REPORT

MAY 2017

Providing Public Workforce Services to Job Seekers: 30-month Impact Findings on the WIA Adult and Dislocated Worker Programs

Technical Supplement

Mathematica Policy Research
Dana Rotz, Paul Burkander, Mary Grider, Kenneth Fortson, Linda Molinari, Elias Sanchez-Eppler, Lindsay Cattell

Submitted to:
U.S. Department of Labor
Employment and Training Administration
Office of Policy Development and Research
200 Constitution Avenue, NW
Room N-5637
Washington, DC 20210
Contract Number: DOLJ081A20678

Submitted by:
Mathematica Policy Research
1100 1st Street, NE
12th Floor
Washington, DC 20002-4221
Telephone: (202) 484-9220
Facsimile: (202) 863-1763
Project Directors: Sheena McConnell and Linda Rosenberg
Reference Number: 06503.133

WIA Adult and Dislocated Worker Programs | Gold Standard Evaluation

SPR SOCIAL POLICY RESEARCH ASSOCIATES

MATHEMATICA Policy Research

About the Evaluation Team

This evaluation is led by Mathematica Policy Research with the support of its evaluation team partners: Social Policy Research Associates, MDRC, and the Corporation for a Skilled Workforce.

This project has been funded, either wholly or in part, with Federal funds from the Department of Labor, Employment and Training Administration under Contract Number DOLJ081A20678. The contents of this publication do not necessarily reflect the views or policies of the Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement of same by the U.S. Government.

CONTENTS

APPENDIX A DETAILS OF OUR METHODOLOGICAL APPROACH A.1

A. Details of study design A.3

1. Selection of local areas A.3
2. Selection of customers into the three research groups A.5
3. Exclusions from random assignment and sample universe A.6

Table A.1. Local area-specific study exemptions A.8

B. Sampling weights A.9

1. Weights to account for local area selection and participation A.9

Table A.2. Local area customer counts and weights A.11

2. Weights to account for assignment probabilities changing over time A.12
3. Weights to account for survey selection A.12
4. Weights to account for survey nonresponse A.12

Table A.3. Candidate variables for splitting customers into clusters A.14

5. Comparison of study sample to survey sample and survey sample to survey respondents after weighting A.16

Table A.4. Characteristics of full study sample and customers selected for survey (full-WIA customers) A.16

Table A.5. Characteristics of core customers selected for survey and survey respondents A.19

Table A.6. Characteristics of core-and-intensive customers selected for survey and survey respondents A.21

Table A.7. Characteristics of full-WIA customers selected for survey and survey respondents A.23

C. Accounting for item nonresponse and outliers A.25

1. Logical imputation A.25
2. Imputation using a hot-deck method A.26

Table A.8. Number of cases imputed using categorical data A.28

Table A.9. Number of cases imputed because of early interview A.28

3. Predictive mean matching A.29

Table A.10. Variables used in imputation procedure A.32

Table A.11. Number of cases imputed for each variable using predictive mean matching A.35

D. Impact estimation approach for full sample analysis A.38

1. Estimation model and variance estimation A.39

2. Testing for significance of impacts A.40

3. Multiple comparison adjustments A.40

4. Impacts of providing services versus impacts of the receipt of services A.41

E. Impact estimation approach for subgroups of customers A.42

1. Estimation model and variance estimation A.42

2. Testing for differences across subgroups A.42

F. Minimum detectable impacts A.43

Table A.12. Minimum detectable impacts for key outcomes A.44

G. Details on our approach to estimating net benefits A.45

1. Benchmark approach to estimating net benefits A.45

Table A.13. Anticipated net benefits of intensive and training services funded by the Adult and Dislocated Worker programs A.47

2. Estimating net benefits associated with productivity A.48

3. Estimating net benefits associated with use of public assistance A.49

4. Estimating costs of providing services A.50

Table A.14. Number of local areas, by average cost per service A.51

Table A.15. Per-program costs of training (all customers) A.52

5. Benefit-cost sensitivity analyses A.53

APPENDIX B SENSITIVITY ANALYSIS OF IMPACT ESTIMATES B.1

A. Impacts estimated without nonresponse weights B.4

Table B.1. Impacts estimated without nonresponse weights, compared with benchmark estimation approach (all customers) B.4

B. Impacts estimated without imputation B.5

Table B.2. Impacts estimated excluding imputed data, compared with benchmark estimation approach (all customers) B.6

C. Impacts excluding replacement local areas B.6

Table B.3. Impacts estimated excluding replacement local areas, compared with benchmark estimation approach (all customers) B.7

D. Impacts controlling for local area and customer characteristics B.8

Table B.4. Impacts estimated controlling for customer-level covariates, compared with benchmark estimation approach (all customers) B.9

E. Impacts estimated using hierarchical linear modeling B.10

Table B.5. Impacts estimated using an HLM without customer covariates, compared with benchmark estimation approach (all customers) B.11

Table B.6. Impacts estimated using an HLM with customer covariates, compared with benchmark estimation approach (all customers) B.12

F. Impacts estimated using a design-based approach B.14

Table B.7. Impacts estimated using a design-based approach, compared with benchmark estimation approach (all customers) B.15

G. The influence of individual local areas on impacts B.16

Figure B.1. Impacts of training funded by the Adult and Dislocated Worker programs on Quarter 5 earnings leaving out individual local areas B.17

Figure B.2. Impacts of training funded by the Adult and Dislocated Worker programs on Quarter 10 earnings leaving out individual local areas B.18

Figure B.3. Impacts of intensive services funded by the Adult and Dislocated Worker programs on Quarter 5 earnings leaving out individual local areas B.19

Figure B.4. Impacts of intensive services funded by the Adult and Dislocated Worker programs on Quarter 10 earnings leaving out individual local areas B.19

Figure B.5. Impacts of intensive and training services funded by the Adult and Dislocated Worker programs on Quarter 5 earnings leaving out individual local areas B.20

Figure B.6. Impacts of intensive and training services funded by the Adult and Dislocated Worker programs on Quarter 10 earnings leaving out individual local areas B.21

APPENDIX C DETAILED TABLES OF SURVEY MEANS AND IMPACTS FOR ALL CUSTOMERS C.1

Table C.II.1. Baseline equivalence among survey respondents (all customers) C.3

Table C.IV.1. Use of resource room since random assignment (all customers) C.6

Table C.IV.2a. Workshop attendance since random assignment (all customers) C.7

Table C.IV.2b. Workshops attended since random assignment (among customers who attended any workshops) C.8

Table C.IV.3. Topics covered in workshops attended since random assignment (among customers who attended at least one workshop) C.10

Table C.IV.4a. Assessments of skills, abilities, and aptitudes taken since random assignment (all customers) C.11

Table C.IV.4b. Assessments of skills, abilities, and aptitudes taken since random assignment (among customers who took assessments) C.12

Table C.IV.5a. Job clubs attended since random assignment (all customers) C.14

Table C.IV.5b. Job clubs attended since random assignment (among customers who attended a job club) C.15

Table C.IV.6a. One-on-one staff assistance received since random assignment (all customers).....C.17

Table C.IV.6b. One-on-one staff assistance received since random assignment (among customers receiving one-on-one assistance).....C.19

Table C.IV.7. Supportive services received since random assignment (all customers).....C.24

Table C.IV.8. Satisfaction with American Job Center experience (all customers).....C.26

Table C.V.1. Enrollment in training since random assignment (all customers).....C.27

Table C.V.2a. Characteristics of training programs enrolled in since random assignment (all customers).....C.28

Table C.V.2b. Characteristics of training programs enrolled in since random assignment (among customers who reported participating in training).....C.30

Table C.V.3a. Enrolled in training in 15 months after random assignment according to program data (all customers).....C.32

Table C.V.3b. Enrolled in training in 15 months after random assignment according to program data (among customers receiving WIA-funded training).....C.33

Table C.V.4. Participation in and completion of education programs since random assignment (all customers).....C.34

Table C.V.5. Participation in and completion of vocational training programs since random assignment (all customers).....C.36

Table C.V.6. Training provider (among customers who reported participating in training).....C.38

Table C.V.7. Top training programsa (among customers who reported participating in training).....C.39

Table C.V.8a. Funding of training since random assignment (all customers).....C.40

Table C.V.8b. Funding of training since random assignment (among customers who reported participating in training).....C.41

Table C.VI.1. Earnings[a] by quarter since random assignment (all customers).....C.42

Table C.VI.2. Employment by quarter since random assignment (all customers).....C.43

Table C.VI.3. Timing of training completion relative to start of new jobs (among customers who had ended enrollment in at least one training program).....C.44

Table C.VI.4. Weeks and hours worked by quarter since random assignment (all customers).....C.45

Table C.VI.5. Characteristics of current or most recent job reported at time of survey (among customers who provided recent employment history from follow-up period).....C.47

Table C.VI.6. Most frequently reported occupations of current or most recent job reported at time of survey (among customers who provided recent employment history from follow-up period).....C.48

Table C.VI.7. Employment in occupations related to most common training occupations (among customers who participated in training) C.49

Table C.VI.8. Match between training and employment (all customers) C.50

Table C.VI.9. Employment and enrollment in training (among customers who participated in training) C.51

Table C.VII.1. Household income and receipt of public assistance in the past calendar year (all customers) C.52

Table C.VII.2. Health and health insurance (all customers) C.53

Table C.VII.3. Arrests and felony convictions (all customers) C.54

APPENDIX D DETAILED TABLES OF SURVEY MEANS AND IMPACTS FOR ADULTS D.1

Table D.II.1. Baseline equivalence among survey respondents (adults only) D.3

Table D.IV.1. Use of resource room since random assignment (all adults) D.6

Table D.IV.2. Workshop attendance since random assignment (all adults) D.7

Table D.IV.3. Assessments of skills, abilities, and aptitudes taken since random assignment (all adults) D.8

Table D.IV.4. Job clubs attended since random assignment (all adults) D.9

Table D.IV.5. One-on-one staff assistance received since random assignment (all adults) D.10

Table D.IV.6. Supportive services received since random assignment (all adults) D.12

Table D.V.1. Enrollment in training since random assignment (all adults) D.14

Table D.V.2. Characteristics of training programs enrolled in since random assignment (all adults) D.15

Table D.V.3. Enrolled in training in 15 months after random assignment according to program data (all adults) D.17

Table D.V.4. Funding of training since random assignment (among adults who reported participating in training) D.18

Table D.VI.1. Earnings[a] by quarter since random assignment (all adults) D.19

Table D.VI.2. Employment by quarter since random assignment (all adults) D.20

Table D.VI.3. Weeks and hours worked by quarter since random assignment (all adults) D.21

Table D.VI.4. Characteristics of current or most recent job reported at time of survey (among adults who provided recent employment history from follow-up period) D.23

Table D.VI.5. Most frequently reported occupations of current or most recent job reported at time of survey (among adults who provided recent employment history from follow-up period) D.24

Table D.VII.1. Household income and receipt of public assistance in the past calendar year (all adults) D.25

Table D.VII.2. Arrests and felony convictions (all adults) D.26

APPENDIX E DETAILED TABLES OF SURVEY MEANS AND IMPACTS FOR DISLOCATED WORKERS E.1

Table E.II.1. Baseline equivalence among survey respondents (dislocated workers only) E.3

Table E.IV.1. Use of resource room since random assignment (all dislocated workers) E.6

Table E.IV.2. Workshop attendance since random assignment (all dislocated workers) E.7

Table E.IV.3. Assessments of skills, abilities, and aptitudes taken since random assignment (all dislocated workers) E.8

Table E.IV.4. Job clubs attended since random assignment (all dislocated workers) E.9

Table E.IV.5. One-on-one staff assistance received since random assignment (all dislocated workers) E.10

Table E.IV.6. Supportive services received since random assignment (all dislocated workers) E.12

Table E.V.1. Enrollment in training since random assignment (all dislocated workers) E.14

Table E.V.2. Characteristics of training programs enrolled in since random assignment (all dislocated workers) E.15

Table E.V.3. Enrolled in training in 15 months after random assignment according to program data (all dislocated workers) E.17

Table E.V.4. Funding of training since random assignment (among dislocated workers who reported participating in training) E.18

Table E.VI.1. Earnings[a] by quarter since random assignment (all dislocated workers) E.19

Table E.VI.2. Employment by quarter since random assignment (all dislocated workers) E.20

Table E.VI.3. Weeks and hours worked by quarter since random assignment (all dislocated workers) E.21

Table E.VI.4. Characteristics of current or most recent job reported at time of survey (among dislocated workers who provided recent employment history from follow-up period) E.23

Table E.VI.5. Most frequently reported occupations of current or most recent job reported at time of survey (among dislocated workers who provided recent employment history from follow-up period) E.24

Table E.VII.1. Household income and receipt of public assistance in the past calendar year (all dislocated workers) E.25

Table E.VII.2. Arrests and felony convictions (all dislocated workers) E.26

APPENDIX F DETAILED TABLES OF NDNH MEANS AND IMPACTS FOR ALL CUSTOMERS F.1

Table F.VI.1. Earnings[a] by quarter since random assignment (all customers) F.3

Table F.VI.2. Employment by quarter since random assignment (all customers) F.5

Table F.VI.3. Earnings by quarter since random assignment among employed customers F.6

Table F.VII.1. Unemployment compensation receipt by quarter since random assignment (all customers) F.8

APPENDIX G DETAILED TABLES OF NDNH MEANS AND IMPACTS FOR ADULTS G.1

Table G.VI.1. Earnings[a] by quarter since random assignment (adults only) G.3

Table G.VI.2. Employment by quarter since random assignment (adults only) G.5

Table G.VII.1. Unemployment compensation receipt by quarter since random assignment (adults only) G.6

APPENDIX H DETAILED TABLES OF NDNH MEANS AND IMPACTS FOR DISLOCATED WORKERS H.1

Table H.VI.1. Earnings[a] by quarter since random assignment (dislocated workers only) H.3

Table H.VI.2. Employment by quarter since random assignment (dislocated workers only) H.5

Table H.VII.1. Unemployment compensation receipt by quarter since random assignment (dislocated workers only) H.6

REFERENCES R.1

This page has been left blank for double-sided copying.

APPENDIX A

DETAILS OF OUR METHODOLOGICAL APPROACH

This page has been left blank for double-sided copying.

In this appendix, we present details of our technical approach for estimating the impacts and net benefits of intensive and training services funded by the Adult and Dislocated Worker programs. We first provide an overview of our sample design (Section A), also available in Mastri et al. (2015). Next, we discuss how we used weighting (Section B) and imputation (Section C) to ensure that our estimates generalize to the broader population of individuals served by the Adult and Dislocated Worker programs. We then explain our approach to estimating impacts using data from our full sample (Section D) or subsamples of customers (Section E) and the minimum detectable impacts implied by the study and analysis design (Section F). Finally, we discuss our approach to estimating the net benefits of intensive and training services funded by the Adult and Dislocated Worker programs (Section G).

A. Details of study design

We designed this study to ensure that the impact estimates discussed in the body of this report reflect nationally representative, causal effects of intensive and training services funded by the Adult and Dislocated Worker programs. We randomly selected local areas to participate in the evaluation to facilitate our ability to generalize from the estimates to a broader population, and ultimately included 28 local areas in the evaluation. We then randomly assigned individuals to our different study groups within each study local area to obtain unbiased local area-specific impact estimates. This section discusses these procedures in greater detail.

1. Selection of local areas

We first had to determine how many local areas to include in the evaluation. We needed enough local areas to estimate precise impacts of the full programs nationwide—that is, impact estimates that would not vary greatly depending on the particular set of sites chosen—but had to balance the number of local areas with the costs of recruiting, training, monitoring, and collecting data from them. Using a statistical power analysis, we settled on targeting 30 local areas as the best balance of these two competing objectives. Sampling additional local areas would have increased the cost of the evaluation but would not have provided appreciable benefits in statistical precision.

We constructed the sample frame, or the set of local areas from which we would randomly select sample areas, by starting with a list of all 585 local areas as of March 2008. We then excluded from the sample frame the 22 local areas outside the 48 contiguous states and 76 very small local areas—those with fewer than 100 customers annually who received intensive services, as reported in the Workforce Investment Act (WIA) Standardized Record Data (WIASRD). We excluded local areas outside the contiguous states because (1) the staff in some of these local areas might not have been fluent in English and thus would have required separate sets of instructions, materials, and intake systems to participate; and (2) it would have been prohibitively costly to travel to these areas to implement the impact study procedures and conduct visits for the implementation study. We excluded the smallest local areas from the evaluation because of the high costs of implementing the intervention in areas that would supply only a very small number of customers for the study.

The final sample frame included 487 local areas, representing 83 percent of all local areas and more than 98 percent of customers who receive WIA-funded intensive services in the contiguous United States. We selected local areas from this sample frame with probabilities

proportional to size (PPS), which means that larger local areas were more likely to be selected than smaller local areas. We adopted this design because it would yield the most precise estimates of the effects of intensive and training services for the average customer of the Adult and Dislocated Worker programs nationally, except those in the very smallest local areas. For a measure of local area size, we used the number of customers who received WIA intensive or training services, or both, and who exited the programs from April 2006 to March 2008, as recorded in the WIASRD. We used two years of data because we believed doing so best balanced the desire to use the most current customer counts with the need to smooth idiosyncratic spikes in enrollment.

To ensure geographic diversity and representation, we sampled a predetermined number of local areas in each of the six U.S. Department of Labor (DOL) administrative regions. We determined the number of local areas to select in each region based on each region's share of intensive-service customers. This resulted in the selection of four local areas in Region 1 (serving Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont); three in Region 2 (serving Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, and West Virginia); seven in Region 3 (serving Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee); five in Region 4 (serving Arkansas, Colorado, Louisiana, Montana, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, and Wyoming); seven in Region 5 (serving Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin); and four in Region 6 (serving Arizona, California, Idaho, Nevada, Oregon, and Washington).

The New York City and Gulf Coast (Texas) local areas were selected with certainty (that is, were not sampled) because they each contained a considerable fraction of the national Adult and Dislocated Worker populations. From the remaining local areas, we randomly selected the prespecified number of areas within each region using PPS. We ensured that there would be variation in the state; the size of the local area; and, as a proxy for the emphasis the local area placed on training, the training rate, defined as the proportion of customers who were reported to have received intensive services in WIASRD who also were reported to have received training.

To ensure this diversity, we used systematic sampling procedures to select the local areas. First, within each region, we sorted the local areas by whether they were large or small (more or fewer than 600 customers annually), their state, and whether more or less than 50 percent of customers participated in WIA-funded training. Second, we implemented PPS sampling. We first duplicated site observations based on the local area's size measure (for example, a local area with 200 customers contributed 200 observations to the ordered data set). We then selected a random starting number for each ordered list. We first selected for the study the local area corresponding to the starting number, and then sequentially selected every *N*th site observation thereafter, where *N* was the total number of customers in the region divided by the number of local areas to be selected. For example, if the ordered list for a region had 1,000 site observations, and four local areas were to be selected, then *N* would equal 250. With *N* equal to 250, if the 50th observation was the random starting point, then we selected the local areas corresponding to observations 50, 300, 550, and 800.

For each of the 30 randomly selected local areas, we identified potential replacement local areas to help maintain the representativeness of the study sample if the local area originally

selected for the sample declined to participate. We selected the replacement local areas to be as similar as possible to the originally selected local area and obtained them by searching for local areas that were, in order of priority, in the same region, of similar size, in the same state, and with similar training rates as the originally selected local area. The size of the local area was a particularly important characteristic for selecting replacement local areas to ensure we could meet sample size targets without substantially changing the rates at which customers would have to be assigned to the restricted-service groups. We developed an ordered list of five potential replacement local areas for each originally selected local area.

Of the 30 originally randomly selected local areas, 26 local areas—87 percent—agreed to participate in the study. Using the ordered lists of replacement local areas we had already developed, we successfully replaced two of the four local areas that declined to participate: Southeast Michigan replaced Thumb Area (Michigan), and Chicago (Illinois) replaced WIA Area 7 (Ohio). The Local Workforce Investment Boards (LWIBs) of two other local areas—Du Page County (Illinois) and Nevada—declined to participate late in the recruitment process. Therefore, there was not enough time to recruit and set up study procedures in replacement local areas within the study's timeline. As a result, our evaluation focuses on the 26 originally selected local areas that elected to participate, plus 2 replacement local areas, for a total of 28 local areas.

2. Selection of customers into the three research groups

Our design called for the random assignment of about 2,000 Adult or Dislocated Worker program customers to the core group and about 2,000 customers to the core-and-intensive group across all participating local areas, with the rest assigned to the full-WIA group. Sampling rates to the restricted-service groups (core and core-and-intensive groups) were set low in each local area so as not to change program operations and to be more acceptable to the local area staff. The rates were set lower in larger local areas than in smaller ones to ensure that the combined core and core-and-intensive groups would not consist mainly of customers from the largest local areas; nonetheless, larger local areas typically contributed more restricted-service group members than did smaller areas.

We set initial rates of assignment to the restricted-service groups using information on expected customer enrollment levels, the desired length of the study intake period, and the targeted number of customers in each restricted-service group. The expected enrollment levels were determined based on historic WIASRD records on counts of customers who received WIA-funded intensive services from April 2006 to March 2008. As an example, consider a local area that preferred a 15-month intake period and, based on historic WIASRD records, could expect to enroll 500 customers eligible for and in need of intensive services over that time. If the target number of customers in the study for that local area was 50 in each restricted-service group, the random assignment rate would initially have been set at 10 percent for each group.

When enrollment appeared to proceed slower or faster than anticipated, we first contacted the local area to ascertain whether the deviation from our expectations was temporary or long term. If the local area expected the deviation to be temporary, we did nothing immediately but continued to monitor enrollment closely. However, if study enrollment was expected to proceed at the unanticipated rate for a longer period, we adjusted the rate of random assignment to the restricted-service groups so that the local area could meet its enrollment targets over the specified intake period. That is, if study enrollment was proceeding too slowly to meet targets for

the restricted-service groups at that rate, we increased the restricted-service group assignment rate. Conversely, we lowered the rate if we had to slow progress toward the targets. We also increased the restricted-service group assignment rate when a local area did not have funds available to allocate to training. In these instances, the difference between the restricted-service and full-WIA groups would be less meaningful, because lack of funding would mean those in the full-WIA group would not be able to access training. We weighted all estimates to ensure that these changes in probabilities did not affect the validity of our results (Section B). Random assignment ended when the preset enrollment targets were met for the restricted-service groups.

3. Exclusions from random assignment and sample universe

One of the key design objectives was to minimize the number and types of customers exempted from the study so that the impact findings would generalize to the national population of adults and dislocated workers. Thus, ideally, we wanted to include all new customers (those not already receiving intensive or training services) deemed eligible for intensive services under the Adult and Dislocated Worker programs in the local area. However, for reasons we discuss next, some eligible customers could not be randomly assigned and were therefore exempted from the study. These customers were allowed to receive the same services they would have received in the absence of the study. The exemptions fell into three categories: (1) studywide exemptions; (2) local area exemptions; and (3) wild cards, or exemptions made for specific customers at the request of the local area.

Studywide exemptions. Three categories of customers were exempted from the study in all local areas:

1. **Participants in the Trade Adjustment Assistance program.** Trade Adjustment Assistance (TAA) is an entitlement program—those eligible for TAA cannot be denied TAA services. Many local areas automatically enrolled TAA participants in WIA so that they could also be offered WIA services. Including TAA participants in the evaluation would be problematic because their access to intensive and training services could not be restricted, which would limit the service contrast between the study research groups.
2. **Veterans and covered spouses.** Veterans and certain spouses of veterans receive priority of service. The Employment and Training Administration (ETA) decided that denying intensive or training services to veterans or covered spouses would go against the spirit of the priority of service provision. Moreover, some local areas agreed to participate in the study only on the condition that veterans be exempted.
3. **Customers referred by an employer to receive on-the-job training or incumbent worker training.** Staff in all local areas considered maintaining strong relationships with employers in the local area to be a top priority. Typically, when local areas funded on-the-job training opportunities, staff members would recommend job seekers for the on-the-job training slots to the employer providing the slots. Sometimes, however, the employer identified a job seeker and requested that this individual fill an on-the-job training slot. In that situation, local area staff expressed concern that their relationship with the employer could be harmed if the employer-referred job seeker was randomly assigned to a restricted service group and thus unable to fill the on-the-job training position. These employer-referred job seekers were exempted from the study. In addition, incumbent worker training—training provided to workers already employed—is not an eligible training

program under the Adult or Dislocated Worker programs, but some local areas received waivers to offer that training. When the local area offered incumbent worker training programs funded by WIA, the workers who received such training were exempted from the study to maintain good relationships with the employers who provided the training.

Local area-specific exemptions. Specific customer groups in certain local areas were also exempted from the study. The evaluation team typically accommodated requests from local areas if they met three conditions. First, there had to be a well-defined reason for the exemption. For example, local areas were reluctant to deny services to customers whose participation in a WIA-funded training program could fulfill requirements for a public assistance program. Second, to maintain the integrity of random assignment, intake staff had to be able to identify the exempt customers and verify their exemption status before, rather than after, random assignment. Third, exempt groups had to comprise only a small percentage of all Adult and Dislocated Worker customers in the local area. The exemptions specific to local areas—indicated in Table A.1—fell into the following three categories:

1. **Participants in other programs who were required or encouraged to be co-enrolled in WIA services.** Just as TAA participants are offered WIA services as part of participating in TAA, other programs in some local areas also required that WIA services be offered to their participants. The most common individuals in this category are Temporary Assistance to Needy Families (TANF) recipients; participants in the Supplemental Nutrition Assistance Program's Employment and Training Program (SNAP E&T); and customers, known as profilees, who were identified as being likely to exhaust unemployment insurance benefits. Others include participants in Vocational Rehabilitation programs, the Social Security Administration's Ticket-to-Work Program, and special local training programs. In some instances, local area administrators requested an exemption for programs, such as TANF, that referred their customers to American Job Centers and encouraged them to access WIA services. Stakeholders indicated that denying services to these referred customers could potentially harm their relationships with the referring programs.
2. **Customers participating in other studies.** A few local areas already were participating in evaluations when recruitment for the WIA Gold Standard Evaluation began. The treatment groups in the other evaluations sometimes were required to receive services. For example, the Reemployment Eligibility and Assessment (REA) Initiative Evaluation mandated the receipt of intensive case management; therefore, treatment group members in that study were exempted from the WIA Gold Standard Evaluation (although control group members were not). Other examples include the Enhanced Transitional Jobs Demonstration Program in Indianapolis (Indiana) and those receiving services through Health and Human Services grants in the Seattle-King County (Washington) local area.
3. **Wild card exemptions.** A wild card refers to an exemption of a customer from the study for extenuating circumstances. Such exemptions were granted for customers whom local area staff indicated faced hardships above and beyond those faced by most adults and dislocated workers. Local area staff members were told that they had to use the wild cards before a customer was randomly assigned. To keep such exemptions to a minimum, local areas had to call the evaluation project director directly for permission to use the wild card.

We used study eligibility checklists to track the exemptions from random assignment. These checklists, tailored to each local area, showed possible exemptions from random assignment. In most local areas, the intake staff completed the checklists for all customers found eligible for intensive or training services. In the two local areas in which intake occurred online, the customer completed the eligibility checklist online.

Table A.1. Local area-specific study exemptions

Local area	No local area-specific exemptions	Mandated or encouraged to receive services			In another study
		SNAP or TANF recipients	Unemployment Insurance program profiles	Other	
Atlanta Region (Georgia)	X				
Capital Region (New York)		X		X	X
Central Pennsylvania	X				
Central Region (Missouri)		X	X		
Chautauqua County (New York)					X
Chicago (Illinois)				X	
East Tennessee	X				
Essex County (New Jersey)	X				
First Coast (Florida)		X		X	
Fresno County (California)				X	
Gulf Coast (Texas)		X			
Indianapolis (Indiana)					X
Louisville (Kentucky)	X				
Lower Savannah (South Carolina)	X				
Muskegon (Michigan)	X				
New Orleans (Louisiana)	X				
New York City					X
North Central Texas		X			
Northwest Pennsylvania	X				
Sacramento (California)	X				
Santee-Lynches (South Carolina)	X				
Seattle-King County (Washington)		X			X
South Dakota	X				
South Plains (Texas)				X	
Southeast Michigan	X				
Southwest Corner Pennsylvania	X				
Twin Districts (Mississippi)			X		
Waukesha-Ozaukee-Washington Counties (Wisconsin)	X				

Source: WIA Gold Standard Evaluation.

SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families.

B. Sampling weights

The design of the WIA Gold Standard Evaluation permits estimating effects that generalize to nearly the entire population served by the Adult and Dislocated Worker programs.[1] To obtain unbiased estimates, however, we had to weight the data to account for differences in sampling probabilities. For our analysis of administrative data, our weights account at the local area level for (1) the probability a local area was selected for the evaluation, (2) the probability a local area consented to participate in the evaluation, and (3) the rate at which customers served by a local area consented to participate in the study. At the customer level, these weights also account for (4) differing rates of random assignment to the restricted-service groups. In our analysis of survey data, our weights also adjust at the customer level for differing rates of (5) selection of individuals into the survey sample, and (6) survey response. This section provides greater detail on how our weights account for these local area and customer differences in sampling probabilities.

1. Weights to account for local area selection and participation

As described in Section A, we selected local areas for the evaluation using probabilities proportional to the number of customers who received intensive services from that area.[2] Specifically, the probability that area *s* was selected is given by:

$$(1) \quad p_s = m_r * \frac{N_s^*}{\sum_{s=1}^{m_r} N_s^*},$$

Where m_r is the number of areas selected in region *r*, which was predetermined, and N_s^* is the adjusted number of anticipated intensive-service customers in local area *s*. New York City and Gulf Coast (Texas) were selected with certainty because their p_s values were greater than 1. Thus, to select the remaining 28 noncertainty local areas, we excluded the two certainty local areas from the summation in the denominator. For simplicity, we rounded adjusted counts to the nearest integer. We weighted each customer by the inverse probability of his or her local area's selection to account for this variation in probability. This probability was one for New York City and Gulf Coast (Texas).

Of the 30 local areas we selected to participate in the evaluation, 4 declined to participate, and we replaced 2 of those using a preselected set of replacement local areas. We treated those replacements as though they had been chosen in the initial selection. By design, the replacement areas were as similar as possible to those they replaced in size, region, and training rate category. To account for the 2 local areas that declined to participate and were not replaced, we estimated the probability that a local area chose to participate at the regional level (the number of

[1] See Section A for exclusions.

[2] We adjusted the intensive-service counts for some local areas that had recently changed their policies to count many more customers as receiving intensive services. We made those adjustments by dividing the training rate in the years after the policy changes by their typical training rate during the years before the changes and using the ratio of WIA funding levels to counts of intensive-service customers. Adjusted counts could be non-integer values, which, for simplicity, we rounded to the nearest integer for the selection process.

participating local areas divided by the number of local areas selected) and weighted areas by the inverse of this probability. This approach corrected for differences in the probability of nonparticipation across regions but assumed that nonparticipation occurred randomly within a region.

Finally, we also accounted in our weighting scheme for different rates of customer-level consent by local area. All customers could opt out of this study; those who did so could not receive intensive or training services throughout the period of random assignment. Some local areas had more customers opt out than others. To account for this variation, we also weighted local areas by the inverse of the probability that a customer at the local area consented to participate in the evaluation, defined as the local area-level ratio of the number of customers randomly assigned to the number of customers either randomly assigned, excluded from the evaluation for invalid reasons, or not consenting to participate in the evaluation (see Mastri et al. [2015] for details on consent rates by local area). This corrects for differences across local areas in rates of nonconsent but assumes that nonconsent occurred randomly within a local area.

Weight trimming. In local areas for which historical data were a poor predictor of customer flows, the local area weights were correspondingly larger or smaller than anticipated. Table A.2 lists each local area, the expected and actual numbers of customers, the ratio of actual to expected customers, and the local area weight. Historical data were particularly inaccurate predictors in two local areas—Essex County (New Jersey) and Atlanta Region (Georgia) — which had 6.5 and 5.2 times more customers than anticipated, respectively.

Because of deviations in actual and predicted customer counts, we view the local area weights for Essex County (New Jersey) and Atlanta Region (Georgia) as outliers, with atypical weights 4.1 and 5.1 times greater than the average local area weight. It is common in such situations to trim weights by setting a maximum weight equal to some multiple α of the average weight, where α is commonly set between 3.0 and 5.0 (Izrael et al. 2009; Elliott 2009). This approach avoids the inflation of the variance estimates due to extreme weights and the undue influence of Atlanta Region (Georgia) and Essex County (New Jersey) on the findings.

We chose α by searching for the value within the 3.0-to-5.0 range that minimized the mean squared error (MSE). The intuition underlying the approach is that as α is set higher, variances of the estimated weighted means increase but biases decrease. Thus, our goal was to identify α to best balance the variance-bias trade-off as measured by MSE values.

We conducted the analysis by estimating the average MSE value for weighted means using the full study sample and 10 baseline customer characteristics (indicators for a customer being enrolled in the Adult program, being female, being black and non-Hispanic, being older than the average customer, being currently married, having a primary language of Spanish, reporting a real hourly wage at their last job over the sample average, having a bachelor's degree only, receiving SNAP or the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and living in a household with more members than the sample average). The MSE was estimated as:

(2) $\widehat{MSE}(\alpha) = \widehat{Var}(\hat{\tau}_\alpha) + (\hat{\tau}_\alpha - \hat{\tau}_0)^2$,

where $\hat{\tau}_{\alpha}$ is the estimated average of a characteristic, imposing that no local area receives a weight over α times the average weight, and $\hat{\tau}_{0}$ is the estimated average without imposing a maximum weight. The first term is the estimated variance and the second term is the bias squared, which move in opposite directions as α changes. Based on our search, we set $\alpha = 3.0$, as this produced the lowest average MSE. We conducted the same analysis restricting the sample to customers in the Adult program, and then to customers in the Dislocated Worker program. These analyses also suggested choosing $\alpha = 3.0$. Thus, for the impact analysis, we trimmed the local area weights for Essex County (New Jersey) and Atlanta Region (Georgia) to be three times greater than the average local area weight.

Table A.2. Local area customer counts and weights

	Expected customer count	Actual customer count	Ratio of actual to expected customer count	Local area weight	Trimmed local area weight
Atlanta Region (Georgia)	472	2,466	5.2	49,141	38,219
Capital Region (New York)	2,142	1,837	0.9	8,487	8,487
Central Pennsylvania	862	978	1.1	6,998	6,998
Central Region (Missouri)	390	310	0.8	7,052	7,052
Chautauqua County (New York)	140	308	2.2	21,810	21,810
Chicago (Illinois)	3,482	1,049	0.3	2,693	2,693
East Tennessee	739	351	0.5	4,455	4,455
Essex County (New Jersey)	103	667	6.5	61,851	38,219
First Coast (Florida)	2,230	671	0.3	3,083	3,083
Fresno County (California)	816	1,548	1.9	23,050	23,050
Gulf Coast (Texas)	12,893	5,506	0.4	5,662	5,662
Indianapolis (Indiana)	888	2,386	2.7	24,798	24,798
Louisville (Kentucky)	657	939	1.4	13,524	13,524
Lower Savannah (South Carolina)	988	445	0.5	4,260	4,260
Muskegon (Michigan)	365	99	0.3	2,383	2,383
New Orleans (Louisiana)	444	586	1.3	12,124	12,124
New York City	6,034	5,416	0.9	5,953	5,953
North Central Texas	990	1,203	1.2	9,407	9,407
Northwest Pennsylvania	444	370	0.8	5,306	5,306
Sacramento (California)	860	2,028	2.4	29,991	29,991
Santee-Lynches (South Carolina)	417	406	1.0	9,599	9,599
Seattle-King County (Washington)	1,754	945	0.5	6,531	6,531
South Dakota	893	941	1.1	8,345	8,345
Southeast Michigan	781	484	0.6	7,395	7,395
South Plains (Texas)	143	110	0.8	5,916	5,916
Southwest Corner Pennsylvania	394	246	0.6	3,874	3,874
Twin Districts (Mississippi)	3,992	1,628	0.4	3,861	3,861
Waukesha-Ozaukee-Washington Counties (Wisconsin)	492	506	1.0	9,162	9,162

Source: WIA Gold Standard Evaluation's study registration form.

Note: Local area weights are the sum of individual weights developed to account for the probability that the local area was selected to participate in the study, the likelihood that the local area agreed to participate in the study, and the likelihood that customers at a local area consented to participate.

2. Weights to account for assignment probabilities changing over time

As described in Section A.2, rates of random assignment varied across both local areas and time. The probability of random assignment to the core and core-and-intensive groups was set lower in larger local areas to ensure that these groups were not primarily composed of customers served by these areas. The study team also increased or decreased the rate of random assignment over time in response to variation in study enrollment rates at each local area. For each local area, we adjusted the rate of random assignment one to seven times. In two local areas we adjusted the random assignment rate only once and in three local areas we adjusted it six or seven times. For some local areas, these adjustments were minor. For example, the maximum and minimum random assignment rates in New York City varied by only 3 percentage points. In contrast, the maximum and minimum assignment rates varied by more than 20 percentage points in about half the local areas. On average across all local areas, customers in the study had a 12 percent restricted-service group assignment rate.

If not accounted for, differences in assignment probabilities across local areas and within local areas over time could lead to biased estimates. For instance, if an area tended to serve customers who were less disadvantaged at the beginning of the study than at the end, perhaps due to changing economic conditions, and the probabilities of assignment differed at the beginning and end of the study, then the changing probability of assignment over time could bias our estimates. To adjust for this, we weighted customers by the inverse probability that they were assigned to their observed study group.

3. Weights to account for survey selection

Because of the relative size of the study groups, we attempted to survey all members of the core and core-and-intensive groups but only a subset of customers assigned to the much larger full-WIA group. We selected the sample of full-WIA customers to match the characteristics of the customers in other study groups at the local-area level. To do this, we first organized customers into cells based on gender, adult or dislocated worker status, and month of random assignment. We then randomly selected full-WIA customers from each cell, determining how many customers to select based on the total number of core and core-and-intensive customers in the same cell. For example, if a cell contained 10 core or core-and-intensive customers, we randomly selected 5 full-WIA customers from the cell.[3] This process led to variation across cells in the probability that a full-WIA group member was selected to participate in the survey. To adjust for the unequal probability of survey selection, we weighted each full-WIA customer in analyses restricted to the survey sample by the inverse probability of survey selection. This weight was set to one for all customers in the core and core-and-intensive groups because the study team attempted to survey all these customers.

4. Weights to account for survey nonresponse

We attempted to survey 6,196 customers for both the 15- and 30-month surveys. Of these, 4,900 customers responded to the 15-month survey (a response rate of 79 percent). For the

[3] In a small number of cases, cells had too few full-WIA customers to permit sampling. When this occurred, we combined cells, first by merging cells by gender, then by adult or dislocated worker status, and finally by adjacent months.

30-month survey, we attempted to interview both customers who responded to the 15-month survey and those who did not respond. In total, 4,777 customers responded to the 30-month survey (a response rate of 77 percent), including 424 customers who did not respond to the 15-month survey. Because our 30-month survey collected employment and training histories for individuals since the time of their last contact with the study team (either random assignment or the 15-month survey), we were able to include all respondents to the 30-month survey in our survey data analysis. We excluded from our analysis the 547 customers who responded to the 15-month survey but not the 30-month survey.

Estimated impacts might be biased if the outcomes and impacts of customers who did not provide survey information differed from the outcomes and impacts of the 4,777 respondents. To help minimize this bias using observable data, we weighted observations based on the inverse probability that an individual responded to the survey. Our weights helped correct for potential biases stemming from observable differences between survey respondents and nonrespondents. Some differences between these groups could still remain based on unobservable variables. We cannot correct for such differences; thus, some degree of nonresponse bias might still be present in the weighted data.

We estimated the probability of survey response by drawing on the rich set of baseline data from the WIA Gold Standard Evaluation's study registration form (SRF), using the following four steps:

1. Identify interaction terms between the baseline variables to potentially include in a model of survey response using chi-squared automatic interaction detection (CHAID).
2. Use stepwise logistic regression to determine the main variables and interactions identified in Step 1 that the survey response model should include.
3. Use the variables identified in Steps 1 and 2 to estimate the likelihood of responding to the survey in a logistic regression.
4. Adjust the predicted probabilities from Step 3 so that the distribution of individuals (by assignment group and adult or dislocated worker status) in the weighted sample of survey respondents matches the distribution of individuals selected for the survey.

We describe each step in further detail next.

Step 1: Identify interactions to include in the model

We used data from the SRF to estimate the probability of observationally similar customers responding to the survey. In addition to the main variables from the SRF, including interactions between these variables in our model might improve the prediction of survey response. The set of possible interactions is too large to be tractable; to select those to possibly include, we used a CHAID algorithm (Kass 1980; Biggs et al. 1991).

CHAID uses a list of candidate variables to consider many ways of splitting data into clusters of observations. It chooses the split that results in the starkest difference in survey response rates across clusters. CHAID will split data into smaller and smaller clusters until a minimum cluster size is reached, a maximum number of clusters is reached, or there is no variation in

survey response or characteristics within a cluster. Table A.3 contains the list of candidate variables for the CHAID algorithm. To keep the analysis manageable, for all variables except education, which we treated as an ordered categorical variable, CHAID considers the possibility of splitting the data into clusters based on whether a single binary variable is one or zero. For example, the algorithm would consider splitting the data based on race into two clusters of Hispanic and non-Hispanic customers or two clusters of non-Hispanic white and Hispanic or non-white customers, and not into four race clusters (Hispanic, non-Hispanic white, non-Hispanic black, and other).

Table A.3. Candidate variables for splitting customers into clusters

Variables
Female
Race: Hispanic, non-Hispanic white, non-Hispanic black
Language: primary language is Spanish, primary language is neither Spanish nor English
Marital status: married; separated, widowed, or divorced
Household size: indicator for below sample median
Education: treated as an order-categorical variables with groups indicating highest degree obtained (less than high school, high school diploma or GED, associate's degree, bachelor's degree, master's degree, or further advanced degree)
Age at random assignment: indicator for below sample median
Work-limiting health problems
Employed in past five years
Currently working
Most recent hourly wage, in 2012 dollars: indicator for below sample median
Public assistance: received TANF; received Social Security benefits; received general assistance; received SNAP; received unemployment compensation; received other public assistance
Visited an American Job Center before study enrollment
Counselor-assessed likelihood of receiving training: very likely, somewhat likely, somewhat unlikely
Probability of being assigned to the full-WIA group: indicator for below sample median
Classified as dislocated worker
Assignment group: full-WIA, core-and-intensive
Indicators for whether all above variables are missing

GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families.

We executed the CHAID algorithm, allowing clusters to be defined by up to three variables. We also required that each time a cluster was split, the *p*-value on a test of whether response rates differed for subclusters was less than 0.30. CHAID identified six clusters:

1. Males not missing information on their wages at their most recent job who did not work in the five years before random assignment
2. Females not missing information on their wages at their most recent job who did not work in the five years before random assignment
3. Customers not missing information on their wages at their most recent job who worked in the five years before random assignment and spoke English or Spanish as their primary language

4. Customers not missing information on their wages at their most recent job who worked in the five years before random assignment and primarily spoke a language other than English or Spanish
5. Customers missing information on their wages at their most recent job who had not previously visited an American Job Center
6. Customers missing information on their wages at their most recent job who had previously visited an American Job Center

We thus included the interactions between the following sets of variables as potential covariates in our models of survey response: (1) customer gender, whether the customer reported the wage at his or her last job before random assignment, and whether the customer worked in the five years before random assignment; (2) whether the customer reported the wage at his or her last job before random assignment, whether the customer worked in the five years before random assignment, and whether the customer primarily spoke a language other than English or Spanish; and (3) whether the customer reported the wage at his or her last job before random assignment and whether the customer previously visited an American Job Center.

Step 2. Stepwise logistic regression

We used forward selection to choose the variables to include in our logit regression models predicting survey response. This procedure involves gradually adding covariates to a regression model in order from most to least predictive of survey response (as defined by the *p*-value associated with each covariate's regression coefficient), stopping when no variable meets a minimum defined threshold of predictability (a *p*-value of 0.20 in our application). The candidate variables included all variables listed in Table A.3, indicators for each variable being missing, and the first- and second-order interactions of the variables identified by CHAID in Step 1. If the forward selection procedure selected either a covariate or its missing value indicator, both variables were added to the model. Although age, last wage, the probability of random assignment to the full-WIA group, a nd household size were transformed to binary variables for the CHAID procedures, the stepwise regression considered including the continuous measures of these characteristics.

We conducted forward selection separately in six subgroups of customers, defined by study group and customer status as an adult or dislocated worker. We used a logistic regression model within each group, weighting observations to correct for local area selection, local area participation, customer participation by local area, survey selection, and the varying probability of assignment to the study group (that is, all other components of the weights).

Step 3. Estimate the probability of survey response

Each of the six forward selection procedures produced a different set of covariates to use in modeling survey response. We used these six sets of results to compile a master list of variables influencing response. We then estimated a logistic regression model within each subgroup, controlling for all identified variables in the master list. This regression yields a predicted probability of survey response, and the nonresponse weight is the inverse of this probability. To avoid giving any customer excess weight, and thus decreasing the precision of our estimates, we censored the weights at the 99th percentile.

For our interim analysis, we smoothed the predicted probabilities by customer subgroup, local area, and predicted probability quintile to avoid spurious variation in our weights (Rotz et al. 2016). However, for this analysis, we determined that this smoothing was not helpful because of relatively small samples of customers within each of the six customer subgroups in some local areas.

Step 4. Adjusting the weights

As a final step, we adjusted the weights to ensure that each local area and customer subgroup received the same total weight in our sample of survey respondents as in our larger sample of individuals selected for the survey. This approach ensures that each study group within a local area receives the same weight and that each local area has the same representation in the sample of 30-month survey respondents.

5. Comparison of study sample to survey sample and survey sample to survey respondents after weighting

In this section, we assess how (1) our broader study sample compares with our sample of customers selected for the survey, and (2) survey respondents differ from nonrespondents. Each analysis uses 55 baseline characteristics from the SRF to assess the similarity of samples.

Assessing the representativeness of the full-WIA customers selected for the survey. As discussed in Section B.3, we selected a random subsample of full-WIA customers to attempt to interview for the 15- and 30-month surveys. Thus, for completeness, it is important to check that our survey sampling strategy yielded a representative sample. This analysis is relevant only for the full-WIA group, because we included all individuals assigned to the core and core-and-intensive groups in the survey sample.

The baseline characteristics of full-WIA customers selected for the survey sample are very similar to those of full-WIA customers in the full study sample (Table A.4). We would expect about 3 of the 55 variables we examine to demonstrate statistically significant differences due to random error. In fact, we find only one variable with a statistically significant difference: 14 percent of full-WIA customers selected for the survey earned between two and three times the federal minimum wage at baseline, compared with 18 percent in the study sample.

Table A.4. Characteristics of full study sample and customers selected for survey (full-WIA customers)

	Study sample	Selected for survey	Difference
Adult (%)	55.6	58.5	-2.9
Dislocated worker (%)	34.9	32.7	2.2
Both adult and dislocated worker (%)	9.5	8.8	0.7
Female (%)	57.3	59.9	-2.7
Age at random assignment (%)			
18–20	3.2	3.1	0.1
21–24	10.6	12.7	-2.1
25–32	22.1	19.8	2.2
33–42	24.7	26.4	-1.7
43–50	19.0	20.7	-1.7
51 or older	20.4	17.2	3.2

	Study sample	Selected for survey	Difference
Race/ethnicity (%)			
Hispanic	13.1	12.0	1.2
White, non-Hispanic	39.3	36.7	2.6
Black, non-Hispanic	41.4	44.2	-2.8
Asian	3.2	3.7	-0.4
Native Hawaiian, Pacific Islander, or Native American	1.2	2.0	-0.8
Other, or multiple races	1.8	1.5	0.3
Primary spoken language is English (%)	93.8	94.2	-0.4
Primary spoken language is Spanish (%)	2.6	2.2	0.4
Primary spoken language is neither English nor Spanish (%)	3.6	3.6	0.1
Marital status (%)			
Currently married	27.7	27.9	-0.2
Separated, divorced, or widowed	27.9	26.0	1.9
Never married	44.5	46.1	-1.6
Working at time of random assignment (%)	1.6	2.2	-0.6
Employed in past five years (%)	75.7	77.1	-1.5
Last real hourly wage[a] ($)	15.22	14.50	0.72
Last real hourly wage was (%)			
Less than minimum wage	3.3	4.1	-0.8
Minimum wage exactly	0.7	1.0	-0.3
1.01 to 1.29 times the minimum	14.5	17.1	-2.5
1.30 to 1.69 times the minimum	17.5	20.4	-2.9
1.70 to 1.99 times the minimum	9.2	8.3	0.9
2.00 to 2.99 times the minimum	17.9	14.4	3.5*
3.00 to 3.99 times the minimum	6.2	5.6	0.7
4.00 to 4.99 times the minimum	2.6	2.4	0.2
5.00 or more times the minimum	2.9	2.7	0.2
Not employed in past five years (%)	24.3	22.9	1.5
Highest degree (%)			
Less than high school degree	6.7	7.8	-1.1
High school or GED	68.8	69.8	-1.0
Associate's or equivalent	8.9	8.2	0.8
Bachelor's or equivalent	12.0	11.5	0.5
Master's or higher	3.5	2.8	0.8
Received a vocational training certificate[b] (%)	16.7	17.6	-0.9
Have health problems that limit work or training (%)	4.3	4.7	-0.4
Household size (%)			
Sole member	22.6	21.5	1.1
2 or 3 members	46.4	47.3	-0.9
4 or 5 members	24.3	24.1	0.3
6 or more members	6.6	7.1	-0.5
Receipt of public assistance (%)			
TANF, SSI/SSDI, or GA	11.2	10.1	1.1
SNAP or WIC	35.5	36.1	-0.6
Unemployment compensation	29.2	29.0	0.2
Other public assistance	1.2	1.7	-0.4
Counselor-predicted likelihood of training (%)			
Very likely	44.7	46.0	-1.4
Somewhat likely	37.0	33.5	3.5
Somewhat unlikely	10.1	11.9	-1.8
Very unlikely	8.2	8.5	-0.3
Visited an AJC previously (%)	34.3	32.2	2.0
Sample size	**30,299**	**2,066**	

Source: WIA Gold Standard Evaluation's study registration form.

Notes: Dollars are 2012 dollars. Sample includes all full-WIA customers in the full-study sample. All data were weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. The survey sample column is also weighted to account for the probability that the customer was selected for the survey. Unadjusted means reported; significance of differences based on estimates adjusted to account for stratification of local areas by region and random assignment of customers by local area. See the other sections of this appendix for details.

[a] For customers who reported working in past five years.

[b] Respondent reported receiving a vocational or technical degree or certificate or a business degree or certificate.

* Indicates regression-adjusted difference in means is statistically significant at the 0.05 level.

AJC = American Job Center; GA = general assistance; GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; SSDI = Social Security Disability Insurance; SSI = Social Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Assessing the representativeness of survey respondents, by study group. In Tables A.5 to A.7, we compare the baseline characteristics of survey respondents with (1) survey nonrespondents, and (2) the full survey sample of respondents and nonrespondents we attempted to contact for follow-up interviews. The tables show whether the differences between the groups are statistically significant for analyses conducted with and without the survey nonresponse weights. Both sets of analyses use weights to adjust for other design factors. Statistics are shown separately for the core group (Table A.5), the core-and-intensive group (Table A.6), and the full-WIA group (Table A.7), because survey nonresponse might have varied by study group.

Overall, although the baseline characteristics of survey respondents and the full survey sample differ somewhat, the survey nonresponse weights help align the two samples. For the comparisons for each study group, we would anticipate finding significant differences across 5 percent of the characteristics compared (3 of the 55) simply by chance. In fact, we see 0 to 3 variables with significant differences between the groups when estimates are weighted, consistent with this expectation; across all three study groups, we see 5 significant differences among the 168 total comparisons (3.0 percent). We discuss these comparisons in more detail for each of the three study groups.

Results for the core group. When we do not apply our survey nonresponse weights, survey respondents in the core group differ from the core-group survey sample based on 9 of 55 characteristics examined (Table A.5). At random assignment, core-group respondents were less likely to be adults, more likely to be female, more likely to have been 51 or older, more likely to have been currently married, less likely to have never been married, more likely to have been working, more likely to have received a master's or higher degree, more likely to live in a household with two to three members, and more likely to have previously visited an American Job Center. When the sample is weighted to account for the probability of responding to the survey, core-group respondents do not differ from the core-group survey sample on any of the 55 characteristics we examined.

Table A.5. Characteristics of core customers selected for survey and survey respondents

		Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
	Survey sample	Responded to survey	Did not respond	Responded to survey	Survey sample–respondents	
Adult (%)	57.5	54.8	66.8	56.9	2.7*	0.6
Dislocated worker (%)	32.8	33.8	29.2	32.6	-1.0	0.2
Both adult and dislocated worker (%)	9.7	11.4	4.0	10.6	-1.7	-0.8
Female (%)	57.5	61.2	44.5	58.4	-3.8*	-1.0
Age at random assignment (%)						
18–20	7.7	5.6	14.8	5.8	2.1	1.9
21–24	10.6	8.5	17.5	9.6	2.0	0.9
25–32	18.9	18.9	18.7	19.5	-0.1	-0.6
33–42	24.0	24.9	21.1	25.0	-0.9	-1.0
43–50	17.0	17.5	15.2	17.8	-0.5	-0.7
51 or older	21.9	24.6	12.7	22.4	-2.7*	-0.5
Race/ethnicity (%)						
Hispanic	16.2	15.2	19.3	16.3	0.9	-0.2
White, non-Hispanic	38.8	39.3	37.2	39.7	-0.5	-0.9
Black, non-Hispanic	38.8	39.9	35.1	38.1	-1.1	0.7
Asian	3.6	3.0	5.5	3.2	0.6	0.4
Native Hawaiian, Pacific Islander, or Native American	1.2	1.0	1.7	1.1	0.2	0.1
Other, or multiple races	1.5	1.6	1.2	1.7	-0.1	-0.1
Primary spoken language is English (%)	92.3	93.6	87.9	92.4	-1.3	-0.1
Primary spoken language is Spanish (%)	3.8	3.0	6.6	4.2	0.8	-0.3
Primary spoken language is neither English nor Spanish (%)	3.9	3.4	5.5	3.4	0.5	0.5
Marital status (%)						
Currently married	29.3	32.2	19.7	31.0	-2.8*	-1.7
Separated, divorced, or widowed	27.9	29.1	24.2	27.6	-1.1	0.3
Never married	42.7	38.8	56.1	41.4	3.9*	1.3
Working at time of random assignment (%)	1.9	2.4	0.3	2.0	-0.5*	-0.1
Employed in past five years (%)	75.5	75.6	74.9	75.9	-0.2	-0.5
Last real hourly wage[a] ($)	14.28	14.66	12.92	14.48	-0.39	-0.20
Last real hourly wage was (%)						
Less than minimum wage	3.8	3.5	5.1	3.6	0.3	0.2
Minimum wage exactly	1.1	1.1	1.2	1.1	0.0	0.0
1.01 to 1.29 times the minimum	17.2	15.3	23.6	15.9	1.9	1.3
1.30 to 1.69 times the minimum	16.0	16.0	15.8	15.9	0.0	0.1
1.70 to 1.99 times the minimum	8.9	9.1	8.1	9.6	-0.2	-0.7
2.00 to 2.99 times the minimum	18.9	20.3	14.1	20.0	-1.4	-1.1
3.00 to 3.99 times the minimum	5.6	6.3	3.1	5.9	-0.7	-0.4
4.00 to 4.99 times the minimum	2.3	2.5	1.2	2.4	-0.3	-0.1
5.00 or more times the minimum	1.4	1.2	2.0	1.2	0.2	0.2
Not employed in past five years (%)	24.5	24.4	25.1	24.1	0.2	0.5

		Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
	Survey sample	Responded to survey	Did not respond	Responded to survey	Survey sample–respondents	
Highest degree (%)						
Less than high school degree	7.2	6.3	9.9	6.4	0.8	0.8
High school or GED	67.6	66.7	70.5	68.4	0.9	-0.8
Associate's or equivalent	10.2	9.9	10.9	9.4	0.2	0.7
Bachelor's or equivalent	12.1	13.4	7.6	12.5	-1.4	-0.5
Master's or higher	3.0	3.6	1.1	3.3	-0.6*	-0.2
Received a vocational training certificate[b] (%)	15.8	15.9	15.4	15.6	-0.1	0.2
Have health problems that limit work or training (%)	7.3	5.3	14.3	6.6	2.0	0.7
Household size (%)						
Sole member	21.3	20.0	26.0	19.9	1.4	1.4
2 or 3 members	40.5	42.4	34.3	41.5	-1.8*	-0.9
4 or 5 members	29.3	28.8	31.1	28.8	0.5	0.5
6 or more members	8.8	8.9	8.6	9.8	-0.1	-1.0
Receipt of public assistance (%)						
TANF, SSI/SSDI, or GA	16.0	13.7	23.6	15.1	2.2	0.8
SNAP or WIC	35.1	35.4	34.3	35.1	-0.2	0.1
Unemployment compensation	26.6	27.6	23.5	27.9	-0.9	-1.3
Other public assistance	2.2	2.5	1.4	2.2	-0.2	0.0
Counselor-predicted likelihood of training (%)						
Very likely	42.8	42.8	42.8	42.9	0.0	0.0
Somewhat likely	37.8	37.4	39.2	37.8	0.4	0.0
Somewhat unlikely	9.4	9.3	9.6	9.4	0.1	0.0
Very unlikely	10.0	10.5	8.4	10.0	-0.5	0.0
Visited an AJC previously (%)	35.7	38.6	26.2	37.7	-2.8*	-2.0
Sample size	**2,066**	**1,576**	**490**	**1,576**		

Source: WIA Gold Standard Evaluation's study registration form.

Notes: Dollars are 2012 dollars. The survey sample includes all customers in the core-and-intensive group. All data were weighted to account for the probability (1) that the local area was selected to participate in the study, (2) the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, and (5) that the customer was selected for the survey. Weighted columns are also weighted to account for (6) the probability that the customer completed the survey. Unadjusted means are reported; significance of differences are based on estimates adjusted to account for stratification of local areas by region and random assignment of customers by local area. See the other sections of this appendix for details.

[a] For customers who reported working in the past five years.

[b] Respondent reported receiving a vocational or technical degree or certificate or a business degree or certificate.

* Indicates regression-adjusted difference in means is statistically significant at the 0.05 level.

AJC = American Job Center; GA = general assistance; GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; SSDI = Social Security Disability Insurance; SSI = Social Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Results for the core-and-intensive group. Without weighting, customers in the core-and-intensive group who responded to the survey differed from the core-and-intensive survey sample based on 11 of the 55 characteristics examined (Table A.6). At random assignment, core-and-intensive respondents were less likely to be adults, more likely to be dislocated workers, less likely to be Asian, more likely to speak English as their primary language, more likely to have earned two to three times the federal minimum wage in their last job, more likely to have earned five or more times the federal minimum wage in their last job, more likely to have a master's or higher degree, less likely to have been the sole member of their household, more likely to have

been receiving unemployment compensation, and more likely to have previously visited an American Job Center. They also earned more in their most recent jobs before random assignment. When the estimated differences are weighted to account for differing probabilities of responding to the survey, core-and-intensive respondents differ on 2 of 55 characteristics; they are more likely to be dislocated workers, and they are more likely to have earned 1.7 to 1.99 times the federal minimum wage at their last job before random assignment.

Table A.6. Characteristics of core-and-intensive customers selected for survey and survey respondents

		Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
	Survey sample	Responded to survey	Did not respond	Responded to survey	Survey sample—respondents	
Adult (%)	56.4	52.9	69.0	56.2	3.6*	0.3
Dislocated worker (%)	32.9	35.2	24.5	33.1	-2.4*	-0.3*
Both adult and dislocated worker (%)	10.7	11.9	6.5	10.7	-1.2	0.0
Female (%)	59.6	60.9	55.2	59.4	-1.2	0.3
Age at random assignment (%)						
18–20	2.0	2.0	2.1	2.1	0.0	-0.1
21–24	10.2	9.9	11.6	10.3	0.4	0.0
25–32	23.0	23.0	23.0	22.2	0.0	0.8
33–42	24.6	25.4	21.9	25.9	-0.8	-1.3
43–50	17.6	15.9	23.6	17.0	1.7	0.6
51 or older	22.5	23.8	17.8	22.5	-1.3	-0.1
Race/ethnicity (%)						
Hispanic	14.5	13.9	16.5	14.2	0.6	0.3
White, non-Hispanic	39.1	39.8	36.6	40.7	-0.7	-1.6
Black, non-Hispanic	41.1	41.7	38.9	40.0	-0.6	1.1
Asian	1.9	1.4	3.6	1.5	0.5*	0.4
Native Hawaiian, Pacific Islander, or Native American	1.1	1.1	0.9	1.3	0.0	-0.2
Other, or multiple races	2.4	2.1	3.4	2.3	0.3	0.1
Primary spoken language is English (%)	95.1	96.3	91.1	95.7	-1.1*	-0.5
Primary spoken language is Spanish (%)	2.9	2.6	3.7	2.9	0.2	0.0
Primary spoken language is neither English nor Spanish (%)	2.0	1.1	5.3	1.4	0.9	0.6
Marital status (%)						
Currently married	26.9	27.8	23.4	26.5	-1.0	0.4
Separated, divorced, or widowed	26.4	25.8	28.3	26.2	0.5	0.2
Never married	46.8	46.3	48.3	47.3	0.4	-0.6
Working at time of random assignment (%)	1.3	1.3	1.2	1.1	0.0	0.2
Employed in past five years (%)	77.6	76.7	80.9	76.2	0.9	1.3
Last real hourly wage[a] ($)	15.19	15.51	14.03	15.33	-0.33*	-0.15
Last real hourly wage was (%)						
Less than minimum wage	3.4	3.4	3.1	3.3	-0.1	0.1
Minimum wage exactly	1.1	1.2	0.6	1.2	-0.1	-0.1
1.01 to 1.29 times the minimum	13.5	12.7	16.1	13.3	0.7	0.1
1.30 to 1.69 times the minimum	21.4	19.6	27.9	19.3	1.8	2.1
1.70 to 1.99 times the minimum	7.4	8.0	5.5	8.0	-0.5	-0.6*

		Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
	Survey sample	Responded to survey	Did not respond	Responded to survey	Survey sample—respondents	
2.00 to 2.99 times the minimum	17.9	19.4	12.5	18.9	-1.5*	-1.0
3.00 to 3.99 times the minimum	7.5	6.6	11.2	7.0	1.0	0.5
4.00 to 4.99 times the minimum	1.5	1.4	1.7	1.3	0.1	0.2
5.00 or more times the minimum	3.2	3.8	0.9	3.3	-0.6*	-0.1
Not employed in past five years (%)	22.4	23.3	19.1	23.8	-0.9	-1.3
Highest degree (%)						
Less than high school degree	8.5	7.4	12.4	8.5	1.1	0.0
High school or GED	65.7	65.1	67.7	64.2	0.6	1.5
Associate's or equivalent	10.0	10.6	7.9	10.1	-0.6	-0.1
Bachelor's or equivalent	13.2	13.9	11.0	14.5	-0.6	-1.3
Master's or higher	2.6	3.0	1.0	2.7	-0.5*	-0.1
Received a vocational training certificate[b] (%)	14.6	14.7	14.6	14.1	0.0	0.6
Have health problems that limit work or training (%)	5.6	5.2	7.2	5.3	0.4	0.3
Household size (%)						
Sole member	23.8	22.0	30.3	21.4	1.8*	2.4
2 or 3 members	46.8	47.5	44.5	49.9	-0.7	-3.1
4 or 5 members	24.2	25.2	20.8	23.6	-0.9	0.6
6 or more members	5.1	5.4	4.4	5.0	-0.2	0.1
Receipt of public assistance (%)						
TANF, SSI/SSDI, or GA	10.8	10.3	12.4	10.5	0.5	0.2
SNAP or WIC	38.3	39.2	34.9	38.6	-0.9	-0.4
Unemployment compensation	25.5	26.9	20.3	25.5	-1.5*	-0.1
Other public assistance	0.8	0.6	1.3	0.6	0.2	0.1
Counselor-predicted likelihood of training (%)						
Very likely	41.8	41.3	43.5	41.7	0.5	0.0
Somewhat likely	35.7	35.1	37.4	34.6	0.5	1.0
Somewhat unlikely	12.4	13.1	10.1	13.0	-0.7	-0.6
Very unlikely	10.2	10.5	9.0	10.6	-0.3	-0.4
Visited an AJC previously (%)	33.4	35.1	27.3	33.1	-1.7*	0.3
Sample size	**2,064**	**1,578**	**486**	**1,578**		

Source: WIA Gold Standard Evaluation's study registration form.

Notes: Dollars are 2012 dollars. The survey sample includes all customers in the core-and-intensive group. All data were weighted to account for the probability (1) that the local area was selected to participate in the study, (2) the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, and (5) that the customer was selected for the survey. Weighted columns are also weighted to account for (6) the probability that the customer completed the survey. Unadjusted means are reported; significance of differences are based on estimates adjusted to account for stratification of local areas by region and random assignment of customers by local area. See the other sections of this appendix for details.

[a] For customers who reported working in the past five years.

[b] Respondent reported receiving a vocational or technical degree or certificate or a business degree or certificate.

* Indicates regression-adjusted difference in means is statistically significant at the 0.05 level.

AJC = American Job Center; GA = general assistance; GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; SSDI = Social Security Disability Insurance; SSI = Social Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Results for the full-WIA group. Without weighting, full-WIA survey respondents differed from the full-WIA survey sample based on 10 of 55 characteristics examined (Table A.7). At random assignment, respondents were less likely to be adults, more likely to be female, less likely to be 25 to 32 years old, more likely to be 43 to 50 years old, less likely to speak a

language other than English or Spanish as their primary language, more likely to have earned two to three times the federal minimum wage at their last jobs, more likely to have received a vocational degree, more likely to live in a household with two or three members, more likely to have been receiving SNAP or WIC, and more likely to have their counselor rate their chances of receiving training as somewhat likely. When the sample is weighted to account for differing probabilities of response, full-WIA respondents differ from the full-WIA survey sample on 3 of 55 characteristics examined. They were more likely to be dislocated workers, to be 18 to 20 years old at random assignment, and to have earned two to three times the federal minimum wage at their last job before random assignment.

Table A.7. Characteristics of full-WIA customers selected for survey and survey respondents

		Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
	Survey sample	Responded to survey	Did not respond	Responded to survey	Survey sample—respondents	
Adult (%)	58.5	56.5	66.7	58.1	2.0*	0.4
Dislocated worker (%)	32.7	34.3	26.3	32.8	-1.6	-0.1*
Both adult and dislocated worker (%)	8.8	9.2	7.0	9.2	-0.4	-0.4
Female (%)	59.9	63.7	45.1	60.9	-3.7*	-1.0
Age at random assignment (%)						
18–20	3.1	3.1	2.8	3.3	-0.1	-0.3*
21–24	12.7	11.7	16.8	12.3	1.0	0.5
25–32	19.8	18.2	26.5	18.3	1.7*	1.5
33–42	26.4	27.1	23.7	26.9	-0.7	-0.5
43–50	20.7	21.8	16.2	22.0	-1.1*	-1.3
51 or older	17.2	18.1	13.9	17.2	-0.8	0.1
Race/ethnicity (%)						
Hispanic	12.0	11.7	12.8	11.7	0.2	0.2
White, non-Hispanic	36.7	37.0	35.4	36.4	-0.3	0.3
Black, non-Hispanic	44.2	44.6	42.6	45.0	-0.4	-0.8
Asian	3.7	3.3	5.0	3.6	0.3	0.1
Native Hawaiian, Pacific Islander, or Native American	2.0	1.8	3.0	1.8	0.2	0.2
Other, or multiple races	1.5	1.5	1.2	1.5	-0.1	-0.1
Primary spoken language is English (%)	94.2	95.2	90.3	94.7	-1.0	-0.6
Primary spoken language is Spanish (%)	2.2	2.4	1.6	2.2	-0.2	0.0
Primary spoken language is neither English nor Spanish (%)	3.6	2.4	8.1	3.1	1.1*	0.5
Marital status (%)						
Currently married	27.9	28.1	26.9	28.1	-0.2	-0.3
Separated, divorced, or widowed	26.0	25.6	27.9	25.5	0.5	0.5
Never married	46.1	46.3	45.1	46.4	-0.2	-0.3
Working at time of random assignment (%)	2.2	2.4	1.6	2.0	-0.1	0.2
Employed in past five years (%)	77.1	77.7	74.9	77.2	-0.6	-0.1
Last real hourly wage[a] ($)	14.50	14.15	15.88	14.07	0.34	0.43

		Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
	Survey sample	Responded to survey	Did not respond	Responded to survey	Survey sample—respondents	
Last real hourly wage was (%)						
Less than minimum wage	4.1	4.3	3.1	5.0	-0.2	-1.0
Minimum wage exactly	1.0	1.0	0.9	1.0	0.0	0.1
1.01 to 1.29 times the minimum	17.1	16.5	19.5	16.3	0.6	0.8
1.30 to 1.69 times the minimum	20.4	20.7	19.2	20.4	-0.3	0.0
1.70 to 1.99 times the minimum	8.3	8.0	9.2	8.1	0.2	0.2
2.00 to 2.99 times the minimum	14.4	15.4	10.4	14.9	-1.0*	-0.5*
3.00 to 3.99 times the minimum	5.6	6.0	4.0	5.8	-0.4	-0.2
4.00 to 4.99 times the minimum	2.4	2.5	1.8	2.5	-0.2	-0.1
5.00 or more times the minimum	2.7	1.9	5.9	2.0	0.8	0.7
Not employed in past five years (%)	22.9	22.3	25.1	22.8	0.6	0.1
Highest degree (%)						
Less than high school degree	7.8	6.7	11.9	7.4	1.0	0.4
High school or GED	69.8	70.2	68.2	70.3	-0.4	-0.5
Associate's or equivalent	8.2	8.6	6.6	8.0	-0.4	0.1
Bachelor's or equivalent	11.5	11.7	10.6	11.4	-0.2	0.1
Master's or higher	2.8	2.8	2.7	2.9	0.0	-0.1
Received a vocational training certificate[b] (%)	17.6	19.6	9.8	19.4	-1.9*	-1.8
Have health problems that limit work or training (%)	4.7	4.7	4.7	4.7	0.0	0.0
Household size (%)						
Sole member	21.5	21.1	22.9	20.7	0.4	0.8
2 or 3 members	47.3	49.7	37.4	49.9	-2.5*	-2.6
4 or 5 members	24.1	22.2	31.4	22.4	1.8	1.6
6 or more members	7.1	6.9	8.3	7.0	0.3	0.2
Receipt of public assistance (%)						
TANF, SSI/SSDI, or GA	10.1	9.2	13.9	9.9	0.9	0.2
SNAP or WIC	36.1	37.9	28.8	37.3	-1.8*	-1.2
Unemployment compensation	29.0	31.3	19.9	30.1	-2.3	-1.0
Other public assistance	1.7	1.5	2.3	1.4	0.2	0.3
Counselor-predicted likelihood of training (%)						
Very likely	46.0	45.9	46.6	46.2	0.1	-0.2
Somewhat likely	33.5	34.2	31.0	33.8	-0.6*	-0.3
Somewhat unlikely	11.9	11.8	12.6	11.8	0.2	0.1
Very unlikely	8.5	8.1	9.8	8.1	0.3	0.3
Visited an AJC previously (%)	32.2	31.8	34.0	32.5	0.4	-0.2
Sample Size	**2,066**	**1,623**	**443**	**1,623**		

Source: WIA Gold Standard Evaluation's study registration forms.

Notes: Dollars are 2012 dollars. The survey sample includes all customers in the core-and-intensive group. All data were weighted to account for the probability (1) that the local area was selected to participate in the study, (2) the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, and (5) that the customer was selected for the survey. Weighted columns are also weighted to account for (6) the probability that the customer completed the survey. Unadjusted means are reported; significance of differences are based on estimates adjusted to account for stratification of local areas by region and random assignment of customers by local area. See the other sections of this appendix for details.

[a] For customers who reported working in the past five years.

[b] Respondent reported receiving a vocational or technical degree or certificate or a business degree or certificate.

* Indicates regression-adjusted difference in means is statistically significant at the 0.05 level.

AJC = American Job Center; GA = general assistance; GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; SSDI = Social Security Disability Insurance; SSI = Social Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

C. Accounting for item nonresponse and outliers

Missing data are a potential source of bias in our analysis of the 30-month follow-up survey data. Imputation can help us to reduce this bias, particularly when we know some information about an outcome. For example, suppose we seek to analyze data on quarterly earnings. To calculate a person's earnings in a given quarter, we have to know when he or she started and ended each job reported in the survey, the hourly wages in these jobs, and how many hours the person worked in each job. If any one of these elements is missing for any job, we might not be able to calculate quarterly earnings. Knowing several of these elements, however, tells us a lot about an individual's earnings. Imputation enables us to use the features of the data to create an estimate of the missing components needed to construct earnings (and other outcomes). When the components are estimated, we can then create the final outcomes of interest.

Imputation is particularly important in cases in which data might be systematically missing. Using the previous example, if an individual was not employed during the quarter of interest, we know that his or her wage and salary earnings will be zero. However, many more data items are required to construct a measure of earnings for employed individuals and, thus, it is more likely that employed individuals will have missing earnings. This suggests that, without imputation, our estimates of earnings might be biased downward.

We used three methods in sequence to impute missing or illogical data for specific survey items. First, we used logical imputation to correct for inconsistencies or incomplete responses to survey items related to wage rates. We next used a simple imputation method similar to hot-deck imputation in two cases: (1) to fill in specific numeric values for categorical data for two variables in which individuals were asked to provide a range of values when they felt they could not provide a specific number (total annual household income and total cost of a training program), and (2) to determine whether individuals who were interviewed before the end of the 30-month follow-up period and were still enrolled in a training or working in a job at the time of the interview remained in that training or job at the end of the follow-up period. Finally, we used predictive mean matching to fill in any remaining missing information from survey items used to construct key outcomes related to training, employment, and earnings. All imputations of dollar amounts were conducted using 2012 dollars. The rest of this section discusses these imputation methods in more detail.

1. Logical imputation

We used logical imputation to determine a customer's hourly wage rate at a specific job in three cases: (1) when a customer reported being employed in the same job on the 15- and 30-month surveys but reported a wage rate for that job on only one of the surveys; (2) when the customer provided a rate of pay but not an associated pay period, which did not enable us to compute a wage in dollars-per-hour terms; or (3) when the customer provided a rate of pay and pay period that implied an implausibly large or small hourly pay rate.

Of the 4,777 respondents to the 30-month survey, 4,353 previously responded to the 15-month survey, and 2,664 reported one or more of the same jobs on both surveys (with 204 customers reporting two or more of the same jobs on both surveys). By looking across surveys, we filled in wage rate information for 166 jobs held by 162 customers.

In addition, 188 survey responders reported earnings information using a nonstandard pay period that did not enable us to estimate an hourly wage rate for at least one of up to 10 jobs they held in the 30-month follow up period. Of these customers, 31 reported receiving wages per mile driven, but did not provide miles driven per any unit of time. Another 69 customers reported receiving wages that included tips, bonuses, or commissions but did not specify the amount received in tips. Ninety-three customers reported pay per event, but did not provide the amount of time to complete an event.[4] We imputed wages for these customers using the following rules:

- For customers who reported pay per mile or pay per event in motor vehicle operator jobs, we imputed wages using the median wage of motor vehicle operators who did not report pay per mile or event.
- For customers who reported receiving pay per event or additional pay from tips, bonuses, or commissions and who were (1) food-and-beverage-serving workers, (2) other food-preparation-and-serving-related workers, or (3) retail sales workers or sales representatives, we imputed hourly wages using the median hourly wage of workers in that occupational group who did not report receiving wages per event or wages plus tips, bonuses, or commissions.
- For customers who reported pay per event and were either postsecondary teachers or other teachers and instructors, we assumed one event was completed every six months, corresponding to an academic semester. If the work spell lasted fewer than six months, we assumed one event was completed over the work spell.

We also adjusted particularly low or high hourly wage rates by changing the period of pay using logical imputation. For customers who reported a nonhourly period of pay and for whom the implied wage rate was less than $5 per hour, we adjusted the reported period of pay, choosing the period that resulted in an hourly wage rate closest to the median wage in our sample of customers with the same occupation.[5] Similarly, if a customer's implied hourly wage was greater than $1,000 per hour, or if he or she reported a rate of pay but not a pay period, we adjusted the period of pay, selecting the one that implied an hourly wage rate closest to the median hourly wage in our sample for that customer's occupation.

We set to missing all hourly wages that remained less than the federal minimum wage for tipped employees ($2.13) for all workers after the preceding adjustments. We also set to missing all wages of customers reporting pay per event or pay plus tips, bonuses, or commissions, in occupations not explicitly listed here. These missing wages were then imputed using predictive mean matching (Section C.3).

2. Imputation using a hot-deck method

For two important survey items—total annual household income and the total cost of a training program—we asked respondents who refused or were unable to provide a specific dollar value to provide a categorical response. We used a simple imputation method to fill in values for

[4] Four of these customers also reported wages for a job on a per mile basis, and one of these customers also reported wages for a job inclusive of tips, bonuses, or commissions.

[5] Potential periods of pay were hourly, daily, weekly, biweekly, semimonthly, monthly, and yearly.

these variables while maintaining the patterns observed for the subsample of respondents who provided numerical responses. For each respondent providing a categorical response to a survey item, we selected at random an individual in the same study group with income or costs in the same category who provided an exact dollar response, called the donor observation. The customer with missing data inherited the donor's exact income or cost amount. For the cost of training, we conducted this imputation at the program level, rather than the customer level (that is, the donor observation is a training program and not a customer, as customers could enroll in multiple programs).

We also explored using predictive mean matching to impute exact numerical values for these survey items (following the procedures described in the next section). However, we discovered that these more complex imputation procedures could sometimes lead to the imputation of numerical values far outside the provided categorical ranges.[6] This simpler procedure maintains the underlying data structure, while avoiding such issues. We used this method to impute total household income for 885 customers and training costs for 218 training programs across 191 unique customers (Table A.8).

To construct some measures related to jobs and earnings, we required information on individuals for all 130 weeks of the 30-month follow-up period; however, we interviewed 417 customers fewer than 130 weeks after randomization for our final follow-up survey. All such respondents were interviewed in the 30th month after randomization. On average, these interviews occurred 12 days before the end of the follow-up period. Of the 417 customers, 310 were enrolled in a training program or working in a job at the time they were interviewed.

We used a similar imputation method to estimate whether these customers were still enrolled in a training or working in a job by the final week of the 30-month follow-up period. Specifically, to impute whether a customer was working in a specific job, we created groups of customers based on study group and number of jobs held during the follow-up period. We then matched every job with missing information on employment in the final week of the follow-up period based on start date to a job held by a customer in the same group. If the customer corresponding to this match was working in the matched job at the end of the 30-month follow-up period, we assumed the customer interviewed before the end of the 30-month follow-up period remained in that job until the end of the follow-up period. Otherwise, we assumed the customer left the job at the midpoint between the date of the interview and the end of the follow-up period. We proceeded similarly for any trainings that early-interview customers were enrolled in at the time of their interviews. These methods enabled us to extend the information available on 322 jobs held by 297 customers and 29 training programs enrolled in by 26 customers (Table A.9).

[6] Some respondents also provided categorical, but not numerical, responses to survey items measuring hours worked per week. Predictive mean matching performs well for these survey items because it uses actual values from other customers, thus maintaining the characteristics of the variable being imputed. For example, if, among similar customers, no one is observed to have worked more than 60 hours per week, no imputed value will exceed 60 hours. Like many other methods of imputation, imputed values could be outside the bounds of a provided category, but this was rare and deviations tended to be small. In these cases, we used our standard imputation procedures but forced imputed values to be inside reported bounds. For example, if a customer reported working 40 to 49 hours per week but was imputed to have worked 50 hours per week, we set hours worked per week to 49.

Table A.8. Number of cases imputed using categorical data

Variable imputed	Number of cases imputed			Percentage of cases imputed		
	Full-WIA	Core-and-intensive	Core	Full-WIA	Core-and-intensive	Core
Total annual household income	306	287	292	18.9	18.2	18.5
Trainings first reported on 15-month survey						
Total cost of training 1	31	33	32	1.9	2.1	2.0
Total cost of training 2	12	4	9	0.7	0.3	0.6
Total cost of training 3	2	1	1	0.1	0.1	0.1
Total cost of training 4	2	0	1	0.1	0.0	0.1
Total cost of training 5	0	0	1	0.0	0.0	0.1
Trainings first reported on 30-month survey						
Total cost of training 1	21	21	30	1.3	1.3	1.9
Total cost of training 2	8	2	3	0.5	0.1	0.2
Total cost of training 3	1	1	1	0.1	0.1	0.1
Total cost of training 4	0	0	0	0.0	0.0	0.0
Total cost of training 5	0	1	0	0.0	0.1	0.0
Sample size	**1,623**	**1,578**	**1,576**	**1,623**	**1,578**	**1,576**

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Note: Unweighted percentage of cases reported.

Table A.9. Number of cases imputed because of early interview

Variable imputed	Number of cases imputed			Percentage of cases imputed		
	Full-WIA	Core-and-intensive	Core	Full-WIA	Core-and-intensive	Core
Trainings first reported on 15-month survey						
Still enrolled in training 1, 30 months after random assignment	1	7	5	0.1	0.4	0.3
Still enrolled in training 2, 30 months after random assignment	0	1	1	0	0.1	0.1
Still enrolled in training 3, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Still enrolled in training 4, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Still enrolled in training 5, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Trainings first reported on 30-month survey						
Still enrolled in training 1, 30 months after random assignment	4	7	2	0.2	0.4	0.1
Still enrolled in training 2, 30 months after random assignment	0	1	0	0.0	0.1	0.0
Still enrolled in training 3, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Still enrolled in training 4, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Still enrolled in training 5, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Jobs first reported on the 15-month survey						
Still employed in job 1, 30 months after random assignment	59	43	54	3.6	2.7	3.4

Variable imputed	Number of cases imputed			Percentage of cases imputed		
	Full-WIA	Core-and-intensive	Core	Full-WIA	Core-and-intensive	Core
Still employed in job 2, 30 months after random assignment	3	1	1	0.2	0.1	0.1
Still employed in job 3, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Still employed in job 4, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Still employed in job 5, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Jobs first reported on the 30-month survey						
Still employed in job 1, 30 months after random assignment	50	43	48	3.1	2.7	3.0
Still employed in job 2, 30 months after random assignment	6	6	4	0.4	0.4	0.3
Still employed in job 3, 30 months after random assignment	1	1	1	0.1	0.1	0.1
Still employed in job 4, 30 months after random assignment	1	0	0	0.1	0.0	0.0
Still employed in job 5, 30 months after random assignment	0	0	0	0.0	0.0	0.0
Sample size	**1,623**	**1,578**	**1,576**	**1,623**	**1,578**	**1,576**

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Note: Unweighted percentage of cases reported.

3. Predictive mean matching

We used predictive mean matching to impute missing values for survey items, which we used to build more complex constructs measuring key employment, income, and training outcomes. We did not impute missing values for all variable subcomponents to limit the number of imputation equations and associated estimation complexities (such as model convergence and implausible imputed values). Rather, for tractability, we performed the imputations only for subcomponents of key variables.

For training outcomes, we imputed the survey items needed to create our key measures of enrollment in training by quarter, amount paid for training, and total cost of training (if neither categorical nor numerical data were provided). For each of up to 10 training programs, we imputed any missing values for the start and end months of training, start and end years of training, the total cost of the training program (if neither categorical nor numerical data were provided), and the share of the training program's cost an individual (or his or her family) paid for him- or herself. We imputed information about a training program as long as a survey respondent provided sufficient information to determine the total number of training programs he or she participated in over the follow-up period.

For employment-related outcomes, we imputed the survey items used to create key measures of quarterly earnings, weeks and hours worked, and the hourly wage rate. For each of up to 10 jobs, we imputed missing values for the start and end months of the job, the start and end years of the job, the weekly hours worked at the job, the real hourly wage at the job (in 2012 dollars), whether an individual was ever on leave from the job, and the share of time employed at the job that the person was on leave. We imputed information about a job as long as a survey respondent

provided sufficient information to determine the number of jobs he or she held over the follow-up period.

We also imputed variables related to receipt of public assistance and total household income: the months in the past year an individual received funding from SNAP, months in the past year he or she received cash assistance from programs such as TANF or Supplemental Security Income (SSI), monthly SNAP benefit, monthly cash assistance benefit, and total annual household income (if neither categorical nor numerical data were provided). We also attempted to impute the months a customer received other benefits and the monthly amount of those benefits. However, the sample of customers who received such benefits was too small to make this imputation practical.

We used Stata's multiple imputation suite to create a single imputation for each missing value for these variables. We conducted all imputations separately across study groups to account for potentially different patterns of missing data. Missing responses were iteratively imputed using chained equations and predictive mean matching to preserve the structure of the data and the relationships between variables observed in the nonmissing data (Azur et al. 2011; van Buuren et al. 2006; Royston and White 2011; White et al. 2011).

The chained-equation imputation approach is similar to Gibbs sampling, a common Markov chain-Monte Carlo method for obtaining observations from a multivariate normal distribution (Geman and Geman 1984; Gelfand and Smith 1990). This procedure enables us to simultaneously impute values for multiple variables. This is particularly valuable because it allows imputed data to exhibit the same correlations as the actual data.

Predictive mean matching is a hybrid of regression imputation and traditional hot- or cold-deck methods. Like hot- or cold-deck methods, it replaces missing data only with actual observed values. This allows imputed values to have the same distribution as nonimputed data. However, predictive mean matching also uses regression to guide which observation should be the donor case for each missing data point, allowing the imputed values to align more closely with the underlying data-generating process. Importantly, the regression model for a particular dependent variable includes two types of covariates: (1) other dependent variables in the chain, and (2) exogenous covariates. These covariates could differ across models.

More formally, we imputed missing values of variables Y_1, Y_2, ... Y_p using an iterative process. $Y_i^{(t)}$ is the value of Y_i from iteration *t* of the procedure and *X* is the set of other variables used to impute *Y*, such as race and gender.[7] Round *t* of the process begins with the estimation of a regression of *Y* on *X*, $Y_2^{(t-1)}$, $Y_3^{(t-1)}$, ..., and $Y_p^{(t-1)}$. The regression produces a vector of predicted values, $Y_1^{(t)}$. Next, $Y_2^{(t)}$ is estimated using a regression with controls *X*, $Y_1^{(t)}$, $Y_3^{(t-1)}$, ... , and $Y_p^{(t-1)}$. Then, $Y_3^{(t)}$ is estimated based on a regression with controls *X*, $Y_1^{(t)}$, $Y_2^{(t)}$, $Y_4^{(t-1)}$, ... , and $Y_p^{(t)}$. This continues until $Y_p^{(t)}$ is estimated based on X_p, $Y_1^{(t)}$, $Y_2^{(t)}$, … , and $Y_{p-1}^{(t)}$. The whole

[7] When a customer did not report a value for one of the *X* variables (for example, race) we imputed these variables to their mean value within study group. If more than 10 percent of observations were missing, we also included an additional *X* variable, which indicates whether an observation's value is imputed or observed.

process is repeated until $Y^{(t)}$ is arbitrarily close to $Y^{(t-1)}$. We used 75 iterations of this process and examined changes in $Y^{(t)}$ across iterations to ensure the process produced stable estimates (van Buuren 2007). The final round of regressions produced a coefficient vector (β) and associated variance-covariance matrix (*var(* β *)*).

We used the results of these regressions to impute outcomes, following a predictive mean matching approach. First, we drew a value of β^* from a normal distribution with mean β and variance *var(* β *)*. We then used this value to generate predicted values of *Y* for all cases, called Y^*. For each customer *i* who did not provide a value for Y_k, we identified customer *c*, for which $Y_{ck}{}^*$ is closest to $Y_{ik}{}^*$ but Y_{ck} is not missing. We then set the imputed value of Y_{ik} to Y_{ck}.

To maintain tractability, we further specified that certain *X* and *Y* variables not be used to impute Y_k. For example, we do not use a person's wage rate to impute the start month of a training program, because these variables likely are not correlated (conditional on other imputed variables, such as the start month of employment). Table A.10 summarizes the variables used to impute each outcome.

Each individual in our sample could have reported holding up to 10 jobs and participating in up to 10 training programs during the follow-up period. In imputing the characteristics of jobs and training programs, we faced a trade-off. We could (1) define the data at the job or training program level and treat each job or training program reported as a separate observation, or (2) define the data at the customer level and treat the characteristics of job or training program *j* as different outcome variables. The first approach enables us to use more observations in imputing a given missing value, but the second approach enables us to better capture the relationships between the characteristics of the jobs and training programs reported by a customer.

We used a hybrid approach to balance these trade-offs. In an initial imputation step, we used data at the customer level to impute the characteristics of the last training program customers enrolled in during the follow-up period, the last two jobs held during the follow-up period, household annual income, and variables related to receipt of public assistance. In a second step, we redefined the data at the training program level and imputed any remaining information on all other trainings that individuals reported. Finally, we redefined the data at the job level and imputed the characteristics of any additional jobs that a customer reported.

Table A.10. Variables used in imputation procedure

Variable to impute	Other imputed variables included in imputation	Controls
Training variables		
Start month of training *j* (*j* = 1, 2, … 10)	Start year, end month, and end year or training *j* Start and end dates of up to seven jobs and four other trainings The total cost of training *j*	Core variables Number of trainings enrolled in Number of jobs held Whether training was in-class education, in-class vocational at a school, in-class educational elsewhere, or on-the-job training
Start year of training *j* (*j* = 1, 2, ... 10)	Start month, end month, and end year of training *j* Start and end dates of up to seven jobs and four other trainings The total cost of training *j*	Core variables Number of trainings enrolled in Number of jobs held Whether training was in-class education, in-class vocational at a school, in-class educational elsewhere, or on-the-job training
End month of training *j* (*j* = 1, 2, ... 10)	Start month, start year, and end year of training *j* Start and end dates of up to seven jobs and four other trainings The total cost of training *j*	Core variables Number of trainings enrolled in Number of jobs held Whether training was in-class education, in-class vocational at a school, in-class educational elsewhere, or on-the-job training
End year of training *j* (*j* = 1, 2, ... 10)	Start month, start year, and end month of training *j* Start and end dates of up to seven jobs and four other trainings The total cost of training *j*	Core variables Number of trainings enrolled in Number of jobs held Whether training was in-class education, in-class vocational at a school, in-class educational elsewhere, or on-the-job training
Total cost of training *j* (*j* = 1, 2, ... 10)	Start month, start year, end month, and end year of training *j* Start and end dates of up to seven jobs and four other trainings Amount paid for all other trainings Total cost of all other trainings	Core variables Number of trainings enrolled in Number of jobs held Whether training was in-class education, in-class vocational at a school, in-class educational elsewhere, or on-the-job training Specific location of training
Share paid for training *j* (*j* = 1, 2, ... 10) by customer or family	Start and end date of training *j* Start and end dates of up to seven jobs and four other trainings	Core variables Number of trainings enrolled in Number of jobs held Whether training was in-class education, in-class vocational at a school, in-class educational elsewhere, or on-the-job training Specific location of training Receipt of funding from WIA, other government sources, or nongovernment sources
Employment variables		
Start month of job *j* (*j* = 1, 2, ... 10)	Start and end dates of up to five other jobs and five trainings All other variables imputed for job *j*	Core variables Number of trainings enrolled in Number of jobs held
Start year of job *j* (j = 1, 2, ... 10)	Start and end dates of up to five other jobs and five trainings All other variables imputed for job *j*	Core variables Number of trainings enrolled in Number of jobs held

Variable to impute	Other imputed variables included in imputation	Controls
End month of job *j* (*j* = 1, 2, ... 10)	Start and end dates of up to five other jobs and five trainings All other variables imputed for job *j*	Core variables Number of trainings enrolled in Number of jobs held
End year of job *j* (*j* = 1, 2, ... 10)	Start and end dates of up to five other jobs and five trainings All other variables imputed for job *j*	Core variables Number of trainings enrolled in Number of jobs held
Real hourly wage in job *j* (*j* = 1, 2, ... 10)	Start and end dates of up to five other jobs and five trainings Hours worked per week in all other jobs Hourly wages in all other jobs All other variables imputed for job *j*	Core variables Number of trainings enrolled in Number of jobs held 2-digit industry code 2-digit occupation code Whether enrolled in any vocational training, on-the-job training, or educational program in the follow-up period Educational attainment at the time of the follow-up survey Fringe benefits received from job Earnings in job *j* if reported in terms other than hourly
Hours worked per week in job *j* (*j* = 1 ,2, ... 10)	Start and end dates of up to five other jobs and five trainings Hours worked per week in all other jobs Hourly wages in all other jobs All other variables imputed for job *j*	Core variables Number of trainings enrolled in Number of jobs held 2-digit industry code 2-digit occupation code Whether enrolled in any vocational training, on-the-job training, or educational program in the follow-up period Educational attainment at the time of the follow-up survey Fringe benefits received from job Categorical number of hours worked per week
Any leave taken from job *j* (*j* = 1, 2, ... 10)	Wage rate in job *j* Hours typically worked per week in job *j*	Core variables Number of trainings enrolled in Number of jobs held Whether enrolled in any vocational training, on-the-job training, or educational program in the follow-up period Educational attainment at the time of the follow-up survey Fringe benefits received from job
Share of time employed spent on leave from job *j* (*j* = 1, 2, ... 10)	None	Core variables Number of trainings enrolled in Number of jobs held Whether enrolled in any vocational training, on-the-job training, or educational program in the follow-up period Educational attainment at the time of the follow-up survey Fringe benefits received from job

Variable to impute	Other imputed variables included in imputation	Controls
Other variables		
Months received SNAP	Monthly SNAP payment Total annual household income	Core variables Family size Number of children younger than 18 in household Receipt of SNAP, WIC, cash assistance, and other benefits
Months received cash assistance from TANF, SSI, SSA, or GA	Monthly cash assistance payment Total annual household income	Core variables Family size Number of children younger than 18 in household Receipt of SNAP, WIC, cash assistance, and other benefits
Monthly SNAP benefit	Months received SNAP Total annual household income	Core variables Family size Number of children younger than 18 in household Receipt of SNAP, WIC, cash assistance, and other benefits
Monthly payment from TANF, SSI, SSA, or GA	Months received cash assistance Total annual income	Core variables Family size Number of children younger than 18 in household Receipt of SNAP, WIC, cash assistance, and other benefits
Total annual household income	Annual SNAP payment Annual cash assistance payment Weekly earnings in all jobs	Core variables Family size Number of children younger than 18 in household Receipt of SNAP, WIC, cash assistance, and other benefits Amount of other benefits received annually

Note: The core variables used for all imputations include measures collected by the WIA Gold Standard study registration form before random assignment. These include adult or dislocated worker status; gender; age; race/ethnicity; main language spoken; marital status; whether an individual worked in the past five years; whether an individual was working at random assignment; the real wage rate (2012 dollars) an individual earned at his or her last job; educational attainment; household size; receipt of cash assistance, SNAP or WIC, unemployment compensation, or other transfer income; whether the individual was very likely, somewhat likely, somewhat unlikely, or very unlikely to participate in training; whether an individual previously used the resources at an American Job Center; the weight used in our impact analysis; and indicators for local area.

GA = general assistance; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSI = Social Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

As shown in Table A.11, we imputed a small percent of cases for each outcome using predictive mean matching. Furthermore, missing data rates are similar across the three study groups. With this relatively small amount of imputation, we can be confident that the resulting data will produce estimates that are less biased and have lower MSE than those produced by nonimputed data (Lee and Huber 2011).

To examine the effects of imputation on our results, we also estimated impacts for key variables using only nonimputed data (see Appendix B, Section B). These results are very similar to those from our benchmark approach using imputation.

Table A.11. Number of cases imputed for each variable using predictive mean matching

Variable imputed	Number of cases imputed			Percentage of cases imputed		
	Full-WIA	Core-and-intensive	Core	Full-WIA	Core-and-intensive	Core
Trainings first reported on the 15-month survey						
Training 1						
Start month of training	21	16	19	1.3	1.0	1.2
Start year of training	2	2	0	0.1	0.1	0.0
End month of training	17	13	12	1.0	0.8	0.8
End year of training	2	5	3	0.1	0.3	0.1
Total cost of training	34	19	15	2.1	1.2	1.0
Share paid for training by customer of family	58	40	42	3.6	2.5	2.7
Training 2						
Start month of training	6	3	7	0.4	0.2	0.4
Start year of training	0	0	0	0.0	0.0	0.0
End month of training	6	4	7	0.4	0.3	0.4
End year of training	2	2	0	0.1	0.1	0.0
Total cost of training	5	1	2	0.3	0.1	0.1
Share paid for training by customer or family	4	2	4	0.2	0.1	0.3
Training 3						
Start month of training	5	1	4	0.3	0.1	0.3
Start year of training	0	1	2	0.0	0.1	0.1
End month of training	3	0	4	0.2	0.0	0.3
End year of training	0	0	2	0.0	0.0	0.1
Total cost of training	4	0	1	0.2	0.0	0.1
Share paid for training by customer or family	2	0	1	0.1	0.0	0.1
Training 4						
Start month of training	1	0	1	0.1	0.0	0.1
Start year of training	0	0	1	0.0	0.0	0.1
End month of training	0	0	1	0.0	0.0	0.1
End year of training	0	0	1	0.0	0.0	0.1
Total cost of training	1	0	2	0.1	0.0	0.1
Share paid for training by customer or family	0	1	2	0.0	0.06	0.1
Training 5						
Start month of training	1	0	0	0.1	0.0	0.0
Start year of training	0	0	0	0.0	0.0	0.0
End month of training	1	0	0	0.1	0.0	0.0
End year of training	0	0	0	0.0	0.0	0.0
Total cost of training	0	0	0	0.0	0.0	0.0

Variable imputed	Number of cases imputed			Percentage of cases imputed		
	Full-WIA	Core-and-intensive	Core	Full-WIA	Core-and-intensive	Core
Trainings first reported on the 30-month survey						
Training 1						
Start month of training	12	10	2	0.7	0.6	0.1
Start year of training	5	1	0	0.3	0.1	0.0
End month of training	7	4	2	0.4	0.3	0.1
End year of training	4	1	0	0.2	0.1	0.0
Total cost of training	15	9	10	0.9	0.6	0.6
Share paid for training by customer or family	20	16	26	1.2	1.0	1.6
Training 2						
Start month of training	3	3	1	0.2	0.2	0.1
Start year of training	0	1	0	0.0	0.1	0.0
End month of training	2	3	1	0.1	0.2	0.1
End year of training	0	1	0	0.0	0.01	0.0
Total cost of training	1	5	1	0.1	0.3	0.1
Share paid for training by customer or family	3	6	2	0.2	0.4	0.1
Training 3						
Start month of training	1	1	1	0.1	0.06	0.1
Start year of training	0	0	1	0.0	0.0	0.1
End month of training	1	0	1	0.1	0.0	0.1
End year of training	0	0	1	0.0	0.0	0.1
Total cost of training	0	1	1	0.0	0.1	0.1
Share paid for training by customer or family	0	0	1	0.0	0.0	0.1
Training 4						
Start month of training	0	0	0	0.0	0.0	0.0
Start year of training	0	0	0	0.0	0.0	0.0
End month of training	0	0	0	0.0	0.0	0.0
End year of training	0	0	0	0.0	0.0	0.0
Total cost of training	1	1	0	0.1	0.1	0.0
Share paid for training by customer or family	1	0	0	0.1	0.0	0.0
Training 5						
Start month of training	1	0	0	0.1	0.0	0.0
Start year of training	1	0	0	0.1	0.0	0.0
End month of training	1	0	0	0.1	0.0	0.0
End year of training	1	0	0	0.1	0.0	0.0
Total cost of training	2	0	0	0.1	0.0	0.0
Share paid for training by customer or family	2	0	0	0.1	0.0	0.0
Jobs first reported on the 15-month survey						
Job 1						
Start month of job	25	18	26	1.5	1.1	1.6
Start year of job	10	6	11	0.6	0.4	0.7
End month of job	14	9	26	0.9	0.6	1.6
End year of job	5	3	11	0.3	0.2	0.7
Real hourly wage in job	47	28	39	2.9	1.8	2.5
Hours worked per week in job	20	21	14	1.2	1.3	0.9
Any leave taken from job	5	2	5	0.3	0.1	0.3
Share of time employed spent on leave from job	28	20	33	1.7	1.3	2.1
Job 2						
Start month of job	24	30	25	1.5	1.9	1.6
Start year of job	10	5	6	0.6	0.3	0.4
End month of job	16	21	13	1.0	1.3	0.8
End year of job	7	6	6	0.4	0.4	0.4
Real hourly wage in job	21	20	19	1.3	1.3	1.2
Hours worked per week in job	8	9	16	0.5	0.6	1.0

Variable imputed	Number of cases imputed			Percentage of cases imputed		
	Full-WIA	Core-and-intensive	Core	Full-WIA	Core-and-intensive	Core
Any leave taken from job	3	4	4	0.2	0.2	0.3
Share of time employed spent on leave from job	16	25	17	1.0	1.6	1.1
Job 3						
Start month of job	12	11	6	0.7	0.7	0.4
Start year of job	3	5	3	0.2	0.3	0.2
End month of job	11	12	7	0.7	0.8	0.4
End year of job	4	5	2	0.2	0.3	0.1
Real hourly wage in job	9	9	8	0.6	0.6	0.5
Hours worked per week in job	2	6	3	0.1	0.4	0.2
Any leave taken from job	1	4	2	0.1	0.3	0.1
Share of time employed spent on leave from job	13	11	6	0.8	0.7	0.4
Job 4						
Start month of job	5	2	4	0.3	0.1	0.3
Start year of job	2	2	1	0.1	0.1	0.1
End month of job	4	2	4	0.2	0.1	0.3
End year of job	3	2	1	0.2	0.1	0.1
Real hourly wage in job	4	5	1	0.2	0.3	0.1
Hours worked per week in job	2	2	3	0.1	0.1	0.2
Any leave taken from job	1	2	1	0.1	0.1	0.1
Share of time employed spent on leave from job	4	3	4	0.2	0.2	0.3
Job 5						
Start month of job	1	2	1	0.1	0.1	0.1
Start year of job	1	1	0	0.1	0.1	0.0
End month of job	1	2	2	0.1	0.1	0.1
End year of job	1	1	0	0.1	0.1	0.0
Real hourly wage in job	3	2	0	0.2	0.1	0.0
Hours worked per week in job	2	1	0	0.1	0.1	0.0
Any leave taken from job	1	1	0	0.1	0.1	0.0
Share of time employed spent on leave from job	2	2	2	0.1	0.1	0.1
Jobs first reported on the 30-month survey						
Job 1						
Start month of job	16	25	20	1.0	1.6	1.3
Start year of job	5	8	6	0.3	0.5	0.4
End month of job	7	7	12	0.4	0.4	0.8
End year of job	5	6	4	0.3	0.4	0.3
Real hourly wage in job	40	40	45	2.5	2.5	2.9
Hours worked per week in job	7	15	6	0.4	1.0	0.4
Any leave taken from job	4	3	2	0.2	0.2	0.1
Share of time employed spent on leave from job	28	26	29	1.7	1.6	1.8
Job 2						
Start month of job	7	9	13	0.4	0.6	0.8
Start year of job	1	2	2	0.1	0.1	0.1
End month of job	3	5	10	0.2	0.3	0.6
End year of job	0	2	1	0.0	0.1	0.1
Real hourly wage in job	10	12	8	0.6	0.8	0.5
Hours worked per week in job	0	4	4	0.0	0.3	0.3
Any leave taken from job	1	2	0	0.1	0.1	0.0
Share of time employed spent on leave from job	9	16	11	0.6	1.0	0.7
Job 3						
Start month of job	4	4	8	0.2	0.3	0.5
Start year of job	1	2	3	0.1	0.1	0.2
End month of job	4	2	7	0.2	0.1	0.4
End year of job	2	1	3	0.1	0.1	0.2
Real hourly wage in job	6	5	7	0.4	0.3	0.4

Variable imputed	Number of cases imputed			Percentage of cases imputed		
	Full-WIA	Core-and-intensive	Core	Full-WIA	Core-and-intensive	Core
Hours worked per week in job	1	2	1	0.1	0.1	0.1
Any leave taken from job	1	0	1	0.1	0.0	0.1
Share of time employed spent on leave from job	5	4	8	0.3	0.3	0.5
Job 4						
Start month of job	4	1	1	0.2	0.1	0.1
Start year of job	2	1	1	0.1	0.1	0.1
End month of job	3	2	1	0.2	0.1	0.1
End year of job	2	1	1	0.1	0.1	0.1
Real hourly wage in job	2	2	2	0.1	0.1	0.1
Hours worked per week in job	2	2	1	0.1	0.1	0.1
Any leave taken from job	2	0	1	0.1	0.0	0.1
Share of time employed spent on leave from job	2	1	2	0.1	0.1	0.1
Job 5						
Start month of job	2	0	1	0.1	0.0	0.1
Start year of job	1	0	1	0.1	0.0	0.1
End month of job	1	1	1	0.1	0.1	0.1
End year of job	1	0	1	0.1	0.0	0.1
Real hourly wage in job	2	0	1	0.1	0.0	0.1
Hours worked per week in job	1	0	1	0.1	0.0	0.1
Any leave taken from job	1	0	1	0.1	0.0	0.1
Share of time employed spent on leave from job	1	0	2	0.1	0.0	0.1
Income Variables						
Months received SNAP	12	8	12	0.7	0.5	0.8
Months received cash assistance from TANF, SSI, SSA, or GA	8	9	7	0.5	0.6	0.4
Monthly SNAP benefit	19	14	14	1.2	0.9	0.9
Monthly payment from TANF, SSI, SSA, or GA	28	26	33	1.7	1.6	2.1
Total annual household income	79	79	85	4.9	5.0	5.3
Sample size	**1,623**	**1,578**	**1,576**	**1,623**	**1,578**	**1,576**

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Note: Unweighted percentage of cases reported.

GA = general assistance; SNAP = Supplemental Nutrition Assistance Program; SSA = Social Security Administration; SSI = Social Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

D. Impact estimation approach for full sample analysis

We structured our analytic approach to impact estimation to accommodate the specifics of the study design. In particular, our approach accounts for the stratification of local areas by region before their selection, the random selection of local areas within strata, and the correlation of customers' outcomes within a local area. We also used weights (described in Section B) to further account for the study design. Our variance estimation does not account for the fact that certainty local areas were selected with a probability of one. These certainty areas would have been included in all possible random samples of local areas, so their contribution to the overall variance of our estimators comes only from the random assignment of customers within those areas. This omission causes our variance estimates to be slightly high.

1. Estimation model and variance estimation

This study used a random block design in which the random assignment of customers occurred within randomly selected local areas (blocks). To estimate impacts within the random block design, we used Stata's regression command with the cluster-robust option. This approach uses a weighted ordinary least squares (OLS) method with cluster-robust standard errors to account for the correlation of the outcomes of sample members in the same local area. All models were estimated using the weights described in Section B.

More specifically, we used the following OLS model to compare outcomes simultaneously across all three study groups:

(3) $y_{isr} = \alpha + T_{f,isr}\beta_{f-c} + T_{ci,isr}\beta_{ci-c} + \delta_r + \in_{isr}$,

where y_{isr} is the outcome of interest for the *i*th individual in local area *s* and region *r*; $T_{f,isr}$ is an indicator for individual *i* being in the full-WIA group; β_{f-c} is the population average treatment effect of assignment to the full-WIA group relative to the core group; $T_{ci,isr}$ is an indicator for individual *i* being in the core-and-intensive group; β_{ci-c} is the population average treatment effect of assignment to the core-and-intensive group relative to the core group; δ are region-fixed effects to account for the within-region sampling of local areas; and $\in_{isr}$ are individual-level errors, assumed to be correlated within local area. The population average treatment effect of assignment to the full-WIA group relative to the core-and-intensive group is given by $\beta_{f-ci} = \beta_{f-c} - \beta_{ci-c}$.

We report the regression-adjusted means for the core-and-intensive group as $\overline{y}_{ci} = \overline{y}_f - \hat{\beta}_{f-ci}$ and the regression-adjusted means for the core group as $\overline{y}_c = \overline{y}_f - \hat{\beta}_{f-c}$, where $\hat{\beta}_{f-ci}$ and $\hat{\beta}_{f-c}$ are parameter estimates. We also report $\overline{y}_f$, the unadjusted mean of *y* for the full-WIA group, to represent the mean value of *y* under unrestricted provision of services funded by the Adult and Dislocated Worker programs.

Because of random assignment, equation (3) will produce asymptotically unbiased (consistent) estimates of average treatment effects without controlling for any additional covariates. However, including such variables in our regression could increase precision. Therefore, we explored adding controls to the regression models for variables measured at the local area level (for example, the local unemployment rate) and the individual level (for example, customer age). As shown in Appendix B, Section D, however, adding these controls had little substantive effect on our impact findings. Thus, for simplicity, we have omitted both local- and individual-level covariates from our benchmark regression specifications.

Our impact results genoperalize to a *finite* sample universe of customers of the Adult and Dislocated Worker programs. Thus, we employed a finite population correction for variance estimation based on an estimate of the share of the population of WIA customers over the follow-up period who were in our sample. We estimated this share as:

(4) $\widehat{FPC} = \frac{N_s}{\sum_{i=1}^{N_s} w_{isr}}$,

Where N_s is the number of customers in the full-study sample and w_{isr} are trimmed weights accounting for the probability of local area selection, local area participation, and customer consent (see Section B.1). This formula yielded an $\widehat{FPC}$ value of .107. We adjusted all variance estimators using $\widehat{FPC}$ in the following way:

(5) $\widehat{var}_{FPC}(\hat{\beta}) = \widehat{var}(\hat{\beta}) * (1 - \widehat{FPC})$,

where $\hat{\beta}$ is the vector of parameters in equation (3) and $\widehat{var}(\hat{\beta})$ is the cluster-robust variance covariance estimator of the parameter estimates from equation (3).

2. Testing for significance of impacts

For each outcome, we separately tested whether each of three impacts is statistically different from zero and whether the three impacts are jointly equal to zero. To test the null hypothesis that a particular impact is zero, we used a t-test based on the adjusted variance estimator in equation (4). This test statistic follows a t distribution with 27 degrees of freedom (Cameron and Miller 2015). All reported *p*-values were then based on the two-tailed test of the hypothesis that the impact is zero. To test whether there are differences across contrasts, that is, whether the joint null hypothesis that $\beta_{f-c} = 0$ and $\beta_{ci-c} = 0$ (which, if true, implies $\beta_{f-ci} = 0$), we used an F-test.

3. Multiple comparison adjustments

Before analysis, we designated the quarterly earnings outcomes as our primary measures of the impacts of services funded by the Adult and Dislocated Worker programs. We also specified that, in drawing conclusions, we would look at earnings across quarters, rather than focusing on whether any single estimate of the impact on earnings is significant. This focus on the whole pattern of estimates within a small set of variables mitigates concerns about multiple comparisons leading to spurious findings. However, our analysis of each outcome involves estimating three impacts corresponding to our three different contrasts of interest (comparisons of the full-WIA and core-and-intensive groups, core-and-intensive and core groups, and full-WIA and core groups). Unless we account for this multiplicity, it could increase the chances of making a false discovery and lead to spurious claims about the impacts of services.[8] Researchers often declare a finding statistically significant if the probability of falsely rejecting the null hypothesis of no impact is less than 5 percent. When testing multiple contrasts, however, the probability of falsely rejecting the null hypothesis in at least one of them can be much higher than 5 percent.

[8] Our F-test enables us to jointly test whether any of our three estimated impacts are different from zero, without needing adjustment for multiple comparisons; however, the F-test examines whether any of the estimated impacts are different from zero and not whether a specific estimated impact is different from zero.

To correct for this increased probability, we apply a multiple hypothesis testing procedure similar to that outlined by Schochet (2009) within outcomes. This procedure involves adjusting the critical *p*-value against which we compare our produced *p*-values. Instead of comparing our produced *p*-values to a cutoff of $p^* = .05$, we compared to $p^* = .05/x$. If each of the three tests were independent, an appropriate value of x would be 3. In our context, based on simulation evidence, we instead chose $x = 2.8$ to account for the correlations across our three hypothesis tests of interest due to the repetition of the research groups. That is, we can conclude an estimate is statistically significant at the 5 percent level if it has a *p*-value less than .0185.[9] This adjustment is less severe than other common adjustment methods, such as the well-known Bonferroni correction ($x = 3$), because it also accounts for the correlation of test statistics across contrasts. For outcomes other than quarterly earnings (that is, those not designated as primary measures of impacts of services funded by the Adult and Dislocated Worker programs), we use the traditional critical *p*-value of .05.

In the figures and tables reporting quarterly earnings in both the body of the evaluation report and this technical supplement, we follow standard procedures and use symbols to indicate whether *p*-values are below the commonly used cutoff of .05. When we discuss the findings we consider them against both the standard cutoff of .05 as well as the more stringent cutoff of .0185.

4. Impacts of providing services versus impacts of the receipt of services

In the report, we focus on estimates of the impacts of providing WIA-funded training by comparing the outcomes of the full-WIA and core-and-intensive groups. These impacts of the provision of services are known as intention-to-treat impacts. However, only about one-third of the full-WIA group actually received WIA-funded training according to the WIASRD administrative records collected about 15 months after random assignment, so there is policy interest in examining impacts for the training recipients only. These impacts of receiving services are known as treatment-on-the-treated impacts. Importantly, the impacts of receiving WIA-funded services must be viewed as the combined impacts of WIA-funded training and the intensive services that the full-WIA group received, not just the effects of training in isolation. This distinction matters because the full-WIA group may have received different amounts and types of intensive services than the core-and-intensive group. Thus, in our context, training impacts pertain to Adult and Dislocated Worker programs that also provide intensive services, and not necessarily to programs that offer training without associated intensive services.

Researchers typically use instrumental variables methods (Angrist et al 1996; Bloom 1984) to estimate impacts for those who actually received an intervention; however, we can only provide approximations of the impact of the receipt of WIA-funded training because the instrumental variables approach requires assumptions that might not hold in our context. For example, we need to assume that everybody in the full-WIA and core-and-intensive groups received intensive services, and that people in the full-WIA group who did not receive training did not receive different amounts of intensive services than members of the core-and-intensive group. Under these assumptions, the impacts of providing training are due solely to the smaller

[9] In the tables in both the body of the evaluation report and this technical supplement, we follow standard procedures and use symbols to indicate whether *p*-values are below the commonly used cutoff of .05.

group of trainees, in which case we can calculate the impacts of receiving training by dividing the impacts of providing WIA-funded training by the rate of participation of the full-WIA group in WIA-funded training. Stated differently, the impacts of receiving training can be estimated by multiplying the intention-to-treat impacts by 3. Because this is an approximation, the true impacts of receiving WIA-funded training could be larger or smaller.

Unfortunately, we cannot use such methods to approximate the impact of receiving WIA-funded intensive services rather than providing WIA-funded intensive services, because the WIASRD does not record the receipt of intensive services consistently across local areas.

E. Impact estimation approach for subgroups of customers

The estimation of average impacts across all customers could mask differences in impacts across subgroups of customers and local areas. For example, the average effect of assignment to the full-WIA group on service receipt and employment-related outcomes might differ between adults and dislocated workers.

1. Estimation model and variance estimation

To determine whether there are different effects across subgroups (defined by a binary variable) and whether those differences are statistically significant, we modified the model in equation (3) as follows:

$$(6)\quad y_{isr} = \alpha + \gamma g_{isr} + T_{f,isr}(1-g_{isr})\beta_{0,f-c} + T_{f,isr}g_{isr}\beta_{1,f-c} + T_{ci,isr}(1-g_{isr})\beta_{0,ci-c} + T_{ci,isr}g_{isr}\beta_{1,ci-c} + \delta_r + \in_{isr}$$

where $g_{isr} = 1$ if customer i in local area s and region r is a member of group g, and is zero otherwise. In this model, $\hat{\beta}_{0,f-c}$ is then the estimated average treatment effect of assignment to the full-WIA group relative to the core group for customers not in group g; $\hat{\beta}_{1,f-c}$ is the estimated average treatment effect of assignment to full-WIA relative to the core group for customers in group g; and $\hat{\beta}_{0,ci-c}$ and $\hat{\beta}_{1,ci-c}$ are the estimated average treatment effects of being in the core-and-intensive group relative to the core group for customers not in group g and customers in group g, respectively. All regression-adjusted means for subgroups of customers are reported with reference to $\overline{y}_{0,f}$, the unadjusted mean of y for customers in the full-WIA group with $g = 0$.

2. Testing for differences across subgroups

For our subgroup estimates, we used F-tests to gauge whether any one impact is equal for the two subgroups considered and whether all impacts are equal across the subgroups. The first is a test of whether, for example, $\hat{\beta}_{1,f-c} = \hat{\beta}_{0,f-c}$. This test tells us if the effect of WIA-funded training, intensive, or training and intensive services depends on whether a customer is in group g. The second test is of the hypothesis that $\hat{\beta}_{1,f-c} - \hat{\beta}_{0,f-c} = \hat{\beta}_{1,ci-c} - \hat{\beta}_{0,ci-c} = 0$ (which, if true, implies $\hat{\beta}_{0,f-ci} - \hat{\beta}_{1,f-ci} = 0$). This test allows us to explore whether there are any differences in impacts for the two subgroups across all three contrasts.

F. Minimum detectable impacts

In this section, we provide updated estimates of minimum detectable impacts for five key outcome variables: earnings in Quarter 5, Quarter 10, and the whole 30-month follow-up period; enrollment in any training program during the 30-month follow-up period; and receipt of any one-on-one assistance during the 30-month follow-up period. Minimum detectable impacts are the smallest true impacts that we have a high probability (80 or 60 percent) of detecting; smaller minimum detectable impacts indicate greater statistical power. Typically, minimum detectable impacts are estimated at the design stage of analysis, to determine if the study's intended sample size will allow researchers to detect anticipated effects of treatment on outcomes. At the analysis stage, minimum detectable impacts can help us ascertain the size of an impact we would be able to detect with high probability given the realities of how the study progressed.

We estimated the minimum detectable impact for the comparison of outcome *y* across groups *i* and *j* as:

$$(7) \quad MDI_{i-j}(y) = factor * se_{FPC}(\hat{\beta}_{y,i-j}),$$

where $\hat{\beta}_{y,i-j}$ is the difference in outcome *y* across study groups *i* and *j* and $se_{FPC}(\hat{\beta}_{y,i-j})$ is that impact's standard error (both estimated as described in Sections D and E). The *factor* multiplier is determined by the size (threshold for significance level) and power of the statistical test used (with smaller-sized and more-powerful tests having higher factors). Table A.11 contains estimates of minimum detectable impacts for tests with power of 80 percent and size of 5 percent, as well as with power of 60 percent and size of 5 percent. The former is typically used in estimating minimum detectable impacts; the latter was selected based on simulations of the true power of our estimator.

For our joint sample of adults and dislocated workers, the minimum detectable impacts suggest we should be able to detect differences in earnings of 10.8 to 24.1 percent in Quarter 5 and 10.6 to 14.1 percent in Quarter 10 with 60 percent power (Table A.12, percentages relative to full-WIA group earnings by quarter). Combining earnings across quarters, minimum detectable impacts range from $4,077 to $6,119, or 10.3 to 15.5 percent of average earnings among full-WIA customers. Minimum detectable impacts for earnings tend to be smaller within the subsample of customers served by the Adult program than within the subsample of customers served by the Dislocated Worker program. This could reflect lower variation in earnings for adults compared with dislocated workers or lower variation in impacts across local areas of services funded by the Adult program compared with those funded by the Dislocated Worker program.

Minimum detectable impacts for a test with 60 percent power using the full sample ranged from 6.3 to 11.8 percentage points for training and 4.4 to 7.8 percentage points for receipt of one-on-one assistance (Table A.12). Again, minimum detectable impacts tend to be smaller for the sample of adults than the sample of dislocated workers.

Table A.12. Minimum detectable impacts for key outcomes

	Earnings in Quarter 5 ($)	Earnings in Quarter 10 ($)	Earnings in Quarters 1–10 ($)	Enrolled in any training program	Received any one-on-one assistance
Means for full-WIA group					
Full sample	3,816	5,244	39,528	49.7	63.1
Adults only	3,651	4,655	36,717	48.7	59.2
Dislocated workers only	4,213	6,030	43,851	53.7	67.8
Comparison of full-WIA and core-and-intensive groups					
Full sample					
Regression-adjusted impact	-541	-191	-3,684	8.6	2.6
Minimum detectable impacts					
80% power, 5% size	1,158	701	7,485	8.0	5.6
60% power, 5% size	919	557	5,942	6.3	4.4
Adults only					
Regression-adjusted impact	-76	-71	-118	7.1	4.7
Minimum detectable impacts					
80% power, 5% size	1,037	1,039	7,943	9.6	8.7
60% power, 5% size	823	825	6,305	7.6	6.9
Dislocated workers only					
Regression-adjusted impact	-1158	-336	-8,331	10.7	-0.2
Minimum detectable impacts					
80% power, 5% size	2,018	947	11,620	14.5	9.6
60% power, 5% size	1,602	752	9,224	11.5	7.6
Comparison of core-and-intensive and core groups					
Full sample					
Regression-adjusted impact	881	963	7133	7.3	13.4
Minimum detectable impacts					
80% power, 5% size	984	851	7708	12.4	9.9
60% power, 5% size	781	676	6119	9.9	7.8
Adults only					
Regression-adjusted impact	646	881	5195	6.3	12.0
Minimum detectable impacts					
80% power, 5% size	961	985	7474	9.2	10.6
60% power, 5% size	763	782	5933	7.3	8.4
Dislocated workers only					
Regression-adjusted impact	1,158	1,032	9,301	8.6	15.0
Minimum detectable impacts					
80% power, 5% size	1,747	798	11,199	20.9	13.6
60% power, 5% size	1,387	633	8,890	16.6	10.8
Comparison of full-WIA and core groups					
Full sample					
Regression-adjusted impact	340	773	3,449	15.9	16.0
Minimum detectable impacts					
80% power, 5% size	517	933	5,135	14.8	9.1
60% power, 5% size	411	741	4,077	11.8	7.2

	Earnings in Quarter 5 ($)	Earnings in Quarter 10 ($)	Earnings in Quarters 1–10 ($)	Enrolled in any training program	Received any one-on-one assistance
Adults only					
Regression-adjusted impact	570	810	5,078	13.3	16.7
Minimum detectable impacts					
80% power, 5% size	809	1,250	7,969	9.4	7.8
60% power, 5% size	642	992	6,326	7.5	6.2
Dislocated workers only					
Regression-adjusted impact	0	696	970	19.3	14.8
Minimum detectable impacts					
80% power, 5% size	862	1,165	5,787	29.4	12.5
60% power, 5% size	684	925	4,594	23.3	9.9

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 constant dollars. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. The adult-only mean is regression-adjusted to match procedures used to estimate subgroup-specific effects (see Section E). All other regression-adjusted impacts are estimated as detailed in Sections D and E.

G. Details on our approach to estimating net benefits

The benefit-cost analysis uses a framework conceptually similar to an accounting ledger to estimate the average net benefits of intensive and training services provided through the Adult and Dislocated Worker programs. In this framework, the main expected benefits of making the services available occur because of increases in earnings and other compensation, after accounting for any earnings and other compensation customers forgo while in training, and reductions in the receipt of public assistance. Costs include the expense of providing the services, such as staffing, materials, overhead, and administrative costs.

This section provides greater detail on the benefit-cost analysis described in Chapter VIII of the main volume of this report. We first provide an overview of our benchmark analysis strategy, repeating much of the information in Chapter VIII for completeness (Section G.1). We then provide details on how we estimated specific benefits and costs (Sections G.2, G.3, and G.4). We finally describe the sensitivity checks we conducted to ensure the robustness of our findings (Section G.5).

1. Benchmark approach to estimating net benefits

The findings from any benefit-cost analysis depend on the perspective from which benefits and costs are considered. A positive benefit from one perspective could be a negative benefit, or a cost, from another. For example, an increase in tax payments by customers is a cost to customers but a positive benefit to taxpayers. We examined benefits and costs from three perspectives.

1. **Society as a whole.** The net benefit to society represents the overall net benefit of the program. Because this perspective aggregates benefits and costs over everyone in society, it is the most relevant perspective for policymakers. Computing net benefits from this perspective enables us to determine whether, in total, the benefits of services exceed the resources used to provide them.

2. **Customers.** Customers reap the benefits of intensive and training services through increased earnings and associated fringe benefits. However, they may also pay more in taxes associated with those higher earnings and claim fewer public assistance benefits as a result. Customers in training forgo earnings that they could have obtained from working rather than participating in training. Additionally, many customers or their families pay for some portion of the training they receive. Computing the net benefit from the perspective of customers enables us to determine whether participating in the Adult or Dislocated Worker programs is a good investment for the customers themselves.
3. **Taxpayers.** Although customers reap the benefits of the services, taxpayers (by way of federal, state, and local governments) pay much of the costs. Customers' reductions in receipt of public assistance and increases in tax payments can partially or fully offset these costs. Computing the net benefits from the perspective of taxpayers enables us to determine whether offering services through the Adult and Dislocated Worker programs is a good investment for the government. In our framework, taxpayers include any entities that are not program customers, such as the households of individuals who are not program customers, private foundations, and employers. Therefore, costs, benefits, and net benefits to taxpayers include any costs, benefits, and net benefits to individuals other than program customers.

We express all benefits and costs in dollar terms. Benefits to society are the sum of the benefits from the perspectives of customers and taxpayers. Similarly, costs to society are the sum of the costs to customers and taxpayers. To estimate net benefits, we take the difference between total benefits and total costs. That is, costs are treated the same as negative benefits.

While the costs of services were incurred mainly at the time of the receipt of services, the benefits may accrue later. We accounted for differences in the timing of the accrual of benefits and costs; a current dollar is worth more than a future dollar, both because of any inflation and because the dollar could be invested to earn more later on. To account for inflation, we converted all benefits and costs into 2012 dollars using the gross domestic product deflator.[10] We chose 2012 because it was the first full year of the follow-up period. To account for potential gains from investment, we discounted any costs and benefits that accrued after the first year of the follow-up period using the U.S. Treasury's real long-term interest rate. This rate, which from 2005 to 2015 was on average 1.5 percent, reflects the rate of return on an accessible, risk-free, long-term investment (U.S. Department of Treasury 2016).

We estimated the net benefits of intensive and training services by considering the dollar values of (1) changes in customers' productivity, (2) changes in customers' use of public assistance, and (3) differences in the cost of the services customers received. We included estimated impacts as benefits (or costs) of WIA-funded intensive and training services even if they were not statistically different from zero because, even if the estimates are imprecise, they are our best estimates.

[10] Because this deflator measures changes in the prices of all goods and services in the U.S. economy, it is the best one for converting into constant dollars the many different types of benefits and costs measured in this study.

Table A.13 lists the benefits and costs we considered and their anticipated signs. We did not capture other potential benefits and costs of intensive and training services. Examples of excluded costs and benefits include potential increases in payments for child care and transportation while at work or in training, decreases in leisure time, changes in job satisfaction, changes in physical or mental health, and increases in quality of life.

Table A.13. Anticipated net benefits of intensive and training services funded by the Adult and Dislocated Worker programs

	Society	Customers	Taxpayers
Productivity			
Earnings	+	+	0
Fringe benefits	+	+	0
Taxes	0	-	+
Use of public assistance			
Benefits	0	-	+
Costs of administering benefits	+	0	+
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-	0	-
Supportive services	-	0	-
Training	?	?	?
Net benefit	**?**	**?**	**?**

Note: A positive sign indicates an anticipated benefit, a negative sign indicates an anticipated cost, and a question mark indicates no a priori expectation.

We also restricted all benefits and costs to those accruing during the 30-month follow-up period for our main, benchmark analysis. Providing intensive and training services might have changed customers' productivity, use of public assistance, or receipt of services after the end of the follow-up period. However, we do not know to what extent this occurs, as our data cover only the 30 months after random assignment. We therefore restrict our estimates of benefits and costs to the follow-up period. Nonetheless, our estimates of net benefits are likely to be smaller than estimates which include impacts after the 30-month follow-up period. This will occur because although the costs associated with WIA-funded services are largely restricted to the follow-up period, the benefits of these services may persist after the follow-up period. In our sensitivity analyses, we explore how considering the period after the 30-month follow-up period would affect our estimates of net benefits.

To estimate the net benefits of each type of service, we used the same basic approach as we used for the impact estimates on individual outcomes. We estimated the benefits and costs accruing to each customer, and then estimated the net benefits of services funded by the Adult and Dislocated Worker programs by comparing the average net benefits across our study groups. To estimate the net benefits of WIA-funded training, we calculated the differences in the estimated benefits and costs between the full-WIA and core-and-intensive groups. To estimate the net benefits of WIA-funded intensive services, we calculated the differences in the estimated benefits and costs between the core-and-intensive and core groups. To estimate the net benefits of WIA-funded intensive and training services, we calculated the differences in the estimated benefits and costs between the full-WIA and core groups.

2. Estimating net benefits associated with productivity

A goal of the Adult and Dislocated Worker programs is to make customers more productive workers by increasing their skills and/or helping them find jobs that will best use their talents and abilities. Thus, if services funded by the Adult and Dislocated Worker programs are effective, customers—and society as a whole—should benefit from increases in productivity. We measure these changes using the compensation customers receive for working: earnings and fringe benefits. We also account for the taxes paid on this compensation in estimating the extent to which both customers and taxpayers benefit from increases in productivity.

Earnings. If WIA-funded services are effective, then customers' earnings should increase, resulting in positive benefits to customers and, by extension, to society as a whole. For our benchmark benefit-cost analysis, we estimated these impacts as differences in average earnings by quarter using data from the 15- and 30-month follow-up surveys (as described in Section D). The earnings impacts implicitly include the earnings foregone as a result of participating in services. When additional services resulted in a decrease in earnings, the earnings loss is accounted for as a cost to customers.

We assume that all increases in earnings indicate gains in productivity. Alternatively, the impacts of WIA-funded services could simply result from customers gaining earnings at the expense of those who do not have access WIA-funded services. This is sometimes referred to as a displacement effect (Calmfors 1994; Lise et al. 2004) and would occur if services funded by the Adult and Dislocated Worker programs mainly redistribute jobs from service recipients to nonrecipients, rather than improving customers' skills or helping to match workers and jobs. If the benefits of the services available to those in the full-WIA group were offset by losses among those who were not offered services, our estimates would overstate the net benefits of the Adult and Dislocated Worker programs. This would occur because we do not account for the potential displacement effect, a cost to workers outside the full-WIA group.

Fringe benefits. In addition to wages, workers receive fringe benefits, or perks, offered to employees by employers. These benefits have value to employees and are a major component of employment compensation. We anticipated that workers would receive greater fringe benefits as a result of intensive and training services.

We accounted for three common types of fringe benefits in our analysis: health insurance, retirement benefits, and legally required benefits such as workers' compensation insurance. Although we do not know the monetary value of these fringe benefits to each customer, we can approximate these values using publicly available data. In 2016, health, retirement, and legally required benefits were 12.2, 7.5, and 10.9 percent of wage and salary costs, respectively, as reported by employers (U.S. Department of Labor 2016). Therefore, we estimated fringe benefits as 30.6 (12.2. + 7.5 + 10.9) percent of earnings.

Taxes. Changes in earnings also imply changes in the taxes that workers pay. Increases in taxes are a negative benefit to the customers who pay them and a positive benefit to other taxpayers. These two benefits cancel each other out from society's perspective—they simply represent a transfer of funds from one group to another. Taxes include federal, state, and local income taxes; payroll taxes; and excise taxes. We used published sources to get the average

applicable tax rates for our sample and, like fringe benefits, multiplied earnings by this rate to estimate taxes paid. In total, we used an estimated tax rate of 30.4 percent.

- **Federal income tax rate.** We estimated the mean annual earnings for customers in Quarters 7 to 10 after random assignment and used the tax rate (10.6 percent) for married taxpayers filing jointly in 2012 with these earnings (Internal Revenue Service 2012).
- **State and local income tax rates.** We used the national average state and local tax rates (10.9 percent) faced by households in the lowest income quintile (Institute on Taxation and Economic Policy 2015).
- **Payroll tax rates.** We used the sum of the employee's share of Social Security taxes (6.2 percent of the first $117,000 earned), federal unemployment taxes (0.6 percent of first $7,000 earned), and state unemployment taxes (0.8 percent) (U.S. House of Representatives 1998, 2014).[11]
- **Excise tax rate.** We used the average excise tax rate (1.7 percent) levied on Americans (U.S. Congressional Budget Office 2016).

For each component of gains from productivity, we estimated impacts of WIA-funded services on a quarterly basis for 10 quarters after random assignment, using the methods described in the other sections of this appendix. We then aggregated these impacts, discounting them as appropriate, to obtain the overall productivity benefit associated with intensive and training services funded through the Adult and Dislocated Worker programs.

3. Estimating net benefits associated with use of public assistance

We expected that if intensive and training services improved customers' earnings, customers' use of public assistance would also decrease. This would be a cost to the customers who no longer receive the public assistance but a benefit to taxpayers, who no longer have to pay for it. From the perspective of society as a whole, the benefits and costs of the payments cancel each other out. However, it is costly to administer public assistance programs, and any administrative costs saved are benefits to taxpayers and society as a whole.

We separately considered impacts of WIA-funded services on public assistance from SNAP, cash assistance programs (including TANF, Supplemental Security Income, and General Assistance), and other programs. We assumed that the net benefits associated with public assistance accrued only once, in the last year of the follow-up period. Our limited data on public assistance necessitated this assumption: we collected this information for all customers in the analysis sample with respect to only a single calendar year. In addition, this assumption reflects the limited duration of many public assistance programs, such as TANF.

[11] Employment and payroll taxes paid by employers are not included because these taxes are just a transfer between employers and other taxpayers and hence do not change the net benefits to customers, taxpayers (which includes employers), or society as a whole.

To determine the administrative costs associated with the provision of these benefits, we used publicly available reports from the U.S. House of Representatives (2014) and the Food and Nutrition Service (2015). According to these sources, administrative costs are about 10.5 percent of the value of SNAP benefits and 5.2 percent of the value of cash assistance program benefits (a weighted average of costs from TANF, Supplemental Security Income, and Social Security Disability Insurance). For other programs, we assumed that administrative costs were the same percentage of benefits as in TANF (7.8 percent). To estimate the impact of intensive and training services on the administrative costs of SNAP, cash assistance, and other public assistance programs, we multiplied the impacts on public assistance benefit amounts by these percentages.

4. Estimating costs of providing services

As shown in Chapters IV and V of the main volume of this report, providing intensive and training services funded by the Adult and Dislocated Worker programs changed the core, intensive, supportive, and training services customers received, both from the Adult and Dislocated Worker programs and from other sources. Because of these differences, the costs of serving customers in each study group differed. We accounted for these cost differences using data on the services a customer received from the 15- and 30-month follow-up surveys and information on costs from both these surveys and our cost study (Mastri and McCutcheon 2015).

We used different methods to estimate cost differences, based on the type of service and available data:

Core and intensive services. We collected information on five core or intensive services—resource room visits, workshops, one-on-one assistance, job clubs, and structured assessments—on both the 15- and 30-month follow-up surveys (see Chapter IV of the main volume of this report). Customers reported services received from the Adult and Dislocated Worker programs and from other sources, such as libraries or community-based organizations.

To estimate the costs of these services, we collected detailed information from the local areas in the study on the per-use costs associated with each—the cost of a person visiting a resource room once or taking one assessment, the cost per customer of attending one job club or workshop session, or the cost of one hour spent one-on-one with an employment counselor (Table A.14). We used the average per-use cost of each service across areas and assumed that the per-use cost of services provided by sources other than the Adult and Dislocated Worker programs was the same as the per-use cost of services provided by the programs. We estimated the costs of services provided to the average customer in each study group by multiplying the weighted average of the number of services provided and the cost per service. We assumed that taxpayers bore all costs of providing these services and paid for them in the first year of the follow-up period. Thus, the differences in these costs across study groups are negative net benefits to taxpayers and society as a whole.

Table A.14. Number of local areas, by average cost per service

Service	Resource room visit[a]	Assessment	Job club (per customer)	Workshop (per customer)	One-on-one counselor meeting (per hour, per customer)
Minimum cost ($)	3	0	4	7	70
Maximum cost ($)	92	62	196	156	355
Mean cost ($)	16	13	38	54	143
Number of local areas reporting costs in range					
$0–$10	12	16	5	2	0
$11–$20	11	3	0	2	0
$21–$30	1	4	1	2	0
$31–$40	1	1	0	5	0
$41–$50	0	0	2	1	0
$51–$100	2	1	0	7	8
$101–$150	0	0	0	1	10
$150 or more	0	0	1	2	10
Number of local areas	**27**	**25**	**9**	**22**	**28**

Source: Cost data collected from 28 local areas. Reproduced from Mastri and McCutcheon (2015).

Note: Costs are for WIA program year 2011 (July 1, 2011, through June 30, 2012) or 2012 (July 1, 2012, through June 30, 2013).

[a] We could not complete this calculation for one local area, because it could not provide an estimate of the total number of visits to the resource room per year.

Supportive services. Supportive services help customers look for work and attend training programs. Survey respondents reported the amount of supportive services they received on the 15- and 30-month follow-up surveys. They provided this amount in dollars and we assumed that these values reflected all costs of providing supportive services (that is, there are no administrative costs) and were borne in the first year of the follow-up period. We estimated the costs of supportive services by taking the weighted average by study group.

Training. We used survey data to estimate differences in costs of training across study groups. The 15- and 30-month follow-up surveys collected information on both how much customers paid for each training program and their estimates of the total cost of each training program in which they enrolled. It is likely that customers could correctly recall the amount they paid for training; however, customers might have been unable to provide accurate information on the full cost of training programs. They might not have known the cost of the programs, especially if paid for by a grant or other funds. Furthermore, the amount an individual is charged for a program (even before scholarships and other sources of funding) does not necessarily reflect a program's resource cost. For example, the full tuition charged to students at many public two- and four-year colleges falls below the cost of providing undergraduate education because of government subsidies received by colleges (Johnson 2014). Survey respondents reported that the cost of providing training was zero for about one-quarter of the training programs reported in the survey.

We assumed that customers correctly reported the amount they paid for training. To estimate the costs of training paid by customers, we took the weighted average amount that customers paid by study group. The differences in these weighted averages are our estimates of the training-related costs to customers associated with WIA-funded intensive and training services.

To estimate the costs of training to society as a whole, we assumed that survey respondents might have incorrectly reported particularly large or small values of the total costs of training. We classified training programs into groups and estimated costs so that very low or very high reported costs could not unduly influence our estimates. We first organized training programs into 15 categories, based on program type and location (Table A.15). For each study group, we then estimated the median cost of training among training programs reported to have a cost greater than zero. We then applied this cost to all training programs of a given category reported by customers in the study group and summed costs for customers who enrolled in more than one training program during the follow-up period. The weighted average of these costs is our estimate of the total costs of training for those in a study group, and differences in these averages provide our estimates of the training-related costs to society as a whole associated with WIA-funded intensive and training services. Finally, to estimate the costs of training to taxpayers, we took the difference between the costs of training to society as a whole and the costs of training to

Table A.15. Per-program costs of training (all customers)

	Full-WIA	Core-and-intensive	Core
Post-secondary program at a community college	5,662	7,365	5,352
Post-secondary program at a four-year college	10,184	20,754	22,419
Post-secondary program at another location	7,872	1,725	10,235
GED certificate test preparation or education toward a high school diploma	123	578	192
ESL instruction	968	40	0[a]
On-the-job training	3,521	4,287	4,329
Training at an employer that is not on-the-job training	3,967	6,776	492
Vocational training at a community college	4,583	6,888	6,776
Vocational training at a four-year college	17,028	20,000	18,840
Vocational training at a vocational institute	4,464	3,000	4,630
Vocational training at a community-based organization or adult education center	441	2,178	204
Online vocational training	1,000	2,214	6,000
Vocational training at an AJC	590	640	245
Vocational training at another government location	3,388	8,555	88
Other training program	871	265	610

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: All estimates are in 2012 dollars. Per-program costs are medians of non-zero amounts. Vocational training includes all programs other than ESL, post-secondary education, GED certification test preparation, and high school education.

[a] All ESL programs were reported to have a cost of zero by customers in the core group.

AJC = American Job Center; ESL= English as a second language; GED = General Educational Development.

program customers. We assumed all training costs were incurred during the first year of the follow-up period (rather than in subsequent years for which we would apply a discount rate to the costs).

Even with this approach, the cost of training to society might be understated because the full costs of many training programs are not visible to customers. However, as discussed in Chapter VIII of the main volume of this report, the conclusions from the benefit-cost analysis are not sensitive to these estimates.

5. Benefit-cost sensitivity analyses

Like most benefit-cost analyses, our estimation required many assumptions. We examined the sensitivity of our results to the following changes in these assumptions to ensure that none were crucial to our findings.

1. **Estimates of productivity impacts based on administrative data.** Our benchmark approach estimated net productivity benefits based on the earnings that customers reported for 10 quarters after random assignment on the 15- and 30-month surveys. We also have administrative data on earnings from the NDNH. We therefore created alternative estimates of net benefits using information on earnings from the NDNH, covering the 10 calendar quarters after random assignment.
2. **Variation in the discount rate.** Our benchmark benefit-cost approach assumed an annual discount rate of 1.5 percent, based on historical, long-term, low-risk rates of return. We also estimated benefits and costs assuming discount rates of 2 or 4 percent.
3. **Variation in the assumed tax rate.** In our benchmark approach, we estimated that taxes equaled about 30 percent of customers' earnings. We explored whether our results changed if the tax rate were 5 percentage points higher or lower.
4. **Variation in the assumed value of fringe benefits.** In our benchmark approach, we estimated the value of fringe benefits as about 31 percent of customers' earnings. We explored whether our results changed if the value of these benefits was 5 percentage points higher or lower.
5. **Accounting for impacts of WIA-funded services on fringe benefits.** Our benchmark model assumed the same fringe benefit rate for all customers in the study. But, as shown in Appendix C, Table C.VI.5, full-WIA customers were more likely than core-and-intensive customers, who were in turn more likely than core customers, to have been offered health insurance and pension or retirement benefits at their current or most recent job at the time of the 30-month follow-up survey. Although these differences were generally not statistically significant, they suggest that study group membership had an effect on the quality of jobs customers found and could possibly affect the fringe benefit rate as well. We therefore conducted a sensitivity analysis to calculate the fringe benefits for each group of customers, accounting for the differences across study groups in the reported rates at which fringe benefits were offered. This sensitivity analysis relies on monetizing the values of specific fringe benefits based on estimates that may not be accurate for this population, which is why this is not our benchmark estimate of the net benefit. However, it still demonstrates how the findings might change if we had variability in the fringe benefit rate.

6. **Extrapolating earnings gains to the working lifetime of customers.** Our benchmark model assumed that all benefits and costs of WIA-funded intensive and training services accrued during the follow-up period—30 months after random assignment. However, if intensive and training services help individuals become more productive, it is plausible that these benefits continue after the end of the follow-up period. As a sensitivity check, we assumed that the impacts of services on earnings, fringe benefits, and taxes in the final year of the follow-up period persisted until a customer's retirement. That is, if earnings in Quarters 7 to 10 were $100 higher in one study group than another, we calculated net benefits assuming that earnings would be $100 higher for members of that study group every year until the customer retired. We assumed a retirement age of 67 and extrapolated the benefits from earnings, fringe benefits, and taxes until retirement using the same inflation and discount rate assumptions as the benchmark model. The average Adult or Dislocated Worker program customer was 42 years old at the end of our follow-up period. Thus, a retirement age of 67 implies an unobserved future benefits period of about 25 years. (Like the benchmark model, we assumed the benefits and costs associated with public assistance and service receipt would be confined to the follow-up period.)

7. **Double estimates of the costs of training to society as a whole.** Because customers may not be aware of the full resource costs of training programs, our measures of the total costs of training to society may be too low. Therefore, we also estimated net benefits by doubling the estimated costs of training to society as a whole (leaving unchanged the amount customers paid for training) to test if a dramatic increase in the estimated cost affected the net benefits (it did not).

APPENDIX B

SENSITIVITY ANALYSIS OF IMPACT ESTIMATES

This page has been left blank for double-sided copying.

The impact estimates discussed in the main body of this report and detailed in Appendix A reflect those from our benchmark approach to estimating the impacts of intensive and training services funded by the Workforce Investment Act (WIA) Adult and Dislocated Worker programs. However, the analytic methods used to estimate impacts for any complex evaluation must always be based on a host of assumptions that are not all testable. Thus, in this appendix, we report findings from a sensitivity analysis designed to examine the robustness of our main impact findings to alternative estimation approaches. We estimated impacts without adjusting for survey nonresponse (Section A), without using imputed data (Section B), omitting the two local areas from our sample that were selected to replace those that refused to participate in the study (Section C), controlling for local area or customer characteristics (Section D), using hierarchical linear modeling (Section E), and using a design-based estimation approach (Section F). We also explored the sensitivity of our estimates to the omission of individual local areas to check that no single area has undue influence on the findings (Section G).

Deviating from our benchmark approach in several ways leads us to the same conclusions about the effects of services provided through the Adult and Dislocated Worker programs. The estimated impact of intensive or training services funded by the programs on the use of many restricted and unrestricted services is consistently positive and significant across specifications. Training funded by the programs also increases training enrollment and credential receipt across the alternatives. Furthermore, impacts of WIA-funded services on employment and earnings are fairly robust.

Our most tentative finding is the pattern of impacts of both WIA-funded intensive and training services on earnings. In our benchmark specification, we estimated that both services together increased earnings in the 10th quarter after random assignment but not the 5th quarter after random assignment. Some sensitivity analyses suggest that providing both types of services significantly increased earnings in Quarters 5 and 10. This is not entirely surprising, given that the benchmark model produces a *p*-value for the estimated impact on Quarter 5 earnings of .067 and we use a 5 percent critical value; only a small increase in precision or the estimated impact is thus required to make this effect statistically significant. Other sensitivity analyses suggest a reversal of the pattern produced by the benchmark approach, with significant impacts on earnings in the 5th, but not 10th, quarter after random assignment.

However, the pattern of the impact findings for earnings is similar across all estimators, which forms the basis for our study conclusions. The findings suggest that providing WIA-funded intensive services without training increases earnings in both Quarter 5 and Quarter 10 and that providing both intensive and training services increases earnings in at least some quarters. Finally, neither the benchmark model nor any of the sensitivity analyses indicate that WIA-funded training increases earnings over and beyond any effect of intensive services.

A. Impacts estimated without nonresponse weights

As discussed in Appendix A, Section B, we used sampling weights to help adjust for possible survey nonresponse bias using propensity score methods and data from study registration forms. To explore whether our results are sensitive to these nonresponse corrections, we estimated impacts using weights that do not correct for survey nonresponse. We find that using the unadjusted weights does not lead to any meaningful changes in either the magnitude of the impacts or the impacts' associated *p*-values (Table B.1). Both analyses imply that services funded by the Adult and Dislocated Worker programs increased the uptake of restricted and unrestricted services, intensive services increased earnings in the 5th and 10th quarters after random assignment, and intensive services (with or without training) increased employment in the 5th quarter after random assignment. Using our benchmark approach, we found that the impact of providing both intensive and training services on earnings in the 5th quarter after random assignment was not statistically significant. When we do not use the nonresponse weights, this impact decreases but becomes significant; the impact estimate changes from $340 to $305, and its *p*-value changes from .067 to .035.

It therefore appears that our nonresponse weights do not change our study's overall conclusions. This occurs because, as shown in Appendix A, patterns of survey nonresponse do not differ markedly across the three study groups. Furthermore, there are not large differences between the baseline characteristics of survey respondents and nonrespondents that would affect the external validity of the impact estimates.

Table B.1. Impacts estimated without nonresponse weights, compared with benchmark estimation approach (all customers)

	Estimates not correcting for nonresponse			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Core, intensive, and supportive services						
Used any resource room (%)	3.3 (0.078)	2.0 (0.363)	5.3* (0.000)	3.5 (0.179)	2.0 (0.529)	5.5* (0.003)
Attended any workshop (%)	2.3 (0.544)	6.1* (0.011)	8.4* (0.041)	3.1 (0.411)	6.2* (0.016)	9.3* (0.026)
Took any assessment (%)	8.9* (0.016)	7.6* (0.003)	16.5* (0.001)	8.1* (0.009)	6.4* (0.028)	14.5* (0.002)
Attended any job club (%)	2.5 (0.085)	2.5 (0.443)	5.0 (0.117)	2.5 (0.088)	1.6 (0.578)	4.2 (0.152)
Received any one-on-one assistance (%)	2.4 (0.205)	13.3* (0.000)	15.7* (0.000)	2.6 (0.186)	13.4* (0.001)	16.0* (0.000)
Received any one-on-one assistance at AJC (%)	1.9 (0.261)	15.6* (0.000)	17.4* (0.000)	1.8 (0.233)	15.7* (0.000)	17.5* (0.000)
Total time spent in one-on-one sessions (minutes)	15.9* (0.015)	26.3* (0.007)	42.2* (0.000)	15.6* (0.009)	26.5* (0.002)	42.2* (0.000)
Total time spent in one-on-one sessions at AJC (minutes)	15.7* (0.012)	25.4* (0.000)	41.1* (0.000)	15.8* (0.004)	24.7* (0.000)	40.5* (0.000)
Received any supportive services (%)	10.8* (0.000)	6.2* (0.001)	17.1* (0.000)	10.4* (0.000)	6.3* (0.001)	16.7* (0.000)

	Estimates not correcting for nonresponse			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Training						
Enrolled in any training or education program (%)	9.1* (0.004)	6.6 (0.067)	15.7* (0.006)	8.6* (0.004)	7.3 (0.100)	15.9* (0.004)
Enrolled in an education program (%)	-0.3 (0.902)	-0.7 (0.771)	-1.0 (0.811)	0.8 (0.752)	-0.3 (0.896)	0.5 (0.889)
Hours spent in training/education	92.1* (0.021)	29.0 (0.095)	121.0* (0.008)	89.1* (0.020)	31.5 (0.110)	120.6* (0.009)
Received a credential through training/education (%)	5.5* (0.006)	7.9* (0.018)	13.5* (0.004)	5.6* (0.000)	8.3* (0.036)	13.9* (0.001)
Earnings and employment						
Earnings in Quarter 5 ($)	-536 (0.138)	841* (0.013)	305* (0.035)	-541 (0.185)	881* (0.015)	340 (0.067)
Earnings in Quarter 10 ($)	-139 (0.603)	868* (0.002)	729* (0.024)	-191 (0.436)	963* (0.003)	773* (0.023)
Employed in Quarter 5 (%)	-2.9 (0.245)	9.4* (0.017)	6.5* (0.009)	-3.4 (0.158)	9.8* (0.006)	6.4* (0.008)
Employed in Quarter 10 (%)	-1.0 (0.717)	3.4 (0.305)	2.4 (0.262)	-0.5 (0.860)	3.6 (0.337)	3.1 (0.231)

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression adjusted. Appendix A provides all details on our benchmark estimation approach. Alternative impacts were produced following the same approach, with one exception. In the alternative approach, data were weighted to account only for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, and (5) that the customer was selected for the survey. Our benchmark estimation approach also weights data to account for the probability that the customer completed the survey. Reported *p*-values for impacts are in parentheses and based on two-tailed t-tests.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center; C = core group mean; C&I = core-and-intensive group mean; F = full-WIA group mean.

B. Impacts estimated without imputation

Our analysis used imputed data to help adjust for survey item nonresponse bias (see Appendix A, Section C). To explore the extent to which the imputation procedure influenced our results, we also estimated impacts excluding any imputed data from the analysis (a complete-case analysis). This reduced our sample size for key outcomes by 0.3 to 10.7 percent. The analysis reveals that imputation had little impact on our findings for training, employment, and earnings, with one exception (Table B.2). When imputed data are omitted from the analysis, the impact of providing both WIA-funded intensive and training services on earnings in Quarter 10 decreases from $773 to $565 and is no longer statistically significant at the 5 percent level (although it remains significant at the 10 percent level, *p*-value = .060). (We did not impute data for receipt of core, intensive, and supportive services; therefore, unlike other tables in this appendix, Table B.2 does not include those outcomes.)

Table B.2. Impacts estimated excluding imputed data, compared with benchmark estimation approach (all customers)

	Estimates excluding imputed data			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Training						
Enrolled in any training or education program (%)	8.6* (0.005)	7.3 (0.088)	15.9* (0.004)	8.6* (0.004)	7.3 (0.100)	15.9* (0.004)
Enrolled in an education program (%)	1.0 (0.679)	-0.6 (0.772)	0.5 (0.896)	0.8 (0.752)	-0.3 (0.896)	0.5 (0.889)
Hours spent in training/education	72.2* (0.017)	22.4 (0.261)	94.6* (0.012)	89.1* (0.020)	31.5 (0.110)	120.6* (0.009)
Received a credential through training/education (%)	5.6* (0.000)	8.4* (0.036)	13.9* (0.001)	5.6* (0.000)	8.3* (0.036)	13.9* (0.001)
Earnings and employment						
Earnings in Quarter 5 ($)	-558 (0.147)	908* (0.012)	350 (0.055)	-541 (0.185)	881* (0.015)	340 (0.067)
Earnings in Quarter 10 ($)	-300 (0.325)	865* (0.009)	565 (0.060)	-191 (0.436)	963* (0.003)	773* (0.023)
Employed in Quarter 5 (%)	-3.3 (0.167)	9.8* (0.007)	6.4* (0.008)	-3.4 (0.158)	9.8* (0.006)	6.4* (0.008)
Employed in Quarter 10 (%)	-0.3 (0.899)	3.4 (0.367)	3.1 (0.260)	-0.5 (0.860)	3.6 (0.337)	3.1 (0.231)

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Alternative impacts were produced following the same approach but excluding any imputed data. Reported *p*-values for impacts are in parentheses and based on two-tailed t-tests.

* Significantly different from zero at the 5 percent level.

C = core group mean; C&I = core-and-intensive group mean; F = full-WIA group mean.

C. Impacts excluding replacement local areas

As described in Appendix A, Section A, the study team identified potential replacement local areas to help maintain the representativeness of our sample if one of the areas selected for the study declined to participate. The team chose replacement local areas to be as similar as possible to the originally selected local area. Specifically, we identified the replacement local areas by searching for local areas that were, in order of priority, in the same region, of similar size, in the same state, and with similar training rates as the originally selected local area. Four local areas declined to participate in the study, and two were replaced: Thumb Area (Michigan) was replaced by Southeast Michigan, and WIA Area 7 (Ohio) was replaced by Chicago (Illinois). (See Appendix A, Section B for details on how our weights account for the sampling and replacement of local areas.)

To ensure that these nonrandomly selected local areas are not responsible for our results, we also estimated impacts excluding customers served by the Southeast Michigan and Chicago (Illinois) local areas (Table B.3). The omission led to no notable changes in our results.

Table B.3. Impacts estimated excluding replacement local areas, compared with benchmark estimation approach (all customers)

	Estimates excluding replacement local areas			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Core, intensive, and supportive services						
Used any resource room (%)	3.4 (0.199)	2.3 (0.492)	5.7* (0.002)	3.5 (0.179)	2.0 (0.529)	5.5* (0.003)
Attended any workshop (%)	3.0 (0.439)	6.4* (0.016)	9.4* (0.029)	3.1 (0.411)	6.2* (0.016)	9.3* (0.026)
Took any assessment (%)	8.4* (0.009)	6.2* (0.039)	14.7* (0.003)	8.1* (0.009)	6.4* (0.028)	14.5* (0.002)
Attended any job club (%)	2.4 (0.104)	1.3 (0.658)	3.8 (0.204)	2.5 (0.088)	1.6 (0.578)	4.2 (0.152)
Received any one-on-one assistance (%)	2.9 (0.151)	12.6* (0.001)	15.5* (0.000)	2.6 (0.186)	13.4* (0.001)	16.0* (0.000)
Received any one-on-one assistance at AJC (%)	2.0 (0.192)	15.0* (0.000)	17.0* (0.000)	1.8 (0.233)	15.7* (0.000)	17.5* (0.000)
Total time spent in one-on-one sessions (minutes)	15.2* (0.013)	25.9* (0.003)	41.1* (0.000)	15.6* (0.009)	26.5* (0.002)	42.2* (0.000)
Total time spent in one-on-one sessions at AJC (minutes)	15.2* (0.006)	24.2* (0.000)	39.4* (0.000)	15.8* (0.004)	24.7* (0.000)	40.5* (0.000)
Received any supportive services (%)	10.8* (0.000)	6.2* (0.002)	16.9* (0.000)	10.4* (0.000)	6.3* (0.001)	16.7* (0.000)
Training						
Enrolled in any training or education program (%)	9.0* (0.004)	7.4 (0.104)	16.4* (0.004)	8.6* (0.004)	7.3 (0.100)	15.9* (0.004)
Enrolled in an education program (%)	0.8 (0.741)	-0.2 (0.924)	0.6 (0.865)	0.8 (0.752)	-0.3 (0.896)	0.5 (0.889)
Hours spent in training/education	90.5* (0.023)	33.0 (0.105)	123.5* (0.010)	89.1* (0.020)	31.5 (0.110)	120.6* (0.009)
Received a credential through training/education (%)	5.7* (0.000)	8.6* (0.035)	14.3* (0.002)	5.6* (0.000)	8.3* (0.036)	13.9* (0.001)
Earnings and employment						
Earnings in Quarter 5 ($)	-560 (0.185)	850* (0.023)	290 (0.116)	-541 (0.185)	881* (0.015)	340 (0.067)
Earnings in Quarter 10 ($)	-198 (0.434)	928* (0.005)	730* (0.037)	-191 (0.436)	963* (0.003)	773* (0.023)
Employed in Quarter 5 (%)	-3.3 (0.181)	9.7* (0.009)	6.4* (0.011)	-3.4 (0.158)	9.8* (0.006)	6.4* (0.008)
Employed in Quarter 10 (%)	-0.5 (0.851)	3.3 (0.385)	2.8 (0.292)	-0.5 (0.860)	3.6 (0.337)	3.1 (0.231)

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Alternative impacts were produced following the same approach but excluding the two local areas chosen to replace two randomly selected local areas that declined to participate in this evaluation. Reported *p*-values for impacts are in parentheses and based on two-tailed t-tests.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center; C = core group mean; C&I = core-and-intensive group mean; F = full-WIA group mean.

D. Impacts controlling for local area and customer characteristics

Because of the randomized controlled trial design, we can produce unbiased impact estimates without controlling for the baseline characteristics of individuals or local areas. However, including baseline covariates in our regression might increase precision and help adjust for residual baseline differences across the three study groups due to random sampling. Therefore, we explored adding controls to our regression models for variables measured at the local area level (for example, the local unemployment rate) or the customer level (for example, customer age).

It is important to realize that the inclusion of customer-level covariates in the regression models does not always yield precision gains. This is mainly because, under a random-block design, the variation in impacts across blocks (local areas, in our case) largely determines the precision of impact estimates. In this study, the variance of the impact estimates largely reflects variation in the estimated impacts across the 28 study local areas. Therefore, although the inclusion of customer-level covariates will improve the precision of the estimated impacts for each site, these covariates will not necessarily reduce the variation of the estimated impacts *across* sites.

In addition, our particular design, in which the probability of assignment to study groups varies across and within sites, implies that adding individual-level covariates may lead to biased impact estimates. This can occur if both the impacts of WIA-funded services and the variance of the probability of assignment to a particular study group vary across groups of customers.

Adding local area controls had no discernible influence on our estimates or their standard errors. This suggests that, after controlling for region indicators, the local area characteristics included in the model explained little of the variation in the estimated impacts across local areas. The local area variables also reduce the number of degrees of freedom for hypothesis testing, which further dampens their effect on precision.

Adding customer-level controls also did not affect many of our overall findings, but it did result in some changes in point estimates and *p*-values (Table B.4). Analyses including and excluding customer covariates both imply that providing services funded by the Adult and Dislocated Worker programs increases the uptake of services. Both analyses also imply that providing intensive services (with or without training) funded by the programs increased employment in the fifth quarter after random assignment.

The two analyses also produce similar results for earnings, although there are some shifts in which estimates are statistically significant. Both estimators imply that providing intensive services funded by the Adult and Dislocated Worker programs significantly increased earnings in both Quarter 5 and Quarter 10 and that providing training, in addition to intensive services, did not significantly affect earnings in either quarter. The benchmark model also indicates that the difference in earnings between the full-WIA and core groups is statistically significant at the 5 percent level in Quarter 10 (impact of $773, *p*-value = .023) but significant only at the 10 percent level in Quarter 5 (impact of $340, *p*-value = .067). In contrast, the model with covariates implies that this difference is statistically significant at the 5 percent level in Quarter 5 (impact of $415, *p*-value = .022) but significant at only the 10 percent level in Quarter 10 (impact of $800, *p*-value = .063).

Table B.4. Impacts estimated controlling for customer-level covariates, compared with benchmark estimation approach (all customers)

	Estimates controlling for customer-level covariates			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Core, intensive, and supportive services						
Used any resource room (%)	3.4 (0.110)	1.5 (0.553)	4.9* (0.005)	3.5 (0.179)	2.0 (0.529)	5.5* (0.003)
Attended any workshop (%)	2.3 (0.373)	5.5* (0.014)	7.8* (0.013)	3.1 (0.411)	6.2* (0.016)	9.3* (0.026)
Took any assessment (%)	8.4* (0.020)	5.8* (0.025)	14.2* (0.003)	8.1* (0.009)	6.4* (0.028)	14.5* (0.002)
Attended any job club (%)	2.8* (0.038)	0.5 (0.801)	3.4 (0.243)	2.5 (0.088)	1.6 (0.578)	4.2 (0.152)
Received any one-on-one assistance (%)	3.6* (0.043)	12.3* (0.000)	15.9* (0.000)	2.6 (0.186)	13.4* (0.001)	16.0* (0.000)
Received any one-on-one assistance at AJC (%)	2.5 (0.074)	15.2* (0.000)	17.8* (0.000)	1.8 (0.233)	15.7* (0.000)	17.5* (0.000)
Total time spent in one-on-one sessions (minutes)	18.6* (0.004)	23.6* (0.006)	42.2* (0.000)	15.6* (0.009)	26.5* (0.002)	42.2* (0.000)
Total time spent in one-on-one sessions at AJC (minutes)	16.5* (0.000)	23.1* (0.000)	39.6* (0.000)	15.8* (0.004)	24.7* (0.000)	40.5* (0.000)
Received any supportive services (%)	10.3* (0.000)	6.8* (0.001)	17.1* (0.000)	10.4* (0.000)	6.3* (0.001)	16.7* (0.000)
Training						
Enrolled in any training or education program (%)	8.8* (0.003)	6.9 (0.065)	15.6* (0.001)	8.6* (0.004)	7.3 (0.100)	15.9* (0.004)
Enrolled in an education program (%)	0.8 (0.743)	-0.3 (0.836)	0.5 (0.868)	0.8 (0.752)	-0.3 (0.896)	0.5 (0.889)
Hours spent in training/education	86.6* (0.048)	38.6 (0.138)	125.2* (0.007)	89.1* (0.020)	31.5 (0.110)	120.6* (0.009)
Received a credential through training/education (%)	5.8* (0.000)	8.0* (0.013)	13.9* (0.001)	5.6* (0.000)	8.3* (0.036)	13.9* (0.001)

	Estimates controlling for customer-level covariates			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Earnings and employment						
Earnings in Quarter 5 ($)	-403 (0.226)	819* (0.032)	415* (0.022)	-541 (0.185)	881* (0.015)	340 (0.067)
Earnings in Quarter 10 ($)	-43 (0.892)	842* (0.004)	800 (0.063)	-191 (0.436)	963* (0.003)	773* (0.023)
Employed in Quarter 5 (%)	-3.1 (0.185)	9.4* (0.007)	6.3* (0.003)	-3.4 (0.158)	9.8* (0.006)	6.4* (0.008)
Employed in Quarter 10 (%)	-0.7 (0.774)	3.6 (0.326)	2.8 (0.314)	-0.5 (0.860)	3.6 (0.337)	3.1 (0.231)

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Alternative impacts were produced following the same approach, but also controlling in the estimating equation for age, education, adult or dislocated worker status, employment status at random assignment, whether the customer held a job in the five years before random assignment, real hourly wage in a person's current or last job, gender, race and ethnicity, whether an individual reported a work-limiting health condition, household size, primary language spoken, marital status, and receipt of government transfer benefits at random assignment, all collected on the evaluation study registration form. Reported *p*-values for impacts are in parentheses and based on two-tailed t-tests.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center; C = core group mean; C&I = core-and-intensive group mean; F = full-WIA group mean.

E. Impacts estimated using hierarchical linear modeling

As detailed in Appendix A, our benchmark estimation approach uses weighted ordinary least squares (OLS) with cluster-robust standard errors to estimate impacts (applied using the Stata regression command with the cluster-robust option). Alternatively, we could estimate effects using a hierarchical linear model (HLM). We thus explored the robustness of our results to this alternative. In particular, we used the SAS proc mixed command to estimate:

$$(1) \quad y_{isr} = \alpha + T_{f,isr}\beta_{f-c} + T_{ci,isr}\beta_{ci-c} + \delta_r + (\mu_s + T_{f,isr}\theta_{f-c,s} + T_{ci,isr}\theta_{ci-c,s} + \in_{isr}) .$$

In this equation, y is the outcome of interest; δ is a region-specific intercept term; T_f and T_{ci} are indicators for a customer being in the full-WIA and core-and-intensive groups, respectively; μ_s is a local area-specific random intercept; θ_{f-c} and θ_{ci-c} are local area-specific random coefficients; and $\in_{isr}$ is a customer-level error term. All random effects (the terms in parentheses) are assumed to be normally distributed and independent of one another. As in our main specification, β_{f-c} is the population average treatment effect of assignment to the full-WIA group relative to the core group, and β_{ci-c} is the population average treatment effect of assignment to the core-and-intensive group relative to the core group. The specification varies from our benchmark estimation approach because it includes local area-specific random effects

(μ) and random coefficients (θ) instead of using cluster-robust standard errors. We estimated this HLM specification both excluding and including additional customer-level covariates.

Most of the HLM results are similar to those produced by our benchmark estimation approach (Tables B.5 and B.6). Both HLM specifications imply that intensive and training services funded by the Adult and Dislocated Worker programs increased the use of many services. Compared with the benchmark model, the HLM specifications provide more evidence that training increased customer use of a resource room but less evidence that training increased the rate at which customers took assessments. Estimated impacts for employment are also similar for the HLM and benchmark specifications. The HLM estimator without covariates also produces results for earnings similar to those produced by the benchmark estimation approach.

Estimates of impacts on earnings differ somewhat between the benchmark approach and the HLM with covariates (Table B.6). In both cases, providing intensive services funded by the Adult and Dislocated Worker programs (without training) is associated with increases in Quarter 5 and Quarter 10 earnings. Both approaches also suggest that making training available, in addition to intensive services, has little impact on earnings in either quarter. However, the benchmark model implies that both intensive and training services significantly increased earnings in Quarter 10 (impact of $773, *p*-value = .023) but not Quarter 5 (impact of $340, *p*-value = .067), and the HLM with covariates implies that these services significantly increased customer earnings in Quarter 5 (impact of $407, *p*-value = .026) but not Quarter 10 (impact of $578, *p*-value = .061). These differences are similar to those seen when comparing the benchmark model to the OLS regression with covariates.

Table B.5. Impacts estimated using an HLM without customer covariates, compared with benchmark estimation approach (all customers)

	Estimates from HLM without customer covariates			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Core, intensive, and supportive services						
Used any resource room (%)	3.6* (0.047)	1.4 (0.510)	5.5* (0.001)	3.5 (0.179)	2.0 (0.529)	5.5* (0.003)
Attended any workshop (%)	3.2 (0.224)	5.0* (0.041)	8.6* (0.004)	3.1 (0.411)	6.2* (0.016)	9.3* (0.026)
Took any assessment (%)	5.3 (0.061)	5.2* (0.046)	10.4* (0.003)	8.1* (0.009)	6.4* (0.028)	14.5* (0.002)
Attended any job club (%)	2.2 (0.192)	1.1 (0.606)	3.6 (0.087)	2.5 (0.088)	1.6 (0.578)	4.2 (0.152)
Received any one-on-one assistance (%)	2.4 (0.198)	11.6* (0.000)	14.8* (0.000)	2.6 (0.186)	13.4* (0.001)	16.0* (0.000)
Received any one-on-one assistance at AJC (%)	1.8 (0.308)	14.4* (0.000)	17.6* (0.000)	1.8 (0.233)	15.7* (0.000)	17.5* (0.000)
Total time spent in one-on-one sessions (minutes)	15.5* (0.008)	25.6* (0.000)	42.8* (0.000)	15.6* (0.009)	26.5* (0.002)	42.2* (0.000)
Total time spent in one-on-one sessions at AJC (minutes)	15.9* (0.002)	23.4* (0.000)	40.4* (0.000)	15.8* (0.004)	24.7* (0.000)	40.5* (0.000)

	Estimates from HLM without customer covariates			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Received any supportive services (%)	10.9* (0.000)	7.6* (0.006)	18.5* (0.000)	10.4* (0.000)	6.3* (0.001)	16.7* (0.000)
Training						
Enrolled in any training or education program (%)	9.9* (0.001)	4.6 (0.104)	15.1* (0.000)	8.6* (0.004)	7.3 (0.100)	15.9* (0.004)
Enrolled in an education program (%)	1.8 (0.320)	-0.9 (0.513)	1.2 (0.541)	0.8 (0.752)	-0.3 (0.896)	0.5 (0.889)
Hours spent in training/education	94.1* (0.017)	28.3 (0.253)	122.5* (0.003)	89.1* (0.020)	31.5 (0.110)	120.6* (0.009)
Received a credential through training/education (%)	6.2* (0.000)	5.7* (0.023)	13.0* (0.000)	5.6* (0.000)	8.3* (0.036)	13.9* (0.001)
Earnings and employment						
Earnings in Quarter 5 ($)	-255 (0.334)	553* (0.034)	366 (0.074)	-541 (0.185)	881* (0.015)	340 (0.067)
Earnings in Quarter 10 ($)	-154 (0.508)	818* (0.001)	669* (0.014)	-191 (0.436)	963* (0.003)	773* (0.023)
Employed in Quarter 5 (%)	-2.3 (0.267)	6.7* (0.010)	6.0* (0.003)	-3.4 (0.158)	9.8* (0.006)	6.4* (0.008)
Employed in Quarter 10 (%)	-0.1 (0.953)	2.6 (0.232)	3.1 (0.093)	-0.5 (0.860)	3.6 (0.337)	3.1 (0.231)

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Alternative impacts were produced using an HLM, allowing for region-fixed effects, local area-random effects, and local area-random coefficients on indicators for study group. Reported *p*-values for impacts are in parentheses and based on two-tailed t-tests.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center; C = core group mean; C&I = core-and-intensive group mean; F = full-WIA group mean; HLM = hierarchical linear model.

Table B.6. Impacts estimated using an HLM with customer covariates, compared with benchmark estimation approach (all customers)

	Estimates from HLM			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Core, intensive, and supportive services						
Used any resource room (%)	3.4* (0.024)	1.1 (0.565)	5.0* (0.001)	3.5 (0.179)	2.0 (0.529)	5.5* (0.003)
Attended any workshop (%)	3.1 (0.192)	4.9* (0.034)	8.3* (0.002)	3.1 (0.411)	6.2* (0.016)	9.3* (0.026)
Took any assessment (%)	5.5 (0.066)	4.9 (0.061)	10.3* (0.004)	8.1* (0.009)	6.4* (0.028)	14.5* (0.002)
Attended any job club (%)	2.7 (0.131)	0.5 (0.749)	3.3 (0.106)	2.5 (0.088)	1.6 (0.578)	4.2 (0.152)

	Estimates from HLM			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Received any one-on-one assistance (%)	3.4 (0.067)	11.4* (0.000)	15.2* (0.000)	2.6 (0.186)	13.4* (0.001)	16.0* (0.000)
Received any one-on-one assistance at AJC (%)	2.5 (0.155)	14.1* (0.000)	17.8* (0.000)	1.8 (0.233)	15.7* (0.000)	17.5* (0.000)
Total time spent in one-on-one sessions (minutes)	18.2* (0.002)	23.9* (0.001)	43.2* (0.000)	15.6* (0.009)	26.5* (0.002)	42.2* (0.000)
Total time spent in one-on-one sessions at AJC (minutes)	16.6* (0.000)	22.3* (0.000)	40.1* (0.000)	15.8* (0.004)	24.7* (0.000)	40.5* (0.000)
Received any supportive services (%)	10.9* (0.000)	7.8* (0.004)	18.7* (0.000)	10.4* (0.000)	6.3* (0.001)	16.7* (0.000)
Training						
Enrolled in any training or education program (%)	10.1* (0.001)	4.6 (0.093)	15.1* (0.000)	8.6* (0.004)	7.3 (0.100)	15.9* (0.004)
Enrolled in an education program (%)	1.8 (0.328)	-0.9 (0.506)	1.2 (0.557)	0.8 (0.752)	-0.3 (0.896)	0.5 (0.889)
Hours spent in training/education	90.3* (0.025)	32.5 (0.192)	122.6* (0.003)	89.1* (0.020)	31.5 (0.110)	120.6* (0.009)
Received a credential through training/education (%)	6.7* (0.001)	5.9* (0.018)	13.3* (0.000)	5.6* (0.000)	8.3* (0.036)	13.9* (0.001)
Earnings and employment						
Earnings in Quarter 5 ($)	-235 (0.303)	538* (0.030)	407* (0.026)	-541 (0.185)	881* (0.015)	340 (0.067)
Earnings in Quarter 10 ($)	-105 (0.695)	705* (0.004)	578 (0.061)	-191 (0.436)	963* (0.003)	773* (0.023)
Employed in Quarter 5 (%)	-2.3 (0.261)	6.3* (0.012)	5.6* (0.007)	-3.4 (0.158)	9.8* (0.006)	6.4* (0.008)
Employed in Quarter 10 (%)	-0.5 (0.777)	2.6 (0.220)	2.8 (0.144)	-0.5 (0.860)	3.6 (0.337)	3.1 (0.231)

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Alternative impacts were produced using an HLM, allowing for local area-random effects, local area-random coefficients on indicators for study group, and fixed effects for region and customer characteristics (age, education, adult or dislocated worker status, employment status at random assignment, whether the customer held a job in the five years before random assignment, real hourly wage in a person's current or most recent job, gender, race and ethnicity, whether an individual reported a work-limiting health condition, household size, primary language spoken, marital status, and receipt of government transfer benefits at random assignment) collected on the evaluation study registration form. Reported *p*-values for impacts are in parentheses and based on two-tailed t-tests.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center; C = core group mean; C&I = core-and-intensive group mean; F = full-WIA group mean; HLM = hierarchical linear model.

F. Impacts estimated using a design-based approach

Design-based analysis is another possible alternative to impact estimation using weighted OLS (Imbens and Rubin 2015; Schochet 2016). Although currently less commonly used in evaluations of employment programs, design-based methods are based on a rich statistical literature (see Neyman 1923 [1990]; Rubin 1974, 1977; Holland 1986). For this study, we randomly selected local areas within regions and conducted random assignment at the area level. Therefore, the design-based approach first estimates impacts in each local area, then uses these estimates to obtain pooled impact and variance estimates. As in our main analysis, we treat all local areas as though they were randomly selected. Because two areas were selected with certainty, this will produce somewhat large standard errors (see Appendix A, Section D).

In the design-based approach, we estimated impacts using a two-stage process for each pairwise combination of study groups (full-WIA versus core-and-intensive, core-and-intensive versus core, and full-WIA versus core). In the first stage, we used weighted OLS within each local area to estimate:

$$(2) \quad y_{isr} = \alpha_{sr} + T_{j,isr}\beta_{j,isr} + \in_{isr},$$

where the sample is restricted to customers in two of the three research groups, and $T_{j,isr}$ is an indicator for being in the full-WIA group ($T_{f,isr}$)—when we compare the full-WIA group with the core-and-intensive or core group—or the core-and-intensive group ($T_{ci,isr}$)—when we compare the core-and-intensive and core groups. The estimated impact for customers in local area *s* and region *r* is given by $\hat{\beta}_{j,sr}$.

In the second stage, we combined the $\hat{\beta}_{j,sr}$ estimates by regressing the local area level impact estimates on a constant and indicators for region that have been mean-centered ($\ddot{\delta}_r$):

$$(3) \quad \hat{\beta}_{j,sr} = \beta_j + \ddot{\delta}_{jr} + \xi_{j,sr}.$$

Because the region-level indicators are demeaned, we can then interpret the estimated value of β_j as the impact of services funded by the Adult and Dislocated Worker programs on the outcome of interest.

Our design-based approach accounts for region-level stratification by estimating the variance of local area impacts within regions and then aggregating across regions. In particular, the region-level variance of $\hat{\beta}_{j,sr}$ could be estimated as:

$$(4) \quad \widehat{Var}_r(\hat{\beta}_{j,sr}) = \frac{1}{m_r(m_r-1)\overline{w}_r^2}\sum_{s=1}^{m_r}(\overline{w}_{sr}\hat{\beta}_{j,sr} - \overline{w}_r(\hat{\beta}_{j,sr} - \xi_{j,sr}))^2,$$

where m_r is the number of local areas in region r, w_{sr} is the total weight given to local area s, $\bar{w}_r = \frac{1}{m_r}\sum_{s=1}^{m_r} w_{sr}$ is the within-region average of the local area weight, and $(\hat{\beta}_{j,sr} - \xi_{sr})$ is the predicted value for local area s from the second-stage regression used to estimate $\hat{\beta}_j$. However, because we selected four or fewer local areas from three regions, $\bar{w}$ is a noisy measure of the average weight within region r. Thus, we replaced it with $\bar{w} = \frac{1}{m}\sum_{s=1}^{m} w_{sr}$, where m is the total number of sites in the analysis. We then pooled these variances across the six regions to estimate the variance of $\hat{\beta}_j$:

$$(5) \quad \widehat{Var}(\hat{\beta}_j) = \frac{\sum_{r=1}^{6} w_r^2 \widehat{Var}_r(\hat{\beta}_{j,sr})}{(\sum_{r=1}^{6} w_r)^2},$$

where $w_r = \sum_{s=1}^{m_r} w_{sr}$. We applied the same finite-population correction to this variance that we used in our benchmark estimation approach (see Appendix A, Section D.1).

The estimates generated using a design-based approach closely match our benchmark results (Table B.7). Providing services funded by the Adult and Dislocated Worker programs is associated with increases in the use of core, intensive, and training services. Although the design-based approach generates slightly higher *p*-values, patterns of significant impacts on earnings and employment also closely match across the approaches.

Table B.7. Impacts estimated using a design-based approach, compared with benchmark estimation approach (all customers)

	Estimates from design-based regression approach			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Core, intensive, and supportive services						
Used any resource room (%)	3.3 (0.161)	2.1 (0.491)	5.5* (0.007)	3.5 (0.179)	2.0 (0.529)	5.5* (0.003)
Attended any workshop (%)	3.1 (0.370)	6.3* (0.025)	9.4* (0.026)	3.1 (0.411)	6.2* (0.016)	9.3* (0.026)
Took any assessment (%)	7.9* (0.040)	6.4 (0.052)	14.8* (0.020)	8.1* (0.009)	6.4* (0.028)	14.5* (0.002)
Attended any job club (%)	2.1 (0.145)	1.8 (0.513)	4.2 (0.161)	2.5 (0.088)	1.6 (0.578)	4.2 (0.152)
Received any one-on-one assistance (%)	2.4 (0.196)	13.4* (0.007)	16.0* (0.001)	2.6 (0.186)	13.4* (0.001)	16.0* (0.000)
Received any one-on-one assistance at AJC (%)	1.8 (0.213)	15.8* (0.001)	17.8* (0.000)	1.8 (0.233)	15.7* (0.000)	17.5* (0.000)
Total time spent in one-on-one sessions (minutes)	14.9* (0.011)	26.7* (0.001)	43.0* (0.000)	15.6* (0.009)	26.5* (0.002)	42.2* (0.000)

	Estimates from design-based regression approach			Benchmark impact estimates		
	F-C&I	C&I-C	F-C	F-C&I	C&I-C	F-C
Total time spent in one-on-one sessions at AJC (minutes)	16.2* (0.005)	24.7* (0.000)	41.7* (0.000)	15.8* (0.004)	24.7* (0.000)	40.5* (0.000)
Received any supportive services (%)	10.8* (0.000)	6.4* (0.002)	17.0* (0.000)	10.4* (0.000)	6.3* (0.001)	16.7* (0.000)
Training						
Enrolled in any training or education program (%)	9.1* (0.001)	7.2 (0.131)	16.1* (0.008)	8.6* (0.004)	7.3 (0.100)	15.9* (0.004)
Enrolled in an education program (%)	1.2 (0.574)	-0.4 (0.846)	0.8 (0.798)	0.8 (0.752)	-0.3 (0.896)	0.5 (0.889)
Hours spent in training/education	93.8* (0.008)	27.7 (0.167)	122.3* (0.009)	89.1* (0.020)	31.5 (0.110)	120.6* (0.009)
Received a credential through training/education (%)	6.4* (0.000)	8.3* (0.046)	14.1* (0.005)	5.6* (0.000)	8.3* (0.036)	13.9* (0.001)
Earnings and employment						
Earnings in Quarter 5 ($)	-549 (0.224)	894* (0.049)	324 (0.134)	-541 (0.185)	881* (0.015)	340 (0.067)
Earnings in Quarter 10 ($)	-140 (0.568)	974* (0.014)	797* (0.030)	-191 (0.436)	963* (0.003)	773* (0.023)
Employed in Quarter 5 (%)	-3.1 (0.218)	9.9* (0.030)	6.3* (0.023)	-3.4 (0.158)	9.8* (0.006)	6.4* (0.008)
Employed in Quarter 10 (%)	-0.4 (0.860)	3.7 (0.317)	3.5 (0.194)	-0.5 (0.860)	3.6 (0.337)	3.1 (0.231)

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Alternative impacts were produced using a design-based approach correcting for random selection of local areas by region and random assignment of customers by local area. Reported *p*-values for impacts are in parentheses and based on two-tailed t-tests.

* Significantly different from zero at the 5 percent level.

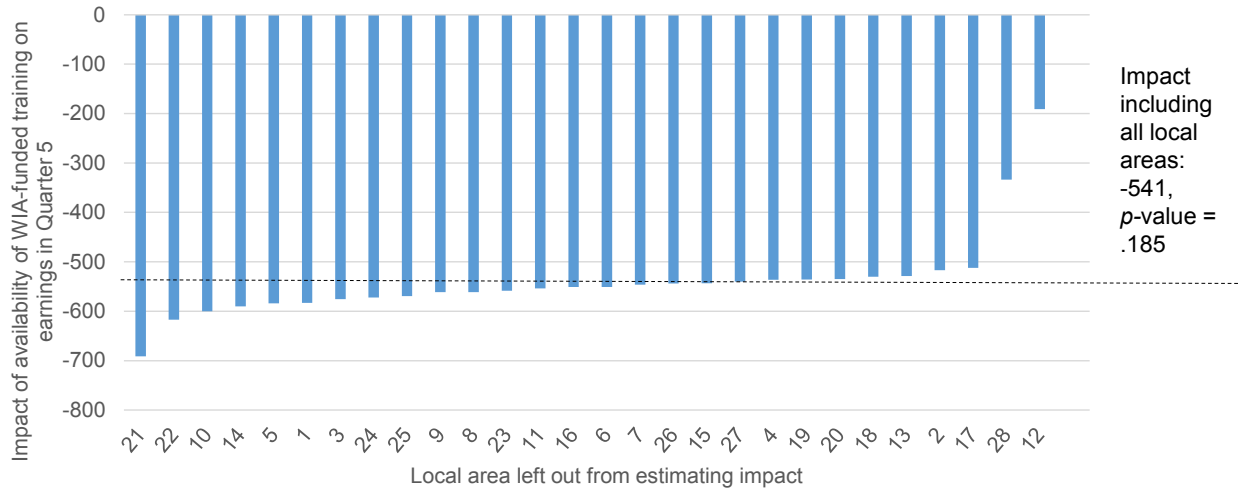
AJC = American Job Center; C = core group mean; C&I = core-and-intensive group mean; F = full-WIA group mean.

G. The influence of individual local areas on impacts

Our main impact analysis strategy used data from 28 local areas to estimate the impacts of intensive and training services funded by the Adult and Dislocated Worker programs. With relatively few local areas, there is some risk that any one area might drive our observed results. To explore this possibility, we estimated the impacts of services funded by the Adult and Dislocated Worker programs on earnings in the 5th and 10th quarters after random assignment 28 times, each time leaving out a different local area. This analysis confirms that no one local area drives our impact estimates, including the two local areas that received relatively large weights (Essex County [New Jersey] and Atlanta Region [Georgia]; see Appendix A, Section B).

As for our main analysis, all 28 estimators that iteratively exclude individual local areas imply that training funded by the Adult and Dislocated Worker programs does not significantly increase or decrease earnings in Quarter 5 or Quarter 10 (Figures B.1 and B.2). For Quarter 5, all impact estimates are negative and imply decreases in earnings of $191 to $691, compared with a decrease of $541 implied by our benchmark estimates. For Quarter 10, all impact estimates are negative as well, and imply decreases in earnings of $143 to $484, compared with a decrease of $191 implied by our benchmark estimates. As with the estimates including all local areas, none of the estimates leaving out a single local area is statistically significant.

Figure B.1. Impacts of training funded by the Adult and Dislocated Worker programs on Quarter 5 earnings leaving out individual local areas

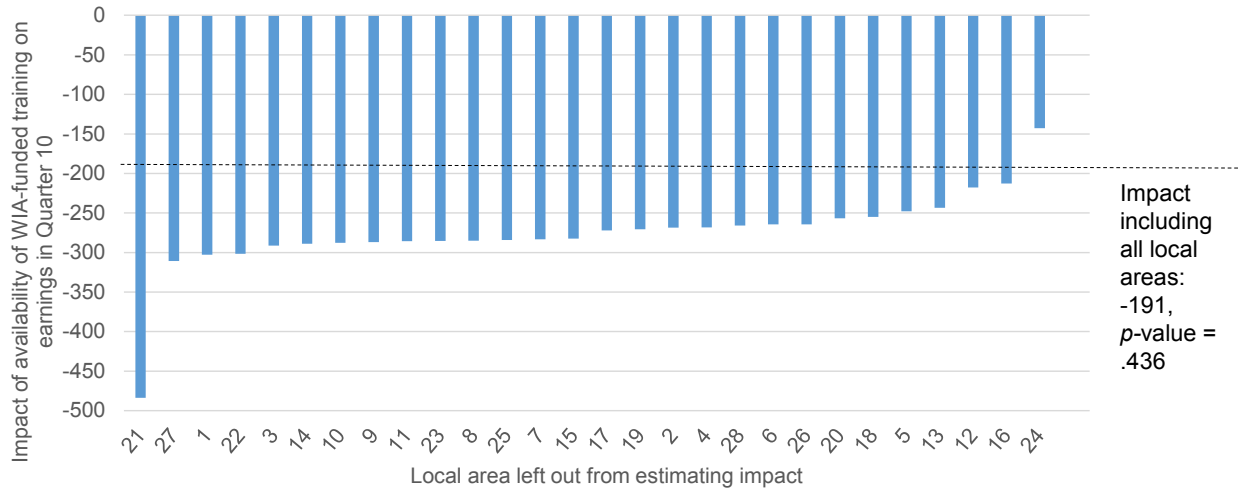


Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Impacts reported in 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Each alternate estimate leaves out data from a single local area. The reported *p*-value is based on a two-tailed t-test.

None of the estimated impacts is statistically significant at the 5 percent level.

Figure B.2. Impacts of training funded by the Adult and Dislocated Worker programs on Quarter 10 earnings leaving out individual local areas



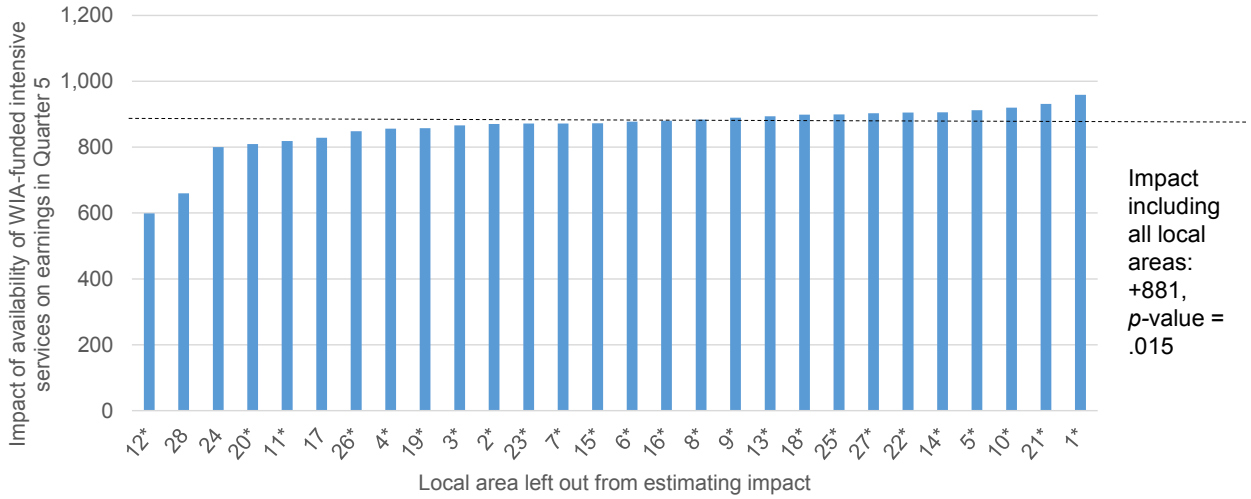
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Impacts reported in 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Each alternate estimate leaves out data from a single local area. The reported *p*-value is based on a two-tailed t-test.

None of the estimated impacts is statistically significant at the 5 percent level.

Most of the estimated impacts of intensive services funded by the Adult and Dislocated Worker programs that we generated by leaving out individual local areas confirm our finding that these services increase earnings (Figures B.3 and B.4). Our benchmark model implies that WIA-funded intensive services increased earnings in the 5th quarter after random assignment by $881 and in the 10th quarter after random assignment by $963. The alternative estimates imply increases in earnings of between $599 and $959 for Quarter 5 and between $793 and $1,085 for Quarter 10. All but three of the impact estimates for Quarter 5, and one of the impact estimates for Quarter 10, are statistically significant.

Figure B.3. Impacts of intensive services funded by the Adult and Dislocated Worker programs on Quarter 5 earnings leaving out individual local areas

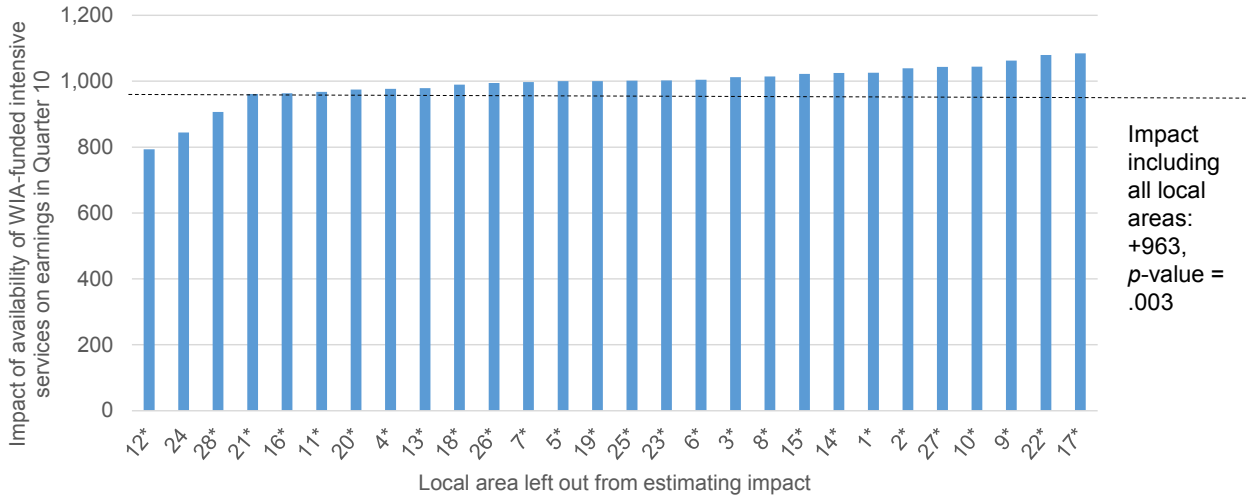


Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Impacts reported in 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Each alternate estimate leaves out data from a single local area. The reported *p*-value is based on a two-tailed t-test.

* Significantly different from zero at the 5 percent level.

Figure B.4. Impacts of intensive services funded by the Adult and Dislocated Worker programs on Quarter 10 earnings leaving out individual local areas



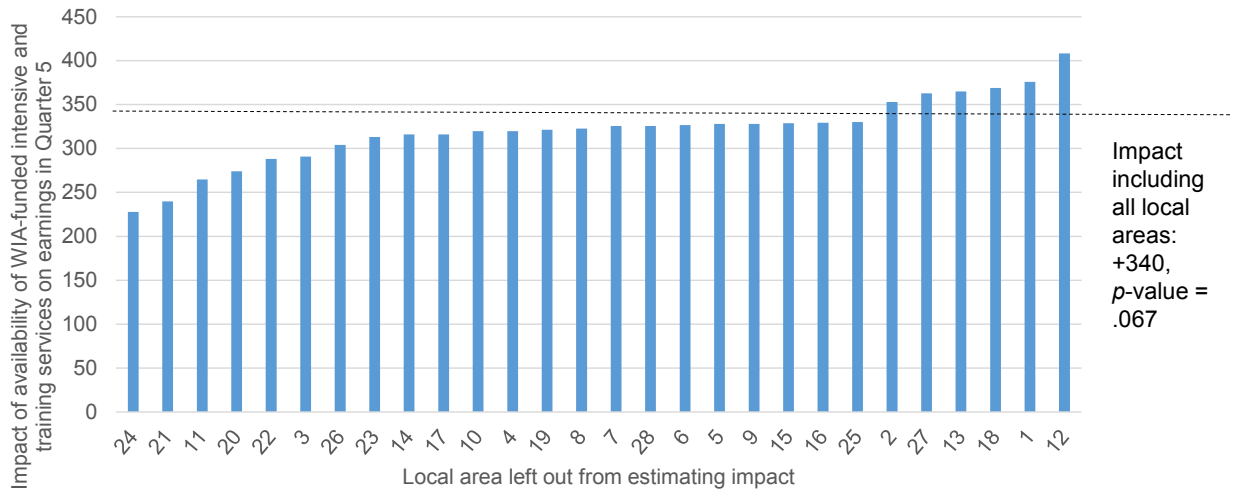
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Impacts reported in 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Each alternate estimate leaves out data from a single local area. The reported *p*-value is based on a two-tailed t-test.

* Significantly different from zero at the 5 percent level.

Finally, the leave-one-out estimators confirm our findings on the impact of both intensive and training services funded by the Adult and Dislocated Worker programs on earnings (Figures B.5 and B.6). Our benchmark estimators indicate that providing both intensive and training services significantly increased earnings in Quarter 10 but not Quarter 5. Impact estimates generated within samples omitting individual local areas for Quarter 5 earnings range from $228 to $408. None of these estimates is statistically significant. For Quarter 10 earnings, estimates range from $478 to $813. All but one of these estimates are significant.

Figure B.5. Impacts of intensive and training services funded by the Adult and Dislocated Worker programs on Quarter 5 earnings leaving out individual local areas

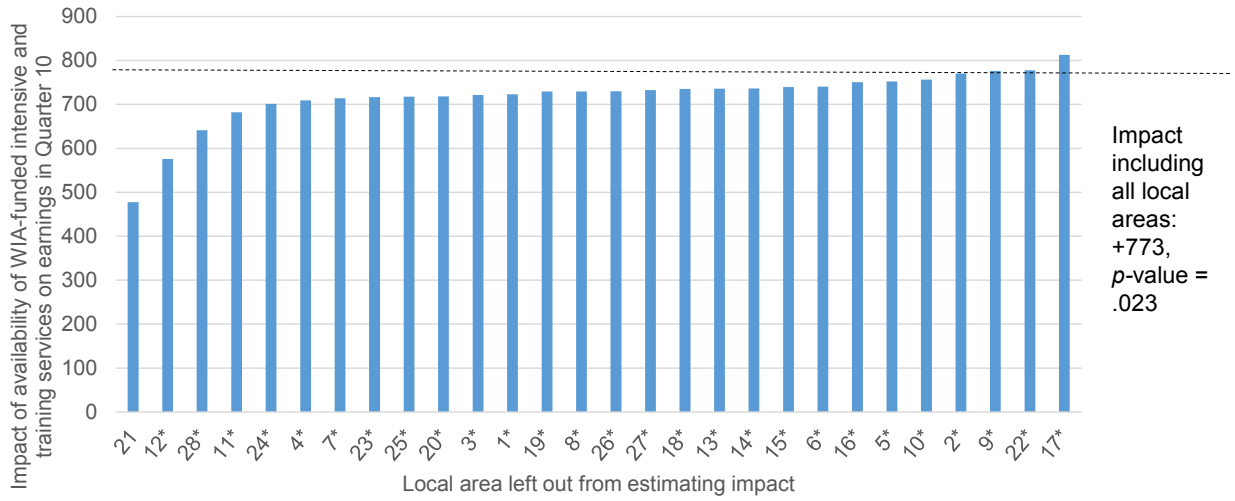


Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Impacts reported in 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Each alternate estimate leaves out data from a single local area. The reported *p*-value is based on a two-tailed t-test.

None of the estimated impacts is statistically significant at the 5 percent level.

Figure B.6. Impacts of intensive and training services funded by the Adult and Dislocated Worker programs on Quarter 10 earnings leaving out individual local areas



Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Impacts reported in 2012 dollars. Estimated means and impacts are regression adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Appendix A provides all details on our benchmark estimation approach. Each alternate estimate leaves out data from a single local area. The reported *p*-value is based on a two-tailed t-test.

* Significantly different from zero at the 5 percent level.

This page has been left blank for double-sided copying.

APPENDIX C

DETAILED TABLES OF SURVEY MEANS AND IMPACTS FOR ALL CUSTOMERS

This page has been left blank for double-sided copying.

Table C.II.1. Baseline equivalence among survey respondents (all customers)

	Means			Differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Adult only (%)	58.1	57.9	58.8	0.2 (0.896)	-0.9 (0.613)	-0.7 (0.682)	0.1 (0.870)
Dislocated worker only (%)	32.8	33.8	33.2	-1.0 (0.528)	0.6 (0.737)	-0.5 (0.693)	0.2 (0.797)
Both adult and dislocated worker (%)	9.2	8.3	8.0	0.8 (0.412)	0.3 (0.556)	1.2 (0.358)	0.4 (0.650)
Female (%)	60.9	59.6	58.8	1.3 (0.450)	0.8 (0.657)	2.1 (0.056)	2.0 (0.154)
Age (%)							
18–20	3.3	2.0	5.7	1.3* (0.011)	-3.7 (0.055)	-2.3 (0.193)	4.6* (0.020)
21–24	12.3	10.4	9.7	1.9 (0.055)	0.6 (0.761)	2.6 (0.317)	2.0 (0.150)
25–32	18.3	22.5	19.8	-4.2 (0.076)	2.7 (0.445)	-1.5 (0.527)	2.1 (0.147)
33–42	26.9	26.1	25.3	0.8 (0.775)	0.8 (0.806)	1.6 (0.636)	0.1 (0.890)
43–50	22.0	16.6	17.3	5.4 (0.068)	-0.7 (0.798)	4.7 (0.092)	2.2 (0.126)
51 or older	17.2	22.4	22.2	-5.2 (0.070)	0.2 (0.953)	-5.0 (0.277)	1.8 (0.183)
Race/ethnicity (%)							
Hispanic	11.7	14.3	16.4	-2.6 (0.265)	-2.0 (0.559)	-4.6 (0.189)	1.2 (0.329)
White, non-Hispanic	36.4	40.5	39.3	-4.1 (0.098)	1.2 (0.727)	-2.9 (0.298)	1.8 (0.187)
Black, non-Hispanic	45.0	39.7	38.1	5.3 (0.121)	1.6 (0.213)	6.9* (0.027)	3.9* (0.032)
Asian	3.6	1.7	3.3	1.9 (0.123)	-1.6* (0.016)	0.3 (0.805)	3.3* (0.050)
Native Hawaiian, Pacific Islander, or Native American	1.8	1.4	1.2	0.4 (0.093)	0.2 (0.477)	0.6 (0.193)	1.5 (0.238)
Other	1.5	2.4	1.7	-0.9 (0.429)	0.7 (0.279)	-0.2 (0.788)	0.6 (0.548)
Primary spoken language is English (%)	94.7	95.7	92.5	-0.9 (0.342)	3.2 (0.229)	2.3 (0.385)	1.0 (0.372)
Primary spoken language is Spanish (%)	2.2	2.7	4.0	-0.5 (0.641)	-1.3 (0.645)	-1.8 (0.486)	0.4 (0.703)
Primary spoken language is neither English nor Spanish (%)	3.1	1.6	3.6	1.4 (0.164)	-1.9 (0.131)	-0.5 (0.741)	2.0 (0.151)
Marital status (%)							
Currently married	28.1	26.7	31.1	1.5 (0.459)	-4.5 (0.285)	-3.0 (0.413)	0.6 (0.542)
Separated, divorced, or widowed	25.5	26.3	27.8	-0.8 (0.806)	-1.5 (0.732)	-2.3 (0.207)	1.0 (0.368)
Never married	46.4	47.0	41.1	-0.7 (0.893)	5.9 (0.415)	5.3 (0.260)	0.7 (0.524)
Working at time of random assignment (%)	2.0	1.2	2.2	0.8 (0.314)	-1.0 (0.233)	-0.1 (0.764)	0.7 (0.485)
Employed in past five years (%)	77.2	76.1	75.7	1.1 (0.558)	0.4 (0.907)	1.5 (0.579)	0.3 (0.718)
Last real hourly wage[a] ($)	14.07	15.09	14.27	-1.02 (0.266)	0.82* (0.027)	-0.20 (0.829)	3.0 (0.067)

	Means			Differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Last real hourly wage was[a,b] (%)							
Less than minimum wage	5.0	3.0	3.3	2.1 (0.057)	-0.3 (0.844)	1.7 (0.400)	2.0 (0.152)
Minimum wage exactly	1.0	1.2	1.1	-0.3 (0.564)	0.1 (0.854)	-0.2 (0.806)	0.2 (0.835)
1.01 to 1.29 times the minimum	16.3	13.6	16.2	2.7 (0.204)	-2.6 (0.419)	0.1 (0.971)	1.0 (0.383)
1.30 to 1.69 times the minimum	20.4	19.8	16.4	0.6 (0.703)	3.4 (0.203)	4.0* (0.022)	3.5* (0.044)
1.70 to 1.99 times the minimum	8.1	8.2	9.8	-0.2 (0.910)	-1.5 (0.286)	-1.7 (0.250)	0.8 (0.448)
2.00 to 2.99 times the minimum	14.9	18.7	19.8	-3.8* (0.019)	-1.1 (0.788)	-4.8 (0.153)	5.1* (0.013)
3.00 to 3.99 times the minimum	5.8	6.4	5.3	-0.6 (0.803)	1.1 (0.518)	0.5 (0.676)	0.4 (0.699)
4.00 to 4.99 times the minimum	2.5	1.4	2.4	1.1* (0.038)	-1.0 (0.167)	0.0 (0.968)	4.4* (0.022)
5.00 or more times the minimum	2.0	3.2	1.1	-1.3 (0.275)	2.1 (0.058)	0.9 (0.143)	2.6 (0.092)
Not employed in past five years (%)	22.8	23.9	24.3	-1.1 (0.558)	-0.4 (0.907)	-1.5 (0.579)	0.3 (0.718)
Highest degree (%)							
Less than high school	7.4	8.6	6.4	-1.2 (0.519)	2.2 (0.117)	1.0 (0.542)	1.3 (0.282)
High school or GED	70.3	64.6	68.7	5.7* (0.045)	-4.1 (0.115)	1.6 (0.598)	2.6 (0.092)
Associates or equivalent	8.0	10.4	9.7	-2.4 (0.102)	0.7 (0.731)	-1.7 (0.267)	2.0 (0.153)
Bachelors or equivalent	11.4	13.6	11.8	-2.2 (0.210)	1.8 (0.271)	-0.4 (0.663)	0.8 (0.448)
Masters or higher	2.9	2.8	3.4	0.0 (0.949)	-0.5 (0.403)	-0.5 (0.624)	0.4 (0.696)
Vocational training[c]	19.4	14.4	15.9	5.0* (0.027)	-1.5 (0.440)	3.4 (0.220)	2.9 (0.071)
Had health problems that limit work or training (%)	4.7	5.1	6.4	-0.3 (0.572)	-1.3 (0.175)	-1.7* (0.044)	2.3 (0.116)
Household size (%)							
Sole member	20.7	21.3	19.8	-0.6 (0.851)	1.5 (0.426)	0.9 (0.561)	1.2 (0.328)
2 or 3 members	49.9	49.8	41.4	0.0 (0.997)	8.4* (0.025)	8.4 (0.138)	3.0 (0.065)
4 or 5 members	22.4	23.8	29.0	-1.3 (0.431)	-5.2 (0.186)	-6.5 (0.117)	1.4 (0.274)
6 or more members	7.0	5.1	9.8	1.9* (0.028)	-4.7 (0.086)	-2.8 (0.247)	3.0 (0.065)
Receipt of Public Assistance (%)							
TANF, SSI/SSDI, or GA	9.9	10.8	15.3	-1.0 (0.476)	-4.5* (0.039)	-5.4* (0.022)	3.0 (0.065)
SNAP or WIC	37.3	39.7	36.4	-2.4 (0.421)	3.4 (0.506)	1.0 (0.764)	0.3 (0.719)
Unemployment Compensation	30.1	25.2	27.5	4.9 (0.217)	-2.3 (0.395)	2.6 (0.407)	0.8 (0.456)
Other public assistance	1.4	0.7	2.3	0.7* (0.005)	-1.6 (0.126)	-0.9 (0.356)	4.8* (0.016)
Counselor-predicted likelihood of training (%)							
Very likely	46.2	43.6	44.9	2.6 (0.300)	-1.3 (0.595)	1.3 (0.656)	0.6 (0.566)
Somewhat likely	33.8	32.8	35.9	1.0 (0.769)	-3.1 (0.179)	-2.0 (0.300)	2.8 (0.081)

	Means			Differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Somewhat unlikely	11.8	12.9	9.3	-1.1 (0.678)	3.6 (0.074)	2.6 (0.184)	2.4 (0.114)
Very unlikely	8.1	10.7	10.0	-2.6* (0.023)	0.7 (0.410)	-1.9 (0.108)	2.9 (0.072)
Visited an AJC previously (%)	32.5	33.0	37.5	-0.5 (0.825)	-4.5 (0.262)	-5.0* (0.048)	2.6 (0.093)
Sample size	**1,623**	**1,578**	**1,576**				

Source: WIA Gold Standard Evaluation study registration form.

Notes: Dollars are 2012 dollars. The sample is restricted to respondents to the WIA Gold Standard Evaluation 30-month follow-up survey. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for baseline equivalence are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three equivalence tests for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Individuals employed in the five years prior to random assignment.

[b] Relative to 2012 federal minimum wage.

[c] Respondent reported receiving a vocational or technical degree or certificate or a business degree or certificate.

* Significantly different from zero at the 5 percent level.

GA = general assistance; GED = General Educational Development certificate; SNAP = Supplemental Nutrition Assistance Program; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; AJC = American Job Center.

Table C.IV.1. Use of resource room since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Used any resource room since random assignment (%)	83.2	79.7	77.7	3.5 (0.179)	2.0 (0.529)	5.5* (0.003)	7.0* (0.003)
Used resource room at an AJC (%)	76.1	71.0	68.9	5.2 (0.062)	2.0 (0.538)	7.2* (0.000)	15.1* (0.000)
Used resource room elsewhere (%)	45.5	50.1	47.1	-4.6* (0.041)	3.1 (0.360)	-1.5 (0.523)	2.6 (0.092)
Number of times used any resource room[a]	10.2	9.9	9.4	0.3 (0.464)	0.4 (0.437)	0.7 (0.129)	1.3 (0.278)
Number of times used a resource room at an AJC[a]	6.3	5.7	5.1	0.7 (0.085)	0.6 (0.072)	1.3* (0.015)	3.4* (0.049)
Number of times used a resource room elsewhere[a]	3.8	4.2	4.4	-0.4 (0.353)	-0.2 (0.563)	-0.5 (0.189)	0.9 (0.410)
Sample size	**1,619**	**1,577**	**1,575**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "3 to 5 times") for use of a resource room at an AJC or elsewhere. To estimate the number of times the resource room was used, we used the midpoint of the categories (for example, 4 if the respondent answered "3 to 5 times"). We assumed respondents who answered "more than 10 times" visited the resource room 11 times.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.2a. Workshop attendance since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Attended any workshop (%)	55.2	52.1	45.9	3.1 (0.411)	6.2* (0.016)	9.3* (0.026)	4.3* (0.024)
Attended any workshop at an AJC (%)	47.1	43.7	38.0	3.3 (0.264)	5.7* (0.031)	9.1* (0.019)	3.6* (0.041)
Attended any "intensive workshop" at an AJC[a] (%)	16.6	14.0	9.7	2.6 (0.068)	4.3* (0.036)	6.8* (0.030)	2.6 (0.091)
Attended any "core workshop" at an AJC[a] (%)	35.9	35.2	30.6	0.6 (0.812)	4.6* (0.049)	5.2 (0.065)	2.8 (0.079)
Attended any workshop elsewhere (%)	17.5	20.2	17.6	-2.7 (0.240)	2.7 (0.149)	-0.1 (0.975)	1.2 (0.324)
Number of workshops attended[b]	2.1	2.1	1.6	0.0 (0.878)	0.5 (0.065)	0.5* (0.016)	5.3* (0.011)
Number of workshops attended at an AJC[b]	1.6	1.3	1.1	0.2 (0.446)	0.3 (0.103)	0.5* (0.027)	5.2* (0.012)
Number of workshops attended elsewhere[b]	0.6	0.7	0.5	-0.1 (0.087)	0.2 (0.061)	0.1 (0.444)	2.3 (0.123)
Sample size	**1,623**	**1,578**	**1,576**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys asked about specific workshops that the local area had designated as intensive. However, since the surveys were launched, some local areas stopped providing these workshops, added intensive workshops, or changed the workshops from intensive to core services. Names of workshops were also sometimes generic. For these reasons, survey questions might not accurately distinguished between intensive and core workshops.

[b] The surveys provided categorical closed responses (for example, "2 or 3 workshops") for workshops attended at an AJC and separately for workshops attended elsewhere. To estimate the number of workshops attended, and the category of frequency of workshops attended anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 workshops"). We assumed respondents who answered "more than 5 workshops" attended 6 workshops.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.2b. Workshops attended since random assignment (among customers who attended any workshops)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who attended any workshop							
Number of workshops attended[a]	4.0	4.1	3.6	-0.1 (0.883)	0.5 (0.303)	0.4 (0.064)	1.9 (0.163)
Frequency of number of workshops attended (%)[a]							
1	26.5	27.9	24.6	-1.4 (0.873)	3.3 (0.762)	2.0 (0.566)	0.2 (0.817)
2 or 3	31.1	26.2	29.9	4.9 (0.207)	-3.7 (0.299)	1.2 (0.711)	0.9 (0.424)
4 or 5	15.0	15.3	25.9	-0.3 (0.915)	-10.6 (0.091)	-10.8* (0.038)	2.6 (0.092)
More than 5	27.3	30.6	19.7	-3.3 (0.503)	11.0* (0.028)	7.7* (0.006)	6.1* (0.007)
Sample size	**816**	**752**	**689**				
Among customers who attended a workshop at an AJC							
Number of workshops attended at an AJC[a]	3.4	3.2	2.9	0.3 (0.554)	0.2 (0.405)	0.5 (0.089)	2.8 (0.081)
Frequency of number of workshops attended at an AJC (%)							
1	27.0	34.2	29.3	-7.2 (0.512)	5.0 (0.672)	-2.2 (0.492)	0.5 (0.594)
2 or 3	34.3	28.6	41.4	5.7 (0.252)	-12.8 (0.159)	-7.1 (0.159)	1.1 (0.346)
4 or 5	14.0	18.2	17.1	-4.2 (0.147)	1.1 (0.701)	-3.1 (0.241)	1.3 (0.292)
More than 5	24.6	18.9	12.2	5.7 (0.331)	6.7* (0.035)	12.4* (0.023)	5.0* (0.014)
Sample size	**709**	**635**	**561**				
Among customers who attended a workshop elsewhere							
Number of workshops attended elsewhere[a]	3.5	3.7	3.1	-0.2 (0.552)	0.6 (0.065)	0.4 (0.340)	2.0 (0.149)
Frequency of number of workshops attended elsewhere (%)							
1	27.1	20.4	33.7	6.8 (0.290)	-13.3* (0.046)	-6.5 (0.077)	3.0 (0.067)
2 or 3	42.0	35.5	30.1	6.5 (0.319)	5.3 (0.336)	11.8* (0.024)	2.9 (0.070)
4 or 5	8.4	23.5	17.5	-15.1* (0.024)	6.0 (0.429)	-9.1 (0.077)	4.0* (0.030)
More than 5	22.5	20.7	18.7	1.9 (0.578)	2.0 (0.781)	3.8 (0.662)	0.2 (0.850)
Hours spent in each workshop attended elsewhere[b]	8.9	9.5	7.0	-0.6 (0.361)	2.5 (0.074)	1.9 (0.116)	1.7 (0.197)
Frequency of hours spent in each workshop attended elsewhere (%)							
Less than 1 hour	4.3	9.0	8.5	-4.7 (0.246)	0.6 (0.666)	-4.1 (0.238)	0.7 (0.488)
1 to 2 hours	45.1	50.9	60.5	-5.8 (0.461)	-9.6 (0.304)	-15.4 (0.119)	1.3 (0.289)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
More than 2, less than 4 hours	34.0	28.2	16.5	5.8	11.7*	17.4*	3.3
				(0.145)	(0.039)	(0.016)	(0.051)
4 to 6 hours	11.6	7.0	7.1	4.6	-0.1	4.5	0.8
				(0.212)	(0.963)	(0.281)	(0.446)
More than 6 hours	5.0	4.9	7.5	0.1	-2.6	-2.5	0.2
				(0.957)	(0.553)	(0.515)	(0.806)
Attended workshop provided by or located at (%)							
Other government agency	9.9	15.8	17.8	-5.9	-2.0	-7.9	1.3
				(0.184)	(0.296)	(0.122)	(0.283)
Library	11.6	25.1	8.9	-13.5*	16.1*	2.7	3.2
				(0.027)	(0.019)	(0.395)	(0.059)
Community-based organization	27.5	41.3	28.3	-13.8*	13.0	-0.8	2.4
				(0.036)	(0.066)	(0.837)	(0.106)
Educational facility	43.3	23.3	32.8	20.0*	-9.5*	10.5	9.1*
				(0.001)	(0.006)	(0.060)	(0.001)
Private employment agency	1.5	1.2	5.2	0.3	-4.0	-3.7	0.6
				(0.738)	(0.266)	(0.277)	(0.531)
Online	1.0	3.0	2.5	-2.0	0.5	-1.5	1.7
				(0.336)	(0.838)	(0.143)	(0.195)
Other	21.7	19.0	24.2	2.8	-5.2	-2.4	0.2
				(0.541)	(0.506)	(0.552)	(0.798)
Sample size	**281**	**295**	**252**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "2 or 3 workshops") for workshops attended at an AJC and separately for workshops attended elsewhere. To estimate the number of workshops attended, and the category of frequency of workshops attended anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 workshops"). We assumed respondents who answered "more than 5 workshops" attended 6 workshops.

[b] The surveys provided categorical closed responses for average length of workshops attended (for example, "1 to 2 hours") at the AJC and elsewhere separately. To estimate the average length of a workshop, we used the midpoint of the categories (for example, 90 minutes if the respondent answered "1 to 2 hours"). We assumed a length of 6 hours for respondents who answered "more than 6 hours."

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.3. Topics covered in workshops attended since random assignment (among customers who attended at least one workshop)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who attended any workshops							
Attended any workshop addressing (%)							
Job search activities	93.6	91.0	91.0	2.6	0.0	2.6	2.5
				(0.439)	(0.997)	(0.253)	(0.100)
Computer skills, programs	54.6	58.4	47.3	-3.8	11.1	7.3*	2.7
				(0.392)	(0.055)	(0.037)	(0.082)
Appropriate job behavior	69.9	66.7	59.8	3.2	6.9	10.1*	4.0*
				(0.387)	(0.105)	(0.009)	(0.030)
Preparing for assessments	59.7	58.4	45.4	1.3	13.0*	14.3*	8.4*
				(0.608)	(0.000)	(0.001)	(0.001)
Managing finances	40.4	38.3	35.7	2.1	2.5	4.6	0.7
				(0.365)	(0.461)	(0.281)	(0.526)
Starting own business	24.2	31.3	17.4	-7.1	13.9*	6.8*	3.2
				(0.106)	(0.025)	(0.030)	(0.058)
Any other topics	10.6	16.4	17.4	-5.9	-1.0	-6.8	2.7
				(0.254)	(0.632)	(0.081)	(0.087)
Sample size	**864**	**785**	**714**				

Source: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.IV.4a. Assessments of skills, abilities, and aptitudes taken since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Took any assessments (%)	74.8	66.7	60.3	8.1* (0.009)	6.4* (0.028)	14.5* (0.002)	5.6* (0.009)
Took any assessments at an AJC (%)	61.6	47.9	41.0	13.7* (0.006)	6.9* (0.019)	20.6* (0.000)	9.0* (0.001)
Took any assessments elsewhere (%)	25.5	24.8	24.0	0.8 (0.694)	0.8 (0.784)	1.5 (0.642)	0.1 (0.884)
Number of assessments taken at any location[a]	2.6	2.2	1.8	0.4 (0.056)	0.4* (0.050)	0.8* (0.009)	3.9* (0.031)
Number of assessments taken at an AJC[a]	1.8	1.5	1.0	0.3 (0.155)	0.5* (0.004)	0.8* (0.000)	11.2* (0.000)
Number of assessments taken elsewhere[a]	0.8	0.7	0.8	0.1 (0.052)	-0.1 (0.340)	0.0 (0.867)	4.1* (0.028)
Sample size	**1,583**	**1,540**	**1,543**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "2 or 3 assessments") for assessments taken at an AJC and separately for assessments taken elsewhere. To estimate the number of times assessments were taken, and the category of frequency of assessments taken anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 assessments"). We assumed respondents who answered "more than 5 assessments" took 6 assessments.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.4b. Assessments of skills, abilities, and aptitudes taken since random assignment (among customers who took assessments)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who took any assessment							
Number of assessments taken[a]	3.6	3.5	3.3	0.1 (0.605)	0.2 (0.449)	0.3 (0.292)	0.6 (0.568)
Frequency of number of assessments taken (%)[a]							
1	22.8	26.4	30.9	-3.6 (0.459)	-4.5 (0.199)	-8.0 (0.147)	1.3 (0.278)
2 or 3	29.7	32.9	32.5	-3.2 (0.182)	0.4 (0.920)	-2.8 (0.379)	1.2 (0.306)
4 or 5	31.4	23.7	20.2	7.6 (0.200)	3.6 (0.370)	11.2 (0.080)	1.7 (0.207)
More than 5	16.1	17.0	16.4	-0.9 (0.762)	0.5 (0.876)	-0.4 (0.902)	0.0 (0.954)
Took basic skills assessments (such as TABE, WorkKeys; %)	79.2	70.5	67.0	8.7* (0.046)	3.5 (0.319)	12.2 (0.088)	2.3 (0.122)
Took assessment to identify abilities or interests (such as O*NET Profiler; %)	64.5	72.3	63.6	-7.8 (0.073)	8.7* (0.001)	0.9 (0.842)	7.4* (0.003)
Took other assessment (%)	18.5	25.3	19.6	-6.7 (0.075)	5.7 (0.222)	-1.0 (0.555)	2.6 (0.090)
Sample size	**1,083**	**989**	**906**				
Among customers who took an assessment at an AJC							
Number of assessments take at an AJC[a]	2.9	3.1	2.4	-0.1 (0.561)	0.6* (0.010)	0.5* (0.027)	4.5* (0.020)
Frequency of number of assessments taken at an AJC (%)							
1	26.3	27.3	41.4	-1.0 (0.846)	-14.1* (0.000)	-15.1* (0.018)	8.2* (0.002)
2 or 3	41.7	36.2	39.7	5.5* (0.048)	-3.4 (0.261)	2.0 (0.545)	2.3 (0.120)
4 or 5	23.8	26.3	11.6	-2.5 (0.484)	14.7* (0.000)	12.2* (0.013)	11.7* (0.000)
More than 5	8.2	10.2	7.4	-2.0 (0.513)	2.8 (0.424)	0.9 (0.769)	0.4 (0.704)
Sample size	**819**	**664**	**565**				
Among customers who took an assessment elsewhere							
Number of assessments taken elsewere[a]	3.2	2.9	3.4	0.4* (0.024)	-0.5 (0.104)	-0.2 (0.493)	2.9 (0.074)
Frequency of number of assessments taken elsewhere (%)							
1	27.2	36.2	21.7	-9.0 (0.105)	14.5 (0.068)	5.5 (0.307)	1.9 (0.169)
2 or 3	38.2	35.9	39.3	2.3 (0.679)	-3.4 (0.537)	-1.2 (0.788)	0.2 (0.823)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
4 or 5	16.0	10.4	18.3	5.6 (0.181)	-7.9* (0.004)	-2.3 (0.633)	5.9* (0.007)
More than 5	18.6	17.5	20.7	1.2 (0.505)	-3.3 (0.387)	-2.1 (0.540)	0.4 (0.647)
Sample size	**372**	**399**	**405**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, “2 or 3 assessments”) for assessments taken at an AJC and separately for assessments taken elsewhere. To estimate the number of times assessments were taken, and the category of frequency of assessments taken anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered “2 or 3 assessments”). We assumed respondents who answered “more than 5 assessments” took 6 assessments.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.5a. Job clubs attended since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Attended any job club since random assignment (%)	35.0	32.5	30.9	2.5 (0.088)	1.6 (0.578)	4.2 (0.152)	2.2 (0.129)
Attended a job club at an AJC (%)	24.9	22.4	20.0	2.4 (0.051)	2.5 (0.376)	4.9 (0.093)	2.9 (0.073)
Attended a job club elsewhere (%)	16.5	16.9	17.4	-0.4 (0.761)	-0.5 (0.914)	-0.9 (0.806)	0.2 (0.856)
Number of times attended a job club[a]	1.6	1.5	1.3	0.1 (0.489)	0.2 (0.467)	0.3 (0.057)	2.4 (0.113)
Number of times attended a job club at an AJC[a]	0.9	0.8	0.6	0.1 (0.076)	0.2* (0.031)	0.3* (0.009)	4.0* (0.031)
Number of times attended a job club elsewhere[a]	0.7	0.7	0.7	0.0 (0.908)	0.0 (0.893)	0.0 (0.809)	0.0 (0.953)
Sample size	**1,621**	**1,577**	**1,576**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "2 or 3 times") for job clubs attended at an AJC and separately for job clubs attended elsewhere. To estimate the number of job clubs attended, and the category of frequency of job clubs attended anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 times"). We assumed respondents who answered "more than 5 times" attended a job club 6 times.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.5b. Job clubs attended since random assignment (among customers who attended a job club)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who attended any job club							
Number of times attended a job club[a]	4.5	4.5	4.3	0.0 (0.990)	0.2 (0.619)	0.2 (0.471)	0.3 (0.760)
Frequency of job club attendance (%)[a]							
1 time	16.9	21.0	17.8	-4.2 (0.243)	3.2 (0.400)	-1.0 (0.685)	0.7 (0.493)
2-3 times	30.0	29.0	29.5	1.0 (0.849)	-0.5 (0.941)	0.5 (0.883)	0.0 (0.956)
4-5 times	19.7	15.2	19.6	4.5 (0.421)	-4.4 (0.459)	0.1 (0.987)	0.5 (0.598)
More than 5 times	33.4	34.8	33.1	-1.4 (0.647)	1.7 (0.844)	0.4 (0.958)	0.1 (0.883)
Sample size	**551**	**497**	**469**				
Among customers who attended a job club at an AJC							
Number of times attended a job club at an AJC[a]	3.6	3.4	2.9	0.2 (0.448)	0.5* (0.008)	0.7* (0.006)	5.9* (0.008)
Frequency of job club attendance at an AJC (%)							
1 time	18.4	27.1	32.3	-8.7* (0.047)	-5.2 (0.376)	-13.8 (0.101)	2.2 (0.132)
2-3 times	37.6	33.5	34.7	4.1 (0.332)	-1.2 (0.877)	2.9 (0.549)	1.1 (0.334)
4-5 times	21.3	20.1	18.9	1.2 (0.879)	1.2 (0.714)	2.4 (0.776)	0.1 (0.920)
More than 5 times	22.7	19.3	14.2	3.4 (0.367)	5.1 (0.206)	8.5* (0.004)	5.1* (0.014)
Sample size	**399**	**349**	**315**				
Among customers who attended a job club elsewhere							
Number of times attended a job club elsewhere[a]	4.2	4.2	4.1	0.0 (0.938)	0.0 (0.901)	0.1 (0.827)	0.0 (0.975)
Frequency of job club attendance elsewhere (%)							
1 time	13.6	16.2	17.4	-2.6 (0.582)	-1.2 (0.667)	-3.8 (0.431)	0.3 (0.717)
2-3 times	33.3	33.9	31.6	-0.6 (0.936)	2.4 (0.723)	1.8 (0.803)	0.1 (0.932)
4-5 times	12.0	16.0	17.4	-4.1 (0.334)	-1.3 (0.830)	-5.4 (0.370)	0.7 (0.509)
More than 5 times	41.1	33.9	33.7	7.2 (0.299)	0.2 (0.983)	7.4 (0.141)	1.8 (0.184)
Attended a job club provided by or located at (%)							
Other government agency	11.2	13.9	11.9	-2.7 (0.315)	1.9 (0.644)	-0.7 (0.844)	0.5 (0.598)
Library	9.9	11.4	13.7	-1.5 (0.776)	-2.3 (0.514)	-3.7 (0.473)	0.4 (0.699)
Community-based organization	19.5	25.8	22.5	-6.3 (0.057)	3.3 (0.509)	-3.1 (0.584)	2.1 (0.147)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Educational facility	21.8	21.2	14.5	0.6	6.7	7.3	1.1
				(0.909)	(0.257)	(0.153)	(0.333)
Private employment agency[b]	2.0	3.3	7.6	-1.3	-4.3	-5.6	2.9
				(0.104)	(0.213)	(0.097)	(0.074)
Online[b]	4.3	0.6	2.2	3.7	-1.6	2.1	2.2
				(0.094)	(0.345)	(0.472)	(0.136)
Other	21.9	30.1	25.7	-8.2	4.4	-3.7	1.2
				(0.133)	(0.528)	(0.588)	(0.317)
Sample size	**263**	**246**	**242**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, “2 or 3 times”) for job clubs attended at an AJC and separately for job clubs attended elsewhere. To estimate the number of job clubs attended, and the category of frequency of job clubs attended anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered “2 or 3 times”). We assumed respondents who answered “more than 5 times” attended a job club 6 times.

[b] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.6a. One-on-one staff assistance received since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any one-on-one assistance (%)	63.1	60.5	47.1	2.6 (0.186)	13.4* (0.001)	16.0* (0.000)	13.3* (0.000)
Received any one-on-one assistance at an AJC (%)	53.6	51.8	36.1	1.8 (0.233)	15.7* (0.000)	17.5* (0.000)	41.1* (0.000)
Received any one-on-one assistance elsewhere (%)	16.5	17.4	14.9	-0.9 (0.667)	2.4 (0.223)	1.6 (0.432)	0.8 (0.454)
Number of sessions[a]	4.3	3.7	2.4	0.6* (0.037)	1.3* (0.000)	1.9* (0.000)	25.9* (0.000)
Number of sessions at an AJC[a]	3.3	2.7	1.6	0.6* (0.011)	1.1* (0.000)	1.8* (0.000)	44.7* (0.000)
Number of sessions elsewhere[a]	0.9	1.0	0.8	0.0 (0.798)	0.2 (0.313)	0.1 (0.379)	0.6 (0.564)
Total time spent in sessions[b] (minutes)	103.5	87.9	61.3	15.6* (0.009)	26.5* (0.002)	42.2* (0.000)	22.1* (0.000)
Total time spent in sessions at an AJC[b] (minutes)	78.3	62.5	37.8	15.8* (0.004)	24.7* (0.000)	40.5* (0.000)	52.6* (0.000)
Total time spent in sessions elsewhere[b] (minutes)	25.2	25.3	23.5	-0.1 (0.969)	1.8 (0.636)	1.7 (0.699)	0.1 (0.889)
Received any counseling or one-on-one assistance related to (%)							
Job search	60.3	58.7	43.5	1.6 (0.354)	15.2* (0.000)	16.8* (0.000)	15.8* (0.000)
Assessment results	47.0	39.0	29.3	8.0 (0.086)	9.6* (0.004)	17.6* (0.000)	16.3* (0.000)
Training options	53.9	51.8	37.2	2.1 (0.395)	14.7* (0.000)	16.8* (0.000)	20.4* (0.000)
Referral to other services for work support	42.3	39.8	28.0	2.5 (0.329)	11.8* (0.000)	14.3* (0.000)	22.4* (0.000)
Referrals for non-work support services[c]	2.6	1.2	1.5	1.4 (0.298)	-0.3 (0.728)	1.1 (0.454)	0.6 (0.561)
Emotional support, general advice[c]	0.8	0.5	0.2	0.3 (0.183)	0.3 (0.156)	0.6* (0.019)	3.1 (0.060)
Other	0.3	0.1	0.6	0.2 (0.125)	-0.5* (0.028)	-0.3 (0.190)	2.9 (0.072)
Sample size	**1,621**	**1,577**	**1,570**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, “2 or 3 sessions”) for the number of phone and in-person sessions at an AJC or elsewhere separately. To estimate the number of sessions, we used the midpoint of the categories (for example, 2.5 if the respondent answered “2 or 3 sessions”). We assumed respondents who answered “more than 5 sessions” attended 6 sessions.

[b] The surveys provided categorical closed responses for average length of sessions (for example, “31 to 45 minutes”) for phone and in-person sessions at the AJC and elsewhere separately. To estimate the average length of a session, we used the midpoint of the categories (for example, 38 if the respondent answered “31 to 45 minutes”). We assumed a length of 60 minutes for respondents who answered “more than 60 minutes.” To estimate approximate amount of time spent in counseling, we multiplied the approximate session length and the approximate number of sessions.

[c] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.6b. One-on-one staff assistance received since random assignment (among customers receiving one-on-one assistance)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers receiving any one-on-one assistance							
Number of sessions[a]	7.4	6.5	5.7	0.9	0.8	1.8*	15.9*
				(0.071)	(0.211)	(0.000)	(0.000)
Frequency of sessions[a] (%)							
1	6.3	6.6	13.0	-0.3	-6.4*	-6.7*	8.3*
				(0.857)	(0.001)	(0.001)	(0.002)
2 or 3	14.9	20.6	27.2	-5.7*	-6.7	-12.4*	15.6*
				(0.008)	(0.052)	(0.000)	(0.000)
4 or 5	20.1	25.0	18.9	-4.9	6.1	1.2	2.0
				(0.142)	(0.058)	(0.616)	(0.159)
More than 5	58.7	47.8	40.9	10.9*	7.0	17.9*	13.2*
				(0.025)	(0.175)	(0.000)	(0.000)
Total time spent in one-on-one assistance sessions[b] (minutes)	180.0	155.7	146.5	24.3*	9.2	33.5*	10.4*
				(0.018)	(0.634)	(0.017)	(0.000)
Frequency of total length of sessions[b] (%)							
Less than 30 minutes	6.5	9.1	16.2	-2.6	-7.1*	-9.7*	6.0*
				(0.077)	(0.004)	(0.002)	(0.007)
30-60 minutes	16.1	21.4	16.1	-5.2*	5.3	0.0	3.4*
				(0.030)	(0.311)	(0.991)	(0.050)
61-120 minutes	20.1	20.6	24.5	-0.6	-3.8	-4.4	1.1
				(0.824)	(0.164)	(0.227)	(0.354)
121-180 minutes	24.2	21.2	14.7	3.0	6.5	9.5*	3.7*
				(0.223)	(0.082)	(0.013)	(0.039)
181-240 minutes	9.5	9.7	8.9	-0.2	0.8	0.6	0.1
				(0.907)	(0.729)	(0.829)	(0.940)
More than 240 minutes	23.6	18.0	19.6	5.6	-1.6	4.0	5.8*
				(0.169)	(0.839)	(0.367)	(0.008)
Number of in-person sessions[a]	5.1	4.3	3.9	0.7	0.4	1.2*	22.3*
				(0.076)	(0.407)	(0.000)	(0.000)
Frequency of in-person sessions[a] (%)							
0	4.4	3.2	5.2	1.2	-2.0*	-0.8	2.2
				(0.535)	(0.049)	(0.649)	(0.131)
1	8.5	9.9	20.2	-1.4	-10.4*	-11.8*	18.4*
				(0.487)	(0.001)	(0.000)	(0.000)
2 or 3	24.9	35.1	34.9	-10.2*	0.2	-10.0*	9.1*
				(0.014)	(0.959)	(0.000)	(0.001)
4 or 5	23.5	25.7	12.0	-2.1	13.7*	11.6*	9.4*
				(0.693)	(0.015)	(0.000)	(0.001)
More than 5	38.8	26.2	27.7	12.5	-1.5	11.0*	8.9*
				(0.051)	(0.843)	(0.004)	(0.001)
Average length of each in-person session[b] (minutes)	28.7	28.1	29.2	0.6	-1.1	-0.5	0.8
				(0.272)	(0.358)	(0.634)	(0.448)
Frequency of average length of each in-person session[b] (%)							
15 minutes or less	13.2	17.2	15.9	-4.0	1.3	-2.7	1.3
				(0.134)	(0.539)	(0.417)	(0.284)
16 to 30 minutes	45.9	46.2	41.4	-0.2	4.8	4.5	0.7
				(0.957)	(0.320)	(0.304)	(0.506)
31 to 45 minutes	28.2	22.1	28.6	6.1	-6.5	-0.4	1.6
				(0.088)	(0.228)	(0.910)	(0.225)
46 to 60 minutes	10.9	12.3	10.7	-1.4	1.5	0.1	0.5
				(0.380)	(0.403)	(0.928)	(0.620)
More than 60 minutes	1.7	2.2	3.3	-0.5	-1.1	-1.6*	2.2
				(0.624)	(0.258)	(0.050)	(0.132)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Number of phone sessions[a]	2.1	2.0	1.5	0.1 (0.664)	0.5* (0.039)	0.5* (0.008)	4.2* (0.027)
Frequency of phone sessions (%)[a]							
0	41.7	42.2	52.4	-0.4 (0.890)	-10.2* (0.038)	-10.6* (0.002)	6.4* (0.005)
1	13.0	12.8	12.5	0.2 (0.945)	0.3 (0.904)	0.5 (0.879)	0.0 (0.988)
2 or 3	25.2	24.9	18.7	0.4 (0.901)	6.1* (0.028)	6.5* (0.040)	3.5* (0.046)
4 or 5	7.9	9.9	8.2	-2.0 (0.158)	1.7 (0.283)	-0.3 (0.835)	1.1 (0.338)
More than 5	12.1	10.2	8.2	1.9 (0.233)	2.0 (0.464)	3.9 (0.110)	1.9 (0.171)
Average length of each phone session[b] (minutes)	11.6	12.3	12.1	-0.7 (0.348)	0.2 (0.779)	-0.5 (0.437)	0.5 (0.594)
Frequency of average length of each phone session[b] (%)							
10 minutes or less	53.0	51.9	48.3	1.1 (0.771)	3.5 (0.305)	4.7 (0.243)	0.9 (0.434)
11 to 20 minutes	31.5	28.5	38.0	3.0 (0.679)	-9.5 (0.178)	-6.5 (0.106)	2.0 (0.154)
21 to 30 minutes	12.7	17.9	8.8	-5.2 (0.382)	9.0 (0.111)	3.9 (0.098)	2.7 (0.086)
More than 30 minutes	2.8	1.8	4.8	1.0 (0.323)	-3.0 (0.189)	-2.0 (0.424)	1.5 (0.251)
Sample size	**981**	**888**	**723**				
Among customers receiving one-on-one assistance from an AJC							
Number of total sessions at an AJC[a]	6.2	5.2	4.3	1.0* (0.013)	0.9* (0.031)	1.9* (0.000)	25.9* (0.000)
Frequency of sessions at an AJC[a] (%)							
1	7.3	8.4	17.6	-1.1 (0.556)	-9.1* (0.006)	-10.3* (0.001)	7.8* (0.002)
2 or 3	19.3	26.3	31.4	-7.0 (0.083)	-5.1 (0.297)	-12.0* (0.000)	12.1* (0.000)
4 or 5	19.4	28.5	25.4	-9.0* (0.032)	3.1 (0.431)	-6.0 (0.173)	2.6 (0.095)
More than 5	53.9	36.8	25.7	17.1* (0.030)	11.1 (0.090)	28.2* (0.000)	27.7* (0.000)
Number of in-person sessions at an AJC[a]	4.4	3.6	3.1	0.9* (0.011)	0.5 (0.108)	1.3* (0.000)	29.8* (0.000)
Frequency of in-person sessions at an AJC (%)							
0	0.2	0.3	0.4	-0.1 (0.629)	-0.1 (0.598)	-0.2 (0.411)	0.3 (0.708)
1	10.1	13.1	27.8	-3.0 (0.294)	-14.7* (0.002)	-17.6* (0.000)	14.1* (0.000)
2 or 3	31.9	44.6	39.1	-12.7* (0.023)	5.5 (0.334)	-7.2* (0.005)	6.9* (0.004)
4 or 5	22.3	23.5	18.2	-1.2 (0.626)	5.3 (0.199)	4.1 (0.303)	0.9 (0.432)
More than 5	35.5	18.4	14.5	17.0* (0.007)	4.0 (0.391)	21.0* (0.000)	17.3* (0.000)
Average length of in-person sessions at an AJC[b] (minutes)	28.2	28.0	28.4	0.2 (0.748)	-0.4 (0.728)	-0.2 (0.887)	0.1 (0.908)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Frequency of average length of each in-person session at an AJC (%)							
15 minutes or less	15.5	17.7	16.1	-2.2 (0.512)	1.5 (0.491)	-0.6 (0.890)	0.7 (0.529)
16 to 30 minutes	44.8	45.5	46.2	-0.7 (0.896)	-0.7 (0.838)	-1.4 (0.759)	0.1 (0.934)
31 to 45 minutes	27.6	23.0	25.0	4.6 (0.162)	-1.9 (0.493)	2.6 (0.275)	1.1 (0.340)
46 to 60 minutes	10.5	11.3	9.2	-0.8 (0.609)	2.1 (0.281)	1.3 (0.538)	0.6 (0.540)
More than 60 minutes	1.5	2.4	3.4	-0.9 (0.287)	-1.0 (0.323)	-1.9* (0.011)	3.9* (0.031)
Number of phone sessions at an AJC[a]	1.8	1.7	1.2	0.1 (0.229)	0.5* (0.007)	0.6* (0.001)	7.0* (0.004)
Frequency of phone sessions at an AJC (%)							
0	43.6	44.4	55.0	-0.8 (0.851)	-10.6* (0.036)	-11.4* (0.025)	3.2 (0.055)
1	13.1	14.9	13.2	-1.9 (0.354)	1.8 (0.671)	-0.1 (0.983)	0.5 (0.633)
2 or 3	24.6	23.9	20.9	0.6 (0.841)	3.0 (0.479)	3.7 (0.364)	0.4 (0.654)
4 or 5	9.2	10.2	7.2	-1.0 (0.604)	3.1 (0.219)	2.0 (0.344)	0.8 (0.451)
More than 5	9.6	6.5	3.8	3.0 (0.063)	2.8* (0.024)	5.8* (0.004)	5.4* (0.011)
Average length of each phone session at an AJC[b] (minutes)	11.6	12.3	11.1	-0.7 (0.513)	1.2 (0.220)	0.5 (0.295)	1.3 (0.293)
Frequency of average length of each phone session at an AJC[b] (%)							
10 minutes or less	52.4	52.0	52.8	0.4 (0.930)	-0.9 (0.838)	-0.5 (0.890)	0.0 (0.974)
11 to 20 minutes	32.2	27.4	37.9	4.8 (0.612)	-10.5 (0.271)	-5.7 (0.146)	1.5 (0.247)
21 to 30 minutes	13.0	18.5	6.7	-5.5 (0.521)	11.9 (0.160)	6.4* (0.010)	4.7* (0.017)
More than 30 minutes	2.4	2.1	2.6	0.3 (0.710)	-0.6 (0.587)	-0.3 (0.847)	0.2 (0.805)
Sample size	**876**	**786**	**592**				
Among customers receiving any one-on-one assistance elsewhere							
Number of total sessions elsewhere[a]	5.6	5.6	5.5	0.1 (0.719)	0.1 (0.874)	0.1 (0.743)	0.1 (0.869)
Frequency of sessions elsewhere[a] (%)							
1	5.9	6.7	7.0	-0.8 (0.648)	-0.4 (0.865)	-1.1 (0.509)	0.3 (0.756)
2 or 3	22.2	24.6	24.7	-2.4 (0.691)	-0.1 (0.989)	-2.5 (0.647)	0.2 (0.788)
4 or 5	25.9	25.1	19.2	0.8 (0.851)	5.9 (0.458)	6.7 (0.283)	0.7 (0.527)
More than 5	45.4	43.6	49.1	1.8 (0.633)	-5.4 (0.539)	-3.6 (0.683)	0.3 (0.773)
Number of in-person sessions elsewhere[a]	3.5	3.4	3.2	0.0 (0.808)	0.2 (0.426)	0.3 (0.226)	0.8 (0.464)
Frequency of in-person sessions elsewhere (%)							
0	0.5	0.9	2.0	-0.5 (0.457)	-1.1 (0.380)	-1.6 (0.188)	1.0 (0.366)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
1	8.8	15.1	14.7	-6.3	0.4	-5.9	1.8
				(0.316)	(0.967)	(0.212)	(0.189)
2 or 3	42.8	37.4	43.4	5.4	-6.0	-0.6	0.5
				(0.374)	(0.415)	(0.935)	(0.584)
4 or 5	19.6	25.8	21.6	-6.2	4.3	-2.0	1.1
				(0.150)	(0.538)	(0.787)	(0.333)
More than 5	21.8	18.2	17.4	3.6	0.8	4.4	0.6
Average length of each in-person session elsewhere[b] (minutes)	30.4	32.0	34.1	-1.7	-2.0	-3.7	1.2
				(0.635)	(0.146)	(0.331)	(0.307)
Frequency of average length of each in-person session elsewhere (%)							
15 minutes or less	23.2	12.3	10.8	10.9	1.5	12.4	1.6
				(0.202)	(0.589)	(0.112)	(0.216)
16 to 30 minutes	34.2	37.0	27.7	-2.7	9.3	6.6	1.2
				(0.596)	(0.148)	(0.381)	(0.331)
31 to 45 minutes	19.1	29.9	41.5	-10.8	-11.6	-22.5	1.8
				(0.211)	(0.082)	(0.082)	(0.178)
46 to 60 minutes	11.5	12.1	12.6	-0.6	-0.5	-1.1	0.0
				(0.879)	(0.833)	(0.800)	(0.963)
More than 60 minutes	11.4	6.3	6.3	5.1	0.0	5.1*	2.2
				(0.097)	(0.992)	(0.050)	(0.132)
Number of phone sessions elsewhere[a]	1.7	1.8	1.7	-0.2	0.1	0.0	0.2
				(0.535)	(0.624)	(0.957)	(0.809)
Frequency of phone sessions elsewhere (%)							
0	47.0	39.5	54.1	7.5	-14.6	-7.1	1.3
				(0.546)	(0.308)	(0.117)	(0.280)
1	11.0	15.6	11.1	-4.6	4.5	-0.1	0.3
				(0.540)	(0.712)	(0.987)	(0.722)
2 or 3	26.3	27.7	12.5	-1.5	15.3*	13.8*	6.8*
				(0.841)	(0.004)	(0.028)	(0.004)
4 or 5	4.5	8.0	8.5	-3.5	-0.4	-3.9	1.5
				(0.096)	(0.854)	(0.247)	(0.242)
More than 5	11.2	9.2	13.9	2.0	-4.7	-2.7	0.6
				(0.395)	(0.348)	(0.558)	(0.561)
Average length of each phone session elsewhere[b] (minutes)	12.6	13.8	14.2	-1.2	-0.3	-1.5	0.7
				(0.480)	(0.805)	(0.259)	(0.522)
Frequency of average length of each phone session elsewhere[b] (%)							
10 minutes or less	45.8	46.7	40.1	-0.9	6.6	5.7	0.4
				(0.927)	(0.442)	(0.512)	(0.676)
11 to 20 minutes	37.4	27.8	37.5	9.6	-9.7	-0.1	1.4
				(0.221)	(0.157)	(0.989)	(0.276)
21 to 30 minutes	11.4	15.0	15.6	-3.6	-0.6	-4.2	0.6
				(0.460)	(0.881)	(0.278)	(0.544)
More than 30 minutes	5.4	10.5	6.8	-5.1	3.7	-1.4	0.4
				(0.379)	(0.535)	(0.783)	(0.672)
Attended session provided by or located at (%)							
Other government agency	15.4	18.7	18.0	-3.3	0.7	-2.6	0.2
				(0.617)	(0.942)	(0.720)	(0.824)
Library	3.0	4.3	9.9	-1.4	-5.6	-6.9	0.8
				(0.539)	(0.514)	(0.363)	(0.443)
Community-based organization	33.0	27.6	22.6	5.3	5.0	10.3	3.2
				(0.585)	(0.445)	(0.058)	(0.056)
Educational facility	41.7	30.4	28.8	11.4	1.6	12.9	2.1
				(0.072)	(0.733)	(0.066)	(0.148)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Private employment agency[c]	9.4	15.8	17.6	-6.4 (0.246)	-1.8 (0.798)	-8.2* (0.013)	5.5* (0.010)
Online	0.5	3.3	3.0	-2.7* (0.047)	0.2 (0.902)	-2.5 (0.080)	3.1 (0.059)
Other	10.7	15.1	20.5	-4.4 (0.129)	-5.4 (0.593)	-9.8 (0.275)	2.6 (0.091)
Sample size	**271**	**276**	**239**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, “2 or 3 sessions”) for the number of phone and in-person sessions at an AJC or elsewhere separately. To estimate the number of sessions, we used the midpoint of the categories (for example, 2.5 if the respondent answered “2 or 3 sessions”). We assumed respondents who answered “more than 5 sessions” attended 6 sessions.

[b] The surveys provided categorical closed responses for average length of sessions (for example, “31 to 45 minutes”) for phone and in-person sessions at the AJC and elsewhere separately. To estimate the average length of a session, we used the midpoint of the categories (for example, 38 if the respondent answered “31 to 45 minutes”). We assumed a length of 60 minutes for respondents who answered “more than 60 minutes.” To estimate approximate amount of time spent in counseling, we multiplied the approximate session length and the approximate number of sessions.

[c] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.7. Supportive services received since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any financial assistance other than for training (%)	24.6	14.2	7.9	10.4* (0.000)	6.3* (0.001)	16.7* (0.000)	32.0* (0.000)
Total financial assistance received, other than for training ($)	264	126	99	137* (0.034)	27 (0.545)	165* (0.008)	4.1* (0.027)
Received financial assistance for (%)							
Books	9.9	4.8	1.6	5.1* (0.005)	3.3* (0.005)	8.4* (0.000)	13.9* (0.000)
Tools, supplies	9.5	4.3	2.2	5.2* (0.001)	2.1* (0.034)	7.2* (0.000)	12.4* (0.000)
Clothes, uniforms	9.0	6.9	3.3	2.2 (0.158)	3.6* (0.010)	5.7* (0.000)	9.2* (0.001)
Transportation	18.7	10.5	6.3	8.1* (0.000)	4.2* (0.022)	12.4* (0.000)	13.1* (0.000)
Child care	3.8	0.6	0.6	3.2 (0.051)	0.0 (0.812)	3.1 (0.051)	2.1 (0.142)
Tests, certifications[a]	0.4	0.4	0.0	0.0 (0.961)	0.4* (0.036)	0.4* (0.041)	5.1* (0.013)
Living expenses[a]	2.2	1.2	0.7	1.0* (0.047)	0.5 (0.404)	1.5* (0.046)	2.8 (0.076)
Medical, dental care[a]	0.2	0.1	0.0	0.1 (0.452)	0.1 (0.273)	0.2 (0.103)	2.4 (0.110)
Received financial assistance from an AJC (%)	19.7	10.3	3.5	9.4* (0.000)	6.8* (0.000)	16.2* (0.000)	22.6* (0.000)
Amount of financial assistance received from an AJC ($)	186	81	17	105 (0.079)	64* (0.031)	169* (0.002)	8.3* (0.002)
Received financial assistance elsewhere (%)	6.1	5.6	5.0	0.6 (0.653)	0.6 (0.569)	1.2 (0.344)	0.5 (0.617)
Amount of financial assistance received elsewhere ($)	94	46	84	47 (0.106)	-38 (0.211)	9 (0.743)	1.5 (0.237)
Received financial assistance from (%)							
Government agency other than AJC	3.8	2.5	3.0	1.3 (0.083)	-0.5 (0.542)	0.8 (0.369)	1.6 (0.212)
Library, church, or community-based organization	0.7	2.2	1.0	-1.4* (0.027)	1.2 (0.150)	-0.3 (0.486)	3.7* (0.038)
Educational facility	0.9	0.6	0.3	0.4 (0.570)	0.2 (0.460)	0.6 (0.292)	0.8 (0.466)
Online	0.0	0.0	0.0	0.0	0.0	0.0	
Private employment agency[a]	0.0	0.0	0.1	0.0 (0.325)	-0.1 (0.288)	-0.1 (0.427)	1.5 (0.234)
Other	0.7	0.6	0.6	0.1 (0.651)	-0.1 (0.826)	0.1 (0.745)	0.1 (0.900)
Sample size	**1,602**	**1,572**	**1,573**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.IV.8. Satisfaction with American Job Center experience (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Very satisfied (%)	59.8	44.2	38.6	15.5* (0.000)	5.6 (0.159)	21.2* (0.000)	18.3* (0.000)
Somewhat satisfied (%)	26.9	29.3	31.6	-2.3 (0.614)	-2.3 (0.407)	-4.7 (0.105)	2.7 (0.085)
Somewhat dissatisfied (%)	5.5	16.9	15.3	-11.4* (0.004)	1.5 (0.739)	-9.8* (0.002)	10.7* (0.000)
Very dissatisfied (%)	7.8	9.6	14.5	-1.8 (0.150)	-4.9* (0.015)	-6.7* (0.000)	8.6* (0.001)
Sample size	**1,607**	**1,563**	**1,548**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.V.1. Enrollment in training since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Enrolled in a training program quarters 1-10 after random assignment (%)	49.7	41.1	33.8	8.6* (0.004)	7.3 (0.100)	15.9* (0.004)	6.3* (0.006)
Enrolled in a training program quarters 1-5 after random assignment (%)	44.4	31.6	26.5	12.8* (0.000)	5.2 (0.155)	17.9* (0.001)	9.3* (0.001)
Enrolled in a training program quarters 6-10 after random assignment (%)	21.5	23.9	23.3	-2.4 (0.546)	0.6 (0.769)	-1.8 (0.599)	0.2 (0.831)
Participation in a training program in quarter after random assignment (%)							
Quarter 1	31.8	20.4	16.8	11.4* (0.004)	3.6 (0.059)	15.0* (0.001)	7.1* (0.003)
Quarter 2	30.3	20.6	18.7	9.6* (0.009)	2.0 (0.420)	11.6* (0.003)	5.6* (0.010)
Quarter 3	24.5	17.7	16.3	6.9* (0.036)	1.3 (0.554)	8.2* (0.032)	2.8 (0.080)
Quarter 4	20.5	17.6	14.3	2.9 (0.269)	3.2 (0.349)	6.1* (0.009)	4.6* (0.019)
Quarter 5	17.2	12.3	14.9	4.9 (0.069)	-2.6 (0.052)	2.3 (0.351)	2.8 (0.078)
Quarter 6	14.6	14.3	15.4	0.3 (0.898)	-1.1 (0.468)	-0.8 (0.781)	0.3 (0.763)
Quarter 7	13.8	13.1	14.9	0.7 (0.775)	-1.8 (0.251)	-1.1 (0.741)	1.1 (0.346)
Quarter 8	11.3	12.0	14.3	-0.7 (0.782)	-2.3 (0.056)	-3.0 (0.226)	2.3 (0.121)
Quarter 9	10.1	12.4	13.5	-2.3 (0.451)	-1.1 (0.560)	-3.5 (0.095)	2.0 (0.154)
Quarter 10	11.0	12.2	12.6	-1.3 (0.563)	-0.3 (0.890)	-1.6 (0.363)	0.5 (0.629)
Sample size	**1,618**	**1,577**	**1,571**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.V.2a. Characteristics of training programs enrolled in since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Hours in training programs	391.5	302.4	270.9	89.1* (0.020)	31.5 (0.110)	120.6* (0.009)	3.9* (0.032)
Weeks in training programs	18.1	15.1	16.1	3.0 (0.100)	-0.9 (0.526)	2.1 (0.389)	1.7 (0.196)
Number of training programs in which enrolled	0.8	0.6	0.5	0.1* (0.017)	0.1* (0.009)	0.3* (0.001)	7.3* (0.003)
Frequency of the number of training programs in which enrolled (%)							
0 programs	50.4	58.9	66.2	-8.5* (0.004)	-7.3 (0.100)	-15.8* (0.004)	6.3* (0.006)
1 program	32.9	27.9	22.8	5.0* (0.042)	5.1 (0.202)	10.1* (0.020)	3.9* (0.033)
2 programs	10.7	8.1	8.2	2.6 (0.196)	-0.1 (0.937)	2.5 (0.351)	1.3 (0.294)
3 or more programs	6.0	5.1	2.8	1.0 (0.398)	2.3* (0.012)	3.3* (0.000)	14.1* (0.000)
Enrolled in any educational program (%)	8.9	8.1	8.4	0.8 (0.752)	-0.3 (0.896)	0.5 (0.889)	0.1 (0.929)
Enrolled in any vocational program (%)	45.0	37.3	29.2	7.8* (0.001)	8.1* (0.043)	15.9* (0.001)	9.2* (0.001)
Enrolled in both vocational and educational programs (%)	4.3	4.3	3.8	0.0 (0.993)	0.6 (0.720)	0.5 (0.839)	0.1 (0.934)
Enrolled in a training program designed to lead to a credential (%)	43.0	33.8	26.1	9.2* (0.001)	7.7 (0.074)	16.9* (0.004)	8.0* (0.002)
Completed any training program (%)	39.0	30.1	21.9	8.9* (0.000)	8.2 (0.051)	17.1* (0.002)	9.0* (0.001)
Left any training program prior to completion[a] (%)	9.2	8.8	9.4	0.3 (0.785)	-0.6 (0.568)	-0.3 (0.808)	0.2 (0.847)
Received a credential for completing any training program (%)	29.2	23.6	15.3	5.6* (0.000)	8.3* (0.036)	13.9* (0.001)	12.7* (0.000)
Number of training programs completed	0.6	0.4	0.3	0.1* (0.001)	0.1* (0.007)	0.3* (0.000)	10.5* (0.000)
Frequency of the number of training programs completed (%)							
0 programs	61.2	70.2	78.3	-9.0* (0.001)	-8.1 (0.054)	-17.1* (0.002)	8.8* (0.001)
1 program	27.7	21.8	16.9	5.9* (0.003)	4.9 (0.233)	10.8* (0.004)	12.4* (0.000)
2 programs	7.8	5.8	3.6	2.0 (0.392)	2.2 (0.093)	4.2 (0.103)	2.1 (0.142)
3 or more programs	3.3	2.1	1.1	1.1 (0.079)	1.0 (0.076)	2.1* (0.009)	4.0* (0.030)
Completed all training programs in which enrolled (%)	32.3	25.3	17.3	6.9* (0.008)	8.0 (0.052)	14.9* (0.002)	7.2* (0.003)
Sample size	**1,615**	**1,575**	**1,569**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Individuals who did not participate in a training program are recorded as not having left any education or training program.

* Significantly different from zero at the 5 percent level.

Table C.V.2b. Characteristics of training programs enrolled in since random assignment (among customers who reported participating in training)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who reported participating in any training							
Enrolled in a training program quarters 1-5 after random assignment (%)	89.3	77.5	79.3	11.8* (0.012)	-1.9 (0.673)	10.0* (0.000)	15.0* (0.000)
Enrolled in a training program quarters 6-10 after random assignment (%)	43.3	57.5	67.0	-14.2 (0.072)	-9.5* (0.050)	-23.7* (0.001)	8.4* (0.001)
Participation in a training program in quarter after random assignment (%)							
Quarter 1	64.1	49.6	49.6	14.4* (0.041)	0.0 (0.997)	14.5* (0.009)	4.0* (0.031)
Quarter 2	60.9	50.3	55.0	10.6 (0.119)	-4.7 (0.458)	6.0 (0.264)	1.4 (0.267)
Quarter 3	49.4	43.5	49.3	5.9 (0.305)	-5.8 (0.334)	0.1 (0.978)	0.6 (0.535)
Quarter 4	41.2	43.6	44.6	-2.4 (0.684)	-0.9 (0.822)	-3.3 (0.407)	0.4 (0.675)
Quarter 5	34.6	29.8	43.6	4.8 (0.296)	-13.8* (0.013)	-9.0 (0.064)	3.6* (0.041)
Quarter 6	29.4	33.8	43.2	-4.5 (0.341)	-9.4* (0.041)	-13.9* (0.030)	3.0 (0.067)
Quarter 7	27.7	31.4	42.9	-3.7 (0.456)	-11.5* (0.030)	-15.2* (0.034)	3.0 (0.067)
Quarter 8	22.7	28.5	41.1	-5.8 (0.256)	-12.5* (0.001)	-18.3* (0.000)	13.6* (0.000)
Quarter 9	20.3	29.5	38.4	-9.2 (0.170)	-8.9 (0.110)	-18.1* (0.000)	11.6* (0.000)
Quarter 10	22.1	29.6	36.8	-7.5 (0.122)	-7.3 (0.157)	-14.7* (0.002)	6.2* (0.006)
Weeks between random assignment and post-random assignment training enrollment	20.6	33.1	30.3	-12.4* (0.029)	2.8 (0.564)	-9.7* (0.003)	5.7* (0.008)
Hours in training programs	796.6	743.7	822.6	52.9 (0.499)	-78.9 (0.219)	-26.0 (0.756)	0.8 (0.443)
Weeks in training programs	36.6	36.6	47.1	-0.1 (0.978)	-10.5* (0.010)	-10.6* (0.028)	3.9* (0.033)
Number of training programs in which enrolled	1.5	1.5	1.4	0.0 (0.838)	0.1 (0.187)	0.1* (0.036)	2.7 (0.087)
Frequency of the number of training programs in which enrolled (%)							
1 program	66.3	67.3	66.7	-1.1 (0.820)	0.7 (0.838)	-0.4 (0.941)	0.0 (0.957)
2 programs	21.6	20.4	25.7	1.2 (0.720)	-5.3* (0.036)	-4.1 (0.444)	4.9* (0.015)
3 or more programs	12.1	12.3	7.7	-0.1 (0.955)	4.6 (0.058)	4.5* (0.002)	7.4* (0.003)
Enrolled in any educational program (%)	18.0	20.4	26.4	-2.3 (0.565)	-6.1 (0.156)	-8.4 (0.229)	1.1 (0.358)
Enrolled in any vocational program (%)	90.9	90.8	85.6	0.1 (0.954)	5.2* (0.001)	5.3* (0.001)	10.0* (0.001)
Enrolled in both vocational and educational programs (%)	8.8	11.0	12.0	-2.3 (0.551)	-1.0 (0.795)	-3.2 (0.607)	0.2 (0.834)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Enrolled in a training program designed to lead to a credential (%)	91.7	89.5	85.9	2.2 (0.384)	3.5 (0.203)	5.7 (0.052)	2.1 (0.145)
Completed any training program (%)	78.9	74.4	66.6	4.5 (0.200)	7.8 (0.171)	12.3* (0.008)	5.1* (0.013)
Left any training program prior to completion (%)	18.6	21.1	25.9	-2.5 (0.242)	-4.8 (0.086)	-7.3* (0.005)	4.7* (0.018)
Received a credential for completing any training program (%)	59.8	59.2	47.7	0.6 (0.892)	11.5* (0.033)	12.0* (0.000)	9.5* (0.001)
Number of training programs completed	1.1	1.0	0.9	0.1* (0.030)	0.2* (0.037)	0.3* (0.000)	11.9* (0.000)
Frequency of the number of training programs completed (%)							
0 programs	21.3	25.8	33.8	-4.6 (0.194)	-7.9 (0.153)	-12.5* (0.007)	5.0* (0.015)
1 program	56.2	53.8	50.5	2.4 (0.630)	3.3 (0.629)	5.7 (0.088)	2.2 (0.133)
2 programs	15.8	15.3	12.9	0.5 (0.899)	2.3 (0.553)	2.9 (0.487)	0.3 (0.743)
3 or more programs	6.6	5.0	2.7	1.6 (0.209)	2.3 (0.100)	3.9* (0.021)	3.0 (0.065)
Completed all training programs in which enrolled (%)	65.0	62.5	53.4	2.5 (0.561)	9.1* (0.050)	11.7* (0.009)	4.2* (0.025)
Sample size	**813**	**642**	**619**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.V.3a. Enrolled in training in 15 months after random assignment according to program data (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Enrolled in a WIA-funded training program during 15-month follow-up period (%)	31.5	3.4	0.4	28.1* (0.000)	3.0* (0.041)	31.1* (0.000)	42.6* (0.000)
Received an ITA (%)	29.1	2.0	0.4	27.1* (0.000)	1.6* (0.037)	28.7* (0.000)	35.3* (0.000)
Enrolled in WIA-funded on-the-job training (%)	1.5	0.1	0.0	1.5* (0.039)	0.0 (0.177)	1.5* (0.035)	3.1 (0.060)
Enrolled in WIA-funded Adult Basic Education or ESL (%)	0.0	0.0	0.0	0.0 (0.286)	0.0 (0.309)	0.0 (0.787)	1.1 (0.355)
Sample size	**1,716**	**1,684**	**1,669**				

Source: McConnell et al. (2016), based on WIA Standardized Record Data (WIASRD) extracted at about 15 months after random assignment.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. The sample is restricted to respondents to the WIA Gold Standard Evaluation 15-month follow-up survey. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero.

* Significantly different from zero at the 5 percent level.

ITA = Individual Training Account; ESL = English as a second language.

Table C.V.3b. Enrolled in training in 15 months after random assignment according to program data (among customers receiving WIA-funded training)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers receiving WIA-funded training in 15 months after random assignment							
Received an ITA (%)	90.0	42.3	79.5	47.7* (0.003)	-37.2* (0.040)	10.5 (0.285)	5.9* (0.007)
Enrolled in WIA-funded on-the-job training (%)	5.1	2.6	2.7	2.5 (0.263)	-0.1 (0.985)	2.5 (0.263)	1.1 (0.340)
Enrolled in WIA-funded Adult Basic Education or ESL (%)	0.2	0.1	9.5	0.0 (0.403)	-9.4 (0.315)	-9.4 (0.316)	0.6 (0.543)
Sample size	**548**	**83**	**7**				

Source: McConnell et al. (2016), based on WIA Standardized Record Data (WIASRD) extracted at about 15 months after random assignment.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and conditional differences are regression-adjusted. The sample is restricted to respondents to the WIA Gold Standard Evaluation 15-month follow-up survey. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero.

* Significantly different from zero at the 5 percent level.

ITA = Individual Training Account; ESL = English as a second language.

Table C.V.4. Participation in and completion of education programs since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Enrolled in any education program (%)	8.9	8.1	8.4	0.8	-0.3	0.5	0.1
				(0.752)	(0.896)	(0.889)	(0.929)
Frequency of the number of education programs in which enrolled (%)							
0 programs	91.2	91.9	91.6	-0.7	0.3	-0.4	0.1
				(0.770)	(0.895)	(0.903)	(0.937)
1 program	6.5	6.5	7.0	0.0	-0.5	-0.5	0.0
				(0.988)	(0.823)	(0.856)	(0.975)
2 programs	2.0	1.5	1.0	0.5	0.5	1.0	1.3
				(0.686)	(0.555)	(0.218)	(0.300)
3 or more programs	0.3	0.1	0.3	0.2	-0.2	0.0	1.4
				(0.178)	(0.309)	(0.902)	(0.264)
Participated in any education program quarters 1 to 5 after random assignment (%)	7.1	6.3	6.7	0.8	-0.4	0.4	0.1
				(0.713)	(0.842)	(0.908)	(0.907)
Participated in any education program quarters 6 to 10 after random assignment (%)	3.7	3.3	4.3	0.4	-1.0	-0.6	1.0
				(0.707)	(0.264)	(0.374)	(0.383)
Participation in any education program in quarter after random assignment (%)							
Quarter 1	4.6	3.8	4.6	0.9	-0.9	0.0	0.5
				(0.446)	(0.655)	(0.997)	(0.613)
Quarter 2	4.5	3.1	3.4	1.4	-0.3	1.1	1.2
				(0.179)	(0.833)	(0.573)	(0.327)
Quarter 3	4.0	3.9	3.2	0.2	0.7	0.9	0.2
				(0.909)	(0.584)	(0.646)	(0.849)
Quarter 4	2.7	3.0	2.1	-0.3	1.0	0.7	0.5
				(0.865)	(0.467)	(0.532)	(0.642)
Quarter 5	1.9	1.7	2.6	0.1	-0.9*	-0.7	3.1
				(0.796)	(0.029)	(0.128)	(0.060)
Quarter 6	2.5	1.9	2.6	0.5	-0.7	-0.1	1.3
				(0.420)	(0.126)	(0.848)	(0.288)
Quarter 7	2.5	1.6	2.1	0.9	-0.5	0.4	2.2
				(0.120)	(0.222)	(0.568)	(0.135)
Quarter 8	1.7	2.2	1.9	-0.5	0.3	-0.2	0.3
				(0.414)	(0.529)	(0.593)	(0.711)
Quarter 9	2.2	2.2	1.9	0.0	0.3	0.4	0.4
				(0.993)	(0.451)	(0.541)	(0.677)
Quarter 10	1.7	1.8	2.2	-0.2	-0.4	-0.6	0.3
				(0.806)	(0.545)	(0.450)	(0.728)
Enrolled in any non-ESL education program (%)	8.7	7.9	8.2	0.8	-0.4	0.5	0.1
				(0.738)	(0.864)	(0.898)	(0.910)
Enrolled in an ESL program (%)	0.4	0.4	0.2	0.0	0.2	0.2	0.5
				(0.809)	(0.368)	(0.344)	(0.598)
Enrolled in any education program designed to lead to a degree/diploma (%)	5.0	4.6	3.6	0.3	1.0	1.3	0.4
				(0.790)	(0.407)	(0.540)	(0.689)
Hours spent in education programs	41.9	41.9	32.5	0.0	9.4	9.3	0.3
				(1.000)	(0.504)	(0.504)	(0.750)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received high school diploma or GED from education program (%)	1.6	1.7	1.1	-0.1 (0.861)	0.6 (0.639)	0.5 (0.661)	0.1 (0.894)
Received post-secondary diploma from education program (%)	5.7	4.2	3.7	1.5 (0.138)	0.5 (0.261)	2.0* (0.040)	2.7 (0.084)
Left any education program prior to completion (%)	2.4	1.9	3.2	0.5 (0.498)	-1.3 (0.144)	-0.9 (0.384)	1.2 (0.319)
Number of education programs completed	0.1	0.1	0.0	0.0 (0.711)	0.0 (0.284)	0.0 (0.446)	0.6 (0.553)
Frequency of the number of education programs completed (%)							
0 programs	94.3	95.0	95.8	-0.8 (0.633)	-0.8 (0.665)	-1.6 (0.583)	0.2 (0.856)
1 program	4.3	3.7	3.9	0.6 (0.606)	-0.2 (0.927)	0.4 (0.853)	0.1 (0.873)
2 programs	1.3	1.2	0.2	0.2 (0.882)	1.0* (0.022)	1.1 (0.167)	8.6* (0.001)
3 or more programs	0.1	0.1	0.1	0.0 (0.938)	0.0 (0.718)	0.0 (0.481)	0.3 (0.775)
Sample size	**1,613**	**1,573**	**1,569**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

ESL = English as a second language; GED = General Educational Development certificate.

Table C.V.5. Participation in and completion of vocational training programs since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Enrolled in any vocational training program (%)	45.0	37.3	29.2	7.8* (0.001)	8.1* (0.043)	15.9* (0.001)	9.2* (0.001)
Number of vocational training programs in which enrolled	0.6	0.5	0.4	0.1* (0.001)	0.1* (0.001)	0.3* (0.000)	12.4* (0.000)
Frequency of the number of vocational training programs in which enrolled (%)							
0 programs	55.2	62.9	70.9	-7.7* (0.002)	-8.0* (0.047)	-15.7* (0.001)	8.7* (0.001)
1 program	32.9	27.2	21.6	5.8 (0.052)	5.5 (0.229)	11.3* (0.004)	6.8* (0.004)
2 programs	7.7	6.6	6.3	1.0 (0.630)	0.3 (0.705)	1.3 (0.428)	0.7 (0.527)
3 or more programs	4.2	3.3	1.2	0.9 (0.154)	2.1* (0.004)	3.0* (0.003)	5.9* (0.008)
Participated in any vocational training quarters 1 to 5 after random assignment (%)	39.5	28.0	21.9	11.5* (0.000)	6.2* (0.050)	17.6* (0.000)	18.0* (0.000)
Participated in any vocational training quarters 6 to 10 after random assignment (%)	18.6	21.5	19.8	-3.0 (0.415)	1.7 (0.315)	-1.2 (0.695)	0.6 (0.560)
Participation in any vocational training by quarter after random assignment (%)							
Quarter 1	27.5	17.6	12.8	9.9* (0.001)	4.8* (0.006)	14.6* (0.000)	9.8* (0.001)
Quarter 2	26.2	17.5	15.5	8.7* (0.008)	2.0 (0.418)	10.7* (0.002)	6.4* (0.005)
Quarter 3	20.8	14.6	13.2	6.2* (0.022)	1.4 (0.521)	7.6* (0.003)	5.6* (0.009)
Quarter 4	18.7	14.4	12.3	4.2* (0.024)	2.2 (0.380)	6.4* (0.003)	6.9* (0.004)
Quarter 5	15.4	10.7	12.6	4.6 (0.070)	-1.8 (0.168)	2.8 (0.223)	2.0 (0.153)
Quarter 6	12.2	12.6	13.0	-0.5 (0.852)	-0.4 (0.815)	-0.8 (0.772)	0.0 (0.952)
Quarter 7	11.3	11.7	12.9	-0.4 (0.864)	-1.2 (0.398)	-1.6 (0.601)	0.4 (0.694)
Quarter 8	9.5	9.7	12.4	-0.2 (0.915)	-2.7* (0.020)	-2.9 (0.199)	3.1 (0.062)
Quarter 9	8.0	10.4	11.9	-2.4 (0.373)	-1.5 (0.386)	-3.9* (0.032)	3.4* (0.049)
Quarter 10	9.4	10.6	10.5	-1.3 (0.541)	0.2 (0.923)	-1.1 (0.435)	0.4 (0.697)
Enrolled in classroom-based vocational training (%)	32.6	25.6	19.8	7.1* (0.005)	5.8 (0.087)	12.9* (0.003)	6.6* (0.005)
Enrolled in any vocational training program designed to lead to a credential (%)	38.9	30.4	22.9	8.5* (0.000)	7.4 (0.089)	15.9* (0.002)	11.2* (0.000)
Hours spent in vocational training programs	342.4	258.5	237.6	83.8* (0.034)	20.9 (0.240)	104.7* (0.024)	2.9 (0.075)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Completed any vocational training program (%)	36.0	28.1	20.7	7.8* (0.001)	7.4 (0.060)	15.3* (0.001)	10.7* (0.000)
Received any credential from completing a vocational training program (%)	27.0	22.0	14.3	5.0* (0.003)	7.8 (0.051)	12.8* (0.001)	13.6* (0.000)
Left any vocational training program prior to completion (%)	6.9	7.2	6.4	-0.3 (0.725)	0.7 (0.143)	0.4 (0.495)	1.3 (0.281)
Number of vocational training programs completed	0.5	0.4	0.2	0.1* (0.000)	0.1* (0.007)	0.3* (0.000)	23.1* (0.000)
Frequency of the number of vocational training programs completed (%)							
0 programs	64.3	72.9	81.2	-8.5* (0.000)	-8.3* (0.038)	-16.8* (0.000)	13.2* (0.000)
1 program	28.2	20.9	15.0	7.3* (0.006)	6.0 (0.196)	13.3* (0.002)	9.4* (0.001)
2 programs	4.4	4.8	3.1	-0.4 (0.875)	1.6 (0.435)	1.3 (0.136)	1.7 (0.199)
3 or more programs	3.0	1.4	0.7	1.6 (0.114)	0.7 (0.124)	2.3* (0.014)	4.9* (0.015)
Sample size	**1,616**	**1,575**	**1,569**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.V.6. Training provider (among customers who reported participating in training)

	Means			Conditional difference			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who reported participating in any training							
Share receiving any training provided at (%)							
Vocational institute, training center, or private training provider	32.7	22.7	20.2	10.1* (0.004)	2.5 (0.374)	12.6* (0.005)	5.5* (0.010)
Employer	32.2	33.8	34.7	-1.7 (0.641)	-0.8 (0.784)	-2.5 (0.459)	0.3 (0.756)
Community college	24.0	24.6	30.0	-0.6 (0.844)	-5.3 (0.398)	-6.0 (0.298)	0.6 (0.574)
Four-year college or university	8.4	10.7	6.9	-2.3 (0.318)	3.8 (0.252)	1.5 (0.463)	0.7 (0.507)
Adult education center, community school, or night school	3.7	3.3	3.8	0.4 (0.566)	-0.5 (0.713)	-0.1 (0.932)	0.2 (0.841)
Community-based organization, senior center, or other non-profit	3.9	4.0	6.8	-0.1 (0.967)	-2.8 (0.171)	-2.9 (0.118)	1.5 (0.232)
AJC	7.8	5.5	3.3	2.2 (0.149)	2.3 (0.383)	4.5* (0.013)	6.0* (0.007)
Unemployment office	0.0	0.2	0.4	-0.2 (0.121)	-0.1 (0.670)	-0.4 (0.215)	2.0 (0.148)
Other government agency	0.6	0.4	0.7	0.2 (0.558)	-0.3 (0.359)	-0.2 (0.724)	0.5 (0.590)
Online	4.6	8.5	11.7	-4.0* (0.025)	-3.2 (0.178)	-7.1* (0.006)	5.2* (0.012)
Any other location or provider (including hotel, conference center, and hospital)	4.9	3.8	2.9	1.2 (0.481)	0.9 (0.497)	2.0 (0.128)	1.3 (0.277)
Sample size	**805**	**637**	**611**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

AJC = American Job Center.

Table C.V.7. Top training programs[a] (among customers who reported participating in training)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who reported participating in any training							
Share enrolling in training program (%)							
Truck driver or commercial driving license	7.7	1.8	3.2	5.9*	-1.4	4.6*	3.7*
				(0.011)	(0.105)	(0.019)	(0.037)
General education	7.3	7.7	12.6	-0.4	-4.9	-5.3	0.5
				(0.793)	(0.349)	(0.325)	(0.609)
Certified Nursing Assistant	7.1	4.4	5.0	2.7	-0.6	2.1	1.7
				(0.147)	(0.853)	(0.376)	(0.209)
Technical school or college	5.5	7.1	5.2	-1.6	1.9	0.3	0.5
				(0.470)	(0.340)	(0.825)	(0.629)
Medical coding	4.8	1.3	2.8	3.5	-1.5	2.0	1.4
				(0.155)	(0.332)	(0.106)	(0.264)
Other - associates degree in nursing	4.5	3.4	5.0	1.0	-1.6	-0.5	1.2
				(0.366)	(0.133)	(0.602)	(0.316)
Unspecified nursing certificate	3.9	2.0	2.9	1.9	-0.9	1.0	3.1
				(0.155)	(0.603)	(0.187)	(0.059)
Welder	3.7	2.3	2.0	1.4	0.3	1.6	0.4
				(0.525)	(0.833)	(0.359)	(0.644)
Licensed Practical Nurse	3.4	3.5	4.1	0.0	-0.7	-0.7	0.2
				(0.990)	(0.546)	(0.686)	(0.831)
Business management	3.1	3.4	4.1	-0.3	-0.7	-1.0	0.2
				(0.804)	(0.599)	(0.491)	(0.781)
General computer skills (software, Windows, MS Office)	3.0	4.9	2.1	-1.9	2.8	0.9	1.5
				(0.420)	(0.158)	(0.417)	(0.243)
Accounting/Bookkeeping	2.7	0.5	1.6	2.2	-1.0	1.2	2.3
				(0.066)	(0.128)	(0.296)	(0.121)
Sample size	**810**	**637**	**617**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The most frequently attended training programs among all WIA Gold Standard Evaluation 30-month follow-up survey responders.

* Significantly different from zero at the 5 percent level.

Table C.V.8a. Funding of training since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any funding for training costs from (%)							
WIA	17.3	2.3	0.9	14.9*	1.5	16.4*	15.4*
				(0.000)	(0.138)	(0.000)	(0.000)
State employment agency	3.4	0.0	0.0	3.4*	0.0	3.4*	2.8
				(0.028)	(0.840)	(0.030)	(0.081)
Trade Adjustment Act	0.0	0.1	0.0	-0.1	0.1	0.0	1.1
				(0.162)	(0.159)	(0.558)	(0.351)
Veteran's administration	0.0	0.1	0.0	0.0	0.1	0.0	0.6
				(0.571)	(0.380)	(0.612)	(0.581)
Pell Grant	7.3	7.2	5.4	0.1	1.8	2.0	1.7
				(0.922)	(0.281)	(0.078)	(0.199)
Other government sources	2.5	1.9	2.1	0.5	-0.1	0.4	0.8
				(0.301)	(0.882)	(0.476)	(0.464)
External scholarship or grant	4.9	3.0	3.1	2.0	-0.1	1.8	1.3
				(0.118)	(0.857)	(0.162)	(0.287)
Other educational or training entity	0.4	0.2	0.0	0.2	0.1	0.3*	3.4*
				(0.143)	(0.087)	(0.037)	(0.048)
Employer	1.5	2.8	1.3	-1.2	1.4	0.2	2.0
				(0.353)	(0.122)	(0.710)	(0.154)
Free Application for Federal Student Aid[a]	2.9	3.0	2.6	-0.1	0.4	0.3	0.2
				(0.874)	(0.551)	(0.722)	(0.829)
Other	0.4	0.8	0.8	-0.3	0.0	-0.4	0.4
				(0.498)	(0.958)	(0.528)	(0.697)
Sample size	**1,605**	**1,569**	**1,563**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

Table C.V.8b. Funding of training since random assignment (among customers who reported participating in training)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who reported participating in any training							
Total cost of all training programs enrolled in ($)	9,385	12,565	12,295	-3,180* (0.017)	270 (0.832)	-2,910 (0.069)	3.3 (0.052)
Received any funding for training costs from (%)							
WIA	35.0	6.1	3.1	28.9* (0.000)	2.9 (0.121)	31.8* (0.000)	24.9* (0.000)
State employment agency	7.0	0.4	0.7	6.6* (0.017)	-0.3 (0.623)	6.3* (0.005)	8.4* (0.001)
Trade Adjustment Act	0.0	0.3	0.0	-0.3 (0.151)	0.3 (0.146)	0.0 (0.215)	1.1 (0.333)
Veteran's administration	0.1	0.2	0.0	-0.1 (0.511)	0.2 (0.403)	0.0 (0.675)	0.4 (0.675)
Pell Grant	14.9	17.3	14.9	-2.4 (0.438)	2.4 (0.582)	0.0 (0.993)	0.3 (0.731)
Other government sources	5.0	4.8	5.8	0.3 (0.812)	-1.1 (0.607)	-0.8 (0.613)	0.1 (0.865)
External scholarship or grant	10.0	7.1	8.7	2.9 (0.281)	-1.6 (0.396)	1.3 (0.644)	0.8 (0.474)
Other educational or training entity	0.8	0.4	0.1	0.4 (0.201)	0.3 (0.126)	0.7* (0.039)	3.0 (0.067)
Employer	3.1	6.7	3.6	-3.6 (0.228)	3.1 (0.168)	-0.5 (0.719)	1.0 (0.377)
Free Application for Federal Student Aid[a]	5.9	7.1	7.0	-1.2 (0.347)	0.1 (0.965)	-1.1 (0.579)	0.5 (0.636)
Other	0.9	1.9	2.3	-1.0 (0.408)	-0.4 (0.835)	-1.4 (0.390)	0.7 (0.526)
Share of training paid for by individual or family (%)	0.3	0.5	0.5	-0.1* (0.001)	-0.1 (0.305)	-0.2* (0.003)	8.3* (0.002)
Paid all training costs on own (%)	18.9	34.6	37.1	-15.7* (0.004)	-2.5 (0.592)	-18.2* (0.000)	13.8* (0.000)
Paid some training costs on own (%)	25.3	20.6	22.6	4.8 (0.387)	-2.0 (0.780)	2.7 (0.601)	0.5 (0.617)
Paid for none of training costs on own (%)	55.8	44.9	40.3	10.9* (0.016)	4.6 (0.415)	15.5* (0.006)	5.8* (0.008)
Sample size	**808**	**639**	**617**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero.

Appendix A provides more details about the weights and estimation approach.

[a] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

Table C.VI.1. Earnings[a] by quarter since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 1 ($)	1,446	2,035	1,660	-589 (0.145)	376 (0.099)	-213 (0.342)	1.5 (0.250)
Quarter 2 ($)	2,363	3,260	2,729	-896 (0.067)	531 (0.102)	-365 (0.122)	1.8 (0.180)
Quarter 3 ($)	3,170	3,832	3,052	-663 (0.084)	780 (0.072)	117 (0.582)	1.8 (0.182)
Quarter 4 ($)	3,580	4,014	3,194	-434 (0.206)	821* (0.036)	387 (0.091)	2.8 (0.078)
Quarter 5 ($)	3,816	4,358	3,477	-541 (0.185)	881* (0.015)	340 (0.067)	5.8* (0.008)
Quarter 6 ($)	4,643	4,829	4,035	-186 (0.461)	794* (0.011)	608* (0.007)	5.2* (0.013)
Quarter 7 ($)	4,975	4,892	4,417	82 (0.715)	475 (0.051)	557* (0.045)	2.7 (0.087)
Quarter 8 ($)	5,118	5,248	4,483	-129 (0.588)	765* (0.007)	636 (0.065)	4.3* (0.024)
Quarter 9 ($)	5,242	5,472	4,570	-231 (0.391)	903* (0.005)	672 (0.064)	4.8* (0.017)
Quarter 10 ($)	5,244	5,435	4,472	-191 (0.436)	963* (0.003)	773* (0.023)	5.4* (0.010)
Quarters 1-5 ($)	14,376	17,513	14,124	-3,137 (0.105)	3,389* (0.045)	252 (0.723)	2.5 (0.101)
Quarters 6-10 ($)	25,188	25,802	21,943	-614 (0.572)	3,859* (0.006)	3,245* (0.024)	4.7* (0.018)
Quarters 1-10 ($)	39,528	43,211	36,079	-3,684 (0.164)	7,133* (0.012)	3,449 (0.061)	4.1* (0.027)
Sample size	**1,616**	**1,574**	**1,570**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

* Significantly different from zero at the 5 percent level.

Table C.VI.2. Employment by quarter since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 1 (%)	37.4	45.0	40.4	-7.7 (0.089)	4.7 (0.306)	-3.0 (0.160)	2.2 (0.127)
Quarter 2 (%)	47.9	57.6	54.1	-9.7 (0.055)	3.5 (0.446)	-6.2* (0.007)	4.7* (0.018)
Quarter 3 (%)	60.5	62.8	59.5	-2.4 (0.545)	3.3 (0.447)	0.9 (0.674)	0.3 (0.741)
Quarter 4 (%)	64.9	65.3	60.1	-0.4 (0.859)	5.3 (0.126)	4.8 (0.142)	1.4 (0.272)
Quarter 5 (%)	68.7	72.1	62.3	-3.4 (0.158)	9.8* (0.006)	6.4* (0.008)	5.0* (0.015)
Quarter 6 (%)	74.8	75.9	70.8	-1.1 (0.523)	5.1 (0.142)	4.0 (0.142)	1.2 (0.310)
Quarter 7 (%)	75.1	75.2	72.4	-0.2 (0.923)	2.8 (0.437)	2.7 (0.394)	0.4 (0.690)
Quarter 8 (%)	77.7	76.3	74.2	1.4 (0.567)	2.1 (0.602)	3.5 (0.397)	0.4 (0.662)
Quarter 9 (%)	79.7	79.1	75.3	0.7 (0.846)	3.7 (0.413)	4.4 (0.145)	1.1 (0.334)
Quarter 10 (%)	78.5	79.0	75.4	-0.5 (0.860)	3.6 (0.337)	3.1 (0.231)	0.8 (0.472)
Quarter 1-5 (%)	78.4	81.5	73.4	-3.1 (0.250)	8.1* (0.048)	5.0* (0.029)	2.8 (0.080)
Quarter 6-10 (%)	88.6	89.0	86.6	-0.4 (0.644)	2.4 (0.364)	2.0 (0.439)	0.5 (0.636)
Quarter 1-10 (%)	92.3	92.6	90.1	-0.3 (0.758)	2.5 (0.310)	2.2 (0.290)	0.6 (0.561)
Sample size	**1,621**	**1,578**	**1,575**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.VI.3. Timing of training completion relative to start of new jobs (among customers who had ended enrollment in at least one training program)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who ended enrollment in training							
Weeks between random assignment and end of first training program	42.7	53.1	59.4	-10.4* (0.013)	-6.3 (0.238)	-16.7* (0.000)	19.2* (0.000)
Sample size	**750**	**562**	**549**				
Among customers who ended enrollment in training and worked in a job							
Started job before completing first training program (%)	50.7	61.3	65.6	-10.5 (0.177)	-4.3 (0.446)	-14.9* (0.005)	5.2* (0.012)
Completed training before getting a job (%)	49.3	38.7	34.4	10.5 (0.177)	4.3 (0.446)	14.9* (0.005)	5.2* (0.012)
Sample size	**693**	**518**	**521**				
Among customers who completed training and then got job							
Weeks between end of first training and start of first job	20.1	19.9	25.8	0.2 (0.938)	-5.8 (0.310)	-5.6 (0.280)	0.6 (0.548)
Sample size	**305**	**206**	**181**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.VI.4. Weeks and hours worked by quarter since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Weeks worked[a]							
Quarter 1	3.2	4.0	3.7	-0.8	0.3	-0.5	1.9
				(0.138)	(0.513)	(0.062)	(0.165)
Quarter 2	4.9	6.0	5.7	-1.1	0.3	-0.8*	4.5*
				(0.054)	(0.535)	(0.006)	(0.020)
Quarter 3	6.4	6.8	6.5	-0.4	0.3	-0.1	0.7
				(0.304)	(0.571)	(0.729)	(0.497)
Quarter 4	7.1	7.2	6.7	-0.1	0.5	0.4	0.8
				(0.731)	(0.255)	(0.252)	(0.458)
Quarter 5	7.4	7.8	6.8	-0.4	1.0*	0.6*	4.3*
				(0.287)	(0.018)	(0.033)	(0.025)
Quarter 6	8.3	8.5	7.6	-0.2	0.9*	0.7*	3.1
				(0.407)	(0.021)	(0.042)	(0.064)
Quarter 7	8.6	8.5	8.1	0.1	0.4	0.5	0.5
				(0.665)	(0.427)	(0.336)	(0.596)
Quarter 8	8.7	8.8	8.3	-0.1	0.5	0.4	0.6
				(0.662)	(0.276)	(0.365)	(0.533)
Quarter 9	9.1	9.1	8.5	0.0	0.6	0.6	1.2
				(0.961)	(0.218)	(0.128)	(0.303)
Quarter 10	9.0	9.0	8.4	0.0	0.6	0.6	1.4
				(0.998)	(0.230)	(0.110)	(0.272)
Quarter 1-5	29.0	31.8	29.4	-2.8	2.4	-0.5	1.3
				(0.140)	(0.267)	(0.633)	(0.295)
Quarter 6-10	43.7	43.9	40.9	-0.2	3.0	2.8	1.1
				(0.791)	(0.163)	(0.148)	(0.339)
Quarter 1-10	72.6	75.7	70.3	-3.1	5.4	2.3	1.7
				(0.138)	(0.101)	(0.388)	(0.203)
Hours worked[a]							
Quarter 1	113.3	143.6	134.5	-30.3	9.1	-21.1	1.5
				(0.134)	(0.510)	(0.117)	(0.249)
Quarter 2	183.7	231.3	212.5	-47.7	18.9	-28.8	2.5
				(0.052)	(0.301)	(0.051)	(0.099)
Quarter 3	250.9	266.8	243.3	-16.0	23.6	7.6	0.6
				(0.449)	(0.283)	(0.642)	(0.557)
Quarter 4	283.4	283.4	259.4	-0.1	24.1	24.0	1.6
				(0.997)	(0.148)	(0.147)	(0.217)
Quarter 5	293.5	306.1	276.7	-12.6	29.4	16.8	1.5
				(0.519)	(0.117)	(0.290)	(0.250)
Quarter 6	340.2	337.1	307.6	3.2	29.5	32.7	1.9
				(0.747)	(0.127)	(0.062)	(0.167)
Quarter 7	356.3	339.0	332.7	17.3	6.3	23.6	1.7
				(0.139)	(0.810)	(0.324)	(0.209)
Quarter 8	361.4	354.3	329.3	7.1	25.0	32.1	0.9
				(0.557)	(0.314)	(0.207)	(0.432)
Quarter 9	375.5	365.8	334.3	9.7	31.4	41.2	2.0
				(0.592)	(0.178)	(0.055)	(0.152)
Quarter 10	373.6	364.1	327.8	9.4	36.4	45.8*	2.6
				(0.585)	(0.144)	(0.031)	(0.092)
Quarter 1-5	1,124.8	1,231.6	1,126.3	-106.8	105.3	-1.5	0.9
				(0.221)	(0.204)	(0.976)	(0.420)
Quarter 6-10	1,807.0	1,760.3	1,631.9	46.6	128.5	175.1	2.1
				(0.422)	(0.259)	(0.075)	(0.144)
Quarter 1-10	2,931.7	2,992.0	2,758.6	-60.3	233.4	173.1	1.1
				(0.544)	(0.160)	(0.184)	(0.345)
Number of jobs worked	2.0	1.9	1.9	0.1	0.0	0.1	0.2
				(0.586)	(0.935)	(0.487)	(0.782)
Sample size	**1,619**	**1,578**	**1,575**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

* Significantly different from zero at the 5 percent level.

Table C.VI.5. Characteristics of current or most recent job reported at time of survey (among customers who provided recent employment history from follow-up period)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who provided employment history during follow-up period							
Hours worked per week	37.9	36.4	36.0	1.5* (0.010)	0.3 (0.643)	1.9* (0.004)	6.9* (0.004)
Employed full-time (35 or more hours per week, %)	74.4	71.1	66.4	3.3 (0.167)	4.7* (0.045)	8.0* (0.000)	9.4* (0.001)
Hourly wage rate ($)	13.76	14.30	13.56	-0.53 (0.348)	0.73 (0.298)	0.20 (0.671)	0.6 (0.558)
Job offered (%)							
Any benefits	77.2	74.1	71.8	3.0 (0.452)	2.4 (0.312)	5.4 (0.210)	1.0 (0.382)
Health insurance	68.7	65.8	60.1	2.9 (0.456)	5.7 (0.062)	8.6 (0.087)	2.2 (0.135)
Paid vacation	67.1	60.2	57.1	6.9 (0.131)	3.1 (0.242)	10.0 (0.051)	2.1 (0.137)
Paid holidays	67.5	62.3	55.2	5.2 (0.240)	7.1* (0.011)	12.3* (0.016)	4.9* (0.015)
Paid sick days	54.3	51.5	42.1	2.7 (0.402)	9.4* (0.011)	12.1* (0.022)	3.9* (0.033)
Any paid time off	72.9	67.5	64.3	5.4 (0.183)	3.2 (0.126)	8.6 (0.073)	2.0 (0.155)
Pension or retirement benefits	61.1	54.1	50.7	7.0 (0.126)	3.3 (0.169)	10.3* (0.038)	2.6 (0.094)
Tuition assistance or reimbursement	32.7	30.8	26.3	1.9 (0.293)	4.5 (0.183)	6.4 (0.164)	1.0 (0.372)
Job classified as (%)							
Regular full- or part-time	82.6	80.6	78.5	2.0 (0.477)	2.1 (0.543)	4.2* (0.006)	5.5* (0.010)
Self-employed or independent contractor	4.8	5.7	7.8	-0.9 (0.581)	-2.1 (0.282)	-3.0 (0.119)	1.3 (0.290)
Temporary or day labor	8.0	6.3	9.4	1.7 (0.411)	-3.1 (0.079)	-1.4 (0.250)	2.3 (0.124)
On-call employee	3.8	4.5	3.0	-0.7 (0.593)	1.5 (0.265)	0.8 (0.423)	0.7 (0.491)
Job at contractor	1.7	3.0	2.1	-1.4 (0.176)	1.0* (0.015)	-0.4 (0.653)	3.5* (0.044)
Unionized job (%)	8.2	7.5	6.3	0.7 (0.522)	1.3 (0.173)	2.0 (0.140)	1.3 (0.278)
Months employed at job	16.0	16.2	16.2	-0.1 (0.929)	0.0 (0.987)	-0.1 (0.937)	0.0 (0.996)
Sample size	**1,502**	**1,453**	**1,461**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.VI.6. Most frequently reported occupations of current or most recent job reported at time of survey (among customers who provided recent employment history from follow-up period)

	Means			Conditional Difference			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who provided employment history during follow-up period							
Occupation of current or most recent job (%)							
Nursing, Psychiatric, and Home Health Aides	12.7	10.3	8.3	2.5 (0.402)	2.0 (0.254)	4.4* (0.039)	3.6* (0.042)
Retail Sales Workers	12.1	10.3	16.6	1.8 (0.282)	-6.2* (0.003)	-4.5* (0.021)	5.3* (0.011)
Information and Record Clerks	10.7	11.0	13.7	-0.3 (0.898)	-2.7 (0.087)	-3.0 (0.061)	3.9* (0.033)
Motor Vehicle Operators	10.7	7.5	7.0	3.2 (0.062)	0.5 (0.779)	3.6 (0.119)	2.0 (0.157)
Material Moving Workers	8.9	10.4	8.1	-1.5 (0.504)	2.4 (0.235)	0.9 (0.533)	0.9 (0.432)
Material Recording, Scheduling, Dispatching, and Distributing Workers	8.3	9.5	6.6	-1.2 (0.490)	2.9 (0.104)	1.7 (0.276)	1.5 (0.243)
Building Cleaning and Pest Control Workers	6.8	6.0	7.1	0.8 (0.567)	-1.2 (0.457)	-0.4 (0.780)	0.3 (0.742)
Other Personal Care and Service Workers	6.7	4.1	4.6	2.6 (0.160)	-0.5 (0.539)	2.1 (0.237)	1.1 (0.356)
Health Technologists and Technicians	5.4	5.8	4.9	-0.4 (0.587)	0.9 (0.377)	0.5 (0.636)	0.4 (0.648)
Other Office and Administrative Support Workers	4.8	5.9	4.9	-1.1 (0.413)	1.0 (0.372)	-0.1 (0.883)	0.4 (0.648)
Cooks and Food Preparation Workers	4.7	3.5	3.3	1.2 (0.241)	0.2 (0.810)	1.4 (0.116)	1.4 (0.272)
Construction Trades Workers	4.5	4.0	5.1	0.5 (0.662)	-1.1 (0.365)	-0.6 (0.664)	0.4 (0.656)
Sample size	**1,473**	**1,435**	**1,437**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.VI.7. Employment in occupations related to most common training occupations (among customers who participated in training)

	Percent who participated in training for this occupation			Percent of those who trained in this occupation who were subsequently employed in that occupation			Percent of those who trained in this occupation who were subsequently employed at all		
	Full-WIA group	Core-and-intensive group	Core group	Full-WIA group	Core-and-intensive group	Core group	Full-WIA group	Core-and-intensive group	Core group
Truck driver or commercial driving license	7.7	1.8	3.2	71.3	100.0	80.0	97.1	100.0	100.0
Certified Nursing Assistant	7.1	4.4	5.0	48.6	46.0	42.3	99.3	97.9	99.6
Medical coding	4.8	1.3	2.8	17.7	26.6	16.8	96.5	64.4	100.0
Other - associates degree in nursing	4.5	3.4	5.0	17.4	15.3	14.0	94.2	88.8	93.7
Unspecified nursing certificate	3.9	2.0	2.9	69.7	97.3	16.7	100.0	98.5	99.6
Welder	3.7	2.3	2.0	36.8	36.2	25.8	100.0	100.0	98.0
Licensed Practical Nurse	3.4	3.5	4.1	79.7	76.7	62.1	97.6	95.2	79.5
Business management	3.1	3.4	4.1	2.9	12.1	44.8	98.7	52.1	93.6
Accounting/Bookkeeping	2.7	0.5	1.6	2.8	9.9	17.3	92.8	100.0	100.0
Sample size	**810**	**637**	**616**	**51**	**49**	**46**	**51**	**49**	**46**

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.VI.8. Match between training and employment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Reported finding a job because of training during follow-up period (%)	25.4	20.9	14.7	4.4 (0.130)	6.2 (0.155)	10.6* (0.001)	10.2* (0.001)
Did not participate in training (%)	50.3	59.0	66.2	-8.7* (0.003)	-7.2 (0.104)	-15.9* (0.004)	6.5* (0.005)
Participated in training not specific to an occupation (%)	20.1	20.7	15.3	-0.6 (0.683)	5.4 (0.106)	4.8* (0.045)	2.4 (0.108)
Trained for specific occupation but did not get job in that occupation (%)	17.4	12.3	11.7	5.0 (0.057)	0.6 (0.728)	5.7* (0.028)	2.8 (0.080)
Trained for specific occupation and got job in same occupation (%)	12.2	7.9	6.7	4.3* (0.040)	1.2 (0.400)	5.4* (0.004)	5.0* (0.014)
Not employed in follow-up period or in five years before random assignment (%)	29.6	30.2	32.1	-0.6 (0.798)	-1.9 (0.649)	-2.5 (0.427)	0.4 (0.695)
Employed and most recent job is same as pre-RA occupation (%)	20.4	20.9	21.1	-0.5 (0.827)	-0.2 (0.966)	-0.7 (0.861)	0.0 (0.969)
Employed and most recent job is different than occupation before random assignment (%)	50.0	48.9	46.8	1.1 (0.646)	2.0 (0.572)	3.2 (0.363)	0.4 (0.645)
Sample size	**1,616**	**1,571**	**1,568**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and WIA Gold Standard Evaluation study registration form.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.VI.9. Employment and enrollment in training (among customers who participated in training)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who participated in training							
Reported finding a job because of training during follow-up period (%)	51.2	51.3	44.5	-0.1 (0.986)	6.8 (0.399)	6.7 (0.169)	1.1 (0.350)
Employed during quarters 1-5 (%)	80.9	81.5	71.7	-0.6 (0.872)	9.8 (0.104)	9.1 (0.164)	1.4 (0.257)
Employed during quarters 6-10 (%)	90.8	90.7	89.3	0.1 (0.967)	1.4 (0.605)	1.5 (0.700)	0.1 (0.868)
Employment by quarter (%)							
Quarter 1	33.1	40.5	38.8	-7.4* (0.032)	1.7 (0.780)	-5.7 (0.192)	4.5* (0.021)
Quarter 2	45.9	54.4	49.6	-8.5 (0.119)	4.8 (0.478)	-3.8 (0.347)	1.8 (0.192)
Quarter 3	59.4	58.1	57.4	1.3 (0.763)	0.6 (0.908)	1.9 (0.739)	0.1 (0.930)
Quarter 4	66.4	63.4	59.0	2.9 (0.357)	4.4 (0.416)	7.3 (0.173)	1.1 (0.333)
Quarter 5	72.7	72.8	63.3	-0.1 (0.984)	9.5 (0.079)	9.4 (0.063)	2.0 (0.150)
Quarter 6	79.2	75.0	69.3	4.1 (0.105)	5.7 (0.290)	9.9 (0.101)	2.0 (0.151)
Quarter 7	81.4	75.2	73.4	6.2 (0.051)	1.8 (0.773)	8.0 (0.207)	2.4 (0.105)
Quarter 8	81.4	78.7	72.8	2.7 (0.417)	5.9 (0.368)	8.6 (0.308)	0.5 (0.583)
Quarter 9	81.5	82.5	74.3	-1.0 (0.774)	8.1 (0.122)	7.1 (0.269)	1.3 (0.281)
Quarter 10	80.4	83.6	78.0	-3.1 (0.339)	5.6* (0.045)	2.4 (0.532)	2.4 (0.106)
Sample size	**818**	**643**	**623**				
Among customers who participated in training for a specific occupation							
Obtained job in occupation specific to training (%)	41.2	37.6	35.4	3.6 (0.602)	2.2 (0.695)	5.8 (0.202)	0.9 (0.422)
Sample size	**464**	**319**	**306**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.VII.1. Household income and receipt of public assistance in the past calendar year (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any income in calendar year prior to survey from (%)							
SNAP	36.1	34.4	36.2	1.7 (0.355)	-1.8 (0.630)	0.0 (0.999)	0.7 (0.519)
WIC	7.7	9.1	12.3	-1.4 (0.379)	-3.1 (0.298)	-4.6* (0.030)	4.1* (0.028)
Cash assistance programs	13.3	13.2	16.7	0.0 (0.985)	-3.5 (0.164)	-3.5* (0.017)	3.2 (0.056)
Other programs	3.1	3.9	2.5	-0.9 (0.537)	1.5 (0.200)	0.6 (0.396)	1.3 (0.279)
Income received in calendar year prior to survey from assistance programs ($)							
SNAP	977	926	978	50 (0.448)	-51 (0.752)	-1 (0.992)	0.3 (0.737)
Cash assistance programs	1,088	982	1,530	107 (0.608)	-549 (0.058)	-442 (0.052)	2.4 (0.110)
Other programs	122	124	60	-2 (0.975)	63 (0.279)	61 (0.149)	1.3 (0.277)
Total household income ($)	27,442	30,230	29,509	-2,787 (0.149)	721 (0.766)	-2,066 (0.318)	1.3 (0.281)
Sample size	**1,623**	**1,578**	**1,576**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Table C.VII.2. Health and health insurance (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Covered by health insurance at any time since random assignment (%)	84.2	83.5	84.8	0.7 (0.796)	-1.3 (0.644)	-0.5 (0.895)	0.2 (0.859)
Covered by health insurance for entire time since random assignment (%)	34.4	32.6	30.7	1.8 (0.470)	1.9 (0.646)	3.7 (0.370)	0.5 (0.596)
Sample size	**1,616**	**1,574**	**1,569**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table C.VII.3. Arrests and felony convictions (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Arrested since random assignment (%)	6.3	5.6	7.9	0.7 (0.663)	-2.3 (0.233)	-1.6 (0.263)	0.9 (0.415)
Convicted of a felony since random assignment (%)	1.4	1.4	1.0	0.0 (0.993)	0.4 (0.462)	0.3 (0.485)	0.4 (0.659)
Sample size	**1,591**	**1,544**	**1,549**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

APPENDIX D

DETAILED TABLES OF SURVEY MEANS AND IMPACTS FOR ADULTS

This page has been left blank for double-sided copying.

Table D.II.1. Baseline equivalence among survey respondents (adults only)

	Means			Differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Female (%)	61.0	60.2	63.1	0.9 (0.720)	-2.9 (0.295)	-2.1 (0.443)	0.6 (0.564)
Age (%)							
18–20	5.1	3.3	9.3	1.7 (0.061)	-5.9 (0.088)	-4.2 (0.193)	2.6 (0.095)
21–24	16.5	13.9	13.8	2.6 (0.059)	0.1 (0.980)	2.7 (0.330)	2.1 (0.144)
25–32	21.6	25.6	25.4	-3.9 (0.161)	0.2 (0.942)	-3.8 (0.153)	1.4 (0.269)
33–42	27.6	23.8	25.4	3.8 (0.348)	-1.6 (0.712)	2.1 (0.229)	1.3 (0.293)
43–50	15.4	17.3	10.6	-1.9 (0.616)	6.7 (0.082)	4.8 (0.069)	2.6 (0.093)
51 or older	13.8	16.1	15.5	-2.3 (0.429)	0.6 (0.857)	-1.7 (0.372)	0.7 (0.517)
Race/ethnicity (%)							
Hispanic	13.7	15.6	14.0	-1.8 (0.511)	1.6 (0.484)	-0.3 (0.902)	0.3 (0.754)
White, non-Hispanic	33.0	34.2	36.1	-1.2 (0.605)	-1.9 (0.479)	-3.1 (0.089)	1.6 (0.218)
Black, non-Hispanic	44.9	43.3	41.5	1.6 (0.599)	1.9 (0.231)	3.4 (0.216)	1.4 (0.267)
Asian	4.5	1.9	4.8	2.6 (0.103)	-2.9*† (0.007)	-0.3 (0.849)	4.4*† (0.022)
Native Hawaiian, Pacific Islander, or Native American	1.8	2.0	1.4	-0.2 (0.732)	0.6 (0.403)	0.4 (0.226)	0.8 (0.457)
Other	2.1	3.1	2.3	-1.0 (0.448)	0.8 (0.246)	-0.2 (0.860)	0.8 (0.477)
Primary spoken language is English (%)	93.2	94.6	92.9	-1.4 (0.343)	1.7 (0.514)	0.3 (0.879)	0.5 (0.632)
Primary spoken language is Spanish (%)	2.6	3.2	1.3	-0.7 (0.654)	1.9 (0.161)	1.3 (0.077)	2.5 (0.097)
Primary spoken language is neither English nor Spanish (%)	4.2	2.2	5.8	2.1 (0.093)	-3.6 (0.100)	-1.6 (0.535)	3.1† (0.059)
Marital status (%)							
Currently married	25.6	21.6	22.0	4.0 (0.112)	-0.5 (0.869)	3.5† (0.082)	2.5† (0.104)
Separated, divorced, or widowed	23.7	26.8	23.1	-3.1 (0.386)	3.7 (0.394)	0.6 (0.761)	0.4 (0.673)
Never married	50.7	51.6	54.8	-0.9 (0.860)	-3.2 (0.516)	-4.1† (0.078)	1.7† (0.202)
Working at time of random assignment (%)	3.0	1.5	1.7	1.5 (0.253)	-0.2 (0.766)	1.3 (0.222)	0.8 (0.465)
Employed in past five years (%)	67.3	64.4	64.5	2.9 (0.344)	-0.1 (0.986)	2.8 (0.467)	0.7 (0.486)
Last real hourly wage[a] ($)	12.61	12.02	11.85	0.59 (0.375)	0.17 (0.721)	0.76 (0.383)	0.4 (0.652)
Last real hourly wage was[a,b] (%)							
Less than minimum wage	6.6	2.9	4.3	3.7*† (0.022)	-1.4 (0.374)	2.2 (0.412)	6.0* (0.007)
Minimum wage exactly	1.4	1.9	1.2	-0.4 (0.540)	0.7 (0.402)	0.2 (0.848)	0.6 (0.561)
1.01 to 1.29 times the minimum	19.5	18.7	20.1	0.9 (0.610)	-1.4 (0.743)	-0.5 (0.905)	0.2 (0.840)
1.30 to 1.69 times the minimum	18.1	17.9	18.1	0.2 (0.909)	-0.2 (0.960)	0.1† (0.977)	0.0† (0.992)

	Means			Differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
1.70 to 1.99 times the minimum	5.7	6.6	7.8	-0.9	-1.1	-2.1	1.0
				(0.674)	(0.559)	(0.171)	(0.368)
2.00 to 2.99 times the minimum	7.9	12.5	9.2	-4.6*	3.3	-1.3	3.7*
				(0.048)	(0.300)	(0.393)	(0.037)
3.00 to 3.99 times the minimum	3.2	1.2	1.8	2.0*	-0.5	1.4	2.6
				(0.046)	(0.289)	(0.161)	(0.097)
4.00 to 4.99 times the minimum	1.7	0.9	0.8	0.8	0.1	0.9	0.8
				(0.219)	(0.777)	(0.272)	(0.464)
5.00 or more times the minimum	2.0	0.6	0.8	1.4†	-0.2†	1.2	1.5†
				(0.098)	(0.586)	(0.172)	(0.236)
Not employed in past five years (%)	32.7	35.6	35.5	-2.9	0.1	-2.8	0.7
				(0.344)	(0.986)	(0.467)	(0.486)
Highest degree (%)							
Less than high school	10.3	12.2	7.6	-1.9	4.6	2.7	1.4
				(0.558)	(0.135)	(0.294)	(0.271)
High school or GED	71.9	63.9	72.5	8.0	-8.6*	-0.6	2.3
				(0.137)	(0.041)	(0.856)	(0.116)
Associates or equivalent	6.9	12.1	8.8	-5.1*	3.3†	-1.9	7.1*†
				(0.001)	(0.092)	(0.248)	(0.003)
Bachelors or equivalent	9.3	9.2	8.7	0.1	0.6	0.7	0.1
				(0.972)	(0.782)	(0.632)	(0.882)
Masters or higher	1.6	2.6	2.5	-1.0	0.1	-0.9	2.2
				(0.198)	(0.884)	(0.091)	(0.134)
Vocational training[c]	19.5	13.4	15.1	6.1	-1.7	4.4	1.7
				(0.087)	(0.408)	(0.237)	(0.202)
Had health problems that limit work or training (%)	5.7	4.5	8.2	1.3	-3.7	-2.5*	2.6
				(0.519)	(0.119)	(0.032)	(0.090)
Household size (%)							
Sole member	19.3	17.8	19.7	1.5	-1.9†	-0.4	0.6†
				(0.323)	(0.353)	(0.816)	(0.539)
2 or 3 members	48.3	53.8	42.0	-5.5*	11.7*	6.3	3.0
				(0.033)	(0.046)	(0.189)	(0.067)
4 or 5 members	23.2	21.9	25.8	1.3	-3.9	-2.6	0.2
				(0.543)	(0.492)	(0.529)	(0.783)
6 or more members	9.3	6.6	12.5	2.7	-5.9	-3.2	1.4
				(0.161)	(0.155)	(0.347)	(0.276)
Receipt of Public Assistance (%)							
TANF, SSI/SSDI, or GA	12.9	14.2	21.8	-1.3	-7.6	-8.8	2.4
				(0.411)	(0.124)	(0.056)	(0.108)
SNAP or WIC	44.9	49.0	45.9	-4.1	3.1	-1.0	1.1
				(0.212)	(0.607)	(0.801)	(0.364)
Unemployment Compensation	10.4	9.4	8.5	1.0	0.8	1.9	0.4
				(0.587)	(0.660)	(0.399)	(0.694)
Other public assistance	1.8	0.9	3.2	0.9*	-2.3	-1.4	3.8*
				(0.011)	(0.195)	(0.408)	(0.036)
Counselor-predicted likelihood of training (%)							
Very likely	50.8	43.9	48.8	6.9	-4.9	2.1	1.8
				(0.118)	(0.339)	(0.379)	(0.186)
Somewhat likely	27.2	30.4	28.9	-3.1	1.5	-1.6	0.4
				(0.502)	(0.692)	(0.376)	(0.663)
Somewhat unlikely	13.2	15.5	10.1	-2.3	5.4*†	3.1*	4.8*†
				(0.351)	(0.035)	(0.014)	(0.016)
Very unlikely	8.7	10.2	12.3	-1.5	-2.1	-3.5*	3.7*
				(0.264)	(0.325)	(0.025)	(0.038)
Visited an AJC previously (%)	32.3	32.0	34.6	0.3	-2.6	-2.3	0.3
				(0.947)	(0.664)	(0.434)	(0.721)
Sample size	**955**	**909**	**930**				

Source: WIA Gold Standard Evaluation study registration form.

Notes: Dollars are 2012 dollars. The sample is restricted to respondents to the WIA Gold Standard Evaluation 30-month follow-up survey. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for baseline equivalence are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three equivalence tests for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Individuals employed in the five years prior to random assignment.

[b] Relative to 2012 federal minimum wage.

[c] Respondent reported receiving a vocational or technical degree or certificate or a business degree or certificate.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three differences are the same for adults and dislocated workers is rejected at the 0.05 level.

GA = general assistance; GED = General Educational Development certificate; SNAP = Supplemental Nutrition Assistance Program; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; AJC = American Job Center.

Table D.IV.1. Use of resource room since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Used any resource room since random assignment (%)	84.5	78.1	75.3	6.4 (0.077)	2.8 (0.627)	9.2* (0.015)	7.8* (0.002)
Used resource room at an AJC (%)	76.0	70.0	65.9	6.0 (0.115)	4.1 (0.495)	10.1* (0.014)	6.3* (0.006)
Used resource room elsewhere (%)	45.6	50.7	50.5	-5.2 (0.131)	0.3 (0.953)	-4.9 (0.163)	2.2 (0.132)
Number of times used any resource room[a]	10.0	9.9	9.3	0.0 (0.954)	0.6 (0.440)	0.7 (0.286)	0.6 (0.552)
Number of times used a resource room at an AJC[a]	6.1	5.7	4.8	0.5 (0.399)	0.9 (0.069)	1.4* (0.046)	2.5 (0.099)
Number of times used a resource room elsewhere[a]	3.9	4.3	4.5	-0.4 (0.424)	-0.2 (0.587)	-0.7 (0.134)	1.3 (0.300)
Sample size	**954**	**908**	**929**				

Sources: WIA Gold Standard Evaluation 15-and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The survey provided categorical closed responses (for example, “3 to 5 times”) for use of a resource room at an AJC or elsewhere. To estimate the number of times the resource room was used, we used the midpoint of the categories (for example, 4 if the respondent answered “3 to 5 times”). We assumed respondents who answered “more than 10 times” visited the resource room 11 times.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table D.IV.2. Workshop attendance since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Attended any workshop (%)	45.5	48.0	39.4	-2.5 (0.538)	8.6 (0.072)	6.1 (0.067)	2.4 (0.113)
Attended any workshop at an AJC (%)	37.4	38.2	29.7	-0.8 (0.852)	8.5 (0.056)	7.7 (0.067)	2.6 (0.091)
Attended any "intensive workshop" at an AJC[a] (%)	15.0	13.4	9.8	1.7 (0.431)	3.6 (0.096)	5.2 (0.068)	2.0 (0.156)
Attended any "core workshop" at an AJC[a] (%)	25.9	29.0	21.4	-3.1 (0.381)	7.6 (0.056)	4.5 (0.148)	2.1 (0.136)
Attended any workshop elsewhere (%)	15.4	21.9	16.5	-6.4* (0.020)	5.4 (0.141)	-1.0 (0.672)	3.2 (0.059)
Number of workshops attended[b]	1.5	2.1	1.2	-0.6* (0.039)	0.8* (0.002)	0.3 (0.202)	6.2* (0.006)
Number of workshops attended at an AJC[b]	1.0	1.2	0.8	-0.2 (0.283)	0.5* (0.002)	0.3 (0.054)	7.0* (0.004)
Number of workshops attended elsewhere[b]	0.5	0.8	0.5	-0.3* (0.010)	0.4* (0.011)	0.0 (0.767)	4.4* (0.022)
Sample size	**955**	**909**	**930**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys asked about specific workshops that the local area had designated as intensive. However, since the surveys were launched, some local areas stopped providing these workshops, added intensive workshops, or changed the workshops from intensive to core services. Names of workshops were also sometimes generic. For these reasons, survey questions might not accurately distinguished between intensive and core workshops.

[b] The surveys provided categorical closed responses (for example, "2 or 3 workshops") for workshops attended at an AJC and separately for workshops attended elsewhere. To estimate the number of workshops attended, and the category of frequency of workshops attended anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 workshops"). We assumed respondents who answered "more than 5 workshops" attended 6 workshops.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table D.IV.3. Assessments of skills, abilities, and aptitudes taken since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Took any assessments (%)	71.0	63.4	57.3	7.5* (0.029)	6.1 (0.144)	13.6* (0.005)	5.0* (0.014)
Took any assessments at an AJC (%)	54.7	45.4	37.7	9.3* (0.035)	7.7 (0.069)	17.0* (0.002)	5.9* (0.007)
Took any assessments elsewhere (%)	24.9	25.5	25.4	-0.6 (0.861)	0.1 (0.979)	-0.5 (0.824)	0.0 (0.968)
Number of assessments taken at any location[a]	2.4	2.3	1.7	0.1 (0.701)	0.6* (0.014)	0.6* (0.012)	4.5* (0.021)
Number of assessments taken at an AJC[a]	1.6	1.6	0.9	0.1 (0.755)	0.6* (0.000)	0.7* (0.000)	15.0* (0.000)
Number of assessments taken elsewhere[a]	0.8	0.7	0.8	0.0 (0.724)	-0.1 (0.598)	0.0 (0.753)	0.1 (0.862)
Sample size	**933**	**887**	**909**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "2 or 3 assessments") for assessments taken at an AJC and separately for assessments taken elsewhere. To estimate the number of times assessments were taken, and the category of frequency of assessments taken anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 assessments"). We assumed respondents who answered "more than 5 assessments" took 6 assessments.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table D.IV.4. Job clubs attended since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Attended any job club since random assignment (%)	30.9	29.3	29.6	1.6 (0.523)	-0.4 (0.922)	1.2 (0.670)	0.3 (0.711)
Attended a job club at an AJC (%)	20.5	19.3	20.2	1.2 (0.647)	-0.9 (0.820)	0.3† (0.916)	0.1† (0.876)
Attended a job club elsewhere (%)	15.9	16.0	14.4	-0.1 (0.984)	1.6 (0.555)	1.6 (0.315)	0.7 (0.529)
Number of times attended a job club[a]	1.3	1.4	1.2	-0.1 (0.653)	0.3 (0.145)	0.2 (0.349)	1.5 (0.250)
Number of times attended a job club at an AJC[a]	0.7	0.7	0.6	0.0 (0.974)	0.1 (0.530)	0.1† (0.294)	0.6† (0.566)
Number of times attended a job club elsewhere[a]	0.7	0.8	0.5	-0.1 (0.538)	0.2 (0.117)	0.1 (0.460)	1.4 (0.265)
Sample size	**953**	**908**	**930**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "2 or 3 times") for job clubs attended at an AJC and separately for job clubs attended elsewhere. To estimate the number of job clubs attended, and the category of frequency of job clubs attended anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 times"). We assumed respondents who answered "more than 5 times" attended a job club 6 times.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table D.IV.5. One-on-one staff assistance received since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any one-on-one assistance (%)	59.2	54.5	42.5	4.7 (0.129)	12.0* (0.003)	16.7* (0.000)	19.3* (0.000)
Received any one-on-one assistance at an AJC (%)	50.3	45.4	29.7	4.9 (0.077)	15.7* (0.000)	20.6* (0.000)	21.9* (0.000)
Received any one-on-one assistance elsewhere (%)	13.4	15.6	11.6	-2.2 (0.472)	4.0 (0.157)	1.8 (0.470)	1.1 (0.348)
Number of sessions[a]	3.8	3.1	1.8	0.6 (0.075)	1.3* (0.001)	1.9* (0.000)	22.2* (0.000)
Number of sessions at an AJC[a]	2.9	2.3	1.2	0.7* (0.004)	1.0* (0.000)	1.7* (0.000)	37.9* (0.000)
Number of sessions elsewhere[a]	0.8	0.9	0.6	-0.1 (0.656)	0.3 (0.069)	0.2 (0.060)	2.7 (0.086)
Total time spent in sessions[b] (minutes)	91.3	74.8	42.4	16.5 (0.073)	32.4* (0.000)	48.9* (0.000)	26.6* (0.000)
Total time spent in sessions at an AJC[b] (minutes)	68.2	50.3	27.0	17.9* (0.008)	23.3* (0.000)	41.1* (0.000)	38.8* (0.000)
Total time spent in sessions elsewhere[b] (minutes)	23.4	24.4	15.3	-1.0 (0.826)	9.1*† (0.020)	8.0* (0.017)	5.8* (0.008)
Received any counseling or one-on-one assistance related to (%)							
Job search	56.5	52.2	38.0	4.3 (0.106)	14.2* (0.000)	18.5* (0.000)	20.2* (0.000)
Assessment results	42.8	38.4	25.7	4.4 (0.221)	12.7* (0.001)	17.1* (0.000)	21.7* (0.000)
Training options	49.9	45.2	30.7	4.7 (0.123)	14.5* (0.001)	19.2* (0.000)	22.0* (0.000)
Referral to other services for work support	38.9	33.9	23.9	5.0 (0.212)	10.0* (0.019)	15.0* (0.000)	15.9* (0.000)
Referrals for non-work support services[c]	1.3	0.9	2.3	0.4 (0.355)	-1.4 (0.197)	-1.0† (0.309)	1.0† (0.380)
Emotional support, general advice[c]	0.2	0.6	0.1	-0.4 (0.333)	0.5 (0.188)	0.1 (0.697)	0.9 (0.404)
Other	0.2	0.1	0.7	0.1 (0.442)	-0.6* (0.034)	-0.5* (0.042)	2.7 (0.085)
Sample size	**955**	**908**	**927**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "2 or 3 sessions") for the number of phone and in-person sessions at an AJC or elsewhere separately. To estimate the number of sessions, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 sessions"). We assumed respondents who answered "more than 5 sessions" attended 6 sessions.

[b] The surveys provided categorical closed responses for average length of sessions (for example, “31 to 45 minutes”) for phone and in-person sessions at the AJC and elsewhere separately. To estimate the average length of a session, we used the midpoint of the categories (for example, 38 if the respondent answered “31 to 45 minutes”). We assumed a length of 60 minutes for respondents who answered “more than 60 minutes.” To estimate approximate amount of time spent in counseling, we multiplied the approximate session length and the approximate number of sessions.

[c] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table D.IV.6. Supportive services received since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any financial assistance other than for training (%)	25.4	16.7	9.4	8.7*	7.3*	16.0*	22.5*
				(0.001)	(0.012)	(0.000)	(0.000)
Total financial assistance received, other than for training ($)	227	108	61	120*	47	166*	9.3*
				(0.003)	(0.059)	(0.000)	(0.001)
Received financial assistance for (%)							
Books	10.3	6.5	2.1	3.8*	4.5*	8.3*	8.8*
				(0.036)	(0.004)	(0.000)	(0.001)
Tools, supplies	10.4	5.3	2.8	5.1*	2.4	7.6*	6.8*
				(0.013)	(0.121)	(0.001)	(0.004)
Clothes, uniforms	11.2	8.8	4.0	2.4	4.8*	7.2*	8.1*
				(0.346)	(0.013)	(0.002)	(0.002)
Transportation	18.6	12.8	7.6	5.8*	5.3	11.1*	9.3*
				(0.043)	(0.062)	(0.000)	(0.001)
Child care	5.9	0.9	0.5	5.0*	0.4†	5.4*†	4.3*†
				(0.048)	(0.180)	(0.028)	(0.023)
Tests, certifications[a]	0.6	0.6	0.0	0.0	0.6*	0.6	5.3*
				(0.934)	(0.039)	(0.061)	(0.011)
Living expenses[a]	2.7	0.7	0.4	1.9	0.3	2.2*	3.0
				(0.082)	(0.344)	(0.037)	(0.066)
Medical, dental care[a]	0.3	0.0	0.0	0.3†	0.0	0.3	1.9
				(0.096)	(0.163)	(0.093)	(0.165)
Received financial assistance from an AJC (%)	19.7	10.9	4.7	8.8*	6.2*	15.0*	19.7
				(0.008)	(0.015)	(0.000)	
Amount of financial assistance received from an AJC ($)	151	46	25	104*	21	126*	151
				(0.001)	(0.120)	(0.000)	
Received financial assistance elsewhere (%)	7.2	7.4	5.2	-0.2	2.2†	1.9	7.2
				(0.912)	(0.133)	(0.259)	
Amount of financial assistance received elsewhere ($)	105	63	36	42	26†	69	105
				(0.268)	(0.163)	(0.069)	
Received financial assistance from (%)							
Government agency other than AJC	4.5	3.4	3.2	1.1	0.2	1.3	4.5
				(0.195)	(0.865)	(0.368)	
Library, church, or community-based organization	1.0	3.2	1.1	-2.2	2.0	-0.2	1.0
				(0.066)	(0.152)	(0.753)	
Educational facility	1.1	0.7	0.5	0.4	0.2	0.6	1.1
				(0.630)	(0.631)	(0.376)	
Online	0.0	0.0	0.0	0.0	0.0	0.0	

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Private employment agency[a]	0.0	0.0	0.0	0.0 (0.231)	0.0 (0.323)	0.0 (0.409)	0.0
Other	0.6	0.4	0.5	0.1 (0.676)	0.0 (0.789)	0.1 (0.783)	0.6
Sample size	**942**	**904**	**928**				

Sources: WIA Gold Standard Evaluation 15-and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table D.V.1. Enrollment in training since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Enrolled in a training program quarters 1-10 after random assignment (%)	48.7	41.6	35.4	7.1* (0.041)	6.3 (0.059)	13.3* (0.000)	8.5* (0.001)
Enrolled in a training program quarters 1-5 after random assignment (%)	42.1	33.4	27.4	8.7* (0.028)	6.0 (0.093)	14.7* (0.000)	16.4* (0.000)
Enrolled in a training program quarters 6-10 after random assignment (%)	22.9	24.1	25.1	-1.2 (0.824)	-1.0 (0.666)	-2.2 (0.615)	0.3 (0.760)
Participation in a training program in quarter after random assignment (%)							
Quarter 1	27.9	23.8	18.0	4.1 (0.116)	5.8* (0.049)	9.9* (0.000)	16.1* (0.000)
Quarter 2	26.9	23.3	19.1	3.5 (0.311)	4.3 (0.154)	7.8* (0.001)	7.3* (0.003)
Quarter 3	20.5	20.2	15.8	0.3 (0.889)	4.4 (0.096)	4.7* (0.009)	4.0* (0.029)
Quarter 4	20.2	17.0	13.9	3.2 (0.286)	3.0 (0.252)	6.2 (0.068)	1.8 (0.180)
Quarter 5	18.4	13.3	14.2	5.1 (0.163)	-0.9 (0.519)	4.2 (0.267)	1.2 (0.330)
Quarter 6	14.8	14.1	15.3	0.8 (0.834)	-1.2 (0.497)	-0.5 (0.896)	0.2 (0.785)
Quarter 7	13.8	12.8	15.2	1.1 (0.741)	-2.4 (0.334)	-1.4 (0.742)	0.5 (0.589)
Quarter 8	11.4	13.0	16.3	-1.6 (0.670)	-3.2 (0.051)	-4.8 (0.166)	3.0 (0.066)
Quarter 9	10.9	13.5	15.0	-2.6 (0.482)	-1.6 (0.383)	-4.2 (0.156)	1.8 (0.185)
Quarter 10	12.7	12.6	15.0	0.1 (0.967)	-2.4 (0.256)	-2.3 (0.276)	1.1 (0.339)
Sample size	**953**	**908**	**929**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table D.V.2. Characteristics of training programs enrolled in since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Hours in training programs	368.9	359.6	272.9	9.2† (0.837)	86.7* (0.050)	95.9* (0.050)	2.8† (0.079)
Weeks in training programs	17.4	16.8	16.6	0.6 (0.789)	0.2 (0.905)	0.8 (0.756)	0.0 (0.952)
Number of training programs in which enrolled	0.8	0.7	0.5	0.1 (0.054)	0.1* (0.012)	0.3* (0.000)	16.5* (0.000)
Frequency of the number of training programs in which enrolled (%)							
0 programs	51.4	58.4	64.6	-7.0* (0.042)	-6.2 (0.060)	-13.3* (0.000)	8.4* (0.001)
1 program	31.3	25.9	22.5	5.4* (0.036)	3.4 (0.264)	8.7* (0.001)	7.8* (0.002)
2 programs	11.2	10.8	9.6	0.4 (0.895)	1.2 (0.458)	1.6 (0.495)	0.5 (0.629)
3 or more programs	6.2	4.9	3.3	1.3 (0.074)	1.6 (0.076)	2.9* (0.001)	6.8* (0.004)
Enrolled in any educational program (%)	9.6	9.1	8.9	0.5 (0.866)	0.2 (0.959)	0.7 (0.847)	0.0 (0.979)
Enrolled in any vocational program (%)	43.7	38.1	30.1	5.6 (0.072)	8.1* (0.010)	13.7* (0.000)	8.9* (0.001)
Enrolled in both vocational and educational programs (%)	4.9	5.7	3.6	-0.8 (0.759)	2.1 (0.411)	1.2 (0.673)	0.3 (0.709)
Enrolled in a training program designed to lead to a credential (%)	41.4	34.7	28.7	6.7* (0.045)	6.1 (0.088)	12.8* (0.001)	6.3* (0.006)
Completed any training program (%)	37.5	27.1	23.2	10.4* (0.001)	3.9 (0.196)	14.2* (0.000)	12.6* (0.000)
Left any training program prior to completion[a] (%)	10.3	12.1	11.9	-1.8 (0.347)	0.1 (0.942)	-1.7 (0.516)	0.5 (0.635)
Received a credential for completing any training program (%)	27.9	21.2	17.4	6.7* (0.014)	3.8† (0.140)	10.5* (0.000)	9.9*† (0.001)
Number of training programs completed	0.6	0.4	0.3	0.2* (0.007)	0.1* (0.006)	0.3* (0.000)	13.0* (0.000)
Frequency of the number of training programs completed (%)							
0 programs	62.7	72.9	77.1	-10.2* (0.001)	-4.2 (0.164)	-14.4* (0.000)	13.2* (0.000)
1 program	26.3	17.3	19.3	9.0*† (0.001)	-2.0† (0.630)	7.0* (0.018)	13.8*† (0.000)
2 programs	7.1	8.0	2.7	-0.9 (0.793)	5.3 (0.091)	4.4 (0.068)	2.7 (0.088)
3 or more programs	3.8	1.7	0.9	2.1 (0.216)	0.8 (0.242)	2.9* (0.047)	3.5* (0.045)
Completed all training programs in which enrolled (%)	30.3	22.4	16.6	8.0* (0.018)	5.7* (0.025)	13.7* (0.000)	10.1* (0.001)
Sample size	**951**	**907**	**929**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Individuals who did not participate in a training program are recorded as not having left any education or training program.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

Table D.V.3. Enrolled in training in 15 months after random assignment according to program data (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Enrolled in a WIA-funded training program during 15-month follow-up period (%)	30.1	4.4	0.3	25.8* (0.000)	4.1* (0.030)	29.9* (0.000)	47.2* (0.000)
Received an ITA (%)	28.0	2.3	0.3	25.6* (0.000)	2.0 (0.079)	27.7* (0.000)	38.0* (0.000)
Enrolled in WIA-funded on-the-job training (%)	1.5	0.1	0.0	1.5 (0.062)	0.1 (0.323)	1.5 (0.053)	2.6 (0.094)
Enrolled in WIA-funded Adult Basic Education or ESL (%)	0.1	0.0	0.1	0.1 (0.297)	-0.1 (0.305)	0.0 (0.794)	1.1 (0.361)
Sample size	**1,011**	**973**	**987**				

Source: McConnell et al. (2016), based on WIA Standardized Record Data (WIASRD) extracted at about 15 months after random assignment.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. The sample is restricted to respondents to the WIA Gold Standard Evaluation 15-month follow-up survey. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

ITA = Individual Training Account; ESL = English as a second language.

Table D.V.4. Funding of training since random assignment (among adults who reported participating in training)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who reported participating in any training							
Total cost of all training programs enrolled in ($)	10,041	15,875	13,003	-5,834*† (0.009)	2,872 (0.244)	-2,961 (0.133)	4.2* (0.025)
Received any funding for training costs from (%)							
WIA	32.7	7.1	3.1	25.7* (0.002)	4.0 (0.324)	29.7* (0.000)	11.8* (0.000)
State employment agency	4.0	0.3	0.2	3.8 (0.056)	0.1 (0.837)	3.8 (0.051)	2.1 (0.144)
Trade Adjustment Act	0.0	0.3	0.0	-0.3 (0.258)	0.3 (0.246)	0.0 (0.298)	1.0 (0.385)
Veteran's administration	0.1	0.3	0.0	-0.2 (0.512)	0.3 (0.306)	0.1 (0.347)	0.9 (0.400)
Pell Grant	17.2	21.5	18.9	-4.3 (0.398)	2.6 (0.723)	-1.7 (0.664)	0.7 (0.511)
Other government sources	5.2	6.0	4.6	-0.8 (0.658)	1.5 (0.611)	0.7 (0.742)	0.1 (0.871)
External scholarship or grant	9.8	7.3	11.2	2.5 (0.491)	-3.9 (0.063)	-1.4 (0.760)	2.6 (0.090)
Other educational or training entity	0.6	0.6	0.2	0.1 (0.885)	0.4 (0.132)	0.5 (0.267)	1.7 (0.204)
Employer	2.9	7.2	3.4	-4.3 (0.369)	3.8 (0.264)	-0.5 (0.785)	0.9 (0.430)
Free Application for Federal Student Aid[a]	4.7	9.2	9.2	-4.5* (0.025)	0.0 (0.999)	-4.5*† (0.015)	11.3*† (0.000)
Other	1.2	2.4	3.3	-1.2 (0.523)	-1.0 (0.733)	-2.1 (0.418)	0.5 (0.637)
Share of training paid for by individual or family (%)	0.3	0.4	0.5	-0.1 (0.106)	0.0 (0.544)	-0.1 (0.106)	1.9 (0.173)
Paid all training costs on own (%)	23.5	31.7	32.4	-8.2 (0.192)	-0.7 (0.837)	-8.9† (0.157)	1.1 (0.354)
Paid some training costs on own (%)	20.7	20.0	23.9	0.7 (0.876)	-3.9 (0.486)	-3.2 (0.540)	0.3 (0.766)
Paid for none of training costs on own (%)	55.8	48.3	43.7	7.5 (0.253)	4.6 (0.513)	12.1 (0.125)	1.3 (0.280)
Sample size	**492**	**381**	**368**				

Sources: WIA Gold Standard Evaluation 15- and 30- month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three conditional differences are the same for adults and dislocated workers is rejected at the 0.05 level.

Table D.VI.1. Earnings[a] by quarter since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 1 ($)	1,554	1,619	1,553	-64 (0.797)	65 (0.781)	1 (0.994)	0.0 (0.959)
Quarter 2 ($)	2,403	2,707	2,288	-303 (0.372)	418 (0.217)	115† (0.604)	0.8 (0.457)
Quarter 3 ($)	3,045	3,220	2,839	-176 (0.664)	381 (0.281)	206 (0.361)	1.0 (0.387)
Quarter 4 ($)	3,382	3,451	3,007	-69 (0.869)	444 (0.145)	376 (0.173)	2.3 (0.123)
Quarter 5 ($)	3,651	3,727	3,081	-76 (0.833)	646 (0.061)	570* (0.050)	3.0 (0.065)
Quarter 6 ($)	4,287	4,140	3,408	146 (0.604)	733* (0.027)	879* (0.006)	4.7* (0.018)
Quarter 7 ($)	4,521	4,073	3,727	448 (0.208)	345 (0.159)	794* (0.042)	2.5 (0.105)
Quarter 8 ($)	4,645	4,632	3,919	13 (0.974)	712* (0.024)	726 (0.151)	2.9 (0.074)
Quarter 9 ($)	4,671	4,896	3,959	-225 (0.561)	937* (0.020)	712 (0.122)	3.1 (0.063)
Quarter 10 ($)	4,655	4,726	3,845	-71 (0.844)	881* (0.015)	810 (0.070)	3.5* (0.045)
Quarters 1-5 ($)	14,030	14,734	12,776	-704 (0.670)	1,957 (0.192)	1,253 (0.232)	1.4 (0.264)
Quarters 6-10 ($)	22,760	22,324	18,858	436 (0.786)	3,466* (0.020)	3,902 (0.053)	3.3 (0.052)
Quarters 1-10 ($)	36,717	36,835	31,639	-118 (0.966)	5,195 (0.053)	5,078 (0.075)	2.6 (0.096)
Sample size	**952**	**907**	**926**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

Table D.VI.2. Employment by quarter since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 1 (%)	41.1	42.6	40.7	-1.4 (0.497)	1.9 (0.498)	0.4 (0.890)	0.4 (0.678)
Quarter 2 (%)	51.5	56.2	53.8	-4.7 (0.255)	2.3 (0.631)	-2.3 (0.506)	0.8† (0.465)
Quarter 3 (%)	60.3	62.0	60.5	-1.7 (0.756)	1.5 (0.781)	-0.2 (0.940)	0.0 (0.952)
Quarter 4 (%)	63.7	63.2	61.6	0.5 (0.896)	1.6 (0.625)	2.2 (0.599)	0.2 (0.830)
Quarter 5 (%)	69.0	70.4	61.1	-1.4 (0.701)	9.2* (0.047)	7.9 (0.078)	2.3 (0.116)
Quarter 6 (%)	73.7	73.7	67.2	0.0 (0.994)	6.5 (0.116)	6.6† (0.079)	1.8 (0.185)
Quarter 7 (%)	73.5	71.0	69.7	2.5 (0.412)	1.4 (0.683)	3.9 (0.359)	0.5 (0.616)
Quarter 8 (%)	78.2	73.9	67.9	4.3 (0.419)	6.0 (0.156)	10.3† (0.133)	1.4† (0.261)
Quarter 9 (%)	77.3	78.2	70.3	-0.9 (0.807)	8.0 (0.140)	7.1 (0.182)	1.2 (0.313)
Quarter 10 (%)	75.8	75.6	70.4	0.1 (0.977)	5.2 (0.326)	5.3 (0.280)	0.7 (0.512)
Quarter 1-5 (%)	79.2	79.4	73.1	-0.2 (0.953)	6.4 (0.201)	6.1 (0.114)	1.4 (0.269)
Quarter 6-10 (%)	88.4	87.3	84.6	1.1 (0.515)	2.7 (0.537)	3.9 (0.440)	0.4 (0.704)
Quarter 1-10 (%)	92.0	90.6	88.8	1.4 (0.361)	1.7 (0.657)	3.2 (0.414)	0.7 (0.522)
Sample size	**955**	**909**	**929**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table D.VI.3. Weeks and hours worked by quarter since random assignment (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Weeks worked[a]							
Quarter 1	3.7	3.6	3.8	0.1	-0.2	-0.2	0.2
				(0.881)	(0.518)	(0.629)	(0.789)
Quarter 2	5.3	5.6	5.4	-0.4	0.2	-0.2†	0.5†
				(0.354)	(0.689)	(0.653)	(0.627)
Quarter 3	6.5	6.5	6.7	0.0	-0.1	-0.1	0.1
				(0.986)	(0.830)	(0.700)	(0.924)
Quarter 4	7.1	7.0	6.9	0.0	0.1	0.1	0.1
				(0.951)	(0.831)	(0.770)	(0.951)
Quarter 5	7.4	7.4	6.7	0.0	0.7	0.7	1.3
				(0.984)	(0.186)	(0.171)	(0.296)
Quarter 6	8.3	8.1	7.3	0.2	0.8	1.0	2.2
				(0.444)	(0.198)	(0.057)	(0.135)
Quarter 7	8.5	7.7	7.8	0.7	-0.1	0.7	1.1
				(0.157)	(0.853)	(0.269)	(0.352)
Quarter 8	8.6	8.3	7.8	0.3	0.5	0.9	0.8
				(0.562)	(0.296)	(0.230)	(0.450)
Quarter 9	8.8	8.8	7.9	0.0	0.8	0.8	1.4
				(0.992)	(0.155)	(0.151)	(0.266)
Quarter 10	8.7	8.6	7.8	0.1	0.8	0.8	1.4
				(0.870)	(0.197)	(0.127)	(0.273)
Quarter 1-5	30.0	30.3	29.6	-0.3	0.7	0.4	0.1
				(0.882)	(0.759)	(0.814)	(0.949)
Quarter 6-10	42.9	41.5	38.6	1.4	2.8	4.2	1.2
				(0.544)	(0.259)	(0.132)	(0.306)
Quarter 1-10	72.8	71.7	68.2	1.1	3.6	4.6	0.6
				(0.785)	(0.442)	(0.280)	(0.546)
Hours worked[a]							
Quarter 1	136.4	132.7	137.4	3.7	-4.8	-1.0	0.0
				(0.772)	(0.779)	(0.933)	(0.952)
Quarter 2	203.3	224.4	200.0	-21.1	24.3	3.2†	0.6†
				(0.317)	(0.343)	(0.846)	(0.576)
Quarter 3	258.8	257.5	242.8	1.4	14.7	16.1	0.5
				(0.959)	(0.589)	(0.336)	(0.609)
Quarter 4	287.9	277.1	259.9	10.8	17.2	28.0	1.0
				(0.715)	(0.441)	(0.216)	(0.381)
Quarter 5	300.7	289.0	255.8	11.7	33.2	44.9*†	2.2
				(0.649)	(0.194)	(0.050)	(0.126)
Quarter 6	337.4	317.7	274.3	19.7	43.3	63.0*†	4.3*†
				(0.288)	(0.081)	(0.007)	(0.024)
Quarter 7	352.7	308.4	297.6	44.3	10.8	55.1*†	2.5
				(0.078)	(0.582)	(0.035)	(0.097)
Quarter 8	358.2	334.6	305.3	23.7	29.2	52.9	1.2
				(0.371)	(0.228)	(0.146)	(0.326)
Quarter 9	363.5	351.5	308.5	11.9	43.0	55.0	1.6
				(0.588)	(0.116)	(0.094)	(0.213)
Quarter 10	359.9	346.8	302.5	13.1	44.3	57.4	1.9
				(0.554)	(0.114)	(0.066)	(0.167)
Quarter 1-5	1,187.1	1,180.6	1,096.0	6.5	84.6	91.1	0.7
				(0.949)	(0.453)	(0.250)	(0.497)
Quarter 6-10	1,771.6	1,659.0	1,488.2	112.7	170.8	283.5*†	2.3
				(0.307)	(0.143)	(0.043)	(0.122)
Quarter 1-10	2,958.7	2,839.5	2,584.2	119.2	255.4	374.6†	1.8
				(0.521)	(0.252)	(0.068)	(0.184)
Number of jobs worked	2.0	2.0	1.9	0.0	0.0	0.0	0.1
				(0.922)	(0.775)	(0.732)	(0.942)
Sample size	**954**	**909**	**929**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

Table D.VI.4. Characteristics of current or most recent job reported at time of survey (among adults who provided recent employment history from follow-up period)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who provided employment history during follow-up period							
Hours worked per week	37.4	35.0	35.3	2.4* (0.016)	-0.3 (0.832)	2.1* (0.036)	6.5* (0.005)
Employed full-time (35 or more hours per week, %)	70.6	66.9	62.5	3.7 (0.365)	4.4 (0.361)	8.1* (0.003)	5.6* (0.010)
Hourly wage rate ($)	13.15	13.13	12.41	0.02 (0.966)	0.72 (0.057)	0.74 (0.184)	2.0 (0.158)
Job offered (%)							
Any benefits	72.8	71.0	70.7	1.8 (0.670)	0.2 (0.952)	2.1 (0.673)	0.1 (0.898)
Health insurance	63.7	62.9	59.1	0.8 (0.811)	3.8 (0.342)	4.6 (0.311)	0.6 (0.559)
Paid vacation	61.1	57.0	54.7	4.1 (0.377)	2.3 (0.467)	6.4 (0.158)	1.1 (0.346)
Paid holidays	60.2	58.9	52.9	1.3 (0.813)	6.0 (0.183)	7.3 (0.168)	1.4 (0.262)
Paid sick days	50.4	48.1	37.1	2.4 (0.591)	11.0* (0.034)	13.3* (0.035)	2.9 (0.071)
Any paid time off	68.0	63.7	62.3	4.3 (0.410)	1.5 (0.667)	5.8 (0.266)	0.6 (0.531)
Pension or retirement benefits	53.2	48.4	48.1	4.8 (0.197)	0.2 (0.948)	5.1 (0.330)	0.9 (0.428)
Tuition assistance or reimbursement	28.1	28.1	22.3	0.0 (0.995)	5.8 (0.072)	5.8 (0.074)	2.0 (0.155)
Job classified as (%)							
Regular full- or part-time	83.2	77.4	81.0	5.8* (0.047)	-3.7 (0.326)	2.1 (0.334)	2.9 (0.074)
Self-employed or independent contractor	5.6	7.5	5.8	-1.9 (0.495)	1.7 (0.564)	-0.3 (0.893)	0.2 (0.785)
Temporary or day labor	7.0	7.8	8.3	-0.8† (0.608)	-0.4 (0.799)	-1.3 (0.353)	0.5 (0.636)
On-call employee	4.2	5.0	3.3	-0.8 (0.623)	1.7 (0.297)	0.9 (0.200)	1.3 (0.302)
Job at contractor	1.5	2.4	1.9	-1.0 (0.289)	0.5 (0.343)	-0.5 (0.618)	0.9 (0.425)
Unionized job (%)	7.2	6.1	4.8	1.1 (0.462)	1.3 (0.315)	2.4 (0.171)	1.0 (0.367)
Months employed at job	16.6	14.5	16.3	2.1 (0.374)	-1.8 (0.222)	0.2 (0.931)	1.3 (0.295)
Sample size	**883**	**829**	**855**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

Table D.VI.5. Most frequently reported occupations of current or most recent job reported at time of survey (among adults who provided recent employment history from follow-up period)

	Means			Conditional difference			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who provided employment history during follow-up							
Occupation of current or most recent job (%)							
Nursing, Psychiatric, and Home Health Aides	14.5	14.6	11.9	0.0 (0.982)	2.7 (0.163)	2.6 (0.120)	1.7 (0.195)
Retail Sales Workers	11.7	10.9	22.8	0.9 (0.675)	-11.9*† (0.008)	-11.1*† (0.007)	4.5* (0.021)
Information and Record Clerks	9.1	10.3	12.6	-1.2 (0.660)	-2.3 (0.147)	-3.5 (0.134)	2.3 (0.120)
Motor Vehicle Operators	12.1	8.2	7.9	4.0 (0.102)	0.3 (0.935)	4.2 (0.142)	2.0 (0.149)
Material Moving Workers	11.8	12.0	10.9	-0.2 (0.951)	1.1 (0.682)	1.0 (0.633)	0.2 (0.858)
Material Recording, Scheduling, Dispatching, and Distributing Workers	8.0	9.8	7.5	-1.7 (0.478)	2.3 (0.333)	0.5 (0.666)	0.5 (0.596)
Building Cleaning and Pest Control Workers	9.5	7.6	9.1	1.9 (0.321)	-1.5 (0.585)	0.4 (0.841)	0.5 (0.587)
Other Personal Care and Service Workers	6.7	5.7	5.9	1.0 (0.502)	-0.3 (0.808)	0.7 (0.667)	0.2 (0.791)
Health Technologists and Technicians	6.6	7.8	6.0	-1.2 (0.344)	1.8 (0.299)	0.6 (0.616)	0.6 (0.546)
Other Office and Administrative Support Workers	3.6	2.8	4.0	0.8 (0.363)	-1.2 (0.169)	-0.4 (0.779)	1.8 (0.177)
Cooks and Food Preparation Workers	5.6	3.7	3.9	1.9 (0.086)	-0.2 (0.863)	1.7 (0.118)	2.1 (0.140)
Construction Trades Workers	4.9	4.0	5.8	0.9 (0.585)	-1.8 (0.427)	-0.8 (0.553)	0.3 (0.719)
Sample size	**863**	**819**	**843**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for dislocated workers at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three conditional differences are the same for adults and dislocated workers is rejected at the 0.05 level.

Table D.VII.1. Household income and receipt of public assistance in the past calendar year (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any income in calendar year prior to survey from (%)							
SNAP	41.3	41.0	44.6	0.3 (0.942)	-3.6 (0.254)	-3.4 (0.511)	0.7 (0.509)
WIC	9.5	10.4	16.1	-0.9 (0.737)	-5.7 (0.098)	-6.6* (0.008)	4.0* (0.029)
Cash assistance programs	14.3	13.5	18.7	0.8 (0.768)	-5.3 (0.190)	-4.5 (0.087)	1.6 (0.224)
Other programs	3.4	2.4	2.7	1.0 (0.335)	-0.3 (0.773)	0.7 (0.585)	0.5 (0.622)
Income received in calendar year prior to survey from assistance programs ($)							
SNAP	1,170	1,156	1,227	15 (0.884)	-71 (0.641)	-56 (0.674)	0.1 (0.891)
Cash assistance programs	1,221	960	1,460	262 (0.371)	-500 (0.136)	-239 (0.346)	1.2 (0.318)
Other programs	111	77	42	34 (0.395)	36 (0.272)	69 (0.055)	2.1 (0.136)
Total household income ($)	24,948	24,259	25,833	689 (0.710)	-1,574 (0.591)	-885 (0.753)	0.2 (0.848)
Sample size	**955**	**909**	**930**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Table D.VII.2. Arrests and felony convictions (all adults)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Arrested since random assignment (%)	8.6	7.3	9.5	1.2 (0.621)	-2.2 (0.339)	-1.0 (0.669)	0.5 (0.627)
Convicted of a felony since random assignment (%)	1.8	2.1	0.9	-0.3 (0.744)	1.2 (0.183)	0.9 (0.141)	1.9 (0.175)
Sample size	**932**	**889**	**911**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

APPENDIX E

DETAILED TABLES OF SURVEY MEANS AND IMPACTS FOR DISLOCATED WORKERS

This page has been left blank for double-sided copying.

Table E.II.1. Baseline equivalence among survey respondents (dislocated workers only)

	Means			Differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Female (%)	63.0	61.0	55.3	2.0	5.6	7.6*	4.3*
				(0.569)	(0.073)	(0.011)	(0.023)
Age (%)							
18–20	0.0	-0.8	-0.2	0.8	-0.6	0.2	3.2
				(0.137)	(0.066)	(0.748)	(0.056)
21–24	6.5	5.6	4.0	0.9	1.6	2.5	0.3
				(0.495)	(0.583)	(0.514)	(0.777)
25–32	14.8	19.3	13.2	-4.5	6.1	1.6	0.5
				(0.438)	(0.352)	(0.603)	(0.640)
33–42	27.6	30.6	26.8	-3.1	3.9	0.8	1.2
				(0.453)	(0.430)	(0.918)	(0.307)
43–50	30.2	15.1	25.6	15.1*	-10.5	4.6	3.4*
				(0.019)	(0.095)	(0.193)	(0.050)
51 or older	21.0	30.2	30.7	-9.2	-0.5	-9.7	1.7
				(0.074)	(0.953)	(0.351)	(0.194)
Race/ethnicity (%)							
Hispanic	9.6	13.5	20.3	-3.9	-6.8	-10.7	1.1
				(0.188)	(0.280)	(0.174)	(0.334)
White, non-Hispanic	37.0	44.9	39.9	-7.9	5.0	-2.9	1.7
				(0.081)	(0.321)	(0.591)	(0.199)
Black, non-Hispanic	47.7	37.3	36.0	10.4	1.3	11.7	2.2
				(0.051)	(0.631)	(0.055)	(0.133)
Asian	2.5	1.5	1.5	1.0	0.0†	1.0	0.8†
				(0.227)	(0.970)	(0.355)	(0.473)
Native Hawaiian, Pacific Islander, or Native American	2.1	0.9	1.1	1.2	-0.2	1.0	0.6
				(0.299)	(0.529)	(0.295)	(0.570)
Other	1.0	1.8	1.2	-0.8	0.6	-0.2	0.3
				(0.420)	(0.478)	(0.707)	(0.717)
Primary spoken language is English (%)	97.2	97.5	92.3	-0.2	5.1	4.9	0.5
				(0.826)	(0.355)	(0.400)	(0.593)
Primary spoken language is Spanish (%)	0.9	1.3	6.8	-0.4	-5.5	-5.9	0.6
				(0.750)	(0.313)	(0.291)	(0.563)
Primary spoken language is neither English nor Spanish (%)	1.8	1.2	0.8	0.6	0.4	1.0	1.8†
				(0.477)	(0.248)	(0.190)	(0.181)
Marital status (%)							
Currently married	32.3	34.4	44.4	-2.0	-10.0	-12.1†	1.9†
				(0.556)	(0.207)	(0.081)	(0.165)
Separated, divorced, or widowed	29.2	27.0	35.3	2.1	-8.3	-6.2	1.1
				(0.592)	(0.232)	(0.144)	(0.335)
Never married	38.5	38.6	20.2	-0.1	18.3	18.3†	2.5†
				(0.989)	(0.190)	(0.066)	(0.098)
Working at time of random assignment (%)	1.0	1.1	3.1	-0.2	-2.0	-2.2	1.0
				(0.586)	(0.190)	(0.168)	(0.365)
Employed in past five years (%)	91.9	93.2	92.7	-1.3	0.4	-0.8	0.3
				(0.479)	(0.725)	(0.698)	(0.741)
Last real hourly wage[a] ($)	15.42	17.81	16.55	-2.40	1.26*	-1.13	3.6*
				(0.108)	(0.026)	(0.442)	(0.042)
Last real hourly wage was[a,b] (%)							
Less than minimum wage	2.3	2.5	1.4	-0.2†	1.1	1.0	0.1
				(0.844)	(0.681)	(0.676)	(0.914)
Minimum wage exactly	0.4	0.5	1.1	-0.1	-0.6	-0.7	0.8
				(0.506)	(0.340)	(0.274)	(0.442)

	Means			Differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
1.01 to 1.29 times the minimum	11.7	6.7	10.6	5.0	-3.8	1.1	2.2
				(0.218)	(0.155)	(0.823)	(0.131)
1.30 to 1.69 times the minimum	24.8	23.4	15.5	1.5	7.8*	9.3*†	9.9*†
				(0.655)	(0.027)	(0.000)	(0.001)
1.70 to 1.99 times the minimum	12.2	11.2	13.4	1.0	-2.2	-1.2	0.6
				(0.591)	(0.283)	(0.583)	(0.553)
2.00 to 2.99 times the minimum	25.2	27.7	34.9	-2.4	-7.2	-9.7	2.3
				(0.518)	(0.468)	(0.196)	(0.123)
3.00 to 3.99 times the minimum	8.5	12.3	9.4	-3.8	2.9	-0.9	0.5
				(0.454)	(0.337)	(0.772)	(0.622)
4.00 to 4.99 times the minimum	3.7	2.3	4.9	1.4	-2.6	-1.2	2.4
				(0.152)	(0.122)	(0.547)	(0.109)
5.00 or more times the minimum	2.0	6.7	1.6	-4.7*†	5.1*†	0.4	3.2†
				(0.020)	(0.017)	(0.543)	(0.055)
Not employed in past five years (%)	8.1	6.8	7.3	1.3	-0.4	0.8	0.3
				(0.479)	(0.725)	(0.698)	(0.741)
Highest degree (%)							
Less than high school	3.6	3.9	4.7	-0.3	-0.9	-1.2	0.2
				(0.804)	(0.663)	(0.522)	(0.807)
High school or GED	69.0	66.2	64.3	2.8	1.9	4.7	0.7
				(0.268)	(0.660)	(0.364)	(0.503)
Associates or equivalent	10.2	8.8	11.5	1.3	-2.7†	-1.3	0.6†
				(0.620)	(0.292)	(0.650)	(0.564)
Bachelors or equivalent	12.5	17.8	14.6	-5.3*	3.1	-2.2	3.5*
				(0.030)	(0.124)	(0.452)	(0.044)
Masters or higher	4.8	3.4	4.8	1.5	-1.4	0.0	1.2
				(0.260)	(0.430)	(0.993)	(0.319)
Vocational training[c]	20.3	16.8	18.2	3.4	-1.3	2.1	0.5
				(0.373)	(0.755)	(0.544)	(0.632)
Had health problems that limit work or training (%)	2.6	5.1	3.2	-2.4	1.8	-0.6	0.9
				(0.190)	(0.220)	(0.531)	(0.410)
Household size (%)							
Sole member	22.5	25.9	19.9	-3.4	6.0*†	2.6	3.9*†
				(0.568)	(0.012)	(0.619)	(0.032)
2 or 3 members	51.6	44.2	40.1	7.4	4.2	11.5	0.8
				(0.296)	(0.338)	(0.218)	(0.457)
4 or 5 members	22.5	27.4	34.5	-4.9	-7.1	-12.0	2.1
				(0.225)	(0.172)	(0.051)	(0.142)
6 or more members	3.4	2.5	5.5	0.9	-3.0	-2.1	1.4
				(0.614)	(0.141)	(0.456)	(0.269)
Receipt of Public Assistance (%)							
TANF, SSI/SSDI, or GA	5.2	5.7	5.9	-0.4	-0.2	-0.7	0.2
				(0.835)	(0.931)	(0.627)	(0.845)
SNAP or WIC	30.9	31.2	27.0	-0.2	4.2	3.9	0.4
				(0.947)	(0.397)	(0.405)	(0.657)
Unemployment Compensation	58.2	48.0	55.2	10.3	-7.3	3.0	1.4
				(0.153)	(0.143)	(0.606)	(0.263)
Other public assistance	1.0	0.5	1.2	0.4	-0.7	-0.2	1.0
				(0.188)	(0.250)	(0.598)	(0.379)
Counselor-predicted likelihood of training (%)							
Very likely	47.6	50.7	47.4	-3.1	3.3	0.1	0.2
				(0.642)	(0.534)	(0.975)	(0.821)
Somewhat likely	37.8	31.2	40.4	6.6	-9.2*	-2.6	6.1*
				(0.138)	(0.003)	(0.383)	(0.007)

	Means			Differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Somewhat unlikely	8.7	8.1	6.7	0.5 (0.881)	1.5† (0.401)	2.0 (0.517)	0.6† (0.540)
Very unlikely	5.9	9.9	5.5	-4.0 (0.229)	4.5 (0.162)	0.4 (0.764)	1.0 (0.366)
Visited an AJC previously (%)	31.8	33.4	40.5	-1.7 (0.776)	-7.0 (0.245)	-8.7* (0.017)	3.3 (0.052)
Sample size	**668**	**669**	**646**				

Source: WIA Gold Standard Evaluation study registration form.

Notes: Dollars are 2012 dollars. The sample is restricted to respondents to the WIA Gold Standard Evaluation 30-month follow-up survey. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for baseline equivalence are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three equivalence tests for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Individuals employed in the five years prior to random assignment.

[b] Relative to 2012 federal minimum wage.

[c] Respondent reported receiving a vocational or technical degree or certificate or a business degree or certificate.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three differences are the same for adults and dislocated workers is rejected at the 0.05 level.

GA = general assistance; GED = General Educational Development certificate; SNAP = Supplemental Nutrition Assistance Program; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; AJC = American Job Center.

Table E.IV.1. Use of resource room since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Used any resource room since random assignment (%)	82.7	83.1	82.3	-0.4 (0.870)	0.8 (0.695)	0.4 (0.923)	0.1 (0.888)
Used resource room at an AJC (%)	77.4	73.3	74.1	4.0 (0.055)	-0.8 (0.758)	3.2 (0.296)	2.0 (0.152)
Used resource room elsewhere (%)	47.1	50.9	44.1	-3.7 (0.324)	6.7 (0.055)	3.0 (0.496)	2.1 (0.138)
Number of times used any resource room[a]	10.8	10.2	10.0	0.7 (0.155)	0.2 (0.786)	0.8 (0.202)	1.4 (0.270)
Number of times used a resource room at an AJC[a]	6.8	5.9	5.7	0.9 (0.145)	0.2 (0.486)	1.2 (0.062)	2.0 (0.162)
Number of times used a resource room elsewhere[a]	4.0	4.3	4.3	-0.3 (0.619)	-0.1 (0.854)	-0.3 (0.645)	0.1 (0.881)
Sample size	**666**	**669**	**646**				

Sources: WIA Gold Standard Evaluation 15- and 30- month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "3 to 5 times") for use of a resource room at an AJC or elsewhere. To estimate the number of times the resource room was used, we used the midpoint of the categories (for example, 4 if the respondent answered "3 to 5 times"). We assumed respondents who answered "more than 10 times" visited the resource room 11 times.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table E.IV.2. Workshop attendance since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Attended any workshop (%)	67.9	57.3	54.3	10.6 (0.117)	2.9 (0.553)	13.5* (0.014)	3.5* (0.046)
Attended any workshop at an AJC (%)	58.9	50.0	48.2	9.0 (0.097)	1.8 (0.749)	10.7* (0.008)	4.6* (0.020)
Attended any "intensive workshop" at an AJC[a] (%)	19.4	15.6	10.5	3.8* (0.044)	5.1 (0.084)	8.9* (0.029)	2.9 (0.075)
Attended any "core workshop" at an AJC[a] (%)	47.5	41.8	41.4	5.7 (0.326)	0.3 (0.951)	6.0 (0.060)	1.9 (0.162)
Attended any workshop elsewhere (%)	21.3	19.0	19.9	2.2 (0.659)	-0.9 (0.883)	1.4 (0.580)	0.3 (0.743)
Number of workshops attended[b]	3.1	2.2	2.2	0.9 (0.178)	0.0 (0.960)	0.9* (0.005)	4.6* (0.019)
Number of workshops attended at an AJC[b]	2.3	1.5	1.5	0.8 (0.190)	0.0 (0.955)	0.8* (0.034)	3.0 (0.067)
Number of workshops attended elsewhere[b]	0.8	0.7	0.7	0.1 (0.405)	0.0 (0.965)	0.1 (0.488)	0.6 (0.555)
Sample size	**668**	**669**	**646**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys asked about specific workshops that the local area had designated as intensive. However, since the surveys were launched, some local areas stopped providing these workshops, added intensive workshops, or changed the workshops from intensive to core services. Names of workshops were also sometimes generic. For these reasons, survey questions might not accurately distinguished between intensive and core workshops.

[b] The surveys provided categorical closed responses (for example, "2 or 3 workshops") for workshops attended at an AJC and separately for workshops attended elsewhere. To estimate the number of workshops attended, and the category of frequency of workshops attended anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 workshops"). We assumed respondents who answered "more than 5 workshops" attended 6 workshops.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table E.IV.3. Assessments of skills, abilities, and aptitudes taken since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Took any assessments (%)	82.0	72.9	66.3	9.0 (0.171)	6.6 (0.089)	15.7* (0.005)	6.2* (0.006)
Took any assessments at an AJC (%)	73.1	53.4	47.6	19.7* (0.044)	5.8 (0.258)	25.5* (0.001)	10.8* (0.000)
Took any assessments elsewhere (%)	28.1	25.5	23.8	2.6 (0.522)	1.6 (0.576)	4.3 (0.470)	0.3 (0.766)
Number of assessments taken at any location[a]	3.1	2.3	2.1	0.8 (0.080)	0.2 (0.547)	1.0* (0.031)	2.6 (0.093)
Number of assessments taken at an AJC[a]	2.2	1.5	1.2	0.6 (0.159)	0.3 (0.269)	0.9* (0.006)	5.5* (0.010)
Number of assessments taken elsewhere[a]	1.0	0.7	0.9	0.2 (0.121)	-0.1 (0.203)	0.1 (0.572)	3.2 (0.056)
Sample size	**650**	**653**	**634**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "2 or 3 assessments") for assessments taken at an AJC and separately for assessments taken elsewhere. To estimate the number of times assessments were taken, and the category of frequency of assessments taken anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 assessments"). We assumed respondents who answered "more than 5 assessments" took 6 assessments.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table E.IV.4. Job clubs attended since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Attended any job club since random assignment (%)	41.8	37.9	33.8	3.9 (0.446)	4.1 (0.552)	8.0 (0.098)	1.8 (0.190)
Attended a job club at an AJC (%)	31.3	27.1	20.3	4.2 (0.262)	6.9* (0.008)	11.0*† (0.009)	5.7*† (0.009)
Attended a job club elsewhere (%)	18.6	19.6	22.9	-0.9 (0.816)	-3.3 (0.704)	-4.2 (0.606)	0.2 (0.859)
Number of times attended a job club[a]	2.0	1.6	1.6	0.4 (0.249)	0.0 (0.926)	0.4 (0.282)	1.1 (0.349)
Number of times attended a job club at an AJC[a]	1.2	0.9	0.6	0.3 (0.133)	0.3* (0.001)	0.6*† (0.002)	13.8*† (0.000)
Number of times attended a job club elsewhere[a]	0.8	0.7	1.0	0.1 (0.548)	-0.3 (0.408)	-0.2 (0.535)	0.4 (0.673)
Sample size	**668**	**669**	**646**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "2 or 3 times") for job clubs attended at an AJC and separately for job clubs attended elsewhere. To estimate the number of job clubs attended, and the category of frequency of job clubs attended anywhere, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 times"). We assumed respondents who answered "more than 5 times" attended a job club 6 times.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table E.IV.5. One-on-one staff assistance received since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any one-on-one assistance (%)	67.8	68.0	53.0	-0.2 (0.963)	15.0* (0.004)	14.8* (0.002)	6.4* (0.005)
Received any one-on-one assistance at an AJC (%)	57.1	59.5	44.1	-2.4 (0.585)	15.4* (0.000)	13.0* (0.000)	14.4* (0.000)
Received any one-on-one assistance elsewhere (%)	19.7	18.8	18.5	0.9 (0.626)	0.2 (0.920)	1.1 (0.652)	0.2 (0.851)
Number of sessions[a]	5.0	4.4	3.2	0.6 (0.279)	1.2 (0.055)	1.8* (0.000)	13.1* (0.000)
Number of sessions at an AJC[a]	3.9	3.3	2.1	0.6 (0.277)	1.3* (0.012)	1.8* (0.000)	18.6* (0.000)
Number of sessions elsewhere[a]	1.1	1.1	1.1	0.0 (0.926)	0.0 (0.849)	0.0 (0.896)	0.0 (0.981)
Total time spent in sessions[b] (minutes)	119.3	104.8	86.7	14.5 (0.267)	18.1 (0.310)	32.5* (0.004)	6.2* (0.006)
Total time spent in sessions at an AJC[b] (minutes)	91.9	78.7	52.6	13.3 (0.294)	26.0* (0.037)	39.3* (0.000)	14.9* (0.000)
Total time spent in sessions elsewhere[b] (minutes)	27.0	26.1	34.0	0.9 (0.749)	-7.9† (0.248)	-7.0 (0.358)	0.8 (0.458)
Received any counseling or one-on-one assistance related to (%)							
Job search	64.4	66.4	50.1	-2.0 (0.596)	16.3* (0.001)	14.3* (0.002)	7.8* (0.002)
Assessment results	53.5	40.8	35.2	12.8 (0.238)	5.6 (0.396)	18.3* (0.006)	7.2* (0.003)
Training options	58.5	59.9	45.2	-1.4 (0.789)	14.6* (0.010)	13.3* (0.005)	5.8* (0.008)
Referral to other services for work support	45.8	46.6	32.7	-0.8 (0.835)	14.0* (0.001)	13.1* (0.000)	14.0* (0.000)
Referrals for non-work support services[c]	4.3	1.5	0.3	2.9 (0.302)	1.2 (0.271)	4.0† (0.091)	2.8† (0.078)
Emotional support, general advice[c]	1.6	0.4	0.3	1.2* (0.038)	0.1 (0.635)	1.3* (0.028)	2.7 (0.086)
Other	0.5	0.1	0.5	0.4 (0.087)	-0.4 (0.171)	0.0 (0.988)	2.2 (0.128)
Sample size	**666**	**669**	**643**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] The surveys provided categorical closed responses (for example, "2 or 3 sessions") for the number of phone and in-person sessions at an AJC or elsewhere separately. To estimate the number of sessions, we used the midpoint of the categories (for example, 2.5 if the respondent answered "2 or 3 sessions"). We assumed respondents who answered "more than 5 sessions" attended 6 sessions.

[b] The surveys provided categorical closed responses for average length of sessions (for example, “31 to 45 minutes”) for phone and in-person sessions at the AJC and elsewhere separately. To estimate the average length of a session, we used the midpoint of the categories (for example, 38 if the respondent answered “31 to 45 minutes”). We assumed a length of 60 minutes for respondents who answered “more than 60 minutes.” To estimate approximate amount of time spent in counseling, we multiplied the approximate session length and the approximate number of sessions.

[c] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table E.IV.6. Supportive services received since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any financial assistance other than for training (%)	25.4	12.7	7.5	12.7* (0.002)	5.1* (0.037)	17.9* (0.000)	14.6* (0.000)
Total financial assistance received, other than for training ($)	332	171	170	161 (0.231)	1 (0.995)	161 (0.188)	1.0 (0.379)
Received financial assistance for (%)							
Books	10.4	3.6	1.8	6.8* (0.005)	1.8 (0.062)	8.6* (0.000)	15.2* (0.000)
Tools, supplies	9.0	3.8	2.2	5.2* (0.027)	1.6 (0.146)	6.8* (0.002)	6.8* (0.004)
Clothes, uniforms	7.3	5.4	3.5	1.8 (0.057)	2.0* (0.050)	3.8* (0.007)	4.2* (0.025)
Transportation	20.0	8.7	5.8	11.3* (0.006)	2.9 (0.219)	14.2* (0.001)	7.3* (0.003)
Child care	1.1	0.3	1.0	0.7* (0.044)	-0.7† (0.053)	0.0† (0.929)	3.5*† (0.044)
Tests, certifications[a]	0.1	0.2	0.0	-0.1 (0.683)	0.2 (0.288)	0.1 (0.160)	1.5 (0.246)
Living expenses[a]	1.8	2.2	1.4	-0.4 (0.808)	0.8 (0.585)	0.4 (0.645)	0.2 (0.817)
Medical, dental care[a]	0.0	0.2	0.0	-0.2† (0.271)	0.1 (0.290)	0.0 (0.089)	1.6 (0.227)
Received financial assistance from an AJC (%)	21.1	10.8	3.3	10.2* (0.021)	7.5* (0.007)	17.7* (0.000)	20.3* (0.000)
Amount of financial assistance received from an AJC ($)	249	141	23	108 (0.433)	118 (0.122)	226* (0.018)	6.9* (0.004)
Received financial assistance elsewhere (%)	5.4	3.8	5.2	1.6 (0.096)	-1.4† (0.153)	0.2 (0.865)	1.8† (0.183)
Amount of financial assistance received elsewhere ($)	84	31	153	52 (0.070)	-122† (0.088)	-70 (0.225)	1.8† (0.145)
Received financial assistance from (%)							
Government agency other than AJC	2.9	1.4	2.7	1.5 (0.140)	-1.3 (0.052)	0.2 (0.850)	2.3 (0.119)
Library, church, or community-based organization	0.7	1.1	1.0	-0.4 (0.375)	0.1 (0.643)	-0.3 (0.449)	0.4 (0.666)
Educational facility	0.9	0.6	0.3	0.3 (0.486)	0.3 (0.203)	0.6 (0.187)	1.4 (0.253)
Online	0.0	0.0	0.0	0.0	0.0	0.0	
Private employment agency[a]	0.1	0.0	0.3	0.1 (0.259)	-0.3 (0.296)	-0.2 (0.442)	1.4 (0.256)
Other	1.0	0.8	0.9	0.2 (0.793)	-0.1 (0.846)	0.1 (0.862)	0.0 (0.965)
Sample size	**660**	**668**	**645**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Item was a write-in response.

[b] Estimates limited to local areas providing information on amount of supportive services received.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

AJC = American Job Center.

Table E.V.1. Enrollment in training since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Enrolled in a training program quarters 1-10 after random assignment (%)	53.7	43.0	34.4	10.7* (0.042)	8.6 (0.241)	19.3 (0.067)	2.4 (0.111)
Enrolled in a training program quarters 1-5 after random assignment (%)	49.0	30.8	26.7	18.2* (0.002)	4.1 (0.454)	22.3* (0.028)	7.3* (0.003)
Enrolled in a training program quarters 6-10 after random assignment (%)	22.6	26.6	23.9	-4.0 (0.369)	2.7 (0.475)	-1.3 (0.732)	0.4 (0.643)
Participation in a training program in quarter after random assignment (%)							
Quarter 1	38.6	17.4	16.6	21.2* (0.009)	0.8 (0.755)	22.0* (0.008)	4.2* (0.027)
Quarter 2	37.0	19.2	20.1	17.8* (0.007)	-0.9 (0.802)	16.8* (0.012)	4.5* (0.021)
Quarter 3	31.5	15.9	18.6	15.6* (0.027)	-2.7 (0.463)	12.9 (0.064)	2.8 (0.082)
Quarter 4	21.2	18.7	15.3	2.5 (0.379)	3.4 (0.551)	5.9 (0.178)	1.8 (0.190)
Quarter 5	17.1	12.6	17.3	4.5 (0.121)	-4.8* (0.048)	-0.3 (0.944)	4.3* (0.023)
Quarter 6	16.8	17.0	18.0	-0.2 (0.945)	-1.1 (0.713)	-1.3 (0.664)	0.1 (0.888)
Quarter 7	15.4	15.2	16.2	0.2 (0.957)	-1.0 (0.665)	-0.8 (0.812)	0.1 (0.908)
Quarter 8	12.8	12.2	13.4	0.6 (0.791)	-1.2 (0.531)	-0.6 (0.849)	0.3 (0.778)
Quarter 9	10.9	12.9	13.4	-2.0 (0.459)	-0.5 (0.855)	-2.5 (0.329)	0.6 (0.573)
Quarter 10	9.7	12.8	10.3	-3.1 (0.222)	2.5 (0.440)	-0.6 (0.803)	0.8 (0.467)
Sample size	**665**	**669**	**642**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

Table E.V.2. Characteristics of training programs enrolled in since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Hours in training programs	447.0	252.3	291.4	194.7*† (0.000)	-39.1 (0.378)	155.6 (0.057)	13.1*† (0.000)
Weeks in training programs	20.9	14.6	17.0	6.2* (0.009)	-2.4 (0.428)	3.8 (0.317)	4.3* (0.024)
Number of training programs in which enrolled	0.8	0.6	0.5	0.2 (0.215)	0.1* (0.039)	0.3 (0.055)	2.8 (0.081)
Frequency of the number of training programs in which enrolled (%)							
0 programs	46.4	57.1	65.7	-10.6* (0.044)	-8.6 (0.240)	-19.3 (0.068)	2.4 (0.114)
1 program	37.4	32.8	25.7	4.6 (0.182)	7.1 (0.360)	11.7 (0.150)	1.6 (0.223)
2 programs	9.9	4.4	6.0	5.5 (0.101)	-1.7 (0.232)	3.9 (0.339)	3.4* (0.050)
3 or more programs	6.3	5.8	2.6	0.5 (0.841)	3.2* (0.032)	3.7* (0.024)	10.0* (0.001)
Enrolled in any educational program (%)	7.5	6.4	7.2	1.0 (0.774)	-0.8 (0.621)	0.3 (0.953)	0.3 (0.745)
Enrolled in any vocational program (%)	49.7	39.0	30.9	10.7* (0.008)	8.1 (0.253)	18.8* (0.043)	4.1* (0.028)
Enrolled in both vocational and educational programs (%)	3.5	2.5	3.9	1.0 (0.666)	-1.4 (0.149)	-0.4 (0.904)	1.9 (0.165)
Enrolled in a training program designed to lead to a credential (%)	47.5	34.8	24.9	12.7* (0.013)	9.8 (0.158)	22.5* (0.041)	3.5* (0.043)
Completed any training program (%)	42.1	35.1	21.4	7.0 (0.212)	13.7* (0.023)	20.7* (0.040)	2.9 (0.072)
Left any training program prior to completion[a] (%)	9.3	6.1	7.5	3.2 (0.140)	-1.4 (0.122)	1.8 (0.413)	2.1 (0.146)
Received a credential for completing any training program (%)	31.6	27.3	13.2	4.4 (0.200)	14.1*† (0.014)	18.5* (0.025)	3.5*† (0.044)
Number of training programs completed	0.6	0.5	0.3	0.1 (0.314)	0.1* (0.040)	0.3 (0.073)	2.6 (0.090)
Frequency of the number of training programs completed (%)							
0 programs	58.0	65.5	78.7	-7.6 (0.179)	-13.2* (0.036)	-20.7* (0.041)	2.6 (0.096)
1 program	31.2	29.2	15.4	1.9† (0.367)	13.8*† (0.024)	15.8* (0.009)	4.1*† (0.028)
2 programs	7.9	2.2	4.0	5.7 (0.184)	-1.9 (0.195)	3.9 (0.428)	2.6 (0.093)
3 or more programs	2.9	3.1	1.9	-0.1 (0.935)	1.2 (0.314)	1.1 (0.280)	1.5 (0.245)
Completed all training programs in which enrolled (%)	35.5	29.9	19.1	5.6 (0.210)	10.8 (0.103)	16.4 (0.071)	1.8 (0.189)
Sample size	**664**	**669**	**640**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Individuals who did not participate in a training program are recorded as not having left any education or training program.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

Table E.V.3. Enrolled in training in 15 months after random assignment according to program data (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Enrolled in a WIA-funded training program during 15-month follow-up period (%)	34.6	3.3	1.9	31.3* (0.000)	1.5 (0.248)	32.8* (0.000)	29.8* (0.000)
Received an ITA (%)	31.4	2.3	1.3	29.2* (0.000)	0.9 (0.303)	30.1* (0.000)	27.7* (0.000)
Enrolled in WIA-funded on-the-job training (%)	1.5	0.0	0.0	1.5* (0.044)	0.0 (0.440)	1.5* (0.041)	2.7 (0.084)
Enrolled in WIA-funded Adult Basic Education or ESL (%)	0.0	0.0	0.0	0.0 (0.457)	0.0 (0.686)	0.0 (0.413)	0.4 (0.690)
Sample size	**705**	**711**	**682**				

Source: McConnell et al. (2016), based on WIA Standardized Record Data (WIASRD) extracted at about 15 months after random assignment.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and impacts are regression-adjusted. The sample is restricted to respondents to the WIA Gold Standard Evaluation 15-month follow-up survey. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

ITA = Individual Training Account; ESL = English as a second language.

Table E.V.4. Funding of training since random assignment (among dislocated workers who reported participating in training)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who reported participating in any training							
Total cost of all training programs enrolled in ($)	8,630	8,332	11,552	297†	-3,219	-2,922	1.0
				(0.845)	(0.163)	(0.287)	(0.364)
Received any funding for training costs from (%)							
WIA	37.8	4.5	3.0	33.2*	1.5	34.8*	35.5*
				(0.000)	(0.631)	(0.000)	(0.000)
State employment agency	9.9	-0.5	0.3	10.4*	-0.8	9.6*	2.7
				(0.043)	(0.478)	(0.031)	(0.083)
Trade Adjustment Act	0.0	0.2	-0.1	-0.2	0.2	0.0	0.8
				(0.332)	(0.278)	(0.254)	(0.453)
Veteran's administration	0.0	0.0	0.1	0.0	-0.1	-0.1	0.9
				(0.411)	(0.251)	(0.307)	(0.409)
Pell Grant	13.5	13.4	11.2	0.1	2.2	2.3	0.3
				(0.962)	(0.524)	(0.463)	(0.747)
Other government sources	5.3	3.6	8.3	1.7	-4.6	-2.9	2.7
				(0.212)	(0.063)	(0.293)	(0.085)
External scholarship or grant	11.4	7.8	6.2	3.5	1.6	5.1	0.9
				(0.364)	(0.618)	(0.203)	(0.436)
Other educational or training entity	1.1	0.2	0.2	0.9	0.1	1.0	1.4
				(0.120)	(0.681)	(0.103)	(0.256)
Employer	4.0	6.7	4.6	-2.7	2.2	-0.5	0.5
				(0.344)	(0.489)	(0.782)	(0.631)
Free Application for Federal Student Aid[a]	9.2	6.0	5.6	3.2	0.4	3.6†	0.8†
				(0.432)	(0.859)	(0.257)	(0.470)
Other	0.7	1.5	1.1	-0.8	0.4	-0.3	0.6
				(0.303)	(0.637)	(0.605)	(0.535)
Share of training paid for by individual or family (%)	0.3	0.5	0.6	-0.2*	-0.1	-0.3*	17.3*
				(0.000)	(0.164)	(0.000)	(0.000)
Paid all training costs on own (%)	11.5	37.0	42.7	-25.5*	-5.7	-31.2*†	19.1*
				(0.001)	(0.544)	(0.000)	(0.000)
Paid some training costs on own (%)	31.6	21.5	20.6	10.1	0.9	11.0	1.5
				(0.259)	(0.933)	(0.155)	(0.242)
Paid for none of training costs on own (%)	56.9	41.5	36.8	15.4*	4.8	20.2*	7.8*
				(0.006)	(0.380)	(0.001)	(0.002)
Sample size	**316**	**258**	**249**				

Sources: WIA Gold Standard Evaluation 15- and 30- month follow-up surveys.

Notes: A *training program* refers to any course designed to teach individuals skills. This includes both vocational training, which teaches an individual job skills or prepares the customer for an occupation and educational programs, including any adult basic education, General Education Development certificate test preparation, English as a second language, high school, college, or post-baccalaureate courses.

Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Item was a write-in response.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three conditional differences are the same for adults and dislocated workers is rejected at the 0.05 level.

Table E.VI.1. Earnings[a] by quarter since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 1 ($)	1,238	2,524	1,754	-1,286 (0.110)	770* (0.026)	-516 (0.335)	3.0 (0.065)
Quarter 2 ($)	2,328	4,020	3,363	-1,692 (0.062)	657 (0.236)	-1,035*† (0.031)	2.6 (0.093)
Quarter 3 ($)	3,432	4,738	3,461	-1,307* (0.024)	1,277 (0.121)	-30 (0.936)	4.0* (0.031)
Quarter 4 ($)	3,994	4,908	3,620	-913 (0.069)	1,288 (0.089)	375 (0.337)	1.8 (0.182)
Quarter 5 ($)	4,213	5,372	4,213	-1,158 (0.107)	1,158 (0.065)	0 (1.000)	1.9 (0.173)
Quarter 6 ($)	5,228	5,856	5,019	-629 (0.139)	838 (0.069)	209 (0.429)	1.8 (0.185)
Quarter 7 ($)	5,651	6,051	5,452	-399 (0.246)	598 (0.078)	199 (0.529)	1.7 (0.202)
Quarter 8 ($)	5,801	6,116	5,313	-314 (0.342)	803* (0.009)	488 (0.132)	4.1* (0.029)
Quarter 9 ($)	6,023	6,251	5,425	-229 (0.523)	826* (0.002)	598 (0.162)	5.9* (0.008)
Quarter 10 ($)	6,030	6,366	5,333	-336 (0.312)	1,032* (0.001)	696 (0.094)	7.3* (0.003)
Quarters 1-5 ($)	15,212	21,573	16,429	-6,361 (0.064)	5,144 (0.089)	-1,217 (0.287)	1.9 (0.172)
Quarters 6-10 ($)	28,647	30,611	26,454	-1,965 (0.182)	4,157* (0.005)	2,193 (0.115)	4.8* (0.017)
Quarters 1-10 ($)	43,851	52,182	42,881	-8,331* (0.047)	9,301* (0.023)	970 (0.630)	2.9 (0.071)
Sample size	**664**	**667**	**644**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests.
F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero.
Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

Table E.VI.2. Employment by quarter since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 1 (%)	30.8	46.9	38.6	-16.1 (0.090)	8.3 (0.308)	-7.7* (0.012)	3.7* (0.038)
Quarter 2 (%)	42.2	58.8	53.8	-16.5* (0.044)	5.0 (0.551)	-11.6* (0.000)	13.1*† (0.000)
Quarter 3 (%)	60.8	64.1	58.4	-3.3 (0.501)	5.7 (0.441)	2.4 (0.662)	0.3 (0.722)
Quarter 4 (%)	68.1	69.7	59.8	-1.6 (0.726)	9.9 (0.182)	8.3 (0.277)	0.9 (0.403)
Quarter 5 (%)	70.5	76.5	66.1	-6.0 (0.061)	10.4 (0.130)	4.4 (0.321)	1.9 (0.165)
Quarter 6 (%)	76.7	79.3	76.3	-2.6 (0.370)	3.0 (0.441)	0.4† (0.810)	0.4 (0.660)
Quarter 7 (%)	77.6	81.3	76.7	-3.7 (0.445)	4.6 (0.395)	0.9 (0.804)	0.4 (0.680)
Quarter 8 (%)	78.6	81.2	84.3	-2.6 (0.592)	-3.1 (0.557)	-5.7*† (0.007)	4.5*† (0.021)
Quarter 9 (%)	83.6	80.9	82.7	2.7 (0.645)	-1.9 (0.677)	0.8 (0.771)	0.1 (0.897)
Quarter 10 (%)	81.9	83.3	81.9	-1.3 (0.754)	1.3 (0.567)	0.0 (0.996)	0.2 (0.836)
Quarter 1-5 (%)	77.6	84.6	74.3	-7.0 (0.061)	10.3 (0.134)	3.3 (0.383)	2.1 (0.147)
Quarter 6-10 (%)	88.5	91.0	89.1	-2.5 (0.234)	1.9 (0.115)	-0.6 (0.804)	2.5 (0.099)
Quarter 1-10 (%)	92.0	94.7	91.2	-2.7 (0.152)	3.5 (0.173)	0.9 (0.808)	2.9 (0.070)
Sample size	**666**	**669**	**646**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

Table E.VI.3. Weeks and hours worked by quarter since random assignment (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Weeks worked[a]							
Quarter 1	2.3	4.3	3.4	-1.9 (0.085)	0.9 (0.188)	-1.1 (0.068)	1.8 (0.179)
Quarter 2	4.3	6.3	6.0	-2.0 (0.059)	0.4 (0.631)	-1.6*† (0.000)	14.3*† (0.000)
Quarter 3	6.2	7.2	6.3	-1.0 (0.112)	0.9 (0.433)	-0.1 (0.917)	1.7 (0.205)
Quarter 4	7.3	7.6	6.7	-0.3 (0.573)	0.9 (0.243)	0.7 (0.335)	0.7 (0.499)
Quarter 5	7.5	8.6	7.1	-1.0 (0.152)	1.4 (0.085)	0.4 (0.177)	1.7 (0.196)
Quarter 6	8.4	9.2	8.0	-0.8 (0.072)	1.2* (0.025)	0.4 (0.236)	2.8 (0.077)
Quarter 7	8.8	9.6	8.7	-0.8 (0.130)	1.0 (0.194)	0.2 (0.756)	1.2 (0.303)
Quarter 8	9.0	9.6	9.1	-0.6 (0.190)	0.5 (0.397)	-0.1 (0.649)	1.0 (0.372)
Quarter 9	9.5	9.6	9.4	0.0 (0.934)	0.2 (0.656)	0.2 (0.665)	0.2 (0.835)
Quarter 10	9.5	9.6	9.3	-0.1 (0.858)	0.3 (0.446)	0.2 (0.623)	0.4 (0.673)
Quarter 1-5	27.8	34.0	29.5	-6.2 (0.085)	4.5 (0.274)	-1.7 (0.180)	3.7* (0.038)
Quarter 6-10	45.3	47.7	44.5	-2.4 (0.259)	3.2 (0.161)	0.8 (0.520)	1.1 (0.363)
Quarter 1-10	73.0	81.7	74.0	-8.6* (0.040)	7.7 (0.071)	-0.9 (0.639)	2.3 (0.117)
Hours worked[a]							
Quarter 1	81.3	157.2	130.1	-75.9 (0.056)	27.1 (0.173)	-48.8 (0.075)	2.0 (0.154)
Quarter 2	166.0	249.9	238.5	-83.9* (0.038)	11.4 (0.644)	-72.5*† (0.002)	6.6*† (0.005)
Quarter 3	250.5	289.6	254.9	-39.1 (0.160)	34.7 (0.340)	-4.4 (0.902)	1.1 (0.336)
Quarter 4	291.7	306.2	273.6	-14.5 (0.544)	32.6 (0.238)	18.1 (0.588)	0.8 (0.449)
Quarter 5	299.5	344.9	321.4	-45.4 (0.112)	23.4 (0.219)	-21.9† (0.285)	1.4 (0.272)
Quarter 6	354.9	374.3	364.1	-19.4 (0.248)	10.2 (0.582)	-9.2† (0.585)	0.7† (0.504)
Quarter 7	369.9	389.1	390.1	-19.2 (0.430)	-1.0 (0.982)	-20.1† (0.505)	0.7 (0.492)
Quarter 8	374.1	389.4	370.8	-15.3 (0.535)	18.5 (0.559)	3.3 (0.861)	0.2 (0.814)
Quarter 9	397.5	390.9	375.5	6.6 (0.863)	15.4 (0.552)	22.0 (0.267)	1.3 (0.285)
Quarter 10	394.0	389.6	364.5	4.4 (0.903)	25.1 (0.349)	29.5 (0.150)	1.9 (0.176)
Quarter 1-5	1,089.1	1,348.5	1,218.5	-259.4 (0.056)	130.0 (0.263)	-129.4 (0.082)	2.5 (0.105)
Quarter 6-10	1,890.4	1,933.6	1,865.7	-43.2 (0.718)	67.9 (0.623)	24.6† (0.701)	0.1 (0.872)
Quarter 1-10	2,979.5	3,282.5	3,085.5	-303.0 (0.087)	197.0 (0.187)	-106.0† (0.346)	1.6 (0.224)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Number of jobs worked	2.0	1.9	1.9	0.2 (0.560)	0.0 (0.693)	0.1 (0.549)	0.2 (0.833)
Sample size	**665**	**669**	**646**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

Table E.VI.4. Characteristics of current or most recent job reported at time of survey (among dislocated workers who provided recent employment history from follow-up period)

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who provided employment history during follow-up period							
Hours worked per week	38.6	38.1	37.1	0.5 (0.472)	1.0 (0.207)	1.6 (0.125)	1.3 (0.292)
Employed full-time (35 or more hours per week, %)	79.3	76.3	71.4	3.0 (0.238)	4.9 (0.145)	7.9* (0.036)	2.5 (0.104)
Hourly wage rate ($)	14.61	15.80	15.12	-1.19 (0.274)	0.68 (0.578)	-0.51 (0.487)	0.8 (0.464)
Job offered (%)							
Any benefits	83.9	79.1	74.1	4.9 (0.461)	5.0 (0.054)	9.8 (0.139)	2.7 (0.083)
Health insurance	76.5	70.6	62.5	5.9 (0.378)	8.1 (0.074)	14.0 (0.159)	1.7 (0.195)
Paid vacation	76.0	65.1	61.2	10.9 (0.192)	3.9 (0.500)	14.8 (0.057)	2.0 (0.156)
Paid holidays	77.6	67.0	58.6	10.6 (0.062)	8.4* (0.015)	19.0* (0.005)	5.6* (0.009)
Paid sick days	59.3	55.9	48.7	3.4 (0.517)	7.3 (0.053)	10.7* (0.038)	3.5* (0.045)
Any paid time off	80.6	73.4	68.2	7.2 (0.237)	5.2 (0.122)	12.4 (0.080)	2.0 (0.158)
Pension or retirement benefits	72.5	62.2	55.1	10.3 (0.233)	7.1* (0.019)	17.4 (0.073)	3.4* (0.046)
Tuition assistance or reimbursement	37.6	33.0	30.4	4.6 (0.306)	2.7 (0.531)	7.2 (0.305)	0.6 (0.555)
Job classified as (%)							
Regular full- or part-time	81.2	83.9	74.5	-2.7 (0.558)	9.4 (0.138)	6.7* (0.012)	4.0* (0.030)
Self-employed or independent contractor	3.5	3.2	10.1	0.3 (0.757)	-6.9* (0.044)	-6.6* (0.047)	2.2 (0.125)
Temporary or day labor	9.1	4.2	10.7	5.0† (0.114)	-6.5* (0.040)	-1.6 (0.470)	2.3 (0.117)
On-call employee	3.6	4.2	2.9	-0.6 (0.733)	1.3 (0.409)	0.7 (0.721)	0.4 (0.703)
Job at contractor	2.7	4.6	3.1	-1.8 (0.309)	1.5 (0.057)	-0.4 (0.804)	2.0 (0.154)
Unionized job (%)	9.1	8.9	7.7	0.1 (0.924)	1.2 (0.514)	1.3 (0.491)	0.3 (0.760)
Months employed at job	14.6	17.6	15.3	-3.0 (0.200)	2.3 (0.319)	-0.7 (0.484)	0.9 (0.402)
Sample size	**619**	**624**	**606**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three conditional differences are the same for adults and dislocated workers is rejected at the 0.05 level.

Table E.VI.5. Most frequently reported occupations of current or most recent job reported at time of survey (among dislocated workers who provided recent employment history from follow-up period)

	Means			Conditional difference			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Among customers who provided employment history during follow-up period							
Occupation of current or most recent job (%)							
Nursing, Psychiatric, and Home Health Aides	11.1	5.5	4.1	5.6 (0.306)	1.4 (0.402)	7.0 (0.147)	1.8 (0.177)
Retail Sales Workers	11.7	8.7	7.4	3.0* (0.050)	1.3† (0.601)	4.3† (0.190)	2.1 (0.141)
Information and Record Clerks	13.5	12.5	15.9	1.0 (0.676)	-3.4 (0.221)	-2.4 (0.360)	0.8 (0.456)
Motor Vehicle Operators	8.1	6.1	5.3	2.0 (0.496)	0.9 (0.605)	2.9 (0.368)	0.4 (0.652)
Material Moving Workers	5.4	8.8	4.7	-3.4 (0.118)	4.1* (0.010)	0.7 (0.579)	4.3* (0.024)
Material Recording, Scheduling, Dispatching, and Distributing Workers	9.7	10.1	6.4	-0.4 (0.811)	3.7 (0.109)	3.3 (0.209)	1.4 (0.267)
Building Cleaning and Pest Control Workers	2.9	3.7	4.2	-0.8 (0.500)	-0.5 (0.702)	-1.4 (0.293)	0.6 (0.546)
Other Personal Care and Service Workers	6.9	2.2	2.9	4.7 (0.177)	-0.6 (0.414)	4.1 (0.182)	1.0 (0.395)
Health Technologists and Technicians	4.4	4.0	4.0	0.5 (0.649)	0.0 (0.973)	0.4 (0.837)	0.1 (0.887)
Other Office and Administrative Support Workers	6.6	10.1	6.5	-3.5 (0.173)	3.6 (0.078)	0.1 (0.960)	1.7 (0.203)
Cooks and Food Preparation Workers	3.7	3.4	2.7	0.3 (0.908)	0.8 (0.648)	1.0 (0.582)	0.2 (0.803)
Construction Trades Workers	4.3	4.3	4.6	0.0 (1.000)	-0.3 (0.861)	-0.3 (0.902)	0.0 (0.984)
Sample size	**612**	**617**	**595**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three conditional differences are the same for adults and dislocated workers is rejected at the 0.05 level.

Table E.VII.1. Household income and receipt of public assistance in the past calendar year (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received any income in calendar year prior to survey from (%)							
SNAP	29.8	26.1	25.0	3.7 (0.352)	1.1 (0.827)	4.9 (0.452)	0.5 (0.625)
WIC	5.3	7.4	7.0	-2.1 (0.171)	0.4 (0.901)	-1.7 (0.499)	1.5 (0.251)
Cash assistance programs	11.4	12.4	13.5	-1.0 (0.695)	-1.1 (0.619)	-2.0 (0.435)	0.3 (0.726)
Other programs	2.1	5.4	1.6	-3.3 (0.200)	3.8 (0.148)	0.4 (0.618)	1.1 (0.334)
Income received in calendar year prior to survey from assistance programs ($)							
SNAP	737	640	652	97 (0.246)	-13 (0.957)	84 (0.700)	0.8 (0.468)
Cash assistance programs	822	927	1,539	-105 (0.744)	-612 (0.279)	-717 (0.102)	1.6 (0.230)
Other programs	122	171	74	-49 (0.708)	97 (0.416)	48 (0.521)	0.5 (0.624)
Total household income ($)	30,811	38,191	34,711	-7,380 (0.055)	3,480 (0.274)	-3,901 (0.085)	2.4 (0.113)
Sample size	**668**	**669**	**646**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Table E.VII.2. Arrests and felony convictions (all dislocated workers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Arrested since random assignment (%)	2.8	2.9	5.2	0.0 (0.977)	-2.3 (0.245)	-2.3* (0.011)	4.1* (0.027)
Convicted of a felony since random assignment (%)	0.7	0.3	1.0	0.4 (0.417)	-0.7 (0.141)	-0.3 (0.657)	1.7 (0.211)
Sample size	**659**	**655**	**638**				

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, (4) that the customer consented to the study, (5) that the customer was selected for the survey, and (6) that the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

* Significantly different from zero at the 5 percent level.

† Significantly different from estimate for adults at the 0.05 level. For the F-statistics, this indicates that the hypothesis that all three impacts are the same for adults and dislocated workers is rejected at the 0.05 level.

APPENDIX F

DETAILED TABLES OF NDNH MEANS AND IMPACTS FOR ALL CUSTOMERS

This page has been left blank for double-sided copying.

Table F.VI.1. Earnings[a] by quarter since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Total earnings: ($)							
Quarter 1	1,880	2,562	2,275	-683* (0.011)	287 (0.123)	-396 (0.229)	5.3* (0.011)
Quarter 2	2,669	3,269	2,907	-600 (0.094)	363 (0.153)	-238 (0.222)	1.5 (0.240)
Quarter 3	3,104	3,507	2,915	-402 (0.230)	592 (0.173)	190 (0.208)	1.0 (0.365)
Quarter 4	3,432	3,560	3,263	-128 (0.386)	297 (0.342)	168 (0.621)	0.8 (0.443)
Quarter 5	3,746	3,729	3,203	17 (0.916)	526* (0.018)	543* (0.011)	4.1* (0.027)
Quarter 6	3,983	4,160	3,750	-177 (0.343)	410 (0.058)	233 (0.144)	2.1 (0.140)
Quarter 7	4,246	4,254	4,017	-8 (0.962)	237 (0.291)	229 (0.273)	0.7 (0.502)
Quarter 8	4,335	4,400	4,090	-65 (0.692)	310* (0.046)	245 (0.143)	2.4 (0.113)
Quarter 9	4,556	4,356	4,337	199 (0.348)	20 (0.927)	219 (0.163)	1.2 (0.330)
Quarter 10	4,704	4,599	4,632	105 (0.528)	-33 (0.854)	72 (0.614)	0.3 (0.777)
Quarter 11	4,917	4,790	4,615	127 (0.574)	175 (0.185)	302 (0.111)	2.3 (0.123)
Quarter 12	4,938	4,775	4,662	163 (0.503)	112 (0.316)	276 (0.161)	2.0 (0.158)
Quarters 1-12	46,509	47,960	44,665	-1,451 (0.327)	3,296* (0.035)	1,844 (0.262)	2.5 (0.104)
Earnings from primary job[b]: ($)							
Quarter 1	1,743	2,345	2,104	-602* (0.024)	241 (0.139)	-361 (0.249)	4.3* (0.025)
Quarter 2	2,494	3,053	2,748	-559 (0.114)	305 (0.222)	-254 (0.176)	1.4 (0.270)
Quarter 3	2,933	3,313	2,767	-380 (0.281)	545 (0.214)	165 (0.242)	0.9 (0.420)
Quarter 4	3,246	3,361	3,060	-116 (0.435)	301 (0.369)	186 (0.599)	0.7 (0.519)
Quarter 5	3,541	3,513	3,005	28 (0.847)	508* (0.019)	536* (0.013)	3.8* (0.036)
Quarter 6	3,777	3,960	3,590	-183 (0.340)	370 (0.094)	188 (0.226)	1.6 (0.222)
Quarter 7	4,026	3,998	3,838	28 (0.857)	160 (0.462)	188 (0.374)	0.4 (0.664)
Quarter 8	4,119	4,196	3,881	-77 (0.573)	315* (0.044)	238 (0.113)	2.4 (0.113)
Quarter 9	4,333	4,167	4,174	166 (0.370)	-7 (0.972)	159 (0.247)	1.0 (0.390)
Quarter 10	4,472	4,399	4,432	73 (0.620)	-33 (0.848)	40 (0.786)	0.1 (0.875)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 11	4,689	4,569	4,420	119 (0.572)	150 (0.275)	269 (0.100)	2.1 (0.141)
Quarter 12	4,697	4,557	4,449	140 (0.556)	108 (0.419)	248 (0.119)	2.3 (0.116)
Sample size	**29,710**	**2,034**	**2,029**				

Source: National Directory of New Hires

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

[b] In each quarter, the primary job is defined as that with the highest total reported earnings in the quarter.

* Significantly different from zero at the .05 level.

Table F.VI.2. Employment by quarter since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Employment: (%)							
Quarter 1	49.8	54.7	55.3	-4.9 (0.153)	-0.6 (0.825)	-5.5 (0.230)	1.1 (0.353)
Quarter 2	56.4	61.4	58.9	-5.0 (0.241)	2.5 (0.438)	-2.5 (0.290)	0.8 (0.461)
Quarter 3	60.1	63.8	62.3	-3.7 (0.272)	1.5 (0.631)	-2.3* (0.033)	2.5 (0.099)
Quarter 4	63.2	63.3	61.7	-0.2 (0.934)	1.6 (0.368)	1.5 (0.145)	1.3 (0.284)
Quarter 5	65.1	67.3	62.2	-2.2 (0.353)	5.1* (0.016)	2.9 (0.101)	4.0* (0.029)
Quarter 6	67.5	69.3	66.7	-1.8 (0.170)	2.6 (0.216)	0.8 (0.599)	1.1 (0.350)
Quarter 7	68.5	69.4	68.5	-0.9 (0.617)	0.9 (0.759)	0.0 (0.992)	0.1 (0.877)
Quarter 8	68.8	70.2	68.5	-1.4 (0.552)	1.7 (0.494)	0.3 (0.850)	0.2 (0.785)
Quarter 9	70.1	70.8	68.5	-0.7 (0.765)	2.3 (0.391)	1.6 (0.346)	0.5 (0.583)
Quarter 10	70.5	70.3	70.9	0.3 (0.886)	-0.6 (0.810)	-0.3 (0.758)	0.0 (0.952)
Quarter 11	70.9	72.3	69.2	-1.4 (0.395)	3.0 (0.206)	1.6 (0.277)	0.9 (0.432)
Quarter 12	70.4	70.7	70.0	-0.3 (0.839)	0.7 (0.754)	0.4 (0.817)	0.1 (0.951)
Quarters 1-12	90.9	90.9	93.0	0.1 (0.945)	-2.1 (0.070)	-2.1* (0.016)	3.3 (0.052)
Quarters employed:							
Quarters 1-12	7.8	8.0	7.8	-0.2 (0.268)	0.2 (0.336)	0.0 (0.889)	0.6 (0.536)
Sample size	**29,710**	**2,034**	**2,029**				

Source: National Directory of New Hires

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

* Significantly different from zero at the .05 level.

Table F.VI.3. Earnings by quarter since random assignment among employed customers

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Customers who were ever employed in calendar quarter 1 after random assignment							
Quarter 1 earnings: ($)	3,775	4,661	4,071	-886* (0.000)	590* (0.005)	-296 (0.174)	12.5* (0.000)
Quarter 1 earnings from primary job[a]: ($)	3,501	4,253	3,755	-752* (0.000)	498* (0.007)	-254 (0.204)	9.6* (0.001)
Sample size	**15,328**	**1,089**	**1,139**				
Customers who were ever employed in calendar quarter 2 after random assignment							
Quarter 2 earnings: ($)	4,736	5,325	4,922	-589* (0.027)	403* (0.040)	-186 (0.261)	2.9 (0.072)
Quarter 2 earnings from primary job[a]: ($)	4,425	4,962	4,649	-537* (0.023)	313 (0.104)	-224 (0.143)	2.9 (0.071)
Sample size	**16,976**	**1,189**	**1,209**				
Customers who were ever employed in calendar quarter 3 after random assignment							
Quarter 3 earnings: ($)	5,169	5,501	4,677	-332 (0.212)	824 (0.079)	492 (0.070)	1.9 (0.176)
Quarter 3 earnings from primary job[a]: ($)	4,883	5,191	4,439	-308 (0.296)	751 (0.119)	444 (0.082)	1.6 (0.212)
Sample size	**17,991**	**1,268**	**1,300**				
Customers who were ever employed in calendar quarter 4 after random assignment							
Quarter 4 earnings: ($)	5,431	5,610	5,285	-179 (0.295)	326 (0.559)	146 (0.774)	0.6 (0.565)
Quarter 4 earnings from primary job[a]: ($)	5,136	5,297	4,955	-160 (0.333)	342 (0.556)	182 (0.732)	0.5 (0.610)
Sample size	**18,726**	**1,325**	**1,302**				
Customers who were ever employed in calendar quarter 5 after random assignment							
Quarter 5 earnings: ($)	5,755	5,553	5,148	202 (0.486)	406 (0.086)	608 (0.086)	2.0 (0.149)
Quarter 5 earnings from primary job[a]: ($)	5,440	5,231	4,830	209 (0.425)	401 (0.093)	610 (0.093)	1.8 (0.183)
Sample size	**19,238**	**1,358**	**1,335**				
Customers who were ever employed in calendar quarter 6 after random assignment							
Quarter 6 earnings: ($)	5,899	6,001	5,621	-103 (0.602)	381 (0.151)	278 (0.210)	1.2 (0.326)
Quarter 6 earnings from primary job[a]: ($)	5,594	5,712	5,380	-118 (0.566)	332 (0.221)	214 (0.298)	0.8 (0.444)
Sample size	**19,648**	**1,386**	**1,346**				
Customers who were ever employed in calendar quarter 7 after random assignment							
Quarter 7 earnings: ($)	6,201	6,135	5,858	65 (0.677)	277 (0.051)	343 (0.071)	2.5 (0.103)
Quarter 7 earnings from primary job[a]: ($)	5,881	5,769	5,597	111 (0.471)	172 (0.208)	283 (0.136)	1.3 (0.289)
Sample size	**19,972**	**1,435**	**1,392**				

	Means			Conditional differences			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Customers who were ever employed in calendar quarter 8 after random assignment							
Quarter 8 earnings: ($)	6,301	6,270	5,960	32 (0.829)	309 (0.174)	341 (0.091)	1.5 (0.233)
Quarter 8 earnings from primary job[a]: ($)	5,988	5,983	5,659	5 (0.971)	324 (0.129)	329 (0.074)	1.7 (0.195)
Sample size	**20,172**	**1,446**	**1,414**				
Customers who were ever employed in calendar quarter 9 after random assignment							
Quarter 9 earnings: ($)	6,498	6,157	6,326	340 (0.097)	-169 (0.544)	172 (0.260)	2.7 (0.083)
Quarter 9 earnings from primary job[a]: ($)	6,181	5,894	6,092	287 (0.112)	-198 (0.491)	89 (0.572)	2.6 (0.095)
Sample size	**20,558**	**1,457**	**1,437**				
Customers who were ever employed in calendar quarter 10 after random assignment							
Quarter 10 earnings: ($)	6,669	6,551	6,528	118 (0.519)	23 (0.907)	141 (0.381)	0.5 (0.636)
Quarter 10 earnings from primary job[a]: ($)	6,340	6,269	6,247	71 (0.702)	22 (0.920)	93 (0.604)	0.2 (0.847)
Sample size	**20,707**	**1,451**	**1,445**				
Customers who were ever employed in calendar quarter 11 after random assignment							
Quarter 11 earnings: ($)	6,937	6,627	6,658	310 (0.230)	-31 (0.906)	279 (0.188)	1.2 (0.316)
Quarter 11 earnings from primary job[a]: ($)	6,616	6,324	6,379	291 (0.232)	-55 (0.835)	237 (0.213)	1.2 (0.307)
Sample size	**20,785**	**1,455**	**1,441**				
Customers who were ever employed in calendar quarter 12 after random assignment							
Quarter 12 earnings: ($)	7,017	6,743	6,652	274 (0.266)	91 (0.714)	365 (0.139)	1.3 (0.296)
Quarter 12 earnings from primary job[a]: ($)	6,674	6,440	6,350	234 (0.347)	90 (0.724)	325 (0.125)	1.3 (0.281)
Sample size	**20,627**	**1,460**	**1,441**				
Customers who were ever employed in calendar quarters 1 through 12 after random assignment							
Quarters 1-12 earnings: ($)	51,151	52,757	48,060	-1,607 (0.285)	4,697* (0.016)	3,091 (0.143)	3.4* (0.048)
Sample size	**26,990**	**1,869**	**1,867**				

Source: National Directory of New Hires

Notes: Dollars are 2012 dollars. Estimated means and conditional differences are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for conditional differences are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three conditional differences for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] In each quarter, the primary job is defined as that with the highest total reported earnings in the quarter.

* Significantly different from zero at the .05 level.

Table F.VII.1. Unemployment compensation receipt by quarter since random assignment (all customers)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received unemployment compensation: (%)							
Quarter 1	33.5	31.7	31.0	1.8 (0.443)	0.6 (0.864)	2.4 (0.522)	0.4 (0.682)
Quarter 2	22.9	20.8	21.0	2.1 (0.443)	-0.2 (0.899)	1.9 (0.206)	0.9 (0.421)
Quarter 3	14.5	17.4	15.8	-2.8 (0.052)	1.5 (0.192)	-1.3 (0.313)	2.1 (0.139)
Quarter 4	11.1	14.4	15.0	-3.4* (0.035)	-0.5 (0.786)	-3.9 (0.145)	2.5 (0.103)
Quarter 5	8.8	12.3	12.0	-3.5 (0.119)	0.4 (0.822)	-3.1* (0.004)	5.3* (0.012)
Quarter 6	7.3	8.5	7.9	-1.2 (0.450)	0.6 (0.758)	-0.6 (0.621)	0.4 (0.699)
Quarter 7	6.5	7.1	5.1	-0.6 (0.701)	2.0 (0.405)	1.3 (0.244)	0.7 (0.500)
Quarter 8	6.1	5.5	6.5	0.6 (0.461)	-1.0 (0.168)	-0.4 (0.734)	1.2 (0.308)
Quarter 9	5.9	6.8	5.6	-1.0 (0.240)	1.3 (0.362)	0.3 (0.791)	0.8 (0.455)
Quarter 10	5.8	6.1	5.9	-0.4 (0.761)	0.3 (0.870)	-0.1 (0.879)	0.1 (0.934)
Quarter 11	5.8	6.2	4.4	-0.4 (0.589)	1.8 (0.234)	1.3 (0.262)	0.8 (0.474)
Quarter 12	5.9	7.2	6.0	-1.3* (0.013)	1.2 (0.241)	-0.1 (0.932)	3.6* (0.042)
Quarters 1-12	47.2	46.5	47.3	0.7 (0.810)	-0.8 (0.624)	-0.1 (0.969)	0.1 (0.881)
Amount[a] of unemployment compensation received: ($)							
Quarter 1	990	880	815	109 (0.434)	65 (0.438)	174 (0.295)	0.6 (0.555)
Quarter 2	597	566	460	30 (0.765)	106 (0.080)	137 (0.126)	2.7 (0.088)
Quarter 3	342	406	428	-64 (0.269)	-22 (0.853)	-87 (0.312)	2.0 (0.150)
Quarter 4	231	354	443	-123* (0.011)	-89 (0.530)	-212 (0.202)	3.8* (0.034)
Quarter 5	165	329	277	-165 (0.099)	52 (0.332)	-112* (0.028)	3.9* (0.033)
Quarter 6	134	114	160	20 (0.197)	-46 (0.113)	-26 (0.331)	1.6 (0.221)
Quarter 7	112	172	85	-60 (0.352)	87 (0.306)	27 (0.329)	0.6 (0.569)
Quarter 8	111	165	95	-54 (0.400)	70 (0.320)	16 (0.460)	0.6 (0.569)
Quarter 9	100	139	80	-40 (0.333)	60 (0.304)	20 (0.386)	0.5 (0.583)
Quarter 10	97	95	73	2 (0.913)	23 (0.227)	25 (0.239)	0.9 (0.408)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 11	106	110	74	-4 (0.721)	37 (0.288)	32 (0.301)	0.6 (0.559)
Quarter 12	97	172	133	-75 (0.154)	39 (0.199)	-36 (0.209)	1.1 (0.355)
Quarters 1-12	3,080	3,503	3,120	-423* (0.047)	382 (0.120)	-41 (0.559)	3.3 (0.052)
Sample size	**29,710**	**2,034**	**2,029**				

Source: National Directory of New Hires

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who did not receive unemployment compensation in the corresponding time period.

* Significantly different from zero at the .05 level.

This page has been left blank for double-sided copying.

APPENDIX G

DETAILED TABLES OF NDNH MEANS AND IMPACTS FOR ADULTS

This page has been left blank for double-sided copying.

Table G.VI.1. Earnings[a] by quarter since random assignment (adults only)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Total earnings: ($)							
Quarter 1	1,854	2,600	2,007	-746* (0.001)	593*† (0.011)	-153 (0.294)	6.8*† (0.004)
Quarter 2	2,407	2,931	2,764	-524* (0.022)	166 (0.542)	-357 (0.060)	4.5* (0.020)
Quarter 3	2,676	3,096	2,807	-420 (0.081)	289 (0.200)	-131 (0.371)	1.7 (0.207)
Quarter 4	2,886	3,209	3,314	-323 (0.097)	-105 (0.759)	-428† (0.362)	1.7 (0.207)
Quarter 5	3,150	3,404	2,895	-254 (0.222)	509* (0.035)	254 (0.215)	2.5 (0.103)
Quarter 6	3,342	3,506	3,196	-164 (0.530)	310 (0.284)	146 (0.378)	0.7 (0.502)
Quarter 7	3,599	3,777	3,413	-178 (0.480)	364 (0.183)	186 (0.380)	1.0 (0.392)
Quarter 8	3,705	4,125	3,530	-420* (0.043)	594* (0.023)	174 (0.390)	3.3 (0.054)
Quarter 9	3,895	4,010	3,713	-115 (0.611)	297 (0.334)	182 (0.412)	0.5 (0.607)
Quarter 10	4,062	4,175	4,088	-113 (0.632)	87 (0.756)	-26 (0.925)	0.1 (0.884)
Quarter 11	4,246	4,386	3,944	-140 (0.672)	442 (0.165)	302 (0.165)	1.6 (0.219)
Quarter 12	4,289	4,432	3,936	-143 (0.599)	496* (0.028)	353 (0.107)	3.5* (0.046)
Quarters 1-12	40,111	43,649	39,607	-3,539 (0.157)	4,042 (0.081)	503 (0.793)	1.7 (0.203)
Earnings from primary job[b]: ($)							
Quarter 1	1,707	2,275	1,824	-567* (0.003)	450*† (0.027)	-117 (0.409)	5.4* (0.011)
Quarter 2	2,232	2,676	2,601	-444* (0.045)	74 (0.779)	-369* (0.048)	3.9* (0.031)
Quarter 3	2,512	2,881	2,651	-369 (0.135)	230 (0.306)	-139 (0.367)	1.2 (0.309)
Quarter 4	2,708	2,968	3,176	-260 (0.166)	-209 (0.549)	-468† (0.319)	1.0 (0.374)
Quarter 5	2,953	3,162	2,753	-209 (0.254)	408* (0.040)	199 (0.299)	2.3 (0.115)
Quarter 6	3,140	3,270	3,017	-130 (0.600)	252 (0.365)	122 (0.447)	0.5 (0.612)
Quarter 7	3,385	3,509	3,218	-124 (0.615)	291 (0.282)	167 (0.405)	0.7 (0.519)
Quarter 8	3,500	3,867	3,282	-367 (0.059)	585* (0.025)	218 (0.255)	3.0 (0.069)
Quarter 9	3,670	3,775	3,511	-105 (0.637)	264 (0.367)	159 (0.444)	0.4 (0.642)
Quarter 10	3,830	3,929	3,889	-99 (0.668)	39 (0.878)	-60 (0.824)	0.1 (0.910)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 11	4,001	4,115	3,701	-114 (0.725)	414 (0.200)	300 (0.122)	1.7 (0.203)
Quarter 12	4,046	4,180	3,723	-134 (0.633)	456* (0.038)	322 (0.089)	3.9* (0.032)
Sample size	**18,558**	**1,214**	**1,224**				

Source: National Directory of New Hires

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

[b] In each quarter, the primary job is defined as that with the highest total reported earnings in the quarter.

* Significantly different from zero at the .05 level.

Table G.VI.2. Employment by quarter since random assignment (adults only)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Employment: (%)							
Quarter 1	55.2	59.7	57.1	-4.4 (0.151)	2.6 (0.516)	-1.8† (0.567)	1.1† (0.337)
Quarter 2	58.6	64.7	61.5	-6.1 (0.077)	3.1 (0.429)	-3.0 (0.262)	2.1 (0.145)
Quarter 3	60.9	66.0	65.6	-5.1 (0.098)	0.4 (0.904)	-4.7 (0.068)	2.3 (0.118)
Quarter 4	62.6	64.3	63.5	-1.7 (0.473)	0.9 (0.688)	-0.8 (0.760)	0.3 (0.755)
Quarter 5	63.8	65.7	61.0	-1.9 (0.430)	4.6 (0.170)	2.7 (0.440)	1.1 (0.351)
Quarter 6	65.5	65.5	63.6	-0.1 (0.979)	1.9 (0.540)	1.8 (0.172)	1.0 (0.385)
Quarter 7	66.4	68.1	66.0	-1.7 (0.611)	2.2 (0.484)	0.4 (0.845)	0.3 (0.779)
Quarter 8	66.8	68.9	65.6	-2.1 (0.470)	3.2 (0.445)	1.1 (0.567)	0.3 (0.741)
Quarter 9	67.8	68.1	65.1	-0.3 (0.933)	3.0 (0.558)	2.7 (0.352)	0.5 (0.617)
Quarter 10	68.5	66.9	68.8	1.5 (0.625)	-1.9 (0.588)	-0.3 (0.920)	0.2 (0.841)
Quarter 11	68.8	68.2	66.1	0.6 (0.860)	2.1 (0.593)	2.7 (0.188)	0.9 (0.400)
Quarter 12	68.4	67.6	65.3	0.9 (0.799)	2.3 (0.527)	3.1 (0.124)	1.3 (0.299)
Quarters 1-12	90.7	90.4	93.0	0.3 (0.816)	-2.6 (0.176)	-2.3 (0.071)	1.8 (0.191)
Quarters employed:							
Quarters 1-12	7.7	7.9	7.7	-0.2 (0.529)	0.2 (0.476)	0.0 (0.846)	0.3 (0.769)
Sample size	**18,558**	**1,214**	**1,224**				

Source: National Directory of New Hires

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

* Significantly different from zero at the .05 level.

Table G.VII.1. Unemployment compensation receipt by quarter since random assignment (adults only)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received unemployment compensation: (%)							
Quarter 1	15.4	14.0	15.9	1.4 (0.438)	-1.9 (0.349)	-0.5 (0.800)	0.5 (0.605)
Quarter 2	12.2	12.6	10.8	-0.4 (0.818)	1.9 (0.192)	1.5 (0.362)	1.0 (0.365)
Quarter 3	9.5	10.4	8.6	-0.9 (0.550)	1.8 (0.177)	0.9 (0.413)	1.1 (0.358)
Quarter 4	7.9	9.7	8.8	-1.8 (0.189)	0.9 (0.469)	-0.9 (0.528)	0.9 (0.411)
Quarter 5	6.7	7.2	8.9	-0.6 (0.643)	-1.6 (0.172)	-2.2 (0.115)	1.5 (0.243)
Quarter 6	5.9	5.1	5.5	0.8 (0.415)	-0.3 (0.783)	0.5 (0.760)	0.4 (0.700)
Quarter 7	5.3	3.5	5.0	1.8 (0.051)	-1.5 (0.097)	0.3 (0.769)	2.6 (0.093)
Quarter 8	5.1	4.0	5.2	1.1 (0.161)	-1.3 (0.071)	-0.2 (0.851)	2.9 (0.072)
Quarter 9	4.9	6.1	5.7	-1.2 (0.072)	0.4 (0.690)	-0.8† (0.423)	1.8† (0.177)
Quarter 10	4.8	5.5	4.4	-0.7 (0.372)	1.1 (0.246)	0.4 (0.546)	0.7 (0.498)
Quarter 11	4.5	4.8	4.3	-0.3 (0.724)	0.5 (0.573)	0.2 (0.811)	0.2 (0.846)
Quarter 12	4.8	6.0	4.2	-1.2 (0.114)	1.7 (0.131)	0.6 (0.545)	1.6 (0.212)
Quarters 1-12	30.4	31.2	31.9	-0.8 (0.759)	-0.7 (0.598)	-1.5 (0.560)	0.2 (0.792)
Amount[a] of unemployment compensation received: ($)							
Quarter 1	383	355	379	28 (0.618)	-24 (0.743)	4 (0.947)	0.1 (0.878)
Quarter 2	274	313	216	-39 (0.518)	97 (0.174)	58 (0.144)	1.4 (0.266)
Quarter 3	186	249	155	-63 (0.240)	94 (0.135)	32 (0.260)	1.3 (0.297)
Quarter 4	137	200	155	-63 (0.076)	45 (0.062)	-18 (0.494)	2.2 (0.133)
Quarter 5	105	137	136	-32 (0.284)	1 (0.976)	-31 (0.326)	0.6 (0.537)
Quarter 6	89	58	87	31 (0.106)	-29 (0.413)	2 (0.956)	1.5 (0.252)
Quarter 7	74	53	73	20 (0.212)	-19 (0.373)	1 (0.954)	1.0 (0.373)
Quarter 8	74	69	69	6 (0.836)	-1 (0.979)	5 (0.847)	0.0 (0.963)
Quarter 9	71	78	78	-7 (0.605)	0 (0.997)	-7† (0.615)	0.2† (0.800)
Quarter 10	70	79	60	-9 (0.625)	20 (0.336)	11 (0.311)	0.7 (0.499)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 11	73	67	53	7 (0.674)	14 (0.557)	20 (0.271)	0.7 (0.506)
Quarter 12	75	97	76	-22 (0.276)	21 (0.424)	-1 (0.939)	0.6 (0.546)
Quarters 1-12	1,613	1,755	1,538	-143 (0.561)	218 (0.364)	75 (0.676)	0.4 (0.653)
Sample size	**18,558**	**1,214**	**1,224**				

Source: National Directory of New Hires

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who did not receive unemployment compensation in the corresponding time period.

* Significantly different from zero at the .05 level.

This page has been left blank for double-sided copying.

APPENDIX H

DETAILED TABLES OF NDNH MEANS AND IMPACTS FOR DISLOCATED WORKERS

This page has been left blank for double-sided copying.

Table H.VI.1. Earnings[a] by quarter since random assignment (dislocated workers only)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Total earnings: ($)							
Quarter 1	1,819	2,420	2,536	-602 (0.184)	-115† (0.578)	-717 (0.239)	1.0† (0.374)
Quarter 2	2,953	3,662	3,053	-709 (0.299)	609 (0.213)	-100 (0.707)	0.9 (0.407)
Quarter 3	3,698	4,096	3,121	-398 (0.451)	974 (0.219)	576 (0.074)	2.1 (0.147)
Quarter 4	4,280	4,184	3,373	95 (0.606)	812 (0.083)	907*† (0.019)	4.0* (0.030)
Quarter 5	4,667	4,330	3,798	337 (0.276)	532 (0.057)	868* (0.018)	3.4* (0.047)
Quarter 6	4,897	5,118	4,607	-221 (0.101)	511 (0.057)	289 (0.188)	2.2 (0.128)
Quarter 7	5,170	4,990	4,946	181 (0.457)	43 (0.935)	224 (0.525)	1.2 (0.326)
Quarter 8	5,292	4,932	5,015	360 (0.301)	-83 (0.803)	277 (0.112)	1.5 (0.241)
Quarter 9	5,545	4,974	5,341	571 (0.284)	-368 (0.493)	203 (0.149)	1.6 (0.224)
Quarter 10	5,606	5,251	5,464	355 (0.267)	-213 (0.377)	142 (0.416)	0.6 (0.531)
Quarter 11	5,879	5,441	5,642	438 (0.226)	-201 (0.551)	237 (0.269)	1.0 (0.377)
Quarter 12	5,900	5,374	5,790	526 (0.231)	-416 (0.159)	110 (0.692)	1.1 (0.359)
Quarters 1-12	55,705	54,771	52,687	934 (0.476)	2,084 (0.195)	3,018 (0.067)	1.8 (0.180)
Earnings from primary job[b]: ($)							
Quarter 1	1,684	2,330	2,369	-646 (0.152)	-38† (0.823)	-685 (0.226)	1.4 (0.271)
Quarter 2	2,764	3,481	2,885	-716 (0.278)	595 (0.209)	-121 (0.632)	0.9 (0.419)
Quarter 3	3,493	3,905	2,961	-412 (0.453)	944 (0.236)	531 (0.085)	1.8 (0.180)
Quarter 4	4,065	4,021	3,062	44 (0.802)	958 (0.074)	1,003*† (0.027)	3.4* (0.047)
Quarter 5	4,434	4,131	3,509	303 (0.270)	622 (0.055)	925* (0.020)	3.1 (0.061)
Quarter 6	4,663	4,942	4,448	-279 (0.069)	494 (0.070)	215 (0.328)	2.3 (0.121)
Quarter 7	4,919	4,724	4,762	195 (0.330)	-37 (0.942)	157 (0.674)	1.1 (0.339)
Quarter 8	5,038	4,772	4,833	266 (0.414)	-61 (0.844)	205 (0.213)	0.9 (0.414)
Quarter 9	5,305	4,821	5,209	484 (0.328)	-388 (0.464)	95 (0.514)	0.8 (0.456)
Quarter 10	5,358	5,092	5,245	266 (0.353)	-153 (0.556)	113 (0.476)	0.5 (0.607)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 11	5,639	5,252	5,476	387 (0.281)	-224 (0.518)	163 (0.426)	0.7 (0.498)
Quarter 12	5,633	5,173	5,546	461 (0.266)	-373 (0.255)	88 (0.715)	0.7 (0.491)
Sample size	**11,152**	**820**	**805**				

Source: National Directory of New Hires

Notes: Dollars are 2012 dollars. Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

[b] In each quarter, the primary job is defined as that with the highest total reported earnings in the quarter.

* Significantly different from zero at the .05 level.

Table H.VI.2. Employment by quarter since random assignment (dislocated workers only)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Employment: (%)							
Quarter 1	42.6	47.8	52.4	-5.2 (0.413)	-4.6 (0.273)	-9.8† (0.085)	2.0† (0.162)
Quarter 2	53.7	57.3	55.4	-3.6 (0.609)	1.9 (0.732)	-1.7 (0.583)	0.2 (0.839)
Quarter 3	59.6	61.6	58.6	-2.0 (0.723)	3.0 (0.668)	1.0 (0.684)	0.1 (0.899)
Quarter 4	65.6	63.8	61.2	1.8 (0.430)	2.6 (0.460)	4.4 (0.272)	0.7 (0.514)
Quarter 5	67.6	70.2	64.6	-2.7 (0.363)	5.6 (0.203)	3.0 (0.205)	0.9 (0.400)
Quarter 6	70.7	74.7	71.4	-4.1 (0.124)	3.3 (0.543)	-0.7 (0.812)	5.5* (0.010)
Quarter 7	72.2	72.1	73.0	0.0 (0.994)	-0.9 (0.901)	-0.9 (0.794)	0.3 (0.762)
Quarter 8	72.8	73.4	73.9	-0.6 (0.894)	-0.4 (0.837)	-1.1 (0.757)	0.1 (0.904)
Quarter 9	74.7	76.1	74.7	-1.3 (0.762)	1.3 (0.563)	0.0 (0.999)	0.2 (0.842)
Quarter 10	74.0	75.4	74.6	-1.4 (0.781)	0.9 (0.723)	-0.6 (0.877)	0.1 (0.938)
Quarter 11	74.3	78.3	74.3	-4.0 (0.062)	4.0 (0.185)	0.0 (0.993)	2.7 (0.085)
Quarter 12	73.9	75.8	77.3	-1.9 (0.607)	-1.6 (0.422)	-3.5 (0.409)	0.5 (0.629)
Quarters 1-12	91.7	92.0	93.5	-0.3 (0.882)	-1.5 (0.078)	-1.8 (0.182)	6.2* (0.006)
Quarters employed:							
Quarters 1-12	8.0	8.3	8.1	-0.3 (0.053)	0.2 (0.350)	-0.1 (0.471)	2.1 (0.144)
Sample size	**11,152**	**820**	**805**				

Source: National Directory of New Hires

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who were not employed in the corresponding time period.

* Significantly different from zero at the .05 level.

Table H.VII.1. Unemployment compensation receipt by quarter since random assignment (dislocated workers only)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Received unemployment compensation: (%)							
Quarter 1	57.2	55.7	52.6	1.5 (0.596)	3.2 (0.588)	4.6 (0.466)	0.3 (0.737)
Quarter 2	36.3	31.4	34.8	4.9 (0.205)	-3.4 (0.317)	1.5 (0.449)	0.9 (0.432)
Quarter 3	20.1	25.6	24.8	-5.5 (0.066)	0.9 (0.555)	-4.7 (0.121)	1.9 (0.176)
Quarter 4	13.2	18.6	21.3	-5.4 (0.056)	-2.7 (0.543)	-8.1 (0.207)	2.1 (0.136)
Quarter 5	10.0	17.3	14.5	-7.3 (0.103)	2.8 (0.236)	-4.5 (0.071)	1.8 (0.190)
Quarter 6	7.9	11.6	10.0	-3.8 (0.199)	1.6 (0.623)	-2.1 (0.112)	2.5 (0.101)
Quarter 7	7.5	11.3	4.9	-3.9 (0.241)	6.5 (0.125)	2.6 (0.087)	1.7 (0.204)
Quarter 8	7.3	7.3	8.0	0.0 (0.992)	-0.7 (0.492)	-0.7 (0.726)	0.3 (0.778)
Quarter 9	7.2	7.9	5.5	-0.7 (0.714)	2.4 (0.370)	1.7† (0.292)	0.6† (0.554)
Quarter 10	7.1	7.2	8.1	-0.1 (0.984)	-0.9 (0.796)	-1.0 (0.560)	0.2 (0.834)
Quarter 11	7.4	8.1	4.7	-0.7 (0.677)	3.4 (0.214)	2.7 (0.108)	1.4 (0.264)
Quarter 12	6.9	8.4	7.9	-1.5* (0.049)	0.4 (0.743)	-1.0 (0.534)	2.4 (0.106)
Quarters 1-12	69.3	67.5	69.1	1.8 (0.590)	-1.6 (0.476)	0.2 (0.945)	0.3 (0.742)
Amount[a] of unemployment compensation received: ($)							
Quarter 1	1,759	1,571	1,412	188 (0.438)	159 (0.138)	347 (0.224)	1.3 (0.290)
Quarter 2	986	881	773	106 (0.506)	108 (0.108)	214 (0.161)	2.2 (0.125)
Quarter 3	499	571	755	-72 (0.444)	-184 (0.442)	-256 (0.182)	1.9 (0.176)
Quarter 4	271	474	746	-203* (0.017)	-272 (0.386)	-475 (0.197)	3.5* (0.045)
Quarter 5	171	507	393	-336 (0.093)	114 (0.231)	-223 (0.053)	2.3 (0.120)
Quarter 6	171	167	237	4 (0.868)	-70 (0.056)	-65* (0.028)	2.9 (0.073)
Quarter 7	133	297	74	-164 (0.217)	223 (0.167)	59 (0.149)	1.2 (0.314)
Quarter 8	135	266	106	-131 (0.308)	160 (0.213)	28 (0.157)	1.8 (0.177)
Quarter 9	126	208	71	-82 (0.355)	137 (0.227)	54† (0.096)	1.5† (0.237)
Quarter 10	132	117	91	15 (0.456)	26 (0.340)	41 (0.227)	0.8 (0.476)

	Means			Impacts			
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	F-test
Quarter 11	141	161	95	-20 (0.476)	65 (0.317)	46 (0.377)	0.5 (0.598)
Quarter 12	99	242	181	-143 (0.200)	61 (0.239)	-82 (0.204)	0.9 (0.430)
Quarters 1-12	4,623	5,461	4,935	-838* (0.022)	526 (0.077)	-312 (0.100)	3.0 (0.065)
Sample size	**11,152**	**820**	**805**				

Source: National Directory of New Hires

Notes: Estimated means and impacts are regression-adjusted. Data are weighted to account for the probability (1) that the local area was selected to participate in the study, (2) that the local area agreed to participate in the study, (3) of assignment to each study group, and (4) that the customer consented to the study. Reported *p*-values for impacts are based on two-tailed t-tests. F-statistics and associated *p*-values are from tests of whether all three impacts for a specific outcome are zero. Appendix A provides more details about the weights and estimation approach.

[a] Means and impacts include zeroes for those who did not receive unemployment compensation in the corresponding time period.

* Significantly different from zero at the .05 level.

This page has been left blank for double-sided copying.

REFERENCES

Angrist, Joshua D., Guido W. Imbens, and Donald B. Rubin. "Identification of Causal Effects Using Instrumental Variables." *Journal of the American Statistical Association,* vol. 91, no. 434, 1996, pp. 444–455.

Azur, Melissa J., Elizabeth A. Stuart, Constantine Frangakis, and Philip J. Leaf. "Multiple Imputation by Chained Equations: What Is It and How Does It Work?" *International Journal of Methods in Psychiatric Research,* vol. 20, no. 1, 2011, pp. 40–49.

Biggs, D., B. de Ville, and E. Suen. "A Method of Choosing Multiway Partitions for Classification and Decision Trees." *Journal of Applied Statistics,* vol. 18, 1991, pp. 49–62.

Bloom, Howard S. "Accounting for No-Shows in Experimental Evaluation Designs." *Evaluation Review,* vol. 8, 1984, pp. 225–246.

Calmfors, Lars. "Active Labor Market Policy and Unemployment – A Framework for the Analysis of Crucial Design Features." *OECD Economic Studies*, vol. 22, no. 1, 1994, pp. 7–47.

Cameron, A.C., and D.L. Miller. "A Practitioner's Guide to Cluster-Robust Inference." *Journal of Human Resources,* vol. 50, no. 2, 2015, pp. 317–372.

Elliott, Michael R. "Model Averaging Methods for Weight Trimming in Generalized Linear Regression Models." *Journal of Official Statistics,* vol. 25, no. 1, 2009, p. 1.

Food and Nutrition Service. "Supplemental Nutrition Assistance Program: State Activity Report, Fiscal Year 2014." Washington, DC: Program Accountability and Administration Division, October 2015.

Gelfand, A.E., and A.F.M. Smith. "Sampling-Based Approaches to Calculating Marginal Densities." *Journal of the American Statistical Association,* vol. 85, 1990, pp. 398–409.

Geman, S., and D. Geman. "Stochastic Relaxation, Gibbs Distributions, and the Bayesian Restoration of Images." *IEEE Transactions on Pattern Analysis and Machine Intelligence,* vol. 6, 1984, pp. 721–741.

Holland, P.W. "Statistics and Causal Inference." *Journal of the American Statistical Association,* vol. 81, no. 396, 1986, pp. 945–960.

Imbens, G., and D. Rubin. *Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction.* Cambridge UK: Cambridge University Press, 2015.

Institute on Taxation and Economic Policy. "Who Pays? A Distributional Analysis of the Tax Systems in All 50 States, 5th Edition." Washington, DC: Institute on Taxation and Economic Policy, 2015. Available at http://www.itep.org/pdf/whopaysreport.pdf. Accessed August 23, 2016.

Internal Revenue Service. "IRS 1040 Instructions, 2012." Washington, DC: IRS, 2012. Available at https://www.irs.gov/pub/irs-prior/i1040--2012.pdf. Accessed August 23, 2016.

Izrael, D., M.P. Battaglia, and M.R. Frankel. "Extreme Survey Weight Adjustment as a Component of Sample Balancing (aka Raking)." In *Proceedings from the Thirty-Fourth Annual SAS Users Group International Conference*. Cary, NC: SAS Institute, 2009.

Johnson, Nate. "College Costs and Prices: Some Key Facts for Policymakers. Lumina Issue Papers." Lumina Foundation for Education, 2014. Available at https://www.luminafoundation.org/files/publications/issue_papers/College_Costs_and_Prices.pdf. Accessed December 21, 2016.

Kass, G.V. "An Exploratory Technique for Investigating Large Quantities of Categorical Data." *Applied Statistics,* vol. 29, no. 2, 1980, pp. 119–127.

Lee, Jin Hyuk, and John Huber, Jr. "Multiple Imputation with Large Proportions of Missing Data: How Much Is Too Much?" United Kingdom Stata Users' Group Meetings 23, Stata Users Group, 2011.

Lise, Jeremy, Shannon Seitz, and Jeffrey Smith. "Equilibrium Policy Experiments and the Evaluation of Social Programs." NBER working paper no. 10283. Cambridge, MA: National Bureau of Economic Research, 2004.

Mastri, Annalisa and AnnaMaria McCutcheon. Costs of Services Provided by the WIA Adult and Dislocated Worker Programs. Issue Brief. Oakland, CA: Mathematica Policy Research and Social Policy Research Associates, 2015.

Mastri, Annalisa, Sheena McConnell, Linda Rosenberg, Peter Schochet, Dana Rotz, Andrew Clarkwest, Ken Fortson, AnnaMaria McCutcheon, Katie Bodenlos, Jessica Ziegler, and Paul Burkander. "Evaluating National Ongoing Programs: Implementing the WIA Adult and Dislocated Worker Programs Gold Standard Evaluation." Report submitted to the U.S. Department of Labor. Washington, DC: Mathematica Policy Research, 2015.

McConnell, Sheena, Kenneth Fortson, Dana Rotz, Peter Schochet, Paul Burkander, Linda Rosenberg, Annalisa Mastri, and Ronald D'Amico. "Do Job Seekers Benefit from Services Provided by the WIA Adult and Dislocated Worker Programs? Impacts at 15 Months." Report submitted to the U.S. Department of Labor. Washington, DC: Mathematica Policy Research, May 2016.

Neyman, J. "On the Application of Probability Theory to Agricultural Experiments: Essay on Principles. Section 9." *Annals of Agricultural Science,* 1923. Translated in *Statistical Science,* vol. 5, no. 4, 1990.

Rotz, Dana, Paul Burkander, Kenneth Fortson, Sheena McConnell, Peter Schochet, Mary Grider, Linda Molinari, and Elias Sanchez-Eppler. "Do Job Seekers Benefit from Services Provided by the WIA Adult and Dislocated Worker Programs? Impacts at 15 Months. Technical Supplement." Report submitted to the U.S. Department of Labor. Washington, DC: Mathematica Policy Research, May 2016.

Royston, Patrick, and Ian R. White. "Multiple Imputation by Chained Equations (MICE): Implementation in Stata." *Journal of Statistical Software,* vol. 45, no. 4, 2011, pp. 1–20.

Rubin, D.B. "Estimating Causal Effects of Treatments in Randomized and Nonrandomized Studies." *Journal of Education Psychology,* vol. 66, 1974, pp. 688–701.

Rubin, D.B. "Assignment to Treatment Group on the Basis of a Covariate." *Journal of Education Statistics,* vol. 2, no. 1, 1977, pp. 1–26.

Schochet, P.Z. "An Approach for Addressing the Multiple Testing Problem in Social Policy Impact Evaluations." *Evaluation Review,* vol. 33, no. 6, 2009, pp. 539–567.

Schochet, Peter Z. "Statistical Theory for the RCT-YES Software: Design-Based Causal Inference for RCTs." Princeton, NJ: Mathematica Policy Research, 2016.

U.S. Congressional Budget Office. "The Distribution of Household Income and Federal Taxes, 2013." Washington, DC: CBO, June 2016. Available at https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51361-HouseholdIncomeFedTaxes_OneCol.pdf. Accessed August 23, 2016.

U.S. Department of Labor, Bureau of Labor Statistics. "Employer Costs for Employee Compensation, June 2016." Washington, DC: DOL, 2016. Available at http://www.bls.gov/news.release/pdf/ecec.pdf. Accessed November 8, 2016.

U.S. Department of Treasury. "Daily Treasury Real Long-Term Rates, Resource Center." Washington, DC: U.S. Department of Treasury, 2016. Available at https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=reallongtermrateAll. Accessed August 4, 2016.

U.S. House of Representatives, Committee on Ways and Means. *1998 Green Book*. Washington, DC: Government Printing Office, 1998.

U.S. House of Representatives, Committee on Ways and Means. *Green Book, 2014*. Washington, DC: U.S. House of Representatives, 2014.

van Buuren, S. "Multiple Imputation of Discrete and Continuous Data by Fully Conditional Specification." *Statistical Methods in Medical Research,* vol. 16, 2007, pp. 219–242.

van Buuren, S., J.P.L. Brand, C.G.M. Groothuis-Oudshoorn, and D.B. Rubin. "Fully Conditional Specification in Multivariate Imputation." *Journal of Statistical Computation and Simulation,* vol. 76, 2006, pp. 1049–1064.

White, I.R., P. Royston, and A.M. Wood. "Multiple Imputation Using Chained Equations: Issues and Guidance for Practice." *Statistics in Medicine,* vol. 30, no. 4, 2011, pp. 377–399.

This page has been left blank for double-sided copying.

This page has been left blank for double-sided copying.