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

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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.

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EXECUTIVE SUMMARY

With a growing need for a more skilled workforce, providing effective and efficient employment and training services is an important national priority. First authorized under the Workforce Investment Act of 1998 (WIA) and then reauthorized in 2014 under the Workforce Innovation and Opportunity Act (WIOA), the Adult and Dislocated Worker programs are two of the nation's largest publicly funded programs providing employment and training services.

Despite their importance, the Adult and Dislocated Worker programs have not been evaluated using the most rigorous methods. Hence, in 2008, the Employment and Training Administration within the U.S. Department of Labor (DOL) launched a national experimental evaluation of the two programs, the WIA Adult and Dislocated Worker Programs Gold Standard Evaluation. The evaluation's goals are to provide national estimates of the impacts and cost-effectiveness of the Adult and Dislocated Worker programs and to describe their implementation in detail.

This report presents the study's findings on the effectiveness of WIA-funded, staff-assisted employment services that are classified as intensive services, and WIA-funded training, both separately and together. The effectiveness of these services are measured relative to "core services" available to everyone at American Job Centers and other services in the community. The report presents estimated impacts of the services based on customers' experiences during the 30 months after they enrolled in the study. The report builds upon an earlier report (McConnell et al. 2016) that discussed estimated impacts in the first 15 months after customers enrolled in the study, as well as an implementation study conducted alongside the impact evaluation (D'Amico et al. 2015).

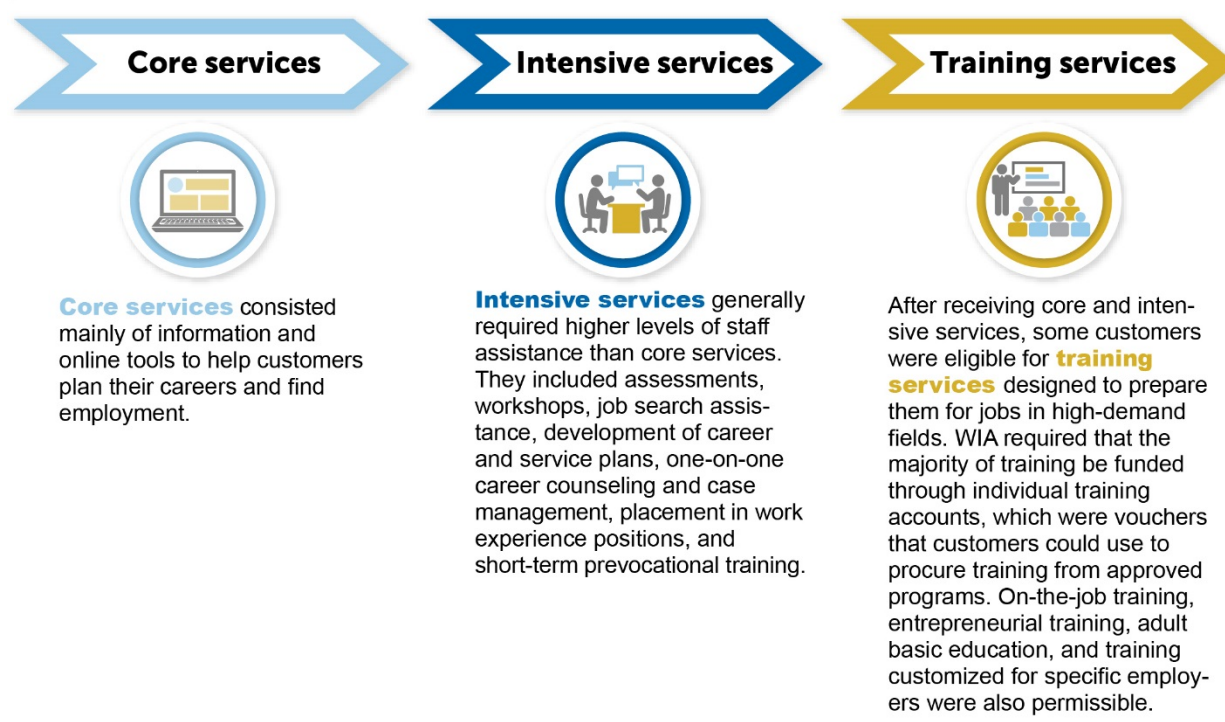
Although we studied the Adult and Dislocated Worker programs as they operated under WIA, the findings and lessons learned are still likely to be relevant under WIOA. WIOA made important changes to the workforce system—providing more flexibility in service delivery, requiring industry or sector partnerships to better meet the needs of the business community, increasing cross-agency service integration, strengthening performance accountability, expanding public access to training program performance, increasing services to individuals with barriers to employment, and increasing the emphasis on evaluation and evidence. However, despite these changes, the Adult and Dislocated Worker programs still offer a similar set of services and serve the same general populations. In addition, many of the important changes explicitly introduced by WIOA reflected changes the local areas were already making under WIA. Hence, our estimated impacts for training and intensive services under WIA are relevant for policy decisions under WIOA.

The Adult and Dislocated Worker programs

WIA required that Local Workforce Investment Boards, each responsible for managing services within a Local Workforce Investment Area (local area), establish a coordinated delivery system composed of American Job Centers (also known as One-Stop Career Centers). At these centers, the Adult and Dislocated Worker programs offered services in three tiers that provided progressively greater levels of assistance according to customers' needs: (1) core services, (2) intensive services, and (3) training services (Figure 1). Under WIOA, core and intensive services were merged into a single career services tier, but local areas can continue to offer the same set of services they offered under WIA. At the discretion of local areas, the Adult and

Dislocated Worker programs also offer some supportive services, such as assistance with expenses related to books, uniforms, tools, child care, and transportation.

Figure 1. Three tiers of services



The Adult and Dislocated Worker programs offer almost identical services, but each program has its own eligibility rules.

- Adult program services are available to customers ages 18 and older. In certain instances, such as when local areas determine funds are limited, recipients of public assistance and other low-income customers (as defined by WIA Section 101[25]) have priority for accessing intensive and training services.
- Dislocated Worker program services are available to customers who (1) were terminated or laid off from a job, showed attachment to the workforce, and were unlikely to return to their previous occupation or industry; (2) were terminated or laid off as a result of a plant closure or substantial plant downsizing; (3) were self-employed and experiencing unemployment as a result of general economic conditions; or (4) were displaced homemakers (people who had depended on income of another family member while providing unpaid services to family members in the home but are no longer supported by that income).

The evaluation design

The impact evaluation examined the effectiveness of the Adult and Dislocated Worker programs. It focused on the impacts of two key program services: intensive services and training services, relative to lower-tiered services. It addressed whether providing intensive services and training individually and together improved customers' employment-related outcomes such as

earnings, employment, and job quality. In summary, the evaluation addressed three main questions:

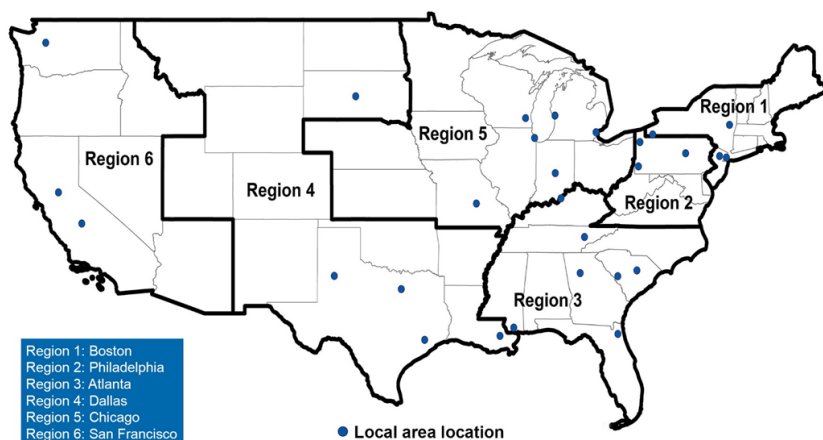
1. Did providing the full set of WIA services including core, intensive, and training services improve employment-related outcomes more than providing only core and intensive services?
2. Did providing core and intensive services improve employment-related outcomes more than providing core services only?
3. Did providing core, intensive, and training services improve employment-related outcomes more than only providing core services?

The evaluation focuses on answering these questions for adults and dislocated workers together but considers estimates separately for the two sets of customers as well.

The evaluation also included an implementation study and a benefit-cost analysis. D’Amico et al. (2015) and a series of briefs reported the findings of the implementation study. This report includes the findings from the benefit-cost analysis, which itemizes specific monetary benefits and costs of these services, considers who receives those benefits and pays those costs, and aggregates the specific benefits and costs into a net benefit of providing these services.

The evaluation produced nationally representative impacts of the Adult and Dislocated Worker programs based on 28 randomly selected local areas (Figure 2). Initially, we randomly selected 30 local areas from among 487 local areas operating in the contiguous 48 states and the District of Columbia as well as replacement local areas that were similar to each of the 30 originally selected areas. These 487 local areas excluded 76 local areas with fewer than 100 customers receiving intensive services annually because of the high costs of implementing the

Figure 2. Locations of the 28 randomly selected local areas participating in the study



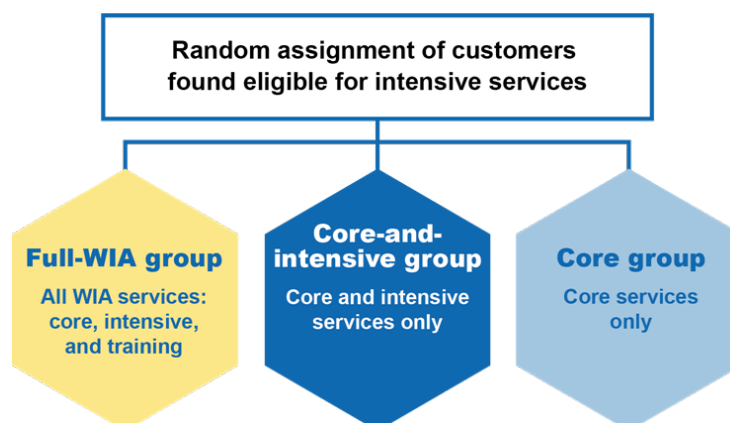
Source: WIA Gold Standard Evaluation.

intervention in areas that would supply only a small number of WIA customers for the study. In total, these 487 local areas served 98 percent of customers who received WIA-funded intensive services in the contiguous United States as of March 2008. Of the 28 local areas in the study, 26 were among the 30 originally selected areas and 2 were replacement local areas.

With some exceptions, all customers found eligible for intensive services in each local area in the study were randomly assigned into one of three study groups (Figure 3):

1. **Full-WIA group.** Customers in this group could potentially receive the full set of WIA core, intensive, and training services, just as they would in the absence of the evaluation.
2. **Core-and-intensive group.** Customers in this group could receive core and intensive services but could not receive training funded by the programs during the first 15 months after enrolling in the study.
3. **Core group.** Customers in this group could receive only core services from the programs and not intensive services or training during the first 15 months of the study.

Figure 3. The three study groups



As was the case under usual program operations, customers were not expected to participate in all offered services, even if they were assigned to the full-WIA group. For example, some customers might not choose to enroll in training because they preferred, or needed, to obtain a job. They may not have qualified for training funds based on the local area's eligibility criteria, and in some cases, the local area may have run out of WIA funding for training. Similarly, not all customers in the core-and-intensive groups received all offered intensive services.

Customers were enrolled in the study from November 2011 through April 2013, with most customers enrolled in 2012. Some categories of customers were excluded from the study because they were deemed to be priority groups for receiving services, were participating in other programs that required participation in the Adult or Dislocated Worker program, or were participating in other studies. For example, the study excluded veterans and participants in the Trade Adjustment Assistance program.

Estimating impacts

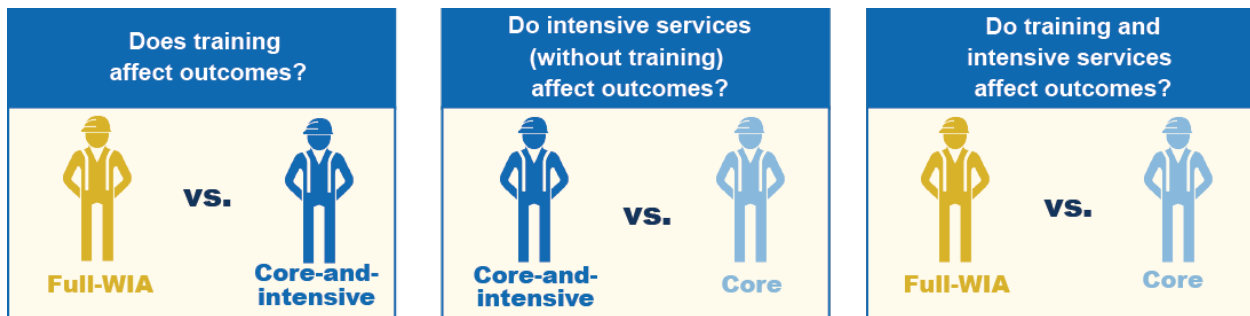
To address the research questions described earlier, we compared the service receipt, training enrollment, employment, and other outcomes of the customers in the three study groups (Figure 4).

- **To determine the effect of providing WIA-funded training services,** we compared the average outcomes of full-WIA customers with those of core-and-intensive customers. Conceptually, we compared a scenario where the Adult and Dislocated Worker programs provided the full set of current services (represented by the full-WIA group) to a scenario where the programs provided core and intensive services but not training (represented by the core-and-intensive group).
- **To determine the effect of providing WIA-funded intensive services,** we compared the average outcomes of core-and-intensive customers with those of core customers. Conceptually, we compared a scenario where the Adult and Dislocated Worker programs provided core and intensive services but not training (represented by the core-and-intensive

group) to a scenario where the Adult and Dislocated Worker programs provided core services and neither training nor intensive services (represented by the core group).

- **To determine the effect of providing both training and intensive services funded by WIA**, we compared the average outcomes of full-WIA customers with those of core customers. Conceptually, we compared a scenario where the Adult and Dislocated Worker programs provided the full set of current services (represented by the full-WIA group) to a scenario where the programs provided core services but neither training nor intensive services (represented by the core group).

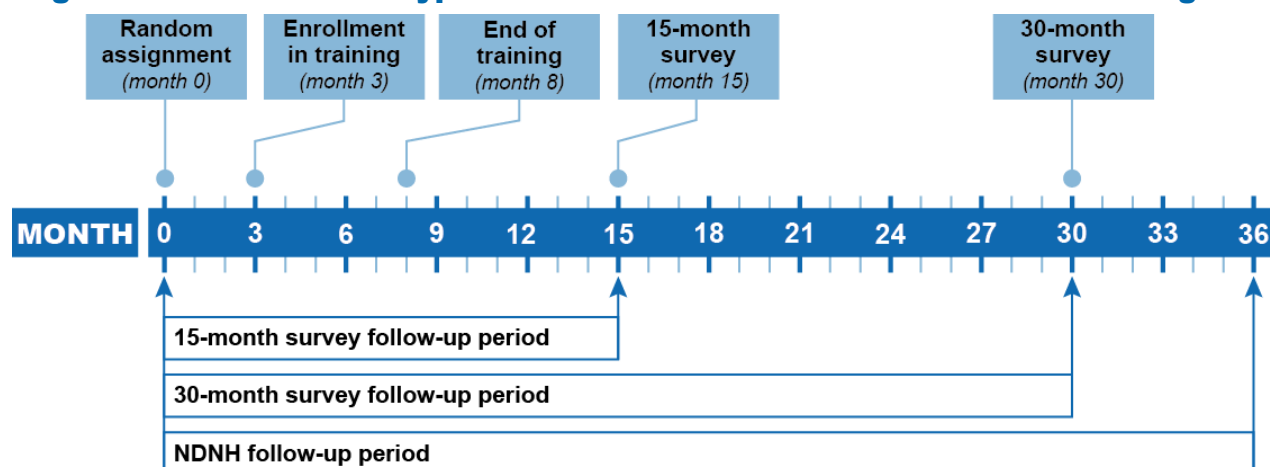
Figure 4. Comparing outcomes between the study groups



This report presents findings based on comparisons of outcomes measured using two sources of follow-up data: (1) follow-up surveys conducted at about 15 and 30 months after each study participant was randomly assigned and (2) the National Directory of New Hires (NDNH), an administrative database containing information on earnings, employment, and unemployment insurance benefits covering 36 months after each study participant was randomly assigned. The survey data cover a greater range of jobs than the NDNH but are potentially subject to nonresponse and recall biases and are not available for the entire sample of study participants. (The survey sample included all core-and-intensive and core customers and a sample of full-WIA customers.) In contrast, NDNH data are available for the entire sample and are not subject to recall error. However, NDNH data exclude some types of jobs, such as self-employment, most agricultural labor, and “under-the-table” jobs. Data on the characteristics of customers were collected from forms completed by the customers just before random assignment and additional data on service receipt were obtained from program administrative records.

Each customer was followed for 30 months after they were first found eligible for intensive services, enrolled in the study, and randomly assigned. The follow-up period covers weeks when many customers were receiving core and intensive services and enrolled in training, particularly in the first 15 months of the follow-up period. Among full-WIA customers who enrolled in and completed training programs, a typical customer enrolled in training near the end of the third month after random assignment and completed training about five months later (Figure 5), but there was substantial variation in the timing of training enrollment and completion. The survey follow-up period spans nearly two years beyond the time when customers typically completed training, and the NDNH follow-up period spans nearly two and a half years beyond when the typical study participant completed training. Intensive services were typically accessed earlier, during the first half of the follow-up period.

Figure 5. Timeline for a typical full-WIA customer who enrolled in training



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

Notes: Typical time of enrollment in training is the median month a study participant first enrolled in training among full-WIA customers who enrolled in any training program during the follow-up period. Typical end of training was calculated as the median months of enrollment in training plus the median month of first enrolling in training among customers who completed a training program.

Importantly, our analysis reflects that not all customers in the Adult and Dislocated Worker programs received all WIA services under normal program operations and could access similar services elsewhere. For this reason, understanding the services received by the full-WIA, core-and-intensive, and core groups is important for interpreting the earnings impact estimates. The estimates of the effects of *receiving* the services are likely to be larger than our estimates of the effects of the availability of these services—either more positive or more negative depending on whether the estimated effect is positive or negative.

The study examined whether the benefits of intensive and training services provided through the Adult and Dislocated Worker programs were large enough to justify their costs. We combined the estimated impacts—of which earnings impacts are most prominent—with the costs of the services customers received to estimate the net benefits associated with providing intensive services, training, and the two sets of services together. The net benefit, expressed as a dollar value, conveys the extent to which the benefits of offering WIA-funded intensive and training services exceed the costs of doing so, thus providing an easily interpretable metric for decision makers. Importantly, the benefits and costs take into account the earnings and other benefits and costs for each group. For example, when we compare the full-WIA group to the core group, we calculate the net benefits accounting for the fact that some customers in the core group are also enrolling in training, receiving other services, and finding employment. Likewise, we account for the fact that some full-WIA customers do not enroll in training in the follow-up period.

Context

By design, the 28 randomly selected local areas reflected the variation in local areas nationwide. Local areas in the study were spread across DOL's six administrative regions (Figure 2). They varied considerably in their size, funding, and number of customers served, as well as the degree of urbanicity. For example, the smallest local area in the study covered slightly more than

100 square miles and comprised only part of one county. In contrast, the largest local area in the study covered more than 75,000 square miles and included an entire state.

The study occurred at a time of high, but declining, unemployment. When the first person was randomly assigned in November 2011, the recession was officially over, but the national unemployment rate was still nearly 9 percent. The average unemployment rate was about 8 percent in 2012 (Bureau of Labor Statistics 2015), when most customers were randomly assigned.

At the same time, funding for the programs was declining, which led to fewer career counselors and less funding for training. In 2012, funding for the two programs was the lowest it had been in more than a decade. According to local area staff interviewed for the implementation study, these funding cuts led to the closing of some American Job Centers and a reduction in operating hours for others. Many local areas in the study ran out of training funds at some time during the follow-up period, so funds were not always readily available for training customers who were otherwise eligible for and interested in training.

Many customers faced multiple barriers to becoming employed. About 77 percent of customers had no more than a high school diploma or a General Educational Development certificate. About one-quarter of customers had not been employed in the five years before random assignment. More than a third of customers reported receiving assistance from the Supplemental Nutrition Assistance Program (SNAP) or Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) at the time of random assignment, and 30 percent reported receiving unemployment compensation.

Receipt of services and enrollment in training

Understanding differences in receipt of services and enrollment in training—whether these services were funded by the Adult and Dislocated Worker Programs or by other sources—is important for understanding what services customers are likely to receive in the absence of WIA funds for training or intensive services. Although during the first 15 months of the study customers in the core-and-intensive group were unable to receive WIA-funded training and customers in the core group were unable to receive WIA-funded intensive services or training, all customers in the study could receive services from other sources in the community. In turn, understanding the differences in the receipt of services by study group helps clarify the interpretation of the impacts on employment outcomes.

Customers in the full-WIA group used more services than customers in the core-and-intensive group, who in turn used more services than customers in the core group, in the 30 months after random assignment (Table 1). Full-WIA customers were more likely than core-and-intensive customers to take an assessment and receive supportive services. Compared to core customers, full-WIA customers were more likely to use a resource room, participate in workshops, take assessments, meet one on one with a staff member, and receive supportive services. In addition, core-and-intensive customers were more likely than core customers to participate in workshops, take assessments, meet one on one with a staff member, and receive supportive services. Survey data suggest that full-WIA customers also received an average of 42 more minutes of one-on-one assistance than core customers (including zero minutes for customers who received no assistance) in the 30 months after random assignment; core-and-intensive customers received an average of 27 more minutes of one-on-one assistance than core customers.

Table 1. Differences in receipt of core, intensive, and supportive services

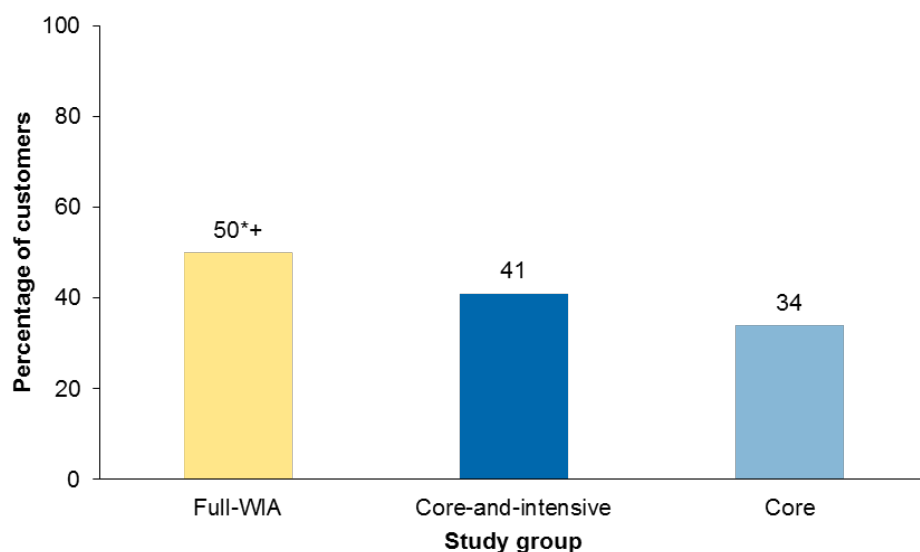
Service received or accessed during the 30 months after random assignment at an American Job Center or elsewhere	Comparisons between study groups		
	Full-WIA versus core-and-intensive	Core-and-intensive versus core	Full-WIA versus core
Resource room	0	0	+
Workshops	0	+	+
Job clubs	0	0	0
Assessments	+	+	+
One-on-one assistance	0	+	+
Supportive services	+	+	+

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

0 indicates no statistically significant difference at the 5 percent level.

+ indicates a statistically significant positive difference at the 5 percent level.

Relative to providing only core and intensive services, providing the full set of WIA services increased the proportion of customers who enrolled in a training program in the 30 months after random assignment (Figure 6). Fifty percent of full-WIA customers enrolled in training at some point in the 30-month follow-up period, whether funded by WIA or another source. Full-WIA customers were 9 percentage points more likely to enroll in training than core-and-intensive customers and 16 percentage points more likely to enroll in training than core customers (Figure 6). They spent on average about 89 more hours in training than core-and-intensive customers (including zero hours for customers who did not enroll in training) and 121 more hours in training than core customers.

Figure 6. Enrollment in training funded by any source in the 30 months after random assignment (all customers)

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

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Difference between the core-and-intensive and core groups is not significant at the 5 percent level.

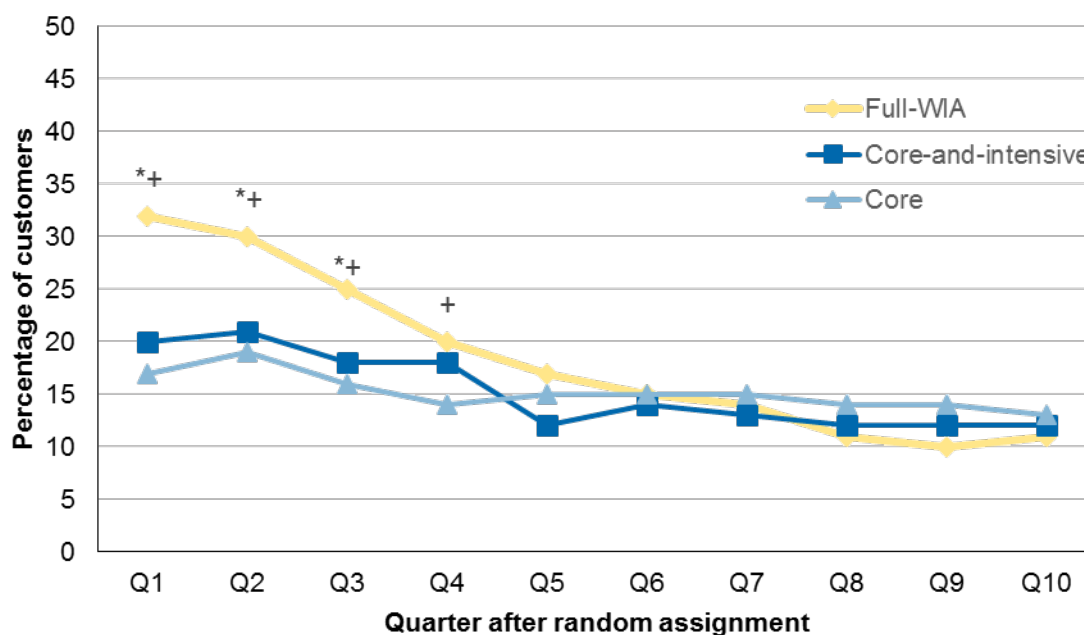
+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Only about one-third of full-WIA customers enrolled in WIA-funded training. Thirty-one percent of full-WIA customers received training funded by WIA during the first 15 months after random assignment. Some customers assigned to the full-WIA group might not have been eligible for training or did not complete all the activities required to be approved for WIA-funded training; others may have been eligible for training but chose not to enroll in training because of personal preferences or constraints. Finally, some full-WIA customers may have not participated in WIA-funded training because their local area exhausted all training funds. The full-WIA customers who enrolled in training not funded by the Adult or Dislocated Worker programs received funding from other sources or paid for training themselves.

Many customers in the core-and-intensive and core groups still enrolled in training even though they could not access Adult and Dislocated Worker funds for training. Forty-one percent of the core-and-intensive group and 34 percent of the core group enrolled in training, which they paid for themselves or by using sources of funding other than WIA (Figure 6).

Full-WIA customers were more likely to enroll in training than core-and-intensive customers in the first three quarters after random assignment. Rates of training enrollment were highest, and differences across study groups in these rates were largest, in the first quarter after random assignment and then generally declined over time (Figure 7). By the end of the follow-up period, the rates of training enrollment in all three study groups were similar.

Figure 7. Enrollment in training (all customers), by quarter



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

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

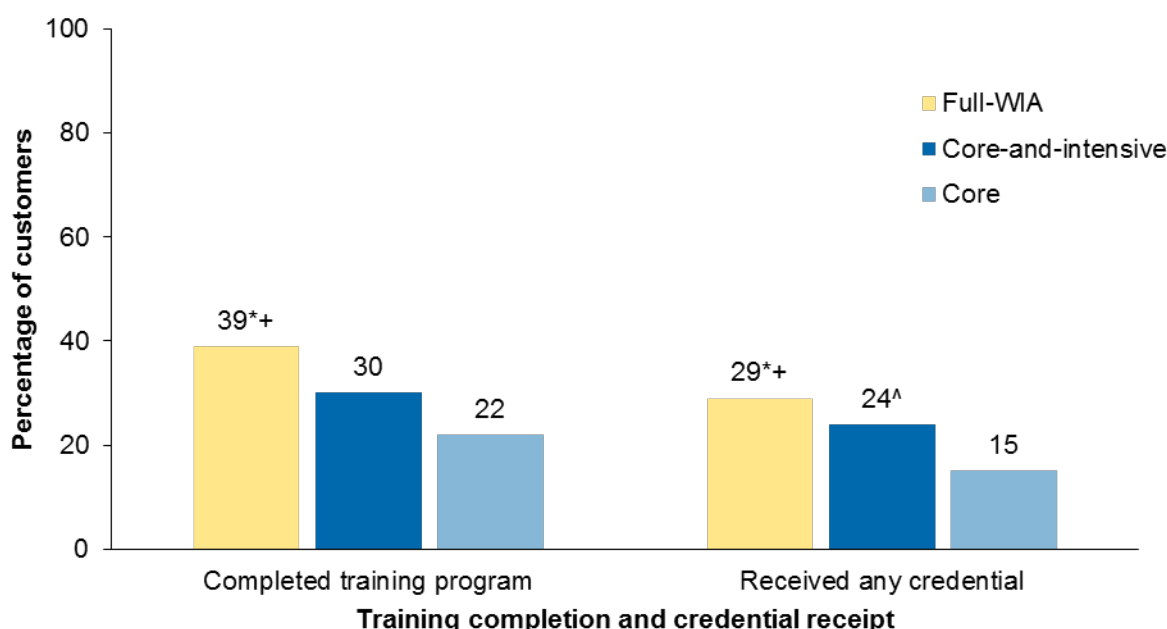
No differences between the core-and-intensive and core groups are significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

Relative to providing only core and intensive services, providing the full set of WIA services increased the rate at which customers completed training programs and received credentials for doing so. Thirty-nine percent of full-WIA customers completed a training program during the follow-up period, compared with 30 percent of core-and-intensive customers (Figure 8). Likewise, 29 percent of full-WIA customers reported receiving a credential from a training program during the 30-month follow-up period, compared with 24 percent of core-and-intensive customers.

Figure 8. Completion of a training program and receipt of a credential for completing a training program (all customers)



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

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

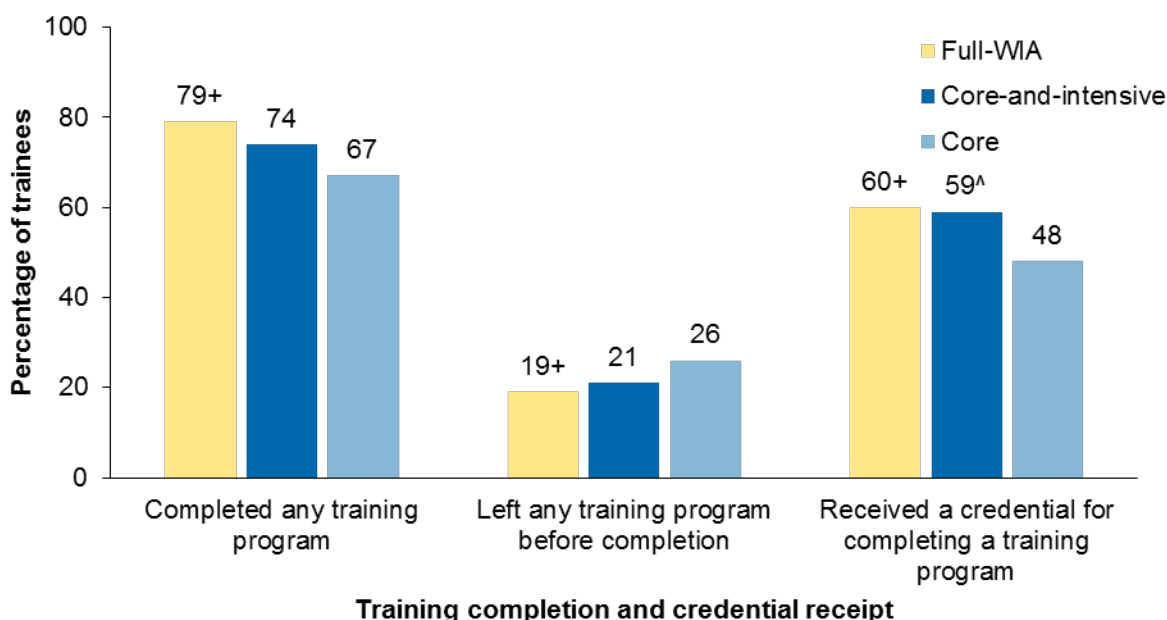
^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

However, for those who enrolled in a training program, customers in the full-WIA and core-and-intensive groups were about as likely to have completed a training program or received a credential from a training program (Figure 9). Hence, the increased likelihood of full-WIA customers completing a training program and receiving a credential was because they were more likely to enroll in a training program.

Relative to providing only core services, providing WIA-funded intensive services increased receipt of credentials. Customers in the core-and-intensive group were more likely to receive a credential than those in the core group (Figure 8). This is true even among those customers who enrolled in training (Figure 9). This may be because employment counselors from the Adult and Dislocated Worker programs steered customers to choose training programs that led to credentials or provided support for them while they were enrolled in the training.

Figure 9. Completion of a training program and receipt of a credential for completing a training program (trainees)



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

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Providing WIA-funded training did not affect whether customers chose vocationally-oriented versus general education training programs, but providing intensive services did.

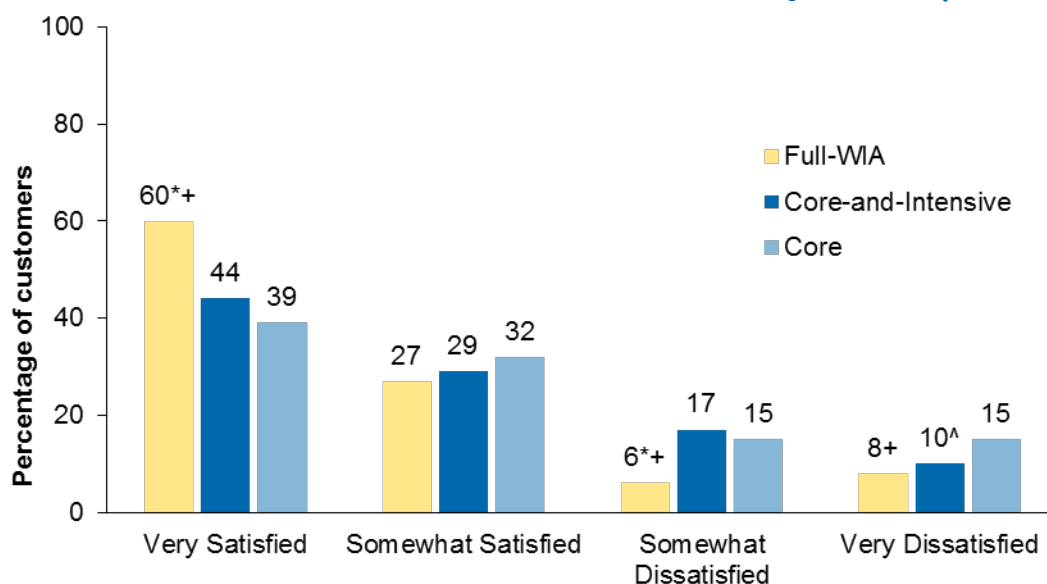
In both the full-WIA and core-and-intensive groups, 91 percent of trainees enrolled in a vocational training program, compared to 86 percent of trainees in the core group. Again, this may have been because of the advice or support provided by employment counselors. In all three study groups the training programs had similar occupational focuses, although customers in the full-WIA group were more likely to enroll in truck driving programs than customers in the other study groups.

Being in the full-WIA group was also associated with an increased likelihood of enrolling in training at a vocational institute or training center. Three categories of providers—vocational institutes or training centers, employers, and community colleges—were most commonly reported as providing training across the three study groups. But trainees in the full-WIA group received training at a vocational institute or training center more often than trainees in the core-and-intensive or core groups. Conversely, trainees in the full-WIA group were less likely than trainees in the core-and-intensive and core groups to report enrolling in an online training program.

In each research group, more than 70 percent of customers reported that they were either very or somewhat satisfied with their overall experience at an American Job Center (Figure 10). Not surprisingly, customers in the full-WIA group, who had access to a wider range

of services, were more satisfied with the American Job Center services, on average, than customers in the other study groups. Most customers (60 percent) in the full-WIA group reported being very satisfied with their experience at the American Job Center, compared with 44 percent of core-and-intensive customers and 39 percent of core customers.

Figure 10. Satisfaction with American Job Center experience (all customers)



Source: WIA Gold Standard Evaluation 30-month follow-up survey.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Impacts on earnings and employment of WIA-funded training

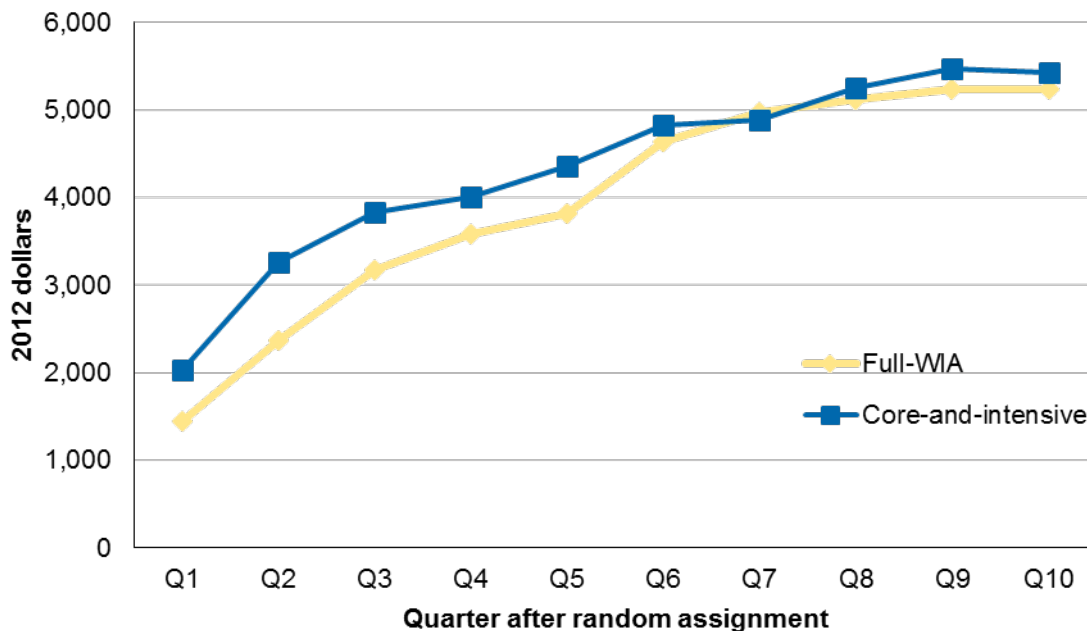
Because differences across groups in rates of enrollment in training were small, our study produced inconclusive evidence on the impact of training in the 30 months after study enrollment. As discussed above, the percentage of customers in the full-WIA group who enrolled in training in the 30-month follow-up period was only 9 percentage points higher than the percentage of customers in the core-and-intensive group who enrolled in training. This difference in the training rate was smaller than expected because both fewer full-WIA customers and more core-and-intensive customers enrolled in training.

Though not conclusive, our findings suggest that providing WIA-funded training did not increase earnings or improve employment-related outcomes in the 30 months after random assignment relative to providing only core and intensive services:

- We found no significant differences in employment or earnings between the full-WIA and core-and-intensive groups throughout the 30-month follow-up period. In the first five quarters of the follow-up period, full-WIA customers tended to have lower employment rates and earnings than core-and-intensive customers (Figure 11), but these estimated differences

are not statistically significant. This pattern is consistent with the higher training rates for the full-WIA group in this early period (noted earlier in Figure 7). By the end of the follow-up period, full-WIA customers had similar average quarterly earnings and employment rates as core-and-intensive customers.

Figure 11. Earnings for full-WIA and core-and-intensive groups from survey data (all customers), by quarter



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

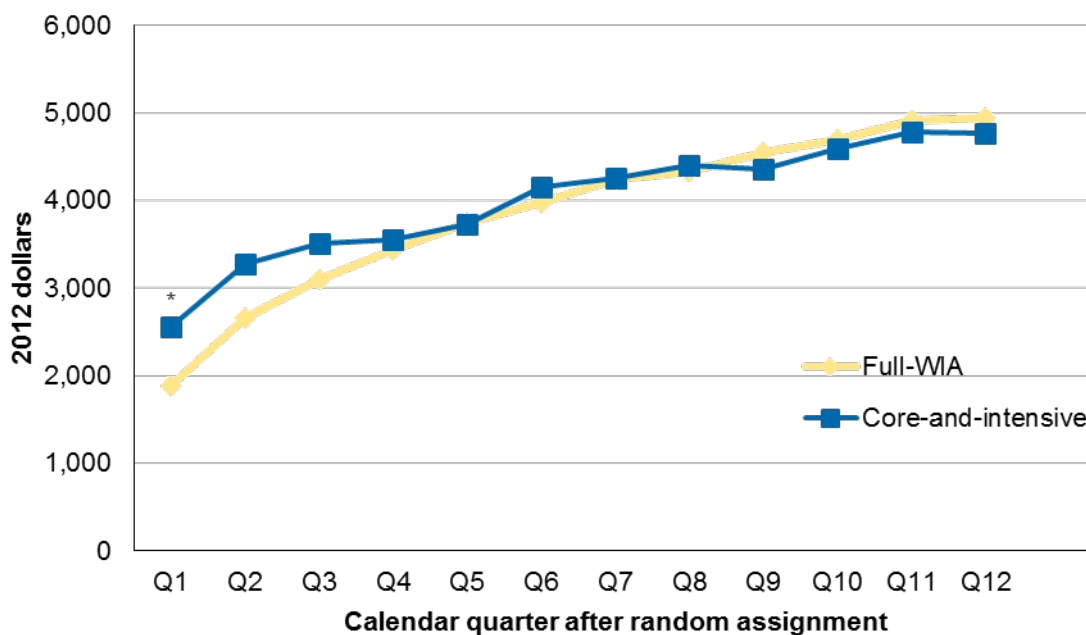
None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

Q = quarter.

- The patterns of impacts are similar for earnings and employment when measured using the survey and NDNH data (Figure 12).
- On average, the jobs obtained by full-WIA customers had similar wage rates as those obtained by core-and-intensive customers and were similarly likely to offer fringe benefits such as health insurance and retirement benefits.

Fewer than half of all customers in the full-WIA and core-and-intensive groups who enrolled in occupation-specific training found employment in a related occupation. Only 41 percent of full-WIA customers and 38 percent of core-and-intensive customers who enrolled in a training program linked to a specific occupation found a job in that occupation. The estimated difference between the groups is not statistically significant.

Figure 12. Earnings for full-WIA and core-and-intensive groups from NDNH (all customers), by quarter



Source: National Directory of New Hires.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

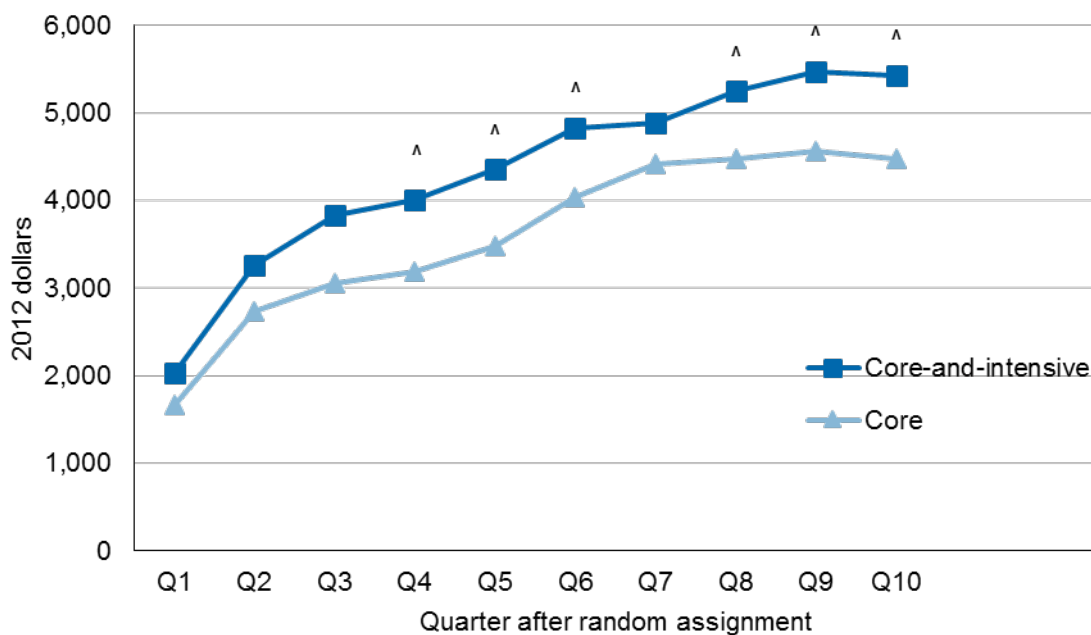
Q = quarter.

Though not conclusive, our findings suggest that providing WIA-funded training represented a net cost to both customers and taxpayers during the follow-up period. This cost arose mainly from the earnings forgone when the customers were in training. Early in the follow-up period, when full-WIA customers were more likely than core-and-intensive customers to enroll in training, they worked and earned less. Their quarterly earnings caught up to those of the core-and-intensive group in the latter half of our follow-up period, but these increases did not offset the earnings losses customers incurred while in training. Positive impacts on earnings would have to materialize after the three-year follow-up period for WIA-funded training to be a net benefit.

Impacts on earnings and employment of WIA-funded intensive services

Our findings suggest that providing intensive services increased earnings and employment. According to both survey and NDNH data, WIA-funded intensive services increased earnings during the 30-month follow-up period. According to the survey data, WIA-funded intensive services increased earnings beginning in the fourth quarter after random assignment and for most subsequent quarters (Figure 13). The impacts using NDNH data are also positive but smaller, and fewer are statistically significant (Figure 14).

Figure 13. Earnings for core-and-intensive and core groups from survey data (all customers), by quarter

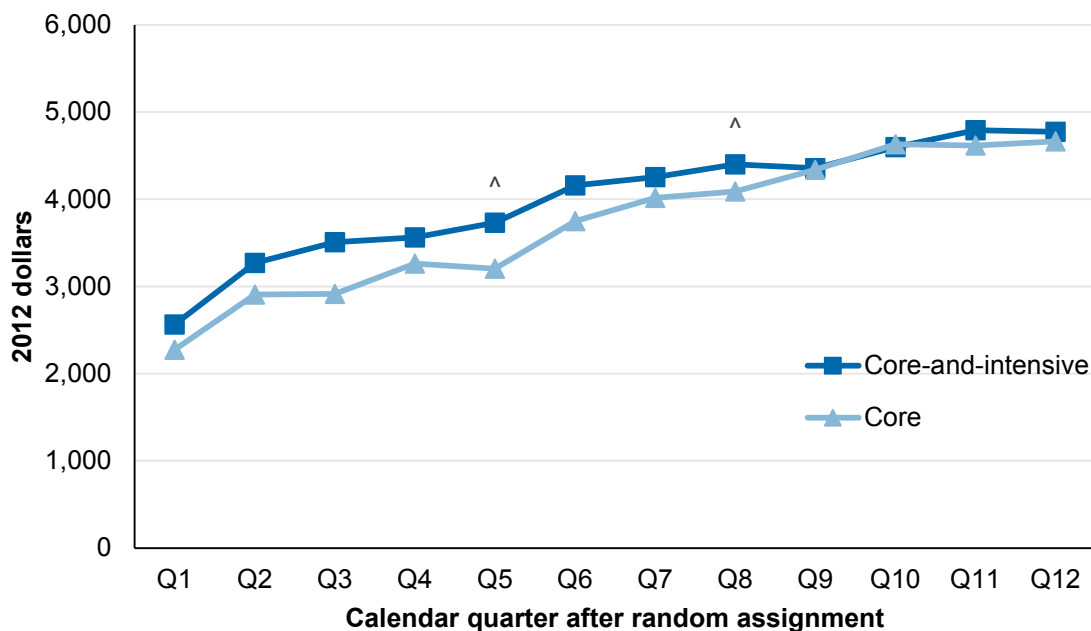


Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up survey.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

Q = quarter.

Figure 14. Earnings for core-and-intensive and core groups from NDNH (all customers), by quarter



Source: National Directory of New Hires.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

Q = quarter.

-
- The survey data indicate that core-and-intensive customers earned about \$7,100, or 20 percent, more than core customers over the entire 30-month follow-up period (Figure 13). This impact is partly explained by core-and-intensive customers having higher employment rates, and partly by them having higher wage rates.
 - The impact on earnings estimated using the NDNH data is smaller—about \$3,300, or 7 percent, over 36 months—but still statistically significant (Figure 14).
 - Core-and-intensive customers were more likely to have jobs that offered fringe benefits such as health insurance and paid holidays than were core customers.

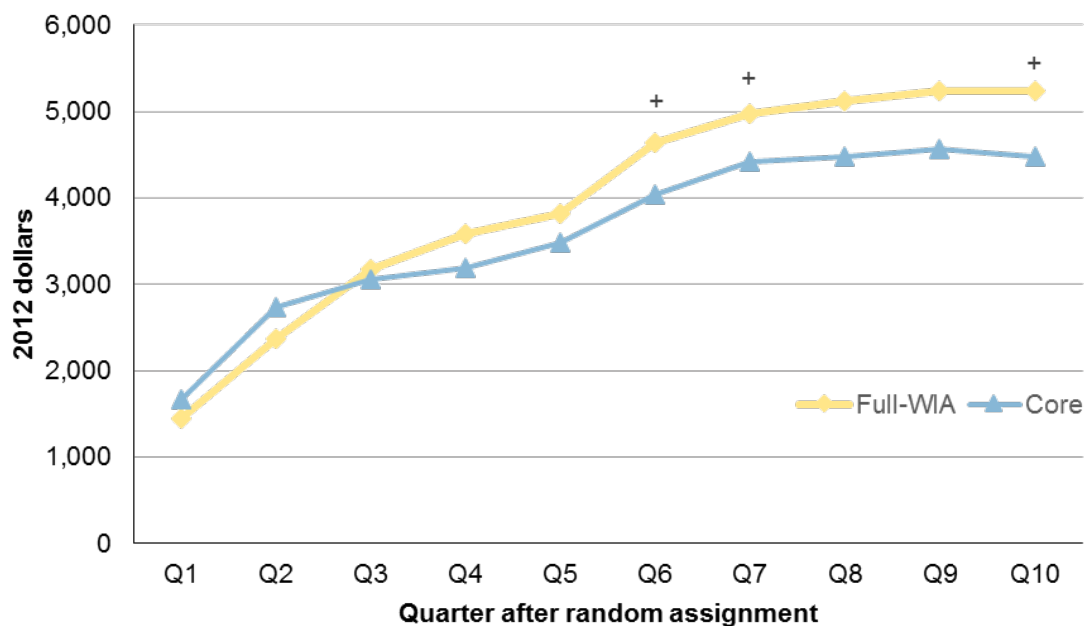
The results of the benefit-cost analysis indicate that providing intensive services is a good investment from the standpoint of both customers and taxpayers. This conclusion holds whether using survey or NDNH data, and is robust to other sensitivity tests. Customers and society benefit from intensive services because of the increased earnings that result from these services. Taxpayers benefit because the increased taxes paid on the increased earnings are larger than the cost of the services.

Impacts on earnings and employment of WIA-funded intensive services and training together

According to both survey and NDNH data, relative to providing only core services, providing WIA-funded intensive and training services increased earnings during the 30-month follow-up period. According to survey data, WIA-funded training and intensive services increased earnings in each quarter after the third, and this increase was statistically significant in Quarters 6, 7, and 10 (Figure 15). The estimates using NDNH data show similar, but smaller and less often statistically significant, impacts (Figure 16).

- Throughout the 10 quarters after random assignment, we estimate that the full-WIA group earned about \$3,400 more on average than the core group (Figure 15). This estimate is not statistically significant. However, the full-WIA group earned \$3,200 more than the core group—a statistically significant difference—during the second half of the follow-up period, when most of those who enrolled in training had completed or dropped out of their training program.
- According to the NDNH data, full-WIA customers' average earnings were higher than those of the core group in each of Quarters 3 through 12, although the difference is statistically significant only in Quarter 5 (Figure 16).
- Given that WIA-funded training did not have positive impacts on employment and earnings, we attribute the higher earnings for the full-WIA group compared with the core group to WIA-funded intensive services rather than WIA-funded training.

Figure 15. Earnings for full-WIA and core groups from survey data (all customers), by quarter

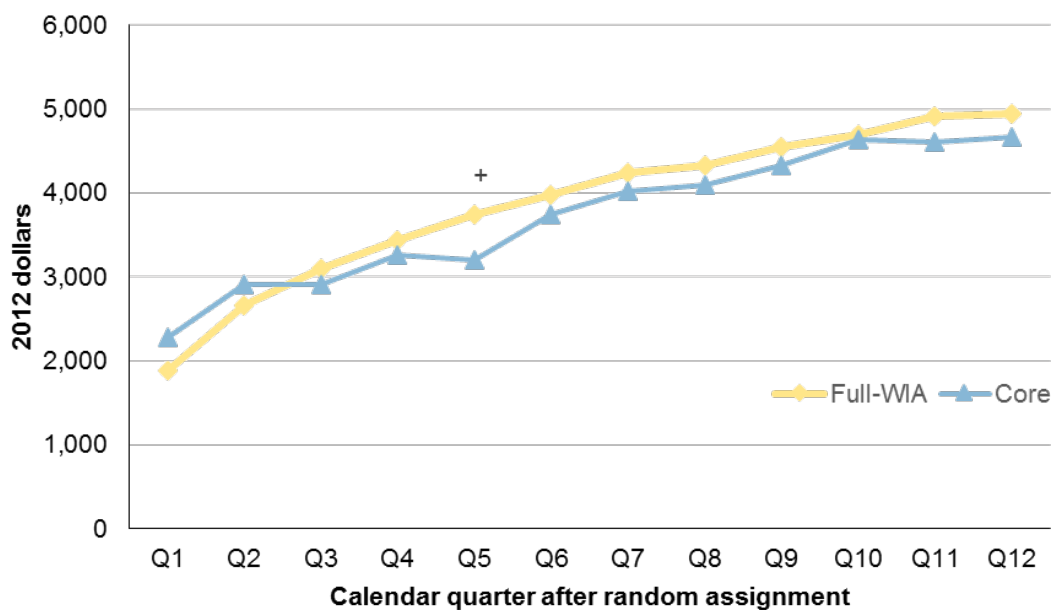


Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up survey.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

Figure 16. Earnings for full-WIA and core groups from NDNH data (all customers), by quarter



Source: National Directory of New Hires.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

As with intensive services alone, relative to providing only core services, the results of the benefit-cost analysis indicate that providing training and intensive services together is a good investment from the standpoint of customers and taxpayers.

Discussion

This study was designed to test the effectiveness of intensive services and training funded through the Adult and Dislocated Worker programs compared to all other services available to customers. Importantly, the Adult and Dislocated Worker programs' provision of intensive services and training does not mean that all customers will receive all of those services. Additionally, in the absence of funding for intensive services and training through the Adult and Dislocated Worker programs, customers could access similar services elsewhere. Hence, understanding the services received by the full-WIA, core-and-intensive, and core groups is crucial for interpreting the earnings impact estimates and is thus an integral part of the study. Of particular importance are the findings that about half of the full-WIA group enrolled in training, and that many customers in the core-and-intensive and core groups, who were not eligible for WIA-funded training, still enrolled in training which they paid for themselves or from other sources.

WIA-funded intensive services were effective. Providing intensive services increased earnings over the follow-up period by \$3,300 to \$7,100 (7 to 20 percent) per customer depending on the data source. The positive impacts of intensive services on earnings stem from a combination of factors. Core-and-intensive customers were more likely to be employed in most quarters, worked more hours, and had higher average hourly wages than core customers—though not all of these estimated differences were statistically significant. In addition, the jobs held by core-and-intensive customers were more likely than the jobs held by core customers to offer fringe benefits. Core-and-intensive customers were also more likely than core customers to choose vocational training programs and obtain a credential for training, even though the training was not funded by WIA. This suggests that employment counselors may have affected customers' choice of training program or provided support while they were in training.

These effects are consistent with the past literature on intensive services, and job-search assistance more broadly. In particular, in a nonexperimental study, Heinrich et al. (2013) found that intensive services funded by the Adult and Dislocated Worker programs increased employment and earnings. Moreover, studies have shown that job-search assistance can increase employment and earnings and decrease unemployment insurance receipt in the short run (Meyer 1995; O'Leary 2004; Katz 2014).

The benefit-cost analyses demonstrate that providing intensive services is cost-effective from the perspectives of customers, taxpayers, and society as a whole. This is true under a wide range of assumptions including if impacts decreased to zero after the end of the follow-up period. Because intensive services are relatively inexpensive, society as a whole benefits from these services by about \$8,500 per customer according to the survey data, and by about \$3,000 according to the NDNH data.

Because differences across groups in rates of enrollment in training were small, our study produced inconclusive evidence on the impact of training in the 30 months after study enrollment. The difference in the training rates between the full-WIA and core-and-intensive groups was only 9 percentage points. This finding that so many core-and-intensive customers enrolled in training is important and suggests the value customers believe training has, but does limit what we can say about the effectiveness of training.

Though not conclusive, the evidence suggests that WIA-funded training does not have positive impacts in the 30 months after study enrollment. On average, training funded through the Adult and Dislocated Worker programs, above and beyond core and intensive services, did not improve customers' employment outcomes within the 30-month follow-up period. In the final quarters of the study, the estimated impacts on earnings were negative but not statistically significant according to the survey data and positive but close to zero according to the NDNH data. The estimated impacts on earnings over the whole follow-up period were negative (but again not statistically significant) according to both data sources. We did not find training to be cost effective from the perspective of customers, taxpayers, or society as a whole.

Following the study participants for more than three years could possibly result in later positive impacts on earnings that offset the forgone earnings and the cost of the training programs. However, the evidence suggests that it is not likely that the impacts will increase because the difference across groups in enrollment in training disappeared by the beginning of the second year after random assignment. Furthermore, a typical full-WIA customer completed training about eight months into the follow-up period, so most training participants were out of training well before the end of the follow-up period. Finally, most previous studies that found training had positive impacts on earnings for populations similar to those served by the Adult and Dislocated Worker programs found that this typically occurs within three years of enrollment (Card et al. 2015). This did not occur in our study according to the survey or NDNH data.

This study only examined the effectiveness of the types of training programs funded by the Adult and Dislocated Worker programs during the follow-up period and not all training. Our study suggests factors that might have diminished the effectiveness of the WIA-funded training that could help guide future improvements:

- The evidence suggests that training funded by the Adult and Dislocated Worker programs under WIA did not always closely align with the needs of local employers. Only half of customers who enrolled in training reported that they found employment because of their training, and only about two of every five full-WIA customers who enrolled in training for a specific occupation found a job in that same occupation. WIOA's greater focus on sector initiatives, employer-recognized credentials, and work-based training could result in more effective training. Recent studies indicate that job training in targeted sectors developed in close collaboration with employers was effective (Hendra et al. 2016; Maguire et al. 2010).
- About one in five full-WIA customers who enrolled in a training left a program before completing it. Training programs are not likely to be effective for customers who do not complete them. Customers did not complete programs for a range of reasons including finding jobs, becoming ill or pregnant, and facing financial or logistical issues. Some customers might be more likely to complete training if they received more supportive

services. Only about 20 percent of full-WIA customers received any supportive services from the Adult or Dislocated Worker programs, and the amounts they received were relatively low.

- Training dollars were limited during the follow-up period. In 2012, funding for the two programs was the lowest it had been in more than a decade. Funding cuts also led to fewer career counselors, less funding for training, and reductions in supportive services (D’Amico et al. 2015). Thus, funds might not have been readily available for training customers who were otherwise eligible for and interested in training. Those who received training funds might not have been able to afford their preferred programs or receive the requisite program counseling to fully support their training choices and experiences.

The study findings suggest that policymakers should continue to invest in staff assistance, but look for effective training approaches. Our study found that staff assistance and other intensive services are effective. However, intensive services alone are unlikely to help all customers achieve satisfactory longer-term employment outcomes and economic self-sufficiency. At the end of our follow-up period, 20 percent of core-and-intensive customers were not employed, their annual household incomes were only about \$30,000, and many still relied on public assistance. Thus, employment services that improve job skills are still needed in addition to staff assistance to help customers obtain self-sufficiency. The changes made to the Adult and Dislocated Worker programs under WIOA, particularly loosening previous restrictions on employer-based training, may improve the effectiveness of training provided by the Adult and Dislocated Worker programs. Policymakers should continue to fund, and evaluate, innovative approaches to training to identify effective approaches and meet the needs of America’s job seekers and employers.

I. INTRODUCTION

With a growing need for a more skilled workforce, providing effective and efficient employment and training services is an important national priority. First authorized under the Workforce Investment Act of 1998 (WIA) and then reauthorized in 2014 under the Workforce Innovation and Opportunity Act (WIOA), the Adult and Dislocated Worker programs are two of the nation’s largest publicly funded programs providing employment and training services. In program year 2015—July 1, 2015, through June 30, 2016—the Adult and Dislocated Worker programs together received about \$2 billion in funding and served about 6.6 million customers.

Despite their importance, the Adult and Dislocated Worker programs have not been evaluated using the most rigorous methods. In 2008, the Employment and Training Administration (ETA) within the U.S. Department of Labor (DOL) launched a national experimental evaluation of the two programs, the WIA Adult and Dislocated Worker Programs Gold Standard Evaluation (WIA Gold Standard Evaluation). The evaluation’s goals are to provide national estimates of the impact and cost-effectiveness of the Adult and Dislocated Worker programs and to provide a detailed description of their implementation.

This report presents the study’s findings on the effectiveness of the Adult and Dislocated Worker programs’ intensive services—primarily staff assistance—and training, both separately and together. The effectiveness of these services are measured relative to “core services” available to everyone at American Job Centers and other services in the community. It presents estimated impacts of the services based on customers’ experiences during the 30 months after they enrolled in the study. The report builds upon an earlier report (McConnell et al. 2016) that discussed the estimated impacts measured 15 months after customers were found eligible for intensive services.

In the rest of this chapter, we present an overview of the Adult and Dislocated Worker programs (Section A); discuss how the programs have changed under WIOA (Section B); present an overview of the WIA Gold Standard Evaluation (Section C); and summarize the findings from the implementation study (Section D), the 15-month impact study (Section E), and prior studies of the programs (Section F). We conclude the chapter by presenting a road map to the subsequent chapters of this report (Section G).

A. The Adult and Dislocated Worker programs

Although a wide variety of workforce investment programs were implemented during the Great Depression, the U.S. federal government began to provide these services via large-scale programs only in the 1960s. In 1962, Congress enacted the Manpower Development and Training Act, which provided training to 1.9 million workers (Mangum 1968). In 1964 and 1965, these services were further augmented by several Great Society programs, which provided workforce development services for disadvantage populations and at-risk youth. The Comprehensive Employment and Training Act began to consolidate these different programs in 1973 and was followed by The Job Training Partnership Act (JTPA) in 1982.

JTPA provided workforce development services through separate funding streams for disadvantaged workers, youth, and dislocated workers, which were distributed by formula to

states (Barnow and Smith 2016). Local areas administered JTPA services and states played a large role in overseeing the performance of local areas. In addition, JTPA focused strongly on serving economically disadvantaged workers and hard-to-serve populations, and it encouraged an increased role for the private sector in the workforce system. Continuing a trend within the workforce system, many different programs operated independently to provide workforce services throughout the JTPA period. In 1994, the public workforce system included 14 government agencies administering 150 programs (U.S. Government Accountability Office 1994).

WIA took effect in 1998 (U.S. Congress 1998) in response to concern that the public workforce system was excessively fragmented and lacked effective coordination and collaboration. This fragmentation resulted in redundancies, inefficiencies, and a confusing maze of programs that customers found difficult to navigate (U.S. Government Accountability Office 1994). Congress enacted WIA with the goals of reducing this fragmentation and making the public workforce system more customer-focused and demand-driven, ultimately helping job seekers to find and prepare for high quality jobs and employers to recruit productive workers. Six underlying principles that apply to the Adult and Dislocated Worker programs (U.S. Department of Labor 2000) formed the basis of WIA:

1. **Streamlining service delivery through program integration.** WIA mandated the establishment of a coordinated service delivery system composed of American Job Centers (originally called One-Stop Career Centers). It designated more than a dozen separately funded programs as mandatory partners in this system. Partners included the Adult, Dislocated Worker, and Youth programs; Unemployment Insurance (UI); Wagner-Peyser Employment Service (providing job search assistance, job referrals, and placement assistance to jobseekers; reemployment services to UI recipients; and assistance in identifying candidates for job openings to employers); Job Corps (providing residential education and vocational training to at-risk youth); Veterans Employment and Training Services (providing employment services to veterans with significant barriers to employment and reaching out to employers on behalf of veterans); Trade Adjustment Assistance (TAA, providing training and re-employment services to workers negatively impacted by international trade); Vocational Rehabilitation (for individuals with disabilities); adult education and literacy activities authorized by Title II of WIA; postsecondary vocational education programs authorized under the Carl D. Perkins Career and Technical Education Act; and others. WIA section 121(b)(1)(B) provides a list of all mandatory partners.
2. **Providing universal access to basic services.** WIA gave everyone access to basic or core services offered at American Job Centers. These core services included resources that customers might use with minimal or no staff assistance to find and apply for jobs and plan careers.
3. **Empowering individuals through a customer-focused approach to services.** WIA encouraged customers to take charge of their own career planning by first accessing self-directed core services. Further, customers approved for training could access services using individual training accounts (ITAs), which operate like vouchers that customers use to choose training programs from approved providers.

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4. **Promoting state and local flexibility.** Operating on the premise that states and localities know best what service designs and delivery strategies are optimal for their communities, WIA further devolved decision-making authority away from the federal level. State governors designated Local Workforce Investment Areas (local areas) and oversaw the work of these areas' Local Workforce Investment Boards (LWIBs). Each LWIB was responsible for designing its local area's service system, within the framework established by WIA. For example, it had the discretion to determine the emphasis on various services (such as training versus core services), the contracted service providers, the location of American Job Centers, and the customers targeted for services. Each of ETA's six regional offices oversaw the implementation of the WIA programs in a specific set of states.
 5. **Promoting system accountability.** While devolving authority downward, WIA enhanced the focus on accountability and continuous improvement by mandating that local areas meet minimum standards on performance measures relating to customers' success in obtaining and retaining employment. It also required training providers to meet performance criteria to be eligible to serve ITA holders.
 6. **Engaging businesses as important customers.** WIA emphasized the importance of meeting the needs of businesses *and* job seekers. Accordingly, the legislation required businesses to have majority representation on each state workforce board and each LWIB. Further, the act required American Job Centers to offer services to businesses and to provide job seekers with funding to train only for skills deemed to be in high demand by local businesses.

Depending on their needs and eligibility, customers of the Adult and Dislocated Worker programs could receive services through three tiers: (1) core services, which either were self-directed (accessed from resource rooms located at the American Job Centers or via the Internet) or required a modest amount of staff assistance; (2) intensive services, which generally required more staff assistance than core services; and (3) training. Adult and Dislocated Worker program funding for training is viewed as "funding of last resort" and can cover only training costs not funded from other sources. Customers are not offered funding for training if, for example, it could be covered by a private scholarship or a federal Pell grant. WIA provided for a tiered system of services: intensive services were provided to customers unable to obtain employment through core services alone and training services to customers who were not able to obtain employment after receiving intensive services.

The act required that all recipients of WIA-funded intensive services or training be legally able to work in the United States and that men be registered with the Selective Service System, if appropriate. Otherwise, it allowed each local area to develop its own eligibility criteria for these services, within the parameters noted below. The Adult and Dislocated Worker programs offer almost identical services, but each program has its own eligibility rules.

- Adult program services are available to customers ages 18 and older. In certain instances, such as when local areas determined funds were limited, recipients of public assistance and other low-income customers (as defined by WIA Section 101(25)) have priority for accessing intensive and training services.

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- Dislocated Worker program services are available to customers who (1) were terminated or laid off from a job, show attachment to the workforce, and are unlikely to return to their previous occupation or industry; (2) were terminated or laid off as a result of a plant closure or substantial plant downsizing; (3) were self-employed and experiencing unemployment as a result of general economic conditions; or (4) are displaced homemakers, individuals who had provided unpaid services to family members in the home while depending on income of another family member but are no longer supported by that income.

B. Changes to the programs under WIOA

WIOA represented the first significant reform of the public workforce system since WIA's enactment in 1998 (U.S. Congress 2014). It has undergone a phased implementation, with major programmatic changes effective on July 1, 2015, and performance accountability changes effective on July 1, 2016.

Much of what we learn from studying the Adult and Dislocated Worker programs under WIA will likely apply to these programs as they are implemented under WIOA. WIOA left in place most of WIA's key principles, retained the American Job Centers, and reauthorized the Adult and Dislocated Worker programs. The two programs include the same basic set of services offered under WIA and retain similar eligibility rules. Customers continue to choose their training programs under some restrictions and with guidance from program staff. Moreover, some of the important changes introduced by WIOA add flexibility for local areas to continue in directions they were already heading:¹

- **Merging core and intensive services into one tier.** WIOA combines core and intensive services into a single career services tier. Local areas can continue to offer the core and intensive services they offered under WIA as career services. The implementation study conducted alongside this impact evaluation concluded that the distinction between core and intensive services was not always clear cut even under WIA (D'Amico et al. 2015). For example, assistance with developing a résumé from a staff member in the resource room was considered a core service; yet, the same assistance given outside the resource room from an employment counselor in the same American Job Center was considered an intensive service.
- **Eliminating the expectation that customers would typically access service tiers sequentially.** WIOA allows customers to receive training before intensive services; in addition, by merging core and intensive services, it allows customers to receive what had been an intensive service without receiving a core service. Under WIA, many local areas already moved customers through core and intensive services quickly. For example, some local areas counted the interactions with the center greeter as the core service required for intensive service eligibility and the determination of training eligibility as the intensive service receipt required for training eligibility.
- **Promoting improved workforce system partnerships.** WIOA requires that states and workforce system partners in each local area develop unified strategic plans and report on common measures of performance. It adds Temporary Assistance for Needy Families (TANF) as a mandatory American Job Center partner unless a state opts not to require it. It

¹ See the study's implementation study report (D'Amico et al. 2015) for more information.

also requires the collocation of WIOA programs and the Wagner-Peyser Employment Service, which already occurred in most local areas.

- **Emphasizing credentials.** WIOA emphasizes the importance of customers obtaining industry-recognized credentials. However, even under WIA, some local areas either made training approval contingent on the possibility of attaining a credential or provided a higher ITA amount for programs that led to credentials.

Other changes made by WIOA include:

- **Aligning workforce and economic development goals.** WIOA requires local areas within an economic region to coordinate with one another and emphasizes sector-based strategies to promote employment in high-demand industries and occupations.
- **Promoting work-based training.** WIOA relaxes restrictions on the use of training for employed workers and increases the maximum allowable reimbursements to employers for on-the-job and customized training. It also authorizes transitional job placements.
- **Increasing the flexibility to transfer funds between the Adult and Dislocated Worker programs.** Under WIA, local areas' ability to transfer funds between the two programs varied based on state-obtained waivers. WIOA allows the transfer of 100 percent of funds between the two programs without a waiver.
- **Enhancing the performance accountability system.** WIOA adds new performance measures to promote accountability within the public workforce system. In addition to the employment-related measures under WIA, WIOA requires local areas to measure their effectiveness in serving employers and customers' credential attainment and skills gain.

C. Overview of the WIA Gold Standard Evaluation

The evaluation's objectives are to estimate the impacts and cost-effectiveness of intensive and training services relative to lower-tiered services provided through the Adult and Dislocated Worker programs and to examine how the programs were implemented nationwide. The evaluation was not designed to estimate the impact of core services even though these were important services used by millions of customers. Evaluating core services experimentally would have required denying some customers any service from an American Job Center, which was not acceptable to the local areas. Furthermore, the evaluation focuses on the services offered by the Adult and Dislocated Worker programs using the formula funds or program funds provided directly to local areas and not held in reserve at the national or state levels. Hence, it does not include specific federal grants, such as the National Emergency Grants, or state funds used for rapid-response activities; those activities aim to meet the needs of workers resulting from specific plant or company closings.

The evaluation addresses three main sets of research questions:

1. Did providing services in the Adult and Dislocated Worker programs improve employment-related outcomes (such as employment, earnings, and use of public assistance)?
 - Did providing core and intensive services improve employment-related outcomes more than providing core services only?

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- Did providing the full set of WIA services, including core, intensive, and training services, improve employment-related outcomes more than providing core and intensive services only?
 - Did providing the full set of WIA services improve employment-related outcomes more than providing core services only?
2. Did the benefits from intensive and training services exceed their costs?
 3. How were the Adult and Dislocated Worker programs implemented?

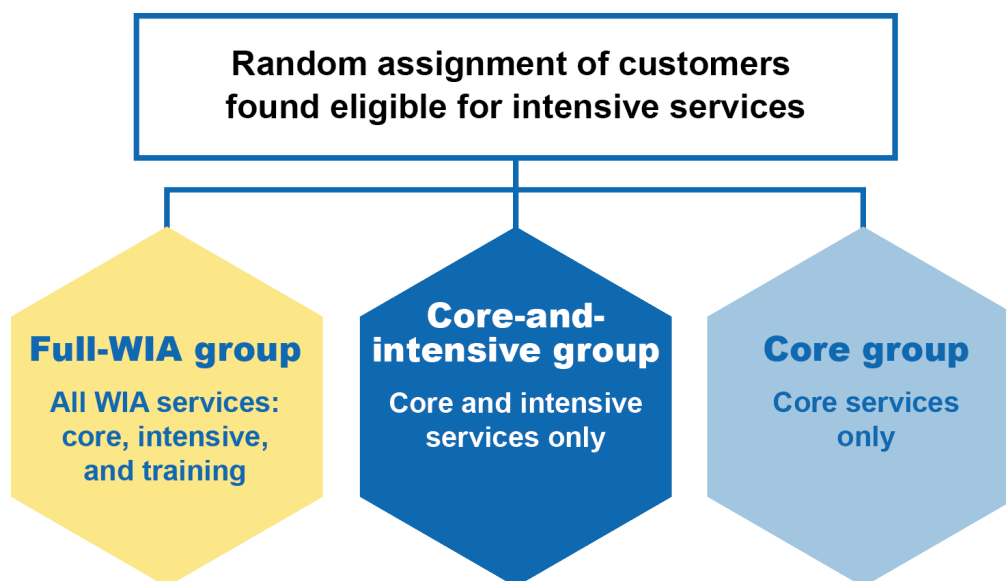
To answer these research questions, the study design included three mutually reinforcing components: (1) an impact study that focuses on the first set of research questions, (2) a benefit-cost study that focuses on the second question, and (3) an implementation study that focused on the third question.

This report presents the findings from the impact and benefit-cost studies, using data collected about 30 months after customers enrolled in the study. A previous report presented findings from the impact study based on data collected 15 months after random assignment of customers (McConnell et al. 2016). D’Amico et al. (2015) and a series of 11 issue briefs discuss the implementation of the programs. Rosenberg et al. (2015) presents findings from a study of workforce services provided to veterans. [Mathematica’s project webpage, https://www.mathematica-mpr.com/our-publications-and-findings/projects/wia-gold-standard-evaluation](https://www.mathematica-mpr.com/our-publications-and-findings/projects/wia-gold-standard-evaluation) and the [DOL ETA publication database, https://wdr.doleta.gov/research/keyword.cfm?fuseaction=dsp_pub_list](https://wdr.doleta.gov/research/keyword.cfm?fuseaction=dsp_pub_list) each list the currently published issue briefs and reports from this study.

The study team designed the evaluation to produce nationally representative and experimental estimates of the impacts of the Adult and Dislocated Worker programs. The study occurred in 28 randomly selected local areas that were representative of all but the smallest programs operating in the contiguous 48 states and the District of Columbia. With some exceptions, such as TAA program participants and veterans,² all customers found eligible for intensive services were randomly assigned into one of three study groups: (1) the full-WIA group, which could receive all services—core, intensive, and training—that the group members would be eligible for in the absence of the study; (2) the core-and-intensive group, which could receive core and intensive services but not training; and (3) the core group, which could receive only core services (Figure I.1). Importantly, the study estimates impacts for *providing* these services, reflecting the fact that most customers do not receive every service because they chose not to receive them or they may not be eligible for them according to criteria that varied by local area. The study enrolled customers from November 2011 through April 2013, with most customers enrolled in 2012. The 15- and 30-month surveys were timed such that each respondent was interviewed about 15 and 30 months after their individual study enrollment dates.

² Chapter II describes the exceptions in detail.

Figure I.1. The three groups to which customers in the study were assigned

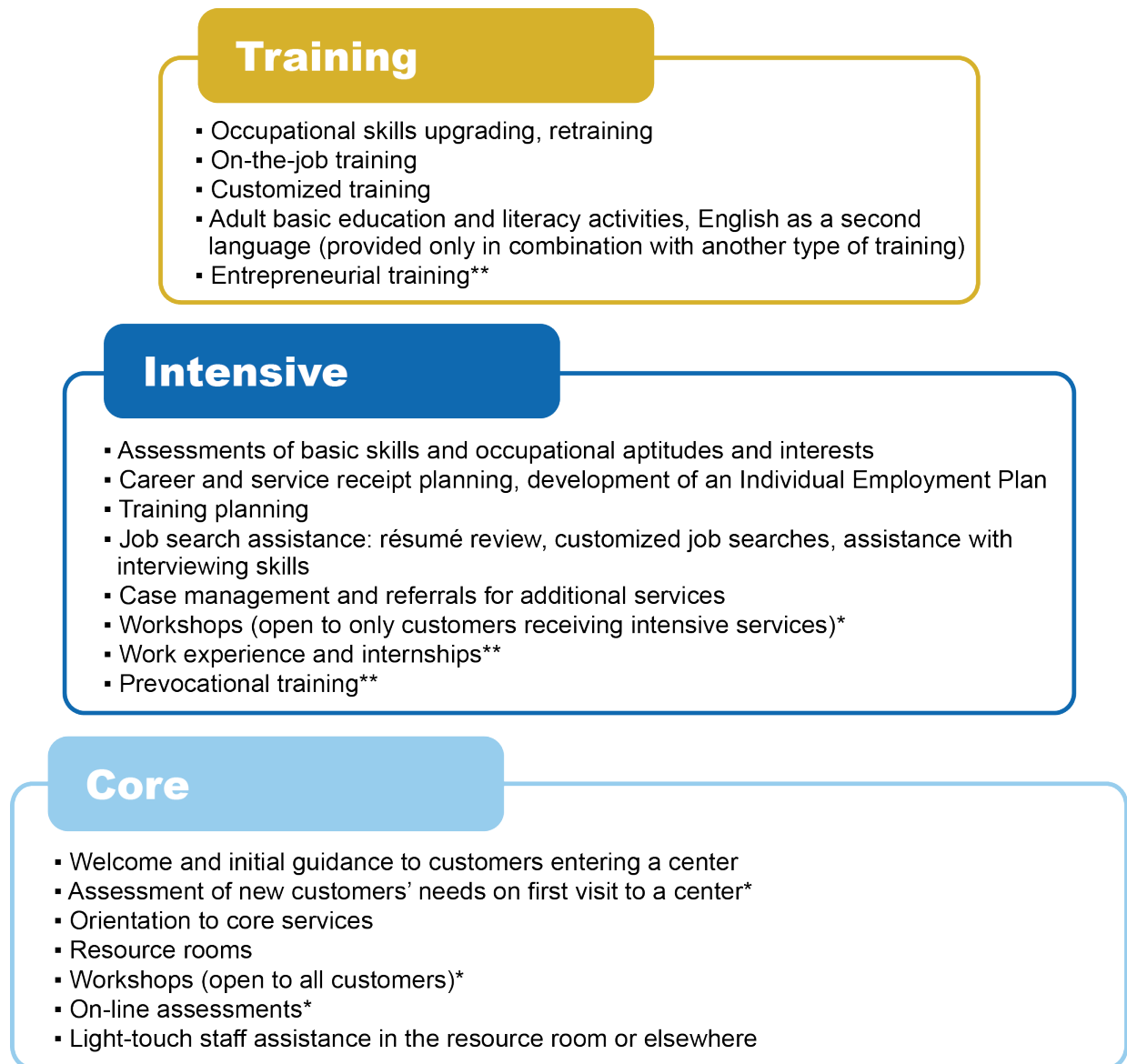


The study uses data about participants collected from self-administered forms completed at the time they enrolled in the study, the National Directory of New Hires (NDNH), the Workforce Investment Act Standardized Record Data (WIASRD), and two follow-up surveys conducted at about 15 and 30 months after random assignment. We use these data to compare the service receipt, training enrollment, and labor market and other outcomes of the customers in the study over a 30-month period. These data also enable us to calculate and compare the benefits and costs of making WIA-funded services available to customers. Chapter II provides more information about the design of the impact study.

D. What we learned from the implementation study

Through the WIA Gold Standard Evaluation's implementation study (D'Amico et al. 2015), we found that most local areas offered the same basic set of services—a resource room, workshops, assessments, career and service planning, and training—but local areas varied in the exact services they provided and to whom they offered the services. The resource room typically provided information about available community services, job matching systems, labor market information, and job search and career exploration tools. Individualized assistance by a career counselor was the key feature of intensive services and included career and service receipt planning and case management. Customers generally received occupational training through an ITA, but some could receive entrepreneurial training, on-the-job training (training provided by an employer while the customer is employed and the customer's wage is subsidized by the local area), or customized training developed for a particular employer and provided to current or prospective employees. Figure I.2 provides a list of the services that the local areas in the study provided. Because we selected local areas for the study to be nationally representative, it represents the services that were offered in local areas across the United States as well.

Figure I.2. Types of services offered by local areas in the study



Source: D'Amico et al. (2015).

*In some, but not all, local areas.

**Rarely offered, and offered to only a small number of customers.

Eligibility for intensive services and training varied by local area. Local areas considered customers ineligible for intensive services if they had one or more serious challenges to successfully finding or keeping a job (such as a substance abuse problem) or if they lacked the motivation to find employment, but how local areas implemented these criteria varied. To receive training funding, most local areas required that customers meet specific local area eligibility criteria, such as a minimum education level, minimum work experience, attainment of a minimum score on basic skills tests, and evidence of the necessary supports to complete training. Customers typically had to develop a training plan that involved completing a series of activities, such as researching occupations and training programs. In addition to ensuring an

informed choice, some local areas used these activities to test customers' motivation and hence their likelihood of completing the training program and becoming employed.

Local areas could also offer supportive and follow-up services to Adult and Dislocated Worker program customers. Supportive services refers to assistance to help customers succeed in their job search and training activities and to address barriers to employment. Examples of supportive services include bus passes or help paying for gas, tools, uniforms, and child care. The Adult and Dislocated Worker programs fund some of these services; more frequently, program staff refer customers to other programs for these services. Follow-up services typically involve phone calls to customers to provide support to the customers and document their labor market experiences after they had left the program (to gather data for performance measures).

Study local areas implemented one of three general approaches to serving customers new to the American Job Centers. Eighteen study local areas offered a customer-initiated approach, in which staff directed these new customers first to use the resource room, typically after receiving an orientation to center services. These customers could receive additional staff assistance if they were unsuccessful in searching independently for a job. However, to address a concern that some new customers might not have the skills to conduct an effective job search independently, staff in eight study local areas conducted an enhanced intake on all new customers when they first visited the center. This enhanced intake involved an initial assessment of the customers' needs. Staff then directed customers deemed capable of finding a job without more staff assistance to use the resource room; they provided other customers with more intensive staff assistance (either a staff-assisted core service or an intensive service). In the remaining two study local areas, the Adult and Dislocated Worker programs almost exclusively served customers interested in training; greeters directed new customers interested in job search to resource rooms overseen by Wagner-Peyser Employment Service staff, and new customers interested in training met with a WIA career counselor to determine their eligibility for training.

E. What we learned from the 15-month impact study

The evaluation's earlier 15-month impact report (McConnell et al. 2016) provided an initial assessment of the impacts of providing services funded by the Adult and Dislocated Worker programs. Key findings include:

- There were meaningful differences across study groups in the receipt of core, intensive, and supportive services. In the 15 months following random assignment, customers in the full-WIA group received more services than core-and-intensive group customers, who in turn received more services than core group customers.
- Training funded by the Adult and Dislocated Worker programs increased the likelihood that customers would enroll in any training program (funded by WIA or another source).
- Many customers were still enrolled in training in the fifth quarter after random assignment. This suggests that the 15-month time horizon discussed in the earlier report was too short to judge the effectiveness of WIA-funded training, in isolation or combined with WIA-funded intensive services.

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- Intensive services, when offered without training, increased customers' earnings. However, there was little evidence of the efficacy of WIA-funded training, when available with or without WIA-funded intensive services, after 15 months.

F. Evidence from prior studies

Although the WIA Gold Standard Evaluation is the only experimental study of the Adult and Dislocated Worker programs, well-implemented non-experimental studies have been conducted (Hollenbeck et al. 2005; Heinrich et al. 2008, 2013; Hollenbeck and Huang 2008; Hollenbeck 2009; Andersson et al. 2013; Heinrich and Mueser 2014; Hollenbeck and Huang 2014; Bendewald et al. 2016). Heinrich et al. (2008, 2013) and Andersson et al. (2013) addressed the research questions most comparable to those addressed by the WIA Gold Standard Evaluation. The other non-experimental studies generally estimated the impact of the receipt of services from any of the eight or nine programs funded by WIA compared with receiving no services from any WIA program, rather than the impact of only the Adult and Dislocated Worker programs compared to lower-tiered services.

Although the Heinrich et al. (2008) study did not select a sample to be representative of the programs nationally, it did include customers from 12 states that vary in region of the country and economic conditions: Connecticut, Indiana, Kentucky, Maryland, Missouri, Minnesota, Mississippi, Montana, New Mexico, Tennessee, Utah, and Wisconsin. It examined the impact of the programs on customers who began receiving services from July 2003 to June 2005, which was about eight years before customers in this study began receiving services. Andersson et al. (2013) conducted a similar analysis with 1999–2005 data from two unnamed states.

Both studies found the effects of receiving training were mixed (Table I.1). Enrollment in WIA-funded training generally led to negative impacts on earnings in the first quarter after receiving the first program services. This would be expected if enrollment in training limited the time available for paid work. Training resulted in increases in earnings in later quarters for those served under the Adult program. Training did not boost earnings for dislocated workers in the four years of follow-up in the Heinrich et al. (2008) study, but did slightly after about two-and-a-half years in one of the states examined in Andersson et al. (2013). These mixed effects are consistent with the null effects reported in the WIA Gold Standard Evaluation 15-month impact report, given that the WIA Gold Standard Evaluation uses a broader, nationally representative sample that includes both adults and dislocated workers.

Heinrich et al. (2008) also estimated the impact of receiving core and intensive services. The authors compared the outcomes of customers who received these WIA-funded services with those of customers who did not receive these WIA-funded services but received either UI or services from the Wagner-Peyser Employment Service, depending on the state. Heinrich et al. (2008) studied only those core services for which there were administrative data on their receipt. As local areas are required to report only the receipt of core services that involve staff assistance, core services that customers accessed with little to no staff assistance were not studied.

Table I.1. Summary of findings from multistate non-experimental studies of the Adult and Dislocated Worker programs

Program	Gender	Impacts on quarterly earnings in quarter after entering the program			
		Quarter 1	Quarter 5	Quarter 10	Quarter 16
Impact of the receipt of training (Heinrich et al. 2008)					
Adult	Female	-220*	451*	835*	917*
Adult	Male	192*	497*	585*	1,285*
Dislocated Worker	Female	-629*	-883*	-39	-2
Dislocated Worker	Male	-447*	-574*	-49	-164
Impact of the receipt of staff-assisted core and intensive services (Heinrich et al. 2008)					
Adult	Female	569*	400*	296*	238*
Adult	Male	665*	317*	250*	365*
Dislocated Worker	Female	-3	240*	309*	476*
Dislocated Worker	Male	-28	148*	320*	323*
Impact of the receipt of training (Andersson et al. 2013)					
Adults	State A	-597*	-11	393*	NA
Dislocated Workers	State A	-939*	-478*	-155	NA
Adults	State B	-688*	24	405*	NA
Dislocated Workers	State B	-1,258*	-662*	163*	NA

Sources: Heinrich et al. (2008) and correspondence with the authors, and Andersson et al. (2013).

Note: Earnings for Heinrich et al. (2008) are expressed in 2005 dollars and those of Andersson et al. (2013) are in 2008 dollars.

* Significantly different from zero at the 5 percent level.

NA = not available.

Heinrich et al. (2008) found that the receipt of staff-assisted core and intensive services led to increased earnings. Adults—both men and women—received a boost in earnings of \$665 or \$569, respectively, in the first quarter after entering the program. That boost declined over time but was still significant four years after they entered the program. The earnings benefits from receiving staff-assisted core and intensive services increased over time among dislocated workers. (Andersson et al. [2013] did not estimate the impacts of core and intensive services.)

The main shortcoming of non-experimental studies of employment and training services is that, because they cannot account for all the differences in the characteristics of customers who receive services and those who do not, their findings may be misleading. In an experiment, on average, both the observed and unobserved characteristics of customers are the same before the receipt of services in each study group being compared. This is especially true when the number of study participants is large, as it is in this study. Consequently, any differences in the outcomes of customers across study groups can be attributed to the employment and training services rather than differences in customers' characteristics. In the non-experimental studies, even if the groups of customers being compared are similar on observed characteristics—such as age, gender, race, ethnicity, and work history—unobserved differences in customer characteristics could drive the results. For example, the non-experimental studies might find that the post-

program earnings of those who enrolled in training were higher than those who did not even if the training was ineffective because those who trained were more motivated than those who did not pursue training. Hence, results from non-experimental studies could be misleading. The present study was designed to overcome these limitations.

G. Organization of this report

The rest of this report is organized as follows:

- In Chapter II, we describe the design of the impact study.
- In Chapter III, we provide context for the study findings by describing the characteristics of the local areas, the labor markets in which they provided services, and the characteristics of the customers in the study.
- In Chapter IV, we describe the differences across study groups in the receipt of core, intensive, and supportive services.
- In Chapter V, we describe the differences across study groups in training enrollment.
- In Chapter VI, we present the impacts of the programs' intensive and training services on employment outcomes.
- In Chapter VII, we present the impacts of the programs' intensive and training services on household income, receipt of public assistance, and some other measures of customer well-being.
- In Chapter VIII, we describe our approach to estimating the net benefits of the programs and present the results of our benefit-cost analysis.
- In Chapter IX, we discuss the key study findings.

A technical supplement in an accompanying volume to this report includes appendices that describe our analyses in more detail, present an analysis of the sensitivity of the estimates to different assumptions and analytical approaches, and provide detailed estimates that include p -values and sample sizes.

II. THE DESIGN OF THE IMPACT STUDY

The WIA Gold Standard Evaluation was ambitious in its design in two ways. First, it aimed to be nationally representative—to estimate impacts that would be representative of the Adult and Dislocated Worker programs nationwide rather than only in a subset of local areas. This required that the evaluation include randomly selected local areas, rather than those that volunteered to participate. Second, it used an experimental design that required random assignment of tens of thousands of customers. Because the programs were ongoing, the evaluation had to be designed in a way that minimized disruptions to their operations.

In this chapter, we provide an overview of the evaluation’s impact study, which is the focus of this report. We begin by describing the random selection of local areas for the study (Section A). We then describe the experimental design (Section B) and data sources (Section C). We end the chapter by presenting the analytic methods used in the impact analysis (Section D). Mastri et al. (2015) provides further details about the design and implementation of the evaluation. Appendix A of the technical supplement to this report provides more detail about the analysis approach.

A. Randomly selecting local areas for the study

We randomly selected 30 local areas nationwide for the study from a list of 487 local areas. We started with a list of all 585 local areas in the United States and its territories as of March 2008. Primarily to reduce the evaluation costs involved in recruiting and monitoring local areas in the study, we excluded the 22 local areas outside the 48 contiguous states and 76 very small local areas (those with fewer than 100 customers annually who were reported in WIASRD as having received intensive services). This left 487 local areas, representing 83 percent of all local areas and more than 98 percent of customers who received WIA-funded intensive services in the contiguous United States in 2008. In selecting the 30 local areas, we ensured that there would be variation in DOL region, states, the size of the local area, and the rate at which customers received training. We measured the training rate based on the proportion of customers reported as having received intensive services who also received training funds from April 2006 through March 2008, according to WIASRD.

We anticipated that not all of the selected local areas would agree to participate, and we had a backup plan for those that did not. 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 originally selected local area declined to participate. We chose the replacement local areas to have similar key characteristics as the originally selected local area, prioritizing in the following order: being in the same region, of similar size, in the same state, and with similar training rates.

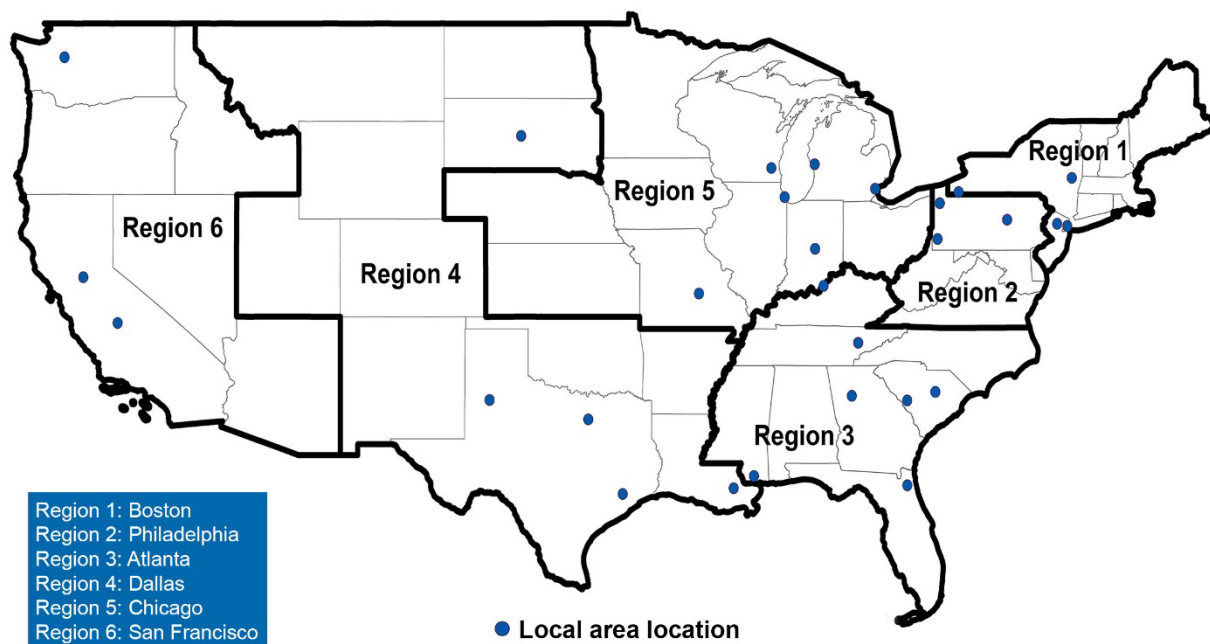
The study included 28 local areas (see the text box for a list of these areas). Twenty-six of the 30 randomly selected local areas—87 percent—agreed to participate. We successfully replaced 2 of the 4 local areas that declined to participate. The LWIBs of 2 other local areas declined to participate, but the decisions were made too late to allow sufficient time to recruit and set up study procedures in their replacement local areas within the study’s timeline. No local areas dropped out of the evaluation after recruitment was complete. As expected given the random selection, the characteristics of the 28 participating local areas were similar to those of local areas nationwide (Mastri et al. 2015). The statistical power of the study was viewed as sufficient with 28 participating local areas. Figure II.1 shows the locations of the local areas participating in the study.

Local areas participating in the WIA Gold Standard Evaluation

Atlanta Regional Workforce Board (Georgia)	New York City Workforce Investment Board (New York)
Capital Regional Workforce Board (New York)	North Central Texas Workforce Development Board-Workforce Solutions (Texas)
Central Region Workforce Investment Board (Missouri)	Northwest Workforce Investment Board (Pennsylvania)
Chautauqua County Workforce Investment Board (New York)	Sacramento Works Workforce Investment Board (California)
Chicago Workforce Investment Council (Illinois) ^a	Santee-Lynches Workforce Investment Board (South Carolina)
East Tennessee Human Resource Agency (Tennessee)	South Dakota Workforce Development Council (South Dakota)
EmployIndy Workforce Investment Board (Indiana)	South Plains Workforce Development Board (Texas)
Essex County Workforce Investment Board (New Jersey)	Southeast Michigan Community Alliance Workforce Investment Board (Michigan)
First Coast Workforce Investment Board (Florida)	Southwest Corner Workforce Investment Board (Pennsylvania)
Fresno Regional Workforce Investment Board (California)	Twin Districts Workforce Area (Mississippi)
Greater Louisville Workforce Investment Board (Kentucky)	Waukesha-Ozaukee-Washington Counties (Wisconsin)
Gulf Coast Workforce Board (Texas)	Workforce Development Council of Seattle-King County (Washington)
Lower Savannah Workforce Investment Area (South Carolina)	Workforce Investment Board of Central Pennsylvania (Pennsylvania)
Muskegon/Oceana Michigan Works! Workforce Development Board (Michigan)	
New Orleans Workforce Investment Board (Louisiana)	

^a In July 2012 the Chicago Workforce Investment Council merged with the Workforce Board of Northern Cook County and Cook County Workforce Investment Board to form a single workforce investment area. Only those American Job Centers located within the boundaries of the City of Chicago participated in the study, both before and after the merger.

Figure II.1. Locations of the 28 local areas participating in the study



Source: WIA Gold Standard Evaluation.

Note: The map shows the location of the six ETA regions.

Four factors were likely important in the success of our recruitment: (1) DOL’s engagement; (2) the low rates of assignment to the study groups in which services were restricted; (3) the agreement to let all customers receive core services; and (4) the decision to exclude veterans from the study so that no veterans would be denied services. The ETA assistant secretary at the time called staff at each local area selected for the study and then DOL staff accompanied evaluation team members on recruitment visits. The low rate of assignment to the core and core-and-intensive groups—only about 6 percent of customers on average were assigned to each of these groups, as detailed in the next section—was a key factor in securing the participation for many local areas.

B. Experimental design

An experimental design is the strongest possible approach for an evaluation of employment and training services. A well-implemented experimental design ensures that the effects we estimate are attributable to the programs being studied and not to other observed or unobserved characteristics of the customers who participate in them.

Random assignment into three study groups. Staff in the local areas randomly assigned all customers (with some exceptions described below) who were eligible for intensive services from the Adult and Dislocated Worker programs and consented to participate in the study. They were randomly assigned to one of three groups:

1. **Full-WIA group.** Customers in this group could receive any core, intensive, or training services for which they were eligible, just as they would in the absence of the evaluation.
2. **Core-and-intensive group.** Customers in this group could receive any core or intensive services for which they were eligible but they could not receive *training* services funded by the Adult or Dislocated Worker programs. No customer was required to receive intensive services.
3. **Core group.** Customers in this group could receive *only core services* and no intensive or training services funded by the Adult and Dislocated Worker programs.

Customers were randomly assigned at the time they were determined eligible for intensive services. Thus, all customers should have received core services prior to random assignment.

Customers’ access to services was restricted for 15 months after random assignment. After this period, customers were permitted to receive any services offered by the programs for which they were eligible. We did not restrict services for the full 30 months after random assignment at the request of the local area administrators, who believed it was too restrictive. We did, however, require that program staff not reach out to the customers in the core and core-and-intensive groups to offer them services after 15 months. Customers could have come in to the American Job Centers after 15 months and received services from which they were previously restricted. Members of all three study groups could also access other employment and training services available in the community at any time.

For the most part, local areas defined core, intensive, and training services similarly. However, a few services were defined as core services in some local areas and intensive in others. For example, some local areas considered the Test of Adult Basic Education (TABE) a core service offered to all customers, but others viewed it as an intensive service. (All local areas considered a staff person discussing the results of the TABE with the customer an intensive service.) Similarly, some local areas offered workshops with similar content, such as how to write a résumé, as core services, but others offered the workshops as intensive services. In most cases, we used the local area's definition of core and intensive services during the study. Mastri et al. (2015) discusses the few exceptions.

Local areas varied in the services they offered and to whom they offered the services. We did not ask any local areas to change the services they offered or to relax any restrictions they placed on whom they offered services to during the study. Because the local areas were randomly selected, this variation in service provision in the local areas in the study reflects the variation in service provision in all the local areas and the estimates of the impacts of access to services can be generalized to the services nationwide.

The study team conducted random assignment in all American Job Centers and online intake points in the local areas participating in the study from November 2011 through April 2013. After customers were randomly assigned, they could receive only the services allowed for their study group; these restrictions lasted for 15 months after each customer's random assignment. For example, a member of the core group could not receive intensive or training services through the Adult or Dislocated Worker programs for 15 months after assignment. After 15 months, customers could receive any Adult or Dislocated Worker program services for which they were eligible, as noted above. Customers who did not consent to participate in the study could receive only core services for the duration of the study intake period in their local area.

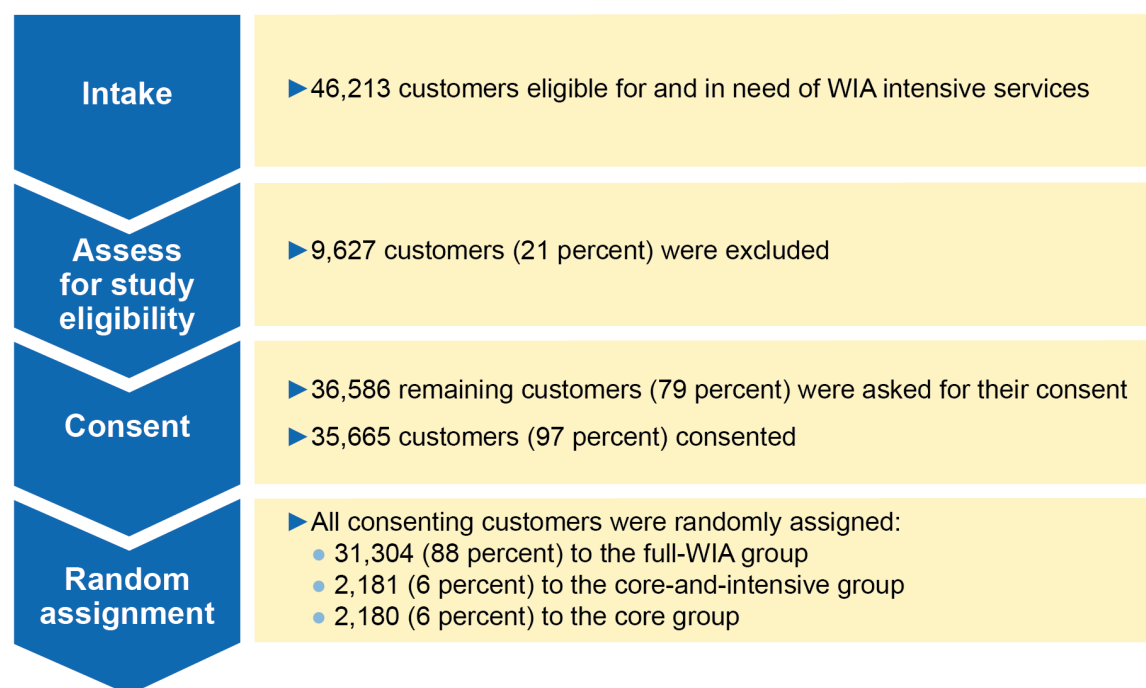
Customers who were not included in the study. Some groups of customers found eligible for intensive services were not included in the study (Mastri et al. 2015). Although not randomly assigned, these customers could receive the same services they would have received in the absence of the study. These customers included:

1. **Participants in the TAA program.** TAA is an entitlement program—those eligible for TAA cannot be denied TAA services. Many states and local areas require that TAA participants be enrolled in the Dislocated Worker program to receive case management and other services. Consequently, TAA participants could not be randomly assigned to the core or core-and-intensive group, since this would preclude them from accessing intensive and other WIA services.
2. **Veterans and covered spouses.** Veterans and some spouses of veterans receive priority of service. 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. To learn about the experiences of veterans accessing public workforce services, DOL funded a supplemental study that examined how the randomly selected local areas participating in the evaluation provided services to veterans and analyzed the characteristics, services, and outcomes of veteran customers in the local areas, with a particular focus in two states (Rosenberg et al. 2015).

3. **Customers referred by an employer.** Local area staff expressed concern that their relationships with employers could be harmed if customers who had been referred to the American Job Center by employers seeking on-the-job training funds were randomly assigned to a group that prohibited training.
4. **Customers exempted for local area-specific reasons.** Some groups of customers in specific local areas were exempt from the study because they were required or encouraged to be co-enrolled in the Adult or Dislocated Worker program. For example, in some local areas, participants in the Supplemental Nutrition Assistance Program Employment and Training (SNAP E&T) program were required to co-enroll in the Adult or Dislocated Worker program. In other local areas, some customers participating in other studies, such as the Reemployment Eligibility and Assessment Initiative Evaluation, were exempted to preserve the validity of the other study. In addition, on a case-by-case basis, we exempted a few customers before random assignment for extenuating circumstances (such as the customer being deemed unable to understand the consent process).

Across all local areas in the study, staff determined, using a study eligibility checklist, the study eligibility of 46,213 customers who were eligible for intensive services through the Adult or Dislocated Worker programs (Figure II.2). Of those customers, 9,627 customers (21 percent) were excluded from the study because they met exemption criteria. The customers found ineligible for the study were not informed about the study, not asked for their consent, and not randomly assigned. The remaining 36,586 customers who were eligible for the study were asked to participate in the evaluation, and 97 percent of them consented to take part. In total, 35,665 customers, or 77 percent of the 46,213 customers determined to be eligible for intensive services,

Figure II.2. Number of customers at each stage of study intake



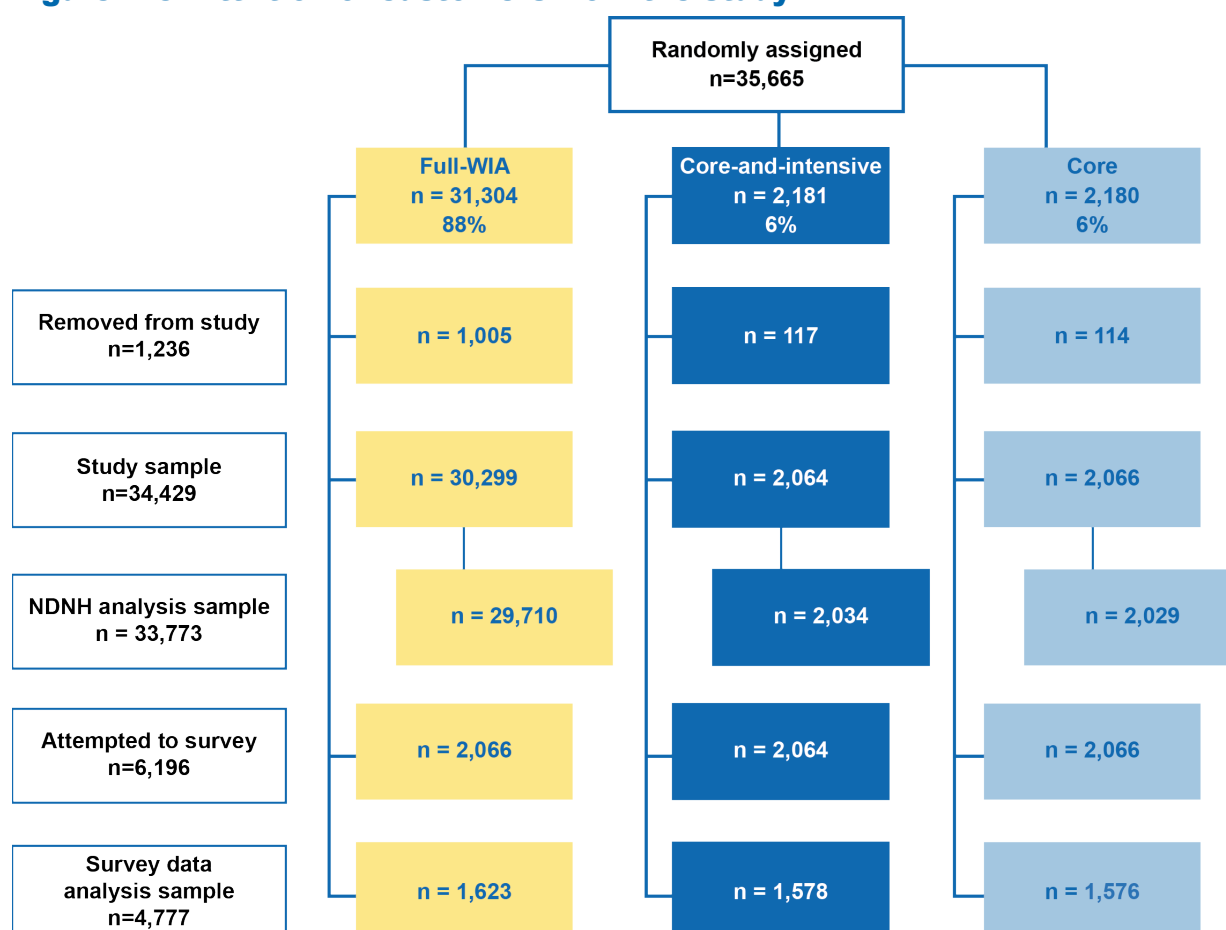
Sources: WIA Gold Standard Evaluation's study eligibility checklists and consent forms.

were determined eligible for the study and consented to participate. All these consenting customers completed a study registration form and a contact information form and were then randomly assigned to one of the three study groups.

The study findings are most directly relevant for customers who were eligible for intensive services and met the study's eligibility criteria. Though many of the customers excluded from the study, such as TAA participants, veterans, and customers referred by employers, received similar services through the Adult and Dislocated Worker programs as study participants, their impacts could have been different.

Across all the study local areas, more than 35,600 customers were randomly assigned (Figures II.2 and II.3). Most of these customers (88 percent) were randomly assigned to the full-WIA group and could receive any core, intensive, or training services for which they were eligible, just as they would in the absence of the study. About 6 percent of customers were randomly assigned to the core-and-intensive group and about 6 percent to the core group

Figure II.3. Attrition of customers from the study



Sources: WIA Gold Standard Evaluation's random assignment system database and 30-month follow-up survey. NDNH = National Directory of New Hires.

(Figure II.3). The study team set random assignment rates to the core-and-intensive and core groups low for two main reasons. First, denying services to a large proportion of the customers would likely change program operations and we would no longer be estimating the impact of the programs as they were usually operated. Second, low rates of assignment to the core-and-intensive and core groups made the study more acceptable to the local area staff and hence increased the likelihood that they would agree to participate in the study. The rates were set lower in larger local areas than in smaller ones to ensure that the core-and-intensive and core groups would not consist mainly of customers from the largest local areas.

Customers who left the study after random assignment. As is typical with experimental studies, we did not obtain follow-up data for all the randomly assigned customers (Figure II.3). Some customers were removed from the study entirely—because they withdrew consent, found out later they were ineligible for the study (because, for example, they later qualified for TAA), or the local area did not send us a customer’s consent form and we could not verify consent to the study. Others remained in the study but did not respond to the follow-up survey. Among the 35,665 randomly assigned customers, 1,236 (3.5 percent) either became ineligible after random assignment (2.1 percent), withdrew their consent after random assignment (0.1 percent), or were removed from the study because we did not receive their consent forms (1.2 percent). Study attrition was low in all three groups: only 3.2 percent of full-WIA customers, 5.4 percent of core-and-intensive customers, and 5.2 percent of core customers were removed from the study (Figure II.3). We did not try to survey or collect administrative data on any of these customers (beyond baseline data collected at random assignment). The remaining sample of 34,429 customers served as our study sample.

C. Data sources

The findings in this report are based on data from five main sources: the study registration form, 15- and 30-month follow-up surveys, the NDNH, the WIASRD, and financial data from local areas.

Study registration form. Local area staff asked customers who consented to participate in the study to complete a hard-copy study registration form. That form collected data on customers’ demographic characteristics, employment histories, receipt of public benefits or unemployment compensation, and history of seeking services at an American Job Center. The form also asked staff members to indicate whether the customer was likely to enroll in WIA as an adult, a dislocated worker, or both.

15- and 30-month follow-up surveys. The 15- and 30-month follow-up surveys are the primary sources of service receipt and outcomes data examined in this report. We conducted follow-up telephone surveys with a subset of study participants about 15 and 30 months after each was randomly assigned. The surveys targeted all members of the core and core-and-intensive groups, along with a similar number (2,066) of randomly selected members of the full-WIA group (Figure II.3). We attempted 30-month interviews with customers regardless of whether they completed a 15-month interview. The 15-month survey asked for information about customers’ service receipt, participation in training, and employment and earnings since random assignment. For customers who responded to the 15-month survey, the 30-month survey asked for information on these same outcomes starting on the date of their last interview. For customers

who did not respond to the 15-month survey, the 30-month survey asked for information covering the entire period after random assignment.

Our final sample for analyses using the survey data in this report included all customers who responded to the 30-month survey. We have survey responses from 4,777 customers in total, yielding a survey response rate of 77 percent. Rates did not differ significantly across the three study groups, with response rates of 79 percent for the full-WIA group and 76 percent for both the core-and-intensive and core groups (Figure II.3).

The analysis sample of 30-month survey respondents differs slightly from that used for our 15-month analysis. It includes 424 customers who responded to the 30-month survey but not the 15-month survey and excludes 547 customers who responded to the 15-month survey but not the 30-month survey. As a result, the estimates of impacts for Quarters 1 to 5 after random assignment produced in this report will not exactly match those from McConnell et al. (2016). However, both samples are weighted to be representative of the same group of customers served by the Adult and Dislocated Worker programs. Thus, we can directly compare the estimates for the 15 months after random assignment from McConnell et al. (2016) to those produced in this report for the entire 30-month follow-up period.

National Directory of New Hires. The NDNH, an administrative database, contains information collected by state unemployment agencies and submitted to the Office of Child Support Enforcement of the U.S. Department of Health and Human Services (Solomon-Fears 2014). Our analysis uses NDNH data on quarterly earnings and UI benefits, covering the 12 quarters (36 months) after random assignment of customers. These data are available for almost all study participants, including survey nonrespondents and participants who we did not select for the survey. We can therefore use the administrative data to validate estimates based on survey data during overlapping periods using a larger sample of customers, as well as to estimate longer-term earnings impacts and impacts on additional outcome measures. Besides spanning two quarters more than the survey data, the exact timing of the NDNH quarters also differs slightly in that each quarter is tied to quarters within a year rather than quarters that begin the day after a customer is randomly assigned.

We included 33,773 of these customers in our analysis of administrative data from the NDNH. We excluded 577 members of the study sample (1.7 percent) because the customers provided invalid combinations of name and Social Security number. We also excluded 79 members of the study sample (0.2 percent) who were randomly assigned very late in the random assignment period because the NDNH did not include information on these individuals for the full 36-month period used in the NDNH analysis. Rates of exclusion did not differ significantly across study groups.

Workforce Investment Act Standardized Record Data. ETA requires states to submit individual-level data for every customer who receives Adult and Dislocated Worker program-funded services, describing the customer's characteristics, service receipt, and outcomes. Together, these data form the WIASRD. We collected these data for those enrolled in the study for two reasons. First, we used WIASRD to examine service receipt by study participants. Second, we monitored compliance with random assignment by collecting data on all customers in the local area to ensure that no customers who were eligible for the study received services

before they were randomly assigned and that no randomly assigned participants received WIA-funded services that were not allowed by their study group. We obtained these data for only the first 15 months after random assignment because we expected most of the differences in receipt of services to happen in the first 15 months and to minimize burden on local area staff.

Financial data from local areas. Local areas provided us data on the value of the ITAs and (in most cases) supportive services provided to study participants. To facilitate the benefit-cost analysis, they also provided information on the costs of providing customers core and intensive services. We obtained this data for only the first 15 months after random assignment, to minimize burden on local area staff.

We use both follow-up survey data and NDNH data as separate measures of employment and earnings. Each has advantages and disadvantages. NDNH data have the advantages that they are available for the entire sample and are not subject to the recall error that is a potential problem in surveys. However, the NDNH data do not cover all jobs, contain less detailed information on jobs, and are subject to other reporting errors. In particular, NDNH data do not cover self-employed workers, railroad employees, workers in service for relatives, most agricultural labor, some domestic service workers, and part-time employees of nonprofit organizations (U.S. Department of Labor 2014). Workers in these sectors comprise about 10 percent of workers in the U.S. economy (Kornfeld and Bloom 1999; Hotz and Scholz 2002). NDNH data do not cover workers who are casually employed, such as day laborers or part-time helpers, either.

NDNH data also exclude workers whose employers do not report their earnings to the UI agency, even in the formal sector, because of the prevalence of flexible staffing arrangements or illegally neglecting to report. An audit study of Illinois employers' UI reports suggests that illegal failure to report wages affects about one in seven workers because of the prevalence of flexible staffing arrangements such as independent contractors (Blakemore et al. 1996). There is reason to believe that type of undercoverage may be increasing because flexible staffing arrangements have become much more common in recent years (Houseman 1999; Hotz and Scholz 2002; Katz and Krueger 2016). Finally, the UI records on which NDNH earnings and employment measures are based rely on the accuracy of reported Social Security numbers; earnings will be excluded if there is a discrepancy in the Social Security number reported at program intake and the Social Security number reported to or by employers. Previous studies have suggested that inconsistently reported Social Security numbers are an important problem when using wage records from state UI agencies (Schochet et al. 2003).

D. Impact analysis approach

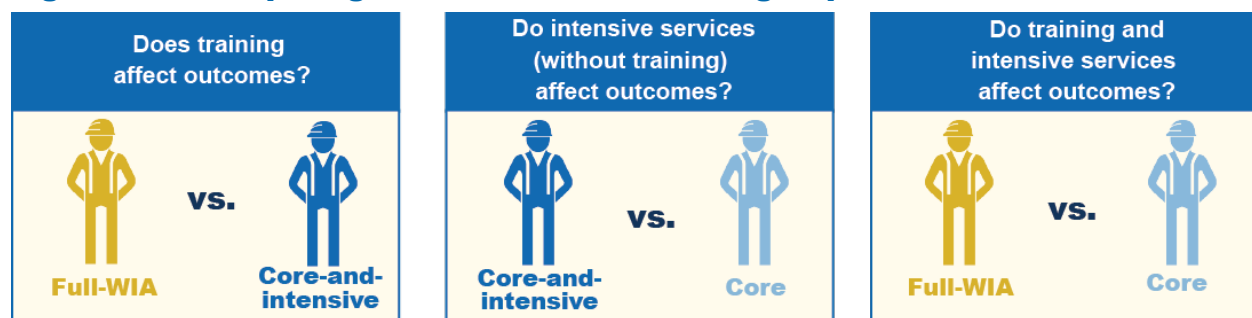
At its heart, our approach to estimating how access to program services affect customers' outcomes was simple: we compared the average outcomes across the three study groups. The analysis approach can be summarized as follows (and is depicted in Figure II.4):

- **To determine the effect of WIA-funded training services,** we compared the average outcomes of full-WIA customers with those of core-and-intensive customers. Conceptually, we compared a scenario with the full set of WIA services provided through the Adult and Dislocated Worker programs (represented by the full-WIA group) to a scenario where the

programs funded core and intensive services but not training (represented by the core-and-intensive group).

- **To determine the effect of WIA-funded intensive services**, we compared the average outcomes of the core-and-intensive customers with those of core customers. Conceptually, we compared a scenario where the Adult and Dislocated Worker programs funded core and intensive services but not training (represented by the core-and-intensive group) to a scenario where the Adult and Dislocated Worker programs funded core services and neither training nor intensive services (represented by the core group).
- **To determine the effect of both training and intensive services**, we compared the average outcomes of full-WIA customers with those of core customers.

Figure II.4. Comparing outcomes between the groups



The baseline characteristics of customers in the final sample were similar across all three study groups (see Appendix C of the technical supplement to this report, Table C.II.1). Because the characteristics of the customers in each of the three groups before random assignment were the same, on average, we can attribute the difference in the outcomes of the customers after random assignment to the differences in the services available to customers in each group.

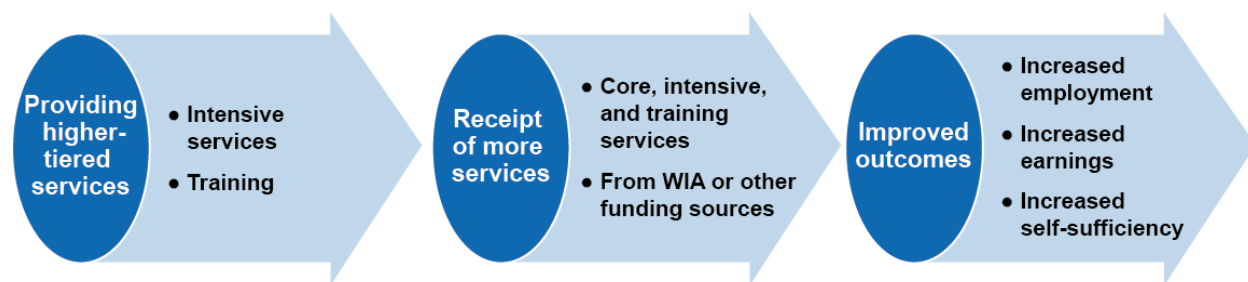
In addition to estimating program impacts for all customers in the study, we also estimated impacts separately for adults and dislocated workers (as classified by program staff at study intake). As previously discussed, program staff were asked to record before random assignment whether the customer would be enrolled in the Adult program, the Dislocated Worker program, or both. We used this designation for our analysis. When program staff recorded that customers would be enrolled under both programs, we categorized the customers as dislocated workers. We followed this practice because most customers who meet the criteria for being a dislocated worker also meet the criteria for being an adult, but the reverse is not true: many customers who meet the criteria for being an adult do not meet the criteria for being a dislocated worker.

Estimating the difference in service receipt between study groups. In many experimental studies, the estimated effects represent the *provision of* services, and not necessarily the *receipt of* the services. Even in drug trials, some patients do not take the medications offered to them. In this study, customers did not have to participate in any services in their assigned study group. In addition, some customers in the full-WIA group were not eligible for training according to local area policies. Many local areas reported being unable to fund training of all customers who would benefit from it. Other local areas did not offer certain services to any customers. For example, some local areas offered on-the-job training and others did not. As a result of these

factors, as we will discuss in Chapters IV and V, some customers in the core-and-intensive group did not receive intensive services, some customers in the full-WIA group did not receive training, and some customers in the full-WIA group received neither intensive services nor training. Customers in any of the study groups could also access other services in the community.

An interpretation of the differences in the employment outcomes across study groups must consider customers' receipt of services. As illustrated in Figure II.5, providing funds for particular services should lead to their increased use, which in turn should lead to improved employment outcomes for those who receive them, if the services are effective. The three study groups differ in whether they could potentially receive services. Understanding how these services affects outcomes requires an understanding of how differences in provision led to differences in actual receipt of the services. For instance, an understanding of the impact of training requires an understanding of the extent to which full-WIA customers enrolled in training compared to the extent to which core-and-intensive customers enrolled in training. For these reasons, we begin our analysis by examining the impact of providing intensive and training services on core, intensive, and supportive service receipt (Chapter IV) and enrollment in training (Chapter V). We then examine impacts of providing intensive and training services on employment and earnings (Chapter VI) and other outcomes (Chapter VII).

Figure II.5. How providing services might improve outcomes



Estimating impacts on customers' outcomes. We estimated impacts by comparing averages of both programs' customers' outcomes across the three groups. We used t-tests to determine whether those differences were statistically significant. Statistical significance is a measure of how confident we are that the impact differs from zero and did not arise purely by chance. When we calculated the average across groups, each observation was weighted. We used weights so that the impacts we estimated were representative of the Adult and Dislocated Worker programs nationwide. We also present separate impacts for customers in the Adult program and for those in the Dislocated Worker program.

Accounting for multiple statistical tests. We estimated the impact of the programs on many outcomes and, for each outcome, we made the three comparisons illustrated in Figure II.4. Performing multiple statistical tests means that it is more likely that we will find some differences to be statistically significant simply by chance. To help guard against this, we determined before analyzing the data that quarterly earnings would be our priority outcome. This is a key measure of the effectiveness of the programs. The estimated impacts on other outcomes could be informative, especially if they fit within a pattern of similar impacts. However, we view these analyses as exploratory to provide policy-relevant, yet less rigorous evidence about

program effects for continuous program improvement and to identify hypotheses that could be subject to more rigorous future examination.

The problem with multiple statistical tests also arises when focusing on individual outcomes, because our analysis involves making three pairwise comparisons across the three research groups. To adjust for this, we used a standard established approach from available literature. Specifically, we compared our estimated p -values for quarterly earnings against both a critical value of 5 percent and a lower critical value of 1.85 percent.³

Additional information. In detailed technical appendices of the technical supplement to this report, we provide additional information about the analysis approach and detailed tables of the findings. In Appendix A of the technical supplement, we describe our analytical approach, including additional details on the study design, weights, approach to addressing missing data due to survey-item nonresponse, impact estimation approach, adjustment for multiple statistical tests, and minimum detectable impacts for key outcomes. In Appendix B, we analyze the sensitivity of our results to different statistical approaches and assumptions. In the remaining appendices, we provide detailed tables of the results that include sample sizes, p -values, and additional tests of statistical significance for all customers as well as separate estimates for key outcomes for adults and dislocated workers.

³ The tables and figures in this report and the accompanying technical supplement use symbols to denote significance using the 5 percent critical value. Appendix A of the technical supplement to this report discusses the rationale for the alternative 1.85 percent significance level.

III. CONTEXT

Documenting the context in which the Adult and Dislocated Worker programs operated and the characteristics of the customers served by the programs is important for understanding the impact study findings. The geographic and political contexts for the local areas, program funding, the needs of the customers, and economic conditions during the study could all influence the effectiveness of the programs. To provide this context, in this chapter we describe the local areas in the study (Section A), their labor market and funding conditions at the time of the study (Sections B and C), and the characteristics of the study participants (Section D).

Key findings

- Reflecting the variation in the characteristics of local areas across the nation, the local areas in the study varied considerably in their degree of urbanicity, size, funding, and number of customers served.
- The study occurred at a time of high, but declining, unemployment and declining funding for the programs.
- Many customers—especially adults—faced multiple barriers to becoming successfully employed. Few customers were employed when they entered the study, and many had been without a job for more than five years.
- Those participating in the Adult program were typically more disadvantaged and faced more barriers to employment than those participating in the Dislocated Worker program.

A. Variation in local areas in which the programs operated

By design, the 28 randomly selected local areas reflected the variation in local areas nationwide. The local areas in the study varied considerably in the size of the geographic area, number of customers served, and amount of funding provided (Table III.1). In physical size, the smallest local area in the study was Essex County in New Jersey, which did not include even a whole county because the local area excluded the city of Newark, which is located in Essex County. In contrast, the entire state of South Dakota formed another local area. In New York City, more than 200,000 customers “exited”⁴ the programs in calendar year 2012, whereas fewer than 200 customers exited the programs in the South Plains (Texas) local area. The local areas that received the most funding for the Adult and Dislocated Worker programs in calendar year 2012 were New York City and Gulf Coast (Texas) at about \$36 million and \$23 million, respectively; Chautauqua County (New York) received the least funding (about \$500,000) of the local areas in the study. On average, the local areas received about \$6.25 million in funding.

The local areas in the study also varied considerably in the extent to which they served customers in urban areas. All but three local areas served both rural and urban populations. However, because most local areas include at least one city, local areas were typically more urban than not. In slightly more than one-third of the local areas, more than 90 percent of the population lived in urban areas (Table III.1). The percentage of the urban population was less than 50 percent in only three local areas.

⁴ “Exited” is a program operations term that means a participant has not received a service funded by the program or a partner program for 90 consecutive calendar days and is not scheduled for future services. Performance measures are based on program exiters.

Table III.1. Features of the study local areas

Local area	Square miles	Number of counties	Percentage urban	WIA funding (\$000s)	Number of exiters in calendar year 2012
Atlanta Region (Georgia)	1,840	7	93	\$7,023	880
Capital Region (New York)	1,380	3	85	\$1,844	15,176
Central Pennsylvania	5,354	9	60	\$2,439	2,146
Central Region (Missouri)	11,784	19	50	\$2,282	25,474
Chautauqua County (New York)	1,060	1	56	\$507	5,192
Chicago (Illinois)	945	1	100	\$15,755	7,044
East Tennessee	4,337	9	50	\$2,071	432
Essex County (New Jersey)	102	< 1	100	\$1,827	307
First Coast (Florida)	3,929	6	87	\$9,651	1,491
Fresno County (California)	5,958	1	89	\$11,357	1,561
Gulf Coast (Texas)	12,189	13	92	\$23,082	12,073
Indianapolis (Indiana)	396	1	99	\$5,628	4,638
Louisville (Kentucky)	1,869	7	89	\$3,925	466
Lower Savannah (South Carolina)	3,908	6	47	\$2,334	592
Muskegon (Michigan)	1,011	2	68	\$1,686	452
New Orleans (Louisiana)	169	1	99	\$1,379	3,249
New York City	303	5	100	\$36,329	215,123
North Central Texas	10,527	14	79	\$7,818	796
Northwest Pennsylvania	4,398	6	60	\$2,076	282
Sacramento (California)	964	1	98	\$8,468	2,987
Santee-Lynches (South Carolina)	2,409	4	49	\$1,269	322
Seattle-King County (Washington)	2,116	1	97	\$7,001	1,199
South Dakota	75,811	66	57	\$2,759	1,039
South Plains (Texas)	13,595	15	79	\$1,348	165
Southeast Michigan	1,023	1+	95	\$6,170	1,160
Southwest Corner Pennsylvania	1,868	3	68	\$2,119	292
Twin Districts (Mississippi)	14,513	24	47	\$5,508	13,942
Waukesha-Ozaukee-Washington Counties (Wisconsin)	1,213	3	84	\$1,341	566
Average	6,606	8.3	78	\$6,250	11,395
Median	1,993	4.5	84	\$2,599	1,180

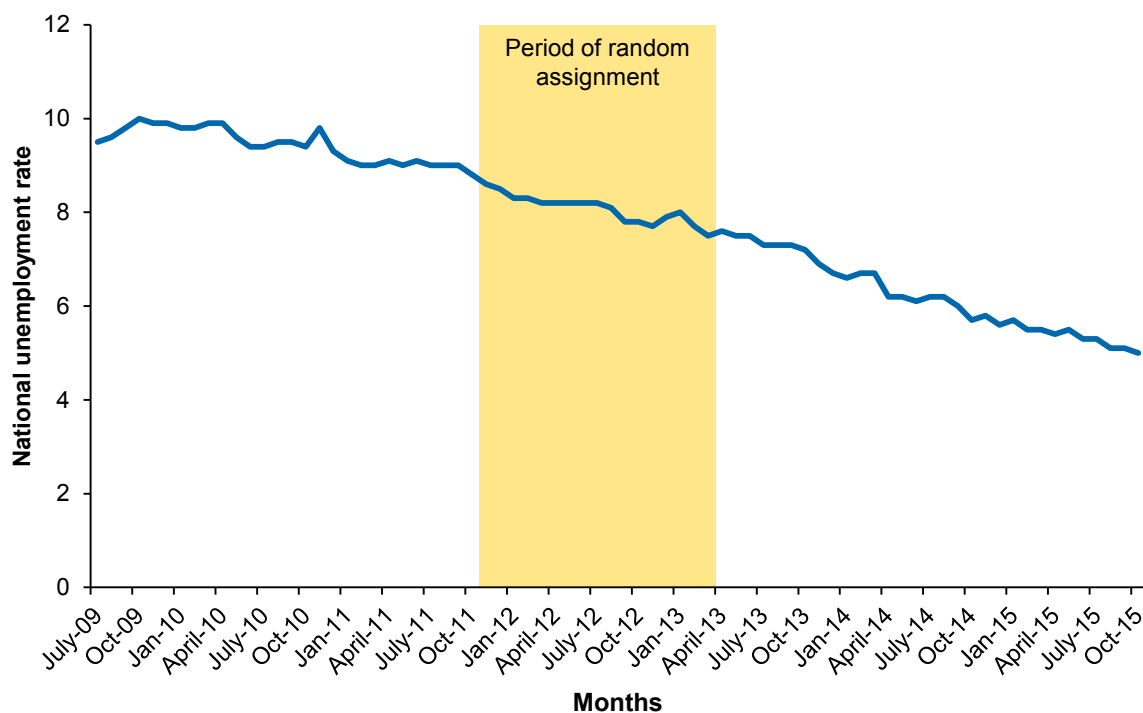
Sources: The Employment and Training Administration provided information on the geographic configurations of local areas. Number of square miles was estimated from Census Quick Facts (<https://www.census.gov/quickfacts>). Number of counties represents the number of counties encompassed by the local area; + means that the local area includes part of an additional county. In calculating the average and median, we counted a part of a county as a whole county. The percentage of the local area's population that was urban was measured for 2010 from https://www.census.gov/geo/reference/ua/ualists_layout.html. Funding is for program year 2011 except in five study local areas, where it is for program year 2012: Chicago (Illinois), New Orleans (Louisiana), Northwest Pennsylvania, Santee-Lynches (South Carolina), and Seattle-King County (Washington). The program year 2012 funding reported for Chicago (Illinois) reflects the funding of only the City of Chicago. In program year 2011, the Chicago local area consolidated with other local areas but only Chicago participated in the evaluation. The WIASRD provided the number of customers who exited from the local Adult or Dislocated Worker programs in calendar year 2012 after receiving at least one staff-assisted service.

B. Labor market conditions

Past research suggests the weak economy during the follow-up period might have influenced the effectiveness of the Adult and Dislocated Worker programs (Heinrich and Mueser 2014; Bendewald et al. 2016). The evaluation occurred as the nation was emerging from the major recession that occurred between December 2007 and June 2009 (National Bureau of Economic Research n.d.). In November 2011, when random assignment for the study began, the national unemployment rate was 8.6 percent (U.S. Department of Labor n.d.a). As intake into the study proceeded, the economy continued to recover from the recession and unemployment rates decreased gradually, but they remained at or above 7.5 percent through the intake period (Figure III.1). At the end of random assignment in spring 2013, the national unemployment rate was 7.6 percent, and it continued to fall thereafter to slightly more than 5 percent in late 2015.

The national unemployment rate masks substantial variation across the 28 study local areas (Figure III.2). In 2012, when most study participants were randomly assigned, the national unemployment rate was 8.1 percent. The highest unemployment rate among local areas in the study was in Fresno County (California) at 15 percent, followed by Southeast Michigan at 11 percent. South Dakota had the lowest unemployment rate in 2012, at slightly more than 4 percent.

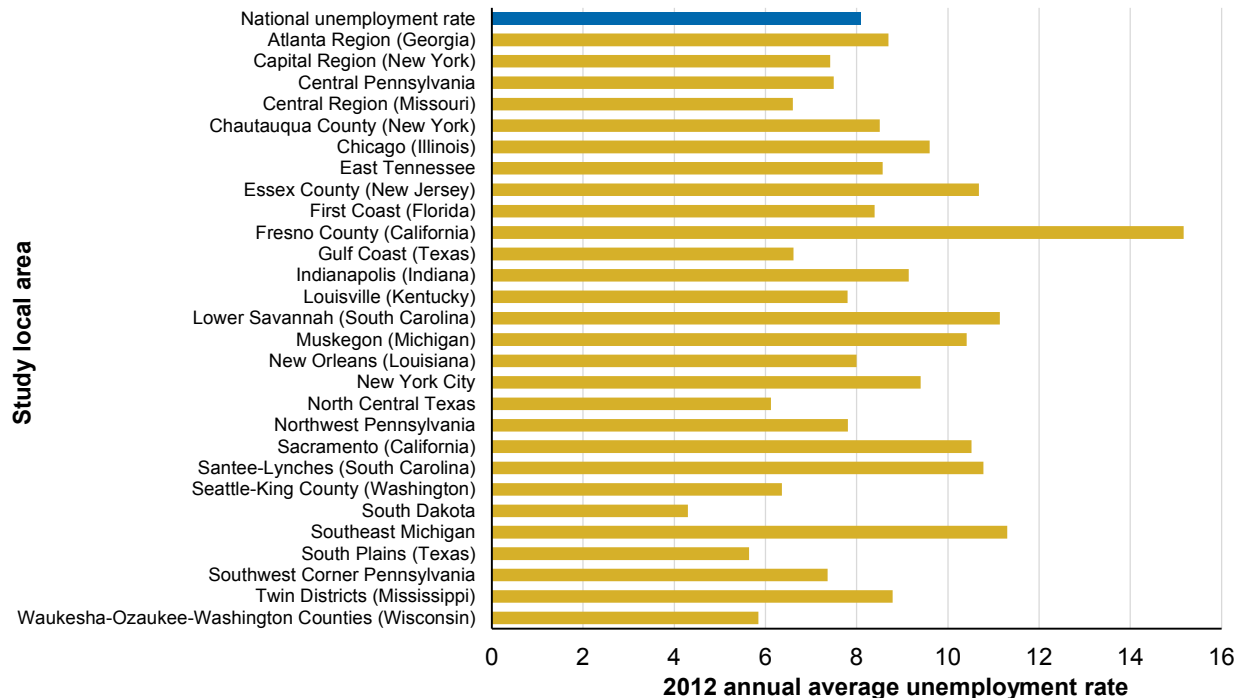
Figure III.1. National unemployment rate during the follow-up period



Source: Bureau of Labor Statistics. *Labor Force Statistics from the Current Population Survey*. Available at http://data.bls.gov/pdq/SurveyOutputServlet?request_action=wh&graph_name=LN_cpsbref3. Accessed on August 2, 2016.

Note: The unemployment rate is seasonally adjusted.

Figure III.2. Annual unemployment rates in the 28 study local areas in 2012



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics: Labor Force Data by County, 2012 Annual Averages. Available at <http://www.bls.gov/lau/laucnty12.txt>. Accessed on January 13, 2015.

Note: Rates calculated from annual average unemployment rates for U.S. counties.

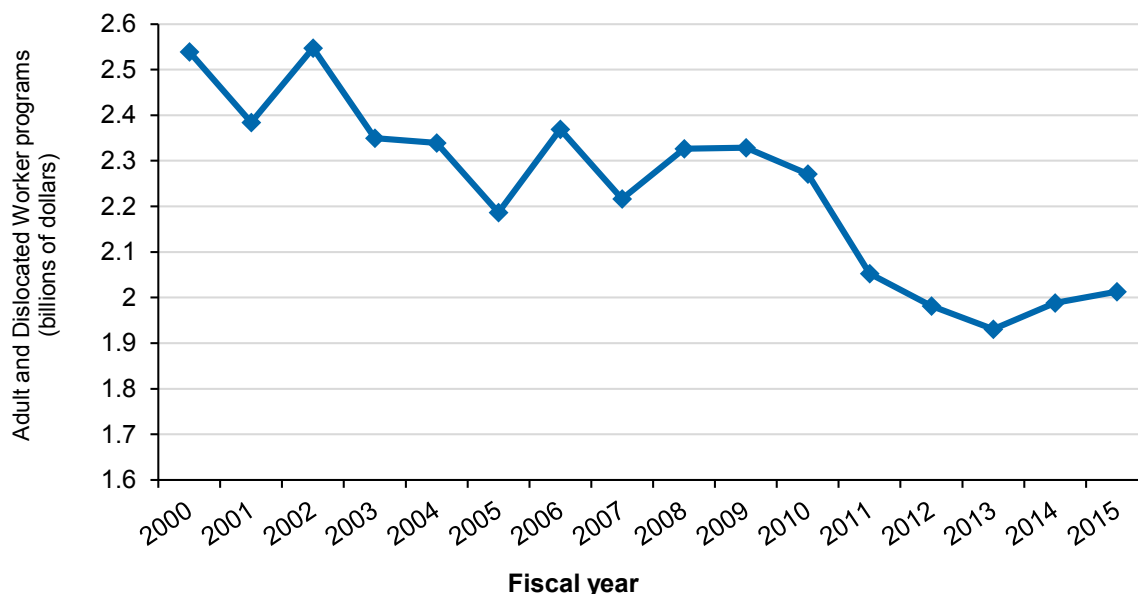
A high rate of long-term unemployment accompanied the high national unemployment rate during the study, which affected both the characteristics of customers in the study and the availability of staff at the American Job Centers to provide core services to an increased caseload of study participants. The percentage of the unemployed who had been unemployed for 27 weeks or more was more than 38 percent nationally throughout the study intake period (Kosanovich and Theodossiou 2015). As discussed in the next subsection, a high percentage of study participants had not been employed for a long period. In addition, administrators in the study local areas noted that the staff in the Wagner-Peyser Employment Service were required to provide additional services to the long-term unemployed who were receiving unemployment insurance benefits. As a result, an increase in the number of the long-term unemployed meant that they had less time to provide core services (D'Amico et al. 2015). Therefore, some core services might have been less available to the customers during the study than would have been the case at a time when the rate of long-term unemployment was lower.

C. Funding availability

Funding nationwide for the Adult and Dislocated Worker programs has declined since the programs were enacted. From 2000 to 2012, combined funding for the two programs nationwide declined by 22 percent (U.S. Department of Labor 2015 n.d.b). The drop in funding was particularly pronounced after 2010 (Figure III.3). The American Recovery and Reinvestment Act of 2009 (ARRA) added funds to the programs (not included in Figure III.3), but this infusion had

ended before the study began. Funding for the Wagner-Peyser Employment Service also declined over the same time period.

Figure III.3. Trend in national funding for the Adult and Dislocated Worker programs, 2000–2015



Sources: U.S. Department of Labor, Employment and Training Administration. "Training and Employment Programs, Summary of Budget Authority, FY 1984 to 2012, by Year of Appropriation." Washington, DC: U.S. Department of Labor, 2014. Available at <http://www.doleta.gov/budget/bahist.cfm>. Accessed on August 2, 2016.
U.S. Department of Labor. "FY 2016 Department of Labor Budget in Brief." Washington, DC: U.S. Department of Labor, n.d). Available at <https://www.dol.gov/sites/default/files/documents/general/budget/2016/FY2016BIB.pdf>. Accessed on August 2, 2016.

Note: Dollars are in nominal terms. Fiscal year refers to a federal fiscal year, which runs from October 1 to September 30, and is identified by the year it ends (fiscal year 2014 runs from October 1, 2013, to September 30, 2014). The data exclude special appropriations as part of the American Recovery and Reinvestment Act.

The reduction in funding led study local areas to cut back on the services they offered (D'Amico et al. 2015). About one-third of the study local areas had closed one or more American Job Centers between our visits in 2012 and subsequent follow-up telephone calls in late 2013 or early 2014. These closings resulted in an overall decline of nearly 12 percent in the number of centers in the study local areas. Funding cuts also led to some study local areas reducing centers' hours of operation and relocating centers to facilities with lower rents. According to administrators at study local areas, funding cuts also led to fewer career counselors, fewer customers enrolling in WIA-funded training, and reductions in supportive services (such as assistance with transportation expenses).

This study presents estimates of the effectiveness of the Adult and Dislocated Worker programs during a period when funding declined despite greater needs due to high unemployment and, specifically, high long-term unemployment. It might be that the programs would have been able to offer more services to customers in the study had there been more funding or the demands on the staff that resulted from high unemployment had been fewer.

D. Customer characteristics

The Adult and Dislocated Worker programs serve a range of customers, many of whom have multiple barriers to employment, such as limited work histories or lower education levels. The characteristics of members of the 30-month survey sample (Table III.2) reflect the diversity among intensive service customers and the barriers to employment they faced. Characteristics of the 15-month survey sample and the sample used in the analysis of administrative data are similar. But, because the study included only customers who had been found eligible for intensive services, many of whom were unsuccessful in finding a job with core services alone, the customers in the study were likely more disadvantaged than those who did not move beyond the core service tier and thus, not included in random assignment into the study.

Table III.2. Characteristics of all customers, dislocated workers, and adults in the 30-month survey analysis sample at baseline

	All customers	Adults	Dislocated workers	Difference between adults and dislocated workers
Adult only (%)	58	100	0	100*
Dislocated worker only (%)	33	0	79	-79*
Both adult and dislocated worker (%)	9	0	21	-21*
Female (%)	61	61	60	1
Age at random assignment (%)				
18–20	3	5	1	4*
21–24	12	16	6	10*
25–32	19	22	13	9*
33–42	27	27	27	0
43–50	22	15	30	-15*
51 or older	17	14	22	-8*
Race/ethnicity (%)				
Hispanic	12	14	9	4
White, non-Hispanic	37	34	42	-8
Black, non-Hispanic	44	44	44	1
Asian	3	4	2	2
Native Hawaiian, Pacific Islander, or Native American	2	2	2	0
Other, or multiple races	2	2	1	1
Primary spoken language is English (%)	95	93	97	-3*
Primary spoken language is Spanish (%)	2	3	2	1
Primary spoken language is neither English nor Spanish (%)	3	4	1	3*
Marital status (%)				
Currently married	28	25	32	-7*
Separated, divorced, or widowed	26	24	28	-4*
Never married	46	51	40	11*
Working at time of random assignment (%)	2	3	1	2
Employed in past five years (%)	77	67	91	-24*
Last real hourly wage ^a (\$)	14.06	12.56	15.65	-3.09*
Last real hourly wage was (%)				
Less than minimum wage	5	6	3	3
Minimum wage exactly	1	2	0	1
1.01 to 1.29 times the minimum	17	20	12	8*
1.30 to 1.69 times the minimum	20	18	23	-5*

	All customers	Adults	Dislocated workers	Difference between adults and dislocated workers
1.70 to 1.99 times the minimum	8	6	12	-6*
2.00 to 2.99 times the minimum	15	8	26	-17*
3.00 to 3.99 times the minimum	5	3	9	-6*
4.00 to 4.99 times the minimum	2	2	3	-2
5.00 or more times the minimum	2	2	2	0
Not employed in past five years (%)	23	33	9	24*
Highest degree (%)				
Less than high school degree	7	10	4	7*
High school or GED	70	71	68	3
Associate's or equivalent	8	7	10	-2
Bachelor's or equivalent	11	9	14	-5
Master's or higher	3	2	4	-3
Received a vocational training certificate ^b (%)	19	19	19	0
Had health problems that limit work or training (%)	5	6	4	2
Household size (%)				
Sole member	21	19	23	-4
2 or 3 members	50	48	51	-3
4 or 5 members	22	23	21	2
6 or more members	7	9	4	5
Receipt of public assistance (%)				
TANF, SSI/SSDI, or GA	10	13	6	8*
SNAP or WIC	38	45	27	19*
Unemployment compensation	30	10	58	-47*
Other public assistance	1	2	1	1
Counselor-predicted likelihood of training (%)				
Very likely	46	50	39	11
Somewhat likely	34	27	43	-15*
Somewhat unlikely	12	13	10	3
Very unlikely	8	9	8	1
Visited a center previously (%)	33	33	34	-1
Sample size	4,777	2,794	1,983	

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

Notes: Dollars are 2012 dollars. Minimum wage refers to the federal minimum wage. 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 that (1) the local area was selected to participate in the study, (2) the local area agreed to participate in the study, (3) the customer consented to the study, (4) the customer was selected for the survey, and (5) the customer completed the survey. Sample sizes for specific outcomes might vary slightly due to item nonresponse. All numbers are rounded to the nearest integer. The difference between the adults and dislocated workers for specific characteristics are tested using a t-test.

^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 5 percent level.

GA = General Assistance; GED = General Educational Development certificate; 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.

Customers in the study had diverse demographic characteristics. Women comprised 61 percent of those in the study and men 39 percent. Although customers varied in age from 18 to older than 80, only 17 percent of customers in the study were 51 or older when they were found eligible for intensive services and entered the study. The racial composition of customers

was also quite diverse, and most customers were racial or ethnic minorities. Only a small proportion (5 percent) of customers in the study did not speak English as a primary language.

Nearly all customers in the study were not working at the time they were randomly assigned, and many faced barriers to employment:

- More than three-fourths (77 percent) of customers had no postsecondary degree.
- About one-quarter (23 percent) of customers had not been employed in the five years before random assignment.
- Among those customers who were employed in the five years before they were randomly assigned, the average wage in the most recent job was about \$14 per hour in 2012 dollars.
- More than a third of customers (38 percent) reported receiving SNAP or Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) benefits at the time of random assignment, and 30 percent reported receiving unemployment compensation. Ten percent received TANF, Supplemental Security Income, Social Security Disability Insurance, or General Assistance at that time.
- About 5 percent of customers in the study reported a health problem severe enough to limit their ability to work or enroll in training.

Moreover, many customers had not previously used an American Job Center. About two-thirds (67 percent) of the customers in the study reported that they had not visited an American Job Center previously.

Many customers met the definition of both an adult and dislocated worker (see Chapter I for these definitions), and a local area's decision of whether to designate them to receive services from the Adult or Dislocated Worker program might have depended on available funding. Just before random assignment of each customer into the study, we asked the intake staff to record whether the customer was considered an adult, a dislocated worker, or both. More than half (58 percent) of all customers were considered adults and 33 percent were considered dislocated workers. The remaining 9 percent of the customers were considered by intake staff as both adults and dislocated workers. Because most dislocated workers also meet the definition of an adult but many adults do not meet the definition of a dislocated worker, we counted a customer whom the intake staff considered to be both an adult and a dislocated worker as a dislocated worker in Table III.2 and the analysis presented in this report.

Compared with adults, dislocated workers were less disadvantaged (Table III.2). On average, dislocated workers were more educated than adults. Only 4 percent of dislocated workers had less than a high school degree, compared with 10 percent of adults. Not surprisingly, given the definition of a dislocated worker, dislocated workers were more likely to have been employed in the five years preceding random assignment (91 percent) than adults (67 percent). The most recent hourly wage earned by dislocated workers (among those who were employed in the five years before random assignment) was about \$16 (measured in 2012 dollars); in contrast, the most recent hourly wage of adults was only about \$13 (measured in 2012 dollars). Dislocated workers were also, on average, older than adults. For instance, 22 percent of dislocated workers in the study were age 51 or older, compared with 14 percent of adults. Only 7 percent of dislocated workers were ages 18 to 24, whereas 21 percent of adults fell into that range.

IV. RECEIPT OF CORE, INTENSIVE, AND SUPPORTIVE SERVICES

During the study, customers were randomly assigned to three different study groups that could potentially receive different sets of services. The restrictions applied for the first 15 months after random assignment, and after that the study did not restrict customers' access to services. For the first 15 months after random assignment, members of the full-WIA group could potentially receive the full set of WIA services—core, intensive, training, and supportive—as they would have in the absence of the study; members of the core-and-intensive group were offered core and intensive services but not WIA-funded training; and members of the core group were offered core services but not WIA-funded intensive or training services. The study did not change the criteria for who could be offered supportive services (such as assistance with transportation expenses), but because half of the local areas tied supportive services to the receipt of intensive or training services, the study did affect whether customers were offered these services.

Key findings

- When WIA-funded services were not available because of the study, many participants instead accessed other employment services that were available in the community. However, the availability of WIA-funded services increased the receipt of core, intensive, and supportive services.
 - Customers in the full-WIA group were more likely than customers in the core-and-intensive group to take assessments. They also spent more time receiving one-on-one assistance than customers in the core-and-intensive group.
 - Customers in the core-and-intensive and full-WIA groups were more likely to receive core and intensive services—workshops, assessments, and one-on-one assistance—than customers in the core group.
 - Customers in the full-WIA group were also more likely to use a resource room than customers in the core group.
 - Customers in the full-WIA group were more likely to receive supportive services than customers in the core-and-intensive group, who in turn were more likely than customers in the core group to receive supportive services.
- More than 70 percent of customers in the full-WIA group were either very or somewhat satisfied with their experience at an American Job Center.

To understand the impacts of providing WIA-funded intensive services and training on employment outcomes, we examined differences across study groups in their receipt of core, intensive, supportive, and training services. No customer in the study was required to receive any service. In addition, all customers could seek services that were similar to those provided by the Adult and Dislocated Worker programs, but offered elsewhere in the community. These alternative providers of employment services may include other government agencies, community-based organizations, or education facilities. Hence, the difference across study groups in the receipt of services is not the same as the difference in access to the services across study group.

In this chapter, we focus on differences across study groups in the receipt of core, intensive, and supportive services in the 30 months after random assignment. It begins with a summary of the services available to and received by members of each group, including resource rooms, workshops, job clubs, assessments, and one-on-one assistance (Section A). It then examines the differences across study groups in the use of the resource room (Section B), workshops attended (Section C), job clubs attended (Section D), assessments taken (Section E), one-on-one staff assistance received (Section F), supportive services received (Section G), and satisfaction with

the American Job Center (Section H). In Section I, we discuss the findings separately for adults and dislocated workers. We discuss customers' receipt of training services in the following chapter (Chapter V).

A. Summary of the services available to and received by members of each group

Although most local areas in the study offered a similar set of services—use of a resource room, workshops, job clubs, assessments, one-on-one assistance, and supportive services—the exact set of services offered to members of each study group varied by local area (Table IV.1). For example, some local areas provided WIA-funded supportive services and job clubs, whereas others did not, and one local area did not offer any core or intensive workshops. Whether the service received by the customer was an intensive or core service sometimes also varied slightly by local area. A service classified by some local areas as an intensive service could be classified by other local areas as a core service. For example, 8 local areas offered basic skills assessments, such as the TABE, in the resource room as a core service, whereas the other 20 offered it only as an intensive service. Reflecting differences across local areas in how they classify services, we focus on measuring specific services received without distinguishing whether the service was classified as core or intensive. However, every local area in the study offered customers in the core-and-intensive group more services than they offered to customers in the core group.

We examined the services customers in the study received in the period starting from the time they were randomly assigned, which occurred after a customer requested and was determined to be eligible for intensive services, through 30 months after random assignment. Before random assignment, customers would have received at least one core service from an American Job Center. In fact, many local areas required customers to use the American Job Center's resource room to look for jobs before they could pursue intensive services.

The study's 15- and 30-month follow-up surveys provide a rich description of the services received by customers. The surveys asked customers about their use of six types of core and intensive services—a resource room, workshops, job clubs, assessments, one-on-one staff assistance, and supportive services (Table IV.1)—as well as enrollment in training. The 15-month survey asked respondents about receipt of services in the 15 months after random assignment. The 30-month survey asked those who had responded to the 15-month survey about receipt of services since that survey, at which time all study participants could potentially receive any WIA-funded service they would have been eligible for in the absence of the study. The 30-month survey asked those who did not respond to the 15-month survey about receipt of services received since random assignment. Because the study restricted access to services only in the first 15 months after random assignment, responses to the 30-month survey are important for determining whether customers in the core-and-intensive and core groups later pursued WIA-funded services they were denied in the first 15 months. Both surveys asked about the receipt of these services at an American Job Center and elsewhere in the community.

Mirroring findings from the analysis of intensive and core service receipt 15 months after random assignment (McConnell et al. 2016), in general, random assignment to a group with access to higher tiers of WIA-funded services increased customers' receipt of core, intensive, and supportive services, either at an American Job Center or elsewhere in the 30 months after

Table IV.1. Core, intensive, and supportive services for which we have survey data on customer service receipt

Description	Availability by study group and local area ^a
Resource rooms. Rooms with computers that provide information about jobs and services and online tools	All local areas offered access to all study groups.
Workshops. Sessions for groups of customers on topics such as job search, use of computers and online tools, self-assessment and goal setting, financial management, conflict resolution, and job retention skills	26 of 28 local areas offered workshops as a core service, available to all study groups. 15 of 26 local areas offering workshops as a core service also offered some workshops as an intensive service, available to the core-and-intensive and full-WIA groups. One local area offered no workshops as a core service and some workshops as an intensive service available to the core-and-intensive and full-WIA groups. One local area did not offer any workshops.
Job clubs. Groups of job seekers who meet to provide support and discuss job search strategies	10 local areas offered a job club as a core service, available to all study groups. 2 local areas offered job clubs as an intensive service, available only to members of the full-WIA and core-and-intensive group. 16 local areas did not offer job clubs.
Assessments. Formal assessment of basic skills, occupational aptitudes, and career interests	Most local areas offered some online self-assessments as a core service, available to all study groups. All local areas offered some assessments as an intensive service, available only to members of the full-WIA and core-and-intensive groups. 8 local areas also offered basic skills assessments as a core service, available to all customers in the resource room. In all local areas, discussion of assessment results was an intensive service, available only to members of the full-WIA and core-and-intensive groups.
One-on-one staff assistance. A meeting or meetings with an employment counselor, in person or by phone, to discuss employment-related issues	All local areas offered job search assistance, career and training planning, and case management as an intensive service, available only to members of the full-WIA and core-and-intensive groups. All local areas might have provided some limited one-on-one assistance (such as from staff in the resource room) to members of all groups.
Supportive services. In-kind and financial assistance to help customers succeed in their job search and training activities and to address barriers to employment	10 local areas offered supportive services only to customers receiving intensive or training services (full-WIA and core-and-intensive groups). 4 local areas offered these services only to customers receiving training services (full-WIA). 9 local areas offered some supportive services to customers regardless of the other services they received. 5 local areas did not offer supportive services.

Source: D'Amico et al. (2015).

^aAs of the study team's first visit to the local area, typically in 2012.

random assignment (as summarized in Table IV.2). Customers in the full-WIA group were significantly more likely than core-and-intensive customers to receive two of the six services, either at an American Job Center or elsewhere. Customers in the core-and-intensive group were significantly more likely than the core customers to receive four types of services. And customers in the full-WIA group were more likely than core customers to receive five of the six services.

Table IV.2. Summary of differences in receipt of core, intensive, and supportive services (all customers)

Service received or accessed during the 30 months after random assignment at an American Job Center or elsewhere	Comparisons between study groups		
	Full-WIA versus core-and-intensive	Core-and-intensive versus core	Full-WIA versus core
Resource room	0	0	+
Workshops	0	+	+
Job clubs	0	0	0
Assessments	+	+	+
One-on-one assistance	0	+	+
Supportive services	+	+	+

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

Notes: The sizes of the differences between groups are presented in figures and tables that follow. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

0 indicates no statistically significant difference at the 5 percent level.

+ indicates a statistically significant positive difference at the 5 percent level.

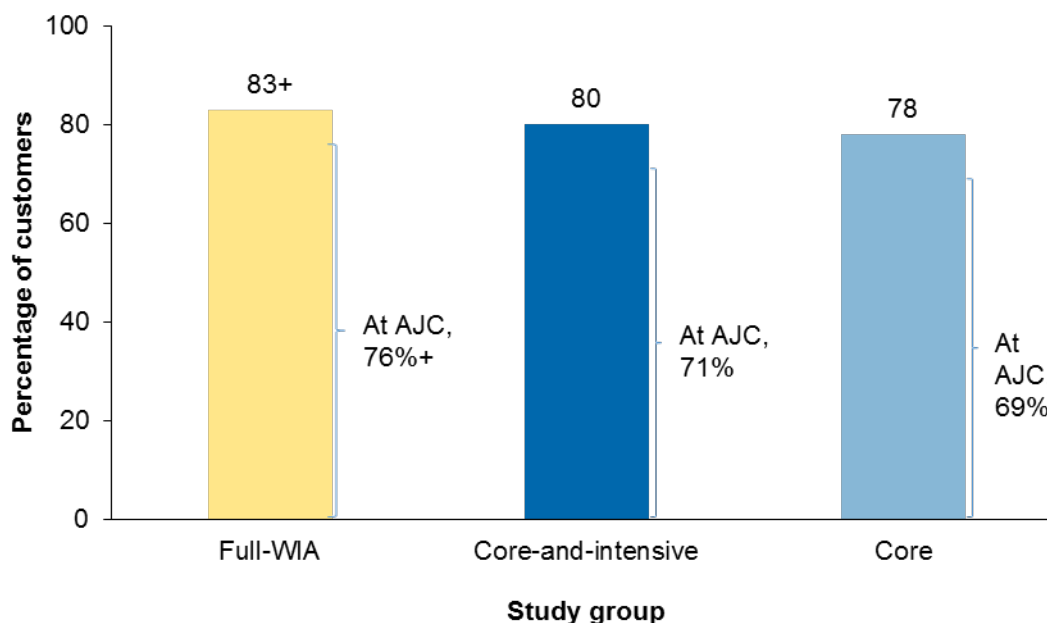
As expected, customers in all three groups continued to receive services throughout the 30-month follow-up period. In general, the patterns of service receipt across study groups in the 30 months after random assignment (Table IV.2) were similar to the patterns of service receipt in the first 15 months after random assignment (McConnell et al. 2016). This suggests that when the restriction on the receipt of WIA-funded services was lifted 15 months after random assignment, customers did not compensate for the early service restriction by substantially increasing their use of WIA-funded services. The only difference in the patterns of service receipt across groups between the first half of the follow-up period and the full follow-up period is in the use of resource rooms. Fifteen months after random assignment, there were significant differences in use of resource rooms between the full-WIA and core-and-intensive groups and the core-and-intensive and core groups. These differences remained positive but were no longer statistically significant when considered over the entire 30-month follow-up period.

B. Use of resource rooms

The resource rooms located in American Job Centers provided individual computer work stations with Internet access, which customers could use to access job matching systems, labor market information, and career exploration tools. Most of the resource rooms also contained printers, copiers, and fax machines for customers' use. All local areas in the study considered use of the resource room as a core service; therefore, all customers in the study could access these rooms, regardless of study group assignment. Many customers had likely already accessed a resource room before random assignment. Some of the services typically provided in an American Job Center resource room were also provided in alternative locations. For example, some public libraries provided Internet access and some community-based organizations had lists of available job openings. In this discussion, we refer to these services accessed at places other than American Job Centers as resource rooms, even though the customers might not have had access to the same array of services as in a typical American Job Center resource room.

Even though customers in all three study groups had the same access to resource rooms throughout the 30-month follow up period, their use was greatest in the full-WIA group and least in the core group. In this period, 83 percent of customers in the full-WIA group used a resource room, either at an American Job Center or elsewhere, compared with 78 percent of the core group (Figure IV.1). The differences between the core-and-intensive group and the other two groups was not significant.

Figure IV.1. Used a resource at an American Job Center or elsewhere in the 15 months after random assignment



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

Neither of the differences (either used a resource room at an AJC or anywhere) between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Neither of the differences (either used a resource room at an AJC or anywhere) between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

AJC = American Job Center.

Customers' use of resource rooms at American Job Centers can partly explain the difference in total resource room use across study groups. The full-WIA group was more likely than the core group to use a resource room at an American Job Center (Figure IV.1). More than three-fourths (76 percent) of customers in the full-WIA group used a resource room at an American Job Center, whereas 69 percent of customers in the core group did so. The differences between the core-and-intensive and each of the other two groups were not significant. Many customers reported using a resource room at an American Job Center as well as resource room services elsewhere.

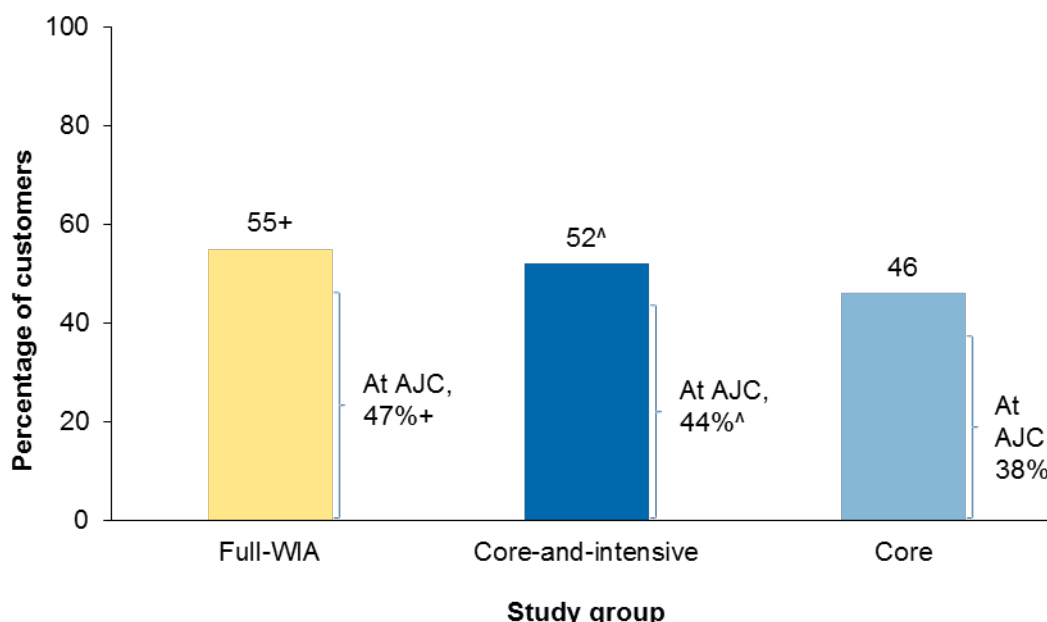
Full-WIA customers were less likely than core-and-intensive customers to use resource rooms at alternative locations. Among full-WIA customers, 46 percent used a resource room at an alternative location, compared with 50 percent of core-and-intensive customers (Appendix C of the technical supplement, Table C.IV.1). The differences between the core group and each of the other two groups were not significant.

C. Workshops attended

Workshops offered at American Job Centers provided instruction on job search and employment-related skills, such as how to apply for a job, develop a résumé, manage stress, and maintain employment. Depending on the local area, workshops could be categorized as either core or intensive services. The content and even duration of workshops categorized as core and intensive were fairly similar (D’Amico et al. 2015). Fifteen local areas provided both core and intensive workshops, 11 provided only core workshops, and one provided only intensive workshops. One local area provided no workshops.

In the 30-month period after random assignment, members of the full-WIA and core-and-intensive groups were about equally likely to attend a workshop at any location, but both of these groups were more likely than core group members to attend workshops. About 55 percent of full-WIA and 52 percent of core-and-intensive customers attended at least one workshop, whereas only 46 percent of the core group attended at least one workshop (Figure IV.2). This pattern of workshop attendance was partially driven by full-WIA and core-and-intensive customers being more likely than core customers to attend workshops at an American Job Center. About 47 percent of full-WIA customers and 44 percent of core-and-intensive customers attended a workshop at an American Job Center, compared with 38 percent of customers in the core group (Figure IV.2). Rates of attending workshops elsewhere were similar across groups, ranging from 18 to 20 percent (Appendix C of the technical supplement, Table C.IV.2a).

Figure IV.2. Attended a workshop at an American Job Center or elsewhere (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

Neither of the differences (either attended a workshop at an AJC or attended a workshop anywhere) between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

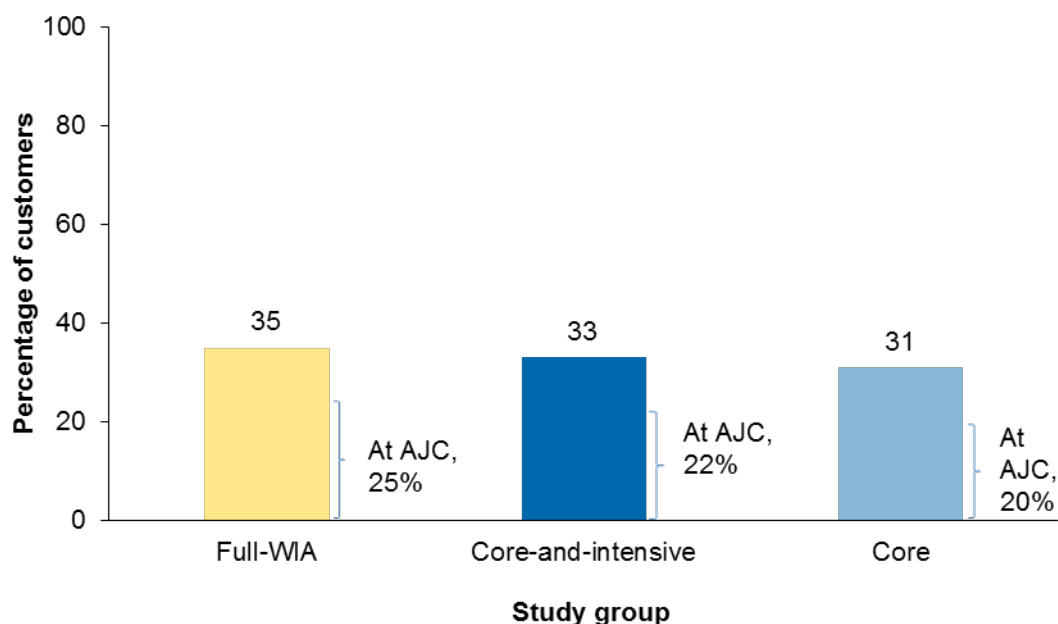
AJC = American Job Center.

Customers who attended at least one workshop after random assignment attended about four workshops, on average (Appendix C of the technical supplement, Table C.IV.2b); this did not differ significantly across study groups. Among those customers who attended a workshop during the 30 months after random assignment, customers in the full-WIA and core-and-intensive groups were more likely than customers in the core group to attend workshops on preparing for assessments and starting a business, and full-WIA customers were more likely than core customers to attend a workshop on computer skills and appropriate job behavior (Appendix C of the technical supplement, Table C.IV.3).

D. Job clubs attended

Job clubs provide an opportunity for customers to meet with other job seekers to discuss job leads and search strategies. They are sometimes facilitated by an employment counselor. Ten local areas considered job clubs a core service, though 2 offered them as intensive services, and the other 16 local areas did not offer job clubs (D'Amico et al. 2015).

Figure IV.3. Participated in a job club at an American Job Center or elsewhere (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

Neither of the differences (either participated in a job club at an AJC or participated in a job club anywhere) between any two groups is significant at the 5 percent level.

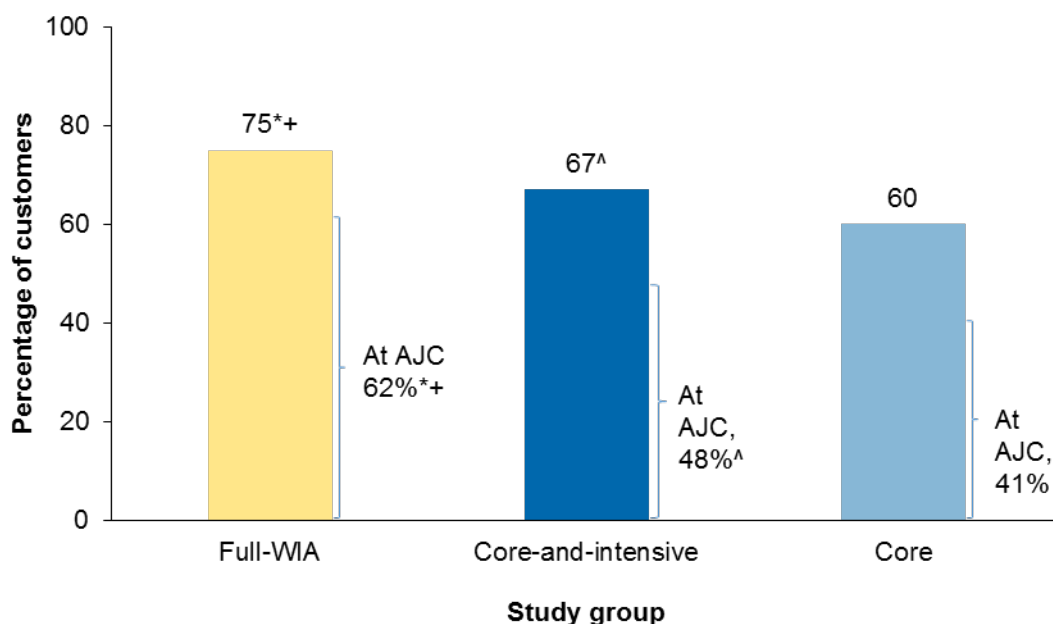
AJC = American Job Center.

E. Assessments taken

Local areas offered formal assessments of skills, abilities, and aptitudes. The most frequently offered tests were the TABE and WorkKeys; others included Prove It!, Aztec, and Comprehensive Adult Student Assessment Systems (D’Amico et al. 2015). Eight local areas provided access to online basic skills assessments to all customers as a core service, but the other local areas considered assessments to be an intensive service.

In the 30 months following random assignment, full-WIA customers were more likely than core-and-intensive and core customers to take an assessment at any location, and core-and-intensive customers were more likely than core customers to take an assessment at any location (Figure IV.4). Among the full-WIA group, 75 percent of customers took an assessment at an American Job Center or elsewhere, compared with 67 percent of core-and-intensive customers and 60 percent of core customers.

Figure IV.4. Took an assessment at an American Job Center or elsewhere (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

[^] Difference between the core-and-intensive and core groups is significant at the 5 percent level.

⁺ Difference between the full-WIA and core groups is significant at the 5 percent level.

AJC = American Job Center.

Differences in the percentage of customers who took an assessment at an American Job Center explain these differences across study groups. Full-WIA customers were more likely than core-and-intensive and core customers to take an assessment at an American Job Center, and core-and-intensive customers were more likely than core customers to take an assessment at a center. Almost two-thirds (62 percent) of full-WIA customers reported taking an assessment at an American Job Center, whereas 48 percent of core-and-intensive customers and 41 percent of core customers reported doing so (Figure IV.4). Customers in each group were about equally likely to take an assessment at an alternative location (Appendix C of the technical supplement, Table C.IV.4a).

Among customers who took an assessment, full-WIA customers were more likely to report taking a basic skills assessment, such as the TABE or WorkKeys, than core-and-intensive customers (Appendix C of the technical supplement, Table C.IV.4b). This difference is likely due to the fact that full-WIA customers had greater incentives to take assessments because, in many local areas, entry into training programs and eligibility for training funding often required a minimum score on such an assessment.

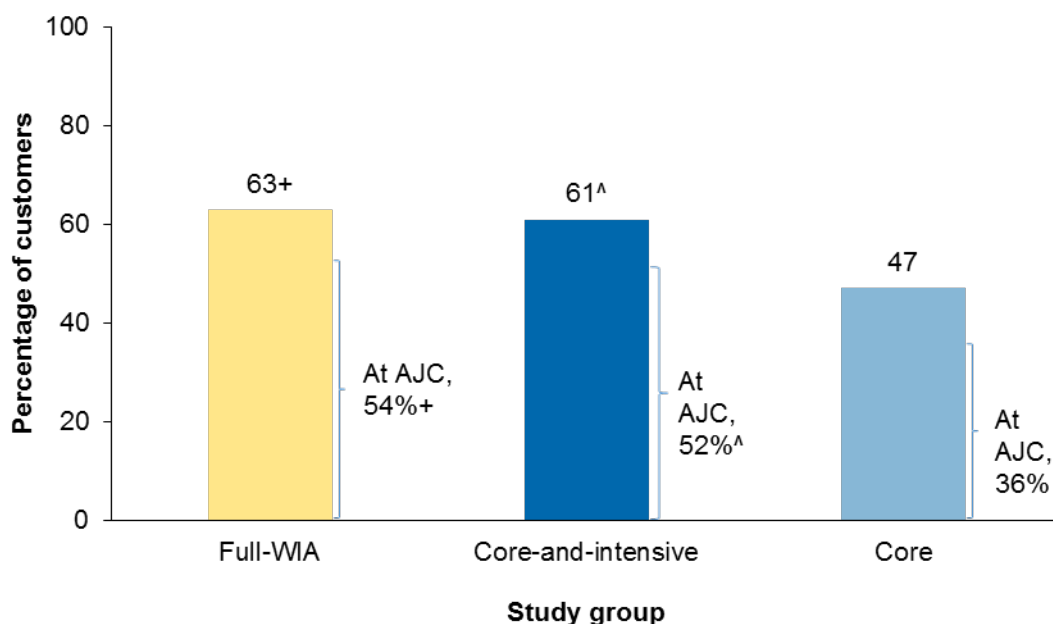
F. Receipt of one-on-one staff assistance

The heart of WIA intensive services was one-on-one assistance from employment counselors. Counselors would meet with customers to review the results of assessments, assist with customers' job searches, develop a career and service plan for the customer, and provide referrals for additional services available at the center and elsewhere in the community. For those full-WIA customers interested in training, counselors determined whether they were eligible for training, reviewed training options, and worked with customers to select an eligible training provider. Counselors could help core-and-intensive customers select a training program and find funding for training elsewhere, but could not offer WIA funding for training. Counselors provided assistance in person and via telephone.

Some centers also provided one-on-one assistance as a core service. For example, customers could receive some light-touch one-on-one assistance from staff in the resource room on, for example, résumé development or how to use the labor exchange. Eight local areas conducted a triage assessment for all new customers before random assignment (D'Amico et al. 2015). Hence, core group members could receive some light-touch one-on-one assistance at the American Job Center, but in the first 15 months after random assignment they were not offered more substantive meetings with a counselor to develop plans for careers or service receipt.

Core-and-intensive and full-WIA customers were more likely than core customers to receive one-on-one assistance at an American Job Center or elsewhere (Figure IV.5). The percentage of customers who received this one-on-one staff assistance did not differ significantly between the full-WIA and core-and-intensive group. Almost two-thirds (63 percent) of full-WIA customers received one-on-one assistance, compared with 61 percent of the core-and-intensive customers and 47 percent of core customers. Differences in the receipt of one-on-one assistance at American Job Centers largely drove differences in the receipt of any one-on-one assistance across study groups (Figure IV.5). Core-and-intensive and full-WIA customers were more likely than core customers to receive one-on-one assistance from staff at an American Job Center.

Figure IV.5. Receipt of one-on-one staff assistance at an American Job Center or elsewhere (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

Neither of the differences (either one-on-one assistance at an AJC or anywhere) between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

[^] Difference between the core-and-intensive and core groups is significant at the 5 percent level.

⁺ Difference between the full-WIA and core groups is significant at the 5 percent level.

AJC = American Job Center.

Full-WIA customers reported receiving more one-on-one assistance than core-and-intensive customers, while both groups received more than customers in the core group (Table IV.3). Counting those who did not receive staff assistance as having received zero minutes, on average, full-WIA customers reported receiving 16 minutes more one-on-one assistance than core-and-intensive customers. Core-and-intensive customers reported receiving 27 minutes more one-on-one staff assistance than core customers, whereas full-WIA customers reported receiving 42 minutes more one-on-one staff assistance than core customers.

Among customers who received any one-on-one assistance, customers in the full-WIA group received more assistance than customers in the core-and-intensive and core groups. Customers in the full-WIA group who received one-on-one assistance reported receiving 24 minutes more than customers in the core-and-intensive group, and 34 minutes more than customers in the core group (Table IV.3). The difference in time spent receiving one-on-one assistance among customers who received any was not significantly different between core-and-intensive and core group customers.

Table IV.3. Length of time spent receiving one-on-one staff assistance from an American Job Center or elsewhere

	Mean by study group		
	Full-WIA	Core-and-intensive	Core
Total time spent receiving one-on-one assistance (minutes)	103.5*+	87.9^	61.3
Total time spent receiving one-on-one assistance among customers who received any one-on-one assistance (minutes)	180.0*+	155.7	146.5

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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. For the total time spent receiving one-on-one assistance among customers who received any one-on-one assistance, differences between study groups cannot be interpreted as causal impacts because not all members of each study group received any one-on-one assistance.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Among customers who received any one-on-one staff assistance, full-WIA customers participated in about two more sessions than core customers (Appendix C of the technical supplement, Table C.IV.6b). Full-WIA customers who received one-on-one assistance received that assistance over an average of about seven sessions; core customers who received one-on-one assistance did so over fewer than six sessions. Other differences among customers who received any one-on-one staff assistance in the number of sessions across study groups were not statistically significant.

Customers in all three study groups reported participating in more in-person sessions than phone sessions and reported that in-person sessions lasted longer on average than phone sessions (Appendix C of the technical supplement, Table C.IV.6b). For example, among the full-WIA group, those who received one-on-one assistance reported receiving about five in-person sessions and two phone sessions. The average reported length of an in-person session for this group was 29 minutes; the average reported length of a telephone session was 12 minutes.

G. Receipt of supportive services

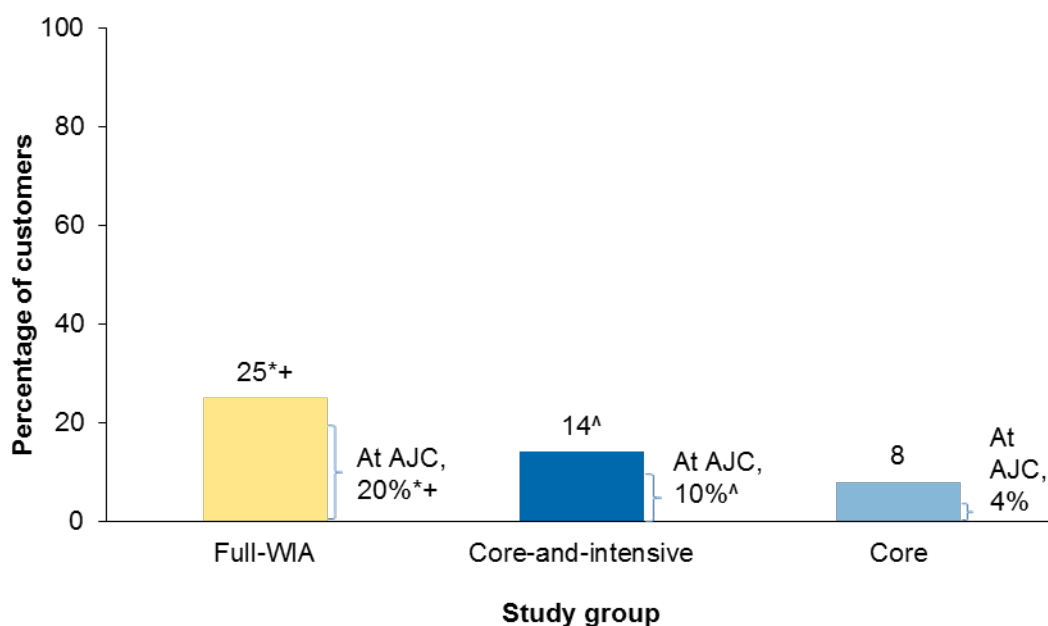
Supportive services consisted of in-kind and financial assistance to help customers succeed in their job search and training activities and to address barriers to employment (D’Amico et al. 2015). Customers could use funds for ancillary training expenses, such as books, tools, and other supplies; transportation to training or job interviews; child care while in training or searching for a job; emergency services such as medical expenses or mortgage payments; and needs-related payments. Some local areas funded ancillary training expenses through an ITA; others counted them as supportive services. For the purposes of this analysis, any financial assistance with the exception of that received for tuition or fees, or from family members, is considered to be supportive services.

Local areas varied in their eligibility rules for supportive services and how much assistance they provided. Ten local areas provided supportive services only to customers receiving training

or intensive services, and four provided supportive services only to customers receiving training. Nine local areas provided assistance to customers even if they did not receive intensive or training services, although this assistance was typically not more than a few hundred dollars. In all local areas, staff would refer customers to other community providers of supportive services. Five local areas relied solely on these referrals and did not offer any WIA-funded supportive services (D’Amico et al. 2015).

Reflecting the fact that supportive services were often tied to training, full-WIA customers were more likely than the core-and-intensive customers to receive supportive services, who in turn were more likely to receive them than core customers (Figure IV.6). About 25 percent of customers in the full-WIA group received supportive services from either the American Job Center or elsewhere, whereas 14 percent of core-and-intensive and 8 percent of core customers did so.

Figure IV.6. Receipt of supportive services from an American Job Center or elsewhere (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

AJC = American Job Center.

These differences were driven by full-WIA customers being more likely to receive supportive services from an American Job Center than core-and-intensive customers, who were in turn more likely to receive supportive services from an American Job Center than were core customers. Center partners, such as community health networks and local public assistance offices, might have funded some of the supportive services that customers reported as receiving from an American Job Center. There were no differences in supportive service receipt from sources beyond those provided by American Job Centers (Appendix C of the technical supplement, Table C.IV.7).

Full-WIA customers received more supportive services than customers in either the core-and-intensive or the core group. Customers in the full-WIA group reported receiving \$264 in the 30 months since random assignment, compared with the \$126 reported by core-and-intensive customers, and the \$99 reported by core customers (Table IV.4). Full-WIA customers received \$186 from an American Job Center on average, whereas core-and-intensive customers received \$81 and core customers received \$17. Of the differences in supportive services received at an American Job Center, only that between the core customers and each of the other groups are significant.

Table IV.4. Total financial assistance received since random assignment (all customers)

	Mean by study group		
	Full-WIA	Core-and-intensive	Core
Total financial assistance received, other than for training (\$)	264*+	126	99
Amount of financial assistance received from an AJC (\$)	186+	81^	17

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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

AJC = American Job Center.

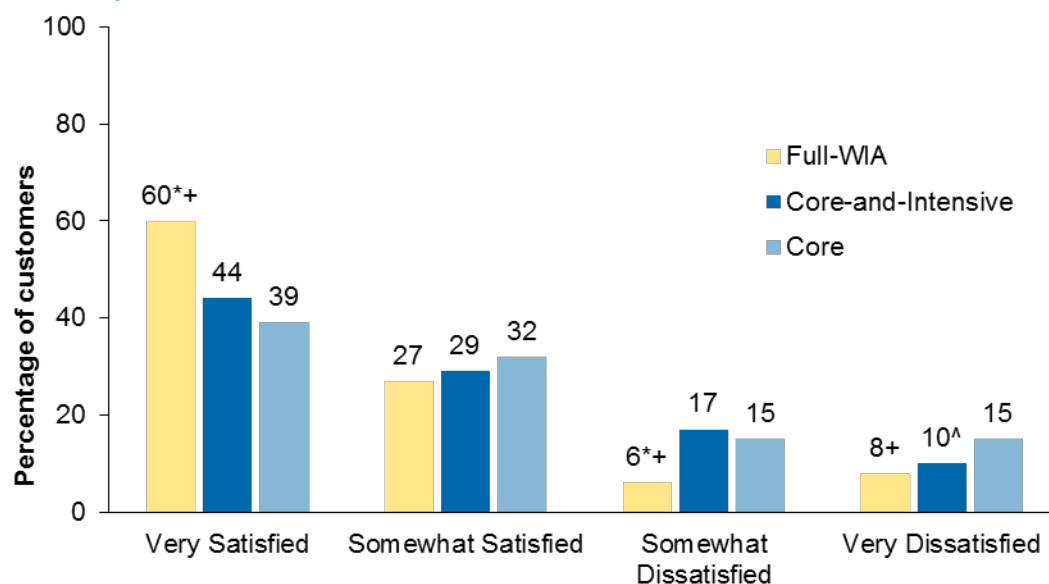
The most common type of supportive services received from any source among each group, as reported on the survey, was transportation, followed by clothes and uniforms, tools and supplies, and books (Appendix C of the technical supplement, Table C.IV.7). Among the full-WIA group, 19 percent reported receiving funds to assist with transportation (such as bus passes or gas cards), 9 percent reported receiving funds to assist with clothing or uniforms, 10 percent reported receiving funds to help purchase books, and 10 percent reported receiving funds to help purchase tools or supplies. Among the core-and-intensive and core customers, use of funds for clothes and uniforms was more common than for books, tools, and supplies.

H. Differences in satisfaction with the American Job Center experience

In addition to asking about service receipt at an American Job Center or elsewhere, the 15- and 30- month surveys also asked customers if they were very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied with their overall experience at the American Job Center.

In each research group, more than 70 percent of customers reported that they were either very or somewhat satisfied with their experience. Customers in the full-WIA group were more likely to report that they were very satisfied than were customers in either the core-and-intensive or core groups (Figure IV.7). Sixty percent of customers in the full-WIA group reporting being very satisfied with their experience at the American Job Center, compared with 44 percent of core-and-intensive customers and 39 percent of core customers. The difference between the core-and-intensive and core groups is not significant.

Figure IV.7. Satisfaction with American Job Center experience (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

[^] Difference between the core-and-intensive and core groups is significant at the 5 percent level.

⁺ Difference between the full-WIA and core groups is significant at the 5 percent level.

AJC = American Job Center.

I. Differences in service receipt by adults and dislocated workers

All local areas offered services tied to a customer's needs, regardless of whether he or she was categorized as an adult or a dislocated worker, but the needs of adults and dislocated workers often differed. As discussed in Chapter III, on average, adults were more disadvantaged, less educated, younger, and had less work experience than dislocated workers (Table III.2). Hence, the service needs of these groups might differ.

In general, the same patterns emerged for adults and dislocated workers across the three study groups as for the full sample (Table IV.5). None of the pairwise differences between study groups for adult customers were statistically different from the differences for dislocated workers.

Table IV.5. Summary of differences in receipt of core, intensive, and supportive services, separately for adults and dislocated workers (all customers)

Service received or accessed during the 30 months after random assignment	Customer type	Full-WIA versus core-and-intensive	Core-and-intensive versus core	Full-WIA versus core
Resource room	Adults	0	0	+
	Dislocated workers	0	0	0
Workshops	Adults	0	0	0
	Dislocated workers	0	0	+
Job clubs	Adults	0	0	0
	Dislocated workers	0	0	0
Assessments	Adults	+	0	+
	Dislocated workers	0	0	+
One-on-one assistance	Adults	0	+	+
	Dislocated workers	0	+	+
Supportive services	Adults	+	+	+
	Dislocated workers	+	+	+

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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

0 indicates that the difference between the study groups is not statistically significant.

+ indicates a statistically significant positive difference between study groups in the receipt of a service at an American Job Center or elsewhere.

V. RECEIPT OF TRAINING SERVICES

Training services were the last of the three tiers of services offered by the Adult and Dislocated Worker programs. Training funded by the Adult and Dislocated Worker programs was offered only to customers who met local area-specific eligibility requirements, had received services from both the core and intensive services tiers, and were unable to find a job that led to self-sufficiency. Local areas offered occupational skills training, upgrading, or retraining and could offer adult basic education if combined with other training services. A few local areas also offered entrepreneurial training.

To maximize customers' choices, WIA required most training services to be funded through ITAs, vouchers that customers could use to procure training from a variety of approved providers. Some local areas allowed customers to enroll in a wide range of training programs using an ITA, whereas others narrowed customers' training options to those geared toward particularly high-growth occupations, such as health care occupations or truck driving. Most local areas also offered on-the-job training, in which a portion of customers' wages were subsidized as they learned skills while working (to compensate employers for lower productivity while workers obtained skills); on-the-job training relied on contracts with employers rather than ITAs. In addition, local areas could customize training for current or prospective employees at a specific business.

Program staff were permitted to offer training services funded by the Adult and Dislocated Worker programs to customers randomly assigned to the full-WIA group throughout the 30-month follow-up period, subject to any usual local area policies. They offered training to full-WIA customers who were interested in training, met the local area criteria for training eligibility, and completed a set of required activities before their training plan was approved, just as they would have in the absence of the study. However, program staff could not offer WIA-funded training to members of the core-and-intensive and core groups during the first 15 months after random assignment. After this initial period, the restrictions on providing WIA-funded training

Key findings

- About half of the customers in the full-WIA group enrolled in a training program during the 30 months after random assignment. Among full-WIA customers who enrolled in training, 79 percent completed at least one program, and 60 percent received a credential. On average, full-WIA group members who enrolled in training spent nearly 800 hours in training over just less than 9 months.
- Providing WIA-funded training significantly increased the proportion of customers who enrolled in a training program during the 30 months after random assignment by 9 to 16 percentage points. It increased the average number of hours in training by 89 to 121 hours.
- The evidence suggests that providing WIA-funded training accelerated the speed at which trainees enrolled in and completed training programs.
- Trainees in the full-WIA and core-and-intensive groups were significantly more likely to enroll in a vocationally oriented training program than trainees in the core group.
- Trainees in the full-WIA and core-and-intensive groups were more likely to receive a credential from a training program than trainees in the core group. Trainees in the full-WIA group were also more likely than trainees in the core group to have completed a training program and less likely to have left a training program before completing it.
- Patterns of training receipt were similar for adults and dislocated workers.

to members of the core-and-intensive and core groups were lifted. But no effort was made to reach out to the customers at that point in time.

Customers in all three study groups could access training funded by other sources at any time as they normally would, including Federal Pell Grants, other government grants or programs, or the customers' own funds. In fact, WIA required that customers use other publicly available funds, such as Pell Grants, before using WIA funds for training. During the study, employment counselors also could offer one-on-one guidance to customers in the full-WIA and core-and-intensive groups on how to apply for other sources of funds to finance training. Such guidance was not available to core customers in the first half of the follow-up period.

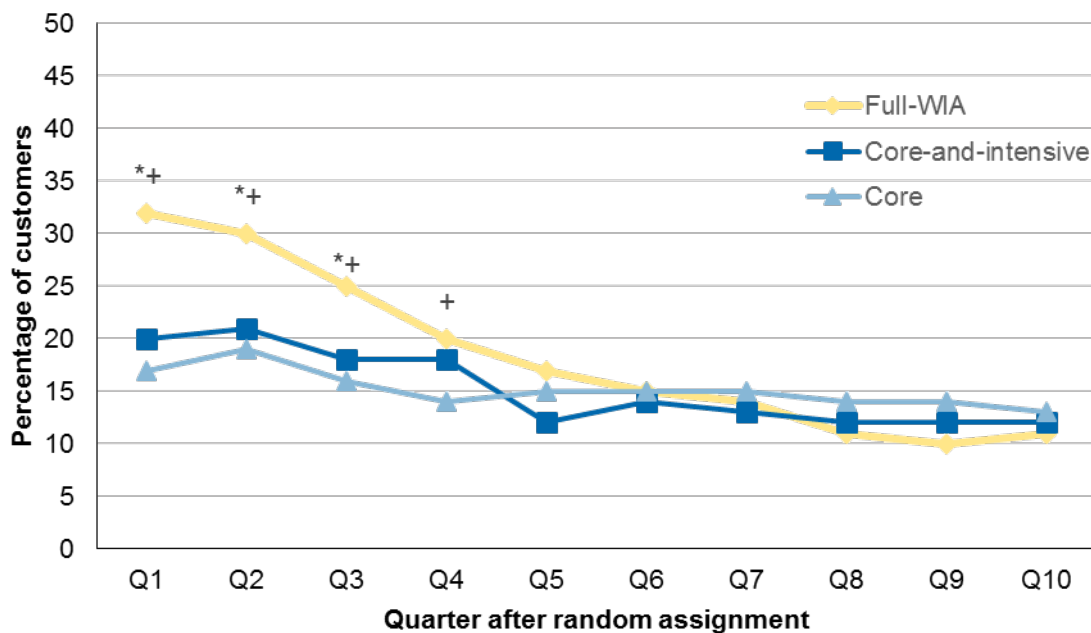
In this study, training programs are any courses designed to teach a customer occupational or basic skills to help the customer succeed in the labor market. This definition includes vocational training, which teaches a customer skills for a specific job or prepares him or her for an occupation, and educational programs, which include any adult basic education or literacy activities, General Educational Development (GED) test preparation, English as a second language programs, and postsecondary general education courses. We classified programs as vocational if a customer said the primary purpose of the program was to help them learn job skills or prepare for an occupation, and educational otherwise.

In this chapter, we discuss differences across the three study groups in the receipt of training and the characteristics of training received. We first discuss how enrollment in training varied across study groups (Section A) and various ways to quantify differences in the amount of training received (Section B). We then delve deeper into the characteristics of training programs chosen by study participants (Section C). Next, we analyze the rates at which customers completed training programs and received credentials (Section D) and how customers paid for training (Section E). We conclude with a discussion of differences in training outcomes for adults and dislocated workers (Section F).

A. Enrollment in training

Fifty percent of customers in the full-WIA group enrolled in some training program during the 30-month follow-up period, funded by either the Adult and Dislocated Worker programs or another source. In the first quarter after random assignment, 32 percent of the full-WIA group enrolled in a training program (Figure V.1). These rates decreased throughout the early portion of the follow-up period. Twenty-five percent of full-WIA customers enrolled in training during Quarter 3; 15 percent of full-WIA customers enrolled in training in Quarter 6. In each of the final three quarters of the follow-up period, about 10 percent of full-WIA customers were enrolled in training. Aggregating across the 30-month follow-up period, about half of all full-WIA customers enrolled in a training program at some point in time (Figure V.2).

Figure V.1. Enrollment in training funded by any source (all customers), by quarter



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

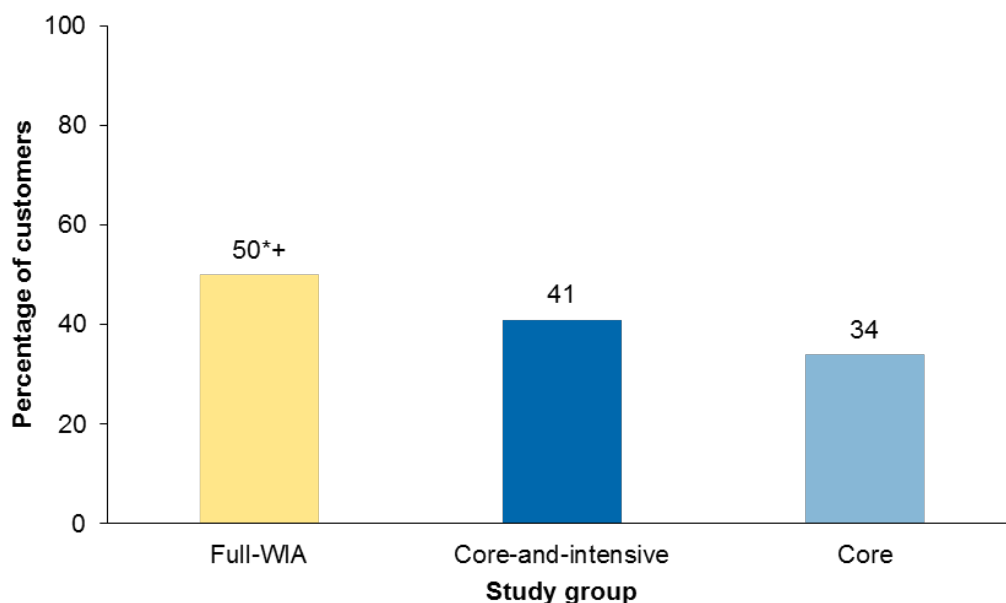
* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

None of the differences between the core-and-intensive and core groups are significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

Figure V.2. Enrollment in training funded by any source (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

The difference between the core-and-intensive and core groups is not significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Fewer customers in the core-and-intensive and core groups enrolled in training compared to the full-WIA group (Figure V.1). Across the 30-month follow-up period, 41 percent of core-and-intensive customers and 34 percent of core customers enrolled in any training program (Figure V.2). In the first quarter after random assignment, only 20 percent of the core-and-intensive group and 17 percent of the core group had started training (Figure V.1). The training enrollment rate increased slightly for both groups in Quarter 2 but then fell in Quarters 3 and 4. By Quarter 6, the rate of training enrollment had fallen to 14 and 15 percent for customers in the core-and-intensive and core groups, respectively. Rates for both groups remained between 12 and 15 percent for the remaining quarters of the follow-up period, similar to the rates of the full-WIA group, which ranged from 10 to 15 percent in these final quarters.

Although customers in the core-and-intensive and core groups could have received WIA-funded training in the second half of the follow-up period if they were otherwise eligible, there was little change in training enrollment rates between Quarters 5 and 6 (Figure V.1). In the core group, the training enrollment rate was 15 percent in both quarters. In the core-and-intensive group, the training rate rose from 12 to 14 percent from Quarter 5 to Quarter 6; this small uptick in training rates could have been because the restriction on WIA-funded training was removed.

Comparing rates of training across groups, customers in the full-WIA group were 9 percentage points more likely than customers in the core-and-intensive group, and 16 percentage points more likely than customers in the core group, to enroll in training at any point in the 30-month follow-up period (Figure V.2). Differences in training enrollment were largest in the first quarters after random assignment and faded by the second half of the follow-up period (Figure V.1). In Quarter 1, full-WIA customers were 11 percentage points more likely to be enrolled in training than core-and-intensive customers and 15 percentage points more likely to be enrolled in training than core customers. But by Quarter 6, estimated differences across groups in enrollment rates were 1 percentage point or less and not statistically significant. These findings suggest that although customers served by the Adult and Dislocated Worker programs had access to outside sources of training throughout the follow-up period, these alternatives did not fully replace WIA-funded training. Furthermore, because training enrollment rates were low and similar across groups in the second half of the follow-up period, the length of the follow-up period is likely sufficient to measure the long-term impacts of access to training funded by the Adult and Dislocated Worker programs on outcomes such as earnings and employment.

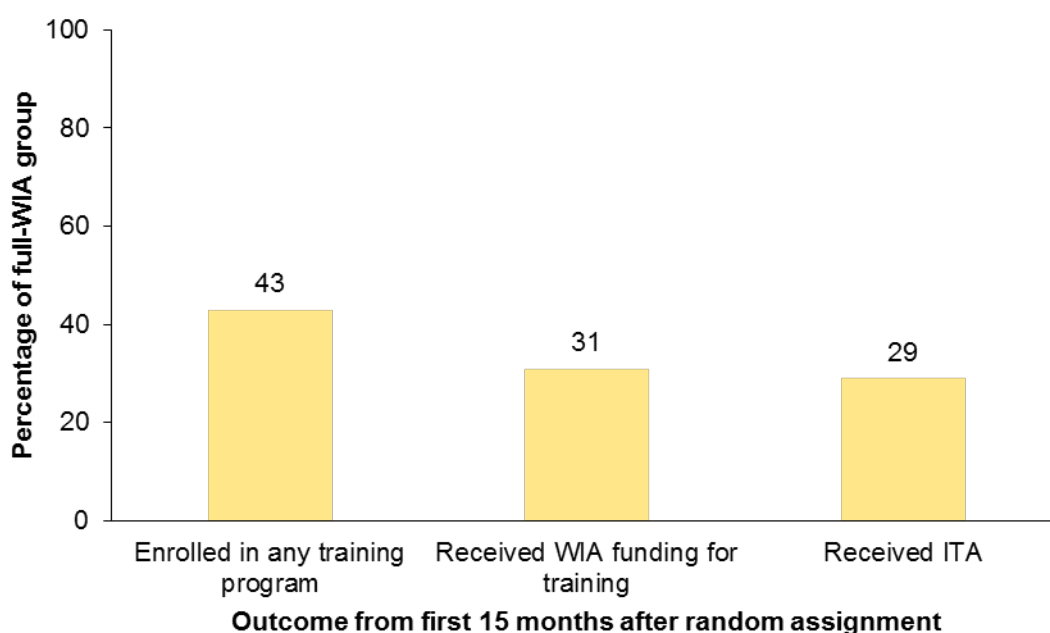
In addition, core-and-intensive customers were 7 percentage points more likely to enroll in training during the 30-month follow-up period than were core customers; however, this difference is not statistically significant (Figure V.2). Employment counselors discussed training options with slightly more than half of the customers in the core-and-intensive group (Appendix C of the technical supplement, Table C.IV.6a) and might have helped them enroll in and find funding for training as part of providing intensive services. But our findings suggest that such assistance did not have large effects on the share of customers that enrolled in any training

program. Core customers motivated to enroll in training likely obtained information on training programs from the resource room or other sources.

In addition to examining rates of training funded by any source, we used information from the WIASRD to understand patterns of enrollment in WIA-funded training. As noted in Chapter II, we obtained information from the WIASRD only for the first 15 months of the follow-up period.

The administrative data suggests that most full-WIA customers who enrolled in training enrolled in a WIA-funded training program (Figure V.3). In the first 15 months of the 30-month follow-up period, 43 percent of full-WIA customers enrolled in a training program, 31 percent used WIA funds—at least in part—to pay for training, and 29 percent received an ITA. By comparing the 50 percent of full-WIA customers who enrolled in a training program at any point during the 30-month follow-up period (Figure V.2) with the 43 percent who enrolled in the first 15 months, we can infer that an additional 7 percent (50 percent – 43 percent) of full-WIA customers enrolled in training during the second half of the follow-up period only; however, the data do not allow us to determine whether these customers enrolled in WIA-funded training.

Figure V.3. Receipt of training, WIA-funded training, and ITAs, by full-WIA customers, first 15 months after random assignment



Source: McConnell et al. (2016), based on WIA Standardized Record Data (WIASRD) extracted at about 15 months after random assignment and the WIA Gold Standard Evaluation 15-month survey. Data on ITAs are not available for months 16 to 30 after random assignment.

ITA = Individual Training Account.

Many customers in the full-WIA group did not enroll in training and other full-WIA customers enrolled in training but did not enroll in WIA-funded training. Half of all customers in the full-WIA group enrolled in training during the 30-month follow-up period, implying half did not do so (Figure V.2). Moreover, comparing the rate of enrollment in a WIA-funded training program during the first 15 months after random assignment for the full-WIA group (31 percent) with the rate of enrollment in any training program for that group during the first 15 months after random assignment (43 percent) or the entire follow-up period (50 percent) implies that between 12 (43 percent – 31 percent) and 19 percent (50 percent – 31 percent) of the full-WIA group enrolled in training but did not use WIA funding to do so. Some customers assigned to the full-WIA group might not have been interested in training or might not have been interested enough to complete all the activities required to be approved for an ITA or other WIA-funded training, such as researching occupations and training programs (D’Amico et al. 2015). Some customers might not choose to enroll in training because they preferred, or needed, to obtain a job. Other full-WIA customers might have not received WIA-funded training because they did not meet their local area’s training eligibility criteria. For example, in nearly all local areas, customers who did not achieve a minimum TABE score or have a high school diploma or GED certificate could not receive funding through the Adult and Dislocated Worker programs for training (D’Amico et al. 2015). Finally, some full-WIA customers may have not received WIA-funded training because their local area exhausted all training funds (D’Amico et al. 2015). Local areas often run out of money to fund training. When this occurs, they cannot approve training for eligible customers until they received additional funds.

B. Amount of training received

Consistent with their higher enrollment in training, customers in the full-WIA group enrolled in more training programs and spent more time in training than customers in the core-and-intensive or core groups (Table V.1). The average customer in the full-WIA group enrolled in 0.8 training programs during the follow-up period and received 392 hours of training (using zero for customers who did not enroll in training in the averages). In contrast, the average core-and-intensive customer enrolled in 0.6 training programs during the follow-up period and received 302 hours of training and the average core customer enrolled in 0.5 training programs and received 271 hours of training. Despite the significant differences in hours and number of programs, none of the differences across groups in weeks of training are statistically significant.

There is also some evidence that the customers in the core-and-intensive group received slightly more training than those in the core group (Table V.1). Customers in the core-and-intensive group enrolled in 0.1 more training programs, on average, than core customers. Despite this difference, customers in the core-and-intensive group did not spend appreciably more time in training than did the core group, on average.

Table V.1. Number of training programs and length of training (all customers)

	Mean for all study group members		
	Full-WIA	Core-and-intensive	Core
Number of training programs enrolled in	0.8*+	0.6^	0.5
Number of weeks spent in training	18.1	15.1	16.1
Number of hours spent in training	392*+	302	271

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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Focusing on customers who enrolled in training, trainees in each study group enrolled in a similar number of programs and spent a similar number of total hours in training during the 30-month follow-up period (Table V.2). On average, a full-WIA customer who enrolled in training attended 1.5 programs, was enrolled in training for 37 weeks, and received almost 800 hours of training during the 30-month follow-up period. There were no significant differences across study groups in the number of training programs or total hours spent in training reported by trainees.

Table V.2. Number of training programs and length of training (trainees)

	Mean for trainees, by study group		
	Full-WIA	Core-and-intensive	Core
Number of training programs enrolled in	1.5	1.5	1.4
Number of weeks spent in training	36.6+	36.6^	47.1
Number of hours spent in training	797	744	823

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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group received training.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

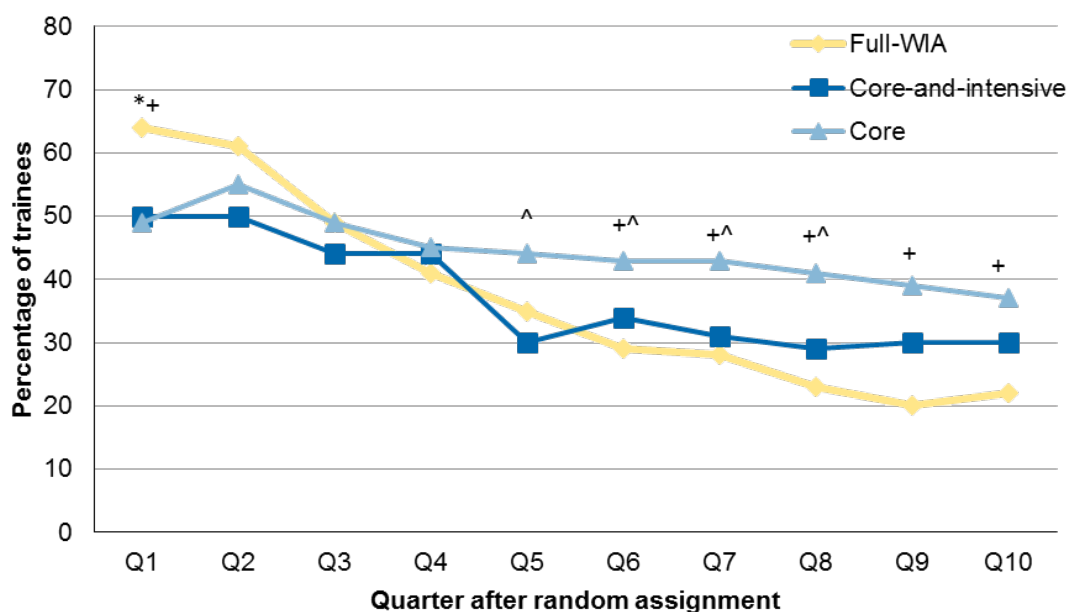
However, trainees in the full-WIA and core-and-intensive groups spread their training over significantly fewer weeks than trainees in the core group (Table V.2). Trainees in the full-WIA and core-and-intensive groups spent on average 37 weeks in training, compared with an average of 47 weeks for trainees in the core group. Although other mechanisms may have caused the observed patterns in weeks and hours of training, these results suggest that trainees in the core group might have selected longer training programs that required a less substantial weekly time commitment. This explanation is consistent with our finding that the average core trainee was more likely than the average full-WIA trainee to have a job while he or she was enrolled in a training program (Appendix C of the technical supplement, Table C.VI.3).

C. Characteristics of training programs

The characteristics of the training programs selected by customers in the different study groups might have varied for three key reasons. First, providing funding for training through the Adult and Dislocated Worker programs might expand the number and types of programs that customers could afford. Second, training funded by the Adult and Dislocated Worker programs typically must be from a provider approved by the local area. This restriction may have influenced the programs chosen by the full-WIA group. Finally, counseling or other services might shape the particular programs a customer chooses. Customers in the full-WIA and core-and-intensive groups often took assessments and discussed the results of these tests with WIA-funded employment counselors. These assessments and subsequent discussions could have guided customers to specific types of training programs.

Among customers who enrolled in training, the timing of training differed across study groups. Trainees in the full-WIA group enrolled in training relatively quickly. Sixty-four percent of full-WIA trainees enrolled in a training program in the first quarter after random assignment (Figure V.4), compared with only 50 percent of trainees in the core-and-intensive and core groups. Conversely, core trainees were more likely to remain enrolled in training during the final quarters of the follow-up period. Differences were greatest in Quarter 8, when 23 percent of full-WIA trainees and 29 percent of core-and-intensive trainees participated in training, compared with 41 percent of core trainees.

Figure V.4. Enrollment in training (trainees), by quarter



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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group received training.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

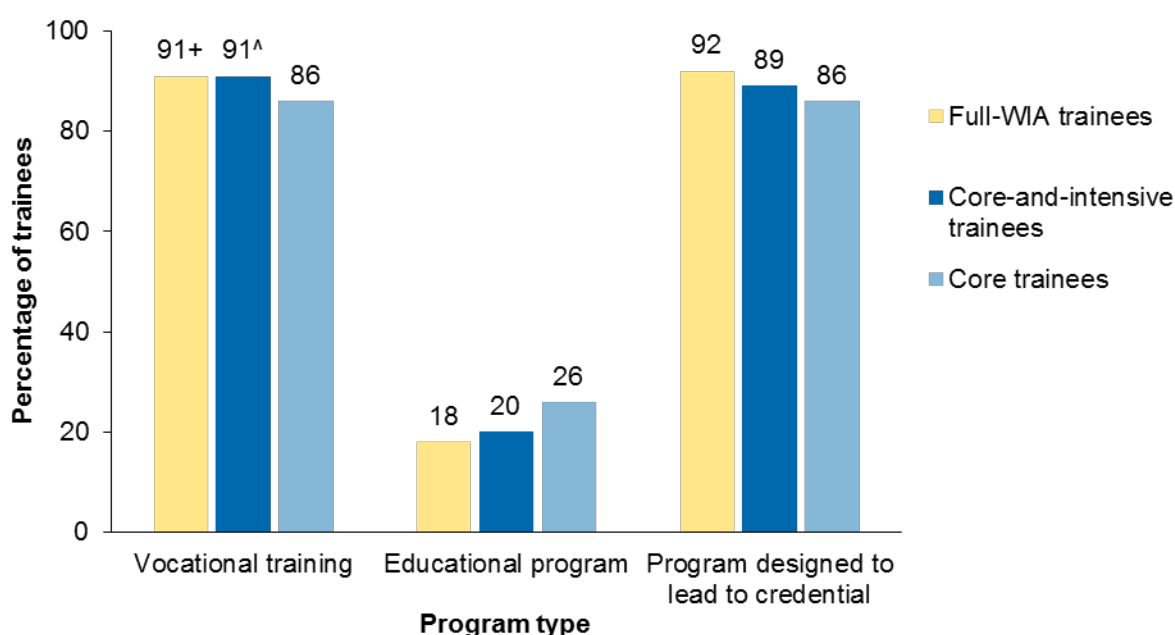
^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

Although customers who enrolled in training were more likely to choose vocationally oriented training programs over educational programs in all study groups, trainees in the full-WIA and core-and-intensive groups were more likely than trainees in the core group to enroll in vocational programs (Figure V.5). Ninety-one percent of full-WIA and core-and-intensive trainees enrolled in a vocationally oriented training program, compared with only 86 percent of core trainees. Conversely, core trainees were more likely than both core-and-intensive and full-WIA trainees to enroll in an educational program, though the estimated differences are not statistically significant. Further, 86 to 92 percent of trainees in each study group enrolled in at least one program designed to lead to a credential (such as a certificate or diploma). Differences across groups in this measure were also not statistically significant.

Figure V.5. Enrollment in different types of training programs (trainees)



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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Trainees could enroll in multiple programs of different or similar types. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group received training.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

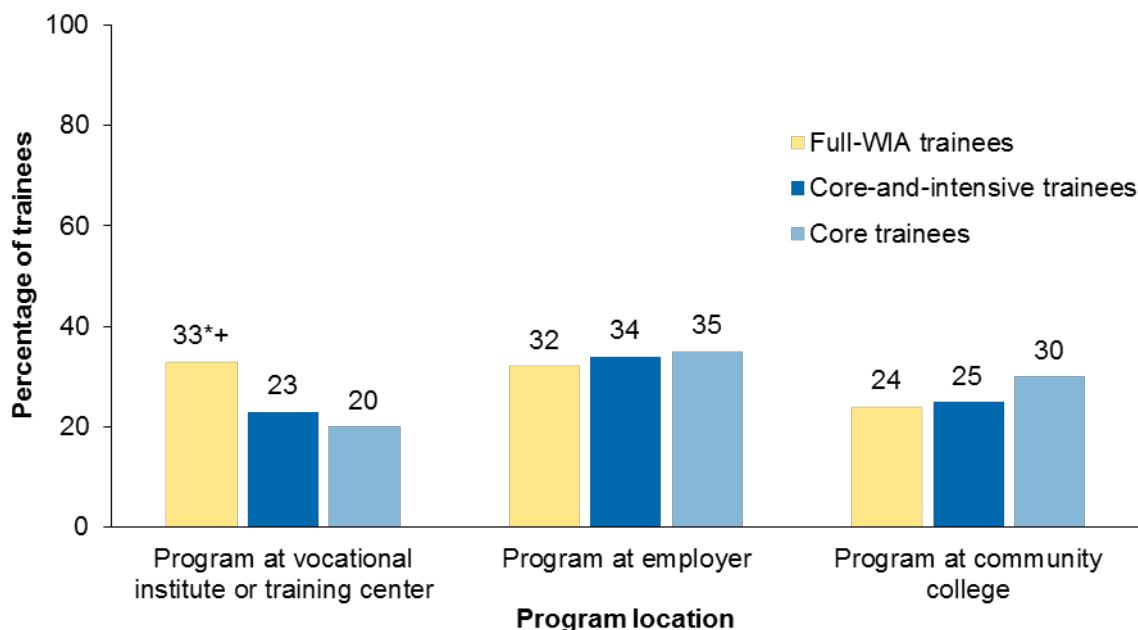
[^] Difference between the core-and-intensive and core groups is significant at the 5 percent level.

⁺ Difference between the full-WIA and core groups is significant at the 5 percent level.

Some differences also occurred across study groups in the types of organizations that provided training to customers (Figure V.6). Three categories of providers—vocational institutes or training centers, employers, and community colleges—were most commonly reported as providing training across the three study groups. But trainees in the full-WIA group received training at a vocational institute or training center more often than trainees in the core-and-intensive or core groups. Conversely, trainees in the full-WIA group were less likely than trainees in the core-and-intensive and core groups to report enrolling in an online training program. Five percent of trainees in the full-WIA group, 9 percent of trainees in the core-and-

intensive group, and 12 percent of trainees in the core group enrolled in an online training program (Appendix C of the technical supplement, Table C.V.6). Trainees in the full-WIA and core-and-intensive groups also reported receiving training at a community-based organization, senior center, or other nonprofit less often than trainees in the core group. Conversely, trainees in the full-WIA group reported receiving training at an American Job Center more often than trainees in the core group (Appendix C of the technical supplement, Table C.V.6). Other differences across groups are not statistically significant.

Figure V.6. Enrollment in training at common provider types (trainees)



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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Percentages do not sum to 100 because (1) some customers enrolled in multiple training programs; and (2) customers also enrolled in programs provided by community-based organizations, online providers, and other providers (not shown in figure). Differences between study groups cannot be interpreted as causal impacts because not all members of each study group received training.

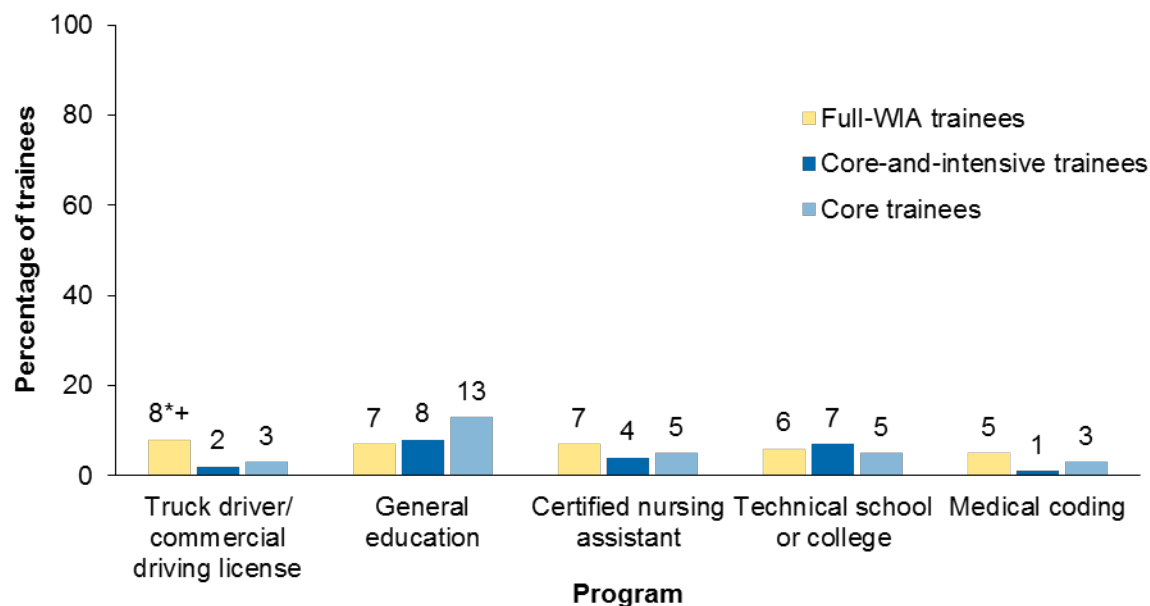
* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

None of the differences between the core-and-intensive and core groups are significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Although program locations differed, focusing on the most common training programs, customers in the full-WIA group enrolled in a similar set of programs as customers in the other study groups (Figure V.7). The most popular vocation-specific programs related to truck driving (commercial driving license) and health care (certified nursing assistant, medical coding, licensed practical nurse, and other nursing programs). Welding and business (business management and accounting or bookkeeping) were two other more popular vocations (Appendix C of the technical supplement, Table C.V.7). Only one notable difference emerged across groups in the programs chosen by customers who enrolled in training. Trainees in the full-WIA group were more likely to enroll in a truck driving or commercial driving license program, compared with trainees in the other study groups. Other estimated differences are not statistically significant.

Figure V.7. Enrollment in top five training programs (trainees)



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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group received training.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

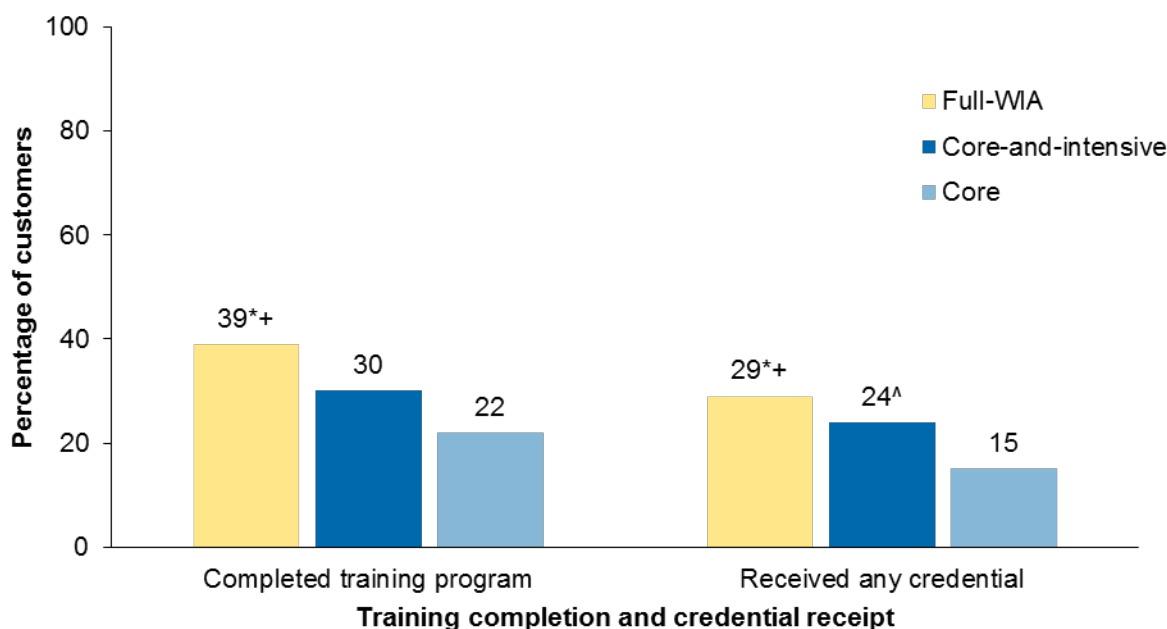
None of the differences between the core-and-intensive and core groups are significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

D. Completion of training and receipt of credentials

In addition to being more likely to enroll in a training program, customers in the full-WIA group were more likely than those in the core-and-intensive or core groups to complete a training program and receive a credential—a diploma, certificate, or license—for doing so (Figure V.8). Thirty-nine percent of full-WIA customers completed a training program during the 30 months after random assignment, compared with 30 percent of core-and-intensive customers and 22 percent of core customers. Likewise, 29 percent of full-WIA customers reported receiving a credential from a training program during the 30-month follow-up period, compared with 24 and 15 percent of core-and-intensive and core customers, respectively. Customers in the core-and-intensive group were also more likely to receive a credential than those in the core group. This finding suggests that employment counselors from the Adult and Dislocated Worker programs steered customers to choose training that leads to credentials.

Figure V.8. Completion of a training program and receipt of a credential for completing a training program (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Differences in program completion and credential attainment stem from differences in these outcomes for vocational, rather than educational, programs (Table V.3). Full-WIA customers were more likely than core-and-intensive or core customers to complete a vocational program and more likely to receive a credential by completing a vocational program; rates of completion and credential receipt were also higher for the core-and-intensive group than the core group, though the estimated differences are not statistically significant. More than one-third (36 percent) of full-WIA customers completed a vocational training program, compared with 28 percent of core-and-intensive customers and 21 percent of core customers; 27 percent of the full-WIA group received a credential by completing a vocational program, compared with 22 percent of core-and-intensive customers and 14 percent of core customers. Conversely, the extent to which customers completed and received credentials from education programs varied less across study groups, although customers in the full-WIA group were more likely than customers in the core group to obtain a postsecondary degree. In all study groups, 4 to 6 percent of customers completed an educational program, 1 to 2 percent of customers received a high school diploma or GED certificate, and 4 to 6 percent of customers received a postsecondary diploma.

Table V.3. Completion of training programs and receipt of a credential for vocational and educational programs (all customers)

	Mean for all study group members		
	Full-WIA	Core-and-intensive	Core
Vocational programs			
Completed a vocational program (%)	36*+	28	21
Received credential by completing a vocational program (%)	27*+	22	14
Education programs			
Completed an educational program (%)	6	5	4
Received high school diploma or GED by completing an educational program (%)	2	2	1
Received postsecondary degree by completing an educational program (%)	6+	4	4

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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

None of the differences between the core-and-intensive and core groups are significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

GED = General Educational Development certificate.

Among the full-WIA customers who enrolled in at least one training, 79 percent completed at least one training program within the 30-month follow-up period, and 60 percent received a credential for completing a program (Figure V.9). The remaining 21 percent of full-WIA customers who enrolled in training but did not complete it gave a range of reasons for not completing such as finding a job, inability to afford to continue, becoming ill or pregnant, and logistical issues.

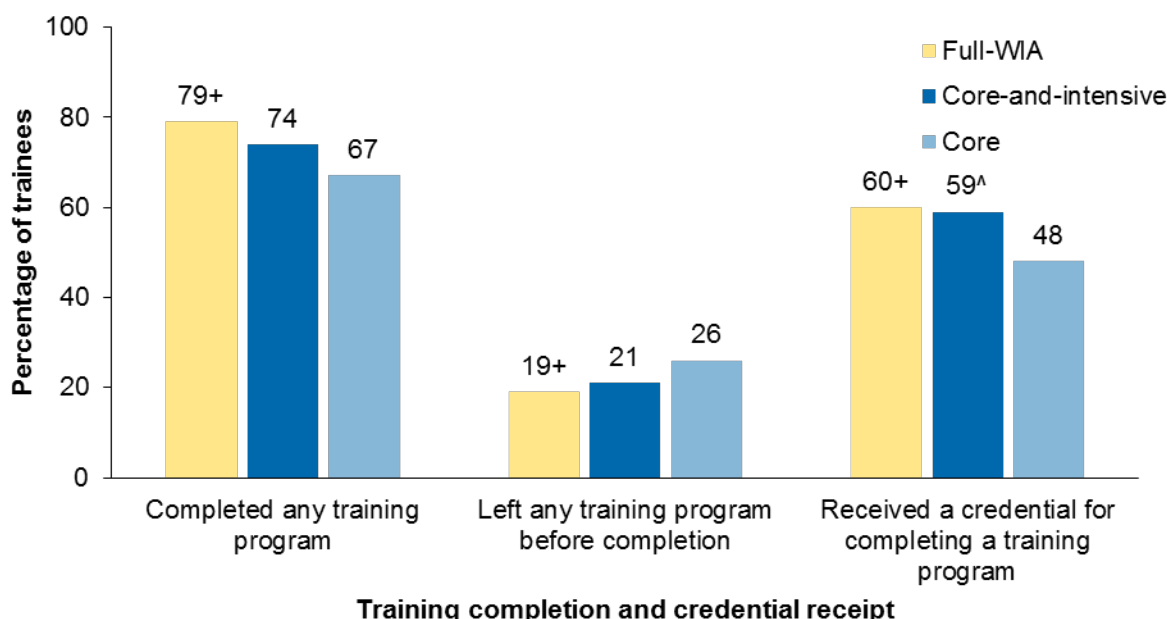
Among customers who enrolled in training, trainees in the full-WIA group were more likely than trainees in the core group to complete a training program (Figure V.9). In total, 79 percent of full-WIA trainees, 74 percent of core-and-intensive trainees, and 67 percent of core trainees completed a training program. The differences between the full-WIA and core-and-intensive groups and between the core-and-intensive and core groups are not statistically significant; however, the difference between the full-WIA and core groups is significant. Differences in program completion rates between the full-WIA and core groups arose because of differences in the rate at which customers left training programs prior to completion and the share of trainees who were still working to complete a training program at the end of the 30-month follow-up period.⁵ Full-WIA trainees were 15 percentage points less likely than core trainees to be enrolled in a training program in the 10th quarter after random assignment (Figure V.4) and 7 percentage points less likely than core trainees to have left a training program without completing it (Figure V.9).

Full-WIA and core-and-intensive trainees were also more likely to have received a credential for completing a training program than trainees in the core group (Figure V.9).

⁵ Because customers could have enrolled in multiple training programs, the shares of trainees who completed a training program, left a training program before completion, and were still enrolled in a training program will not necessarily sum to 100 percent.

Similar proportions of full-WIA and core-and-intensive trainees (60 and 59 percent, respectively) received a credential through their training, compared with only 48 percent of core trainees.

Figure V.9. Completion of a training program and receipt of a credential for completing a training program (trainees)



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

Notes: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group received training.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

E. Funding of training programs

As mentioned in Section A, most full-WIA customers who enrolled in training used WIA funds to do so. According to the WIASRD, in the first 15 months after random assignment, about 31 percent of the full-WIA group used WIA funds, at least in part, to pay for training (Figure V.3). Comparing this with the 43 percent of full-WIA customers who enrolled in any training program during this period, and with the 50 percent of full-WIA customers who enrolled in any training throughout the entire 30-month follow-up period (Figure V.2), we estimate that about 12 (43 percent – 31 percent) to 19 percent (50 percent – 31 percent) of the full-WIA group enrolled in training without funding from the Adult and Dislocated Worker programs.⁶

⁶ Survey data suggest that a much lower proportion of full-WIA customers received training funded by WIA than the WIASRD indicates (McConnell et al. 2016). It is likely that some survey respondents incorrectly recalled the source of their training funding or were otherwise unaware of the sources of funds received for training. We therefore did not use this data to analyze receipt of WIA-funded training and instead used information from the WIASRD.

Most customers who received WIA-funded training in the first half of the follow-up period paid for all or part of this training using an ITA, according to the WIASRD (Table V.4). The vast majority (90 percent) of full-WIA customers who received WIA-funded training received an ITA. Another 5 percent of full-WIA customers who enrolled in WIA-funded training enrolled in on-the-job training. The remaining customers in the full-WIA group received training provided under contracts by the local areas or via contracts with employers.

When staff approved customers for an ITA, they were typically approved for the estimated cost of their selected training program or for the local area maximum for an ITA, whichever was lower. The value of the ITAs granted to full-WIA customers varied from only a couple of hundred dollars to more than \$8,000; the average ITA was \$3,490 and the median was \$3,000 (Table V.4). Customers did not always spend any or all of their ITAs. Some decided not to enroll in training, did not complete the program, or did not spend all available funds for books or supplies. It might also be that customers had not yet spent the full value of their ITAs at the time we received data on ITA expenditures, but would eventually do so. On average, customers in the full-WIA group who received an ITA spent \$3,029 in the first 15 months after random assignment; the median customer spent \$2,695, about 90 percent of the median ITA value.

Table V.4. Characteristics of funding received from the Adult and Dislocated Worker programs, 15 months after random assignment

ITA characteristic	
Among customers who received WIA-funded training (%)	
Received an ITA	90
Enrolled in WIA-funded on-the-job training	5
Among customers who received an ITA	
Value of ITA (\$)	
Average	3,490
5th percentile	695
Median	3,000
95th percentile	8,000
Amount of ITA spent (\$)	
Average	3,029
5th percentile	0
Median	2,695
95th percentile	8,000

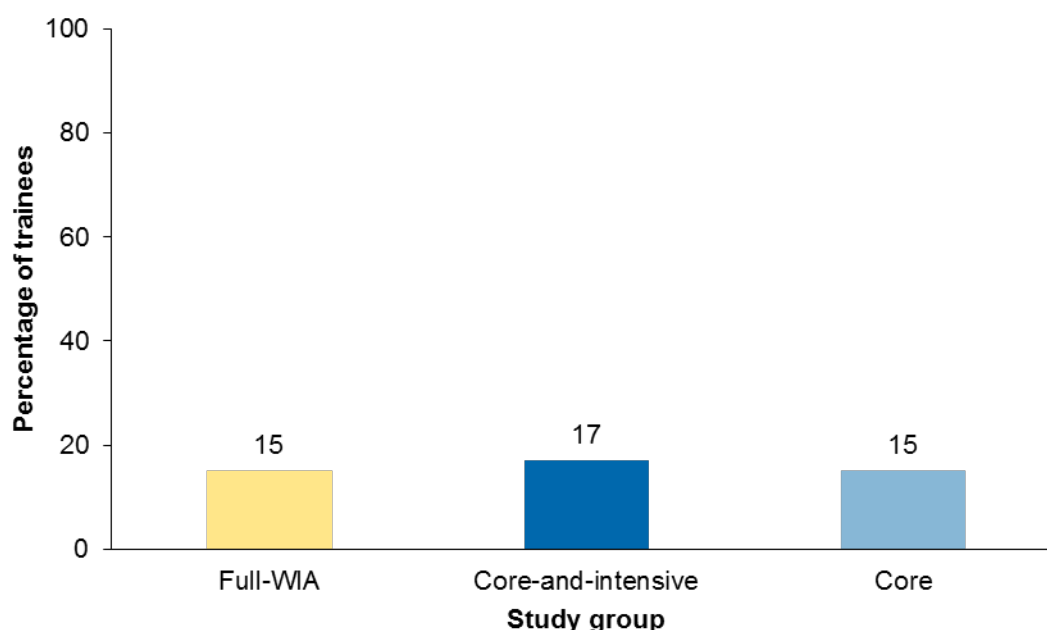
Source: McConnell et al. (2016), based on WIA Standardized Record Data (WIASRD) extracted at about 15 months after random assignment and financial data provided by local areas. Data on ITAs are not available for months 16 to 30 after random assignment.

ITA = Individual Training Account.

Survey data covering the entire 30-month follow-up period suggest that customers in the core-and-intensive and core groups did not obtain financing from other sources to fully offset their lack of access to ITAs during the first half of the follow-up period. Trainees in the full-WIA group were not significantly more or less likely than trainees in the core-and-intensive and core group to receive Pell Grants (Figure V.10); 15 to 17 percent of customers who enrolled in training received a Pell Grant across all three study groups. Moreover, full-WIA customers were at least as likely as members of the other study groups to obtain funding from all of the non-WIA funding sources on which our survey collected data (Appendix C of the technical supplement, Table C.V.8a). For example, 7 percent of full-WIA trainees reported receiving funding for

training from a state employment agency, compared with less than 1 percent of trainees in the other two study groups (Appendix C of the technical supplement, Table C.V.8b). This particular difference might reflect the survey respondents' inability to distinguish funding from the Adult and Dislocated Worker programs from funding from other partners at the American Job Center. But it might also be the result of increased referrals to funding sources by employment counselors after customers in the full-WIA group had their eligibility for training assessed. In addition, the finding is consistent with the requirement of the Adult and Dislocated Worker programs that customers apply for other available funding before they receive an ITA.

Figure V.10. Receipt of Pell Grants (trainees)



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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group received training.

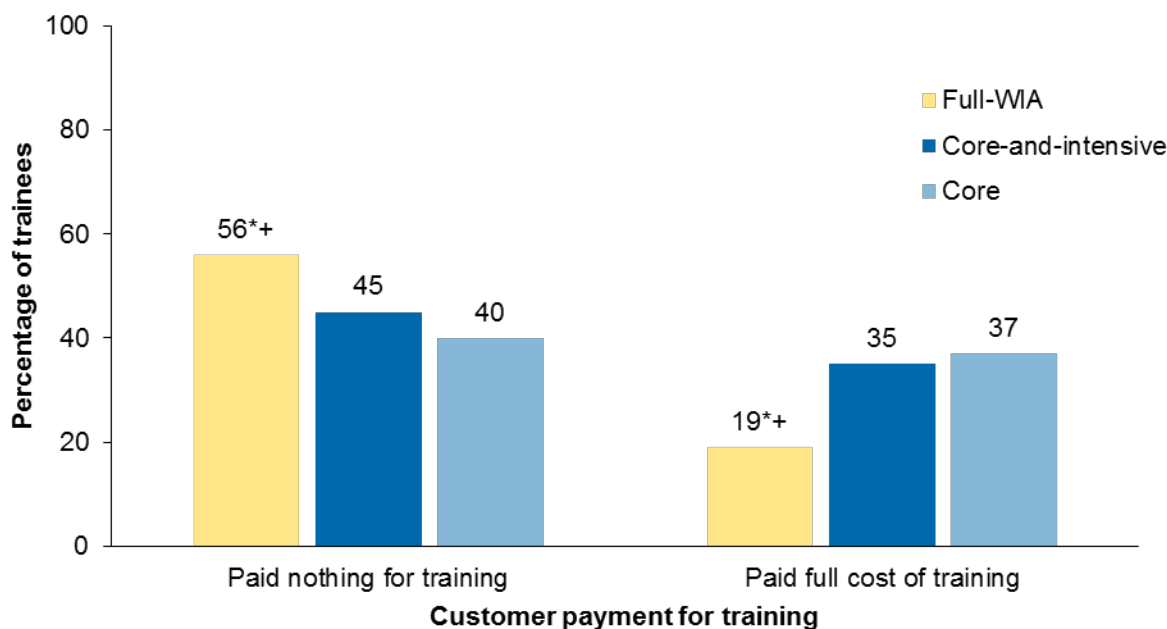
The difference between the full-WIA and core-and-intensive groups is not significant at the 5 percent level.

The difference between the core-and-intensive and core groups is not significant at the 5 percent level.

The difference between the full-WIA and core groups is not significant at the 5 percent level.

Trainees in the full-WIA group paid a smaller percentage of training costs compared with trainees in the core-and-intensive and core groups (Figure V.11). Fifty-six percent of trainees in the full-WIA group reported paying nothing out of pocket for training, 11 percentage points more than trainees in the core-and-intensive group and 16 percentage points more than trainees in the core group. Conversely, 19 percent of trainees in the full-WIA group reported paying the full cost of their training programs, 16 to 18 percentage points less than trainees in the other study groups. This suggests that when customers do not have access to funding for training through the Adult and Dislocated Worker programs, they must use more of their own money to pay for training.

Figure V.11. Payment for training (trainees)



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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group received training.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Neither difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

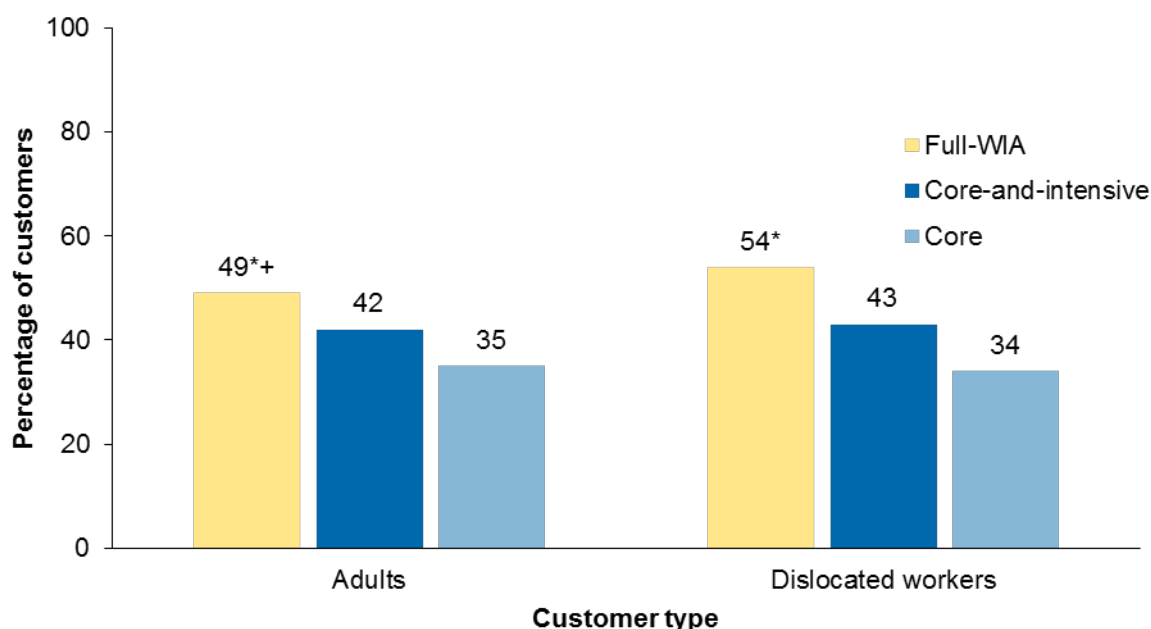
F. Differences in receipt of training by adults and dislocated workers

Adults in the full-WIA group were about as likely as dislocated workers in the full-WIA group to enroll in training funded by any source during the 30-month follow-up period (Figure V.12). The difference in training rates between adults and dislocated workers (47 percent compared with 54 percent) is not statistically significant. Differences in rates of WIA-funded training and ITA receipt for adults and dislocated workers in the full-WIA group in the first half of the follow-up period are also not statistically significant (Appendix D of the technical supplement, Table D.V.3 and Appendix E, Table E.V.3).

Differences across study groups in training enrollment were also similar for adults and dislocated workers (Figure V.12). In both cases, customers in the full-WIA group were the most likely to enroll in training, followed by customers in the core-and-intensive group, and then by customers in the core group, although not all differences are statistically significant. Adults in the full-WIA group were 7 percentage points more likely to enroll in a training program than adults in the core-and-intensive group and 13 percentage points (after rounding the difference in means) more likely to enroll in a training program than adults in the core group. Both differences are statistically significant. Similarly, 54 percent of dislocated workers in the full-WIA group enrolled in a training program during the 30-month follow-up period, compared with 43 percent of core-and-intensive customers and 34 percent of core customers. However, for dislocated workers, only the difference between the full-WIA and core-and-intensive groups is statistically significant.

Similarly, we found evidence that a greater share of full-WIA customers completed a training program and received a credential for completing a training program than did core-and-intensive customers (Appendix D of the technical supplement, Table D.V.2 and Appendix E, Table E.V.2). In addition, for dislocated workers only, access to intensive services increased both program completion and credential receipt.

Figure V.12. Enrollment in training funded by any source, separately for adults and dislocated workers (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Neither difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

No differences in impacts between adults and dislocated workers are significant at the 5 percent level. For example, the impact of access to training on enrollment in training for adults is not significantly different than the impact for dislocated workers.

VI. IMPACTS ON EARNINGS AND EMPLOYMENT

The central goal of the Adult and Dislocated Worker programs is to help customers succeed in the labor market. In this chapter, we examine whether the training and intensive services funded by these programs during the evaluation period met that goal successfully. We focus on the impacts of the services on employment, earnings, and the quality of the jobs customers obtained.

As in the rest of this report, we describe the impacts on customers over the first 30 months (or first 10 quarters) after random assignment. The first half of this follow-up period, reported on in McConnell et al. (2016), might have been too short to assess the full effectiveness of these services. This is especially true of training, because at the end of the 15-month period, many customers were either still enrolled in training or had just finished training. This chapter presents findings from a longer follow-up period: 30 months (10 quarters) for analysis based on survey data and 36 months (12 quarters) for analysis based on NDNH data. As summarized in Chapter II, the advantages of the survey data are that they provide more detailed information on employment and cover all jobs. The advantages of the NDNH data are that they are available for all study participants (not just those who responded to the survey) and are not subject to recall error.

We begin this chapter by comparing the employment-related outcomes of the full-WIA group with those for the core-and-intensive group; this comparison provides the estimated impact of WIA-funded training (Section A). We then compare the outcomes of the core-and-intensive group with those for the core group, which provides the estimated impacts of WIA-funded intensive services (Section B). Next we present the comparison of the full-WIA group with the

Key findings

- Providing WIA-funded training did not increase earnings or employment rates in the 30 months after random assignment.
 - At the end of the study period, full-WIA customers had similar average earnings and employment rates as core-and-intensive customers.
 - The jobs obtained by full-WIA customers had similar wage rates and fringe benefits as those obtained by core-and-intensive customers.
- Providing WIA-funded intensive services increased earnings beginning in the fourth quarter after random assignment and for most subsequent quarters.
 - Core-and-intensive customers earned about \$7,000, or 20 percent, more than core customers in the 30-month study period based on the survey data. This impact is partly explained by higher employment rates and partly by higher wage rates.
 - The impact using administrative earnings records is smaller—about \$3,000, or 7 percent, over 36 months—but still statistically significant.
 - Core-and-intensive customers were more likely to have jobs that offered fringe benefits than were core customers.
- Based on survey data, providing both WIA-funded training and intensive services increased earnings in Quarters 6 through 10. The impact on total earnings for full-WIA customers relative to core customers over those five quarters is statistically significant at the 5 percent level. The estimates using administrative earnings data show a similar but smaller impact.
- The pattern of earnings impacts was broadly similar for adults and dislocated workers.

core group to obtain the estimated impacts of both training and intensive services (Section C). Within each of Sections A, B, and C, we first describe whether the services increased earnings, a summary measure of the key ways in which the Adult and Dislocated Worker programs can affect customers' labor market experiences. We then separately examine the extent to which any observed impacts on earnings come from differences in the proportion of customers who were employed or from differences in wage rates and then examine other job characteristics among those who found employment. We report estimated impacts on earnings and employment based on customers' responses to the 30-month survey as well as 12 quarters (36 months) of administrative records from NDNH. (As described in Chapter II, the first quarter for the survey outcomes begins the day after a given customer is randomly assigned, whereas for the NDNH outcomes the first quarter begins the first calendar quarter after a given customer is randomly assigned.) In addition to the combined impacts for adults and dislocated workers, we present impact estimates for each group separately. We then describe how customers' training during the follow-up period related to their subsequent employment (Section D).

As described in Chapter II, performing multiple statistical tests means that it is more likely that we will find some differences to be statistically significant simply by chance. To help guard against this, we determined before analyzing the data that quarterly earnings would be our priority outcome. This is a key measure of the effectiveness of the programs. In all tables and figures that present earnings impact estimates, we report statistical significance based on conventional tests with 5 percent significance. However, when reporting significant impact estimates for earnings, we also discuss the significance of these estimates using a more stringent test that accounts for the fact that we are making three comparisons for each earnings outcome measure, and that the comparisons are correlated with each other—comparing *p*-values to a critical value of 1.85 instead of 5 percent.

A. Impacts of WIA-funded training

The impacts of WIA-funded training are estimated by comparing outcomes for the full-WIA group, who could potentially enroll in WIA-funded training, and those of the core-and-intensive group, who could not. Three key findings about customers' use of services (reported in Chapters IV and V) are important for interpreting the impacts of access to WIA-funded training.

First, even though customers in the full-WIA group could potentially enroll in WIA-funded training, only about one in three full-WIA customers did enroll in WIA-funded training. In some cases customers were not eligible for training, were eligible but not willing to do the paperwork and other activities necessary, or chose not to enroll in training either because they could not afford to be out of the workforce while in training or for other reasons, and were thus not eligible for WIA-funded training. As described in Chapter III, funding for the Adult and Dislocated Worker Programs also declined over the follow-up period, and in some cases customers who were otherwise eligible for training had to wait for more training funds to become available.

The impacts on employment and earnings of those who enrolled in WIA-funded training would likely be larger in magnitude (whether positive or negative) than the impacts on all full-WIA customers (including those who did not enroll in training) reported in this section. The study's experimental design does not allow us to definitively estimate the impacts of enrolling in WIA-funded training. However, Appendix A of the technical supplement discusses a plausible

set of assumptions we can use to approximate the effects of enrolling in training, and based on those assumptions we calculate that the effect of enrolling in training could be about three times the size of the effect of access to WIA-funded training.

Second, providing WIA-funded training led to both more training and more use of other services. Full-WIA customers took more assessments and received more supportive services than the core-and-intensive group. These services were not restricted to either of these groups, but they were associated with seeking training programs. For example, customers often took assessments to determine what training programs were appropriate for their skills and interests, and supportive services often facilitated customers' training attendance. The impacts could have been different had training been provided without changes in provision of these other services.

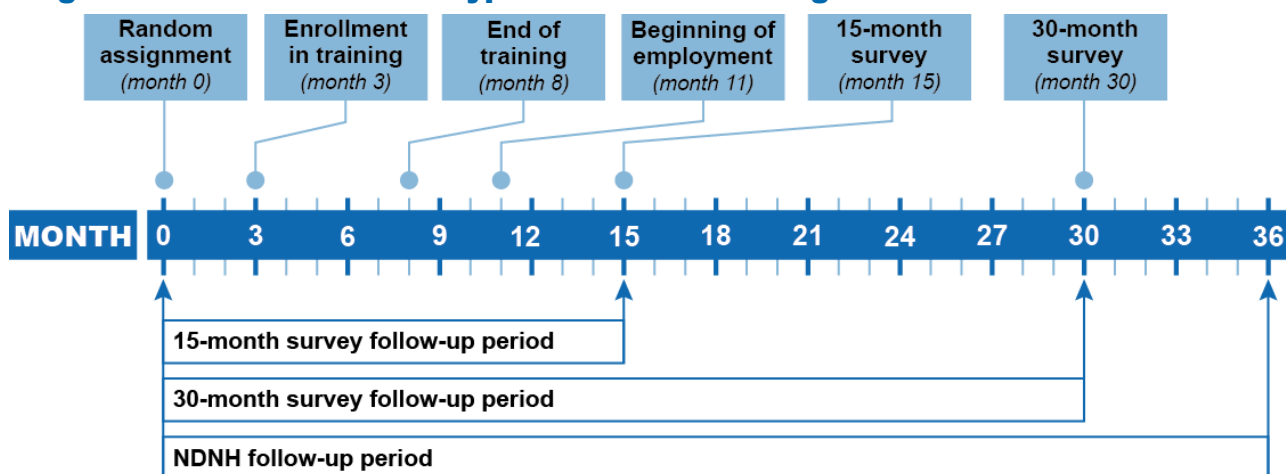
Comparing the full-WIA and core-and-intensive groups

- This comparison examines the impact of providing the full set of WIA services, including WIA-funded training, compared with a situation in which only core and intensive services were available:
 - Full-WIA customers were eligible for WIA-funded training in the same way they would have been in the absence of the study. They were also eligible for core and intensive services.
 - Core-and-intensive customers were not eligible for WIA-funded training but were eligible for core and intensive services.
- The following differences in service receipt underpin the impacts on earnings and employment:
 - Full-WIA customers were more likely than core-and-intensive customers to enroll in training: 50 percent of full-WIA customers and 41 percent of core-and-intensive customers enrolled in training.
 - WIA, rather than other sources, funded most full-WIA customers' training.
 - Full-WIA customers also made more use of other services than core-and-intensive customers did, including the resource room, assessments, and supportive services.



Third, we did not expect to see impacts of training in the early quarters of the follow-up period, but we did expect impacts to emerge later in the follow-up period. Participating in training takes time, time that is then not available for employment. Full-WIA customers who enrolled in training typically started training near the end of Quarter 1, completed training in Quarter 3 (if they completed at all), and began post-training employment in Quarter 5 (if at all) (Figure VI.1). Hence, as reported in McConnell et al. (2016), we expected the negative impacts of access to training on employment and earnings in the first quarters after random assignment, as training displaced employment. This is a well-documented effect of training, referred to as the lock-in effect, and has been found in past studies of training programs (Heinrich et al. 2008; Andersson et al. 2013; Card et al. 2015). If training provided by these programs is effective, the full-WIA group should eventually have greater earnings than the core-and-intensive group, and we would expect this to happen in the later quarters of the follow-up period. In previous studies, the crossover point has varied by the program and population, but can happen as quickly as one quarter and as long as several years after beginning the program (Heinrich et al. 2008; Card et al. 2015).

Figure VI.1. Timeline for a typical full-WIA training enrollee



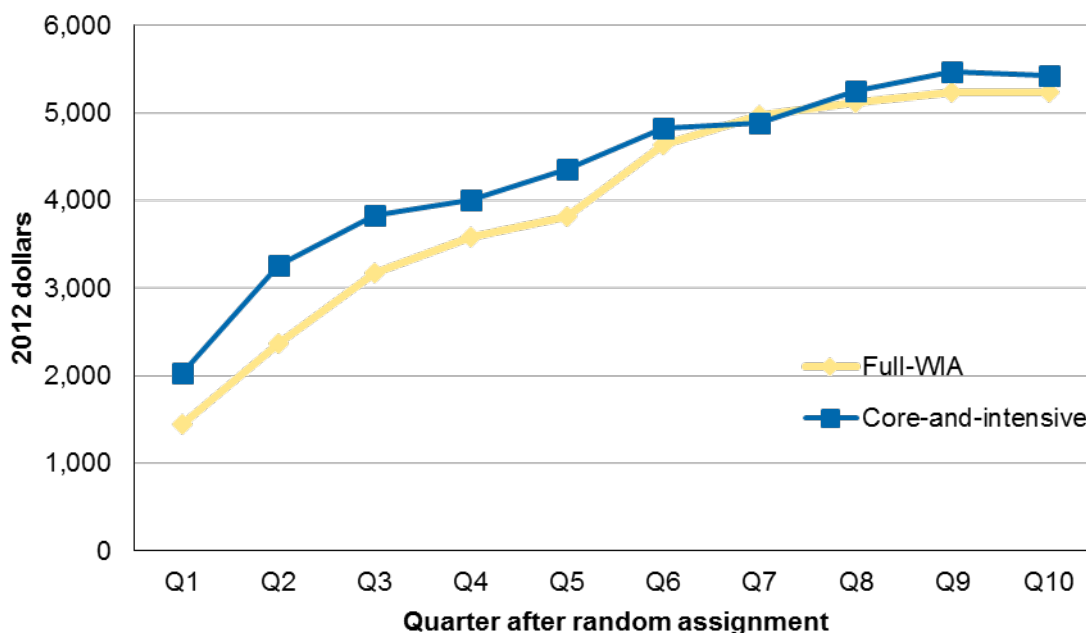
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Notes: Typical time of enrollment in training is the median month of first enrolling in training among full-WIA customers who enrolled in any program during the follow-up period. Typical end of training is the median months of enrollment plus the median month of first enrolling among customers who completed a training program. Typical time of first post-training employment is based on the median months between training completion and first post-training employment among customers who completed training and subsequently found employment.

1. Earnings

According to the survey data, providing WIA-funded training did not lead to an increase in earnings in any of the first 10 quarters after random assignment (Figure VI.2). Full-WIA customers' earnings were lower on average than core-and-intensive customers' earnings throughout almost all of the 30-month follow-up period, although the estimated differences are not statistically significant. In the first four quarters after random assignment, when more full-WIA customers were in training than were core-and-intensive customers, the full-WIA group earned about \$650 per quarter less than the core-and-intensive group did per quarter, though none of the quarterly impacts are statistically significant. (These averages include zero earnings for customers who are not employed.) Earnings for both groups increased substantially over the 30-month follow-up period, and the full-WIA group's earnings grew closer to those of the core-and-intensive group, but did not overtake them. In Quarter 10, the full-WIA group earned \$5,244 on average compared with \$5,435 for the core-and-intensive group. Over the 10-quarter follow-up period, full-WIA customers earned an average of \$39,528 compared with \$43,211 for the core-and-intensive group, but this estimated difference of -\$3,684 (after rounding) is also not statistically significant.

Figure VI.2. Earnings for full-WIA and core-and-intensive groups from survey data (all customers), by quarter



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

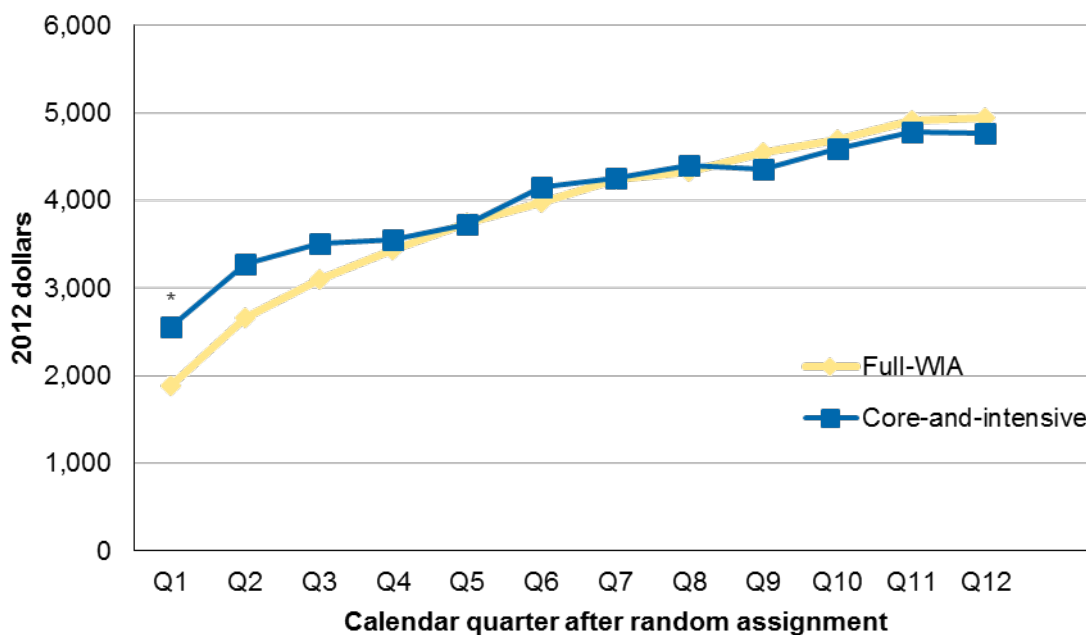
Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

Q = quarter.

The NDNH impact estimates also do not suggest that WIA-funded training increased earnings in the follow-up period (Figure VI.3). According to the NDNH data, full-WIA customers earned an average of \$683 less than core-and-intensive customers did in Quarter 1 but caught up in subsequent quarters. In the third year after random assignment, earnings were slightly higher in the full-WIA group than the core-and-intensive group, but the estimated difference is only \$149 per quarter, which is not statistically significant. The increase in earnings later in the follow-up period did not offset the decrease in earnings during the lock-in period when many were enrolled in training. Over the full period of the first 12 calendar quarters after random assignment, full-WIA customers earned an average of \$46,509 compared with \$47,960 for the core-and-intensive group, but this estimated difference of -\$1,451 is not statistically significant.

Figure VI.3. Earnings for full-WIA and core-and-intensive groups from NDNH data (all customers), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

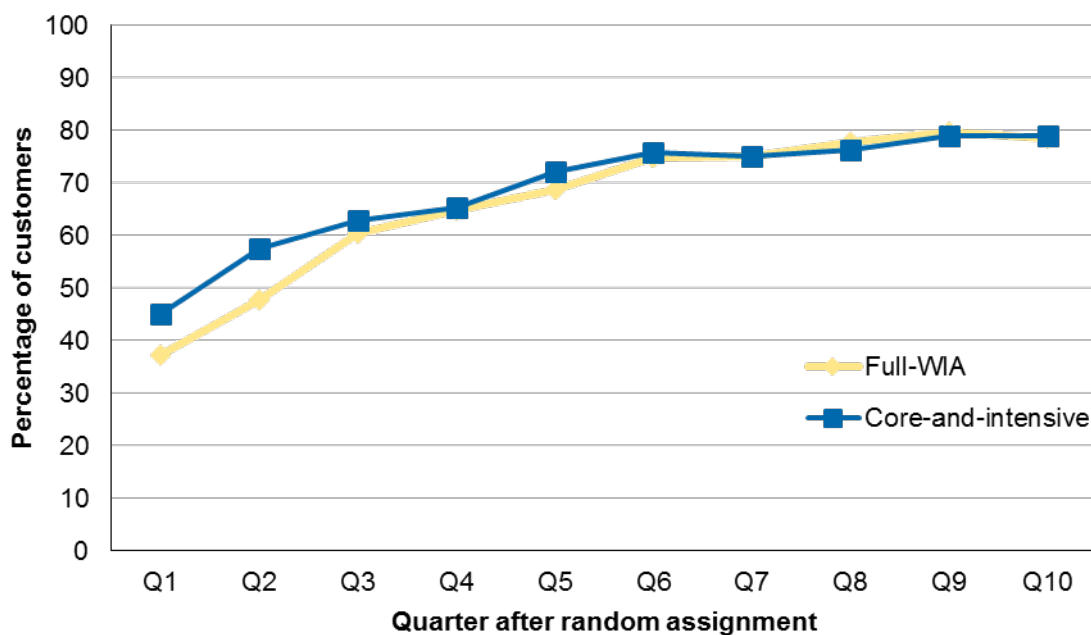
* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Q = quarter.

2. Employment

The estimated impacts on employment based on both survey and NDNH data follow a similar pattern as those on earnings. As expected, the estimated impacts were negative early and became less negative over time, but are not statistically significant for any quarter (Figures VI.4 and VI.5). According to the survey findings, full-WIA customers were less likely to be employed in Quarter 1 (37 percent) than were core-and-intensive customers (45 percent), but the estimated difference (8 percentage points) is not statistically significant. By Quarter 10, 79 percent of full-WIA customers were employed, which was similar to the employment rate among core-and-intensive customers. According to NDNH data, in Quarter 12, 70 percent of full-WIA customers and 71 percent of core-and-intensive customers were employed.

Figure VI.4. Employment rates for full-WIA and core-and-intensive groups from survey data (all customers), by quarter



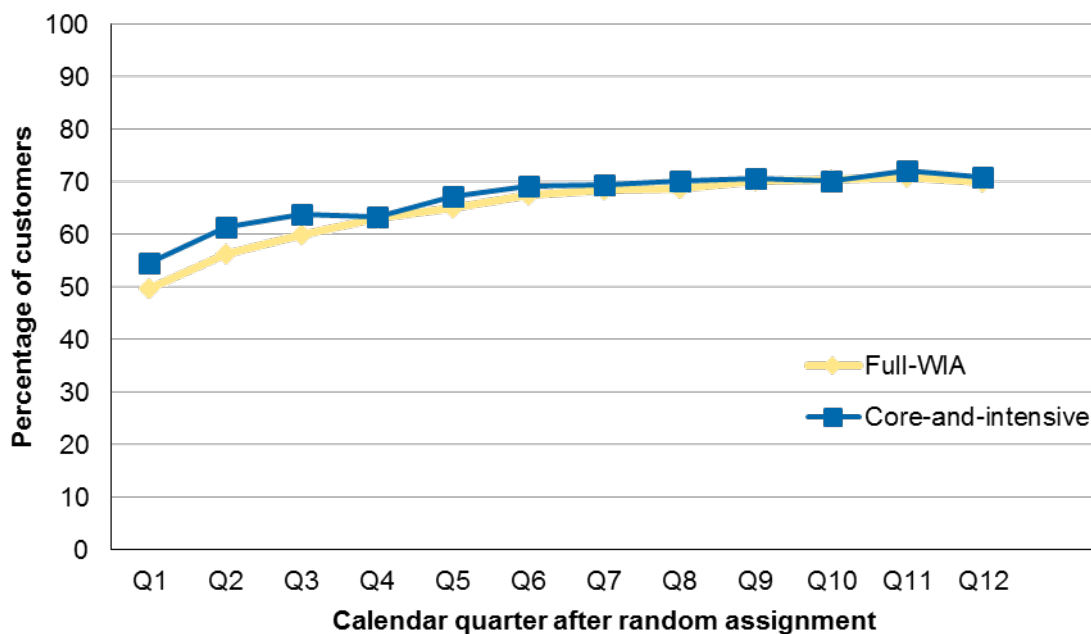
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

Q = quarter.

Figure VI.5. Employment rates for full-WIA and core-and-intensive groups from NDNH data (all customers), by quarter



Source: National Directory of New Hires.

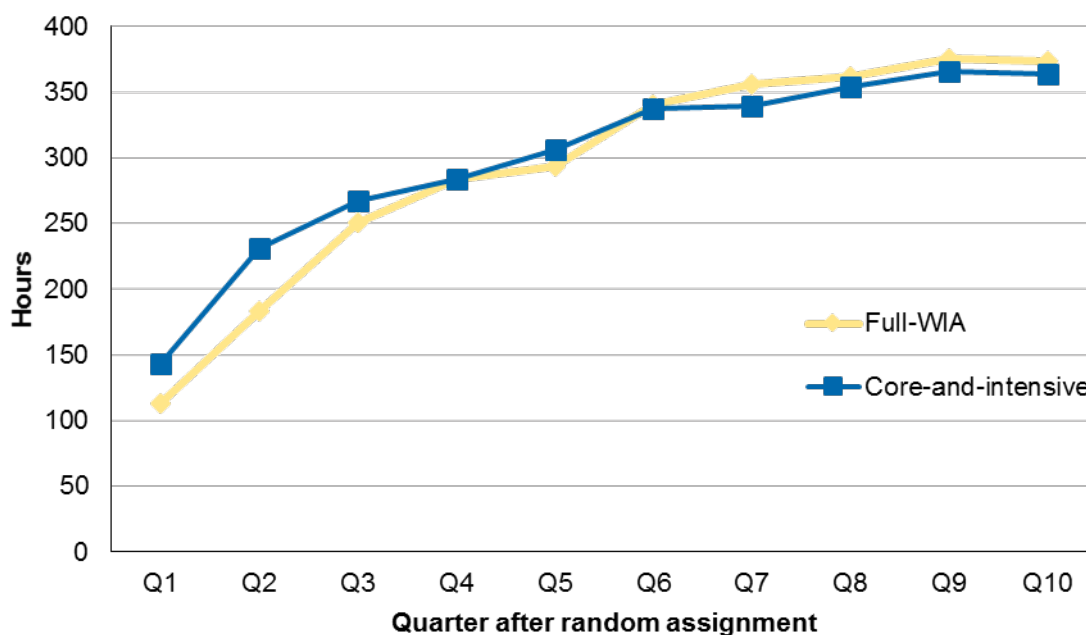
Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, p -values, and sample sizes.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level. Q = quarter.

3. Hours worked

From the survey, the pattern of estimated impacts on hours worked (Figure VI.6) in each quarter is similar to the pattern of estimated impacts on employment rates (Figures VI.4 and VI.5). Full-WIA customers worked fewer hours than core-and-intensive customers in the first few quarters, although the estimated differences are not statistically significant. By the final quarter, full-WIA customers worked only nine more hours than core-and-intensive customers worked. We revisit hours worked per week among those who were employed as part of Section A.5, below, on job characteristics. (The NDNH does not include data on hours worked.)

Figure VI.6. Hours worked for full-WIA and core-and-intensive groups (all customers), by quarter



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, p -values, and sample sizes.

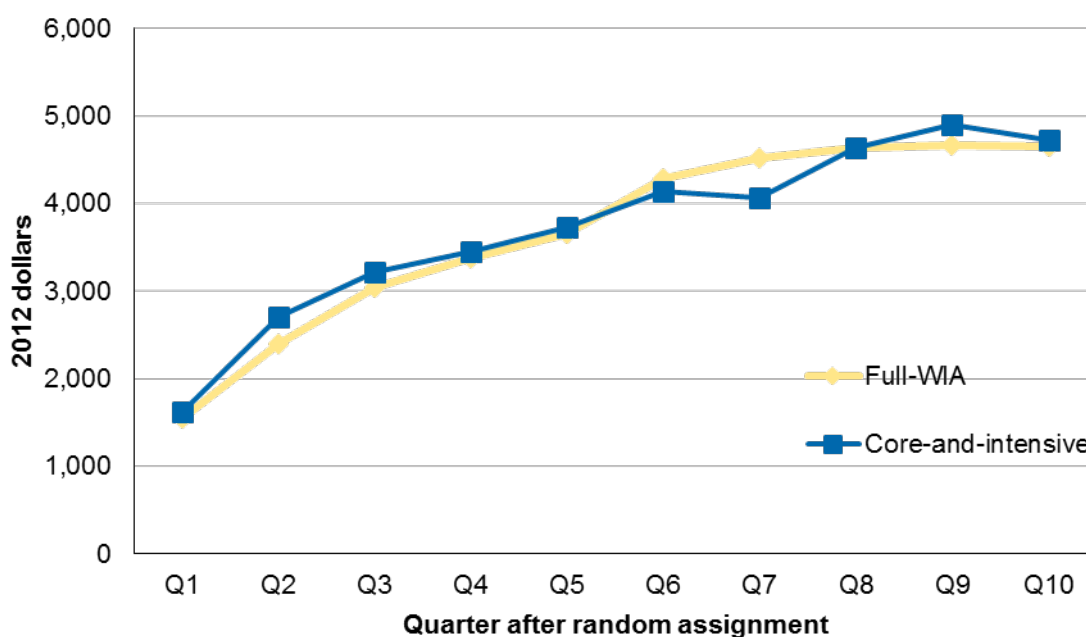
None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level. Q = quarter.

4. Earnings and employment for adults and dislocated workers

Based on the survey data, the magnitudes of the impacts on earnings were similar for adults and dislocated workers (Figures VI.7 and VI.8). For both adults and dislocated workers, the full-WIA group earned a little less on average in Quarters 9 and 10 than did the core-and-intensive group, but the estimated differences are not statistically significant.

Estimated impacts on earnings and employment from NDNH data vary more between adults and dislocated workers than those from survey data (Figures VI.9 and VI.10). Among adults, the earnings of the full-WIA and core-and-intensive groups were similar in the NDNH data. One notable exception is that, based on the NDNH data, full-WIA adults earned less on average in Quarter 8 than did core-and-intensive adults, and this difference is statistically significant. However, this estimate is inconsistent with the earnings impact estimates for other quarters and is not corroborated in the survey data, suggesting it is an aberration rather than a true finding. Among dislocated workers, those in the full-WIA group had higher average earnings (\$5,900) than did those in the core-and-intensive group (\$5,374), although this estimated difference was not statistically significant.

Figure VI.7. Earnings among adults in full-WIA and core-and-intensive groups from survey data (all adults), by quarter



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

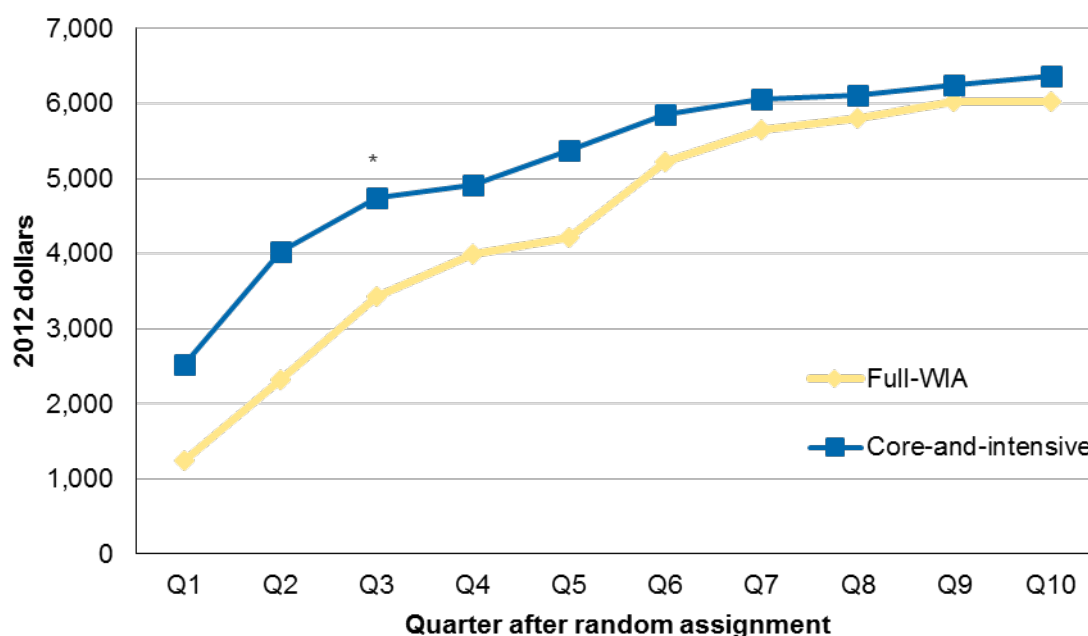
Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level. Q = quarter.

Past studies have demonstrated somewhat different patterns in the impacts of training. Similar to our study, Heinrich et al. (2008) and Andersson et al. (2013) found no positive impacts of training in the early parts of the studies' follow-up periods, for either adults or dislocated workers. However, in contrast to our findings, the impacts estimated for adults in Heinrich et al. (2008) and Andersson et al. (2013) turned positive during later quarters. Andersson et al. (2013) estimated that the impact of training on earnings for adults became positive within seven quarters of training enrollment; Heinrich et al. (2008) found positive impacts for adults within four quarters. For dislocated workers, in contrast, both studies found that training had no effect (positive or negative) on earnings two or more years after training enrollment. These past studies may have different results than our study because (1) their studies

occurred in different locations and were not representative of the country, or (2) their studies occurred at different times. In addition, unlike our randomly assigned core-and-intensive group, the comparison groups used by Heinrich et al. (2008) and Andersson et al. (2013) included customers who were not eligible for WIA-funded training or were eligible but chose not to enroll. These customers may have different characteristics than those who chose to receive WIA-funded training. In particular, if customers who benefit most from training are most likely to enroll in training, this may have resulted in those studies overstating the impact of training on adults. Lastly, these past studies estimated the impacts of receiving WIA-funded training whereas the present study considered the impact of providing WIA-funded training. As discussed previously and in more detail in Appendix A of the technical supplement, this would affect the magnitude of the estimated impacts but not whether the impacts were positive or not.

Figure VI.8. Earnings among dislocated workers in full-WIA and core-and-intensive groups from survey data (all dislocated workers), by quarter



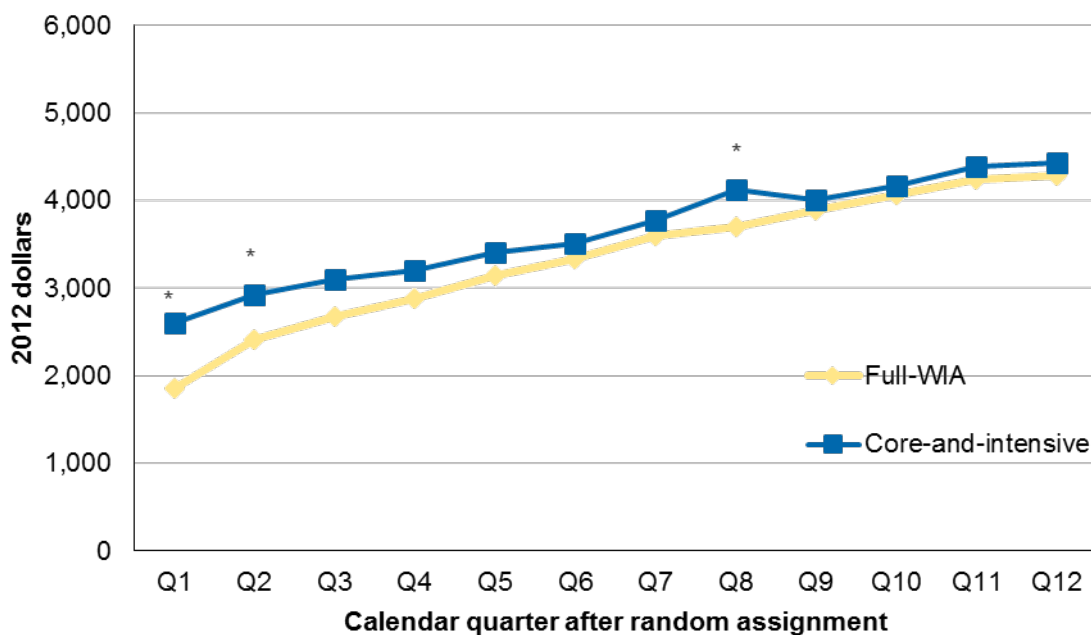
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Q = quarter.

Figure VI.9. Earnings among adults in full-WIA and core-and-intensive groups from NDNH data (all adults), by quarter



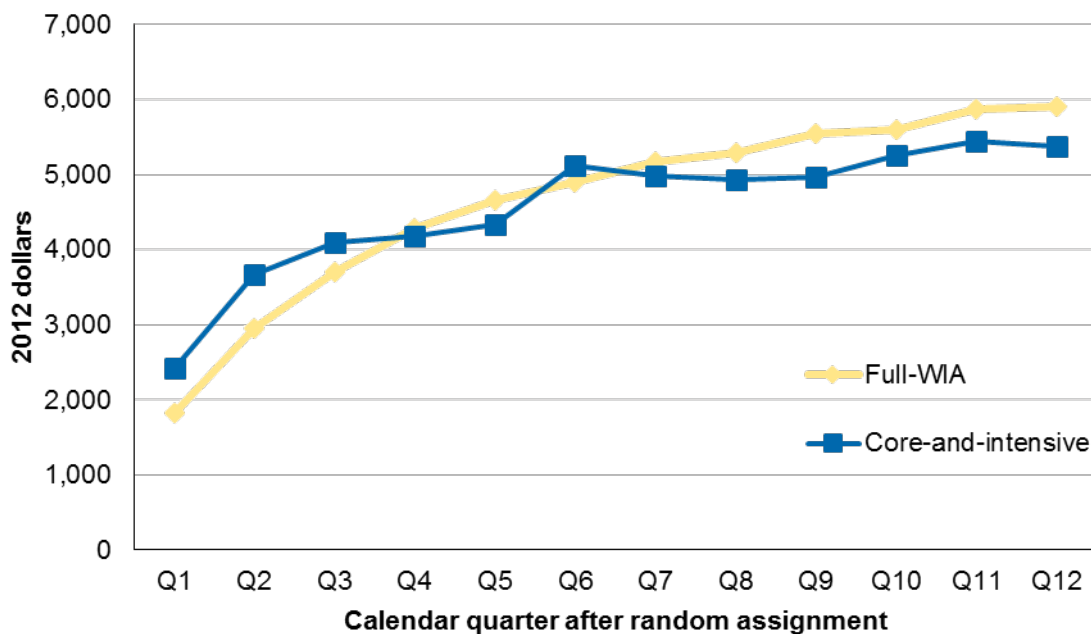
Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Q = quarter.

Figure VI.10. Earnings among dislocated workers in full-WIA and core-and-intensive groups from NDNH data (all dislocated workers), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

No differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

Q = quarter.

5. Characteristics of jobs among those who were employed

In addition to helping customers find employment, access to training could improve the quality of jobs customers obtain. In this section, we examine the characteristics—including wage rate and fringe benefits—of the job most recently held (or still held) for customers who were employed at any point in the 30-month follow-up period.⁷ We focus on the most recent job held within the 30-month follow-up period because it provides the most insight into customers' future employment trajectory. For about 85 percent of customers who were ever employed in the follow-up period, the most recent job was the job the customer still held in Quarter 10, but in some cases it was a job held earlier in the follow-up period. We obtained similar findings when we examined job characteristics across all jobs held by a customer in the follow-up period, not only the most recent one.

Among customers who were employed during the follow-up period, full-WIA and core-and-intensive customers held jobs with similar characteristics (Table VI.1). The exception is that full-WIA customers worked more hours per week on average (38) in their most recent jobs than did core-and-intensive customers (36), but the two groups were about equally likely to report that they held full-time jobs. There are no other statistically significant different job characteristics, though there is a pattern of higher rates of fringe benefits. For example, more of full-WIA customers' jobs offered health insurance, paid vacation, and pension or retirement benefits than did core-and-intensive customers' jobs, but none of these differences is statistically significant.

Table VI.1. Characteristics of most recent job for full-WIA and core-and-intensive groups (employed customers)

	Means by study group	
	Full-WIA	Core-and-intensive
Hours worked per week	37.9*	36.4
Employed full-time (35 or more hours per week, %)	74	71
Hourly wage rate (\$)	13.76	14.30
Job offered (%)		
Any benefits	77	74
Health insurance	69	66
Paid vacation	67	60
Paid holidays	68	62
Paid sick days	54	52
Any paid time off	73	68

⁷ Any differences between job characteristics for employed full-WIA customers and employed core-and-intensive customers could be because the availability of WIA-funded training affected customers' job characteristics, or because it affected which customers were employed. We cannot conclusively distinguish between these two effects. This consideration also applies to the comparisons between core-and-intensive and core customers' job characteristics and full-WIA and core customers' job characteristics.

	Means by study group	
	Full-WIA	Core-and-intensive
Pension or retirement benefits	61	54
Tuition assistance or reimbursement	33	31
Job classified as (%)		
Regular full- or part-time	83	81
Self-employed or independent contractor	5	6
Temporary or day labor	8	6
On-call	4	5
Job at contractor	2	3
Unionized job (%)	8	8

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

Notes: Dollars are 2012 dollars. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group became employed.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Only about 8 percent of customers' most recent jobs were unionized, with no differences between the study groups in rates of unionization. The average hourly wage rate for full-WIA customers' jobs (\$13.76) was lower than for core-and-intensive customers' jobs (\$14.30), but also not a statistically significant difference. These hourly wage rates were also similar to customers' average hourly wage rate (\$14.06) in the last job they held before random assignment (Table III.2).

6. Occupations of employed customers

Customers found employment in many different occupations, but there were no meaningful or statistically significant differences in occupations between the full-WIA and core-and-intensive groups (Table VI.2). Full-WIA customers who were employed most commonly held jobs as nursing, psychiatric, or home health aides; retail sales workers; information and record clerks; motor vehicle operators; or material-moving workers. These five occupations accounted for about half of the jobs.

Table VI.2. Most frequently reported occupations of current or most recent job reported for full-WIA and core-and-intensive groups (customers employed in follow-up period)

	Mean for study group members	
	Full-WIA	Core-and-intensive
Occupation of current or most recent job (%)		
Nursing, psychiatric, or home health aide	13	10
Retail sales worker	12	10
Information and record clerk	11	11
Motor vehicle operator	11	8
Material-moving worker	9	10
Material-recording, -scheduling, -dispatching, and -distributing worker	8	10
Building cleaning and pest control worker	7	6
Other personal care and service worker	7	4
Health technologist and technician	5	6
Other office and administrative support worker	5	6

	Mean for study group members	
	Full-WIA	Core-and-intensive
Cook and food preparation worker	5	4
Construction trades worker	5	4

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

Notes: Occupations are categorized based on two-digit Standard Occupational Classifications. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group became employed.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

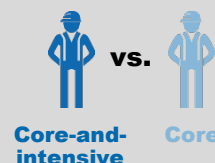
B. Impacts of WIA-funded intensive services

The core-and-intensive group was offered intensive services but the core group was not. This group received about 27 more minutes of counseling on average than the core group whether it was delivered at an American Job Center or elsewhere, as discussed in Chapter IV. These customers were also more likely to attend workshops, take assessments, receive supportive services, and receive a credential for completing their training programs. This section examines whether providing WIA-funded intensive services, which led to the increased receipt of both core and intensive services, translated into impacts on customers' employment-related outcomes.

In contrast to customers enrolling in training, we did not expect the receipt of intensive services to lead to lower employment and earnings in the first few quarters after random assignment. Although being in training is time-consuming and hence likely to displace employment, receiving intensive services takes less time than training and is unlikely to displace employment for a significant period of time.

Comparing the core-and-intensive and core groups

- This comparison examines the impact of providing WIA-funded intensive services (without training) compared with a situation in which only core services were available:
 - Core-and-intensive customers were not eligible for WIA-funded training but were eligible for WIA-funded core and intensive services.
 - Core customers were eligible for core services but not WIA-funded intensive or training services.
- The following differences in service receipt underpin the impacts on earnings and employment:
 - The core-and-intensive group was more likely than the core group to receive one-on-one assistance—the key intensive service.
 - Core-and-intensive customers were more likely than the core group to take assessments, participate in workshops, and use the resource room.
 - Core-and-intensive customers were more likely than core customers to receive a credential for completing a training program.



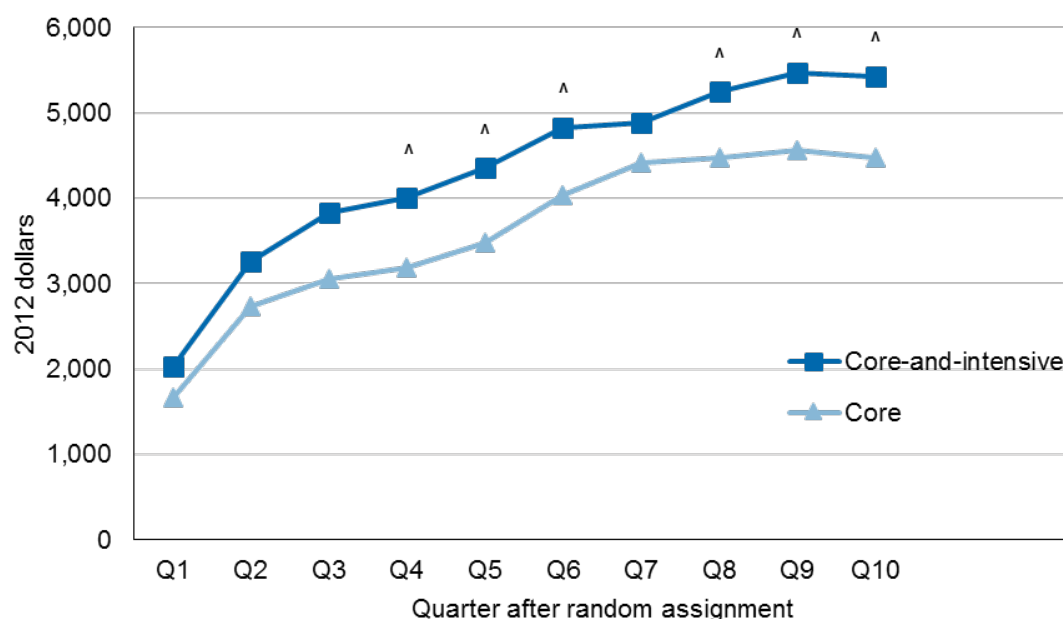
1. Earnings

According to the survey data, providing intensive services significantly increased customers' earnings over the 30-month follow-up period. On average, core-and-intensive customers earned more than core customers in each quarter after random assignment

(**Figure VI.11**). The significant positive impacts materialize beginning in Quarter 4 and persist through Quarter 10 except for Quarter 7, which is slightly higher than the threshold for statistical significance with a p -value of .051. As of Quarter 10, the average quarterly earnings of core-and-intensive customers (\$5,435) are nearly \$1,000 more than the average quarterly earnings of core customers (\$4,472). The impact estimates for each of Quarters 5, 6, 8, 9, and 10 remain statistically significant even using the more stringent significance test that accounts for the fact that we made three comparisons on the same outcome, as described in Chapter II. Over the full 30-month follow-up period, the core-and-intensive group earned \$43,211, on average, compared with \$36,079 for the core group, a difference of \$7,133 (after rounding), which is also statistically significant using the more stringent criteria.

The NDNH data also support the conclusion that providing intensive services increased earnings, but the estimated impacts are smaller. Average earnings among core-and-intensive customers were higher than those of core customers in all but one of the first 12 calendar quarters after random assignment and statistically significant in Quarters 5 and 8 (Figure VI.12); the impact estimate for Quarter 5 also meets the more stringent statistical criteria. In contrast to the estimates with survey data, according to the NDNH data the impacts are negligible from Quarter 9 onward, but the total impact across the follow-up period is still positive. Core-and-intensive customers earned an average of \$47,960 over the first 12 calendar quarters after random assignment, compared with \$44,664 for core customers. This difference of \$3,296 was statistically significant by traditional measures, but not by the more stringent significance test.

Figure VI.11. Earnings for core-and-intensive and core groups from survey data (all customers), by quarter



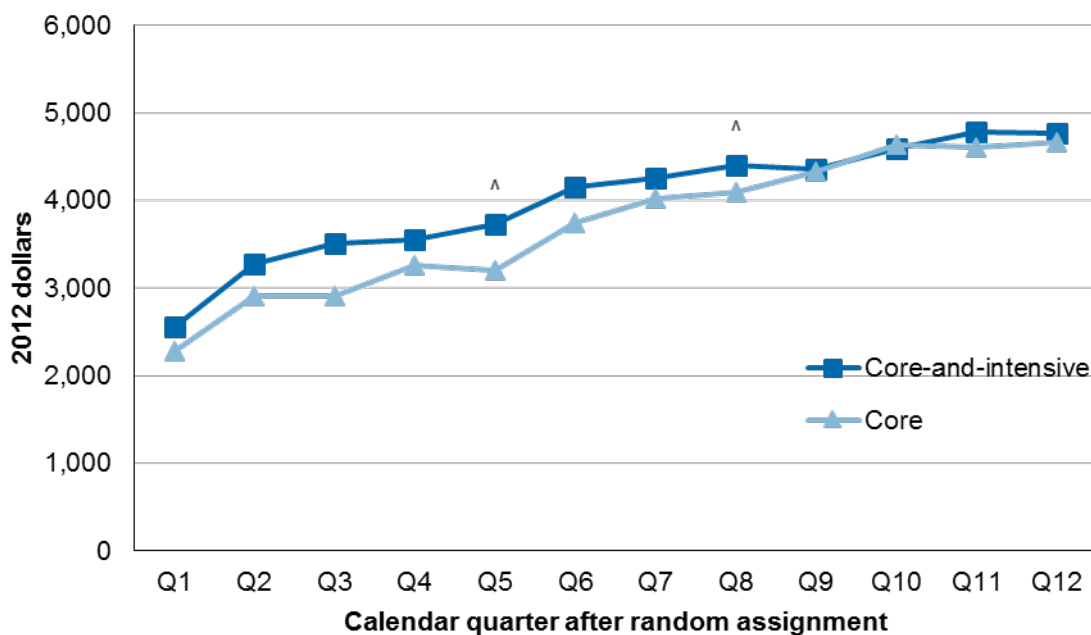
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, p -values, and sample sizes.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

Q = quarter.

Figure VI.12. Earnings for core-and-intensive and core groups from NDNH data (all customers), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

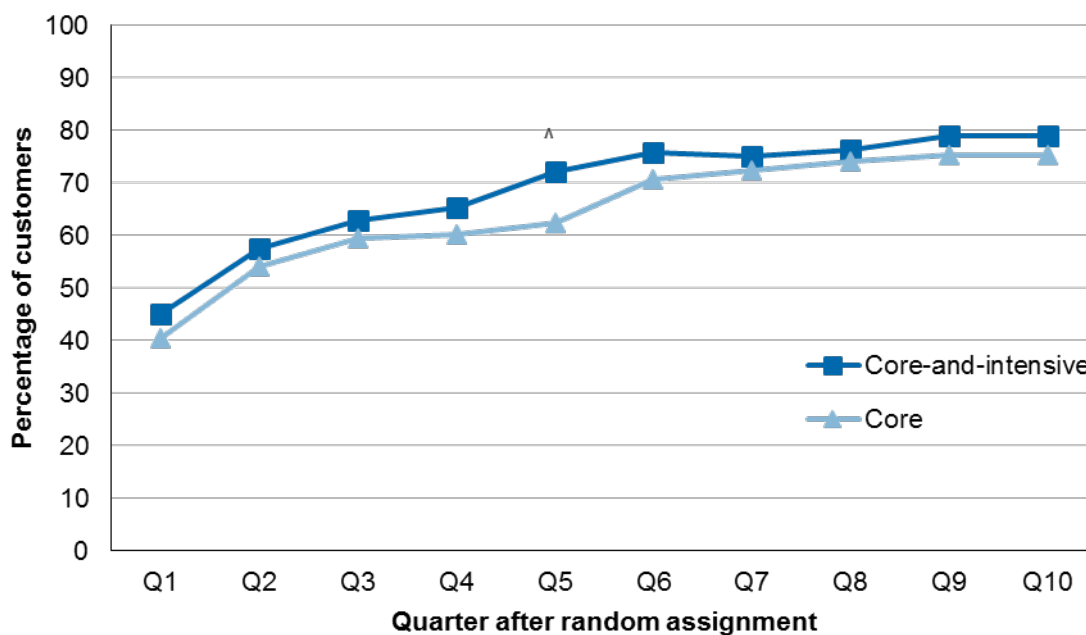
Q = quarter.

2. Employment

Differences in employment rates based on the survey data are consistent with the differences in earnings for core-and-intensive customers relative to core customers, but the differences are smaller (Figure VI.13). The employment patterns over time are similar to the patterns for earnings, but only in Quarter 5 is the difference statistically significant. As of Quarter 10, 79 percent of core-and-intensive customers were employed compared with 75 percent of core customers.

Impact estimates from NDNH data on employment rates mirror those from survey data. Employment was higher among core-and-intensive customers than among core customers in all but 2 of the first 12 calendar quarters after random assignment, although the difference is only larger than 5 percentage points and statistically significant in Quarter 5 (Figure VI.14).

Figure VI.13. Employment rates for core-and-intensive and core groups from survey data (all customers), by quarter



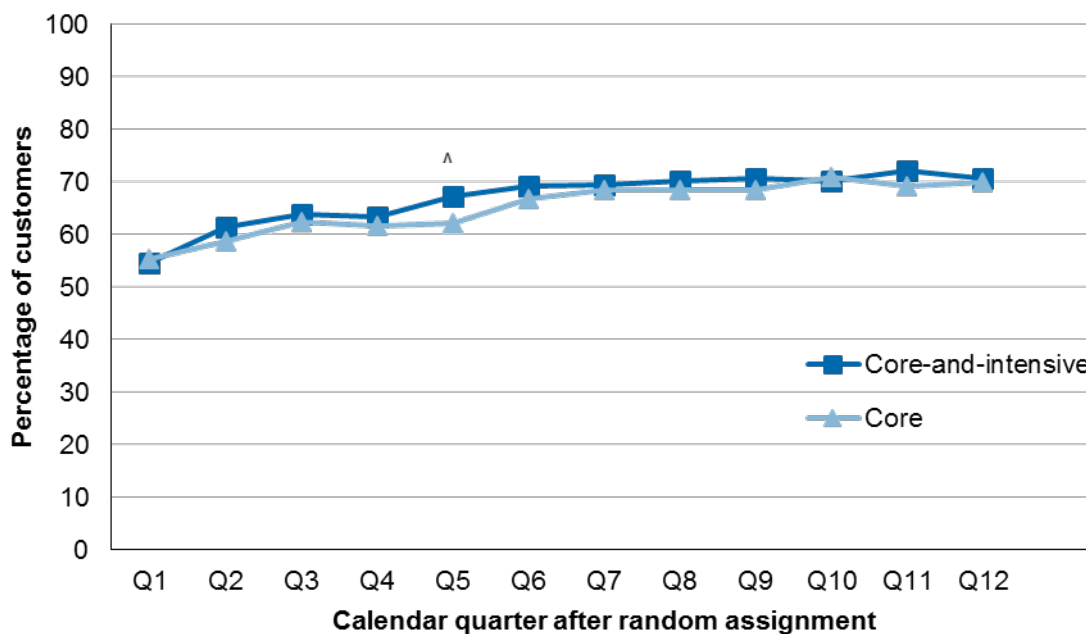
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

Q = quarter.

Figure VI.14. Employment rates for core-and-intensive and core groups from NDNH data (all customers), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

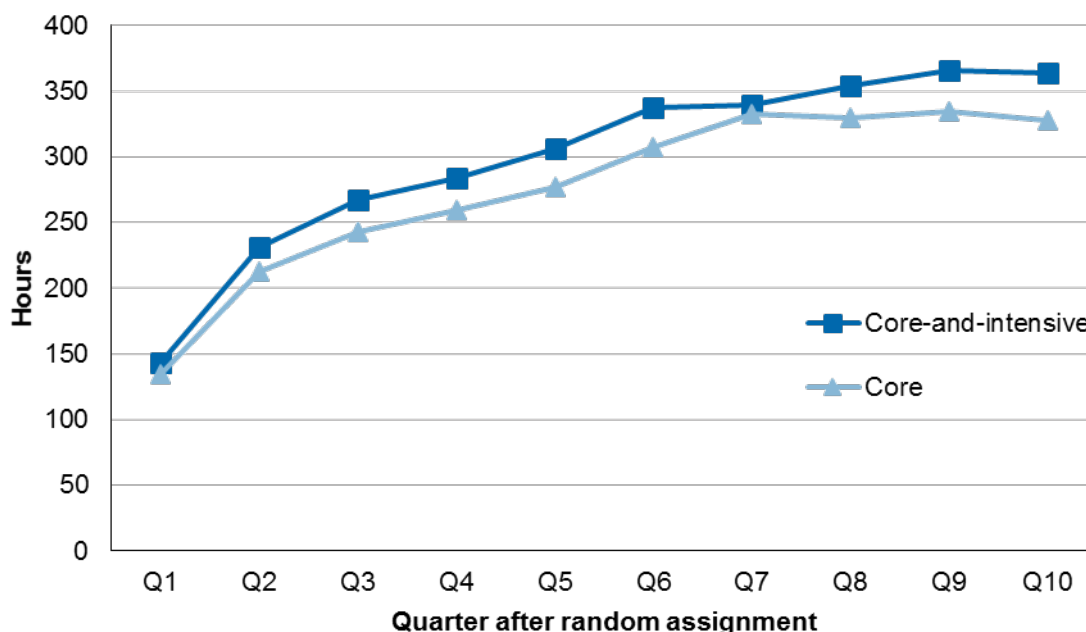
^ Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Q = quarter.

3. Hours worked

According to the survey data and similar to the patterns in employment rates, core-and-intensive customers worked more hours than core customers worked on average, but the estimated differences are not statistically significant (Figure VI.15). Core-and-intensive customers worked 2,992 hours from Quarter 1 to 10, which is about 8 percent more than core customers' 2,758 hours. Quarter by quarter, the impacts on hours worked are larger percentages than are the impacts on employment, which suggests that the impacts we observe on earnings might be caused not just by higher employment, but by more hours worked as well.

Figure VI.15. Hours worked for core-and-intensive and core groups (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

None of the differences between the core-and-intensive and core groups are significant at the 5 percent level.

Q = quarter.

4. Earnings and employment for adults and dislocated workers

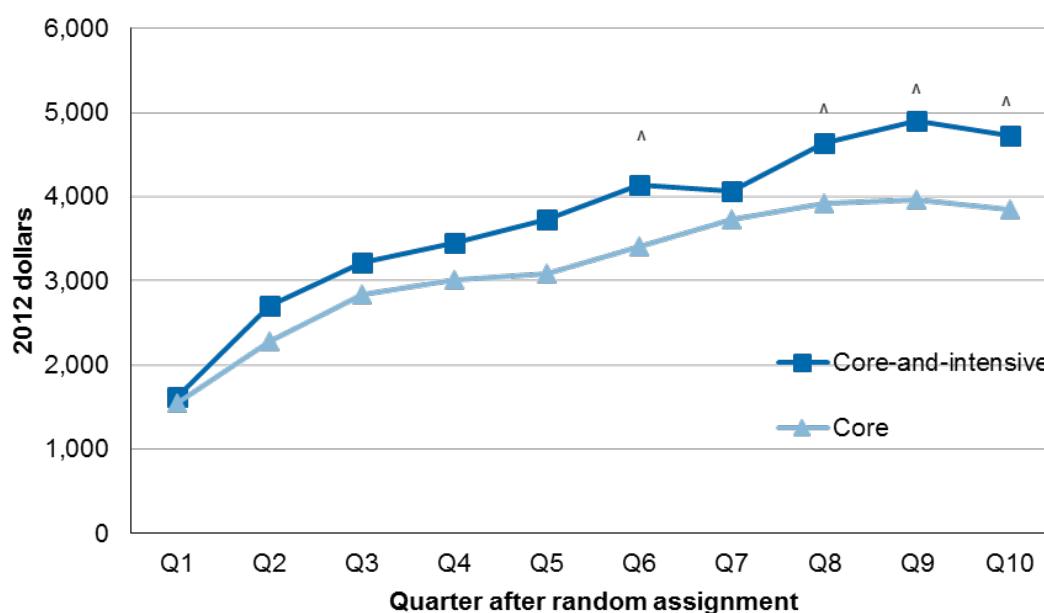
Based on the survey data, the magnitudes of the impacts on earnings were similar for dislocated workers and adults (Figures VI.16 and VI.17). For both adults and dislocated workers, the core-and-intensive group earned about \$900 to \$1,000 more on average in each of Quarters 8, 9, and 10 than did the core group. Adults earn less than dislocated workers on

average, so the estimated impacts are a larger proportion of the earnings for adults than dislocated workers.

Estimated impacts on earnings and employment from NDNH data have different patterns for adults and dislocated workers (Figures VI.18 and VI.19). In Quarter 12, the estimated average earnings of core-and-intensive adults according to the NDNH were about \$500 higher than core adults' earnings (a statistically significant difference), whereas those of core-and-intensive dislocated workers were about \$400 less than core dislocated workers' earnings (but not statistically significant). The difference between these estimated impacts was slightly higher than the threshold for statistical significance (p -value = .057).

Our findings on the impacts of intensive services differ somewhat from those found by Heinrich et al. (2008) when considering the survey data but not when using the NDNH data. (Andersson et al. [2013] did not examine the impact of intensive services.) Heinrich et al. (2008) found that intensive services increased earnings for both adults and dislocated workers. Their study suggests that impacts for adults were larger than those for dislocated workers in the early part of the follow-up period. But earnings impacts for adults decreased over time and by the 10th quarter after random assignment, impacts for adults and dislocated workers were about the same size. Similar to the differences in our training impacts discussed in Section A, the cause of these differences in our findings and theirs might be differences in the locations or time of their study, or that their comparison group comprised individuals who chose not to enroll and thus are fundamentally different.

Figure VI.16. Earnings among adults in core-and-intensive and core groups from survey data (all adults), by quarter



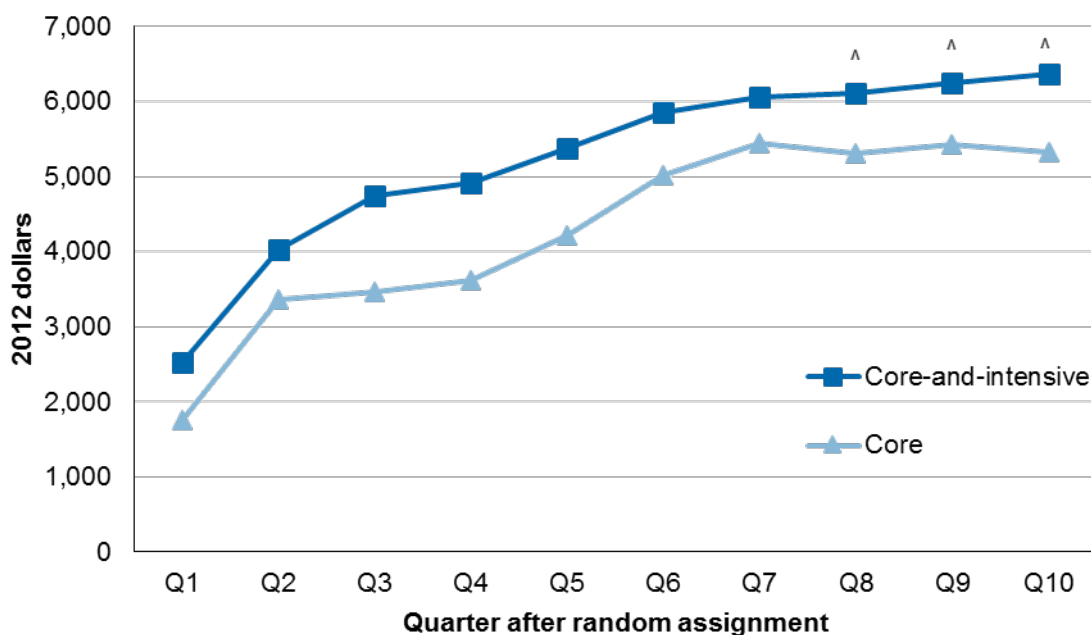
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, p -values, and sample sizes.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

Q = quarter.

Figure VI.17. Earnings among dislocated workers in core-and-intensive and core groups from survey data (all dislocated workers), by quarter



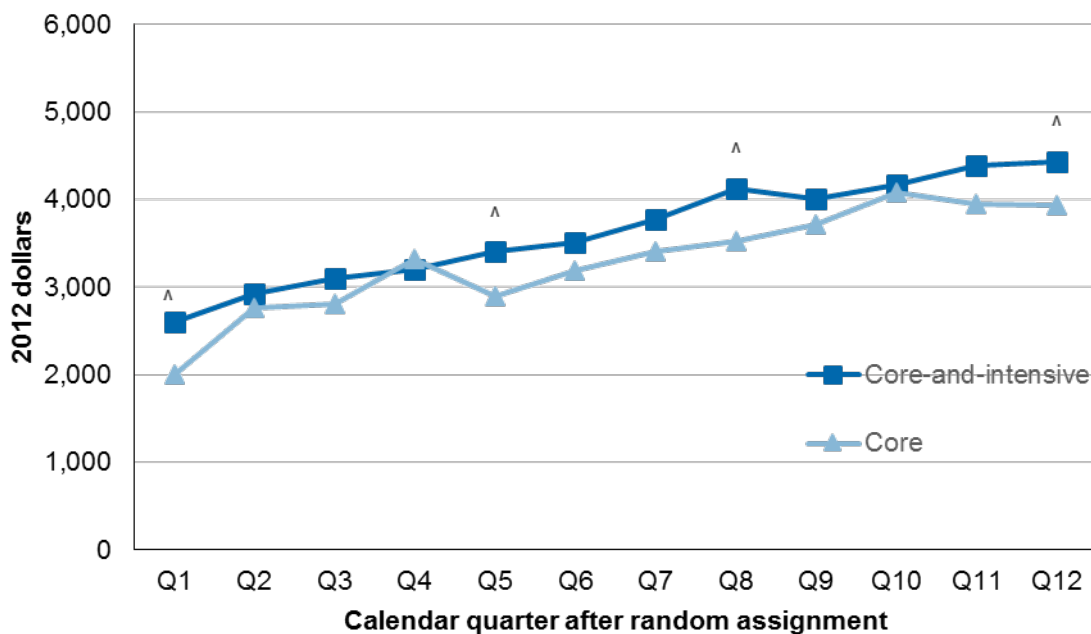
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

Q = quarter.

Figure VI.18. Earnings among adults in core-and-intensive and core groups from NDNH data (all adults), by quarter



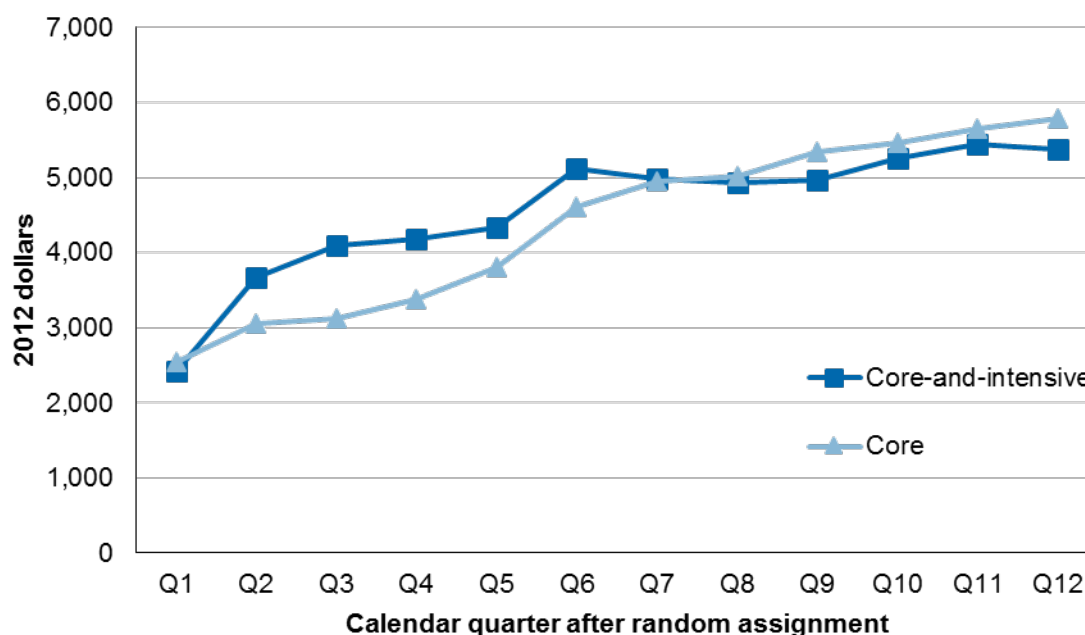
Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

Q = quarter.

Figure VI.19. Earnings among dislocated workers in core-and-intensive and core groups from NDNH data (all dislocated workers), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

No differences between the core-and-intensive and core groups are significant at the 5 percent level.

Q = quarter.

5. Characteristics of jobs among those who were employed

The most recent jobs held by customers in the core-and-intensive group are more likely than the jobs held by core group customers to be full-time and offer more benefits, on average. Core-and-intensive customers' most recent jobs featured higher hourly wage rates (\$14.30) than did core customers' (\$13.56), but the estimated difference is not statistically significant (Table VI.3). Core-and-intensive customers' most recent jobs were also more likely to offer each of the seven job-related benefits we considered. Only two of the seven differences in job-related benefits are statistically significant, but all of the differences are consistently positive. The positive but not statistically significant estimated difference in hourly wage rates coupled with the positive but also not statistically significant impacts on employment suggest that higher employment rates and higher wages might each partially explain the impact of access to intensive services on earnings.

Table VI.3. Characteristics of most recent job for core-and-intensive and core groups from survey data (employed customers)

	Mean by study group	
	Core-and-intensive	Core
Hours worked per week	36.4	36.0
Employed full-time (35 or more hours per week, %)	71 [^]	66
Hourly wage rate (\$)	14.30	13.56
Job offered (%)		
Any benefits	74	72
Health insurance	66	60
Paid vacation (other than holidays)	60	57
Paid holidays	62 [^]	55
Paid sick days	52 [^]	42
Any paid time off	68	64
Pension or retirement benefits	54	51
Tuition assistance or reimbursement	31	26
Job classified as (%)		
Regular full- or part-time	81	79
Self-employed or independent contractor	6	8
Temporary or day labor	6	9
On-call	5	3
Job at contractor	3 [^]	2
Unionized job (%)	8	6

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

Notes: Dollars are 2012 dollars. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group became employed.

[^] Difference between the core-and-intensive and core groups is significant at the 5 percent level.

6. Occupations of employed customers

Core-and-intensive and core customers who were employed had broadly similar occupations except core-and-intensive customers were less likely to be employed in retail sales (Table VI.4). Core-and-intensive customers were about 6 percentage points (after rounding) less likely to have been employed in retail sales in their most recent jobs than were core customers, but there are few other notable differences. Retail sales jobs are lower paying on average than are other common occupations for study group members, and the fact that core customers are more likely to be employed in retail sales may be associated with their lower (but not statistically different) wage rates as discussed in Section B.5.

Table VI.4. Most frequently reported occupations of current or most recent job reported for core-and-intensive and core groups (employed customers)

	Mean for study group members	
	Core-and-intensive	Core
Occupation of current or most recent job (%)		
Nursing, psychiatric, or home health aide	10	8
Retail sales worker	10 [^]	17
Information and record clerk	11	14
Motor vehicle operator	8	7
Material-moving worker	10	8
Material-recording, -scheduling, -dispatching, and -distributing worker	10	7
Building cleaning and pest control worker	6	7
Other personal care and service worker	4	5
Health technologist and technician	6	5
Other office and administrative support worker	6	5
Cook and food preparation worker	4	3
Construction trades worker	4	5

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

Notes: Occupations are categorized based on two-digit Standard Occupational Classifications. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group were employed.

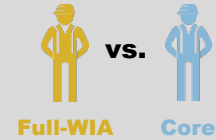
[^] Difference between the core-and-intensive and core groups is significant at the 5 percent level.

C. Impacts of both WIA-funded training and WIA-funded intensive services

Comparing the average outcomes for the full-WIA group with the average outcomes of the core group provides an estimate of the combined effect of providing both training and intensive services compared with access to core services only. As shown in Chapters IV and V, providing WIA-funded training and intensive services not only increased enrollment in training and receipt of intensive services, it increased receipt of some core and supportive services and affected the types of training received as well. By design, the differences between the outcomes of the full-WIA and core groups are equal to the sum of the differences between the outcomes of full-WIA and core-and-intensive groups (as discussed in Section A) and the differences between the outcomes of the core-and-intensive and core groups (as discussed in Section B). Although we focus the discussion on the full-WIA and core groups, we also present the estimates for the core-and-intensive group to help visualize the extent to which the combined impact of WIA-funded training and intensive services is because of training specifically or intensive services.

Comparing the full-WIA and core groups

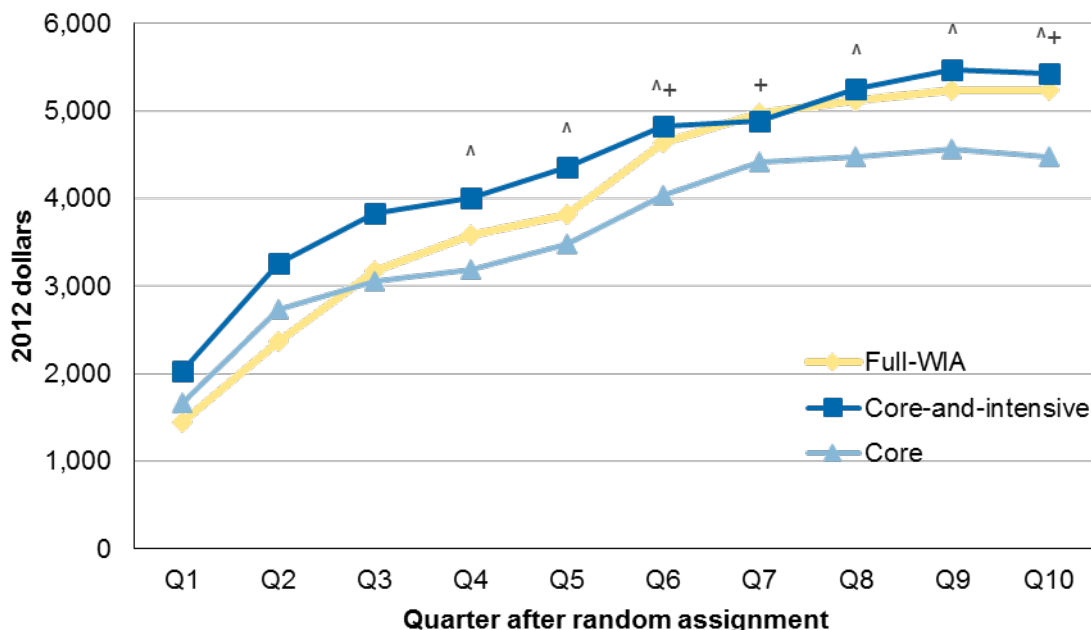
- This comparison examines the impact of providing the full set of WIA services, including WIA-funded training and intensive services, compared with a situation in which only core services are available:
 - Full-WIA customers were eligible for WIA-funded training in the same way they would have been in the absence of the study. They were also eligible for WIA-funded core and intensive services.
 - Core customers were eligible for core services but not WIA-funded intensive or training services.
- The following differences in service receipt underpin the impacts on earnings and employment:
 - Full-WIA customers were more likely than core customers to enroll in training and to receive credentials.
 - WIA, rather than other sources, funded most full-WIA customers' training.
 - Full-WIA customers were more likely than core customers to receive one-on-one assistance, take assessments, participate in workshops, use a resource room, and receive supportive services.



1. Earnings

According to the survey data, providing both WIA-funded training and intensive services increased average earnings in the second half of the follow-up period (Figure VI.20). The full-WIA group earned about \$3,245 more in total than the core group from Quarters 6 through 10, and \$3,449 more in total from Quarters 1 through 10. The quarterly impact estimates of about \$600 per quarter are significant in Quarters 6, 7, and 10, and close to significant in Quarters 5, 8, and 9. However, none of these impact estimates are statistically significant using the more stringent statistical test that accounts for the fact that we made three comparisons across groups for each outcome.

Figure VI.20. Earnings for each study group from survey data (all customers), by quarter



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

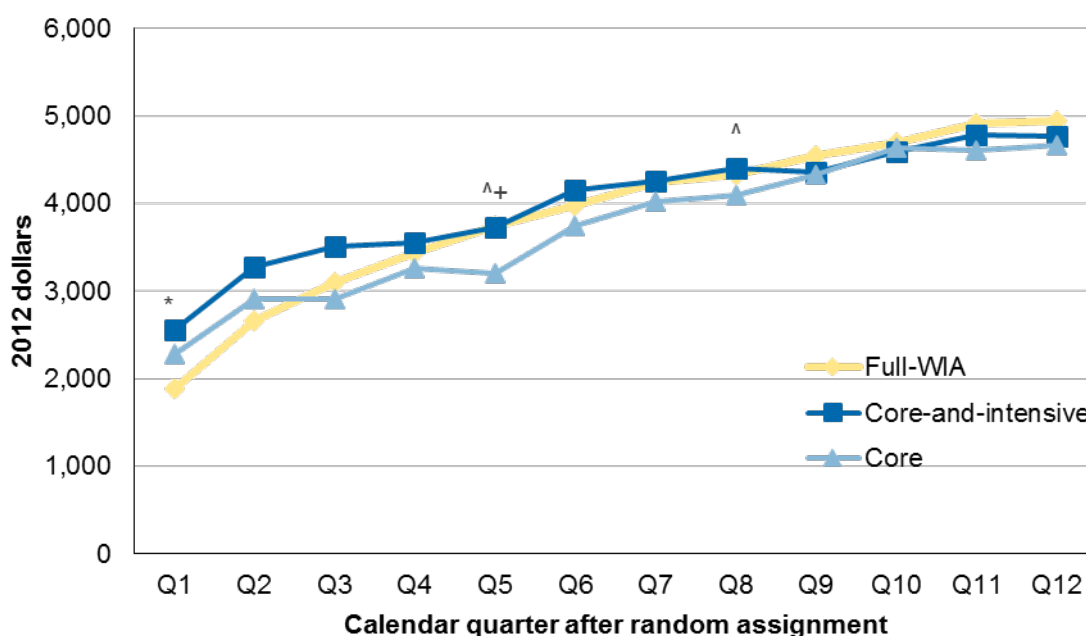
^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

The NDNH data provide some evidence to support the finding that both WIA-funded training and intensive services increased average earnings (Figure VI.21). Full-WIA customers' average earnings were higher in each quarter from Quarters 3 to 12, although the difference is statistically significant only in Quarter 5. The Quarter 5 difference is significant by the more stringent statistical significance test as well.

Figure VI.21. Earnings for each study group from NDNH data (all customers), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

The impacts of intensive services—with or without training—are positive according to both data sources, but the magnitude of the impact is larger using the survey data than NDNH. Core-and-intensive customers earned more than core customers in each quarter according to both the survey and NDNH, and the impacts are statistically significant in each of Quarters 4–6 and 8–10 (Table VI.5). However, the estimated impacts using NDNH are about

half as large in each quarter, and only statistically significant in Quarters 5 and 8. Additionally, the survey impact estimates showed large positive effects in Quarters 9 and 10 of over \$900, whereas the NDNH impact estimates indicate there is no persistent impact in the later quarters. A similar pattern of differences in impacts according to the two data sources is evident for the comparison of full-WIA and core customers.

Table VI.5. Impact estimates by data source (all customers) and quarter

	F – C&I impact		C&I – C impact		F – C impact	
	Survey	NDNH	Survey	NDNH	Survey	NDNH
Quarter 1 earnings	-589	-683*	376	287	-213	-396
Quarter 2 earnings	-896	-600	531	363	-365	-238
Quarter 3 earnings	-663	-402	780	592	117	190
Quarter 4 earnings	-434	-128	821^	297	387	168
Quarter 5 earnings	-541	17	881^	526^	340	543+
Quarter 6 earnings	-186	-177	794^	410	608+	233
Quarter 7 earnings	82	-8	475	237	557+	229
Quarter 8 earnings	-129	-65	765^	310^	636	245
Quarter 9 earnings	-231	199	903^	20	672	219
Quarter 10 earnings	-191	105	963^	-33	773+	72
Quarter 11 earnings	--	127	--	175	--	302
Quarter 12 earnings	--	163	--	112	--	276

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and National Directory of New Hires.

Note: All estimates are in 2012 dollars.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

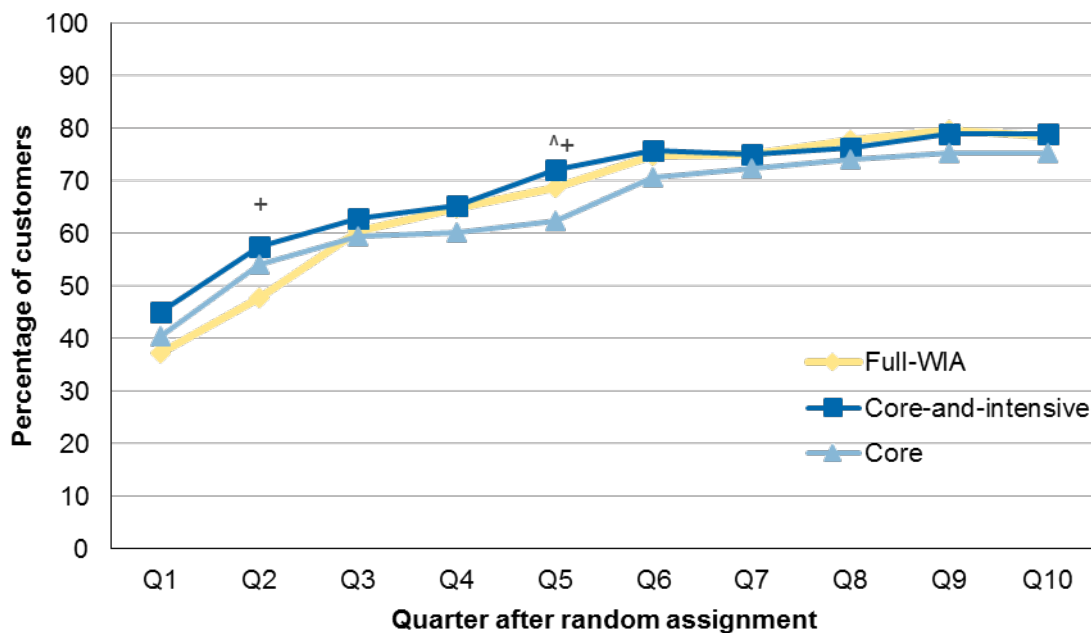
F = full-WIA group; C&I = core-and-intensive group; C = core group.

We mostly attribute the higher earnings for the full-WIA group compared with the core group to intensive services rather than WIA-funded training. This conclusion draws on the findings in Sections A and B, which found that WIA-funded training did not affect earnings but providing intensive services had a positive impact on earnings.

2. Employment

According to the survey data, customers in the full-WIA group were significantly more likely to be employed in Quarter 5 than were core customers but not in any subsequent quarter (Figure VI.22). As of Quarter 10, 79 percent of the full-WIA group was employed, compared with 75 percent of the core group. ***We found a similar pattern in the NDNH data (Figure VI.23).*** In most quarters, employment rates were similar between the full-WIA and core groups. In fact, by Quarter 12, 70 percent of full-WIA customers and 70 percent of core customers were employed. These findings suggest that impacts on employment alone do not explain the impacts we observe for earnings. We explore other explanations when we discuss effects on hours worked and wage rates.

Figure VI.22. Employment rates for each study group from survey data (all customers), by quarter



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

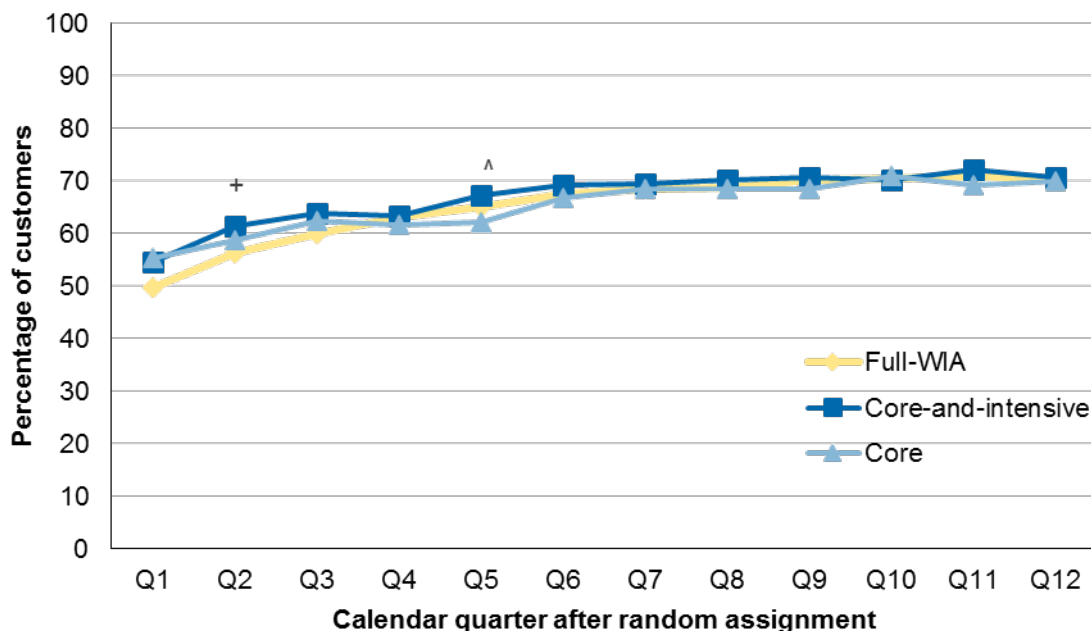
None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

Figure VI.23. Employment for each study group from NDNH data (all customers), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

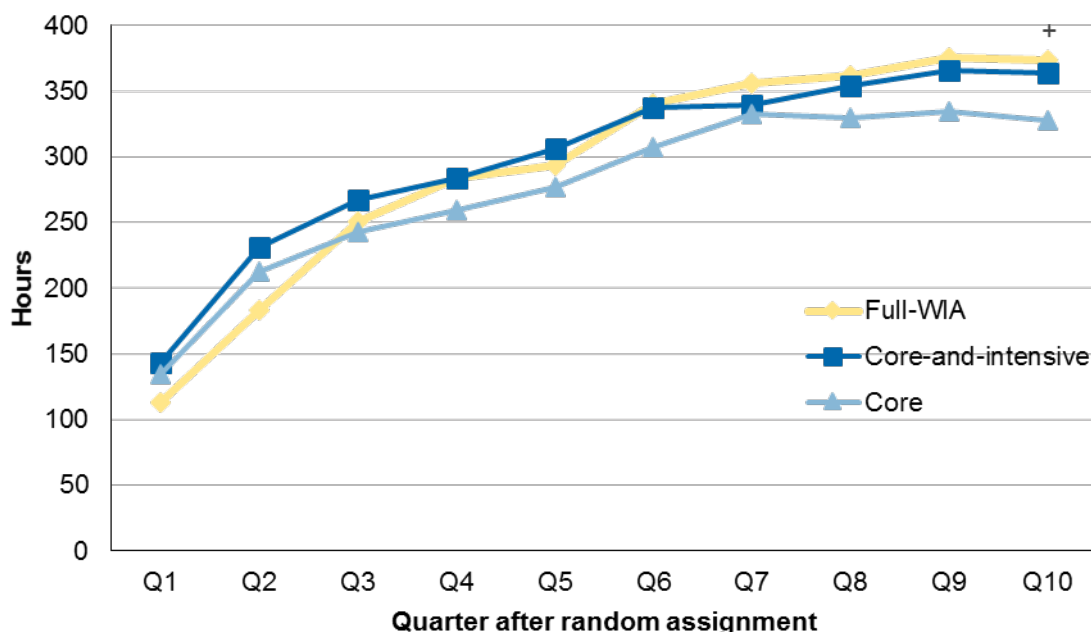
+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

3. Hours worked

From the survey data, the pattern of impacts on hours worked in each quarter is similar to the pattern of employment impacts but larger in magnitude throughout the follow-up period and significant in Quarter 10 (Figure VI.24). Full-WIA customers worked about 374 hours in Quarter 10 compared with 328 for core customers. The impacts on hours worked are proportionally larger than the impacts on employment rates, suggesting that increases in hours worked explain at least part of the impact on earnings.

Figure VI.24. Hours worked for each study group (all customers)



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, p -values, and sample sizes.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

None of the differences between the core-and-intensive and core groups are significant at the 5 percent level.

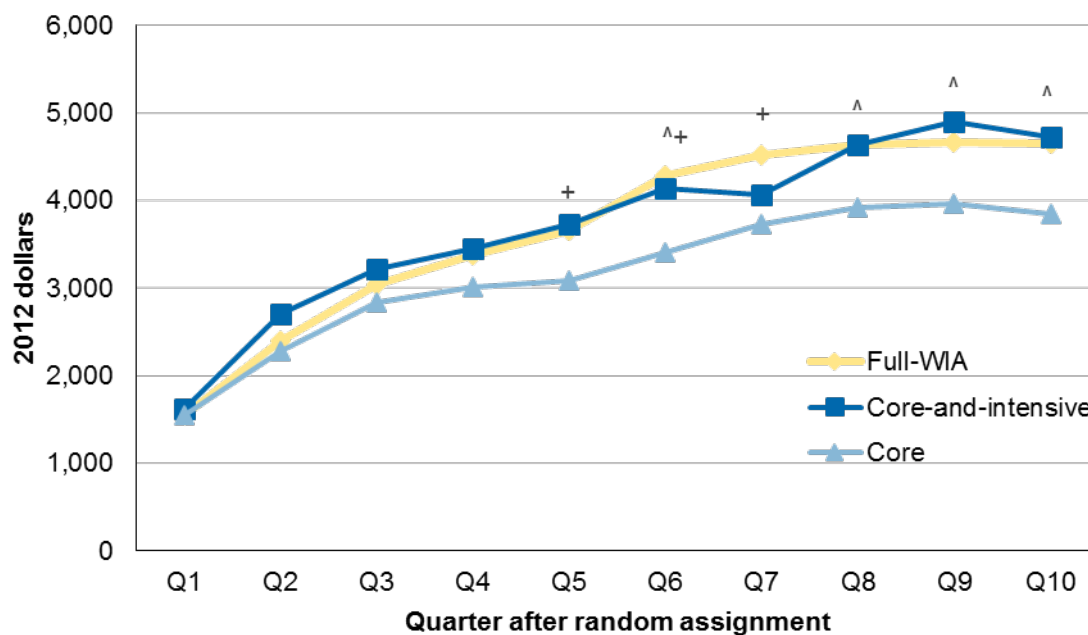
+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

4. Earnings and employment for adults and dislocated workers

The magnitudes of the impacts on earnings were similar for dislocated workers and adults with both the survey and NDNH data (Figures VI.25–VI.28). Using the survey data, the full-WIA group earned about \$600 to \$800 more, on average, in Quarters 9 and 10 than did the core group, which was true for both adults and dislocated workers. These estimated differences are not statistically significant, although the difference for adults is close to the threshold for statistical significance (p -value = .070). For adults, the differences were similar and statistically significant in Quarters 6–8 as well. As was the case when we pooled adults and dislocated workers, estimated impacts on earnings from NDNH data for adults and dislocated workers separately are smaller than those from survey data. For example, in Quarter 12, full-WIA adults' average earnings were \$353 higher than core adults', whereas those of full-WIA dislocated workers were \$110 more than core dislocated workers, neither of which is statistically significant.

Figure VI.25. Earnings among adults in each study group from survey data (all adults), by quarter



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

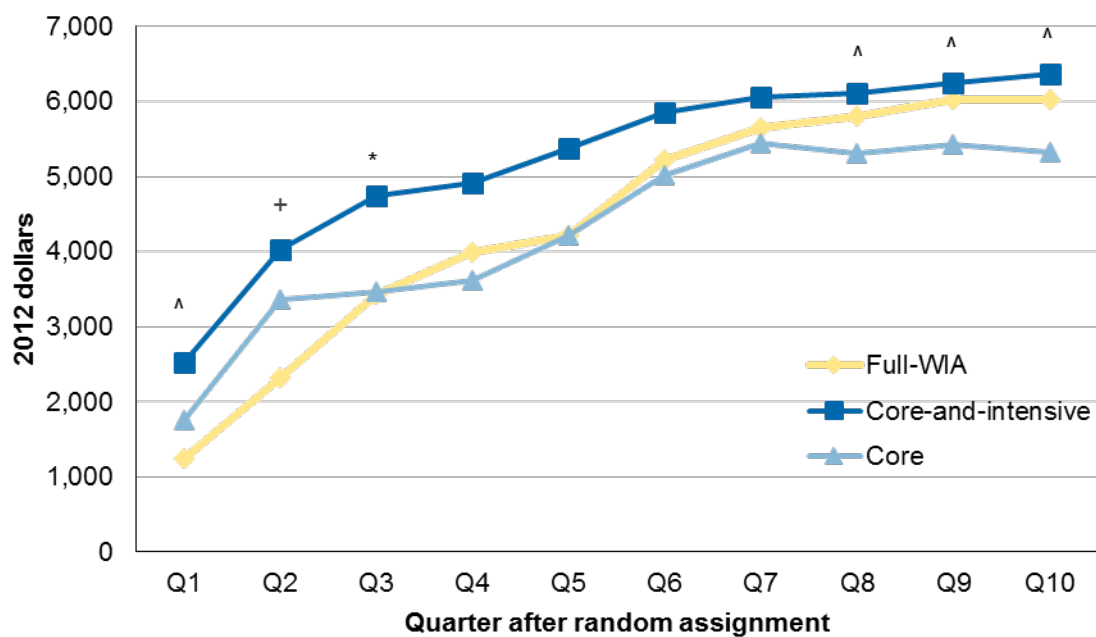
None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

Figure VI.26. Earnings among dislocated workers in each study group from survey data (all dislocated workers), by quarter



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

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

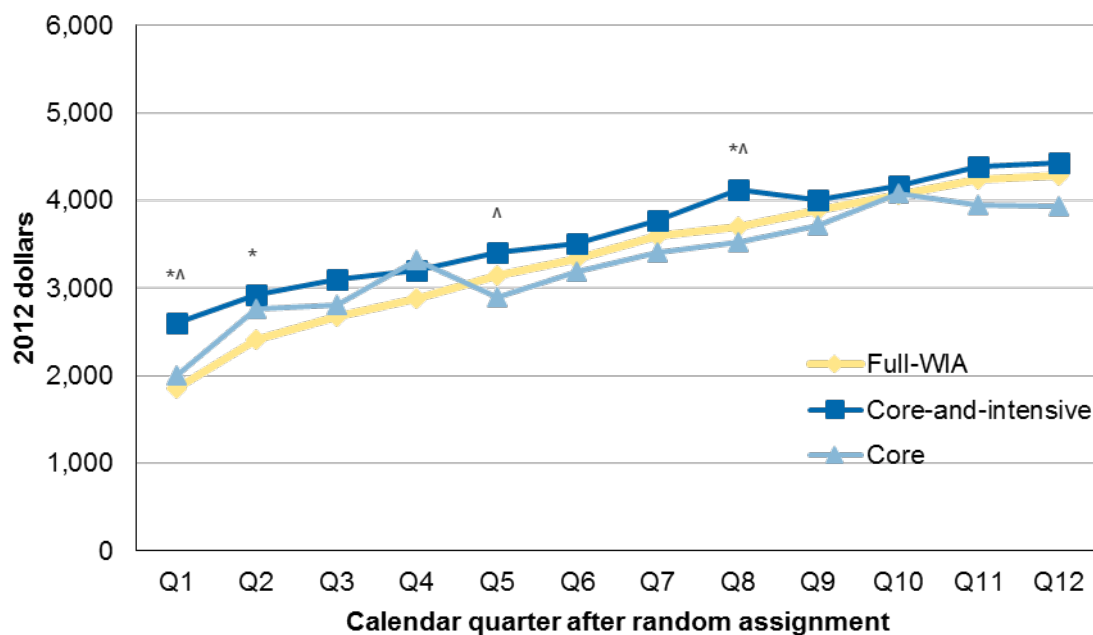
* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

None of the differences between the full-WIA and core groups are significant at the 5 percent level.

Q = quarter.

Figure VI.27. Earnings among adults in each study group from NDNH data (all adults), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

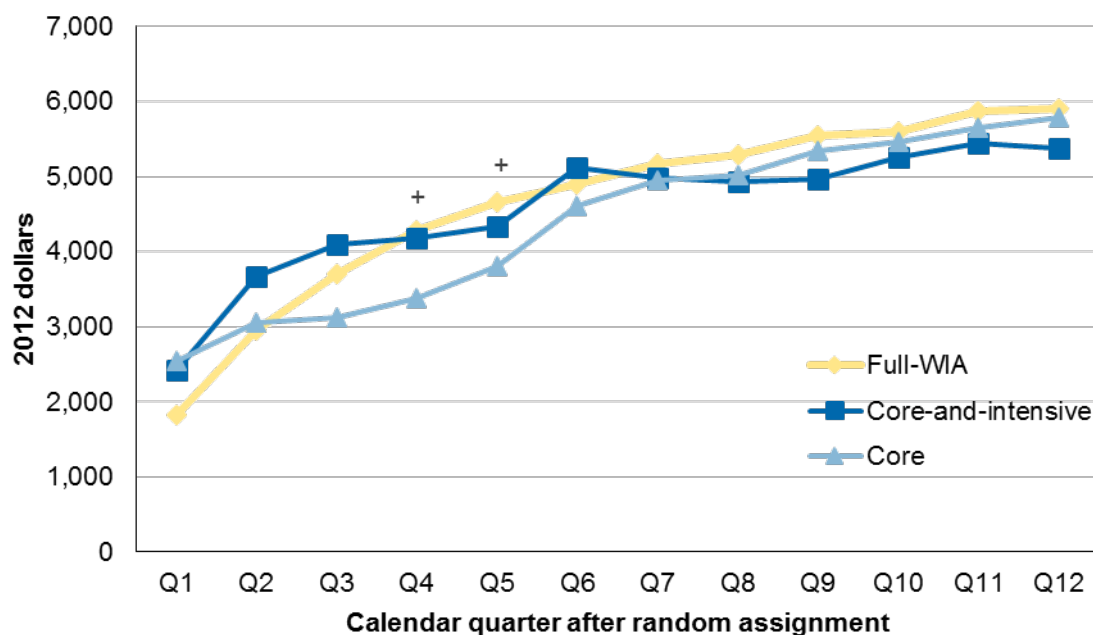
None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

Figure VI.28. Earnings among dislocated workers in each study group from NDNH data (all dislocated workers), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

None of the differences between the core-and-intensive and core groups are significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

Q = quarter.

5. Characteristics of jobs among those who were employed

Full-WIA customers who were employed at any point in the follow-up period held jobs that could be considered better on many of the dimensions we examined compared with the jobs held by core customers (Table VI.6). Although wage rates did not differ significantly between the groups (\$13.76 per hour for full-WIA and \$13.56 for core customers), full-WIA customers worked more hours per week (38 versus 36), were more likely to be employed full-time (74 versus 66 percent), and were more likely to hold regular full- or part-time jobs than were core customers. These findings are consistent with the positive impact on total hours worked despite the small impacts on employment rates. A higher percentage of full-WIA customers than core customers were also offered each type of benefit we examined through their most recent jobs. The differences are statistically significant only for paid holidays, paid sick days, and pension or retirement benefits, but the differences are close to significant for health insurance, paid vacation, and paid time off as well.

Table VI.6. Characteristics of most recent job for each study group (employed customers)

	Means by study group		
	Full-WIA	Core-and-intensive	Core
Hours worked per week	37.9*+	36.4	36.0
Employed full time (35 or more hours per week, %)	74+	71^	66
Hourly wage rate (\$)	13.76	14.30	13.56
Job offered (%)			
Any benefits	77	74	72
Health insurance	69	66	60
Paid vacation (not holidays)	67	60	57
Paid holidays	68+	62^	55
Paid sick days	54+	52^	42
Any paid time off	73	68	64
Pension or retirement benefits	61+	54	51
Tuition assistance or reimbursement	33	31	26
Job classified as (%)			
Regular full- or part-time	83+	81	79
Self-employed or independent contractor	5	6	8
Temporary or day labor	8	6	9
On-call	4	5	3
Job at contractor	2	3^	2
Unionized job (%)	8	8	6

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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group became employed.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

^ Difference between the core-and-intensive and core groups is significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

6. Occupations of employed customers

Full-WIA customers who were employed at some point during the follow-up period were about 50 percent more likely to hold jobs as a nursing, psychiatric, or home health aide compared with core customers and about 25 percent less likely to work in retail sales, but there are few other differences in the types of jobs held (Table VI.7).

Table VI.7. Most frequently reported occupations of current or most recent job reported for each study group (customers employed in follow-up period)

	Mean for study group members		
	Full-WIA	Core-and-intensive	Core
Occupation of current or most recent job (%)			
Nursing, psychiatric, or home health aide	13+	10	8
Retail sales worker	12+	10 [^]	17
Information and record clerk	11	11	14
Motor vehicle operator	11	8	7
Material-moving worker	9	10	8
Material-recording, -scheduling, -dispatching, and -distributing worker	8	10	7
Building cleaning and pest control worker	7	6	7
Other personal care and service worker	7	4	5
Health technologist and technician	5	6	5
Other office and administrative support worker	5	6	5
Cook and food preparation worker	5	4	3
Construction trades worker	5	4	5

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

Notes: Occupations are categorized based on two-digit Standard Occupational Classifications. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group became employed.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

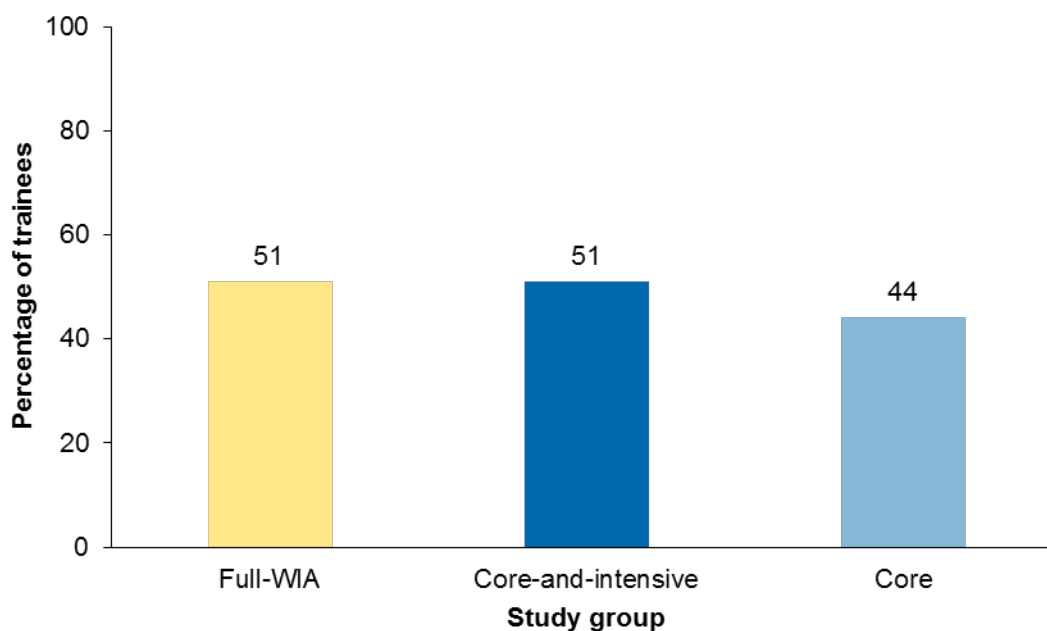
[^] Difference between the core-and-intensive and core groups is significant at the 5 percent level.

⁺ Difference between the full-WIA and core groups is significant at the 5 percent level.

D. Relevance of training to subsequent occupation

Customers likely enrolled in training in hopes of better employment prospects. *Our survey findings suggest that about half of all customers who enrolled in training believed it helped them find employment during the 30-month follow-up period.* More than half (51 percent) of full-WIA customers who enrolled in any training program reported that training helped them find employment (Figure VI.29), and likewise for 51 percent of core-and-intensive customers who enrolled in a training program. In contrast, 44 percent of core customers who enrolled in training believed training helped them find employment, although this is not statistically significantly different from the percentage of full-WIA or core-and-intensive trainees who believed training helped them find jobs. In the rest of this section we explore in more depth how well the field of the training programs matched the jobs that customers obtained.

Figure VI.29. Believe found a job due to training (among customers who enrolled in training at some time during the 30 months after random assignment)



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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group were trainees.

The difference between the full-WIA and core-and-intensive groups is not significant at the 5 percent level.

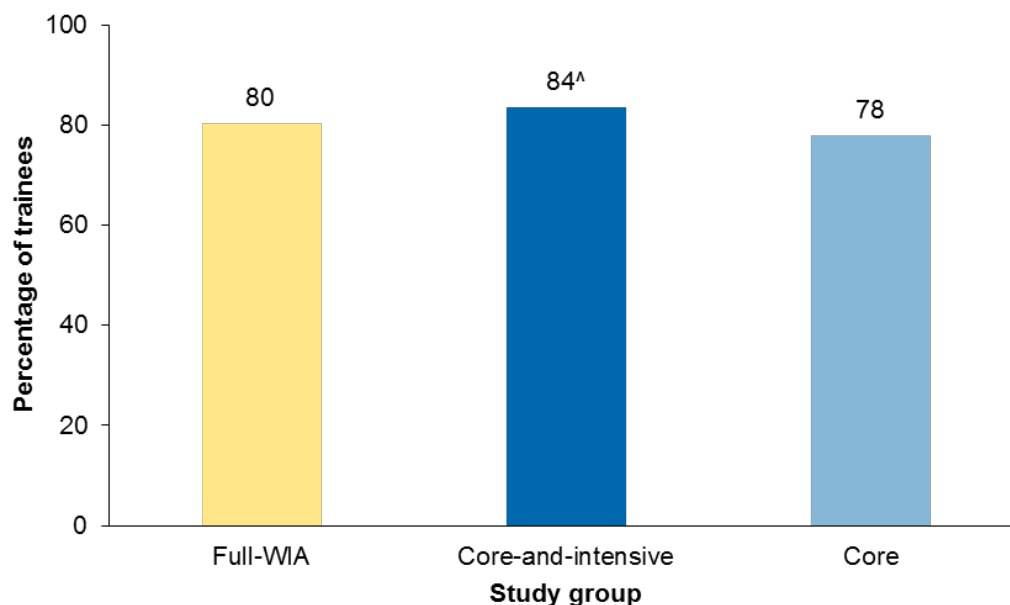
The difference between the core-and-intensive and core groups is not significant at the 5 percent level.

The difference between the full-WIA and core groups is not significant at the 5 percent level.

In all three study groups, most customers who enrolled in training during the follow-up period were employed in Quarter 10 (Figure VI.30). A large majority (80 percent) of full-WIA trainees were employed in Quarter 10, and 84 percent of core-and-intensive customers who had enrolled in training were employed in Quarter 10. More than three-fourths (78 percent) of core customers who had enrolled in training were employed in Quarter 10, significantly less than for core-and-intensive trainees.

Most customers who enrolled in training enrolled in vocational training programs that aimed to provide skills to help customers find employment in specific occupations. For these more specific programs, we explored how well occupation-specific programs helped customers find employment in a related occupation. Other customers in the study enrolled in programs that provided education rather than specific vocational skills, such as community college classes toward an associate's degree. Sometimes community college degree programs are also occupationally focused, but we do not have information that details those community colleges' occupational focuses, if any, so we exclude these general education programs in the rest of this section.

Figure VI.30. Employment rate in Quarter 10 among customers who enrolled in training at some time during the 30 months after random assignment



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

Notes: The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group were trainees.

The difference between the full-WIA and core-and-intensive groups is not significant at the 5 percent level.

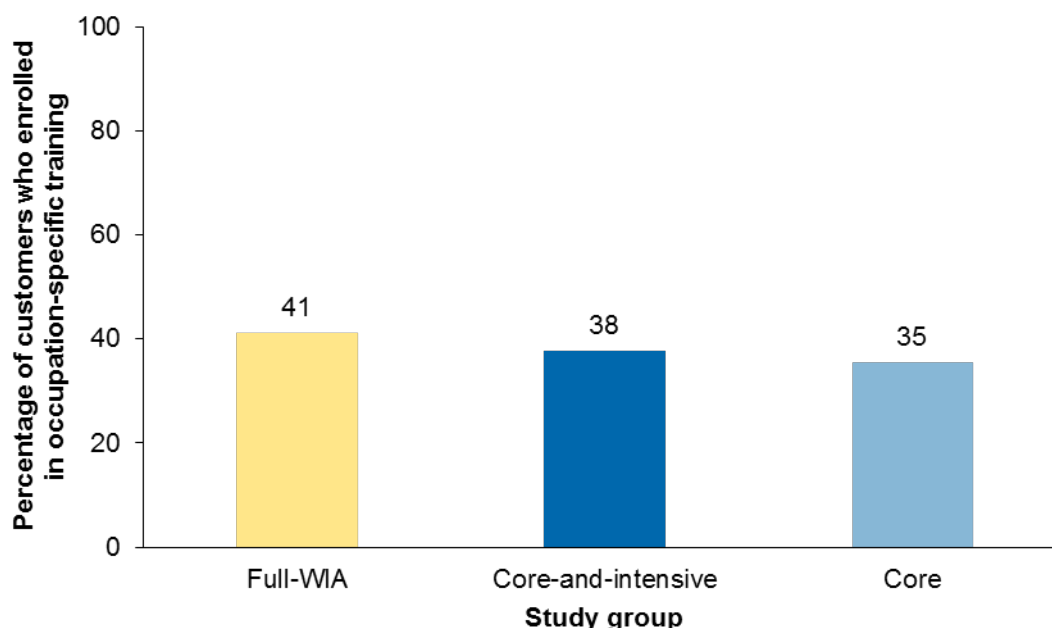
[^] The difference between the core-and-intensive and core groups is significant at the 5 percent level.

The difference between the full-WIA and core groups is not significant at the 5 percent level.

Full-WIA customers were more likely to enroll in occupational training of all types than were core-and-intensive or core customers (Chapter V), but upon completing training, their subsequent jobs were not more likely to be in the field in which they trained (Figure VI.31). In all study groups, fewer than half of customers who enrolled in training designed to prepare them for an occupation actually found a job related to that occupation: this was the case for 41 percent of such customers from the full-WIA group, 38 percent of such customers from the core-and-intensive group, and 35 percent of such customers from the core group, but the estimated differences are not statistically significant. This finding corroborates the finding that only about half of customers who had enrolled in training believed it helped them find employment.

About half the customers in each study group (including those who did or did not enroll in training) found employment in occupations different from those they held before random assignment (Table VI.8). This finding suggests that occupations of customers in all three study groups shifted for reasons other than access to training. For these comparisons we classified occupations based on two-digit Standard Occupational Classifications, the same as those reported in Sections A.6, B.6, and C.6. The customer's job after random assignment was in the same occupation as the one before random assignment for about 20 percent of customers, with no significant difference across study groups. The remaining 30 to 32 percent of customers in each study group were either not employed at all in the follow-up period or (more often) had not been employed in the five years before random assignment; this percentage did not differ significantly across study groups.

Figure VI.31. Found employment in an occupation related to training (customers who enrolled in occupation-specific training)



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

Notes: Occupations are categorized based on two-digit Standard Occupational Classifications. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes. Differences between study groups cannot be interpreted as causal impacts because not all members of each study group were enrolled in occupation-specific training.

The difference between the full-WIA and core-and-intensive groups is not significant at the 5 percent level.

The difference between the core-and-intensive and core groups is not significant at the 5 percent level.

The difference between the full-WIA and core groups is not significant at the 5 percent level.

Table VI.8. Whether jobs before and after random assignment differed (all customers)

	Mean for study group members		
	Full-WIA	Core-and-intensive	Core
Employed and most recent job differs from occupation before random assignment (%)	50	49	47
Employed and most recent job is in same occupation as before random assignment (%)	20	21	21
Not employed in follow-up period or not employed in five years before random assignment (%)	30	30	32

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

Notes: Occupations are categorized based on two-digit Standard Occupational Classifications. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and more estimates, *p*-values, and sample sizes.

None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

None of the differences between the core-and-intensive and core groups are significant at the 5 percent level.

None of the differences between the full-WIA and core groups are significant at the 5 percent level.

VII. IMPACTS ON HOUSEHOLD INCOME, RECEIPT OF PUBLIC ASSISTANCE, AND OTHER OUTCOMES

By helping customers improve their employment outcomes, the Adult and Dislocated Worker programs aim ultimately to help customers become more self-sufficient. These programs could conceivably increase annual household income and reduce household reliance on public assistance and unemployment compensation. Since success in the labor market can also conceivably affect outcomes beyond economic self-sufficiency, these programs may affect customers' health insurance coverage and criminal activity as well. In this chapter, we present findings on the impacts on these outcomes using data from the 15- and 30-month surveys, and from the NDNH data.

Unlike the employment and earnings outcomes reported in Chapter VI, several of the outcomes reported in this chapter, including annual household income and receipt of public assistance, are measured with respect to only the most recent calendar year preceding the 30-month follow-up survey rather than over the full follow-up period.

We begin this chapter by comparing outcomes for the full-WIA group with those for the core-and-intensive group, which provides estimates of the impact of training funded by the Adult and Dislocated Worker programs (Section A). Next, we compare the outcomes of the core-and-intensive and core groups, which provides an estimate of the impact of intensive services (Section B). We then compare the outcomes of the full-WIA and core groups, which provides an estimate of the combined effect of both training and intensive services (Section C). Finally, we conclude the chapter with a discussion of differences in impacts for adults and dislocated workers (Section D).

Key findings

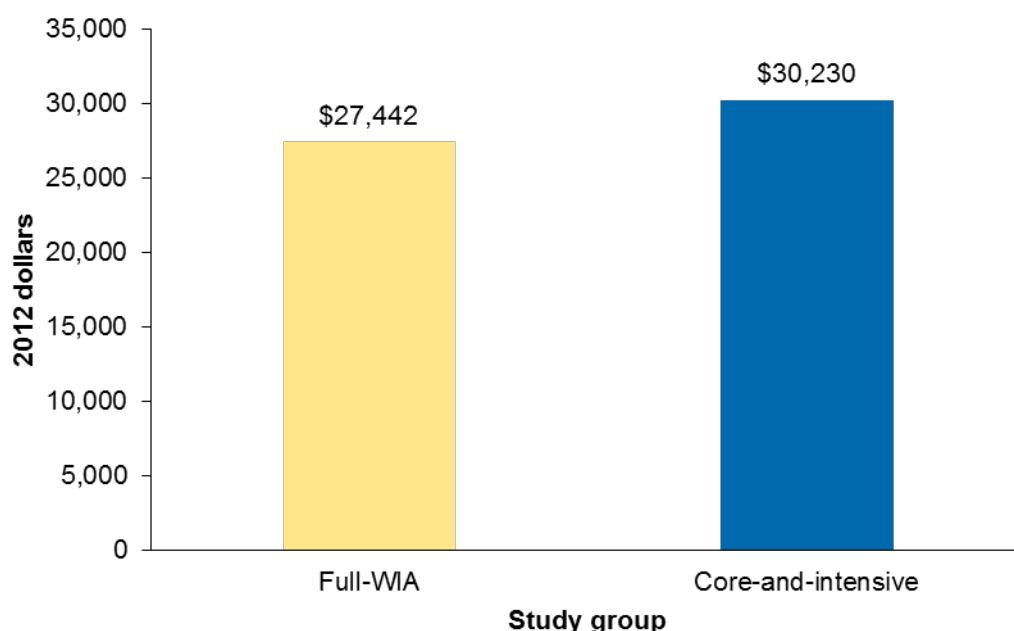
- Providing WIA-funded training led to a smaller proportion of customers receiving unemployment compensation in the fourth and twelfth calendar quarters after random assignment, though over the full 12 calendar quarters after random assignment the difference was not significant. WIA-funded training also led to a reduction in the total amount of unemployment compensation received in the 12 calendar quarters after random assignment.
- Providing WIA-funded intensive services (without training) did not impact receipt of unemployment compensation or public assistance.
- Providing both training and intensive services led to a decrease in the proportion of customers living in a household that received cash assistance and in the proportion of customers in households that received benefits through the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).
- Neither WIA-funded training nor WIA-funded intensive services affected annual household income.
- Impacts between adults and dislocated workers were generally not significantly different.

A. Impacts of WIA-funded training

Providing WIA-funded training did not significantly affect customers' total annual household income (all money received by all household members from employment, UI, or public assistance programs) in the calendar year preceding the 30-month survey. Full-WIA customers reported an average household income of \$27,442 in the calendar year preceding the

30-month follow-up survey, compared with \$30,230 for the core-and-intensive group (Figure VII.1). Consistent with our finding that access to WIA-funded training did not significantly affect earnings during the interim follow-up period (Chapter VI), this estimated difference is not statistically significant.

Figure VII.1. Total annual household income for full-WIA and core-and-intensive groups (all customers)



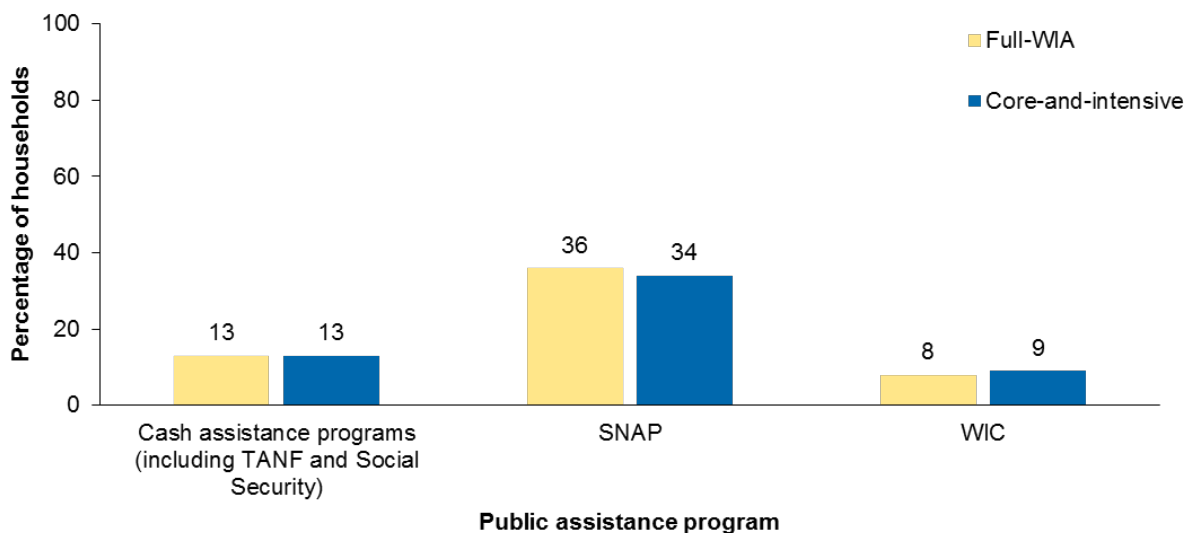
Source: WIA Gold Standard Evaluation 30-month follow-up survey.

Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes.

The difference between the full-WIA and core-and-intensive groups is not significant at the 5 percent level.

Providing WIA-funded training did not significantly affect household receipt of public assistance in the calendar year before the 30-month follow-up survey. Consistent with our finding that access to such training programs did not significantly affect household earnings in the calendar year preceding the 30-month follow-up survey, customers in the full-WIA and core-and-intensive groups were about as likely to be in a household that received cash assistance, benefits from the Supplemental Nutrition Assistance Program (SNAP), and benefits from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) in the calendar year preceding the 30-month follow-up survey (Figure VII.2).

Figure VII.2. Household receipt of public assistance in calendar year preceding 30-month follow-up survey for full-WIA and core-and-intensive groups (all customers)



Source: WIA Gold Standard Evaluation 30-month follow-up survey.

Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes.

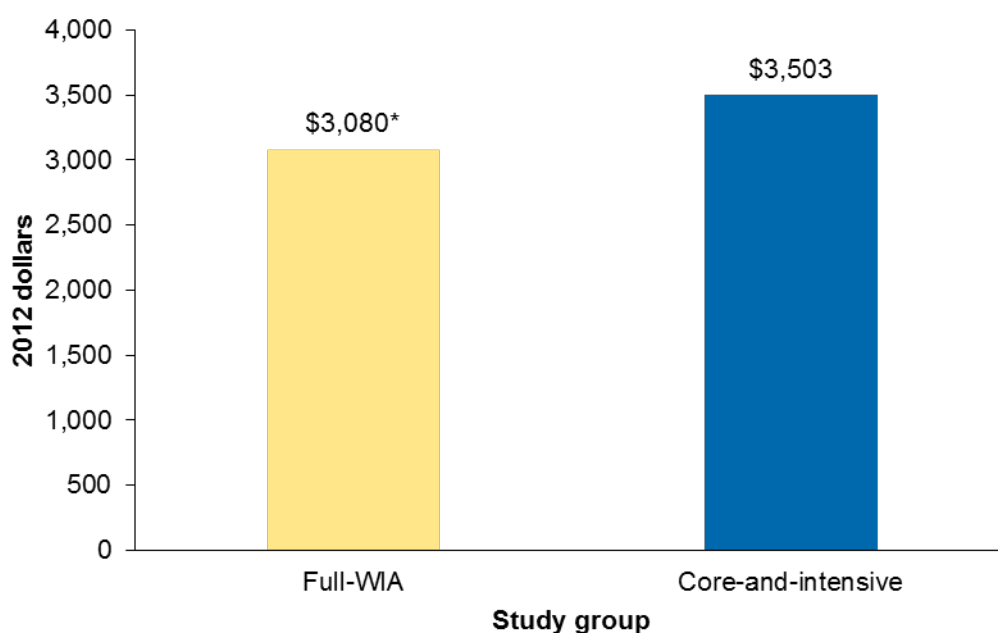
None of the differences between the full-WIA and core-and-intensive groups are significant at the 5 percent level.

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

Findings from NDNH data suggest that providing WIA-funded training reduced receipt of unemployment compensation in the fourth and twelfth quarters, though across all 12 calendars after random assignment there is no effect. In the first calendar quarter after random assignment, customers in the full-WIA group were more likely to receive unemployment compensation than customers in the core-and-intensive group, although the estimated difference is not statistically significant (Figure VII.3). By the fourth calendar quarter after random assignment, a lower proportion of customers in the full-WIA group (11 percent) received any unemployment compensation than did those in the core-and-intensive group (14 percent), a statistically significant difference. The proportion of full-WIA customers receiving unemployment compensation was again significantly lower in the twelfth quarter, when 6 percent of full-WIA customers and 7 percent of core-and-intensive customers received unemployment compensation. Across all 12 quarters, about 47 percent of customers in both the full-WIA and core-and-intensive groups received some unemployment compensation at some point in time (Appendix F of the technical supplement, Table F.VII.1).

WIA-funded training reduced the amount of unemployment compensation received over the first 12 calendar quarters after random assignment. Customers in the full-WIA group received an average of \$3,080 in the 12 calendar quarters following random assignment, compared to \$3,503 for customers in the core-and-intensive group (Figure VII.3). This finding is consistent with the fact that in the fourth and twelfth calendar quarters after random assignment the proportion of customers receiving unemployment compensation in the full-WIA group was lower than the proportion of core-and-intensive customers, and in no quarter did a greater percentage of full-WIA customers receive unemployment compensation (Figure VII.4).

Figure VII.3. Total unemployment compensation over three years after random assignment for full-WIA and core-and-intensive groups (all customers)

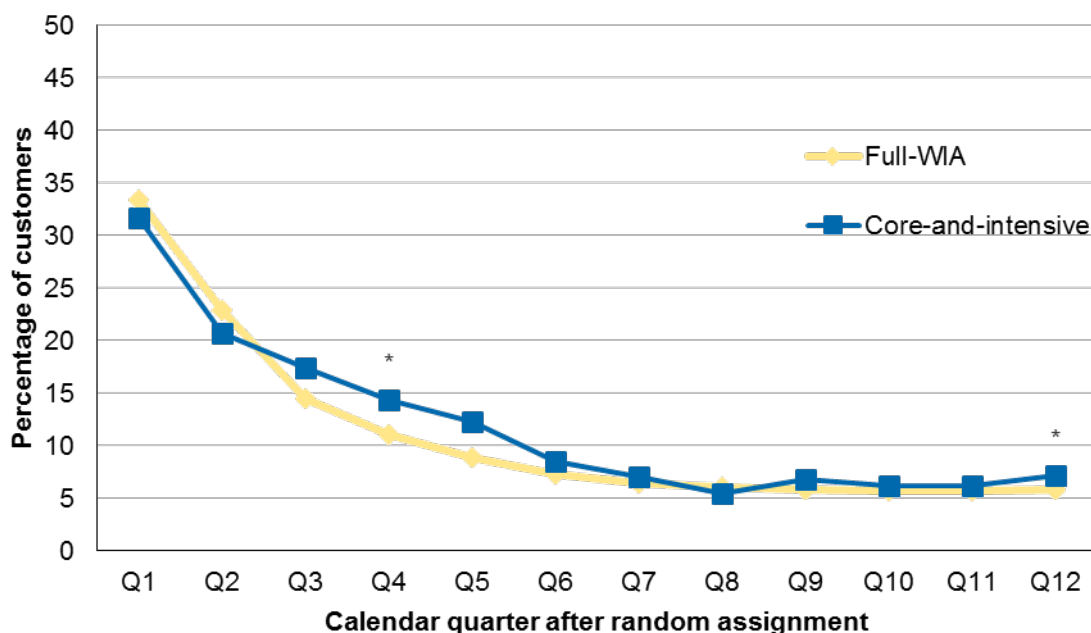


Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Figure VII.4. Receipt of unemployment compensation after random assignment for full-WIA and core-and-intensive groups (all customers), by quarter



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Q = quarter.

WIA-funded training had no significant effect on health insurance. About 84 percent of customers in both the full-WIA group and the core-and-intensive group reported being covered by health insurance at any time between random assignment and the 30-month follow-up survey (Appendix C of the technical supplement, Table C.VII.2). This is consistent with the finding that customers in the full-WIA and core-and-intensive groups were equally likely to have had health insurance in their most recent job (Chapter VI).

WIA-funded training had no effect on criminal activity. In both the full-WIA and core-and-intensive groups, about 6 percent of customers reported being arrested over this period, and 1 percent reported having been convicted of a felony (Appendix C of the technical supplement, Table C.VII.3).

B. Impacts of WIA-funded intensive services

Providing WIA-funded intensive services did not affect household income in the calendar year preceding the 30-month follow-up survey. Despite our finding that access to WIA-funded intensive services increased earnings (Chapter VI), customers in the core-and-intensive and core groups reported similar household incomes of about \$30,000 in the calendar year preceding the 30-month follow-up survey (Appendix C of the technical supplement, Table C.VII.1).

WIA-funded intensive services did not affect household receipt of benefits from SNAP, WIC, or cash assistance programs. Customers in the core-and-intensive and core groups were similarly likely to receive SNAP, WIC, or cash assistance benefits (Appendix C of the technical supplement, Table C.VII.1). Customers in the core group lived in households that received \$1,530 in cash assistance, compared to \$982 for customers in the core-and-intensive group, a difference which is close to significant (p -value = .058). Customers in both groups received about the same amount of benefits from SNAP (Figure VII.5).

Figure VII.5. Amount of public assistance received in calendar year preceding 30-month follow-up survey for core-and-intensive and core groups (all customers)



Source: WIA Gold Standard Evaluation 30-month follow-up survey.

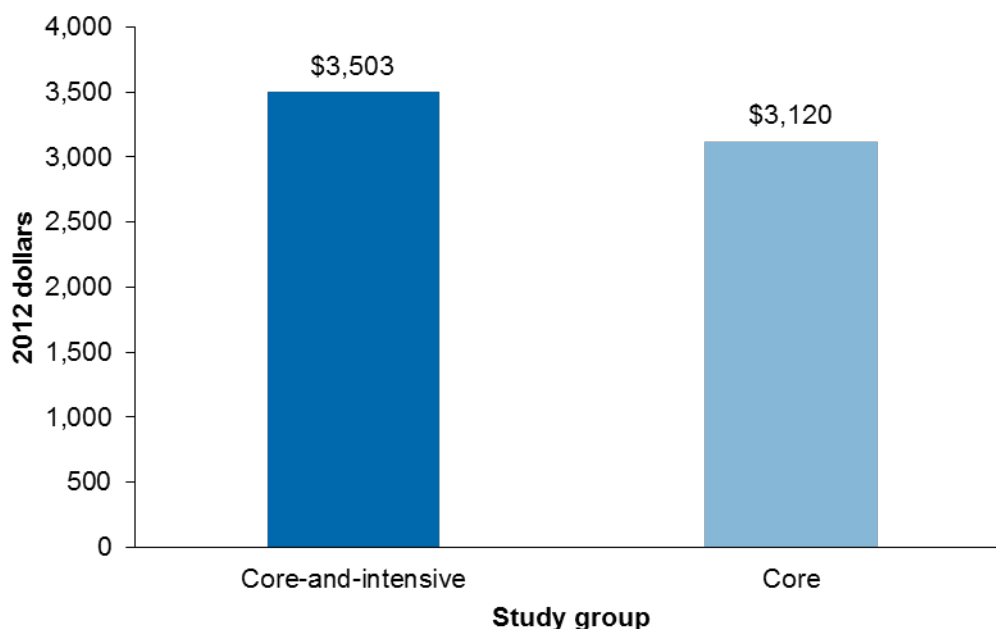
Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, p -values, and sample sizes.

Neither difference between the core-and-intensive and core groups is significant at the 5 percent level.

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

WIA-funded intensive services did not affect receipt of unemployment compensation. Core-and-intensive customers received about \$3,503 in unemployment compensation in the first 12 calendar quarters after random assignment, compared to \$3,120 for the core group (Figure VII.6).

Figure VII.6. Total unemployment compensation over three years after random assignment for core-and-intensive and core groups (all customers)



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes.

Difference between the full-WIA and core-and-intensive groups is not significant at the 5 percent level.

WIA-funded intensive services did not affect health insurance coverage between random assignment and the 30-month survey. Over this period, about 85 percent of core-and-intensive and core customers reported having been covered by health insurance at some point since random assignment (Appendix C of the technical supplement, Table C.VII.2).

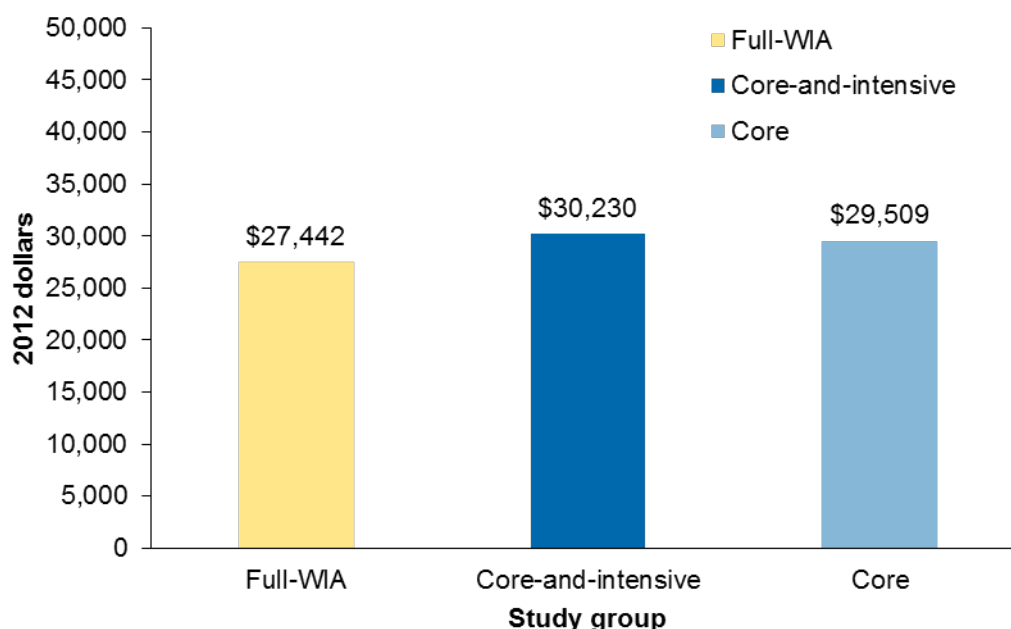
WIA-funded intensive services did not affect criminal activity between random assignment and the 30-month survey. Few customers in either group reported having been arrested since random assignment, and even fewer reported having been convicted of a felony since random assignment (Appendix C of the technical supplement, Table C.VII.3).

C. Impacts of both WIA-funded training and WIA-funded intensive services

By design, the impact of providing both WIA-funded training and WIA-funded intensive services will equal the sum of the impact of WIA-funded training (as discussed in Section A) and the impact of WIA-funded intensive services (as discussed in Section B). In this section, we present estimates for all three study groups in the figures to help illustrate the extent to which the impacts of WIA-funded training and WIA-funded intensive services are driven by training or intensive service individually, but we focus our discussion on comparisons between the full-WIA and core groups.

Providing WIA-funded training and intensive services had no effect on household income in the calendar year preceding the 30-month follow-up survey. Contrary to our finding that both WIA-funded training and intensive services increased average earnings in the second half of the follow-up period (Chapter VI), customers in the full-WIA group reported similar average household incomes to those in the core group (Figure VII.7).

Figure VII.7. Total annual household income for each study group (all customers)



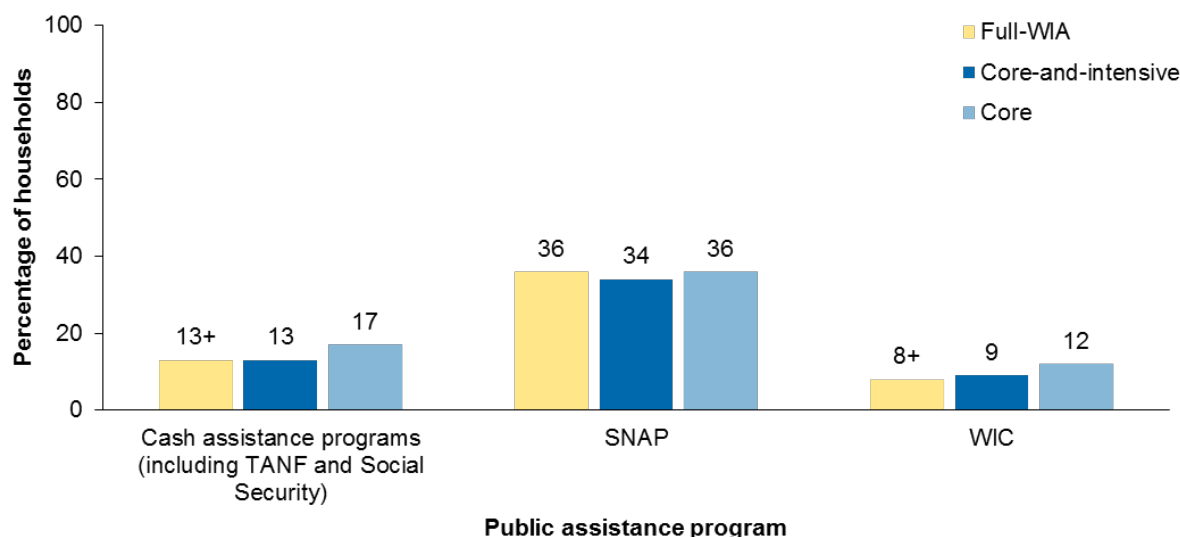
Source: WIA Gold Standard Evaluation 30-month follow-up survey.

Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes.

Differences in total annual household income were not statistically significant at the 5 percent level for all pairwise comparisons between groups.

Providing WIA-funded training and intensive services reduced the likelihood of being in a household in which someone received WIC or cash assistance in the calendar year preceding the 30 month interview, but not SNAP benefits. Among full-WIA customers, 13 percent lived in a household in which someone received cash assistance in this period, compared to 17 percent of customers in the core group. Among full-WIA customers, 8 percent lived in a household in which someone received WIC over this period, compared to 12 percent of customers in the core group (Figure VII.8). In both groups about 36 percent of customers reported receiving SNAP benefits over the period.

Figure VII.8. Household receipt of public assistance in calendar year preceding 30-month follow-up survey for each study group (all customers)



Source: WIA Gold Standard Evaluation 30-month follow-up survey.

Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes.

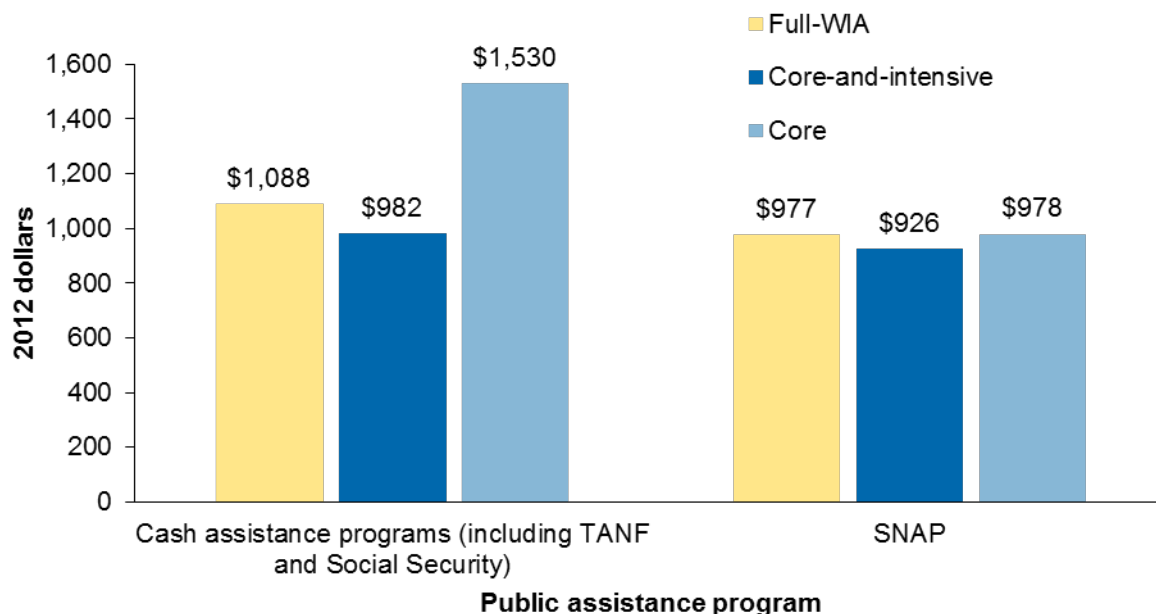
Differences between the core-and-intensive group and each of the other two groups are not significant at the 5 percent level.

+ Difference between the full-WIA and core groups is significant at the 5 percent level.

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

Providing WIA-funded training and intensive services did not affect the amount of benefits received from SNAP or cash assistance programs in the calendar year preceding the 30-month follow-up survey. Customers in both groups reported receiving about \$977 in benefits from SNAP over this period (Figure VII.9). Customers in the full-WIA group reported receiving \$1,088 in cash assistance programs on average, and customers in the core group reported receiving \$1,530. This difference is close to significant, with a *p*-value of .052.

Figure VII.9. Amount of public assistance received in calendar year preceding 30-month follow-up survey for each study group (all customers)



Source: WIA Gold Standard Evaluation 30-month follow-up survey.

Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes.

Neither difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

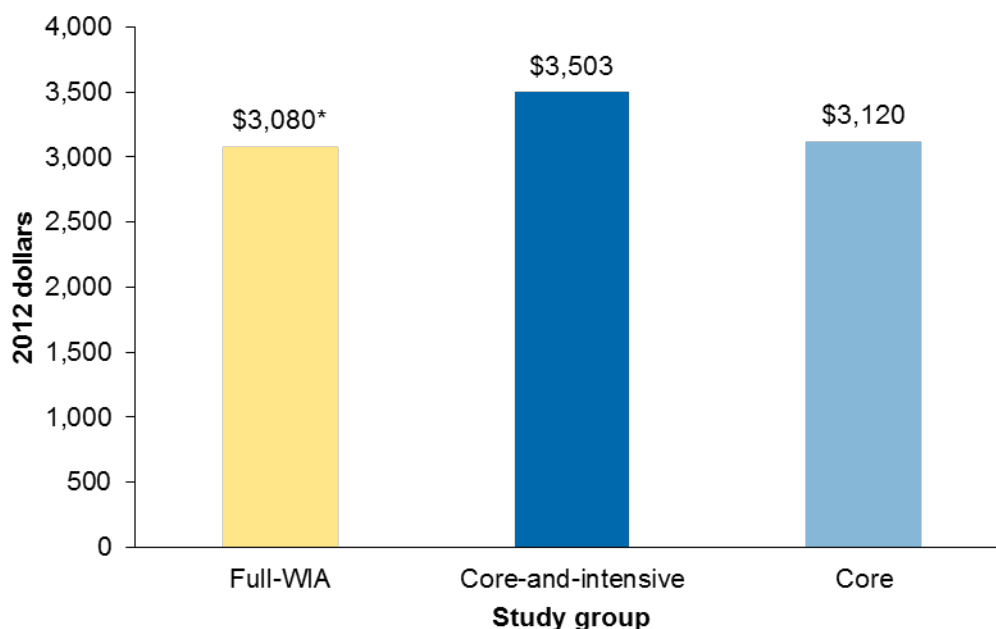
Neither difference between the core-and-intensive and core groups is significant at the 5 percent level.

Neither difference between the full-WIA and core groups is significant at the 5 percent level.

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

Providing WIA-funded training and intensive services did not affect receipt of any unemployment compensation, or the total amount of unemployment compensation received over the 12 calendar quarters after random assignment. According to NDNH data, in both the full-WIA and the core groups, about 47 percent of customers receiving unemployment compensation in the 12 calendar quarters following random assignment, and each group received about \$3,100 on average (Figure VII.10).

Figure VII.10. Total unemployment compensation over 12 quarters after random assignment (all customers)



Source: National Directory of New Hires.

Note: The technical supplement to this report provides more detail about the estimation approach, sensitivity analyses, and more estimates, *p*-values, and sample sizes.

* Difference between the full-WIA and core-and-intensive groups is significant at the 5 percent level.

Differences between the core and each of the other two groups is not significant.

Providing WIA-funded training and intensive services had no effect on customers' health insurance coverage. Among full-WIA customers, 84 percent reported being covered by health insurance at some point between random assignment and the 30-month follow-up survey, compared to 85 percent of customers in the core group (Appendix C of the technical supplement, Tables C.VII.2).

Providing WIA-funded training and intensive services had no effect on customers' criminal activity. Few customers in either group were arrested or convicted of felonies (Appendix C of the technical supplement, Table C.VII.3).

D. Impacts for adults and dislocated workers

For all outcomes discussed in this chapter, we found no impacts of WIA-funded training, intensive services, or the two types of services together, within the samples of only adults or only dislocated workers. Moreover, there were no differences between adults and dislocated workers in any of the estimated impacts.

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VIII. BENEFIT-COST ANALYSIS

One important criterion for determining whether it is worthwhile to provide intensive and training services through the Adult and Dislocated Worker programs is whether the services are effective *enough* to justify their costs. In this chapter, we combine the impacts estimated in previous chapters with the costs of the services customers received to estimate the net benefits associated with intensive services, training, and the two sets of services together. The net benefit, which is expressed as a dollar value, conveys the extent to which the benefits of providing WIA-funded intensive and training services exceed the costs of doing so, thus providing an easily interpretable metric for decision makers.

The estimates in this chapter represent our best guesses as to the aggregated benefits and costs of services funded by the Adult and Dislocated Worker programs. However, most of the key inputs into this analysis are estimates themselves, so the total estimated net benefits are measured with uncertainty as well. The benefit-cost analysis is useful to assess whether the net benefits of intensive and training services funded through the Adult and Dislocated Worker programs are positive, but the exact amounts of the net benefits could be bigger or smaller than the best-guess estimates we provide.

This chapter begins with a brief overview of our approach to estimating net benefits (Section A). Next, we estimate the net benefits of WIA-funded training (Section B), WIA-funded intensive services (Section C), and both WIA-funded intensive and training services (Section D). We then provide estimates of net benefits specific to the Adult program and the Dislocated Worker program (Section E). The chapter concludes with a summary of several sensitivity analyses (Section F).

Key findings

- Providing training funded by the Adult and Dislocated Worker programs does not produce positive net benefits for customers, taxpayers, or society as a whole over the 30-month study period.
- Providing intensive services funded by the Adult and Dislocated Worker programs produces positive net benefits for customers, taxpayers, and society as a whole over the 30-month study period. This suggests that intensive services are a good investment from all the perspectives considered.
 - This conclusion is robust to sensitivity tests.
 - Extrapolating the impacts beyond the study period results in even larger net benefits of the availability of intensive services.
- Providing both intensive and training services funded by the Adult and Dislocated Worker programs leads to positive net benefits for customers, taxpayers, and society as a whole over the 30-month study period. These benefits are driven by the positive benefits of intensive services.

A. 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 access to intensive and training services funded through the Adult and Dislocated Worker programs. In this framework, the benefits of providing the services could occur because of any increases in earnings and other compensation and reductions in the receipt of public assistance. Costs include those associated with providing the intensive and training services, such as staffing, materials, overhead, and administrative costs. This section

provides an overview of how we estimated benefits and costs. Appendix A in the technical supplement to this report provides further details of the approach.

1. Benefits and costs from different perspectives

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 cost, or a negative benefit, from another. For example, an increase in tax payments by customers is a cost to customers but a 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 considers benefits and costs for 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 enrolling 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.

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. (Note that costs are treated the same as negative benefits).

2. Accounting for benefits accruing later than costs

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. We chose 2012 because it was the first full year of the follow-up period. To account for potential gains from investment, we also discounted any costs and benefits that accrued after the first year of the follow-up period to reflect their value during that first year using the U.S. Treasury's daily real long-term interest rate (1.5 percent, U.S. Department of Treasury 2016).

3. Measures of benefits and costs

We estimated the net benefits of providing each type of service funded by the Adult and Dislocated Worker programs by estimating 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 discuss each of these in more detail later in the chapter. We included impacts as benefits or costs even if they were not statistically significantly different from zero, because even if the estimates are imprecise, they are our best estimates.

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.

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 of providing 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.

a. Productivity

A goal of the Adult and Dislocated Worker programs is to help 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 this productivity. We measured these changes using the compensation customers received for working: earnings and fringe benefits. We also accounted for the taxes paid on this compensation. For our benchmark estimates, we estimated the impacts on earnings, taxes, and fringe benefits by quarter for 10 quarters after random assignment using data from the 15- and 30-month follow-up surveys. We conducted a sensitivity analysis (Section F) using earnings from the NDNH. An increase in earnings and fringe benefits is a benefit for customers and society as a whole. An increase in taxes is a cost for customers (who pay them) but a benefit to taxpayers; the cost and the benefit exactly offset each other, so that the benefit of taxes to society as a whole is zero.

b. 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. Using data from the

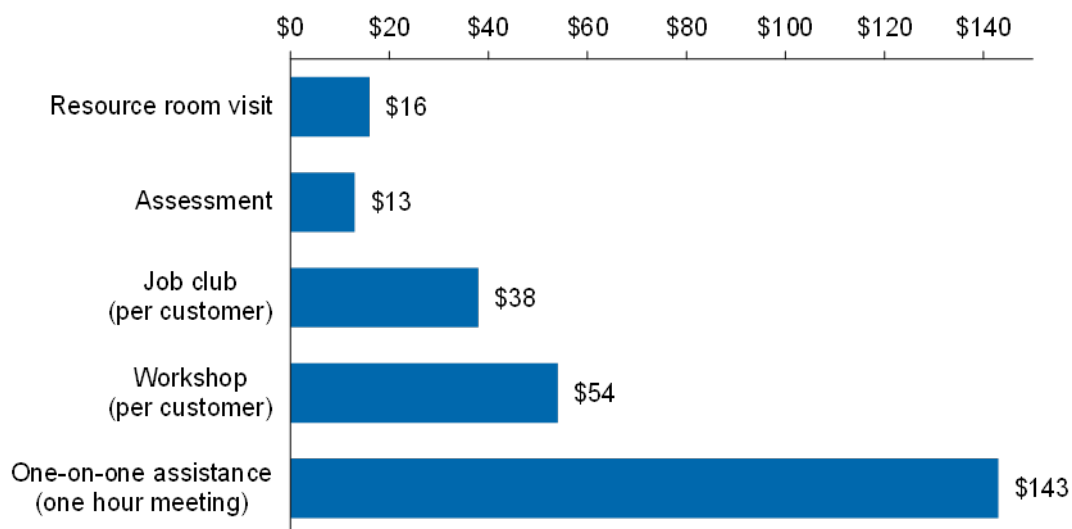
30-month follow-up survey, we separately considered impacts of services on public assistance (and associated administrative costs) from SNAP, cash assistance programs (including TANF, Supplemental Security Income, and General Assistance), and other programs.

c. Service receipt

As shown in Chapters IV and V, 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).

Core and intensive services. We combined information on rates of core and intensive service utilization with per-use cost estimates to estimate the costs of core and intensive services. We estimated the costs associated with the receipt of five core or intensive services: (1) resource room visits, (2) workshops, (3) one-on-one assistance, (4) job clubs, and (5) assessments. We estimated the impact on the amount of services received using data from the 15- and 30-month surveys (Chapter IV). 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 (Figure VIII.1). We 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 the services provided by the programs. We also assumed that taxpayers bore all costs of providing these services and all costs accrued in the first year of the follow-up period.

Figure VIII.1. Average per-use costs of key services



Source: WIA Gold Standard Evaluation cost data collected from 28 local areas. Reproduced from Mastri and McCutcheon (2015).

Supportive services. Survey respondents reported the amount of supportive services they received on the 15- and 30-month follow-up surveys. The amount of supportive services is provided in dollars and we assumed that these values reflect all costs of providing supportive services (that is, there are no administrative costs). We assumed all costs were borne in the first year of the follow-up period. The cost of supportive services are a cost to taxpayers and society as a whole.

Training. The 15- and 30-month follow-up surveys asked respondents both how much each training program they enrolled in cost in total, regardless of who paid for it, and how much they paid for the training. Customers could likely correctly recall the amount they paid for training; however, we suspect that customers might not have been able to provide accurate information on the full cost of training programs, especially for programs 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.

Our approach assumed that survey respondents correctly reported the amount they paid for training but that particularly large or small values of the reported total cost of a training program were incorrect. To measure the cost of training to customers, we used the amount customers reported paying for training. To measure the cost of training to society, we used the reported cost of the training programs. To avoid the effects of the particularly large or small reported costs of a training, we assumed the cost was equal to the median, nonzero cost of a training reported within 45 groups: 15 categories of training program and the 3 study groups. Finally, we estimated the cost of training paid for by taxpayers as the difference between the cost to society and the amount paid by customers. Even with this approach, the cost of training to society could be understated. However, as discussed in Section F, the conclusions from the benefit-cost analysis are not sensitive to allowing for much larger costs of training to society.

d. Cost of all services received

In total, we estimated that the cost to society of providing services to study participants was about \$3,000 to \$4,000 per customer (Table VIII.1). For all study groups, training contributed the largest share of costs and supportive services contributed the smallest share.

Table VIII.1. Per-person total cost of services to society as a whole (all customers)

	Full-WIA	Core-and-intensive	Core
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	663	620	506
Supportive services	225	99	58
Training—total costs	3,223	3,259	2,567
Amount taxpayers paid	1,521	1,222	579
Amount customers paid	1,702	2,037	1,988
Total	4,111	3,978	3,131

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and cost data provided by the 28 study local areas.

Note: All estimates are in 2012 dollars. Costs reflect the average costs of services for all customers. Customers who did not receive a specific service are included with a cost of zero.

Aggregating across all services received, the average customers in the full-WIA and core-and-intensive groups received services with about the same dollar value (Table VIII.1). In total, the costs of all services received by customers in both groups were about \$4,000 per person. Overall costs of training were also fairly similar for customers in these two study groups. The average total costs of training for both full-WIA and core-and-intensive customers were between \$3,000 and \$3,500. However, customers in the full-WIA group paid less for training than customers in the core-and-intensive group, both in absolute terms and as a fraction of the total costs of training. Thus, although total costs of services were similar, the full-WIA group received more services paid for by taxpayers than the core-and-intensive group.

Customers in the core group received services with a lower dollar value than customers in the other study groups (Table VIII.1). On average, services for customers in the core group cost about \$3,000 in total, about three quarters of the amount of the cost of the services received by customers in the other two study groups. The core customers themselves paid much of that cost.

4. Estimating the net benefits of providing each type of service

To estimate the net benefits of providing each type of service, we used the same basic approach as we used to estimate impacts on individual outcomes. We estimated the benefits and costs accruing to each customer and then estimated the net benefits of those 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.

5. Sensitivity analyses

Like most benefit-cost analyses, our estimates of benefits and costs required many assumptions. We thus examined the sensitivity of our results to changes in these assumptions to ensure that none were crucial to our findings. We explored how our results differed if we did each of the following:

1. Used earnings impacts from the NDNH data (instead of those from survey data)
2. Used a discount rate of 2 or 4 percent (instead of 1.5 percent)
3. Increased or decreased the assumed value of fringe benefits by 5 percent of earnings
4. Increased or decreased the assumed tax rate by 5 percentage points

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5. Estimated net benefits associated with fringe benefits accounting for differences in the types of jobs held by customers in the different study groups
 6. Extrapolated productivity benefits past the 30-month follow-up period (assuming the impacts of access to services on earnings, fringe benefits, and taxes in the last year of the follow-up period persisted until customers' retirements)
 7. Doubled the estimated costs of training to society

B. Benefits, costs, and net benefits of WIA-funded training

The net benefits of WIA-funded training for society as a whole, customers, and taxpayers were all negative during the 30-month follow-up period (Table VIII.2). These costs were driven by the lower productivity of the full-WIA group, as measured by their earnings and fringe benefits, relative to the core-and-intensive group. As detailed in Chapter VI, earnings for customers in the full-WIA group were lower than earnings for customers in the core-and-intensive group, especially during the initial quarters of the follow-up period when customers in the full-WIA group were more likely to be enrolled in training than customers in the other study groups. These lower earnings in the early quarters were not offset by higher earnings in later quarters within the 30-month follow-up period. Reflecting the earnings differences, the full-WIA group also received fewer fringe benefits and paid less in taxes.

- **Society as a whole.** On average, it costs society as a whole about \$5,000 per customer to provide the full set of WIA services available relative to only the services available to the core-and-intensive group. This estimate accounts for the fact that many full-WIA customers did not enroll in training. The lower earnings among the full-WIA group compared with the core-and-intensive group largely drove this cost.
- **Customers.** On average, customers did not benefit from training funded by the Adult and Dislocated Worker programs. On average, training cost customers about \$3,500 each during the 30-month follow-up period. This cost arose because customers who were in training, rather than working, had lower earnings. The decrease in earnings (and corresponding decrease in fringe benefits) was partially offset for customers by decreases in taxes and increases in public assistance. Full-WIA customers also paid less out-of-pocket for training than core-and-intensive customers, despite being more likely to enroll in training (Table VIII.2). But these benefits did not offset the large costs associated with reduced productivity.
- **Taxpayers.** Taxpayers also faced a net cost, on average, of WIA-funded training during the follow-up period. This was almost entirely driven by the lower taxes paid by the full-WIA group, relative to the core-and-intensive group, as a result of their lower earnings. The net cost to taxpayers increased by a small amount because of increases in public assistance associated with access to training funded by the Adult and Dislocated Worker programs. Furthermore, taxpayers paid more for the services received by the full-WIA group than those received by the core-and-intensive group, particularly training.

These results are generally robust to changes in our methods of estimating benefits and costs. As described in more detail in Section F, a number of sensitivity analyses produce negative estimates of the net benefit of access to WIA-funded training from all perspectives. These analyses also tend to produce estimates of a similar magnitude to those produced by our

benchmark approach. However, one analysis generates notably larger net costs and one generates notably smaller net costs. When we use the NDNH data on earnings instead of survey data, the net cost of training to society as a whole was about half the size of the estimate produced by the benchmark model. Conversely, when we extrapolate the impacts of training beyond the 30-month follow-up period to estimate the productivity benefit, the net cost of training to society as a whole was about three times the size of the estimate produced by the benchmark model.

However, it is possible that the net benefits of training would have become positive if we followed study participants for more than 30 months. Using both survey and NDNH data, we find that the net benefits of training funded by the Adult and Dislocated Worker programs are negative for society, customers, and taxpayers over the 30-month follow-up period. It could be that after the end of the 30-month follow-up period, earnings of full-WIA customers exceeded those of core-and-intensive customers and thus that the follow-up period was not long enough to see the benefits of training turn positive.

Table VIII.2. Net benefits associated with WIA-funded training (all customers)

	Perspective		
	Society	Customers	Taxpayers
Productivity			
Earnings	-3,754	-3,754	0
Fringe benefits	-1,149	-1,149	0
Taxes	0	1,142	-1,142
Use of public assistance			
Benefits	0	152	-152
Costs of administering benefits	-10	0	-10
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-43	0	-43
Supportive services	-126	0	-126
Training	36	335	-299
Net benefit	-5,046	-3,274	-1,773

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and cost data provided by 28 local areas.

Notes: All estimates are in 2012 dollars. A positive number represents a net benefit; a negative number represents a net cost. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and impact estimates, *p*-values, and sample sizes.

To investigate this possibility, we determined by how much the earnings of full-WIA customers would have to increase after the 30-month follow-up period to produce a positive net benefit of training. Based on the average age of customers, and assuming that customers worked until age 67, we found that if the impact of training on earnings was more than \$52 per quarter for *every quarter* after the follow-up period until the average customer was 67, the net benefit of training would be positive for society as a whole. Our study was not designed to estimate an impact this small, but it is plausible. In the survey data, the earnings impacts in the last three quarters of the follow-up period were negative. But in the NDNH data, the quarterly impacts of training were about two to four times the \$52 breakeven point in the final four quarters that we have data from that source (\$105 to \$199). Moreover, though most of the studies summarized in Card et al. (2015) found that any positive impacts of training materialized within timeframes

similar to the present study, research by Couch (1992) and Lengermann (1996) suggests that the impacts of training can persist for many years after program exit. Therefore, it may be plausible for the net benefits of training to become positive over time.

C. Benefits, costs, and net benefits of WIA-funded intensive services

The net benefits of WIA-funded intensive services to customers, taxpayers, and society as a whole were all positive (Table VIII.3). Again, differences in productivity drove the overall net benefits. Customers in the core-and-intensive group had higher earnings than customers in the core group throughout the follow-up period. The higher earnings also led customers in the core-and-intensive group to receive more fringe benefits and pay more in taxes, compared with customers in the core group. These changes led to positive net benefits from all three perspectives considered.

Table VIII.3. Net benefits associated with WIA-funded intensive services (all customers)

	Perspective		
	Society	Customers	Taxpayers
Productivity			
Earnings	7,191	7,191	0
Fringe benefits	2,201	2,201	0
Taxes	0	-2,187	2,187
Use of public assistance			
Benefits	0	-525	525
Costs of administering benefits	29	0	29
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-115	0	-115
Supportive services	-41	0	-41
Training	-692	-49	-643
Net benefit	8,573	6,630	1,943

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and cost data provided by 28 local areas.

Notes: All estimates are in 2012 dollars. A positive number represents a net benefit; a negative number represents a net cost. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and impact estimates, *p*-values, and sample sizes.

- **Society as a whole.** In total, society benefitted by about \$8,500 over the 30-month follow-up period for each person offered intensive services funded by the Adult and Dislocated Worker programs. Large, positive impacts of intensive services on earnings largely drove this benefit. Although the services provided to customers in the core-and-intensive group cost more than those provided to the core group, these differences were small compared with the earnings impacts.

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- **Customers.** On average, customers in the core-and-intensive group received a benefit of about \$6,500 over the follow-up period, relative to customers in the core group. Large, positive impacts on earnings and fringe benefits drove this result. The positive impact on earnings was partly offset by the higher taxes core-and-intensive customers are expected to pay on their higher earnings and reductions in receipt of public assistance.
 - **Taxpayers.** Like customers, taxpayers received a positive net benefit, on average, from WIA-funded intensive services. The net benefit of about \$1,900 to taxpayers was driven by the greater amount of taxes paid by the core-and-intensive group than the core group as a result of their higher earnings. Taxpayers also saved on public assistance benefits and associated administrative costs. Taxpayers paid most of the additional cost of providing the additional services received by the core-and-intensive group, compared with the core group. These services cost almost \$1,000 more per core-and-intensive customer, on average, than per core customer. However, the larger tax payments more than offset this difference in cost, resulting in a positive net benefit to taxpayers of access to intensive services.

Overall, these benefits suggest that providing intensive services through the Adult and Dislocated Worker programs is beneficial to society. Moreover, both customers and taxpayers benefit from access to these services.

Many alternative assumptions generate similar estimates of net benefits. As detailed in Section A.5 of this chapter, we conducted a number of sensitivity analysis to verify the robustness of our findings. In all cases, the net benefits of WIA-funded intensive services were positive from all perspectives. The analyses also produced estimates of a similar magnitude to those of our benchmark approach, with two exceptions. When we estimated net benefits assuming that the earnings impacts of intensive services persisted throughout customers' working lives, benefits increased greatly, with the net benefit to society increasing by a factor of more than nine. Conversely, when we used NDNH earnings data, instead of data from our surveys, to estimate productivity benefits, the net benefit of intensive services to society as a whole fell, from about \$8,500 to about \$3,000 per customer. Nevertheless, all sensitivity analyses implied that the net benefits of intensive services were positive for society as a whole, customers, and taxpayers.

D. Benefits, costs, and net benefits of WIA-funded training and intensive services

The net benefits of WIA-funded intensive and training services to customers, taxpayers, and society as a whole are positive (Table VIII.4). As with the net benefits of intensive or training services, differences in productivity drove this result. As shown in Chapter VI, the earnings of customers in the full-WIA group were lower than the earnings of customers in the core group during the first two quarters of the follow-up period. But by the third quarter after random assignment, full-WIA customers earned more than core customers. These higher earnings led to an overall net benefit associated with productivity.

Table VIII.4. Net benefits associated with WIA-funded intensive and training services (all customers)

	Perspective		
	Society	Customers	Taxpayers
Productivity			
Earnings	3,437	3,437	0
Fringe benefits	1,052	1,052	0
Taxes	0	-1,046	1,046
Use of public assistance			
Benefits	0	-373	373
Costs of administering benefits	18	0	18
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-158	0	-158
Supportive services	-168	0	-168
Training	-656	286	-942
Net benefit	3,526	3,356	170

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and cost data provided by 28 local areas.

Notes: All estimates are in 2012 dollars. A positive number represents a net benefit; a negative number represents a net cost. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and impact estimates, *p*-values, and sample sizes.

- **Society as a whole.** The estimates suggest that from the perspective of society as a whole, WIA-funded training and intensive services can be expected to produce a benefit of about \$3,500 over the 30-month follow-up period. This is driven by increases in productivity but offset by higher costs of providing services to the full-WIA group compared with the core group.
- **Customers.** On average, customers in the full-WIA group received a net benefit of about \$3,500 over the follow-up period, relative to customers in the core group. Positive impacts on earnings and fringe benefits drove this result. These benefits were partially offset by the taxes full-WIA customers would be expected to pay on their higher earnings. Reflecting their higher earnings, full-WIA customers also received less in public assistance than core customers, which is a cost to customers. In addition, customers in the full-WIA group spent less on training expenses than core customers, despite being more likely to enroll in training (Chapter V). This is a benefit to customers, further reinforcing the benefits from increased productivity.
- **Taxpayers.** Taxpayers received a positive net benefit of less than \$200, on average, from WIA-funded intensive and training services over the course of the 30-month follow-up period. On the positive side of the ledger, full-WIA customers would be expected to pay slightly more than \$1,000 more in taxes as a result of their higher earnings. Taxpayers also save on public assistance benefits and associated administrative costs. However, taxpayers bear much of the cost of providing services to customers. The total costs borne by taxpayers were more than \$1,000 more per full-WIA customer, on average, than per core customer. These costs were less than the benefits to taxpayers associated with productivity and public assistance, resulting in a positive, albeit small, net benefit to taxpayers.

Overall, the results suggest that providing both intensive and training services through the Adult and Dislocated Worker programs provides value to program customers, taxpayers, and society as a whole; however, the positive benefit is driven by the benefits associated with intensive services.

Our sensitivity analyses demonstrate that the net benefits of WIA-funded intensive and training services remain positive under a variety of different assumptions. In all sensitivity analyses, the net benefit of intensive and training services is positive from the perspectives of society as a whole and customers. The estimated net benefits are also similar across all analyses, except for that which extrapolates productivity benefits into the future and that which uses NDNH data in place of survey data. As with the net benefits of intensive or training services alone, extrapolating benefits into the future implies net benefits that are larger in magnitude, and using NDNH data on earnings implies net benefits that are smaller in magnitude. Additionally, although the benchmark model produces a net benefit of intensive and training services to taxpayers of just under \$200, some of the sensitivity analyses imply net costs to customers. These costs range from close to zero to about \$500.

E. Benefits and costs for adults and dislocated workers

As adults and dislocated workers have different average characteristics, we might expect differences in the net benefits of providing services to the two populations. Chapter VI shows that the magnitudes of impacts often differed for adults and dislocated workers, even though impacts tended to be the same sign and there were few statistically significant differences in impacts for the two groups. For example, the impact of training on Quarter 1 earnings was negative and not statistically significant for both adults and dislocated workers. But the magnitude of the effect was more than \$1,000 for dislocated workers but less than \$100 for adults. As a result of such differences in magnitude, we find in the benefit-cost analyses that net benefits differed for adults and dislocated workers.

1. Benefits, costs, and net benefits of WIA-funded training, by adult and dislocated worker status

Analyzing adults and dislocated workers separately indicates that costs for dislocated workers drove the \$5,000 per-person net cost of providing training during the follow-up period (Table VIII.5). From the perspective of society as a whole, the net cost of providing training was less than \$500 per adult but more than \$11,000 per dislocated worker. From the perspective of taxpayers, net costs were also larger for dislocated workers than for adults. Moreover, dislocated workers lost, on average, about \$8,500 each from training, whereas adults benefited by a small amount.

The differences in net benefits for dislocated workers and adults were driven by differences in the impacts of training on earnings, especially early in the follow-up period. Dislocated workers in the full-WIA group earned less than dislocated workers in the core-and-intensive group. Most differences were not statistically significant, though many were more than \$1,000 (Appendix E, Table E.VI.1). The negative earnings impacts led to large productivity costs of training. Differences between adults in the full-WIA and core-and-intensive groups were much smaller, implying much smaller productivity costs. Although there were some additional differences between the benefits and costs associated with use of public assistance and service

receipt for adults and dislocated workers, these were small compared with the earnings differences.

Table VIII.5. Net benefits associated with WIA-funded training, separately for adults and dislocated workers (all customers)

	Perspective		
	Society	Customers	Taxpayers
Adults			
Productivity			
Earnings	-375	-375	0
Fringe benefits	-115	-115	0
Taxes	0	114	-114
Use of public assistance			
Benefits	0	303	-303
Costs of administering benefits	-17	0	-17
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-21	0	-21
Supportive services	-101	0	-101
Training	297	595	-298
Net benefit	-332	523	-855
Dislocated workers			
Productivity			
Earnings	-8,211	-8,211	0
Fringe benefits	-2,512	-2,512	0
Taxes	0	2,498	-2,498
Use of public assistance			
Benefits	0	-56	56
Costs of administering benefits	-1	0	-1
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-83	0	-83
Supportive services	-161	0	-161
Training	-309	-6	-303
Net benefit	-11,276	-8,287	-2,989

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and cost data provided by 28 local areas.

Notes: All estimates are in 2012 dollars. A positive number represents a net benefit; a negative number represents a net cost. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and impact estimates, *p*-values, and sample sizes.

2. Benefits, costs, and net benefits of WIA-funded intensive services, by adult and dislocated worker status

The net benefits of access to WIA-funded intensive services were positive from the perspectives of customers, taxpayers, and society as a whole for both adults and dislocated workers (Table VIII.6). From the perspective of society as a whole, each adult assigned to the core-and-intensive group instead of the core group generated a net benefit of about \$6,000 over the follow-up period. Each dislocated worker assigned to the core-and-intensive group, instead of

the core group, produced an even larger benefit of about \$11,500 for society as a whole over the follow-up period. Most benefits accrued to customers; the benefit to the average adult was about \$4,500 and the benefit to the average dislocated worker was about \$9,000. As with the overall benefit of training, these benefits were driven by both adults and dislocated workers in the core- and-intensive group earning more than their counterparts in the core group (Chapter VI).

Table VIII.6. Net benefits associated with WIA-funded intensive services, separately for adults and dislocated workers (all customers)

	Perspective		
	Society	Customers	Taxpayers
Adults			
Productivity			
Earnings	5,474	5,474	0
Fringe benefits	1,675	1,675	0
Taxes	0	-1,665	1,665
Use of public assistance			
Benefits	0	-524	524
Costs of administering benefits	30	0	30
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-123	0	-123
Supportive services	-37	0	-37
Training	-880	-334	-545
Net benefit	6,140	4,626	1,514
Dislocated workers			
Productivity			
Earnings	9,143	9,143	0
Fringe benefits	2,798	2,798	0
Taxes	0	-2,781	2,781
Use of public assistance			
Benefits	0	-516	516
Costs of administering benefits	25	0	25
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-101	0	-101
Supportive services	-45	0	-45
Training	-451	319	-771
Net benefit	11,368	8,963	2,405

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and cost data provided by 28 local areas.

Notes: All estimates are in 2012 dollars. A positive number represents a net benefit; a negative number represents a net cost. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and impact estimates, *p*-values, and sample sizes.

3. Benefits, costs, and net benefits of WIA-funded intensive and training services, by adult and dislocated worker status

Analyzing adults and dislocated workers separately indicates that benefits to adults drove the overall \$3,500 per-person net benefit of intensive and training services (Table VIII.7). For adults, the net benefits of intensive and training services were positive from all perspectives. But for dislocated workers, intensive and training services led to a benefit to customers but a cost to taxpayers. The cost and benefit were about equal, so that the net benefit to society as a whole of providing intensive and training services to dislocated workers was less than \$100 over the 30-month follow-up period.

Table VIII.7. Net benefits associated with WIA-funded intensive and training services, separately for adults and dislocated workers (all customers)

	Perspective		
	Society	Customers	Taxpayers
Adults			
Productivity			
Earnings	5,100	5,100	0
Fringe benefits	1,560	1,560	0
Taxes	0	-1,551	1,551
Use of public assistance			
Benefits	0	-221	221
Costs of administering benefits	13	0	13
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-143	0	-143
Supportive services	-138	0	-138
Training	-583	261	-844
Net benefit	5,808	5,149	659
Dislocated workers			
Productivity			
Earnings	932	932	0
Fringe benefits	285	285	0
Taxes	0	-284	284
Use of public assistance			
Benefits	0	-572	572
Costs of administering benefits	24	0	24
Service receipt			
Resource rooms, workshops, meetings with counselors, job clubs, and assessments	-184	0	-184
Supportive services	-206	0	-206
Training	-760	313	-1,074
Net benefit	92	676	-584

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and cost data provided by 28 local areas.

Notes: All estimates are in 2012 dollars. A positive number represents a net benefit; a negative number represents a net cost. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and impact estimates, *p*-values, and sample sizes.

The benefits of providing services to adults and dislocated workers differed mainly because of differences in earnings impacts. Although both adults and dislocated workers in the full-WIA group earned more than their counterparts in the core group, differences were larger in magnitude and more consistently positive across quarters for adults (Chapter VI). As a result, the magnitudes of the productivity impacts for adults were about five times as large as those for dislocated workers. Differences in the benefits and costs associated with the use of public assistance and service receipt were somewhat smaller.

F. Results of the sensitivity analyses

We conducted a number of sensitivity analyses but none changed the implications of the benefit-cost analysis for policymakers (Table VIII.8). To determine whether our results were robust, we estimated the benefits and costs of providing intensive and training services using nine alternative sets of assumptions. Each analysis implies that training led to net costs for society as a whole and intensive services, with or without training, led to net benefits. However, as mentioned in Section B, a small, positive earnings impact of training after the end of the follow-up period will imply that training generates net benefits.

Most of the analyses also led to only small differences in the magnitudes of estimates of benefits and costs. The exceptions are the analysis that uses impacts on earnings estimated from the NDNH and the analysis that extrapolates productivity benefits into the future.

Just as differences in earnings are muted when one uses the NDNH to analyze impacts (Chapter VI), benefits and costs are muted when one uses the NDNH in the benefit-cost analysis. From the perspective of society as a whole, using the NDNH data on earnings implies that the net cost of providing WIA-funded training was about \$2,500, about half the size of the estimate from the benchmark model; the net benefit of providing WIA-funded intensive services was about \$3,000, about one-third the size of the estimate from the benchmark model; and the net benefit of intensive and training services was about \$500, less than one-fifth the size of the estimate from the benchmark model. In addition, the benchmark model implies that providing both intensive and training services led to a small net benefit to taxpayers. Using the NDNH data on earnings instead implies a loss of about \$500 per customer to taxpayers. This occurs because the NDNH implies a much smaller increase in tax payments associated with intensive and training services, compared with the survey data.

Conversely, net benefits to society increase by a factor of at least three when one extrapolates productivity benefits beyond the 30-month follow-up period. For this sensitivity analysis, we assumed that the impacts of providing WIA-funded services on earnings 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 until the average customer retired. This resulted in benefits and costs that were much larger in magnitude. For society as a whole, the analysis implied that the net cost of providing WIA-funded training was about \$16,000, the net benefit of intensive services was about \$83,000, and the net benefit of providing both intensive and training services was about \$67,500.

Table VIII.8. Net benefits associated with WIA-funded services, sensitivity analysis (all customers)

	Perspective		
	Society	Customers	Taxpayers
Benefits of WIA-funded training			
Benchmark model	-5,046	-3,274	-1,773
NDNH earnings impacts	-2,426	-1,263	-1,162
Discount rate of 2%	-5,036	-3,267	-1,769
Discount rate of 4%	-4,997	-3,241	-1,755
Fringe rate 5 percentage points higher	-5,234	-3,461	-1,773
Fringe rate 5 percentage points lower	-4,859	-3,086	-1,773
Alternative fringe rate calculation	-4,466	-2,693	-1,773
Tax rate 5 percentage points higher	-5,046	-3,086	-1,960
Tax rate 5 percentage points lower	-5,046	-3,461	-1,585
Extrapolating into the future	-15,880	-11,617	-4,264
Double estimated costs of training to society	-5,010	-3,274	-1,736
Benefits of WIA-funded intensive services			
Benchmark model	8,573	6,630	1,943
NDNH earnings impacts	3,082	2,419	664
Discount rate of 2%	8,530	6,602	1,929
Discount rate of 4%	8,368	6,493	1,875
Fringe rate 5 percentage points higher	8,932	6,990	1,943
Fringe rate 5 percentage points lower	8,213	6,271	1,943
Alternative fringe rate calculation	8,888	6,946	1,943
Tax rate 5 percentage points higher	8,573	6,271	2,302
Tax rate 5 percentage points lower	8,573	6,990	1,583
Extrapolating into the future	83,225	63,910	19,315
Double estimated costs of training to society	7,881	6,630	1,250
Benefits of WIA-funded intensive and training services			
Benchmark model	3,526	3,356	170
NDNH earnings impacts	657	1,155	-498
Discount rate of 2%	3,494	3,335	159
Discount rate of 4%	3,372	3,252	120
Fringe rate 5 percentage points higher	3,698	3,528	170
Fringe rate 5 percentage points lower	3,354	3,185	170
Alternative fringe rate calculation	4,423	4,253	170
Tax rate 5 percentage points higher	3,526	3,185	342
Tax rate 5 percentage points lower	3,526	3,528	-2
Extrapolating into the future	67,345	52,293	15,052
Double estimated costs of training to society	2,871	3,356	-486

Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys and cost data provided by 28 local areas.

Notes: All estimates are in 2012 dollars. A positive number represents a net benefit; a negative number represents a net cost. The technical supplement to this report provides more detail about the estimation approach; sensitivity analyses; and impact estimates, *p*-values, and sample sizes.

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IX. DISCUSSION

The Adult and Dislocated Worker programs are two of the largest public workforce investment programs in the United States, so it is important to determine the effectiveness of the services they offer. This report presents the estimates of the effectiveness of intensive and training services provided by these programs. It uses survey data from the first 30 months—or 10 quarters—after random assignment of customers (just after they became eligible for intensive services) and administrative data from the NDNH from the first 36 months—or 12 quarters—after customers were randomly assigned. We designed the study such that these findings are representative of local areas nationally. This final chapter discusses the main conclusions from this report.

This study tested the effectiveness of intensive services and training funded through the Adult and Dislocated Worker programs compared to all other services available to customers.

Importantly, that the Adult and Dislocated Worker programs fund intensive services and training does not mean that each customer will receive all of those services, which is reflected in our analyses. Additionally, in the absence of funding for intensive services and training through the Adult and Dislocated Worker programs, customers could access similar services elsewhere. We account for both of these factors in our analyses. In particular:

- To estimate the impact of training funded by WIA, we compared a scenario with the full set of WIA services provided through the Adult and Dislocated Worker programs (represented by the full-WIA group) to a scenario where the programs fund core and intensive services but not training (represented by the core-and-intensive group). When the full set of Adult and Dislocated Worker services are available, including training, some customers are not eligible for training, some choose not to enroll in training because of personal preferences or constraints, and funds are not always available for all customers interested in and eligible for training. Likewise, customers in the core-and-intensive group could fund training in other ways, as they could if there were no WIA funds for training.
- To estimate the impact of intensive services funded by WIA, we compared the core-and-intensive group described above to a scenario where the Adult and Dislocated Worker programs fund core services but not training or intensive services (represented by the core group). Once again, core-and-intensive customers might not receive all types of intensive services, and some core customers might have accessed similar services through other sources, as they would if there were no WIA-funded intensive services.

WIA-funded intensive services were effective.

Our findings suggest that intensive services, when provided as a stand-alone service without training, increased earnings and employment. On average, core-and-intensive customers received about 30 minutes more one-on-one assistance than did core customers and they were more likely to attend workshops and take assessments as well. According to the survey data, providing these intensive services increased earnings over the follow-up period by about \$7,000, or 20 percent. According to the NDNH data, intensive services also increased earnings but by a smaller amount of about \$3,000, or 7 percent, over the 36-month period for which NDNH data are available, but it remains statistically significant. According to the survey data, intensive services have a

persistent positive impact on earnings even in the final quarters of the follow-up period. In contrast, according to the NDNH data, intensive services cease to affect earnings after about two years.

These effects are consistent with the past literature on intensive services, and job-search assistance more broadly. In particular, in a nonexperimental study, Heinrich et al. (2013) found that intensive services funded by the Adult and Dislocated Worker programs increased employment and earnings. Moreover, studies have shown that job-search assistance can increase employment and earnings and decrease unemployment insurance receipt in the short run (Meyer 1995; O’Leary 2004; Katz 2014).

The positive impacts of intensive services on earnings stem from a combination of factors. Core-and-intensive customers were more likely to be employed in most quarters, worked more hours, and had higher average wages than core customers—though not all of these estimated differences were statistically significant. In addition, the jobs held by core-and-intensive customers were more likely than the jobs held by core customers to offer fringe benefits, suggesting they may have higher-quality jobs. Core-and-intensive customers were also more likely than core customers to choose vocational training programs and obtain a credential for training, even though the training was not funded by WIA. This suggests that employment counselors may have affected customers’ choice of training program or provided support while they were in training.

The findings suggest that policymakers should continue to invest in staff assistance. The benefit-cost analyses demonstrate that providing intensive services is cost-effective from the perspectives of customers, taxpayers, and society as a whole even if impacts disappeared at the end of the follow-up period. Based on the survey data, customers benefited by nearly \$7,000 on average over the 30-month follow-up period from having access to WIA-funded intensive services. And because these services are relatively inexpensive, society as a whole benefits from offering these services by about \$8,500 per customer, and by about \$3,000 according to the NDNH data.

Because differences across groups in rates of enrollment in training were small, our study produced inconclusive evidence on the impact of training in the 30 months after study enrollment.

Only about half of the full-WIA customers, who had access to the same services as under regular program operations, enrolled in training. About four in ten core-and-intensive customers—who could not access WIA training funds—still enrolled in training, paying for programs themselves or with funding from other sources. The difference in the training rates between the two groups was only 9 percentage points. That so many core-and-intensive customers enrolled in training is an important finding and suggests the value customers believe training has, but does limit what we can say about the effectiveness of training. Because the difference in training rates was small, even if training had large impacts on earnings among training participants, the difference in earnings for full-WIA and core-and-intensive customers would still be small because it is driven by the 9 percent of customers induced to enroll in training when the full set of WIA services is available.

Though not conclusive, the evidence suggests that WIA-funded training does not have positive impacts in the 30 months after study enrollment.

In the final quarters of the study, the estimated impacts on earnings were negative (but not statistically significant) according to the survey data and positive but close to zero according to the NDNH data. The estimated impacts on earnings over the whole follow-up period were negative (but again not statistically significant) according to both data sources. We similarly found no evidence of positive impacts when we estimated separate impacts for adults and dislocated workers.

Unless positive impacts on earnings materialize after the three-year follow-up period, WIA-funded training represented a net cost to society, taxpayers, and the customers themselves. From the perspective of society, providing WIA-funded training had a net cost of about \$5,000 per person over the 30-month follow-up period, which arose mainly from the earnings forgone when the customers were in training. Early in the follow-up period, when full-WIA customers were more likely than core-and-intensive customers to enroll in training, they worked and earned less. Their quarterly earnings caught up to those of the core-and-intensive group in the latter half of our follow-up period, but these increases did not offset the earnings losses they incurred while enrolled in training.

Following the study participants for more than three years could possibly result in later positive impacts on earnings that offset the forgone earnings and the cost of the training programs. However, the evidence suggests that it is not likely that the impacts will increase because the difference across groups in enrollment in training disappeared by the beginning of the second year after random assignment. Furthermore, a typical full-WIA customer completed training about eight months into the follow-up period so most training participants were out of training well before the end of the follow-up period. Finally, most previous studies that found training had positive impacts on earnings for populations similar to those served by the Adult and Dislocated Worker programs found that this typically occurs within three years of enrollment (Card et al. 2015), which did not occur in our study according to the survey or NDNH data.

Nevertheless, we cannot rule out the possibility that training has positive (or negative) impacts on customers' earnings, nor can we extrapolate our findings to all types of job training. As noted above, because the differences in training rates are small, the expected differences in earnings between the full-WIA and core-and-intensive groups are also small, and we cannot reliably detect small earnings impacts. Moreover, this study only examines the types of training programs funded by the Adult and Dislocated Worker programs during the follow-up period. It could be that providing training would have been more effective if training funds were more readily available or if customers enrolled in different types of training, such as the more employer focused training advocated under WIOA.

Our findings are consistent with past studies for dislocated workers but not for adults. Although we found that WIA-funded training did not increase earnings for either adults or dislocated workers, Heinrich et al. (2008) and Andersson et al. (2013) found that training increased earnings for adults but not for dislocated workers. One possible explanation for the difference in findings for adults is that unlike our study, these previous studies were not experimental, and thus, may not have fully captured differences between those who chose to

enroll in training and those who did not in ways that were correlated with their longer-term earnings. In addition, those studies occurred at a different time and in locations that were not nationally representative.

Our evidence points to areas of improvement for training offered by the Adult and Dislocated Worker programs.

Our study suggests factors that might have diminished the effectiveness of the WIA-funded training that could help guide future improvements:

- About one in five full-WIA customers who enrolled in training left their programs before completing them, and overall, only four in ten full-WIA customers completed training programs. Training programs are not likely to be effective for customers who do not complete them. Only about 20 percent of full-WIA customers received any supportive services from the Adult or Dislocated Worker programs, which are intended in part to provide support facilitating training enrollment, and the amounts they received were relatively low.
- The evidence suggests that training funded by the Adult and Dislocated Worker programs did not always closely align with the needs of local employers. Only half of customers who enrolled in training reported that they found employment because of their training, and only about two of every five full-WIA customers who enrolled in training for a specific occupation found a job in that same occupation. WIOA's greater focus on sector initiatives, employer-recognized credentials, and work-based training could result in more effective training. Recent studies indicate that job training in targeted sectors developed in close collaboration with employers is effective (Hendra et al. 2016; Maguire et al. 2010).
- Training dollars were limited during the follow-up period. In 2012, funding for the two programs was the lowest it had been in more than a decade. Funding cuts also led to fewer career counselors, less funding for training, and reductions in supportive services (D'Amico et al. 2015). Thus, funds might not have been readily available for training customers who were otherwise eligible for and interested in training. Even those who received training funds might not have been able to afford their preferred programs or receive the requisite program counseling to fully support their training choices and experiences.

These findings suggest that policymakers should look to improve training as funded through the Adult and Dislocated Worker programs.

Our findings do not suggest that training is unnecessary. Intensive services alone are unlikely to help all customers achieve satisfactory longer-term employment outcomes or economic self-sufficiency. At the end of our follow-up period, 20 percent of core-and-intensive customers were not employed, their annual household incomes were only about \$30,000, and many still relied on public assistance. Intensive services were designed to help customers find jobs but not to improve their skills. Considering this fact, training or other employment services are still needed in addition to intensive services to help customers obtain self-sufficiency.

Our findings might have differed if the programs had been evaluated when the economy was stronger or program funding greater.

The study occurred at a time of high unemployment and declining WIA funding. Although the recession was officially over when the study began, the national unemployment rate was still above 8 percent during 2012, the year in which most study participants were randomly assigned. In that same year, funding for the programs was the lowest it had been in more than a decade.

We do not know what the estimated impacts would have been if the economy had been stronger. Some weak evidence from a comparison of impacts between local areas with relatively high and low unemployment rates suggests that the impacts of training did not differ much with the unemployment rate (McConnell et al. 2016), but the impacts of intensive services might be different in a strong economy.

In addition, as described earlier in this chapter, we do not know whether the services would be more effective if funding had been higher. However, local area administrators we spoke to for the implementation study reported that the diminished funding led to the closing of some American Job Centers and reduced operating hours for others. It also led to a lower number of career counselors and fewer funds expended on training and supportive services.

Our findings appear likely to still be relevant under WIOA.

Although we studied the Adult and Dislocated Worker programs as they were operated under WIA, the findings appear to still be relevant under WIOA, which reauthorized the two programs. Although WIOA made important changes to the workforce system, the Adult and Dislocated Worker programs still offer the same basic set of services. In addition, many of the important changes explicitly introduced by WIOA reflected changes the local areas were already making under WIA. Hence, we expect that our estimated impacts for training and intensive services under WIA would be similar to impacts under WIOA.

WIOA changed the delivery of some services in ways that could possibly mean the impacts of training or intensive services could now be different. WIOA made important enhancements aiming to improve the efficacy of training by more closely aligning training with employers' needs and identifying jobs with promising career paths, and our findings for the Adult and Dislocated Worker Programs as implemented under WIA point to the potential importance of these enhancements. WIOA also removed the requirement that customers participate in core services before proceeding to intensive services by merging core and intensive services into "career services." However, the programs still offer the key element of intensive services—one-on-one assistance by trained employment counselors—so we expect that our findings for intensive services would be similar under WIOA.

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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

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APPENDIX A

DETAILS OF OUR METHODOLOGICAL APPROACH

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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:

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

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

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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, and 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

	Survey sample	Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
		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

	Survey sample	Means		Differences	
		Unweighted		Unweighted	Weighted
		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
High school or GED	67.6	66.7	70.5	68.4	-0.8
Associate's or equivalent	10.2	9.9	10.9	9.4	0.7
Bachelor's or equivalent	12.1	13.4	7.6	12.5	-1.4
Master's or higher	3.0	3.6	1.1	3.3	-0.6*
Received a vocational training certificate ^b (%)	15.8	15.9	15.4	15.6	-0.1
Have health problems that limit work or training (%)	7.3	5.3	14.3	6.6	2.0
Household size (%)					
Sole member	21.3	20.0	26.0	19.9	1.4
2 or 3 members	40.5	42.4	34.3	41.5	-1.8*
4 or 5 members	29.3	28.8	31.1	28.8	0.5
6 or more members	8.8	8.9	8.6	9.8	-0.1
Receipt of public assistance (%)					
TANF, SSI/SSDI, or GA	16.0	13.7	23.6	15.1	2.2
SNAP or WIC	35.1	35.4	34.3	35.1	-0.2
Unemployment compensation	26.6	27.6	23.5	27.9	-0.9
Other public assistance	2.2	2.5	1.4	2.2	-0.2
Counselor-predicted likelihood of training (%)					
Very likely	42.8	42.8	42.8	42.9	0.0
Somewhat likely	37.8	37.4	39.2	37.8	0.4
Somewhat unlikely	9.4	9.3	9.6	9.4	0.1
Very unlikely	10.0	10.5	8.4	10.0	-0.5
Visited an AJC previously (%)	35.7	38.6	26.2	37.7	-2.8*
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

	Survey sample	Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
		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*

	Survey sample	Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
		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.

^aFor customers who reported working in the past five years.

^bRespondent 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

	Survey sample	Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
		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

	Survey sample	Means			Differences	
		Unweighted		Weighted	Unweighted	Weighted
		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 $Y_1, Y_2, \dots, Y_p$ 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 $X, Y_2^{(t-1)}, Y_3^{(t-1)}, \dots$, 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 $X, Y_1^{(t)}, Y_3^{(t-1)}, \dots$, and $Y_p^{(t-1)}$. Then, $Y_3^{(t)}$ is estimated based on a regression with controls $X, Y_1^{(t)}, Y_2^{(t)}, Y_4^{(t-1)}, \dots$, and $Y_p^{(t)}$. This continues until $Y_p^{(t)}$ is estimated based on $X, Y_1^{(t)}, Y_2^{(t)}, \dots$, 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 ($\text{var}(\beta)$).

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 $\text{var}(\beta)$. 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 ($j = 1, 2, \dots, 10$)	Start year, 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
Start year of training j ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$) 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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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 ($j = 1, 2, \dots, 10$)	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:

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

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_r are region-fixed effects to account for the within-region sampling of local areas; and ϵ_{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 $\bar{y}_{ci} = \bar{y}_f - \hat{\beta}_{f-ci}$ and the regression-adjusted means for the core group as $\bar{y}_c = \bar{y}_f - \hat{\beta}_{f-c}$, where $\hat{\beta}_{f-ci}$ and $\hat{\beta}_{f-c}$ are parameter estimates. We also report $\bar{y}_f$, 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 generalize 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:

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

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:

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

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:

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

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 $\bar{y}_{0, f}$, 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.

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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.

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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

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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:

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

In this equation, y is the outcome of interest; δ_r 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 ϵ_{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:

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

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:

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

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.

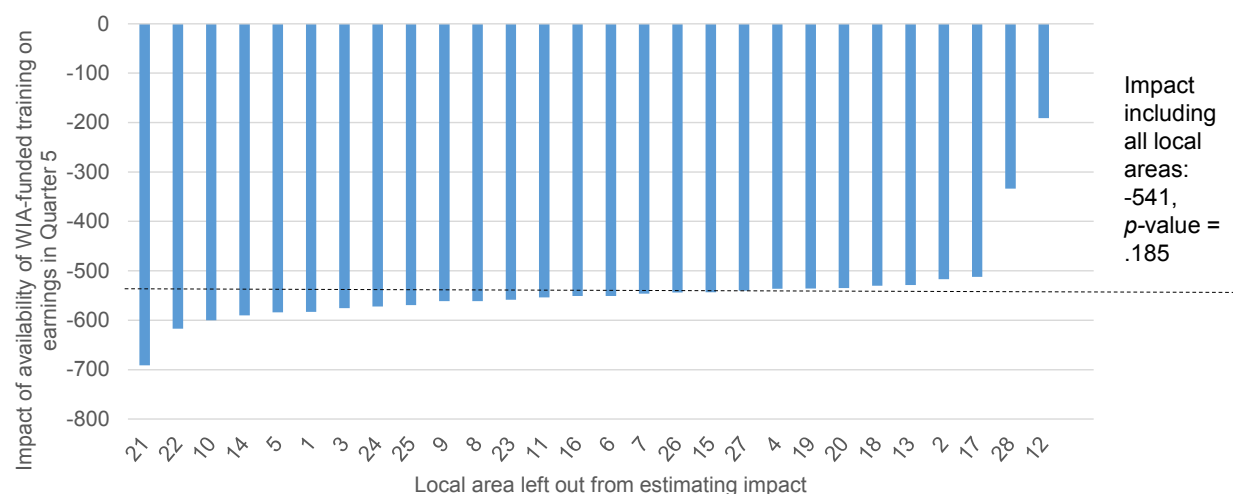
AJC = American Job Center; C = core group mean; C&I = core-and-intensive group mean; F = full-WIA group mean.

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

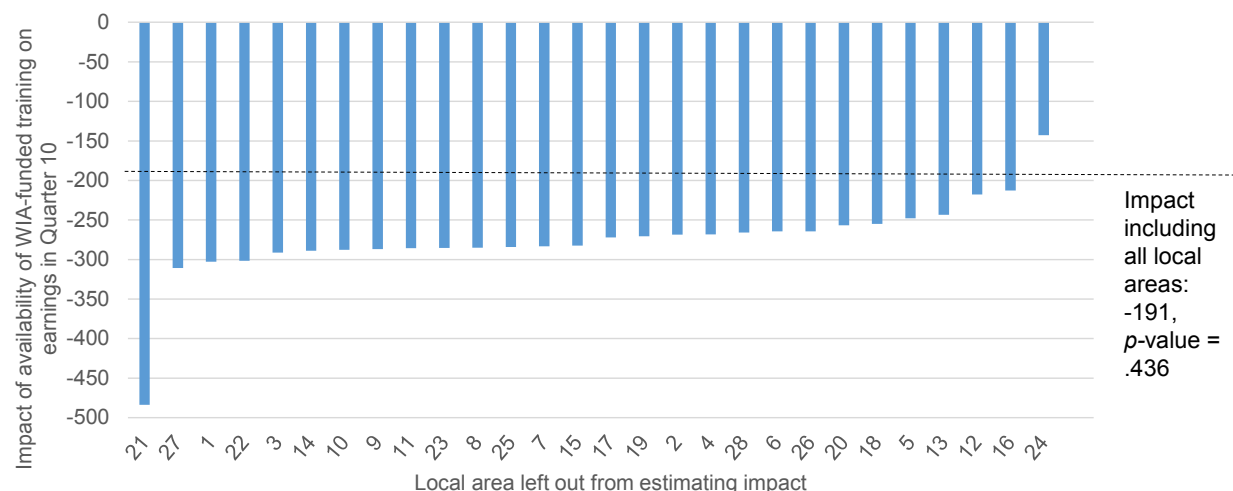


Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

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



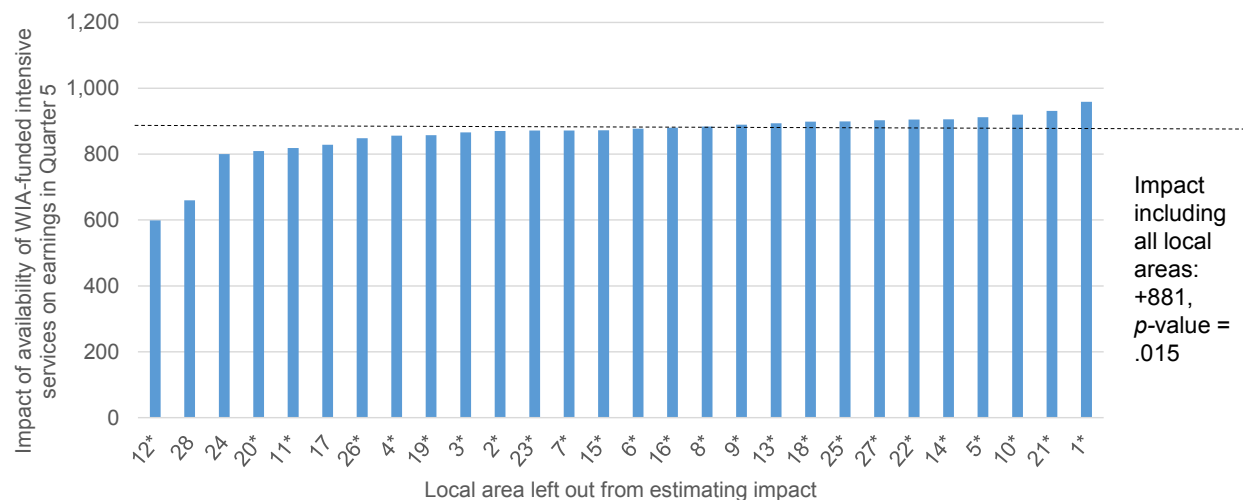
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

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

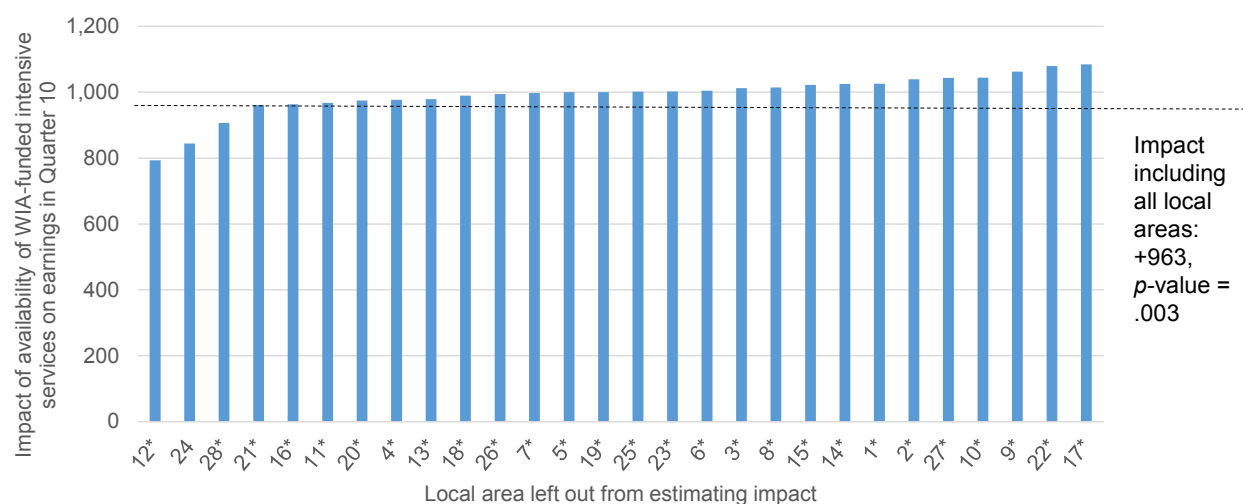


Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

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



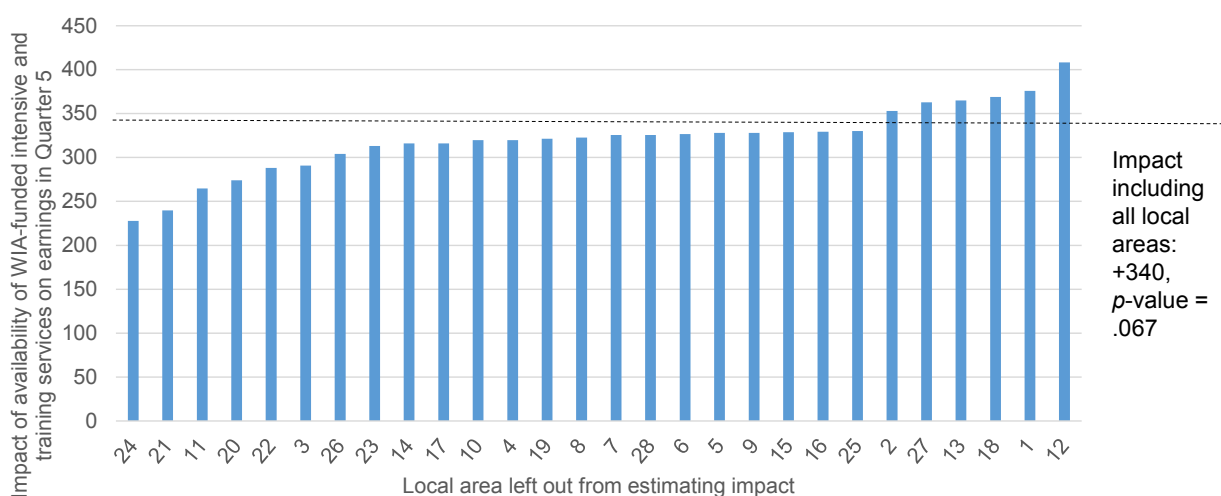
Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

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

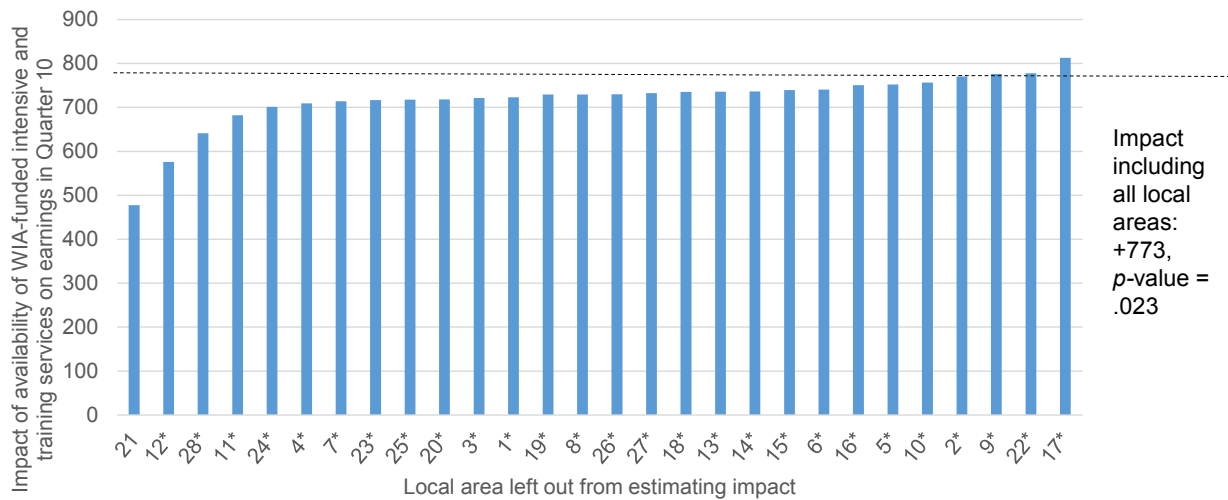


Sources: WIA Gold Standard Evaluation 15- and 30-month follow-up surveys.

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.

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APPENDIX C

DETAILED TABLES OF SURVEY MEANS AND IMPACTS FOR ALL CUSTOMERS

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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 (0.145)	11.7* (0.039)	17.4* (0.016)	3.3 (0.051)
4 to 6 hours	11.6	7.0	7.1	4.6 (0.212)	-0.1 (0.963)	4.5 (0.281)	0.8 (0.446)
More than 6 hours	5.0	4.9	7.5	0.1 (0.957)	-2.6 (0.553)	-2.5 (0.515)	0.2 (0.806)
Attended workshop provided by or located at (%)							
Other government agency	9.9	15.8	17.8	-5.9 (0.184)	-2.0 (0.296)	-7.9 (0.122)	1.3 (0.283)
Library	11.6	25.1	8.9	-13.5* (0.027)	16.1* (0.019)	2.7 (0.395)	3.2 (0.059)
Community-based organization	27.5	41.3	28.3	-13.8* (0.036)	13.0 (0.066)	-0.8 (0.837)	2.4 (0.106)
Educational facility	43.3	23.3	32.8	20.0* (0.001)	-9.5* (0.006)	10.5 (0.060)	9.1* (0.001)
Private employment agency	1.5	1.2	5.2	0.3 (0.738)	-4.0 (0.266)	-3.7 (0.277)	0.6 (0.531)
Online	1.0	3.0	2.5	-2.0 (0.336)	0.5 (0.838)	-1.5 (0.143)	1.7 (0.195)
Other	21.7	19.0	24.2	2.8 (0.541)	-5.2 (0.506)	-2.4 (0.552)	0.2 (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 (0.439)	0.0 (0.997)	2.6 (0.253)	2.5 (0.100)
Computer skills, programs	54.6	58.4	47.3	-3.8 (0.392)	11.1 (0.055)	7.3* (0.037)	2.7 (0.082)
Appropriate job behavior	69.9	66.7	59.8	3.2 (0.387)	6.9 (0.105)	10.1* (0.009)	4.0* (0.030)
Preparing for assessments	59.7	58.4	45.4	1.3 (0.608)	13.0* (0.000)	14.3* (0.001)	8.4* (0.001)
Managing finances	40.4	38.3	35.7	2.1 (0.365)	2.5 (0.461)	4.6 (0.281)	0.7 (0.526)
Starting own business	24.2	31.3	17.4	-7.1 (0.106)	13.9* (0.025)	6.8* (0.030)	3.2 (0.058)
Any other topics	10.6	16.4	17.4	-5.9 (0.254)	-1.0 (0.632)	-6.8 (0.081)	2.7 (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 elsewhere ^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 (0.909)	6.7 (0.257)	7.3 (0.153)	1.1 (0.333)
Private employment agency ^b	2.0	3.3	7.6	-1.3 (0.104)	-4.3 (0.213)	-5.6 (0.097)	2.9 (0.074)
Online ^b	4.3	0.6	2.2	3.7 (0.094)	-1.6 (0.345)	2.1 (0.472)	2.2 (0.136)
Other	21.9	30.1	25.7	-8.2 (0.133)	4.4 (0.528)	-3.7 (0.588)	1.2 (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)

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

	Full-WIA group (F)	Means		Conditional differences			
		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)

	Full-WIA group (F)	Means		Conditional differences			
		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)

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

	Full-WIA group (F)	Means		Conditional differences			
		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 (0.752)	-0.3 (0.896)	0.5 (0.889)	0.1 (0.929)
Frequency of the number of education programs in which enrolled (%)							
0 programs	91.2	91.9	91.6	-0.7 (0.770)	0.3 (0.895)	-0.4 (0.903)	0.1 (0.937)
1 program	6.5	6.5	7.0	0.0 (0.988)	-0.5 (0.823)	-0.5 (0.856)	0.0 (0.975)
2 programs	2.0	1.5	1.0	0.5 (0.686)	0.5 (0.555)	1.0 (0.218)	1.3 (0.300)
3 or more programs	0.3	0.1	0.3	0.2 (0.178)	-0.2 (0.309)	0.0 (0.902)	1.4 (0.264)
Participated in any education program quarters 1 to 5 after random assignment (%)	7.1	6.3	6.7	0.8 (0.713)	-0.4 (0.842)	0.4 (0.908)	0.1 (0.907)
Participated in any education program quarters 6 to 10 after random assignment (%)	3.7	3.3	4.3	0.4 (0.707)	-1.0 (0.264)	-0.6 (0.374)	1.0 (0.383)
Participation in any education program in quarter after random assignment (%)							
Quarter 1	4.6	3.8	4.6	0.9 (0.446)	-0.9 (0.655)	0.0 (0.997)	0.5 (0.613)
Quarter 2	4.5	3.1	3.4	1.4 (0.179)	-0.3 (0.833)	1.1 (0.573)	1.2 (0.327)
Quarter 3	4.0	3.9	3.2	0.2 (0.909)	0.7 (0.584)	0.9 (0.646)	0.2 (0.849)
Quarter 4	2.7	3.0	2.1	-0.3 (0.865)	1.0 (0.467)	0.7 (0.532)	0.5 (0.642)
Quarter 5	1.9	1.7	2.6	0.1 (0.796)	-0.9* (0.029)	-0.7 (0.128)	3.1 (0.060)
Quarter 6	2.5	1.9	2.6	0.5 (0.420)	-0.7 (0.126)	-0.1 (0.848)	1.3 (0.288)
Quarter 7	2.5	1.6	2.1	0.9 (0.120)	-0.5 (0.222)	0.4 (0.568)	2.2 (0.135)
Quarter 8	1.7	2.2	1.9	-0.5 (0.414)	0.3 (0.529)	-0.2 (0.593)	0.3 (0.711)
Quarter 9	2.2	2.2	1.9	0.0 (0.993)	0.3 (0.451)	0.4 (0.541)	0.4 (0.677)
Quarter 10	1.7	1.8	2.2	-0.2 (0.806)	-0.4 (0.545)	-0.6 (0.450)	0.3 (0.728)
Enrolled in any non-ESL education program (%)	8.7	7.9	8.2	0.8 (0.738)	-0.4 (0.864)	0.5 (0.898)	0.1 (0.910)
Enrolled in an ESL program (%)	0.4	0.4	0.2	0.0 (0.809)	0.2 (0.368)	0.2 (0.344)	0.5 (0.598)
Enrolled in any education program designed to lead to a degree/diploma (%)	5.0	4.6	3.6	0.3 (0.790)	1.0 (0.407)	1.3 (0.540)	0.4 (0.689)
Hours spent in education programs	41.9	41.9	32.5	0.0 (1.000)	9.4 (0.504)	9.3 (0.504)	0.3 (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* (0.011)	-1.4 (0.105)	4.6* (0.019)	3.7* (0.037)
General education	7.3	7.7	12.6	-0.4 (0.793)	-4.9 (0.349)	-5.3 (0.325)	0.5 (0.609)
Certified Nursing Assistant	7.1	4.4	5.0	2.7 (0.147)	-0.6 (0.853)	2.1 (0.376)	1.7 (0.209)
Technical school or college	5.5	7.1	5.2	-1.6 (0.470)	1.9 (0.340)	0.3 (0.825)	0.5 (0.629)
Medical coding	4.8	1.3	2.8	3.5 (0.155)	-1.5 (0.332)	2.0 (0.106)	1.4 (0.264)
Other - associates degree in nursing	4.5	3.4	5.0	1.0 (0.366)	-1.6 (0.133)	-0.5 (0.602)	1.2 (0.316)
Unspecified nursing certificate	3.9	2.0	2.9	1.9 (0.155)	-0.9 (0.603)	1.0 (0.187)	3.1 (0.059)
Welder	3.7	2.3	2.0	1.4 (0.525)	0.3 (0.833)	1.6 (0.359)	0.4 (0.644)
Licensed Practical Nurse	3.4	3.5	4.1	0.0 (0.990)	-0.7 (0.546)	-0.7 (0.686)	0.2 (0.831)
Business management	3.1	3.4	4.1	-0.3 (0.804)	-0.7 (0.599)	-1.0 (0.491)	0.2 (0.781)
General computer skills (software, Windows, MS Office)	3.0	4.9	2.1	-1.9 (0.420)	2.8 (0.158)	0.9 (0.417)	1.5 (0.243)
Accounting/Bookkeeping	2.7	0.5	1.6	2.2 (0.066)	-1.0 (0.128)	1.2 (0.296)	2.3 (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* (0.000)	1.5 (0.138)	16.4* (0.000)	15.4* (0.000)
State employment agency	3.4	0.0	0.0	3.4* (0.028)	0.0 (0.840)	3.4* (0.030)	2.8 (0.081)
Trade Adjustment Act	0.0	0.1	0.0	-0.1 (0.162)	0.1 (0.159)	0.0 (0.558)	1.1 (0.351)
Veteran's administration	0.0	0.1	0.0	0.0 (0.571)	0.1 (0.380)	0.0 (0.612)	0.6 (0.581)
Pell Grant	7.3	7.2	5.4	0.1 (0.922)	1.8 (0.281)	2.0 (0.078)	1.7 (0.199)
Other government sources	2.5	1.9	2.1	0.5 (0.301)	-0.1 (0.882)	0.4 (0.476)	0.8 (0.464)
External scholarship or grant	4.9	3.0	3.1	2.0 (0.118)	-0.1 (0.857)	1.8 (0.162)	1.3 (0.287)
Other educational or training entity	0.4	0.2	0.0	0.2 (0.143)	0.1 (0.087)	0.3* (0.037)	3.4* (0.048)
Employer	1.5	2.8	1.3	-1.2 (0.353)	1.4 (0.122)	0.2 (0.710)	2.0 (0.154)
Free Application for Federal Student Aid ^a	2.9	3.0	2.6	-0.1 (0.874)	0.4 (0.551)	0.3 (0.722)	0.2 (0.829)
Other	0.4	0.8	0.8	-0.3 (0.498)	0.0 (0.958)	-0.4 (0.528)	0.4 (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			F-test
	Full-WIA group (F)	Core-and-intensive group (C&I)	Core group (C)	F – C&I	C&I – C	F – C	
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 (0.138)	0.3 (0.513)	-0.5 (0.062)	1.9 (0.165)
Quarter 2	4.9	6.0	5.7	-1.1 (0.054)	0.3 (0.535)	-0.8* (0.006)	4.5* (0.020)
Quarter 3	6.4	6.8	6.5	-0.4 (0.304)	0.3 (0.571)	-0.1 (0.729)	0.7 (0.497)
Quarter 4	7.1	7.2	6.7	-0.1 (0.731)	0.5 (0.255)	0.4 (0.252)	0.8 (0.458)
Quarter 5	7.4	7.8	6.8	-0.4 (0.287)	1.0* (0.018)	0.6* (0.033)	4.3* (0.025)
Quarter 6	8.3	8.5	7.6	-0.2 (0.407)	0.9* (0.021)	0.7* (0.042)	3.1 (0.064)
Quarter 7	8.6	8.5	8.1	0.1 (0.665)	0.4 (0.427)	0.5 (0.336)	0.5 (0.596)
Quarter 8	8.7	8.8	8.3	-0.1 (0.662)	0.5 (0.276)	0.4 (0.365)	0.6 (0.533)
Quarter 9	9.1	9.1	8.5	0.0 (0.961)	0.6 (0.218)	0.6 (0.128)	1.2 (0.303)
Quarter 10	9.0	9.0	8.4	0.0 (0.998)	0.6 (0.230)	0.6 (0.110)	1.4 (0.272)
Quarter 1-5	29.0	31.8	29.4	-2.8 (0.140)	2.4 (0.267)	-0.5 (0.633)	1.3 (0.295)
Quarter 6-10	43.7	43.9	40.9	-0.2 (0.791)	3.0 (0.163)	2.8 (0.148)	1.1 (0.339)
Quarter 1-10	72.6	75.7	70.3	-3.1 (0.138)	5.4 (0.101)	2.3 (0.388)	1.7 (0.203)
Hours worked ^a							
Quarter 1	113.3	143.6	134.5	-30.3 (0.134)	9.1 (0.510)	-21.1 (0.117)	1.5 (0.249)
Quarter 2	183.7	231.3	212.5	-47.7 (0.052)	18.9 (0.301)	-28.8 (0.051)	2.5 (0.099)
Quarter 3	250.9	266.8	243.3	-16.0 (0.449)	23.6 (0.283)	7.6 (0.642)	0.6 (0.557)
Quarter 4	283.4	283.4	259.4	-0.1 (0.997)	24.1 (0.148)	24.0 (0.147)	1.6 (0.217)
Quarter 5	293.5	306.1	276.7	-12.6 (0.519)	29.4 (0.117)	16.8 (0.290)	1.5 (0.250)
Quarter 6	340.2	337.1	307.6	3.2 (0.747)	29.5 (0.127)	32.7 (0.062)	1.9 (0.167)
Quarter 7	356.3	339.0	332.7	17.3 (0.139)	6.3 (0.810)	23.6 (0.324)	1.7 (0.209)
Quarter 8	361.4	354.3	329.3	7.1 (0.557)	25.0 (0.314)	32.1 (0.207)	0.9 (0.432)
Quarter 9	375.5	365.8	334.3	9.7 (0.592)	31.4 (0.178)	41.2 (0.055)	2.0 (0.152)
Quarter 10	373.6	364.1	327.8	9.4 (0.585)	36.4 (0.144)	45.8* (0.031)	2.6 (0.092)
Quarter 1-5	1,124.8	1,231.6	1,126.3	-106.8 (0.221)	105.3 (0.204)	-1.5 (0.976)	0.9 (0.420)
Quarter 6-10	1,807.0	1,760.3	1,631.9	46.6 (0.422)	128.5 (0.259)	175.1 (0.075)	2.1 (0.144)
Quarter 1-10	2,931.7	2,992.0	2,758.6	-60.3 (0.544)	233.4 (0.160)	173.1 (0.184)	1.1 (0.345)
Number of jobs worked	2.0	1.9	1.9	0.1 (0.586)	0.0 (0.935)	0.1 (0.487)	0.2 (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

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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 (0.674)	-1.1 (0.559)	-2.1 (0.171)	1.0 (0.368)
2.00 to 2.99 times the minimum	7.9	12.5	9.2	-4.6* (0.048)	3.3 (0.300)	-1.3 (0.393)	3.7* (0.037)
3.00 to 3.99 times the minimum	3.2	1.2	1.8	2.0* (0.046)	-0.5 (0.289)	1.4 (0.161)	2.6 (0.097)
4.00 to 4.99 times the minimum	1.7	0.9	0.8	0.8 (0.219)	0.1 (0.777)	0.9 (0.272)	0.8 (0.464)
5.00 or more times the minimum	2.0	0.6	0.8	1.4† (0.098)	-0.2† (0.586)	1.2 (0.172)	1.5† (0.236)
Not employed in past five years (%)	32.7	35.6	35.5	-2.9 (0.344)	0.1 (0.986)	-2.8 (0.467)	0.7 (0.486)
Highest degree (%)							
Less than high school	10.3	12.2	7.6	-1.9 (0.558)	4.6 (0.135)	2.7 (0.294)	1.4 (0.271)
High school or GED	71.9	63.9	72.5	8.0 (0.137)	-8.6* (0.041)	-0.6 (0.856)	2.3 (0.116)
Associates or equivalent	6.9	12.1	8.8	-5.1* (0.001)	3.3† (0.092)	-1.9 (0.248)	7.1*† (0.003)
Bachelors or equivalent	9.3	9.2	8.7	0.1 (0.972)	0.6 (0.782)	0.7 (0.632)	0.1 (0.882)
Masters or higher	1.6	2.6	2.5	-1.0 (0.198)	0.1 (0.884)	-0.9 (0.091)	2.2 (0.134)
Vocational training ^c	19.5	13.4	15.1	6.1 (0.087)	-1.7 (0.408)	4.4 (0.237)	1.7 (0.202)
Had health problems that limit work or training (%)	5.7	4.5	8.2	1.3 (0.519)	-3.7 (0.119)	-2.5* (0.032)	2.6 (0.090)
Household size (%)							
Sole member	19.3	17.8	19.7	1.5 (0.323)	-1.9† (0.353)	-0.4 (0.816)	0.6† (0.539)
2 or 3 members	48.3	53.8	42.0	-5.5* (0.033)	11.7* (0.046)	6.3 (0.189)	3.0 (0.067)
4 or 5 members	23.2	21.9	25.8	1.3 (0.543)	-3.9 (0.492)	-2.6 (0.529)	0.2 (0.783)
6 or more members	9.3	6.6	12.5	2.7 (0.161)	-5.9 (0.155)	-3.2 (0.347)	1.4 (0.276)
Receipt of Public Assistance (%)							
TANF, SSI/SSDI, or GA	12.9	14.2	21.8	-1.3 (0.411)	-7.6 (0.124)	-8.8 (0.056)	2.4 (0.108)
SNAP or WIC	44.9	49.0	45.9	-4.1 (0.212)	3.1 (0.607)	-1.0 (0.801)	1.1 (0.364)
Unemployment Compensation	10.4	9.4	8.5	1.0 (0.587)	0.8 (0.660)	1.9 (0.399)	0.4 (0.694)
Other public assistance	1.8	0.9	3.2	0.9* (0.011)	-2.3 (0.195)	-1.4 (0.408)	3.8* (0.036)
Counselor-predicted likelihood of training (%)							
Very likely	50.8	43.9	48.8	6.9 (0.118)	-4.9 (0.339)	2.1 (0.379)	1.8 (0.186)
Somewhat likely	27.2	30.4	28.9	-3.1 (0.502)	1.5 (0.692)	-1.6 (0.376)	0.4 (0.663)
Somewhat unlikely	13.2	15.5	10.1	-2.3 (0.351)	5.4*† (0.035)	3.1* (0.014)	4.8*† (0.016)
Very unlikely	8.7	10.2	12.3	-1.5 (0.264)	-2.1 (0.325)	-3.5* (0.025)	3.7* (0.038)
Visited an AJC previously (%)	32.3	32.0	34.6	0.3 (0.947)	-2.6 (0.664)	-2.3 (0.434)	0.3 (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* (0.001)	7.3* (0.012)	16.0* (0.000)	22.5* (0.000)
Total financial assistance received, other than for training (\$)	227	108	61	120* (0.003)	47 (0.059)	166* (0.000)	9.3* (0.001)
Received financial assistance for (%)							
Books	10.3	6.5	2.1	3.8* (0.036)	4.5* (0.004)	8.3* (0.000)	8.8* (0.001)
Tools, supplies	10.4	5.3	2.8	5.1* (0.013)	2.4 (0.121)	7.6* (0.001)	6.8* (0.004)
Clothes, uniforms	11.2	8.8	4.0	2.4 (0.346)	4.8* (0.013)	7.2* (0.002)	8.1* (0.002)
Transportation	18.6	12.8	7.6	5.8* (0.043)	5.3 (0.062)	11.1* (0.000)	9.3* (0.001)
Child care	5.9	0.9	0.5	5.0* (0.048)	0.4† (0.180)	5.4*† (0.028)	4.3*† (0.023)
Tests, certifications ^a	0.6	0.6	0.0	0.0 (0.934)	0.6* (0.039)	0.6 (0.061)	5.3* (0.011)
Living expenses ^a	2.7	0.7	0.4	1.9 (0.082)	0.3 (0.344)	2.2* (0.037)	3.0 (0.066)
Medical, dental care ^a	0.3	0.0	0.0	0.3† (0.096)	0.0 (0.163)	0.3 (0.093)	1.9 (0.165)
Received financial assistance from an AJC (%)	19.7	10.9	4.7	8.8* (0.008)	6.2* (0.015)	15.0* (0.000)	19.7
Amount of financial assistance received from an AJC (\$)	151	46	25	104* (0.001)	21 (0.120)	126* (0.000)	151
Received financial assistance elsewhere (%)	7.2	7.4	5.2	-0.2 (0.912)	2.2† (0.133)	1.9 (0.259)	7.2
Amount of financial assistance received elsewhere (\$)	105	63	36	42 (0.268)	26† (0.163)	69 (0.069)	105
Received financial assistance from (%)							
Government agency other than AJC	4.5	3.4	3.2	1.1 (0.195)	0.2 (0.865)	1.3 (0.368)	4.5
Library, church, or community-based organization	1.0	3.2	1.1	-2.2 (0.066)	2.0 (0.152)	-0.2 (0.753)	1.0
Educational facility	1.1	0.7	0.5	0.4 (0.630)	0.2 (0.631)	0.6 (0.376)	1.1
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 (0.881)	-0.2 (0.518)	-0.2 (0.629)	0.2 (0.789)
Quarter 2	5.3	5.6	5.4	-0.4 (0.354)	0.2 (0.689)	-0.2† (0.653)	0.5† (0.627)
Quarter 3	6.5	6.5	6.7	0.0 (0.986)	-0.1 (0.830)	-0.1 (0.700)	0.1 (0.924)
Quarter 4	7.1	7.0	6.9	0.0 (0.951)	0.1 (0.831)	0.1 (0.770)	0.1 (0.951)
Quarter 5	7.4	7.4	6.7	0.0 (0.984)	0.7 (0.186)	0.7 (0.171)	1.3 (0.296)
Quarter 6	8.3	8.1	7.3	0.2 (0.444)	0.8 (0.198)	1.0 (0.057)	2.2 (0.135)
Quarter 7	8.5	7.7	7.8	0.7 (0.157)	-0.1 (0.853)	0.7 (0.269)	1.1 (0.352)
Quarter 8	8.6	8.3	7.8	0.3 (0.562)	0.5 (0.296)	0.9 (0.230)	0.8 (0.450)
Quarter 9	8.8	8.8	7.9	0.0 (0.992)	0.8 (0.155)	0.8 (0.151)	1.4 (0.266)
Quarter 10	8.7	8.6	7.8	0.1 (0.870)	0.8 (0.197)	0.8 (0.127)	1.4 (0.273)
Quarter 1-5	30.0	30.3	29.6	-0.3 (0.882)	0.7 (0.759)	0.4 (0.814)	0.1 (0.949)
Quarter 6-10	42.9	41.5	38.6	1.4 (0.544)	2.8 (0.259)	4.2 (0.132)	1.2 (0.306)
Quarter 1-10	72.8	71.7	68.2	1.1 (0.785)	3.6 (0.442)	4.6 (0.280)	0.6 (0.546)
Hours worked ^a							
Quarter 1	136.4	132.7	137.4	3.7 (0.772)	-4.8 (0.779)	-1.0 (0.933)	0.0 (0.952)
Quarter 2	203.3	224.4	200.0	-21.1 (0.317)	24.3 (0.343)	3.2† (0.846)	0.6† (0.576)
Quarter 3	258.8	257.5	242.8	1.4 (0.959)	14.7 (0.589)	16.1 (0.336)	0.5 (0.609)
Quarter 4	287.9	277.1	259.9	10.8 (0.715)	17.2 (0.441)	28.0 (0.216)	1.0 (0.381)
Quarter 5	300.7	289.0	255.8	11.7 (0.649)	33.2 (0.194)	44.9*† (0.050)	2.2 (0.126)
Quarter 6	337.4	317.7	274.3	19.7 (0.288)	43.3 (0.081)	63.0*† (0.007)	4.3*† (0.024)
Quarter 7	352.7	308.4	297.6	44.3 (0.078)	10.8 (0.582)	55.1*† (0.035)	2.5 (0.097)
Quarter 8	358.2	334.6	305.3	23.7 (0.371)	29.2 (0.228)	52.9 (0.146)	1.2 (0.326)
Quarter 9	363.5	351.5	308.5	11.9 (0.588)	43.0 (0.116)	55.0 (0.094)	1.6 (0.213)
Quarter 10	359.9	346.8	302.5	13.1 (0.554)	44.3 (0.114)	57.4 (0.066)	1.9 (0.167)
Quarter 1-5	1,187.1	1,180.6	1,096.0	6.5 (0.949)	84.6 (0.453)	91.1 (0.250)	0.7 (0.497)
Quarter 6-10	1,771.6	1,659.0	1,488.2	112.7 (0.307)	170.8 (0.143)	283.5*† (0.043)	2.3 (0.122)
Quarter 1-10	2,958.7	2,839.5	2,584.2	119.2 (0.521)	255.4 (0.252)	374.6† (0.068)	1.8 (0.184)
Number of jobs worked	2.0	2.0	1.9	0.0 (0.922)	0.0 (0.775)	0.0 (0.732)	0.1 (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

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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 (0.569)	5.6 (0.073)	7.6* (0.011)	4.3* (0.023)
Age (%)							
18–20	0.0	-0.8	-0.2	0.8 (0.137)	-0.6 (0.066)	0.2 (0.748)	3.2 (0.056)
21–24	6.5	5.6	4.0	0.9 (0.495)	1.6 (0.583)	2.5 (0.514)	0.3 (0.777)
25–32	14.8	19.3	13.2	-4.5 (0.438)	6.1 (0.352)	1.6 (0.603)	0.5 (0.640)
33–42	27.6	30.6	26.8	-3.1 (0.453)	3.9 (0.430)	0.8 (0.918)	1.2 (0.307)
43–50	30.2	15.1	25.6	15.1* (0.019)	-10.5 (0.095)	4.6 (0.193)	3.4* (0.050)
51 or older	21.0	30.2	30.7	-9.2 (0.074)	-0.5 (0.953)	-9.7 (0.351)	1.7 (0.194)
Race/ethnicity (%)							
Hispanic	9.6	13.5	20.3	-3.9 (0.188)	-6.8 (0.280)	-10.7 (0.174)	1.1 (0.334)
White, non-Hispanic	37.0	44.9	39.9	-7.9 (0.081)	5.0 (0.321)	-2.9 (0.591)	1.7 (0.199)
Black, non-Hispanic	47.7	37.3	36.0	10.4 (0.051)	1.3 (0.631)	11.7 (0.055)	2.2 (0.133)
Asian	2.5	1.5	1.5	1.0 (0.227)	0.0† (0.970)	1.0 (0.355)	0.8† (0.473)
Native Hawaiian, Pacific Islander, or Native American	2.1	0.9	1.1	1.2 (0.299)	-0.2 (0.529)	1.0 (0.295)	0.6 (0.570)
Other	1.0	1.8	1.2	-0.8 (0.420)	0.6 (0.478)	-0.2 (0.707)	0.3 (0.717)
Primary spoken language is English (%)	97.2	97.5	92.3	-0.2 (0.826)	5.1 (0.355)	4.9 (0.400)	0.5 (0.593)
Primary spoken language is Spanish (%)	0.9	1.3	6.8	-0.4 (0.750)	-5.5 (0.313)	-5.9 (0.291)	0.6 (0.563)
Primary spoken language is neither English nor Spanish (%)	1.8	1.2	0.8	0.6 (0.477)	0.4 (0.248)	1.0 (0.190)	1.8† (0.181)
Marital status (%)							
Currently married	32.3	34.4	44.4	-2.0 (0.556)	-10.0 (0.207)	-12.1† (0.081)	1.9† (0.165)
Separated, divorced, or widowed	29.2	27.0	35.3	2.1 (0.592)	-8.3 (0.232)	-6.2 (0.144)	1.1 (0.335)
Never married	38.5	38.6	20.2	-0.1 (0.989)	18.3 (0.190)	18.3† (0.066)	2.5† (0.098)
Working at time of random assignment (%)	1.0	1.1	3.1	-0.2 (0.586)	-2.0 (0.190)	-2.2 (0.168)	1.0 (0.365)
Employed in past five years (%)	91.9	93.2	92.7	-1.3 (0.479)	0.4 (0.725)	-0.8 (0.698)	0.3 (0.741)
Last real hourly wage ^a (\$)	15.42	17.81	16.55	-2.40 (0.108)	1.26* (0.026)	-1.13 (0.442)	3.6* (0.042)
Last real hourly wage was ^{a,b} (%)							
Less than minimum wage	2.3	2.5	1.4	-0.2† (0.844)	1.1 (0.681)	1.0 (0.676)	0.1 (0.914)
Minimum wage exactly	0.4	0.5	1.1	-0.1 (0.506)	-0.6 (0.340)	-0.7 (0.274)	0.8 (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 (0.218)	-3.8 (0.155)	1.1 (0.823)	2.2 (0.131)
1.30 to 1.69 times the minimum	24.8	23.4	15.5	1.5 (0.655)	7.8* (0.027)	9.3*† (0.000)	9.9*† (0.001)
1.70 to 1.99 times the minimum	12.2	11.2	13.4	1.0 (0.591)	-2.2 (0.283)	-1.2 (0.583)	0.6 (0.553)
2.00 to 2.99 times the minimum	25.2	27.7	34.9	-2.4 (0.518)	-7.2 (0.468)	-9.7 (0.196)	2.3 (0.123)
3.00 to 3.99 times the minimum	8.5	12.3	9.4	-3.8 (0.454)	2.9 (0.337)	-0.9 (0.772)	0.5 (0.622)
4.00 to 4.99 times the minimum	3.7	2.3	4.9	1.4 (0.152)	-2.6 (0.122)	-1.2 (0.547)	2.4 (0.109)
5.00 or more times the minimum	2.0	6.7	1.6	-4.7*† (0.020)	5.1*† (0.017)	0.4 (0.543)	3.2† (0.055)
Not employed in past five years (%)	8.1	6.8	7.3	1.3 (0.479)	-0.4 (0.725)	0.8 (0.698)	0.3 (0.741)
Highest degree (%)							
Less than high school	3.6	3.9	4.7	-0.3 (0.804)	-0.9 (0.663)	-1.2 (0.522)	0.2 (0.807)
High school or GED	69.0	66.2	64.3	2.8 (0.268)	1.9 (0.660)	4.7 (0.364)	0.7 (0.503)
Associates or equivalent	10.2	8.8	11.5	1.3 (0.620)	-2.7† (0.292)	-1.3 (0.650)	0.6† (0.564)
Bachelors or equivalent	12.5	17.8	14.6	-5.3* (0.030)	3.1 (0.124)	-2.2 (0.452)	3.5* (0.044)
Masters or higher	4.8	3.4	4.8	1.5 (0.260)	-1.4 (0.430)	0.0 (0.993)	1.2 (0.319)
Vocational training ^c	20.3	16.8	18.2	3.4 (0.373)	-1.3 (0.755)	2.1 (0.544)	0.5 (0.632)
Had health problems that limit work or training (%)	2.6	5.1	3.2	-2.4 (0.190)	1.8 (0.220)	-0.6 (0.531)	0.9 (0.410)
Household size (%)							
Sole member	22.5	25.9	19.9	-3.4 (0.568)	6.0*† (0.012)	2.6 (0.619)	3.9*† (0.032)
2 or 3 members	51.6	44.2	40.1	7.4 (0.296)	4.2 (0.338)	11.5 (0.218)	0.8 (0.457)
4 or 5 members	22.5	27.4	34.5	-4.9 (0.225)	-7.1 (0.172)	-12.0 (0.051)	2.1 (0.142)
6 or more members	3.4	2.5	5.5	0.9 (0.614)	-3.0 (0.141)	-2.1 (0.456)	1.4 (0.269)
Receipt of Public Assistance (%)							
TANF, SSI/SSDI, or GA	5.2	5.7	5.9	-0.4 (0.835)	-0.2 (0.931)	-0.7 (0.627)	0.2 (0.845)
SNAP or WIC	30.9	31.2	27.0	-0.2 (0.947)	4.2 (0.397)	3.9 (0.405)	0.4 (0.657)
Unemployment Compensation	58.2	48.0	55.2	10.3 (0.153)	-7.3 (0.143)	3.0 (0.606)	1.4 (0.263)
Other public assistance	1.0	0.5	1.2	0.4 (0.188)	-0.7 (0.250)	-0.2 (0.598)	1.0 (0.379)
Counselor-predicted likelihood of training (%)							
Very likely	47.6	50.7	47.4	-3.1 (0.642)	3.3 (0.534)	0.1 (0.975)	0.2 (0.821)
Somewhat likely	37.8	31.2	40.4	6.6 (0.138)	-9.2* (0.003)	-2.6 (0.383)	6.1* (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† (0.845)	-3,219 (0.163)	-2,922 (0.287)	1.0 (0.364)
Received any funding for training costs from (%)							
WIA	37.8	4.5	3.0	33.2* (0.000)	1.5 (0.631)	34.8* (0.000)	35.5* (0.000)
State employment agency	9.9	-0.5	0.3	10.4* (0.043)	-0.8 (0.478)	9.6* (0.031)	2.7 (0.083)
Trade Adjustment Act	0.0	0.2	-0.1	-0.2 (0.332)	0.2 (0.278)	0.0 (0.254)	0.8 (0.453)
Veteran's administration	0.0	0.0	0.1	0.0 (0.411)	-0.1 (0.251)	-0.1 (0.307)	0.9 (0.409)
Pell Grant	13.5	13.4	11.2	0.1 (0.962)	2.2 (0.524)	2.3 (0.463)	0.3 (0.747)
Other government sources	5.3	3.6	8.3	1.7 (0.212)	-4.6 (0.063)	-2.9 (0.293)	2.7 (0.085)
External scholarship or grant	11.4	7.8	6.2	3.5 (0.364)	1.6 (0.618)	5.1 (0.203)	0.9 (0.436)
Other educational or training entity	1.1	0.2	0.2	0.9 (0.120)	0.1 (0.681)	1.0 (0.103)	1.4 (0.256)
Employer	4.0	6.7	4.6	-2.7 (0.344)	2.2 (0.489)	-0.5 (0.782)	0.5 (0.631)
Free Application for Federal Student Aid ^a	9.2	6.0	5.6	3.2 (0.432)	0.4 (0.859)	3.6† (0.257)	0.8† (0.470)
Other	0.7	1.5	1.1	-0.8 (0.303)	0.4 (0.637)	-0.3 (0.605)	0.6 (0.535)
Share of training paid for by individual or family (%)	0.3	0.5	0.6	-0.2* (0.000)	-0.1 (0.164)	-0.3* (0.000)	17.3* (0.000)
Paid all training costs on own (%)	11.5	37.0	42.7	-25.5* (0.001)	-5.7 (0.544)	-31.2*† (0.000)	19.1* (0.000)
Paid some training costs on own (%)	31.6	21.5	20.6	10.1 (0.259)	0.9 (0.933)	11.0 (0.155)	1.5 (0.242)
Paid for none of training costs on own (%)	56.9	41.5	36.8	15.4* (0.006)	4.8 (0.380)	20.2* (0.001)	7.8* (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

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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.

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APPENDIX G

DETAILED TABLES OF NDNH MEANS AND IMPACTS FOR ADULTS

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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.

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APPENDIX H

DETAILED TABLES OF NDNH MEANS AND IMPACTS FOR DISLOCATED WORKERS

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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.

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