Impact Estimates Regarding Nonparticipants in the Trade Adjustment Assistance (TAA) Program Under the 2002 Amendments

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DISCLAIMER

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EXECUTIVE SUMMARY

The Trade Adjustment Assistance (TAA) program is the linchpin of Federal efforts to help America's manufacturing workers rebound from job separation experienced as a consequence of foreign competition. The program's goal is to help affected workers obtain reemployment at a suitable wage replacement ratio by providing training, wage subsidies, and temporary income support, among other services. In 2010, the program served 199,238 participants.

Not all workers who are eligible for TAA take up the offer of key program services. Worker advocates have cited a lack of aggressive outreach as one factor contributing to low take-up rates, but workers may also choose not to access TAA because they anticipate being recalled or are confident that they can find suitable reemployment without assistance. Program and survey data indicate that about 50 percent of those eligible for TAA receive a *significant* TAA service, including TAA-supported training, Trade Readjustment Allowances (TRA), Alternative TAA for Older Workers (ATAA), the Health Coverage Tax Credit (HCTC), job search or relocation allowances, or subsistence or travel allowances for those in training. This definition does not include the considerable numbers of workers who receive only waivers from the TAA training requirement or those who receive One-Stop Career Center services.

The U.S. Department of Labor's Employment and Training Administration (ETA) funded Social Policy Research Associates (SPR) and its subcontractor, Mathematica Policy Research (Mathematica), to conduct a comprehensive study—the *Evaluation of the TAA Program*—that included: (a) a quasi-experimental impact evaluation, (b) a cost-benefit study, and (c) an implementation study. The impetus for the study was the TAA Reform Act of 2002, which led to changes in TAA program operations and emphases. Legislation enacted in 2009 and 2011 led to further program changes. The evaluation, however, focuses only on the TAA program as it existed under the 2002 legislation.

The main impact evaluation report (Schochet et al. 2012) presents impact findings for TAA *participants* who received a significant TAA service as defined above. This report supplements the main impact evaluation report by focusing on program impacts for TAA-eligible *nonparticipants* who choose not to receive a significant TAA service. These workers may be affected by the TAA program for several reasons. First, TAA-eligible workers might receive Rapid Response services or other early intervention services funded by the Workforce Investment Act (WIA) or Employment Services (ES), and One-Stop Career Center services. In addition, these workers could receive a waiver from the TAA training requirement, and thus, may have some contact with a TAA counselor. Consequently, these light-touch services could help eligible nonparticipants become reemployed, thereby obviating their need for more intensive TAA services.

This report addresses the following research questions:

- Did the early intervention services provided to all TAA eligible workers improve access to reemployment services and education and training services for program nonparticipants?
- How effective were the TAA early intervention services in boosting nonparticipants' employment and earnings?

These questions are addressed by comparing the outcomes of a sample of TAA nonparticipants to their matched comparisons, primarily using telephone survey data that cover the eight quarters after their job losses. The TAA nonparticipant sample was selected using lists of TAA-certified workers obtained from 26 randomly selected study states that were merged with state UI claims records. Most nonparticipants were laid off from their jobs in 2005 and 2006. The matched comparisons were identified using state UI claims records and include unemployed manufacturing workers who were not eligible for TAA services, but who came from the same local areas, lost their jobs at the same time, and had similar characteristics as the nonparticipants. Initial matching was conducted using available data from the UI claims records, but rematching was conducted using much richer demographic and employment history data from the initial telephone survey.

Key findings can be summarized as follows:

- *Eligibility for TAA led to increases in the reemployment services received by program nonparticipants.* TAA nonparticipants in our sample were significantly more likely to access reemployment services than their matched comparisons, with 74 percent reporting receipt of a reemployment service compared to 66 percent of comparison workers. TAA nonparticipants were more likely to receive labor market information about in-demand occupations and complete assessments to determine appropriate career paths. They were also significantly more likely to receive information on education and training options and information on how to change careers. Some of these more intensive reemployment services may have been delivered through the WIA program since TAA nonparticipants were significantly more likely than similar non TAA eligible workers to be enrolled in WIA (15 percent of TAA nonparticipants, compared to 9 percent of comparisons).

- *Nonparticipants did not receive more education and training than matched comparisons.* The early intervention services available through TAA may have connected nonparticipants with relatively short-term or inexpensive education or training programs that did not require enrollment in the TAA program, thereby leading to program impacts on education and training outcomes. However, this did not occur. During the 8-quarter follow-up period, 18 percent of TAA nonparticipants and 18 percent of comparisons enrolled in training. On average, both groups received a little more than one week of full-time training.

- *Both TAA nonparticipants and comparison workers returned to work at the same rate.* The estimated impacts on employment rates and weeks of employment were not statistically significant for any quarter during the two-year follow-up period. More than one third of both TAA nonparticipants and comparisons were employed in the first quarter following the job loss, and by quarter 8, the employment rate for both groups increased to about 75 percent. As expected, employment rates for the TAA nonparticipants were higher than for the TAA participants, many of whom were in training during the first two years after job loss (Schochet et al. 2012).

- *Eligibility for TAA had no impact on the earnings of program nonparticipants.* A similar pattern of program impacts was found for earnings as for employment: there were no significant differences in the quarterly earnings of nonparticipants and comparison workers (Table 1). Average earnings in the first quarter following job loss

were approximately $2,000 for both nonparticipants and comparison workers. By quarter 8, average earnings for both groups had more than doubled with average earnings exceeding $5,000 per quarter. In quarter 8, nonparticipants earned $437 more than the average comparison, but this difference is not significant. These impact findings were not sensitive to variations in the definition of a nonparticipant, alternative data sources, or alternative samples.

In sum, the evidence suggests that TAA appeared to moderately increase the receipt of light-touch reemployment services by TAA-eligible nonparticipants relative to what these workers would receive in the absence of TAA. However, these increases in reemployment services did not translate into increases in employment and earnings. The absence of observed program impacts on employment and earnings may have occurred because the treatment-comparison differences in light-touch reemployment services were modest or because the light-touch services were not intensive enough to affect labor market outcomes.

Table I: Impacts on Earnings (Survey Data)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Quarterly Earnings (2006$)				
Quarter 1	1,995	2,081	-85	217
Quarter 2	3,727	3,659	68	283
Quarter 3	4,620	4,390	229	292
Quarter 4	5,121	4,919	202	311
Quarter 5	5,461	5,229	232	316
Quarter 6	5,467	5,567	-100	318
Quarter 7	5,484	5,566	-82	320
Quarter 8	5,536	5,100	437	311
Annual Earnings (2006$)				
Quarters 1 – 4	15,235	14,856	379	915
Quarters 5 – 8	20,332	19,892	439	1,174
Sample Size	670	1,286		

Source: Mathematica TAA Baseline Survey.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

I. INTRODUCTION

The Trade Adjustment Assistance (TAA) program is the linchpin of Federal efforts to help America's manufacturing workers rebound from job separation experienced as a consequence of foreign competition. The program's goal is to help affected workers obtain reemployment at a suitable wage replacement ratio by providing training, wage subsidies, and temporary income support, among other services. In 2010, the program served 199,238 participants.[1]

Not all workers who are eligible for TAA take up the offer of key program services. Worker advocates have cited a lack of aggressive outreach as one factor contributing to low take-up rates (Rosen 2006), but workers may also choose not to access TAA because they anticipate being recalled or are confident that they can find suitable reemployment without assistance. Program and survey data indicate that about 50 percent of those eligible for TAA receive a *significant* TAA service, including TAA-supported training, Trade Readjustment Allowances (TRA), Alternative TAA for Older Workers (ATAA), the Health Coverage Tax Credit (HCTC), job search or relocation allowances, or subsistence or travel allowances for those in training. This definition does not include the considerable numbers of workers who receive only waivers from the TAA training requirement or those who receive One-Stop Career Center services.

The U.S. Department of Labor's Employment and Training Administration (ETA) funded Social Policy Research Associates (SPR) and its subcontractor, Mathematica Policy Research (Mathematica), to conduct a comprehensive study—the *Evaluation of the TAA Program*—that included: (a) a quasi-experimental impact evaluation, (b) a cost-benefit study, and (c) an implementation study. The impetus for the study was the TAA Reform Act of 2002, which led to changes in TAA program operations and emphases. Legislation enacted in 2009 and 2011 led to further program changes. The evaluation, however, focuses only on the TAA program as it existed under the 2002 legislation.

The main impact evaluation report (Schochet et al. 2012) presents impact findings for TAA participants who received a significant TAA service as defined above. The analysis compared the outcomes of TAA participants to those of a matched comparison group of manufacturing workers from the same local areas who were not eligible for TAA services. The results indicate that TAA participation significantly increases the receipt of reemployment services and education and training; TAA participants in our sample spent about 8 times as many weeks in education and training as the average comparison group member (49 versus 6 weeks). This increased participation in education and training, however, came at a cost. During the first two years after they lost their jobs—during what was essentially an in-program period for many of them—TAA participants were significantly less likely to be employed than comparisons and they earned substantially less. As their participation

[1] U.S. Department of Labor, Employment and Training Administration, *Workforce System Results: December 31, 2010 (http://www.doleta.gov/Performance)*

in training and other TAA services drew to a close, participants began to catch up with their comparisons, but, even four years after job loss, they had not yet closed the gap.

This report supplements the main impact evaluation report for TAA participants by focusing on program impacts for TAA-eligible *nonparticipants*, who choose not to receive significant TAA services. These workers might be affected by the TAA program for several reasons. First, TAA-eligible workers might receive Rapid Response services or other early intervention services funded by the Workforce Investment Act (WIA) or Employment Services (ES), and One-Stop Career Center services. In addition, these workers could receive a waiver from the TAA training requirement, and thus, may have some contact with a TAA counselor. Consequently, these light-touch services could help eligible nonparticipants become reemployed, thereby obviating their need for more intensive TAA services. For this report, we label these workers as "TAA nonparticipants" for convenience, although it is perhaps more accurate to consider these workers to be a "limited-services" group.

This report addresses the following research questions:

- Did the early intervention services provided to all TAA eligible workers improve access to reemployment services and education and training services for program nonparticipants?
- How effective were the TAA early intervention services in boosting nonparticipants' employment and earnings?

These questions are addressed by comparing the outcomes of a sample of TAA nonparticipants to their matched comparisons, primarily using survey data. Additionally, to establish the context for the interpretation of the findings, the report presents information on the TAA participation rate and reported reasons for nonparticipation.

We find that eligibility for TAA does increase the reemployment services received by program nonparticipants. TAA nonparticipants in our sample received more information on current labor market demand, assessments to determine appropriate careers, and counseling on career changes than similar unemployed workers in the comparison group who were not eligible for TAA. These reemployment services, however, did not translate into increases in nonparticipants' receipt of education and training and changes in their labor market outcomes. Both TAA nonparticipants and comparison workers returned to work at the same rate and had similar average earnings.

Before subsequent chapters present these findings, the remainder of this chapter describes the TAA program in more detail, and summarizes the overall design of the evaluation.

A. Recent History of TAA

Although beneficial to the economy as a whole, the expansion of international trade exposes some U.S. firms to a level of increased foreign competition that can harm them financially and cause them to lay off significant numbers of their workers (Kletzer 2002). U.S. government policy recognized such potential for localized harm and incorporated escape clause provisions into U.S. trade laws in the 1940s. These provisions included the institution of trade barriers if trade-related injuries to U.S. producers could be clearly demonstrated. This approach protected U.S. firms and

workers, but it meant forgoing some of the potential economy-wide gains that could result from trade liberalization.

TAA represents an alternative strategy. Rather than blocking or reversing trade liberalization, TAA compensates workers and firms that have suffered trade-related injuries, providing services that help them adjust to changes in market circumstances. The Trade Adjustment Assistance Reform Act of 2002 (hereafter referred to by its short title, the Trade Act of 2002)—which was the impetus for the evaluation--represents a significant milestone in the evolution of the TAA program.

The Trade Act of 2002, and ETA's accompanying implementation guidance, promotes three key principles regarding how the TAA program should operate:

- *Increase the focus on early intervention, upfront assessment, and reemployment services.* Recognizing that TAA had often been thought of as a training and income support program, ETA's operating instructions for the Trade Act of 2002[2] note that program operators should not lose sight of the importance of fostering rapid re-employment for adversely affected workers, so long as the goal of obtaining suitable employment is not sacrificed. In this context, providing trade-affected workers with timely access to upfront services might help identify their marketable skills and, with the provision of job search assistance, can assist them in obtaining suitable employment quickly, potentially obviating their need for retraining.

- *Use One-Stop Career Centers as a focal point of participant intake.* In keeping with the fact that the Workforce Investment Act (WIA) identified the TAA program as a required One-Stop system partner, the Trade Act of 2002 promotes collaboration of TAA with its partners in the One-Stop delivery systems by designating One-Stop Career Centers as the main points of TAA participant intake. Furthermore, the focus on the Career Center system is designed to promote the coordination and efficient delivery of services.

- *Maintain fiscal integrity and promote performance accountability.* ETA's operating instructions include a statement of the importance of maintaining fiscal integrity and note that program operators should be mindful of achieving strong participant outcomes.

With these tenets as the backdrop, the next sections review the process by which eligibility for TAA is established and describe the program's benefits and services.

[2] Training and Employment Guidance Letter (TEGL) 11-02, issued October 2002.

1. Eligibility and Worker Notification

To be eligible for TAA benefits and services, a worker must be covered by a petition certified for TAA. Petitions are filed by an eligible entity (employers, unions, One-Stop operators or partners, among others) with ETA. Once it receives a petition, ETA has 40 days to make a determination. The petition is certified for TAA if ETA determines that the displacement occurred (or is expected to occur):

- Because of import competition of "like or directly competitive articles," or
- Due to a shift in production to a foreign country so long as the country has a trade agreement with the U.S.

The Trade Act of 2002 also expanded eligibility to secondarily-affected workers; that is, those who are "upstream suppliers" or "downstream finishers" of products produced by a firm that has itself been certified for TAA (the primary firm), so long as the supplier or finisher firm experiences a loss of business that was importantly caused by the loss of business from the primary firm.

The date on which a petition is certified for TAA is the *determination date*. Recognizing that layoffs may have occurred before the petition was certified, or may occur in the future (i.e., after certification), TAA allows workers to be covered by the certified petition if they have experienced full or partial separations within a date range defined as beginning with the *impact date*, which is usually one year before the date the petition was filed, and ending with the *termination date*, which is usually two years after the determination date. This range represents slightly more than a three-year period of participant eligibility.

Once a petition is certified, states, operating as ETA's agents under a Governor/Secretary Agreement, are required to notify affected workers of their potential eligibility for TAA. To do so, a state elicits from the affected employer a list of all workers who have suffered (or will suffer) full or partial separation due to the cause listed in the petition, along with the workers' contact information. Within this report, we refer to these as *certified worker lists*.

States provide notification by sending a letter to each affected worker, letting the worker know of the TAA program's enrollment deadlines. Notification is also provided during Rapid Response meetings and at TAA orientation sessions, conducted at either the work site or a One-Stop Career Center.

Before eligible workers receive individual program services and benefits, they must complete an application to confirm their eligibility. This application includes their date of job loss and reasons for separation. In some states, workers are encouraged to complete the application at the TAA orientation, thus speeding the workers' connection to the program, and ideally to reemployment (D'Amico et al. 2009). Some nonparticipants may have completed an application, but never received any significant program services. Other nonparticipants never applied to the program.

2. Program Administration and Early Intervention Services

In most states, TAA is a state-administered program run by the state Employment Service (ES)/Unemployment Insurance (UI) agency. ES staff in field offices conduct intake, take

applications for the program, and forward the paperwork to the State TAA Coordinator or other state program administrators for approval. A few states, by contrast, have devolved substantial authority for TAA to local workforce investment areas (LWIAs), and in some of these states LWIA personnel can approve training plans.

Regardless of the administrative arrangements used, One-Stop Career Centers are the focal point of participant intake and service delivery, and TAA is a mandatory One-Stop system partner. Thus, customers generally access program services through the One-Stop Career Center system. Moreover, workers covered by a petition that has been filed (whether or not a determination has yet been made on it) must be provided access to Rapid Response assistance and One-Stop core services, making it imperative that TAA operate in conjunction with its One-Stop partners.

Much of the funding for TAA training is provided by formula to the states, but ETA holds a substantial amount in reserve at the national level until the end of the Fiscal Year. States can request draw downs from this reserve after they have used significant amounts of their formula allocation. This two-stage procedure is a way of recognizing that states benefit from having a base amount of TAA funds upfront to facilitate planning, but that the timing and location of trade-related dislocations cannot be predicted by formula with great accuracy, due to their episodic nature.

3. Defining Significant TAA Program Services and TAA Nonparticipants

The main benefits provided by the TAA program under the 2002 amendments include subsidized training and extended UI payments called Trade Readjustment Allowances (TRA) for up to 104 weeks (130 weeks if remedial training is needed), coverage of 65 percent of health insurance premiums through the Health Coverage Tax Credit (HCTC), and wage subsidies for workers over age 50 who find a full-time job with earnings of $50,000 a year or less through Alternative Trade Adjustment Assistance (ATAA). Other benefits offered by TAA include job search and relocation allowances for workers who seek and find work in another area, and supplemental assistance payments for expenses associated with attending training in another area.

Our definition of nonparticipants is workers who were laid off from a certified firm between the impact date and the termination date as determined from UI claims records and did not receive any of these significant program services. However, they may have received basic TAA employment services or labor market information in the One-Stop Career Centers or elsewhere. These nonparticipants fell into two groups: (1) eligible TAA applicants who only received a waiver from the TAA training requirement to preserve their future eligibility for TRA or the HCTC; and (2) TAA nonapplicants who may not have had any contact with the TAA program beyond rapid response services.

To be eligible for TRA, workers must enter training within 8 weeks after the petition is certified or within 16 weeks after the separation, whichever is later (known as the 8/16 rule), unless they receive a waiver from the training requirement before that deadline. Waivers can be granted for any of the following reasons:

- The worker is expected to be recalled;
- The worker is believed to have marketable skills;

- The worker is within two years of retirement;
- The worker has a health condition preventing participation in training;
- Suitable training is not available; or
- The first available enrollment date for the training the worker wants to undertake falls outside the 8/16 guidelines.

According to ETA's guidance,[3] a person receiving a waiver is considered to be receiving TAA services and this qualifies the individual as a TAA participant. Since any person receiving TAA services should be included in the Trade Act Participant Report (TAPR), we should observe all waiver-only individuals in the TAPR. However, not all states have consistently followed this guidance (U.S. Government Accountability Office 2006). In our sample, 17 percent of nonparticipants were included in the TAPR. The absence of a TAPR record may indicate that a worker never applied for the TAA program, but the variation in state reporting makes this interpretation uncertain.

For the TAA evaluation, we treat waiver-only individuals as eligible nonparticipants.

B. Overall Design of the Evaluation

The *Evaluation of the TAA Program* was designed to address key research questions focused on how the TAA program operates under the 2002 Amendments, what its effects are on the outcomes of eligible workers, and whether the benefits of the program outweigh the program's costs. The TAA evaluation included the collection of survey and administrative wage records data on samples of eligible TAA workers and matched comparison groups to obtain unbiased estimates of the impact of TAA on participants' and nonparticipants' employment-related outcomes. The ideal design—random assignment—was not feasible for the evaluation, because TAA services are an entitlement, and cannot be denied to eligible workers under current program rules, making it impossible to construct a control group. Consequently, the evaluation employed a comparison group (propensity score matching) design to obtain an estimate of the impact of TAA on participants' and nonparticipants' employment-related outcomes. Comparison samples of dislocated workers in the manufacturing sector were selected to be as similar as possible to workers in the TAA samples at the time of job layoff. These comparison samples were matched to the treatment sample on key variables, and various analyses were used to assess what the outcomes of treatment group members would have been in the absence of the TAA program (that is, to define the counterfactual outcomes for the evaluation).

[3] See *Trade Act Participant Report (TAPR): General Reporting Instructions and Specifications* (Revised 2006).

This section discusses the selection of the TAA samples for the evaluation, the selection of the matched comparison group samples, data sources, the analysis samples, and analytic methods for estimating and interpreting program impacts. These topics are covered in much more detail in the main impact report (Schochet et al. 2012) and companion report entitled "Methodological Notes on the Impact Analysis," which we hereafter refer to as the "MN report."

1. Selection of the TAA Worker Sample

The evaluation sample of eligible TAA workers was selected in two stages:

Selection of States. In the first stage, 26 states were randomly selected and recruited for the study. We used USDOL data on petitions certified for TAA in 2005 and 2006 to select states within geographic strata with probabilities proportional to the expected number of TAA participants in the state.[4] These 26 states contain about 90 percent of all TAA-eligible workers nationwide in the study's certified-worker sample frame under the 2002 Amendments.

Selection of the Certified-Worker Sample. In the second stage, we selected a sample of TAA certified workers from each state as the primary treatment group sample for the impact analysis.[5] The sample was obtained from lists of workers in worker groups covered by a petition certified for TAA (the "certified-worker lists"), which states are required, by law, to obtain from the workers' employers. We merged these lists with UI/TRA claims data from each study state, and defined the nationally representative certified-worker sample frame to include the following workers (about 55,000 TAA-eligible workers nationwide):

- Workers on the certified-worker lists who were laid off from firms that became certified for TAA under the 2002 Amendments between November 1, 2005 and October 31, 2006. Even though states furnished data at different times (see below), the petition certification period for the study was the same for all states. We specified a one-year window to account for potential seasonal layoff patterns.

- Those whose UI benefit year started between September 1, 2004 and October 31, 2008. This window was selected because workers covered by a certification include those laid off between one year prior to the petition filing date and two years after the petition certification date, and it typically takes USDOL one to two months to make certification determinations.

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[4] The selected states were New Hampshire, New Jersey, New York, Rhode Island, Pennsylvania, Virginia, Maryland, Alabama, Florida, Georgia, Kentucky, North Carolina, South Carolina, Tennessee, Texas, Arkansas, Colorado, Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, Wisconsin, California and Washington.

[5] We also selected a supplementary sample of TRA beneficiaries to examine the robustness of impact estimates, as described in the impact report, but by definition all members of the TRA beneficiary sample are TAA participants.

States provided the UI claims data at different times throughout 2008, depending on when they agreed to participate in the study and had staff available to provide the data. We requested UI claims data for all workers who received a first UI payment of any type from the first quarter of 2004 to the most recent quarter that UI records were available when the data were extracted. Thus, the UI data did not always cover the approximately three-year layoff window for each petition certified between November 1, 2005 and October 31, 2006. In general, however, coverage rates were high: for more than three-quarters of the petitions, the period left uncovered was 12 months or less.

The certified-worker sample frame was initially divided into TAA participants (who received TRA benefits) and TAA nonparticipants (who did not), according to the first round of UI claims data provided by the states. Using these designations, we randomly selected 2,875 participants and 1,506 nonparticipants for telephone interviews and administrative records collection (UI wage records, TAPR data, and WIASRD data). The TAA participant and nonparticipant designations were subsequently updated using TAPR records, baseline interview information on TAA service receipt, and updated TRA benefit information. Using these criteria, about 25 percent of nonparticipants were reclassified as participants for the impact analysis. These reclassified workers were *included* in the participant samples for the main impact report, but were *excluded* from the nonparticipant samples for this report.

2. Selection of Matched Comparison Worker Samples

The net impact analysis for the overall evaluation used quasi-experimental methods to compare program outcomes for treatment groups of TAA participants and TAA-eligible nonparticipants to matched comparison groups of those not eligible for TAA. Following best practices in the field (Heckman, LaLonde and Smith 1999), comparison group members were chosen to be like their treatment group counterparts (except for the offer of TAA services) in that they had comparable demographic characteristics and employment histories and were drawn from the same local labor markets. Furthermore, their outcomes were measured in the same way, using the same data sources used for those in the treatment groups.

For both the TAA participant and nonparticipant samples, we identified the pool of potential comparison group members from the UI/TRA claims data as follows:

- We aligned the treatment and comparison samples in terms of their job layoff dates by limiting the comparison sample for the certified-worker samples to those who started collecting regular UI benefits between September 1, 2004, and October 31, 2008.

- Using UI/TRA claim data on the industry of a worker's primary employer, we limited the comparison sample to workers in the manufacturing industry, restricting the sample to workers with North American Industry Classification System (NAICS) two-digit industry codes of 31, 32, or 33.

- We dropped workers who received TRA benefits according to the UI/TRA claims data or who were on a certified-worker list for a firm that was certified for TAA outside the date range for the study.

- We limited the potential comparison pool to workers who lived in the same local areas as the treatment group, as defined using the local area indicators discussed below, and to those between the ages of 16 and 80 who received regular UI benefits and who had non-missing values for key variables.

We used propensity score matching methods developed by Rosenbaum and Rubin (1983) to select the study comparison groups. The variables used in the matching process included demographic information, job characteristics, and UI claim and benefit data constructed from the UI/TRA claims data, as well as local area characteristics such as local unemployment rates. Matching was performed with replacement so that a comparison group member could be matched to multiple treatment group members. The matching was conducted *separately* for TAA participants and TAA nonparticipants and by state. The sample for this report includes the TAA nonparticipants and their matched comparisons.

3. Data Sources for the Impact Analysis

The net-impact analysis used administrative data and survey data. Administrative data were collected from 26 states and include files of various sorts:

- Lists of workers covered by certified petitions (the certified worker lists), used to define the sampling frame for the impact analysis;
- UI and TRA claimant data, used in conjunction with certified worker lists to define the sampling frame for the impact analysis and to measure receipt of benefits, either as TAA services (TRA payments) or as outcomes (UI payments following separation);
- UI wage data, used in the impact analysis to measure employment and earnings in the quarters before and after workers' job separations;
- TAA participation data, drawn from the Trade Act Participant Report (TAPR), the client-level records maintained by states on TAA participants' characteristics, services, and outcomes; and
- WIA participant data, drawn from the Workforce Investment Act Standardized Record Data (WIASRD), the client-level records maintained by states on WIA participants' characteristics, services, and outcomes.

Data for the overall evaluation were also drawn from two rounds of telephone surveys administered to randomly selected samples of treatment group and comparison group members. The first round was an initial survey (that we refer to as the "baseline survey") that was administered to TAA eligibles, including both TAA participants and nonparticipants, as well as to their comparison group counterparts. Baseline interviews typically occurred 29 months after job loss. The second round of interviews was a follow-up survey that was administered to TAA participants and their comparison group counterparts, but *not* to nonparticipants and their comparisons.

Because this report focuses on TAA nonparticipants and their comparisons, it uses baseline survey data but not follow-up survey data. The baseline survey questionnaire included a battery of

questions about workers' experiences with the TAA program under the 2002 Amendments, their labor market and training experiences, and other key study outcomes that we hypothesized could be affected by TAA participation. The survey coverage period started with the UI claim date associated with the trade-related job separation.

Baseline interviewing took place by telephone between March 2008 and April 2009. The (unweighted) response rate to the baseline interview was 58.8 percent for TAA nonparticipants and 56.9 percent for the comparison group. Interviews were completed with 886 TAA nonparticipants and 1,174 matched comparisons.

4. Sample Used in the Analysis

The primary sample used for this report includes nonparticipants and their matched comparisons who completed the baseline interview. To account for treatment-comparison baseline differences for some survey items that were not used in the initial matching process, we rematched the treatment and comparison groups in the baseline survey sample using the full set of matching variables from the UI claims, local area, and baseline survey data. We used a "kernel" matching algorithm where each TAA nonparticipant was compared to all comparison group members in the baseline completer sample, regardless of the initially-matched triads. The algorithm assigned weights to each comparison group member based on the similarity of that worker's baseline characteristics to those of each TAA nonparticipant. Thus, a TAA nonparticipant could have many comparison group matches, each with a different weight. Chapter VI of the MN report describes the kernel matching algorithm in detail.[6] This approach generated balanced TAA nonparticipant and matched comparison group samples.

5. Analytical Methods

We estimated the average impacts of the TAA program on eligible nonparticipants' outcomes by comparing the mean outcomes of nonparticipants to those of their matched comparisons. The outcomes of the comparison group represent the counterfactual for the study—that is, the outcomes that the TAA eligible nonparticipants would have experienced in the absence of TAA.

We estimated impacts using regression methods, where each study outcome was regressed on a treatment status indicator variable and a fixed set of baseline covariates. Baseline covariates were used in the analysis to improve the precision of the impact estimates and to adjust for the small pre-existing observable differences between the nonparticipant and comparison groups that remained after matching. All estimates were obtained using the sample weights discussed in Chapters VI and VII of MN report, and the standard errors of all impact estimates were inflated to account for design effects due to unequal weighting and state-level clustering.

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[6] The MN report focuses on analytic methods for analyses based on the TAA participant samples. However, identical methods were used for the TAA nonparticipant samples.

II. PARTICIPATION IN TAA

Once a firm's petition for TAA is certified, states are obliged to notify covered workers of their eligibility for the program. They do so by first requesting lists of covered workers, along with the workers' contact information, from the affected employers. State officials then mail letters informing the workers of their potential eligibility for services and inviting them to attend orientation sessions at which TAA services are explained. Workers might also learn about their potential eligibility for TAA at Rapid Response events even before a petition is certified, or through announcements that State Workforce Agencies disseminate through various media outlets.

To enroll in the TAA program, workers must then complete a program application that confirms details on the workers' date of job loss and reason for separation. In some states, workers are encouraged to complete the application at the TAA orientation, thus speeding the workers' connection to the program, and ideally to reemployment (D'Amico et al. 2009).

Not all workers who are eligible for TAA take up the offer of services. Some workers complete an application for TAA but do not receive any significant service; other workers on the certified worker lists never apply. Worker advocates have cited a lack of aggressive outreach as one factor contributing to low take-up rates (Rosen 2006), but workers may also choose not to access TAA because they anticipate being recalled or are confident that they can find suitable reemployment without assistance.

As a way of establishing the context for the impact results that follow later in this report, this chapter presents the study's findings on TAA participation decisions. Because this report focuses on impacts for TAA nonparticipants (as opposed to the broader sample of TAA eligibles or those TAA eligibles who participate in TAA), we focus carefully on what constitutes TAA participation and discuss important ambiguities in this definition. We then use baseline survey data to describe the reasons why eligibles choose not to participate in TAA.

As will be described in this chapter, we define a TAA participant as an eligible worker who receives a *significant* TAA service, including TAA-supported training, TRA, ATAA, HCTC, job search or relocation allowances, or subsistence or travel allowances for those in training. This definition thereby excludes the considerable numbers of workers in our sample who were eligible TAA applicants but who received only waivers or light touch reemployment services that did not go beyond One-Stop Career Center core services.

Using this definition, about 50 percent of those eligible for TAA become TAA participants. This estimate is essentially the same regardless of whether it is calculated from administrative data that states provided or from baseline survey data. However, the TAA participation rate differs markedly from state to state—in some states, no more than 30 percent of eligibles participate, while in other states more than 80 percent do. Participation also varies depending on workers' characteristics. For example, among eligibles, females are more likely to participate than males, African-Americans more than Hispanics, and older workers more than those who are younger.

The main reported reason that nonparticipants did not apply for TAA is that they got a job (about 36 percent of nonparticipants). Nearly one quarter reported that they did not know about TAA or how to apply for TAA services in spite of requirements for Rapid Response for all certified

dislocations and a requirement that states notify each potentially eligible worker in writing. Nonparticipants may have forgotten that they received this information, the initial survey interview was an average of 29 months after the UI claim, or they may not have understood the information provided.

A. Participation in TAA

The research design for this study enables us to define a nationally representative sample of TAA eligibles—that is, those who experienced job separation and were covered under a certified worker list. Starting from this base, we are able to calculate the percentage of eligibles who access TAA services.

1. Who Counts as a TAA Participant?

We received TAPR data from the participating states,[7] and intended to classify eligibles as TAA participants if they appeared in these files. A complication, though, is that not all states have applied a consistent definition of what it means to be a TAA participant for purposes of preparing their TAPRs. ETA's guidance has been consistent and clear that a participant record should be opened "for all individuals who receive services or benefits financially assisted by" the TAA program.[8] However, the U.S. Government Accountability Office (GAO) and our own investigations have determined that not all states rigorously follow ETA's guidance (U.S. GAO 2006). A particular problem, discussed more fully in Chapter V of the MN report, is that only about half of the states nationwide include in their TAPRs data on individuals who receive waivers but no other TAA services, since they have not considered those who receive only waivers to be TAA participants.[9]

Exacerbating the problem caused by inconsistent reporting in TAPR has been the explosion in the use of waivers in the wake of the enactment of the Trade Act of 2002, at least in some states. This dramatic increase is the result of two primary factors. First, states became more apt to issue waivers to protect workers' eligibility for TRA in the face of the Trade Act's 8/16 deadlines for receipt of training. As noted in Chapter I, to be eligible for TRA, a worker must enter training by the latter of 8 weeks after the petition is certified or 16 weeks after the separation date, unless he or she receives a waiver for the training requirement before that deadline. Some states' TAA

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[7] The TAPR is the client-level reporting system used in the TAA program. As discussed in the MN report, we requested that states send us TAPR data for anyone who participated in TAA between April 2004 (the earliest date that persons in the sample could have been eligible to participate in TAA given the petitions' impact dates) and June 2010.

[8] This language can be found in the instructions for the TAPR at least since 2005.

[9] In 2006, after this fact came to light, ETA issued explicit instructions for the TAPR that made clear that waiver receipt was to be considered a TAA service, and, hence, individuals who received a waiver should be included in the TAPR submissions. States' practices appear to have changed gradually after this guidance was released, but it is still unclear whether compliance is complete.

administrators feel that the 8/16 deadlines are too aggressive, given the time it takes the state to obtain certified worker lists from employers, notify workers of their eligibility, schedule intake appointments, and help workers make prudent training choices (D'Amico et al. 2009). Consequently, they routinely issue waivers to give workers more time for training enrollment.

Second, ETA issued guidance that states could reasonably issue waivers to demonstrate workers' eligibility for HCTC. To be eligible for HCTC, trade-affected workers must be covered by certified petitions and either be receiving TRA or be deemed as eligible to receive TRA once they have exhausted UI. If a worker is still on UI, the state's determination that he or she would otherwise be TRA eligible must include determining that the worker is expected to be in training by the 8/16 deadlines or will receive a waiver before then. To simplify the calculus for this decision, ETA suggested that it would generally be appropriate for states to issue marketable-skills waivers to workers who were still on UI and in advance of the 8/16 deadlines, even for those who had not yet decided to enroll in training. Doing so would provide tangible evidence of HCTC eligibility and, meanwhile, would give workers a chance to test the labor market before the need for training was definitively determined.[10] In the face of these considerations, some states began to issue waivers to everyone—or nearly everyone—eligible for TAA who attended Rapid Response events or other TAA orientation sessions, even to those who had not expressed an intention of seeking HCTC or any other TAA service.

Combined with the fact that waivers are inconsistently recorded in the TAPR, this increase in waiver use means that in some states 50 percent or more of all TAA participants included in the TAPRs are those who received only a waiver, while in other states there are none (see the MN report for details). This dramatic variation is clearly a problem for the evaluation. To begin with, using inclusion in the TAPR as evidence that someone is a TAA participant would mean that impact estimates would be weighted towards states that include waiver-only participants in their TAPRs, even though other states might be delivering equivalent services to similar numbers of people. Moreover, counting waiver-only recipients would mean that, at least in states that issued waivers on a widespread basis to protect HCTC eligibility, some persons—and perhaps many persons—would be counted as TAA participants who received effectively nothing beyond One-Stop core services.

Thus, for purposes of estimating program impacts in this report, we define TAA participation more narrowly, to be those who received a *significant* TAA service, including one or more of:

- TAA-funded training;
- TRA;

[10] This guidance was issued as TEGL 11-02 Change 1, in 2003. The research team reported that, as an unintended consequence of ETA's guidance, the use of waivers had skyrocketed, causing states substantial administrative burden (see D'Amico et al. 2009). In response to this problem, ETA rescinded its earlier guidance in TEGL 11-02 Change 3, issued in 2006.

- ATAA;
- HCTC; or
- any of the various allowances that the program makes available to cover special circumstances (that is, a job search allowance, a subsistence or travel allowance for those in training, or a relocation allowance).

Evidence of receipt of these services comes from two main sources: administrative data and survey data. Administrative data is itself of two types. Our primary source is the TAPR data that states provided, because this should cover everyone who was served in TAA during the eligibility period covered by the certified petitions that make up the sampling frame. Because states are asked to record in the TAPR anyone who receives any of the above listed services (with the exception of HCTC; see below), the TAPR should in principle enable us to accurately identify all TAA participants as the term is defined in this report.

We discovered, however, that under the less restrictive TAPR requirements of the 2002 Amendments, some individuals who are shown as having received TRA in the UI/TRA claimant files we received are in fact not included in the states' TAPR submissions (see Chapter V of the MN report). Therefore, to supplement the TAPR as an administrative data source, we use evidence of TRA receipt from the UI/TRA claimant files. We add these additional TAA participants to those from the TAPRs.

Thus, using administrative data, persons are classified as TAA participants if they are listed as having received any of the following: (a) training, ATAA, or job search, travel, subsistence or relocation allowances, recorded in the TAPRs, or (b) TRA, recorded in either the TAPR or the UI/TRA claimant files.[11] Note that, based on this operational definition, HCTC receipt does not cause someone to be classified as a TAA participant if the individual did not also receive one of the services listed above. This is because evidence that an individual received the tax credit is not a reportable TAA activity; hence, is not recorded in the TAPR or in any other report that state workforce agencies need to submit.

Survey data provide another source for learning about TAA participation. The baseline survey was administered to a representative sample of TAA eligibles (that is, those covered by certified petitions) to learn about the TAA services they received. Questions specifically focused on receipt of TRA, TAA-funded training, ATAA, HCTC, job search allowances, relocation allowances, and travel and subsistence allowances for those in training. Using the survey data, we could classify an individual as a TAA participant even if the only TAA service was the receipt of HCTC.

[11] In keeping with the sample frame as defined in Chapter I, these individuals would also each need to be covered by a petition certified for TAA between November 2005 and October 2006, appear on a certified worker list that a state provided us, and have received a UI payment.

Therefore, nonparticipants for our analysis are defined as workers on the certified worker lists who did not receive any significant TAA program service. These workers include those who received a waiver from the TAA training requirement but no other reported TAA service. The majority of our sample (83 percent) did not appear in the TAPR.

Table II-1 reports the TAA participation rates calculated from each of these data sources and shows that the two rates match quite closely. Using administrative data, we find that 50.2 percent of those who are eligible do participate in TAA, while the rate using survey data is 51.1 percent, a difference of just .9 percentage points.[12]

Because HCTC receipt is not captured through administrative data, a fairer comparison of the degree of correspondence would exclude HCTC from the survey's measurement of TAA participation. Doing so yields an estimated participation rate of 50.2 percent, exactly the figure we get using administrative data.[13]

Table II-1: TAA Participation Rates, as Measured by Administrative and Survey Data

	Measured by Administrative Data	Measured by Survey Data
Eligibles who Participated in TAA	50.2	51.1
Excluding HCTC	--	50.2
Sample Size	19,389	2,744

Source: Administrative data and baseline survey data.

Note: Sample weights were applied to account for sample design effects, and, for the survey sample, for survey nonresponse.

The very close correspondence in participation rates calculated from these two data sources suggests their equivalence for purposes of identifying TAA participants. However, the administrative data offer much larger sample sizes, and therefore can be used to estimate subgroup differences in participation rates more reliably. Because of this advantage, the administrative data

[12] The rate of participation estimated from the survey data and reported here is slightly higher than the 50.3 percent participation rate reported in the evaluation's companion paper by Dolfin and Berk (2010). Dolfin and Berk excluded those who received only travel and subsistence allowances from their calculations

[13] Even eliminating HCTC from the survey's finding, the comparison is still not exact, because the survey was administered between March 2008 and April 2009, while the administrative data covers TAA participation up through June 2010. Some eligibles who had not participated in TAA by the time of the baseline survey might have participated after that date. Hence, they would be included in the findings from the administrative data, but not from the survey data. Restricting the administrative data to those who participated by December 2008 yields a participation rate of 49.7 percent.

are used to estimate state and demographic group differences in participation rates. These are reported in the subsequent sections.

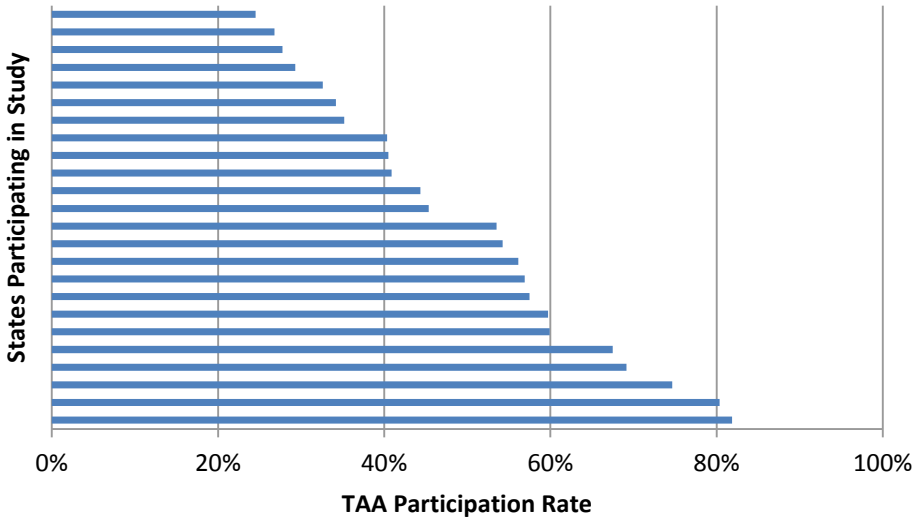
2. State Differences in TAA Participation Rates

Once a petition is certified, states obtain lists of affected workers and their contact information from employers. They then send letters inviting these workers to attend TAA orientation sessions or intake appointments. As noted elsewhere, state officials report that employers are generally cooperative in supplying the lists, and the names appear to constitute a good accounting of all eligible workers (D'Amico et al. 2009). Further, states appear to uniformly practice due diligence in notifying workers whose names appear on the lists.

However, some states appear more aggressive in their outreach efforts than others and make it easier for workers to access services (D'Amico et al. 2011; Salzman 2011). For example, in some states, workers who have not responded to initial mailings are sent reminder letters or are telephoned and invited in for services. Similarly, some states are more diligent in their efforts to reach non-English speakers, for example by translating letters into Spanish or other languages, if they have reason to believe that substantial numbers of workers covered by a given petition have limited English-language proficiency.

Whether as a consequence of these aggressive outreach efforts or for other reasons (e.g., the economic climate in some states allows workers to find reemployment without needing TAA services), some states record substantially greater take-up rates among eligibles than others. As Exhibit II-1 shows, in some states only about 30 percent of eligibles participate in TAA, while in

Exhibit II-1: Participation Rate in TAA Among Eligibles, by State



Source: Administrative data.

Note: Sample weights were applied to account for sample design effects. Each horizontal bar represents one state's TAA participation rate, calculated from among the state's eligibles. States are unnamed to protect their confidentiality.

others more than 80 percent participate. As a result, the state distribution of TAA nonparticipants, whose impacts are the focus of this report, looks considerably different from the state distribution of all eligibles and of TAA-eligible participants.

3. Demographic Differences in TAA Participation

There are also pronounced differences in TAA participation rates by demographic attributes of eligibles (see Table 5 in Dolfin and Berk 2010). For example, eligibles who are female are much more likely to participate in TAA than are those who are male. Eligible African-Americans participate at a considerably higher rate than do other groups, while Hispanics have the lowest participation among the racial/ethnic groups examined. TAA participation rates increase steadily with age. Eligibles with a college degree are significantly less likely to participate than eligibles with less education.

The geographical differences in TAA participation rates, coupled with the demographic differences in participation rates, mean that TAA nonparticipants have a considerably different demographic profile than participants (see Table 6 in Dolfin and Berk 2010). While a majority of TAA participants are female, only 40 percent of nonparticipants are female. Nonparticipants are also younger and more educated than participants. Nonparticipants are less likely to be Black and more likely to be Hispanic. These characteristics are relevant to our interpretation and understanding of the overall impacts of TAA on nonparticipants.

B. Reasons for Not Applying for TAA

Through the study's baseline survey, nonparticipants were asked why they did not apply for TAA services. A summary of results, shown in Table II-2, illustrates the most commonly cited reason that TAA nonparticipants did not apply for services was that they found another job. More than one third of nonparticipants reported that they did not apply because they had found a new job (36 percent); other nonparticipants reported that they had been recalled (3 percent) or expected to be recalled (2 percent) to their previous employer. As discussed further below, about 35 percent of nonparticipants were employed during the first quarter after their UI claim date, so a sizeable fraction of nonparticipants became reemployed quickly.

Lack of information about the TAA program was another common reason for not applying. Some eligible workers reported that they did not know about TAA (14 percent), did not know how to apply (12 percent), thought the rules were too complicated (3 percent), or did not think they would be eligible (10 percent). A small share of TAA nonparticipants did not apply because they were not interested in training (10 percent).

A companion paper prepared as part of this evaluation reports that, with age, workers' reasons for nonparticipation change (Dolfin and Berk 2010). Younger workers were more likely to report that finding a job was the reason for nonparticipation, while older nonparticipants had less knowledge of the program or thought they were too old to participate.

Table II-2: Reasons Cited by Nonparticipants for Not Applying for TAA Services

	Percent Citing This Reason
Got a Job	36.1
Didn't Know About TAA	13.7
Didn't Know How to Apply for TAA Services	11.5
Wasn't Interested in Training	10.4
Didn't Think Would be Eligible	9.8
Didn't Think I Would Benefit	6.0
Recalled to Work by Former Employer	3.3
Too Old/Retirement	3.1
Rules Too Complicated	2.7
Health	2.1
Expected to be Recalled by Former Employer	1.9
Other	5.2
Don't Know	1.8

Source: TAA Baseline Survey.

Note: Sample weights were applied to account for sample design effects, and, for the survey sample, for survey nonresponse. Respondents could cite more than one reason, so the percentages sum to more than 100 percent.

III. IMPACTS ON REEMPLOYMENT SERVICES AND EDUCATION AND TRAINING

The Trade Act of 2002 and ETA's accompanying guidance (see especially TEGL 11-02) emphasize that trade-affected workers should be provided access to early intervention and reemployment services, as well as to a broad array of One-Stop core and intensive services, even before a petition certification decision has been made. Since these early intervention services occur before an individual officially enrolls in TAA, we might expect that the early intervention services would increase the receipt of reemployment services for TAA-eligible nonparticipants. To a lesser extent, these early intervention services might also connect TAA nonparticipants with education and training programs, and thus, might increase their receipt of non-TAA funded education and training services.

At the same time, comparison group workers were drawn from the same local areas as the TAA nonparticipants and were therefore likely to have been in similar proximity to One-Stop Career Centers as TAA nonparticipants. Thus, an important evaluation objective was to measure these "counterfactual" services received by the comparisons, because they represent the services that participants would have received in the absence of the TAA program. We would expect that the comparison workers would have access to many of the same services as the TAA nonparticipants, including possibly Rapid Response. The TAA Implementation Study found Rapid Response activities were, as required, a part of states' processes for responding to major dislocations whether or not trade had been identified or was suspected as a contributing cause (D'Amico et al. 2009).

This chapter describes the experiences of TAA nonparticipants and comparisons in accessing reemployment services and education and training, as well as the impact of TAA on the receipt of these services. Specifically, it addresses the following key research questions:

- Did the early intervention services provided to all TAA eligible workers increase the receipt of reemployment services by TAA nonparticipants?
- Did TAA eligibility increase access to WIA program services for TAA nonparticipants?
- Did the early intervention services provided to all TAA eligible workers increase the receipt of education and training by TAA nonparticipants?

For the most part, we examined these questions using data from the baseline survey. We looked at services focused on helping individuals find employment quickly as well as those with the broader goals of assisting individuals in longer-term career planning. We supplemented this analysis by using administrative data for TAA nonparticipants and their comparison group counterparts in order to examine rates of enrollment in WIA.

We found that approximately two thirds of those in the comparison group accessed reemployment services since their job losses, suggesting widespread accessibility of these services to the unemployed. Nonetheless, TAA still increased service receipt—74 percent of TAA nonparticipants received at least one reemployment service, while 66 percent of comparison group members reported doing so, a statistically significant gain of 8 percentage points.

Consistent with these results, according to the survey data, we found that TAA increased nonparticipants' access to reemployment services designed to help workers with longer-term career planning. TAA nonparticipants were significantly more likely to receive labor market information about local in-demand occupations and complete assessments to see what jobs they were particularly qualified or suited for. Nonparticipants were also more likely to receive information on education or job training programs as well as information on how to change careers. There was no significant difference in the receipt of services designed to help workers find jobs immediately including job search assistance, resume assistance, or job referrals. Overwhelmingly, the One-Stop Career Center system was the primary source that TAA nonparticipants and their comparisons used to access these services. One half of the TAA nonparticipants and comparisons who received reemployment services reported that these services were helpful in finding a job or suitable education or training programs.

While nonparticipants were more likely to receive information on education and training programs, the early interventions services of the TAA program did not increase the receipt of non-TAA funded education and training for eligible nonparticipants. Eighteen percent of nonparticipants and comparisons received education or training in the first two years following the job loss.

In detailing these findings, we begin by describing results from the baseline survey on the receipt of reemployment services for each research group. We then turn to the administrative data to estimate the impact of TAA on enrollment in WIA, and, finally, use the baseline survey to estimate the impact of the TAA program on the receipt of education and training by eligible nonparticipants.

A. Impacts on Receipt of Reemployment Services

As previously noted, the Trade Act of 2002 requires that trade-affected workers be given access to One-Stop core and intensive services, and further mandates that Rapid Response assistance be provided whenever petitions are filed, regardless of whether they are yet certified. This section compares the reemployment services accessed by TAA nonparticipants with those accessed by comparisons and reports the impacts of TAA on service receipt. It also describes where workers typically accessed reemployment services, and how helpful they perceived them to be.

1. Reemployment Services Received

As Table III-1 shows, 66 percent of comparisons received any of the reemployment services covered in the survey, while the comparable figure among TAA nonparticipants is 74 percent, an 8 percentage point increase.

Each of the nine reemployment services considered here has the goal of enhancing workers' careers. However, they can be divided into two categories: those that provide information or guidance focused on immediate job finding, and those that facilitate longer-term career planning. TAA substantially increased nonparticipants' access to some of the services focused on immediate job placement and most of the services focused on career planning.

With specific regard to job-focused guidance and informational services, about 47 percent of TAA nonparticipants and comparison workers received assistance in searching for work, the most

common reemployment service they reported receiving (Table III-1). The TAA program had no significant impact on the receipt of job search assistance, job referrals, or resume help. Eligible nonparticipants, however, were significantly more likely to receive labor market information about local in-demand occupations and assessments to determine appropriate careers, impacts of 9 and 8 percentage points, respectively. As discussed further below, these impacts are considerably smaller than the corresponding impacts for the TAA participants.

Table III-1: Impacts on Reemployment Services (Survey Data)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Percent who Received Any Reemployment Services	73.5	65.9	7.6***	2.7
Job-Focused Reemployment Services				
Assistance searching for work	48.6	43.7	5.0	3.1
Labor market information about occupations in demand in local area	40.8	31.8	9.0***	3.0
Referrals to jobs or employers	35.8	34.8	0.9	3.3
Help with resume	38.8	37.9	0.8	3.2
Tests to see what jobs qualified/suited for	30.9	23.3	7.7**	3.0
Career-Focused Reemployment Services				
Information on education or job training programs	52.5	45.8	6.7**	3.0
Information on how to change careers	42.1	35.4	6.6**	3.1
Counseling on whether training is appropriate	14.2	11.8	2.4	1.8
Counseling to select a training provider	12.4	7.5	4.9***	1.6
Average number of meetings with a counselor about training[a]	3.3	6.3	-2.9***	1.0

Source: Mathematica TAA Baseline Survey.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

[a]This is a conditional outcome, with the tabulation restricted to survey respondents who reported having received counseling to determine whether training was appropriate or which training provider to choose. Therefore, difference between outcomes for TAA nonparticipants and the comparison group is not an impact.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

TAA's impacts on career-focused reemployment services were significant (Table III-1). For example, 46 percent of comparisons received information on education or job training programs, but 53 percent of TAA nonparticipants did so, a significant impact of 7 percentage points. TAA had an equally large impact on receipt of information on how to change careers. Fewer than 15 percent of nonparticipants or comparisons received counseling on whether training was appropriate or how to select a training provider, but the TAA program did significantly increase counseling on appropriate training providers. Workers who reported receiving counseling about training choices were also asked how many meetings they had with their counselors. TAA nonparticipants reported an average of 3 meetings while comparisons reported an average of 6 meetings, a significant reduction of 3 counselor meetings.

Overall, these results indicate that the early intervention services of the TAA program had moderately sized and statistically significant impacts on the receipt of reemployment services by TAA eligible nonparticipants. As context, it is useful to consider the reemployment services received by TAA participants. While 74 percent of nonparticipants received a reemployment service, almost all TAA participants reported a reemployment service (94 percent, Schochet et al. 2012). The difference in the service receipt of TAA participants and their comparisons (17 percentage points) was much larger than the difference in the service receipt of TAA nonparticipants and their comparisons (8 percentage points). These results are consistent with our expectation that comparison workers had access to similar services to those received by TAA nonparticipants.

2. Source of Services

Because the Trade Act of 2002 mandates that workers covered by petitions be provided with access to One-Stop core and intensive services, it is not surprising that the reemployment services just described were overwhelmingly accessed by TAA nonparticipants through the One-Stop system (Table III-2). Of those TAA nonparticipants who accessed reemployment services, 72 percent did so primarily at state unemployment or employment offices or at One-Stop Career Centers. However, among comparisons who accessed reemployment services, the percentage was nearly as large, at 71 percent. There is therefore no significant difference between the two groups in this regard and it seems clear that the One-Stop system serves as the main intake point for reemployment services for both TAA nonparticipants and comparisons. The second most common source of reemployment services was the employer with 13 percent of TAA nonparticipants and 12 percent of comparisons reporting the employer as the primary location. Services provided at the employers' locations are often offered by One-Stop Career Center staff.

Table III-2: Differences in Locations Where the Majority of Reemployment Services Were Received (Survey Data)

	TAA Nonparticipants	Comparison Group	Difference	Standard Error
Location where Most Reemployment Services Were Received (Percent)				
State unemployment or employment office or One-Stop Career Center[a]	71.9	71.3	0.6	2.5
School, training provider, college, or university[a]	1.6	1.6	0.0	0.0
Employer[a]	12.9	11.5	1.3	2.1
Another government agency[a]	3.1	2.1	0.9***	0.3
Internet[a]	5.5	4.8	0.7	1.4
Placement agency[a]	2.0	5.3	-3.3**	1.4
Other[a]	2.6	2.7	-0.1	0.1
Don't know[a]	0.6	0.5	0.0	0.0

Source: Mathematica TAA Baseline Survey.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

[a]This is a conditional outcome, with the tabulation restricted to those who accessed a reemployment service. Therefore, differences between outcomes for TAA nonparticipants and those for the comparison group are not impacts.

*/**/*** Effect of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

†/††/††† Effect of TAA on distribution of categories is statistically significant at the 0.10/0.05/0.01 level.

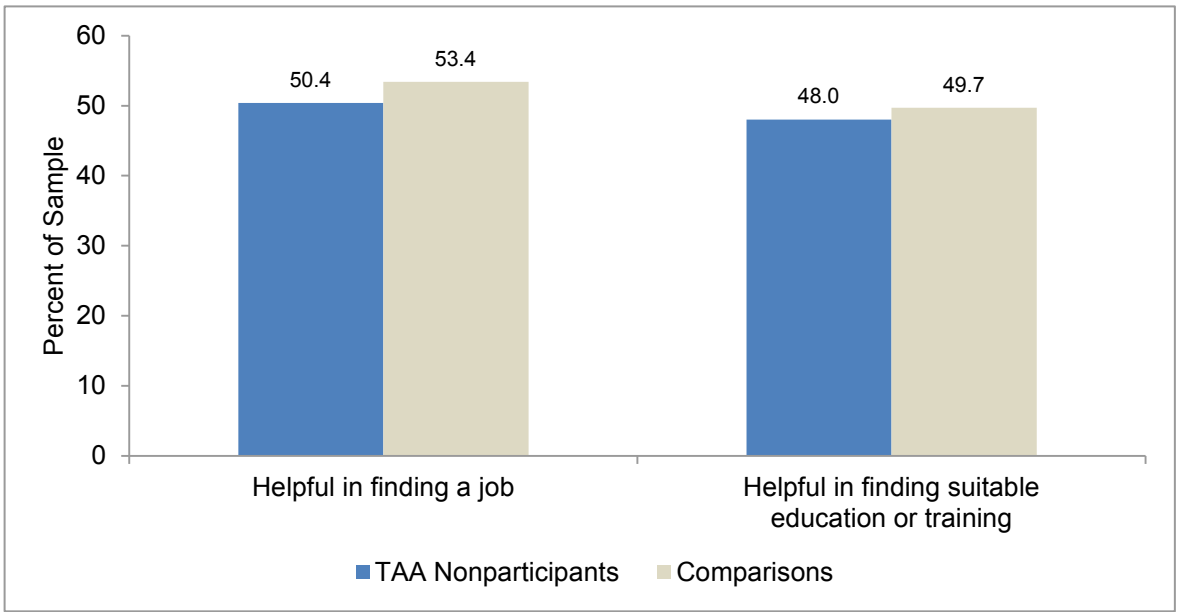
3. Satisfaction with Reemployment Services

Although TAA nonparticipants and comparisons primarily received reemployment services from the same sources (Table III-2), nonparticipants typically received a wider array of services than comparisons (Table III-1). This difference may give rise to varied assessments across the two groups of how useful the services were perceived to be.

Exhibit III-1 shows the percentage of TAA nonparticipants and comparisons who reported that the services they received were helpful to them in finding jobs or suitable education or training programs. Approximately one half of the nonparticipants and comparisons who received reemployment services found that these services were very or moderately helpful in finding a job or

suitable training program. The very small treatment-comparison differences are not statistically significant.

Exhibit III-1: Differences in Perceptions of Helpfulness of Reemployment Services[a]



Source: Mathematica TAA Baseline Survey.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

[a] This is a conditional outcome, with the tabulation restricted to those who accessed a reemployment service. Therefore, differences between outcomes for TAA nonparticipants and the comparison group are not estimates of net impacts.

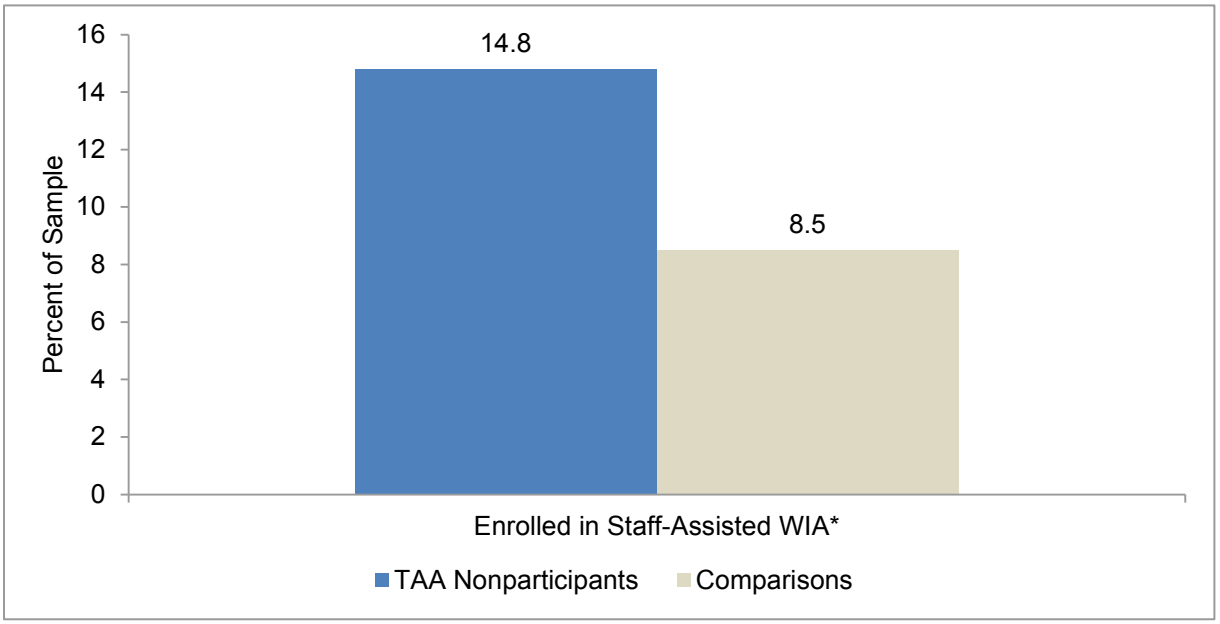
* Effect of TAA is significantly different from zero at the 0.05 level, two-tailed test.

B. Impacts on WIA Enrollment

The early intervention services and the emphasis on connections with the One-Stop Career Centers may have increased the enrollment in WIA for TAA nonparticipants. Comparison group members would have also been eligible for WIA services and some might have received reemployment services, or even training services, from this source.

Based on WIASRD data, Exhibit III-2 shows TAA's impacts on enrollment in WIA. This tabulation treats a sample member as enrolled in WIA only if he or she appeared in the WIASRD files provided by the states, had a WIA participation date after or no more than 90 days before the UI trigger claim date, and (for reasons discussed in Chapter V of the MN report) was listed as having received a staff-assisted WIA service (as opposed to merely WIA self-services).

Exhibit III-2: Impacts on WIA Enrollment (Administrative Data)



Source: TAA Baseline Survey and Administrative data.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

* Impact of TAA is significantly different from zero at the 0.05 level, two-tailed test.

TAA increased the likelihood of WIA enrollment—9 percent of comparison-group members were enrolled in WIA, compared with 15 percent of TAA nonparticipants, for an impact of 6 percentage points (Exhibit III-2). It is worth drawing attention to the seeming disconnect between the high proportions of TAA nonparticipants and comparisons who received reemployment services from the One-Stop system and the much smaller numbers enrolled in WIA. For example, we saw from Table III-1 that 66 percent of comparison group members received reemployment services and, of that group, 71 percent received their services through the One-Stop system (Table III-2). Yet only 9 percent of comparisons were enrolled in WIA staff-assisted services. By implication, substantial numbers were accessing only One-Stop self-services or informational services, and were doing so perhaps as part of their registration for UI. Although there has been some concern that the remote filing of UI through call centers divorces workers from the One-Stop reemployment services they may need (USGAO 2005), this evidence suggests that the use of these services—at least self-services and information services—is widespread among the workers in our sample.

C. Impacts on Education and Training

This section compares TAA nonparticipants' and matched comparisons' participation in non-TAA funded education and training programs during the 8 quarters after their UI claims. Given the generous training benefits available through the TAA program, TAA eligible workers interested in long-term training would likely have enrolled in the TAA program. We found that 66 percent of TAA participants enrolled in education or training in the four years following job loss (Schochet et al. 2012). Since nonparticipants chose not to receive significant TAA services, we would expect less

interest and participation in training. Two of the most common reasons that nonparticipants provided for not applying for TAA services were finding a job and not being interested in training. This suggests that this group might actually have lower levels of participation in education and training (see Table II-2).

On the other hand, the early intervention services available through TAA may have connected nonparticipants with relatively short-term or inexpensive education or training programs that did not require enrollment in the TAA program. If these connections occurred, the TAA program may have increased the receipt of education and training for nonparticipants.

Overall, we found that the TAA program had no impact on the receipt of education and training for TAA nonparticipants. During the 8-quarter follow-up period, 18 percent of TAA nonparticipants and 18 percent of comparisons enrolled in training (Table III-3).

Table III-3: Impacts on Receipt of Education and Training (Survey Data)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Percentage Ever Trained	18.0	18.1	-0.1	2.3
Percent In Training				
Quarter 1	7.4	9.3	-1.9	1.8
Quarter 2	8.3	12.6	-4.4**	1.8
Quarter 3	6.8	8.1	-1.4	1.4
Quarter 4	6.9	8.9	-2.0	1.6
Quarter 5	6.2	7.7	-1.6	1.4
Quarter 6	6.4	6.4	0.0	1.2
Quarter 7	5.2	4.5	0.8	1.2
Quarter 8	3.7	4.6	-0.9	0.8
Sample Size	691	1,352		

Source: Mathematica TAA Baseline Survey.

Notes: The outcome for all rows is receipt of any reemployment service, as measured by the surveys. Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

In the first year after job loss, the matched comparisons received an average of 46 hours of training and TAA nonparticipants received an average of 48 hours (Table III-4). Thus, on average, both groups received a little more than one week of full-time training. Receipt of training declined in year 2 with an average of 28 hours for matched comparisons and 35 hours for nonparticipants. During the first two years following the job loss, comparisons received an average of seven weeks of education or training. During this same period, the average TAA nonparticipant spent 5 weeks in training. Thus, increased access to early intervention TAA services had no impact on the receipt of education and training by program nonparticipants.

Table III-4: Impacts on Time Spent in Education and Training (Survey Data)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Hours in Training				
Quarters 1 – 4	48.3	46.2	2.1	13.0
Quarters 5 – 8	34.6	28.0	6.6	9.9
Total Weeks in Training	5.3	6.8	-1.5	1.5
Sample Size	691	1,352		

Source: Mathematica TAA Baseline Survey.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

IV. IMPACTS ON EMPLOYMENT, EARNINGS, AND UI BENEFITS

Chapter III showed that, for nonparticipants—defined as those who do not receive a significant TAA service but possibly light-touch TAA services only—eligibility for TAA leads to moderate impacts on the receipt of reemployment services but no impact on time spent in education and training programs. The additional reemployment services received by TAA nonparticipants could increase nonparticipants' employability, as measured by increases in their labor force participation and earnings, although given the relatively small service impacts we would not expect large impacts on labor market outcomes.

This chapter compares the overall employment and earnings experiences of nonparticipants and comparisons in the two to three years after job loss, and addresses the following research questions:

- To what extent did TAA affect the employment and earnings of program eligible nonparticipants?
- Did key impact results differ if one estimates them using administrative rather than survey data or using different samples?
- Did eligibility for TAA affect the receipt of Unemployment Insurance (UI) benefits?

These questions were primarily addressed using the certified worker survey sample and the baseline interview data. In the sensitivity analysis, however, we also estimated earnings impacts using UI wage records and the certified worker administrative records samples.

We found that the labor market outcomes for TAA nonparticipants were very similar to the outcomes of comparison workers who were not eligible for TAA. During the first two years after the job loss, there were no significant differences in weeks of employment or annual earnings. We conducted sensitivity tests and found the employment and earnings impact estimates to be robust to alternative data sources and analysis samples.

The rest of this chapter provides details on these findings. The first section presents impact estimates on employment and earnings for TAA nonparticipants. In the second section, we test the sensitivity of the employment and earnings impacts. In the third section, we assess whether there was any impact of TAA eligibility on the receipt of UI benefits.

A. Impacts on Employment and Earnings

This section compares the overall employment and earnings experiences of TAA nonparticipants and matched comparisons in the baseline survey sample during the 8 quarters after job loss. We examine impacts by quarter and year after job loss.

The unemployed workers in the comparison group returned to work fairly soon after they were laid off from their trigger jobs. More than one third of comparisons were employed by the end of the first quarter, and 63 percent were employed in the fourth quarter (Table IV-1). On average, comparison workers were employed for 24 weeks during the first follow-up year. After quarter 4,

the employment rates for these workers continued to climb. Eight quarters after job loss, 73 percent of the comparison workers were employed.

The return to employment was very similar for TAA nonparticipants (Table IV-1). More than one third of TAA nonparticipants were employed in the first quarter following the job loss, and by quarter 8, the employment rate of TAA nonparticipants had reached 74 percent. During the first two years after job loss, the TAA program had no impact on the employment rate of eligible nonparticipants or on the weeks of employment.

As might be expected, the reemployment patterns of TAA nonparticipants looked very different than the reemployment patterns for TAA participants. Eight quarters after job loss, only 46 percent of TAA participants were employed, while 33 percent were still enrolled in education or training (Schochet et al. 2012). Thus, although the overall rate of productive activity (training or employment) was very similar for TAA participants and nonparticipants, the type of productive activity was quite different.

Table IV-1: Impacts on Employment (Survey Data)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Percent Employed				
Quarter 1	35.2	33.7	1.5	2.9
Quarter 2	52.0	49.5	2.5	3.2
Quarter 3	60.8	58.0	2.9	3.3
Quarter 4	65.3	62.9	2.4	3.2
Quarter 5	70.3	69.5	0.9	3.2
Quarter 6	72.1	73.3	-1.2	3.1
Quarter 7	74.2	75.5	-1.3	3.0
Quarter 8	73.5	73.4	0.0	3.0
Weeks of Employment				
Quarters 1 – 4	24.9	23.6	1.3	1.3
Quarters 5 – 8	36.8	35.2	1.7	1.6
Sample Size	670	1,286		

Source: Mathematica TAA Baseline Survey.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

Not surprisingly, we found a similar pattern of program impacts for earnings as for employment: there were no significant differences in the quarterly earnings of nonparticipants and comparison workers (Table IV-2). Average earnings in the first quarter following job loss were approximately $2,000 for both nonparticipants and comparison workers. By quarter 8, average earnings for both groups had more than doubled with average earnings exceeding $5,000 per quarter. In quarter 8, nonparticipants earned $437 more than the average comparison, but this difference is not significant.

Table IV-2: Impacts on Earnings (Survey Data)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Quarterly Earnings (2006$)				
Quarter 1	1,995	2,081	-85	217
Quarter 2	3,727	3,659	68	283
Quarter 3	4,620	4,390	229	292
Quarter 4	5,121	4,919	202	311
Quarter 5	5,461	5,229	232	316
Quarter 6	5,467	5,567	-100	318
Quarter 7	5,484	5,566	-82	320
Quarter 8	5,536	5,100	437	311
Annual Earnings (2006$)				
Quarters 1 – 4	15,235	14,856	379	915
Quarters 5 – 8	20,332	19,892	439	1,174
Sample Size	670	1,286		

Source: Mathematica TAA Baseline Survey.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

The results suggest that while TAA nonparticipants receive additional reemployment services, the receipt of these services do not appear to alter their labor market trajectories. TAA nonparticipants and their comparisons returned to the labor market at the same rate and their average earnings were very similar.

B. Sensitivity of Employment and Earnings Impacts

Using survey data, we were able to closely match TAA nonparticipants to comparisons on a very rich set of survey characteristics that are usually unavailable in quasi-experimental evaluations of

employment and training programs, which typically rely on administrative data only. Even with our rich survey data, however, there is always the remaining concern that unobservable differences exist between the nonparticipants and comparisons that could bias the estimated impacts. Such unobserved factors could include treatment-comparison differences in their skills, marketability, support systems, and motivation to become reemployed, as well as differences in available employment opportunities in their local labor markets.

While it is impossible to prove definitively that our impact estimates are free of selection biases, we conducted a series of sensitivity tests to examine the robustness of the main impact findings described above. For these tests, we estimated impacts using UI wage records rather than survey data as the source of earnings information, and also drew from a variety of survey and administrative records samples.

Across all permutations, the same story emerged: there were no significant differences in the labor market experiences of TAA-eligible nonparticipants and similar workers who were not eligible for TAA.

1. Using UI Wage Records

For the earnings impacts presented above, we measured employment and earnings outcomes using survey data. As discussed in Chapter I, we also collected administrative UI wage records for the survey sample and the certified worker administrative sample for both TAA participants and nonparticipants and their respective matched comparison samples. Each data source has its advantages and disadvantages. The survey data cover earnings from all formal and informal jobs, but could suffer from misreporting and survey nonresponse. The UI wage records data are available for all sample members and do not suffer from survey misreporting, but also do not reflect all types of earnings (for example, self-employment earnings), and do not cover earnings for sample members who were employed in different states than those of their initial UI claims. One advantage of the UI records is that we are able to examine impacts for 12 quarters post job loss instead of the 8 quarter follow-up period covered in the baseline survey.

Previous studies have documented some earnings differences using survey and UI wage records (Kornfeld and Bloom 1999; Schochet, Burghardt, and McConnell 2008). Consequently, as a sensitivity analysis, it is important to document, using the survey sample, whether we find consistent impacts using the two data sources. This is especially important because the UI wage records provide the only source of earnings data for the administrative records samples.

The pattern of employment and earnings impacts using the UI wage records mirrors the pattern of impacts using the survey data (Table IV-3 and Table IV-4). For example, in quarter 8 (the most recent period covered by both data sources), the estimated impact on the employment rate was -1 percentage points according to the UI wage records and 0 percentage points according to the survey data (neither were statistically significant). Similarly, the quarter 8 earnings impact was -$109 using the UI data and $437 using the survey data.

The pattern evident in the first 8 quarters of follow-up available in the survey continues in the next 4 quarters available in the administrative data. There were no significant differences in the employment rates or earnings of TAA nonparticipants and comparisons in quarters 9 through 12.

Table IV-3: Impacts on Employment (UI Wage Records)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Percent Employed				
Quarter 1	66.6	62.4	4.3	3.2
Quarter 2	66.8	65.7	1.1	2.8
Quarter 3	73.6	70.4	3.2	2.6
Quarter 4	74.3	71.4	2.9	2.6
Quarter 5	72.2	72.0	0.1	2.7
Quarter 6	71.2	71.1	0.1	3.0
Quarter 7	71.8	72.9	-1.1	3.0
Quarter 8	71.9	70.9	1.0	2.6
Quarter 9	71.1	71.8	-0.7	2.5
Quarter 10	71.7	74.6	-2.9	3.0
Quarter 11	70.9	70.1	0.8	3.1
Quarter 12	68.6	69.7	-1.0	3.6
Sample Size	652	1,263		

Source: Mathematica Baseline Survey and UI Wage Records.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

Table IV-4: Impacts on Earnings (UI Wage Records)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Quarterly Earnings (2006$)				
Quarter 1	4,649	4,069	580	515
Quarter 2	5,396	4,117	1,279***	490
Quarter 3	4,927	5,667	-740	664
Quarter 4	5,519	5,260	258	392
Quarter 5	6,400	5,301	1,100*	667
Quarter 6	5,422	5,043	378	326
Quarter 7	5,335	5,002	333	318
Quarter 8	5,325	4,955	370	310
Quarter 9	5,186	5,001	186	297
Quarter 10	5,305	5,177	129	368
Quarter 11	4,953	4,740	213	367
Quarter 12	4,839	4,948	-109	370
Sample Size	652	1,263		

Source: Mathematica Baseline Survey and UI Wage Records.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

2. Alternative Definition of Nonparticipant

As an additional sensitivity analysis, we estimated labor market impacts using an alternative definition of a TAA nonparticipant. As described in Chapter I, we defined a TAA nonparticipant as

a TAA certified worker who did not receive any significant program service, including TAA-supported training, Trade Readjustment Allowances (TRA), Alternative TAA for Older Workers (ATAA), the Health Coverage Tax Credit (HCTC), job search or relocation allowances, or subsistence or travel allowances for those in training. Using this definition, some TAA nonparticipants may have applied for TAA services and received a TAA waiver from the training requirement to preserve their future eligibility for TRA or the HCTC. Although ETA guidance defines a person receiving a waiver to be a TAA participant, not all states have consistently followed this guidance. Thus, for the purposes of our impact analysis, we classified waiver-only individuals as eligible nonparticipants. As a sensitivity test, however, we estimated employment and earnings impacts while limiting the sample to 515 of 652 TAA nonparticipants who did not appear in the TAPR. These nonparticipants may not have applied for program services or they may have lived in a state that did not treat waiver-only workers as TAA participants for TAPR reporting purposes.

Nonparticipants who were not in the TAPR may be systematically different from nonparticipants who had some interaction with the TAA program. However, the impact findings using this restricted sample of nonparticipants were very similar to the benchmark impacts presented above (Table IV-5 and IV-6).

Table IV-5: Impacts on Employment for Nonparticipants not in TAPR (Survey Data)

	Nonparticipants not in TAPR	Comparison Group	Impact	Standard Error
Percent Employed				
Quarter 1	36.1	35.1	0.9	3.1
Quarter 2	52.7	50.6	2.1	3.3
Quarter 3	61.1	58.1	3.0	3.4
Quarter 4	65.3	62.3	3.0	3.2
Quarter 5	70.8	69.1	1.7	3.3
Quarter 6	72.5	73.5	-1.0	3.3
Quarter 7	74.6	76.2	-1.6	3.4
Quarter 8	74.0	73.6	0.3	3.2
Weeks of Employment				
Quarters 1 – 4	25.3	23.9	1.3	1.4
Quarters 5 – 8	36.9	35.4	1.5	1.7
Sample Size	515	1,241		

Source: Mathematica TAA Baseline Survey and TAPR administrative records.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

Table IV-6: Impacts on Earnings for Nonparticipants not in TAPR (Survey Data)

	Nonparticipants Not in TAPR	Comparison Group	Impact	Standard Error
Quarterly Earnings (2006$)				
Quarter 1	2,089	2,139	-50	232
Quarter 2	3,828	3,776	52	318
Quarter 3	4,657	4,468	189	306
Quarter 4	5,061	4,996	65	325
Quarter 5	5,425	5,257	168	324
Quarter 6	5,421	5,611	-190	327
Quarter 7	5,427	5,601	-174	337
Quarter 8	5,561	5,134	428	326
Annual Earnings (2006$)				
Quarters 1 – 4	15,439	15,153	286	970
Quarters 5 – 8	20,202	20,257	-54	1,200
Sample Size	515	1,241		

Source: Mathematica TAA Baseline Survey and TAPR administrative records.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

3. Using the Certified Worker Administrative Records Sample

As a final sensitivity analysis, we examined employment and earnings impacts using the certified worker sample of TAA nonparticipants and their comparisons who were selected for administrative data collection. This nonparticipant sample is much larger than the corresponding survey sample, but because both samples were randomly drawn from the same population universe, the estimated impacts based on the two samples should be similar. An important difference between the two samples, however, is that the comparison group for the administrative records nonparticipant sample was matched using UI claims and local area data, but not baseline survey data.

We found consistent employment and earnings impact results using the administrative records and survey samples (Table IV-7 and Table IV-8). In the last quarter covered by both data sources (quarter 8), the employment rate impact was 1.5 percentage points using the administrative records sample, compared to 0.0 percentage points using the benchmark survey sample (neither impact was significant). Likewise, the quarter 8 earnings impacts were both statistically insignificant for the two samples In the administrative records sample, there were a few quarters with a significant difference in earnings between the nonparticipants and the comparison workers, but the overall pattern of no significant difference in the earnings trajectories of the two groups of workers was constant across the two samples.

Table IV-7: Impacts on Employment for the Certified Worker Administrative Sample (UI Wage Records)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Percent Employed				
Quarter 1	66.1	65.0	1.2	1.9
Quarter 2	67.6	69.5	-1.9	2.2
Quarter 3	70.1	71.7	-1.6	2.0
Quarter 4	70.5	72.2	-1.7	1.8
Quarter 5	70.1	71.9	-1.8	1.6
Quarter 6	68.6	70.9	-2.3	2.0
Quarter 7	70.1	70.7	-0.6	1.6
Quarter 8	69.2	69.3	-0.1	1.6
Quarter 9	68.6	68.2	0.4	1.8
Quarter 10	68.2	67.4	0.8	1.8
Quarter 11	67.7	65.8	1.9	1.9
Quarter 12	66.2	64.6	1.5	1.9
Sample Size	8,640	14,328		

Source: Administrative UI Claims Files and UI Wage Records.

Notes: Treatment group weights account for sample design, and comparison group weights are constructed using the original matching triads. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

Table IV-8: Impacts on Earnings for the Certified Worker Administrative Sample (UI Wage Records)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Quarterly Earnings (2006$)				
Quarter 1	4,787	4,556	231	388
Quarter 2	6,001	5,262	740***	264
Quarter 3	4,928	5,574	-646**	288
Quarter 4	5,171	5,509	-338	290
Quarter 5	5,795	5,797	-2	222
Quarter 6	5,090	5,611	-520*	284
Quarter 7	5,182	5,583	-401	264
Quarter 8	5,144	5,400	-255	253
Quarter 9	5,069	5,198	-130	261
Quarter 10	4,972	5,331	-359	298
Quarter 11	4,952	5,000	-48	324
Quarter 12	4,857	5,079	-222	335
Sample Size	8,640	14,328		

Source: Administrative UI Claims Files and UI Wage Records.

Notes: Treatment group weights account for sample design, and comparison group weights are constructed using the original matching triads. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

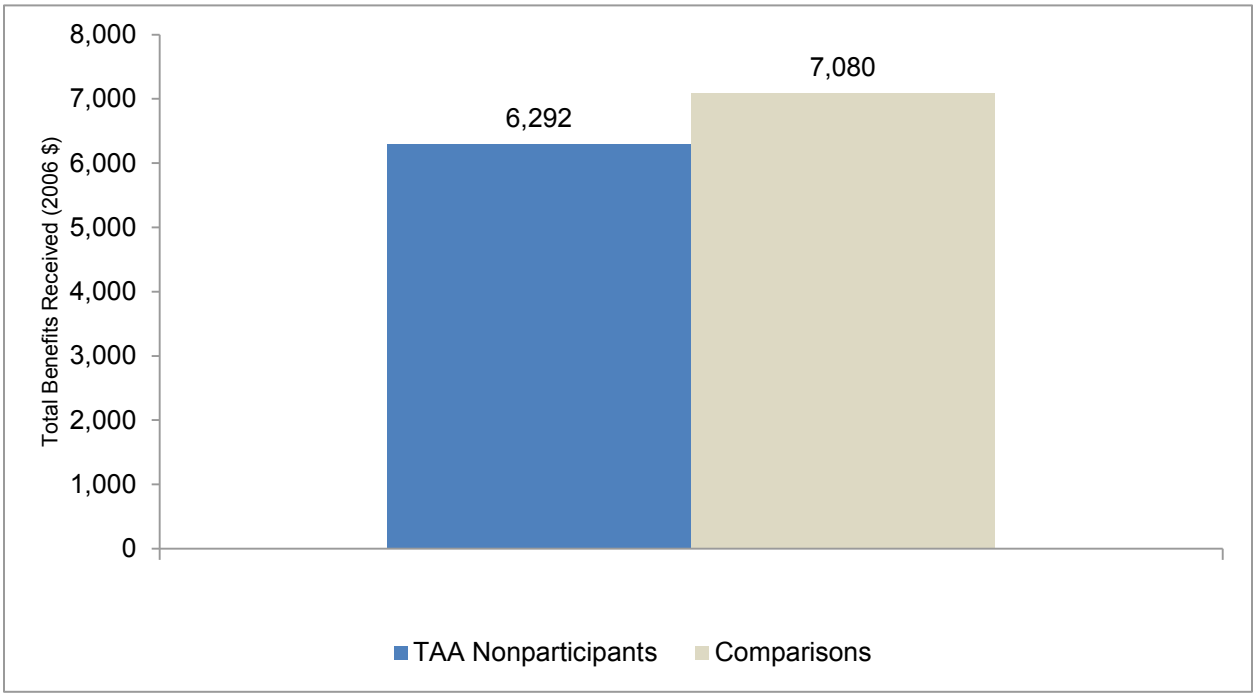
C. Impacts on UI Benefits

UI benefits are intended to provide temporary assistance to workers who become unemployed involuntarily. All of the TAA nonparticipants and comparison workers included in our research samples were UI recipients. If the TAA program affected the duration of unemployment for eligible nonparticipants, the program may have had an impact on the receipt of UI benefits. Our impact estimates on employment and earnings suggest that TAA was not altering the reemployment patterns of nonparticipants, but examining the impacts of the program of UI benefit receipt could provide additional evidence. Since nonparticipants, by definition, did not receive TRA benefits, we do not consider this additional source of income.

As shown in Exhibit IV-1 and Table IV-9, we found that the average matched comparison worker collected about $7,080 in total UI benefits during the 12 quarters after job loss. This total reflects any UI benefits that were received both during and after their initial UI claims. However, the majority of UI payments were collected during the first two quarters following the job loss. Just over half exhausted their first claims (Table IV-9), as determined by UI claims data indicating a zero remaining claim balance.

TAA nonparticipants showed a similar pattern of UI benefit receipt (Exhibit IV-1 and Table IV-9). During the trigger quarter and the twelve-quarter follow-up period, participants collected $6,292 in UI benefits, approximately $800 less than comparisons. The difference in the UI benefits collected by nonparticipants and comparison workers was not statistically significant. The UI exhaustion rate of nonparticipants and comparison workers was also similar (47 percent compared to 53 percent).

Exhibit IV-1: Impact on Total UI Benefits Received, Quarters 1-12



Source: Mathematica TAA Baseline Survey and State UI Administrative Data.

Notes: The sample is limited to participants for whom UI administrative data are available for the trigger quarter and subsequent 12 quarters. Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design.

* Impact of TAA is significantly different from zero at the 0.05 level, two-tailed test.

Table IV-9: Impacts on Receipt of Unemployment Insurance (Administrative Data)

	TAA Nonparticipants	Comparison Group	Impact	Standard Error
Average Benefits Received (2006$)				
Trigger Quarter	1,327	1,397	-69	161
Quarter 1	1,925	2,086	-161	159
Quarter 2	990	1,292	-302***	113
Quarter 3	264	393	-129**	60
Quarter 4	125	160	-36	41
Quarter 5	161	190	-28	69
Quarter 6	138	147	-9	45
Quarter 7	132	189	-57	69
Quarter 8	137	136	0	38
Quarter 9	209	231	-22	51
Quarter 10	251	360	-110	90
Quarter 11	341	221	121	78
Quarter 12	293	279	14	55
Total Benefits Received, Trigger – Q12 (2006$)	6,292	7,080	-788	495
Exhausted UI Benefits (Percent)	47.0	52.5	-5.5	3.4
Sample Size	626	1,191		

Source: Mathematica TAA Baseline Survey and State UI Administrative Data.

Notes: Treatment group weights account for sample design and nonresponse, and comparison group weights are constructed using a kernel matching algorithm. Comparison group means and impacts are regression adjusted. Standard errors account for the two-stage sampling design. The sample is restricted to individuals who completed the baseline survey and for whom UI administrative data provide complete information for all quarters.

*/**/*** Impact of TAA is significantly different from zero at the 0.10/0.05/0.01 level, two-tailed test.

V. CONCLUSIONS

The TAA program is designed to ensure that trade-affected workers are provided with quick access to One-Stop Career Center services to hasten their return to work, and, when necessary, with potentially lengthy education and training services and TRA benefits (referred to in this report as significant services). Some TAA eligible workers choose not to take up these offered services. In our survey of eligible nonparticipants, we learned that many chose not to receive significant services because they had found new employment while others reported confusion over the available services and eligibility criteria. Even among workers who did not receive significant services, the TAA program may have affected reemployment. This is because the workforce development system and One Stop Career Centers provide early intervention services through Rapid Response programs and attempt to connect eligible workers with other reemployment services available through the One-Stop system. These early intervention services could speed reemployment or help connect workers to occupations that best utilize their existing skills.

TAA appears to modestly increase the reemployment services received by program-eligible nonparticipants relative to what these workers would receive in the absence of TAA. About 74 percent of nonparticipants in our sample accessed reemployment services, compared to 66 percent of their matched comparisons. The nonparticipants were more likely to receive labor market information about in-demand occupations and complete assessments to determine appropriate career paths. They were also significantly more likely to receive information on education and training options and information on how to change careers. Some of these more intensive reemployment services may have been delivered through the WIA program since TAA nonparticipants were significantly more likely than similar non TAA eligible workers to be enrolled in WIA (15 percent, compared to 9 percent). The receipt of more intensive reemployment services and information about education and training programs, however, did not translate into increased participation in education and training.

The modest impacts on the receipt of reemployment services are not surprising. Comparison group workers were drawn from the same local areas as the TAA nonparticipants and were therefore likely to have been in similar proximity to One-Stop Career Centers as TAA nonparticipants. Additionally similar to TAA-eligible workers, comparison group workers may have received Rapid Response services if they were part of a large layoff. The TAA Implementation Study (D'Amico et al. 2009) found Rapid Response activities were a part of states' processes for responding to major dislocations whether or not trade had been identified or was suspected as a contributing cause.

It is not surprising then that the receipt of additional reemployment services did not alter the labor market outcomes of TAA nonparticipants. Nonparticipants and comparisons returned to work at the same rate following job loss and had similar average earnings in the first three years following job loss. These impact findings were not sensitive to variations in the definition of a nonparticipant, alternative data sources, or alternative samples.

In sum, the evidence suggests that TAA appears to moderately increase the receipt of light-touch reemployment services by TAA-eligible nonparticipants. However, these increases in reemployment receipt do not translate into increases in employment and earnings. The absence of observed program impacts on employment and earnings may have occurred because the treatment-

comparison differences in light-touch reemployment services were modest or because the light-touch services were not intensive enough to affect labor market outcomes.

Finally, the analysis findings provide additional support for the credibility of the impact findings for TAA participants (Schochet et al. 2012). If our main impact findings were driven by strong selection bias that resulted in the hardest to reemploy workers enrolling in TAA, we would expect the direction of the selection bias for nonparticipants to be the opposite—the TAA nonparticipants should be more "employable" than their matched comparisons. Instead we find no differences in the labor market outcomes of TAA nonparticipants and their comparisons.

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