planned to spend \$441 of their CT grant to create one training slot in 2001. A training slot is a set of training activities designed to improve employees' skills. Although only a decline of 13 percent from the previous year, this was the first significant drop in the number of grant dollars spent per training slot created in recent program years. The amount spent per slot remained relatively stable between 1997 and 2000, although it dropped significantly from the amount spent per slot in 1994-1996, which was \$899, more than double the 2001 level.





ii) Cost Per Training Slot

Firms in manufacturing, the sector receiving the most CT grants, planned to spend the greatest amount of money per training slot (\$489). Firms in most other industries followed closely behind in expenditure per planned training slot although service firms and FIRE firms anticipated a markedly smaller expenditure per training slot; service firms anticipated an expenditure of \$267 per training slot and FIRE firms planned an expenditure of \$252 per training slot. The smallest firms (50 or fewer employees) planned to spend more than double the amount per training slot (\$880) to be created than firms with more than 50 employees.





## X. Planned vs. Actual Training

The following section is based on information submitted by grantees at the end of their grant period. Grantees whose grant extends beyond 2001 will not have submitted a close-out report. Only 2 of 18 consortia and 14 of 106 firms submitted a closeout report for 2001. Because of the paucity of data for consortium, the data was not analyzed. Firm close out data was analyzed, but the results reported below only reflect the close-out reports of 13% of firms who received grants in 2001. As such, the results should not be generalized to all firms.

# A. Individual Firms

Fourteen of 106 firms submitted a closeout report for 2001. Together, these companies contributed \$3.8 million, 46% more than planned and trained 79% of the employees they

planned to train. The next two sections detail the level of planned contribution and planned versus actual levels of training and job creation.

# i) Planned contribution of Firm by Size and Industry

Individual firms that submitted close out reports had projected contributing a total of \$2.6 million, yet in actuality contributed a total of \$3.8 million. This is largely due to one firm in particular, whose actual planned contribution exceeded planned contribution by \$1.8 million. However, not all firms contributed more than they projected. Half of firms submitting close out reports (7 of 14) did not meet their planned level of planned contribution. Two firms contributed exactly what they had projected, and five firms exceeded their forecasted planned contributions. Of those submitting close out reports, the planned contribution was \$1.47 for every dollar in grant money. The actual planned contribution for these firms was slightly higher at \$1.55 per dollar received in grant money.

While actual firm contributions did exceed projected firm contributions in 2001, it is important to note that even this actual contribution level is far below that of previous years. Given this drop in firm contribution, the importance of leveraging private resources for training becomes even more significant. It is clear that private funds, in addition to state funds, serve as an investment in training programs that would otherwise go unfunded.

# ii) Planned vs. Actual Training

Together the firms submitting closeout reports trained 79% of the workers they planned to train. These companies combined projected to train 1,336 individuals and actually trained 1,058. Only one firm reported training more than the projected number of individuals, having trained four more individuals than projected. Three firms trained exactly the amount they forecast while ten firms trained fewer individuals than projected with the grants.

#### **APPENDIX A:** Operational Definitions: Durations and Average Grant

### **Time Between Claim and Training**

# Definition used in report: For values between 1-365 days, the average duration is 141 days (4.6 months).

Without removing outliers, the overall mean length of time between claim and training was 173 days (5.7 months). After removing 5% of the observations, which had values greater than 365 days, the mean length was 141 days (4.6 months).

#### **Duration of Training**

# Definition used in report: For values between 18-730 days, average length of training is 153 days (5 months).

The mean length of training overall was 290 days (9.5 months). After removing the 3% of observations with values below 18 and above 730 days, the mean length of training was 153 days (5 months). Choosing a cut point of 365 days would result in removing 7% of observations and yields a mean length of training of 135 days (4.4 months).

Note: We chose 18 days as the lower end cut off because 691 respondents were clustered at this point. 622 of those 691 respondents (90%) received training in Transportation and Materials Moving.

#### Average Grant Amount

#### Definition used in report: For values greater than .01, average is \$3,645.

The mean grant amount for all observations is \$3,518. After removing 3.5% of observations with a grant amount below \$0.01, the mean grant amount is \$3,645.
# APPENDIX B ITG Outcome Definitions & Operational Parameters

The below table provides an overview of the outcome definitions and the remaining sections provide detailed definitions with operational parameters.

Indicators	Workforce Investment Act of 1998 Definition	Heldrich Definition
Employment Rate	The percent of ITG recipients who were employed in the first quarter after training.	The percent of ITG recipients who were employed in jobs covered by the New Jersey UI trust fund in the first quarter after training.
Retention Rate	The percent of ITG recipients employed in the first quarter after training who were also employed in the third quarter after training.	The percent of ITG recipients employed in jobs covered by the NJ UI trust fund in the first quarter after training who were also employed in the third quarter after training.
Wage Recovery Rate at 6 months	Total of all participant wages earned in the second and third quarter after training divided by total earned in the second and third quarter prior to dislocation. In the absence of date of dislocation, date of registration is used. (This is not a mean calculated over the sample it is the ratio of two sums)	Total of all participant wages earned at employers covered by the New Jersey UI trust fund in the second and third quarter after training divided by total earned in the second and third quarter prior to date of unemployment claim. (This is not a mean calculated over the sample. It is the ratio of two sums)
Yearly Wage Recovery Rate after training	None	The median wage recovery among participants. and The percent of participants with wage recovery above 100%
Enrollment in Higher Education	None	The percent of ITG recipients who were enrolled in non- vocational higher education at New Jersey public institution of higher education in the first full semester after completing training

Table 1. Outcome Definition Comparison Summary Chart

# I. Definitions and Parameters for Short-Term Outcome Measures

(\* denotes WIA operational parameters as specified in the Federal Department of Labor's Training and Employment Guidance Letter No. 7-99.)

### A. Entered employment rate

### i) Measure:

# of ITG recipients who entered employment by the 1st Qtr. after training

# of ITG recipients who completed training

# Operational parameters:

- an individual who has positive wages is counted as employed\*
- Includes all ITG participants who completed training during or prior to the 1<sup>st</sup> quarter of Year 2001 are included in this measure\* This date is used because wage data is available through 2nd quarter of 2001.

### B. Retention rate at six months

i) Measure:

# of ITG recipients who are employed in the 1st and 3rd Qtr. after training

# of ITG recipients who are employed in the 1<sup>st</sup> Qtr. after training

### **Operational parameters:**

- Includes all individuals who are counted as employed in the entered employment rate (specified above)\* Additionally it only includes those who completed training during or prior to the 3<sup>rd</sup> quarter of 2000 because only those completers have data for the 3<sup>rd</sup> quarter after training.
- employment in the first & third quarters following exit does not have to be with same employer\*

### C. Wage recovery rate at six months, as specified under Workforce Investment Act, 1998

i) Measure One--The WIA definition of wage recovery of ITG recipients, defined as:

Total Post-Program Wages (Wages in Qtr 2 + Qtr 3 after training)

Total Pre-Unemployment Wages (Wages in Qtrs 2 +3 prior to unemployment)

# Operational parameters:

- Calculated using nominal (not adjusted for inflation) wages.
- Computed for individuals who are employed in the first quarter following exit.\* Additionally it only includes those who completed training during or prior to the 3<sup>rd</sup> quarter of 2000 because only those completers have data for the 3<sup>rd</sup> quarter after training.
- This calculation is done on an aggregate basis. It is the ratio of total post-program wages in the sample to the total pre-program wages in the sample, as opposed to an average wage recovery over the sample.\*
- Individuals who earn \$100,000 or more in either the post-program quarters or the pre-unemployment quarters are removed from the wage recovery measures. These individuals are considered to be outliers because earning \$400,000 a year is unusually large. Note, these individuals *are* included in the previous two employment measures.
- ii) Measure Two--The Median wage recovery of ITG recipients, where wage recovery is defined as:

Post-Program Wages (Average Wages in Qtr 2 + Qtr 3 after training)

Pre-Unemployment Wages (wages in the Qtr 4 prior to unemployment)

Operational parameters:

- Calculated using inflation adjusted wages with 2000 as the base year. The Bureau of Labor Statistics's U.S. city average consumer price index was used to adjust the wages for inflation.

- Calculated for those who are employed in either the 2<sup>nd</sup> or 3<sup>rd</sup> quarter after training and the 4<sup>th</sup> quarter prior to claiming UI.
- The numerator is the wages earned in the second (third) quarter after training if the person was not employed in the third (second) quarter after training.
- Individuals who earn \$100,000 or more in either the post-program quarters or the pre-unemployment quarters are removed from the wage recovery measures. These individuals are considered to be outliers because earning \$400,000 a year is unusually large. Note, these individuals *are* included in the employment and retention measures.

iii) Measure Three—The percent of ITG recipients recovering 100% or more of their wages, using the above definition of wage recovery.

*Operational parameters*: Same as above

# **II. Definitions & Operational Parameters for Long-Term Outcome Measures**

### A. Employment rate at yearly intervals

i) Measure:

# of ITG recipients who are employed in the 4<sup>th</sup> Qtr. after training

# of ITG recipients who completed training

Operational parameters:

- An individual who has positive wages is counted as employed
- The employment rate at year 2 uses the same formula, but is calculated using the 8<sup>th</sup> quarter after training instead of the 4<sup>th</sup>. The employment rate will be calculated at yearly intervals through the sixth year, which corresponds with the 24<sup>th</sup> quarter after training.
- All observations eligible to have wages in the quarter of analysis are included, for example for the employment rate one year after training all those who completed during or prior to the 2<sup>nd</sup> quarter of 2000 are included because wage data is only available up to and including the 2nd quarter of 2001.

### B. Wage recovery rate at yearly intervals

i) Measure One--The Median wage recovery of ITG recipients, where wage recovery is defined as:

Post-Program Wages (wages in the 4<sup>th</sup> quarter after training)

Pre-Unemployment Wages (wages in Qtr 4 prior to unemployment)

# Operational parameters:

- Calculated using inflation adjusted wages with 2000 as the base year. The Bureau of Labor Statistics's U.S. city average consumer price index was used to adjust the wages for inflation.
- Calculated for those employed in the quarters under analysis. For example, the wage recovery rate at one-year after training would only include those employed one-year after training and those with wages in the 4<sup>th</sup> quarter to claiming UI.
- Individuals who earn \$100,000 or more in either the post-program quarters or the pre-unemployment quarters are removed from the wage recovery measures. These individuals are considered to be outliers because earning \$400,000 a year is unusually large. Note, these individuals *are* included in the employment measure.
- The wage recovery rate at year 2 uses the same formula, but is calculated using the 8<sup>th</sup> quarter after training instead of the 4<sup>th</sup>. The wage recovery rate will be calculated at yearly intervals through the sixth year, which corresponds with the 24<sup>th</sup> quarter after training.
- All observations eligible to have wages in the quarter of analysis are included, for example an individual who completed training in the 4<sup>th</sup> quarter of Year 1999 would not be included in the wage recovery rate two years after training because wage data is only available up to and including the 2<sup>nd</sup> quarter of Year 2001.

ii) Measure Two—The percent of ITG recipients recovering 100% or more of their wages, using the above definition of wage recovery. Calculated the  $1^{st}$  through  $6^{th}$  year after training

Operational parameters: Same as above

# **III. Definitions & Operational Parameters Enrollment in Higher Education**

# A. Enrollment Rate

i) Measure:

# of ITG recipients who enrolled in a non-vocational higher education institution in the first semester after training

# of ITG recipients who completed training

# Operational parameters:

- Non-vocational higher education institutions are all schools that belong to New Jersey's Commission on Higher Education. This includes State universities and county community colleges.
- A semester is defined as either the fall semester (which starts in September) or the spring semester (which starts in January).
- Those completing training between February and September of a given year are looked for in the fall enrollment file and those completing training between October and January are looked for in the spring enrollment file.

The below figure illustrate the time line used:

Completion Month, Year X	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. year x+1
Potential Enrollment Semester	spring semester of YearX	)	p	oossible Semes	enrollm ater of Y	nent: Fa Zear X	11			s	poss enroll Spring S	ible ment: Semester	
											of Yea	ır X+1	

1998-2001

- Prior to 1998 there is only a fall enrollment file. Therefore, prior to 1998, those completing training between January and September are looked for in the fall enrollment file of the same year and those completing training between October and December are looked for in the enrollment file of the subsequent year.

				1994-	1997							
Completion Month, Year X	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Potential Enrollment Semester			Р	ossible o Semes	enrollm ter of Y	ent: Fal ear X	1			l enro	Possible Ilment:	Fall
											ear X+	1

The below figure illustrate the time line used :

# APPENDIX C The Median Wage Recovery vs. the Mean Wage Recovery

The wage recovery distribution for Individual Training Grant (ITG) recipients is skewed to the left (as illustrated in figure B1), therefore the median is better representation of the general wage recovery of ITG recipients. Using the average wage would over-state the overall wage recovery. In the first year after training, 80% of participants had a wage recovery that was below the average wage recovery of 147%. In contrast, 50% of ITG participants had a median wage recovery that was less than the median wage recovery of 89%.

### **Figure B1. Distribution of Wage Recovery Among Those Employed One Year After Training** *relative to the wage in the fourth quarter prior to claiming UI*



The distribution of the wage recovery is different from a normal distribution; therefore, the median and mean are expected to be different. In this distribution, the mean is larger than the median because the long right tail of the distribution. The median is mostly unaffected by the small percentage of observations in the tail. The data in the right tail corresponds to unusually high wage recovery that stems from unusually low wages before the training. Because it is desirable to give a lower weight to the small percentage of observations in the right tail of the distribution, the median wage recovery is used to represent wage recovery.

Those participants in the right tail of the distribution have a wage recovery greater than 200% and are 8% of the total sample. These individuals typically had a wage around \$2,200 in the fourth quarter prior to claiming unemployment and a wage of around \$7,600 in the fourth quarter after training. Those participants with a wage recovery greater than 400% (4% of all participants) typically had a wage on the order of \$1,300 in the fourth quarter prior to claiming unemployment and a wage on the order of \$7,300 in the fourth quarter after training.

The same general distribution holds for wage recovery in the fifth year after training, as illustrated in figure B2. In the first year after training 84% of participants had a wage recovery that was below the average wage recovery of 208%. Where as, 50% of ITG participants had a median wage recovery that was less than the median wage recovery of 110%.

# Figure B2. Distribution of Wage Recovery Among Those Employed Five Years After Training





Those participants with a wage recovery greater than 200% (who make up 16% of participants in the fifth year after training) typically had a wage around \$3,000 in the fourth quarter prior to claiming unemployment and a wage of around \$10,500 in the twentieth quarter (5 years) after training.

# APPENDIX D SHORT TERM OUTCOME TABLES

For detailed definitions of the outcomes see appendix B

#### **Overall Outcomes**

Short-Term Outcomes	OVERALL	N-size
Entered Employment Rate (Q1)	66%	25145
Retention Rate (Q3)	87%	15376
Median Wage Recovery Rate (Q2+Q3)	83%	13215
Percent with Wage Recovery Greater than		
100%	36%	13215

#### **Outcomes by Racial Groups**

							ASIAN/PACIFIC		NATIVE AMERICAN /ALASKA	
Short-Term Outcomes	WHITE	N-size	AFRICAN-AMERICAN	N-size	HISPANIC	N-size	ISLANDER	N-size	NATIVE	N-size
Entered Employment Rate (Q1)	65%	16111	68%	5001	67%	3039	61%	794	62%	53
Retention Rate (Q3)	87%	9899	85%	3100	86%	1833	89%	448	84%	32
Median Wage Recovery Rate (Q2+Q3)	82%	8598	82%	2587	89%	1562	87%	389	82%	24
Percent with Wage Recovery Greater than										
100%	34%	8598	36%	2587	41%	1562	39%	389	38%	24

### **Outcomes by Gender**

Short-Term Outcomes	MALE	N-size	FEMALE	N-size
Entered Employment Rate (Q1)	62%	10729	69%	14413
Retention Rate (Q3)	85%	6078	88%	9297
Median Wage Recovery Rate (Q2+Q3)	83%	5052	83%	8162
Percent with Wage Recovery Greater than				
100%	37%	5052	34%	8162

### Outcomes by Age Groups

Short-Term Outcomes	AGE 18-37	N-size	AGE 37-51	N-size	AGE 51-66	N-size	AGE 66 +	N-size
Entered Employment Rate (Q1)	70%	8391	66%	10503	60%	5389	40%	280
Retention Rate (Q3)	87%	5458	88%	6457	85%	3000	73%	106
Median Wage Recovery Rate (Q2+Q3)	92%	4735	82%	5733	71%	2650	54%	83
Percent with Wage Recovery Greater than								
100%	43%	4735	34%	5733	24%	2650	18%	83

### **Outcomes by Education Groups**

	LESS THAN HIGH				SOME			
Short-Term Outcomes	SCHOOL	N-size	HIGH SCHOOL	N-size	COLLEGE	N-size	COLLEGE	N-size
Entered Employment Rate (Q1)	67%	1429	68%	12131	66%	6917	59%	4594
Retention Rate (Q3)	84%	861	87%	7592	86%	4288	86%	2606
Wage Recovery Rate (Q2+Q3)	83%	741	82%	6535	83%	3712	84%	2204
Percent with Wage Recovery Greater than								
100%	36%	741	35%	6535	36%	3712	36%	2204
Outcomes by Cohorts			I					
Short-Term Outcomes	94	N-size	95	N-size	96	N-size	97	N-size
Entered Employment Rate (Q1)	58%	36	69%	3068	67%	3429	68%	4018
Retention Rate (Q3)	100%	21	89%	2111	89%	2303	86%	2751
Median Wage Recovery Rate (Q2+Q3)	76%	17	82%	1788	82%	1989	82%	2389
Percent with Wage Recovery Greater than								
100%	24%	17	33%	1788	33%	1989	35%	2389
(continued from above)	98	N-size	99	N-size	00	N-size	01	N-size
Entered Employment Rate (Q1)	65%	4206	66%	4861	63%	4587	60%	940
Retention Rate (Q3)	86%	2715	84%	3201	86%	2274		
Median Wage Recovery Rate (Q2+Q3)	85%	2394	83%	2733	84%	1905		
Percent with Wage Recovery Greater than								
100%	38%	2394	36%	2733	37%	1905		

### **Outcomes by Type of Training (2 digit CIP)**

	Business Management		Computer and		Engineering-		Health Professions and		Mechanics	
Short-Term Outcomes	Services	N-size	Information Sciences	N-size	Technologies	N-size	Related Sciences	N-size	Repairers	N-size
Entered Employment Rate (O1)	69%	10847	64%	3520	62%	1605	72%	1419	65%	592
Retention Rate (Q3)	88%	7109	88%	2086	83%	910	88%	959	87%	358
Median Wage Recovery Rate ( 02+03)	82%	6240	84%	1810	87%	762	84%	831	81%	297
Percent with Wage Recovery Greater than										
100%	34%	6240	35%	1810	41%	762	36%	831	35%	297
			•				•			
	Marketing				Transportation				Visual and	
	Operating/Marketing				and Materials		Percision		Performing	
(continued from above)	and Distribution	N-size	Others	N-size	Moving Workers	N-size	Production	N-size	Arts	N-size
Entered Employment Rate (Q1)	47%	2259	67%	1533	69%	2289	64%	626	61%	455
Retention Rate (Q3)	82%	929	87%	956	85%	1421	85%	382	86%	266
Median Wage Recovery Rate (Q2+Q3)	74%	770	77%	797	88%	1165	86%	318	79%	225
Percent with Wage Recovery Greater than										

Note: In some cases N-sizes for subgroups may not add to the overall total because of observations with missing subgroup information

### APPENDIX D (continued) LONG TERM OUTCOME TABLES

For detailed definitions of the outcomes see appendix B

#### **Overall Outcomes**

Employment Rates	OVERALL	N-size
1 Year after training	69%	22426
2 Years after training	67%	16844
3 Years after training	66%	12691
4 Years after training	64%	8440
5 Years after training	61%	5011
6 Years after training	61%	1000
Median Wage Recovery Rates	OVERALL	N-size
1 Year after training	89%	14099
2 Years after training	98%	10283
3 Years after training	104%	7591
4 Years after training	107%	4908
5 Years after training	110%	2754
6 Years after training	111%	527
Percent with Wage Recovery Greater		
than 100%	OVERALL	N-size
1 Year after training	41%	14099
2 Years after training	48%	10283
3 Years after training	53%	7591
4 Years after training	55%	4908
5 Years after training	57%	2754
6 Years after training	58%	527

#### **Outcomes by Racial Groups**

							ASIAN/PACIFIC		NATIVE AMERICAN/ ALASKA	
Employment Rates	WHITE	N-size	AFRICAN-AMERICAN	N-size	HISPANIC	N-size	ISLANDER	N-size	NATIVE	N-size
1 Year after training	69%	14629	70%	4385	70%	2590	69%	691	64%	45
2 Years after training	67%	11326	67%	3146	68%	1813	66%	482	62%	39
3 Years after training	66%	8619	66%	2301	67%	1381	66%	343	64%	28
4 Years after training	64%	5693	64%	1552	65%	966	64%	201	50%	18
5 Years after training	62%	3371	61%	925	61%	571	61%	126	58%	12
6 Years after training	61%	715	58%	183	62%	86	64%	14	50%	2

<b>Outcomes by Racial Groups Contin</b>	nued									
									NATIVE AMERICAN/	
Median Wage Recovery Rates	WHITE	N-size	AFRICAN-AMERICAN	N-size	HISPANIC	N-size	ASIAN/PACIFIC ISLANDER	N-size	NATIVE	N-size
1 Year after training	88%	9229	90%	2747	98%	1623	97%	430	85%	26
2 Years after training	96%	6948	97%	1890	108%	1122	104%	284	87%	22
3 Years after training	102%	5187	106%	1357	113%	825	106%	197	86%	17
4 Years after training	106%	3346	106%	884	119%	557	117%	108	58%	8
5 Years after training	109%	1874	108%	494	127%	314	138%	63	83%	6
6 Years after training	108%	379	105%	91	126%	49	128%	7	73%	1
	1		1				1		NATIVE	
									AMERICAN/	
Percent with Wage Recovery Greater							ASIAN/PACIFIC		ALASKA	
than 100%	WHITE	N-size	AFRICAN-AMERICAN	N-size	HISPANIC	N-size	ISLANDER	N-size	NATIVE	N-size
1 Year after training	39%	9229	41%	2747	48%	1623	47%	430	38%	26
2 Years after training	47%	6948	48%	1890	56%	1122	54%	284	32%	22
3 Years after training	51%	5187	55%	1357	59%	825	56%	197	41%	17
4 Years after training	54%	3346	54%	884	61%	557	63%	108	12%	8
5 Years after training	57%	1874	54%	494	64%	314	68%	63	33%	6
6 Years after training	56%	379	59%	91	69%	49	71%	7	0%	1

#### **Outcomes by Gender**

Employment Rates	MALE	N-size	FEMALE	N-size
1 Year after training	65%	9454	72%	12970
2 Years after training	63%	6956	70%	9886
3 Years after training	63%	5085	68%	7604
4 Years after training	61%	3281	66%	5158
5 Years after training	58%	1977	64%	3033
6 Years after training	60%	474	61%	526
Median Wage Recovery Rates	MALE	N-size	FEMALE	N-size
1 Year after training	91%	5483	89%	8614
2 Years after training	99%	3917	97%	6364
3 Years after training	106%	2805	103%	4785
4 Years after training	110%	1752	106%	3155
5 Years after training	113%	986	109%	1767
6 Years after training	103%	242	110%	1752

#### Appendix D

#### **Outcomes by Gender Continued**

Percent with Wage Recovery Greater				
than 100%	MALE	N-size	FEMALE	N-size
1 Year after training	42%	5483	40%	8614
2 Years after training	49%	3917	47%	6364
3 Years after training	54%	2805	52%	4785
4 Years after training	57%	1752	54%	3155
5 Years after training	58%	986	57%	1767
6 Years after training	55%	242	61%	285

Note: In some cases N-sizes for subgroups may not add to the overeall total because of observations with missing subgroup information

### **Outcomes by Age Groups**

I			l		I		1	
Employment Rates	AGE 18-36	N-size	AGE 37-50	N-size	AGE 51-65	N-size	AGE 66+	N-size
1 Year after training	72%	7457	71%	9402	63%	4796	39%	244
2 Years after training	69%	5676	68%	6977	62%	3567	37%	174
3 Years after training	68%	4372	68%	5172	59%	2606	34%	123
4 Years after training	67%	2946	67%	3343	56%	1686	23%	78
5 Years after training	65%	1747	64%	1946	53%	1007	18%	40
6 Years after training	63%	327	66%	403	50%	201	14%	7
			•					
Median Wage Recovery Rates	AGE 18-36	N-size	AGE 37-50	N-size	AGE 51-65	N-size	AGE 66+	N-size
1 Year after training	100%	4938	88%	6191	77%	2862	55%	93
2 Years after training	110%	3631	97%	4463	81%	2113	48%	63
3 Years after training	121%	2757	102%	3320	86%	1467	63%	41
4 Years after training	126%	1838	104%	2134	88%	912	53%	18
5 Years after training	127%	1058	106%	1175	88%	513	43%	7
6 Years after training	126%	189	112%	244	86%	93	73%	1
Percent with Wage Recovery Greater								
than 100%	AGE 18-36	N-size	AGE 37-50	N-size	AGE 51-65	N-size	AGE 66+	N-size
1 Year after training	50%	4938	40%	6191	29%	2862	18%	93
2 Years after training	58%	3631	47%	4463	33%	2113	9%	63
3 Years after training	63%	2757	51%	3320	38%	1467	12%	41
4 Years after training	66%	1838	53%	2134	39%	912	11%	18
5 Years after training	69%	1058	55%	1175	40%	513	14%	7
6 Years after training	66%	189	59%	244	41%	93	0%	1

#### Appendix D

### **Outcomes by Education Groups**

	LESS THAN HIGH				SOME			
Employment Rates	SCHOOL	N-size	HIGH SCHOOL	N-size	COLLEGE	N-size	COLLEGE	N-size
1 Year after training	68%	1216	72%	10755	69%	6196	64%	4202
2 Years after training	66%	874	69%	8063	66%	4713	62%	3158
3 Years after training	64%	655	68%	6217	66%	3487	61%	2303
4 Years after training	61%	478	66%	4278	64%	2256	60%	1406
5 Years after training	59%	307	63%	2623	62%	1249	56%	811
6 Years after training	65%	62	60%	505	64%	241	55%	185
-			•		•			
	LESS THAN HIGH				SOME			
Median Wage Recovery Rates	SCHOOL	N-size	HIGH SCHOOL	N-size	COLLEGE	N-size	COLLEGE	N-size
1 Year after training	92%	759	88%	7002	91%	3875	90%	2434
2 Years after training	94%	524	96%	5094	99%	2858	99%	1789
3 Years after training	99%	380	102%	3841	106%	2085	106%	1270
4 Years after training	105%	267	105%	2556	110%	1302	108%	772
5 Years after training	110%	161	108%	1495	112%	680	112%	408
6 Years after training	104%	35	112%	268	109%	131	111%	91
Percent with Wage Recovery Greater	LESS THAN HIGH				SOME			
than 100%	SCHOOL	N-size	HIGH SCHOOL	N-size	COLLEGE	N-size	COLLEGE	N-size
1 Year after training	43%	759	40%	7002	43%	3875	41%	2434
2 Years after training	46%	524	47%	5094	49%	2858	50%	1789
3 Years after training	49%	380	51%	3841	55%	2085	54%	1270
4 Years after training	55%	267	54%	2556	56%	1302	57%	772
5 Years after training	57%	161	56%	1495	59%	680	60%	408
6 Years after training	57%	35	59%	268	57%	131	59%	91
		_						
Outcomes by Cohort								
Employment Rates	94	N-size	95	N-size	96	N-size	97	N-size
1 Year after training	69%	36	73%	3068	70%	3429	71%	4018
2 Years after training	61%	36	68%	3068	69%	3429	68%	4018
3 Years after training	67%	36	67%	3068	66%	3429	65%	4018
4 Years after training	69%	36	65%	3068	62%	3429	66%	1907
5 Years after training	67%	36	61%	3068	62%	1907		
6 Years after training	72%	36	60%	964				
					1			
(Continued from above)	98	N-size	99	N-size	00	N-size	01	N-size
1 Year after training	68%	4206	66%	4861	67%	2808		
2 Years after training	64%	4206	67%	2087			1	
3 Years after training	64%	2140						
4 Years after training								
5 Years after training							1	
6 Years after training								

#### Appendix D

### **Outcomes by Cohort Continued**

Median Wage Recovery Rates	94	N-size	95	N-size	96	N-size	97	N-size
1 Year after training	90%	21	88%	2016	85%	2160	91%	2617
2 Years after training	122%	18	95%	1883	96%	2123	99%	2507
3 Years after training	105%	18	104%	1836	102%	2053	105%	2405
4 Years after training	132%	19	109%	1781	107%	1935	105%	1173
5 Years after training	143%	18	110%	1688	110%	1048		
6 Years after training	134%	22	110%	505				
(Continued from above)	98	N-size	99	N-size	00	N-size	01	N-size
1 Year after training	91%	2680	91%	2936	89%	1669		
2 Years after training	99%	2495	97%	1257				
3 Years after training	103%	1279						
4 Years after training								
5 Years after training								
6 Years after training								
Percent with Wage Recovery Greater								
than 100%	94	N-size	95	N-size	96	N-size	97	N-size
1 Year after training	43%	21	40%	2016	37%	2160	42%	2617
2 Years after training	67%	18	46%	1883	46%	2123	49%	2507
3 Years after training	56%	18	53%	1836	51%	2053	54%	2405
4 Years after training	74%	19	56%	1781	55%	1935	53%	1173
5 Years after training	72%	18	58%	1688	57%	1048		
6 Years after training	73%	22	58%	505				
(Continued from above)	98	N-size	99	N-size	00	N-size	01	N-size
1 Year after training	42%	2680	42%	2936	41%	1669		
2 Years after training	49%	2495	48%	1257				
							1	
3 Years after training	53%	1279						
3 Years after training 4 Years after training	53%	1279						
3 Years after training 4 Years after training 5 Years after training	53%	1279						

#### **Outcomes by Type of Training (2-digit CIP)**

	Business Management				Engineering-		Health		Mechanics	
	and Administrative		Computer and		Related		Professions and		and	
Employment Rates	Services	N-size	Information Sciences	N-size	Technologies	N-size	Related Sciences	N-size	Repairers	N-size
1 Year after training	72%	9914	69%	3064	67%	1370	74%	1292	69%	527
2 Years after training	69%	7878	67%	1959	66%	860	72%	990	64%	370
3 Years after training	67%	5980	67%	1413	63%	596	71%	810	62%	287
4 Years after training	64%	4143	65%	1015	67%	374	68%	557	63%	186
5 Years after training	62%	2406	58%	665	65%	215	61%	331	62%	85
6 Years after training	60%	368	54%	156	61%	54	59%	49	42%	12
			1		1		1		1	
	Marketing				Transportation				Visual and	
	Operating/Marketing and				and Materials		Percision		Performing	
(Continued from above)	Distribution	N-size	Others	N-size	Moving Workers	N-size	Production	N-size	Arts	N-size
1 Year after training	49%	1893	69%	1397	71%	1971	66%	588	68%	410
2 Years after training	52%	1326	68%	1148	69%	1529	65%	482	64%	302
3 Years after training	52%	859	67%	956	66%	1142	63%	412	64%	236
4 Years after training	61%	160	65%	701	64%	822	61%	327	57%	155
5 Years after training	59%	44	61%	413	61%	535	60%	219	63%	98
6 Years after training	46%	13	61%	93	66%	187	60%	48	80%	20
	Business Management		I		Engineering		Health		Machanica	
	Business Management		Computer and		Engineering-		Health Professions and		Mechanics	
Median Wage Recovery Pates	Business Management and Administrative	N_size	Computer and	N_size	Engineering- Related	N-size	Health Professions and Related Sciences	N-size	Mechanics and Repairers	N_size
Median Wage Recovery Rates	Business Management and Administrative Services 88%	N-size	Computer and Information Sciences	N-size	Engineering- Related Technologies	N-size	Health Professions and Related Sciences	N-size	Mechanics and Repairers	N-size
Median Wage Recovery Rates	Business Management and Administrative Services 88% 97%	N-size 6621	Computer and Information Sciences 89% 98%	N-size 1939	Engineering- Related Technologies 94%	N-size 825	Health Professions and Related Sciences 90%	N-size 869	Mechanics and Repairers 94%	N-size 313 205
Median Wage Recovery Rates 1 Year after training 2 Years after training 3 Years ofter training	Business Management and Administrative Services 88% 97% 102%	N-size 6621 5041 3738	Computer and Information Sciences 89% 98% 101%	N-size 1939 1218 877	Engineering- Related Technologies 94% 102% 109%	N-size 825 509 335	Health Professions and Related Sciences 90% 100%	N-size 869 643	Mechanics and Repairers 94% 103% 125%	N-size 313 205
Median Wage Recovery Rates 1 Year after training 2 Years after training 3 Years after training 4 Years after training	Business Management and Administrative Services 88% 97% 102% 105%	N-size 6621 5041 3738 2471	Computer and Information Sciences 89% 98% 101% 100%	N-size 1939 1218 877 609	Engineering- Related Technologies 94% 102% 109% 112%	N-size 825 509 335 224	Health Professions and Related Sciences 90% 100% 108%	N-size 869 643 510 331	Mechanics and Repairers 94% 103% 125% 121%	N-size 313 205 154 98
Median Wage Recovery Rates 1 Year after training 2 Years after training 3 Years after training 4 Years after training 5 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 108%	N-size 6621 5041 3738 2471 1375	Computer and Information Sciences 89% 98% 101% 109%	N-size 1939 1218 877 609 354	Engineering- Related Technologies 94% 102% 109% 112% 108%	N-size 825 509 335 224 127	Health Professions and Related Sciences 90% 100% 108% 107% 113%	N-size 869 643 510 331 174	Mechanics and Repairers 94% 103% 125% 121% 123%	N-size 313 205 154 98 44
Median Wage Recovery Rates 1 Year after training 2 Years after training 3 Years after training 4 Years after training 5 Years after training 6 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 108% 108%	N-size 6621 5041 3738 2471 1375 198	Computer and Information Sciences 89% 98% 101% 109% 111% 105%	N-size 1939 1218 877 609 354 69	Engineering- Related Technologies 94% 102% 109% 112% 108% 123%	N-size 825 509 335 224 127 28	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125%	N-size 869 643 510 331 174 27	Mechanics and Repairers 94% 103% 125% 121% 123% 66%	N-size 313 205 154 98 44 4
Median Wage Recovery Rates 1 Year after training 2 Years after training 3 Years after training 4 Years after training 5 Years after training 6 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 105% 108% 107%	N-size 6621 5041 3738 2471 1375 198	Computer and Information Sciences 89% 98% 101% 109% 111% 105%	N-size 1939 1218 877 609 354 69	Engineering- Related Technologies 94% 102% 109% 112% 108% 123%	N-size 825 509 335 224 127 28	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125%	N-size 869 643 510 331 174 27	Mechanics and Repairers 94% 103% 125% 121% 123% 66%	N-size 313 205 154 98 44 4 4
Median Wage Recovery Rates 1 Year after training 2 Years after training 3 Years after training 4 Years after training 5 Years after training 6 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 105% 108% 107% Marketing	N-size 6621 5041 3738 2471 1375 198	Computer and Information Sciences 89% 98% 101% 109% 111% 105%	N-size 1939 1218 877 609 354 69	Engineering- Related Technologies 94% 102% 109% 112% 108% 123% Transportation	N-size 825 509 335 224 127 28	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125%	N-size 869 643 510 331 174 27	Mechanics and Repairers 94% 103% 125% 121% 123% 66% Visual and	N-size 313 205 154 98 44 4 4
Median Wage Recovery Rates 1 Year after training 2 Years after training 3 Years after training 4 Years after training 5 Years after training 6 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 108% 107% Marketing Operating/Marketing and	N-size 6621 5041 3738 2471 1375 198	Computer and Information Sciences 89% 98% 101% 109% 111% 105%	N-size 1939 1218 877 609 354 69	Engineering- Related Technologies 94% 102% 109% 112% 108% 123% Transportation and Materials	N-size 825 509 335 224 127 28	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125% Percision	N-size 869 643 510 331 174 27	Mechanics and Repairers 94% 103% 125% 121% 123% 66% Visual and Performing	N-size 313 205 154 98 44 4 4
Median Wage Recovery Rates 1 Year after training 2 Years after training 3 Years after training 4 Years after training 5 Years after training 6 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 108% 107% Marketing Operating/Marketing and Distribution	N-size 6621 5041 3738 2471 1375 198 N-size	Computer and Information Sciences 89% 98% 101% 109% 111% 105% Others	N-size 1939 1218 877 609 354 69 N-size	Engineering- Related Technologies 94% 102% 109% 112% 108% 123% Transportation and Materials Moving Workers	N-size 825 509 335 224 127 28 N-size	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125% Percision Production	N-size 869 643 510 331 174 27 N-size	Mechanics and Repairers 94% 103% 125% 121% 123% 66% Visual and Performing Arts	N-size 313 205 154 98 44 4 4 N-size
Median Wage Recovery Rates         1 Year after training         2 Years after training         3 Years after training         4 Years after training         5 Years after training         6 Years after training         (Continued from above)         1 Year after training	Business Management and Administrative Services 88% 97% 102% 105% 105% 108% 107% Marketing Operating/Marketing and Distribution 85%	N-size 6621 5041 3738 2471 1375 198 N-size 845	Computer and Information Sciences 89% 98% 101% 109% 111% 105% Others 84%	N-size 1939 1218 877 609 354 69 N-size 865	Engineering- Related Technologies 94% 102% 109% 112% 108% 123% Transportation and Materials Moving Workers 97%	N-size 825 509 335 224 127 28 N-size 1221	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125% Percision Production 89%	N-size 869 643 510 331 174 27 N-size 348	Mechanics and Repairers 94% 103% 125% 121% 123% 66% Visual and Performing Arts 84%	N-size 313 205 154 98 44 4 N-size 253
Median Wage Recovery Rates         1 Year after training         2 Years after training         3 Years after training         4 Years after training         5 Years after training         6 Years after training         (Continued from above)         1 Year after training         2 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 108% 107% Marketing Operating/Marketing and Distribution 85% 94%	N-size 6621 5041 3738 2471 1375 198 N-size 845 616	Computer and Information Sciences 89% 98% 101% 109% 111% 105% Others 84% 93%	N-size 1939 1218 877 609 354 69 N-size 865 683	Engineering- Related Technologies 94% 102% 109% 112% 108% 123% Transportation and Materials Moving Workers 97% 107%	N-size 825 509 335 224 127 28 N-size 1221 914	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125% Percision Production 89% 97%	N-size 869 643 510 331 174 27 N-size 348 278	Mechanics and Repairers 94% 103% 125% 121% 123% 66% Visual and Performing Arts 84% 91%	N-size 313 205 154 98 44 4 N-size 253 176
Median Wage Recovery Rates         1 Year after training         2 Years after training         3 Years after training         4 Years after training         5 Years after training         6 Years after training         (Continued from above)         1 Years after training         2 Years after training         3 Years after training         4 Years after training         5 Years after training         6 Years after training         1 Year after training         2 Years after training         3 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 108% 107% Marketing Operating/Marketing and Distribution 85% 94% 99%	N-size 6621 5041 3738 2471 1375 198 N-size 845 616 399	Computer and Information Sciences 89% 98% 101% 109% 111% 105% Others 84% 93% 101%	N-size 1939 1218 877 609 354 69 N-size 865 683 560	Engineering- Related Technologies 94% 102% 109% 112% 108% 123% Transportation and Materials Moving Workers 97% 107% 116%	N-size 825 509 335 224 127 28 N-size 1221 914 651	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125% Percision Production 89% 97% 103%	N-size 869 643 510 331 174 27 N-size 348 278 229	Mechanics and Repairers 94% 103% 125% 121% 123% 66% Visual and Performing Arts 84% 91% 102%	N-size 313 205 154 98 44 4 N-size 253 176 138
Median Wage Recovery Rates         1 Year after training         2 Years after training         3 Years after training         4 Years after training         5 Years after training         6 Years after training         (Continued from above)         1 Year after training         2 Years after training         3 Years after training         4 Years after training         9 Years after training         1 Year after training         2 Years after training         3 Years after training         4 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 108% 107% Marketing Operating/Marketing and Distribution 85% 94% 99% 96%	N-size 6621 5041 3738 2471 1375 198 N-size 845 616 399 86	Computer and Information Sciences 89% 98% 101% 109% 111% 105% Others 84% 93% 101% 101% 104%	N-size 1939 1218 877 609 354 69 N-size 865 683 560 395	Engineering- Related Technologies 94% 102% 109% 112% 108% 123% Transportation and Materials Moving Workers 97% 107% 116% 120%	N-size 825 509 335 224 127 28 N-size 1221 914 651 441	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125% Percision Production 89% 97% 103% 101%	N-size 869 643 510 331 174 27 N-size 348 278 229 176	Mechanics and Repairers           94%           103%           125%           121%           66%           Visual and Performing Arts           84%           91%           102%           104%	N-size 313 205 154 98 44 4 N-size 253 176 138 77
Median Wage Recovery Rates         1 Year after training         2 Years after training         3 Years after training         4 Years after training         5 Years after training         6 Years after training         (Continued from above)         1 Year after training         2 Years after training         3 Years after training         4 Years after training         9 Years after training         1 Year after training         2 Years after training         3 Years after training         4 Years after training         5 Years after training         5 Years after training         5 Years after training	Business Management and Administrative Services 88% 97% 102% 105% 108% 107% Marketing Operating/Marketing and Distribution 85% 94% 99% 96% 106%	N-size 6621 5041 3738 2471 1375 198 N-size 845 616 399 86 22	Computer and Information Sciences 89% 98% 101% 109% 111% 105% Others 84% 93% 101% 104% 110%	N-size 1939 1218 877 609 354 69 N-size 865 683 560 395 221	Engineering- Related Technologies 94% 102% 109% 112% 108% 123% Transportation and Materials Moving Workers 97% 107% 116% 120% 128%	N-size 825 509 335 224 127 28 N-size 1221 914 651 441 272	Health Professions and Related Sciences 90% 100% 108% 107% 113% 125% Percision Production 89% 97% 103% 101% 99%	N-size 869 643 510 331 174 27 N-size 348 278 229 176 110	Mechanics and Repairers           94%           103%           125%           121%           66%           Visual and Performing Arts           84%           91%           102%           104%           126%	N-size 313 205 154 98 44 4 N-size 253 176 138 77 55

### Outcomes by Type of Training (2-digit CIP) Continued

	Business Management				Engineering-		Health		Mechanics	
Percent with Wage Recovery Greater	and Administrative		Computer and		Related		Professions and		and	
than 100%	Services	N-size	Information Sciences	N-size	Technologies	N-size	Related Sciences	N-size	Repairers	N-size
1 Year after training	40%	6621	41%	1939	47%	825	41%	869	44%	313
2 Years after training	47%	5041	48%	1218	51%	509	50%	643	52%	205
3 Years after training	52%	3738	51%	877	56%	335	55%	510	68%	154
4 Years after training	54%	2471	56%	609	60%	224	54%	331	63%	98
5 Years after training	56%	1375	58%	354	59%	127	55%	174	59%	44
6 Years after training	58%	198	55%	69	71%	28	59%	27	25%	4
	i.		i i i i i i i i i i i i i i i i i i i				i.			
	Marketing				Transportation				Visual and	
	Operating/Marketing and				and Materials		Percision		Performing	
(Continued from above)	Distribution	N-size	Others	N-size	Moving Workers	N-size	Production	N-size	Arts	N-size
1 Year after training	38%	845	39%	865	48%	1221	41%	348	36%	253
2 Years after training	46%	616	45%	683	54%	914	47%	278	43%	176
3 Years after training	50%	399	51%	560	60%	651	52%	229	51%	138
4 Years after training	48%	86	52%	395	63%	441	51%	176	52%	77
5 Years after training	59%	22	58%	221	66%	272	50%	110	64%	55
6 Years after training	33%	6	59%	53	59%	104	58%	24	64%	14