



#### Prepared for:

The U.S. Department of Labor Employment and Training Administration Office of Policy Development and Research 200 Constitution Ave., N.W. Washington, DC 20210

DOL Contract Nos. AK-13690000430 DOLB111A21774 DOLQ101A21449 Order DOLU121A21859 Order DOLU121A21894 SPR Project No. 1213

#### **Project Director:**

Ronald D'Amico (SPR)

#### **Principal Investigators:**

Ronald D'Amico (SPR)
Peter Z. Schochet (Mathematica)

# The Evaluation of the Trade Adjustment Assistance Program: A Synthesis of Major Findings

Final Report
Prepared as Part of the

Evaluation of the Trade Adjustment Assistance Program
December 2012

Prepared by:

Ronald D'Amico, SPR Peter Z. Schochet, Mathematica

#### **DISCLAIMER**

This report and associated work have been funded, either wholly or in part, with Federal funds from the U.S. Department of Labor (USDOL), Employment and Training Administration (ETA), Office of Policy Development and Research (OPDR) under Contract Numbers AK-13690000430, DOLB111A21774, and DOLQ101A21449. The contents of this publication do not necessarily reflect the views or policies of the Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement of same by the U.S. Government.

#### **ACKNOWLEDGEMENTS**

We would like to thank the many people whose cooperation and efforts have made this evaluation possible. Our biggest debt of gratitude is owed to the representatives of the states who provided us with the data we needed to carry out the analyses for this study. These individuals received from us numerous and complex requests for data, often at times when they were engaged with other urgent priorities, such as upgrading their data systems to process extended and emergency Unemployment Insurance benefits. We are extremely grateful for their perseverance on our behalf.

We would also like to thank the many people at the U.S. Department of Labor's Employment and Training Administration (ETA) who supported this study in many ways. Special thanks are due to our Project Officer, Charlotte "Sande" Schifferes, of ETA's Office of Policy Development and Research, who was tremendously supportive of the project team throughout and unstinting in her willingness to do what she could to unclog logjams when they occurred. We would not have been nearly as successful in getting states to cooperate with our study without her persistent efforts on our behalf. We also appreciate the support provided by ETA's Office of Trade Adjustment Assistance (OTAA), whose staff members responded to our frequent requests for Federal administrative data pertaining to the TAA program. We are especially grateful for the support provided by OTAA's Erin Fitzgerald and Terry Clark, who patiently answered our many questions about the TAA program and shared their insights regarding pressing policy matters.

#### FINDINGS IN BRIEF

This paper presents a synthesis of findings described in detail in more than a dozen separate reports prepared as part of the *Evaluation of the Trade Adjustment Assistance (TAA) Program*. The evaluation focused on providing answers to two broad questions: (1) Is TAA effective in helping workers rebound from their job losses?, and (2) What services are delivered to participants? To answer these questions we collected and analyzed data of a variety of types, including administrative data, data from surveys of TAA participants and a statistically matched comparison group of Unemployment Insurance (UI) claimants not eligible for TAA, and data from site visits conducted from 2004 to 2011 to 34 states and more than 100 local offices.

In examining TAA's effectiveness as it operated under the Trade Act of 2002, we found that:

- TAA participation significantly increased the receipt of reemployment services and education and training services. TAA participants were much more likely than those in the comparison group to receive career planning and job search assistance, as well as to participate in occupational skills training and other forms of training and education.
- Participants were engaged in some form of productive activity at about the same rate as the comparison group. To a large degree, TAA participants engaged in training in the period after job loss, in lieu of seeking and obtaining employment. Thus, impacts on being employed or being in training were not statistically significant, except in the first year when effects were negative but small.
- As we would expect, the labor market outcomes for participants were significantly worse during the first two years after the workers' UI claim dates than they were for their matched comparison group members who were not eligible for TAA. This finding was entirely expected because TAA participants were much more likely to be in training than comparison group members in the few years after job loss.
- By the end of the four-year observation period, TAA participants had almost entirely closed the gap in employment and earnings, and, by one measure, they had pulled slightly ahead. Depending on the specification of the comparison group, TAA participants in the fourth year of follow-up worked either about the same number of weeks on average as comparison group members or about three weeks more. Participants' fourth-year earnings were either \$3,300 less than, or about the same as, those of comparison-group members. The differing results represent lower- and upper-bound estimates of TAA's likely true impacts in the fourth year after job loss.
- Some groups of TAA participants fared better than others on measures of employment and earnings. TAA participants who were younger and those who received TAA-funded training were more likely to have caught up to their comparison group members by the fourth year of follow-up, while impacts remained negative and significant for TAA participants who were older and those who received TAA income support but not TAA-funded training. TAA-funded trainees' employment rates in the last four quarters were similar to that of the full matched comparison group of UI claimants (and, relative to a comparison group of UI exhaustees, the trainees' employment rates during the last three quarters were statistically significant and positive, rising to 11.3 percentage points higher in the 16th and final quarter). TAA-funded trainees' earnings relative to the full comparison group were negative and statistically significant in all quarters (but, compared to the UI-exhaustee sample, there were no statistically significant earnings impacts during the final four quarters).
- Overall, participation in TAA as the program operated under the 2002 amendments had a negative effect on total
  income during the four-year follow-up period. Participants collected more in UI payments and Trade
  Readjustment Allowances (TRA). However, TAA had a negative impact on total income, suggesting
  that these additional income payments did not fully compensate for participants' lower earnings.

Projecting into the future, for the program to provide positive benefits for them the 2002 TAA participants would have to earn at least \$2,124 per year more than the full comparison group from year five (after job loss) until retirement, or \$757 per year more than the UI-exhaustee comparison group.

- Without considering the benefits of TAA stemming from the possibility that it promotes free trade, the net benefits of the TAA program as it operated under the 2002 amendments were negative, whether calculated from the perspective of society as a whole, participants, or other members of society. However, if TAA made even a relatively modest contribution to the ease of enacting free-trade policies, the program's benefits would outweigh its costs.
- There are important caveats to these findings. Because many participants were in TAA-funded training for a long period of time, the four-year follow-up period may not be long enough to evaluate the full returns of such training. Furthermore, TAA trainees completed their training and re-entered the labor market when the nation's economy was mired in severe economic recession, whereas the comparison group—who spent considerably less time in training—were more likely to have returned to the labor market before economic conditions deteriorated. Thus, longer follow-up may be necessary to account for all the benefits of training in the 2002 TAA program.

In examining the implementation of TAA services, we found that:

- Most of the provisions of the Trade Act of 2002 were well received by state TAA administrators, but there were some implementation challenges. The U.S. Department of Labor's improved response time in making petition determination decisions and the expansion of benefits and eligibility were greeted enthusiastically. The Act's wage insurance program for older workers and the tax credit it allowed to cover health insurance costs were viewed as providing helpful benefits to workers, but they were challenging to implement at first, and take-up for these new benefits was low. The new 8/16-week deadline by which participants needed to enroll in training to maintain eligibility for TRA was designed to promote speedy entry into training, but was viewed by some as rushing workers to make training decisions too quickly. Some provisions of the Act led states to expand their use of waivers to protect workers' eligibility for various benefits, which caused states a greatly increased paperwork burden.
- TAA program administrators were diligent in carrying out their obligations to promote petition filing and notify workers of their potential eligibility for services. Rapid Response was helpful in spreading the word about the TAA program to employers and affected workers. States also made sure to obtain lists of eligible workers from employers and mail these workers notification letters informing them of the TAA services for which they might qualify. More aggressive outreach efforts were less common, but some states hosted hotlines, used social networking, collaborated with labor organizations, and used peer counselors to increase the take-up of program services.
- Those eligible for TAA tended to be full-time workers with long tenures who were displaced from relatively high-paying positions. Contributing to the challenges they faced in finding new employment, these workers were also older and less educated than other workers looking for employment.
- About 50 percent of those eligible for TAA received a "significant" TAA service, defined as including TAA-funded training, TRA, Alternative Trade Adjustment Assistance (ATAA), the Health Coverage Tax Credit (HCTC), or allowances other than TRA. More than 90 percent of participants received TRA and about half received TAA-funded training. Other services were much less common. The TAA participation rate and types of services emphasized differed markedly from state to state.
- Certain characteristics of TAA training were associated with better labor market outcomes. Although our analysis was not causal, it appears that workers who entered training more quickly experienced

better labor market outcomes, but the length of the training did not seem to matter. Females who trained in healthcare practitioner or technical fields or in office and administrative support fared better, as did the 37 percent of TAA-funded trainees who found employment in their training fields. Those who received a career assessment to guide them in their training choices were more likely to obtain training-related job placement.

• Most of the provisions of the Trade and Globalization Adjustment Assistance Act (TGAAA) of 2009 were well received, but the poor economic climate made it difficult for state officials and eligible workers to take full advantage of them. TAA staff members felt that TGAAA's expansion of benefits and broadened eligibility rules were of considerable benefit, and they welcomed the relaxation of the 8/16-week deadlines by which participants needed to enroll in training to protect TRA eligibility. TGAAA also mandated case management services for TAA participants; the nature of these services did not seem to change much from what they had been previously, but states were more careful to document the case management services that they offered. An overriding factor affecting the implementation of many provisions of the new law was the weakened state of the economy, which caused long waiting lists for training and made it difficult for older workers interested in the expanded wage supplement program to find jobs.

## **CONTENTS**

Α.	Introduction		
	1.	About the TAA Program	1
	2.	Research Design and Data Collection	3
В.	What are the Impacts and Costs and Benefits for the 2002 TAA Program?		
	1.	The Impacts of TAA on TAA Participants	6
	2.	The Impacts of TAA on TAA Nonparticipants	10
	3.	The Costs and Benefits of the 2002 TAA Program	11
C.	Ho	w Does TAA Operate and What Services Does It Provide?	13
	1.	The Implementation of the Trade Act of 2002	13
	2.	TAA and Its American Job Center Partners	15
	3.	Outreach to Employers and Eligible Workers	15
	4.	Case Management in TAA	17
	5.	The Characteristics of Workers Eligible for TAA and the Decision to Participate	19
	6.	Participants' Experiences in TAA	19
	7.	The Outcomes of TAA-Funded Trainees	20
	8.	The Implementation of TGAAA	21
REFER	RENC	ES	27
APPE	NDIX	A: OTHER REPORTS PREPARED AS PART OF THE EVALUATION	29
APPE	NDIX	B: INDEX OF REPORTS BY MAJOR TOPICS IN THE SYNTHESIS REPORT	31

## **EXHIBITS**

Exhibit 1:	Impacts on Employment Rates Using Samples of UI Exhaustees versus UI Claimants	8
Exhibit 2:	Impacts on Earnings Using Samples of UI Exhaustees versus UI Claimants	8
Exhibit 3:	Summary of Key Provisions of the Trade Act of 2002 and Accompanying ETA Guidance	14
Exhibit 4:	Summary of Key Provisions of TGAAA	22

# THE EVALUATION OF THE TRADE ADJUSTMENT ASSISTANCE PROGRAM: A SYNTHESIS OF MAJOR FINDINGS

Although beneficial to the economy as a whole, the expansion of international trade has heightened competition from foreign producers, which has caused some U.S. industrial sectors to contract markedly (Kletzer 2002). U.S. government policy recognizes the potential for localized harm due to foreign competition and, through the Trade Adjustment Assistance (TAA) program, aims to help America's workers rebound from job separations that the competition might cause. Although TAA has a compensatory component, the program's primary goal is to help trade-affected workers obtain reemployment at suitable wages by providing training, temporary income support, and other services.

In 2004, the U.S. Department of Labor's Employment and Training Administration (ETA) funded a comprehensive *Evaluation of the TAA Program*, which was designed to document the program's implementation and assess the ability of the program to achieve its goal of helping participants find rapid and suitable reemployment. The evaluation, conducted jointly by Social Policy Research Associates (SPR) and Mathematica Policy Research (Mathematica), yielded a series of more than a dozen reports, along with additional memos, briefs, and presentations. This report serves as a concise synthesis of the major findings presented in these prior products. It is focused on the answers the evaluation provided to two major categories of questions, with one focusing on TAA's impacts and the second on the program's implementation.

- 1. Is TAA effective in helping workers rebound from their job losses and, in light of these impacts, do the program's benefits outweigh its costs?
- 2. How is TAA managed at the local level and what services are delivered to participants?

We present major findings relating to these two questions in successive sections of the report, after we first present a brief introduction to the study that includes an overview of TAA's key features and the evaluation's research design. Appendix A lists other reports prepared as part of the evaluation, to which readers desiring more information might refer; Appendix B functions as an index to Appendix A, directing the reader to the reports where the topics presented in this synthesis are most directly addressed.

#### A. INTRODUCTION

TAA offers a rich set of services to participants. After outlining these services, we describe the data the research team collected to learn about these services and their impacts on participants.

#### 1. About the TAA Program

The TAA program has been amended a number of times since it was first authorized with the enactment of the Trade Act of 1974. The Trade Adjustment Assistance Reform Act of 2002 (hereafter, the Trade Act of 2002 or the 2002 TAA program), enacted shortly before the evaluation began, represented a significant change, as it expanded eligibility, promoted early intervention,

fostered greater collaboration between the TAA and Workforce Investment Act (WIA) programs, and expanded benefits and services. As the evaluation was winding down, additional changes to the TAA program occurred. The Trade and Globalization Adjustment Assistance Act (TGAAA) was enacted in 2009 as part of the American Recovery and Reinvestment Act (ARRA), but this legislation included a sunset provision and its amendments to TAA expired on February 12, 2011. Changes were next mandated under the Trade Adjustment Assistance Extension Act of 2011 (TAAEA), enacted on October 21, 2011 (TAAEA is set to expire in late 2013). Among their key provisions, TGAAA and TAAEA expanded eligibility to trade-affected workers in the service sector (prior to TGAAA, only workers in the goods-producing sector were eligible), required that case management services be made available to TAA participants, and significantly expanded certain other program benefits.

Regardless of which of these program rules were in effect, to be eligible for TAA a worker must be covered by a petition certified for TAA. A petition is filed with ETA by an eligible entity, and, if ETA determines that the job losses were significantly caused by foreign competition, it certifies the affected worker group for TAA. 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 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, state workforce agency staff members contact the employer of the affected firm to offer early intervention services and obtain a list of affected workers. The state agency then contacts the workers on the list and invites them in for services (and to make a determination of individual TAA eligibility). These services can include the following:

- Training. Workers are eligible to receive tuition assistance for training and education that can last more than two years.
- Trade Readjustment Allowances (TRA). TRA represents weekly cash payments made to eligible workers in amounts equivalent to their weekly Unemployment Insurance (UI) benefit amounts. Under normal circumstances, basic TRA can be paid for 52 weeks less any weeks of UI benefits available (which is usually 26 weeks); additional TRA can be paid for an additional 65 weeks (extended from 52 weeks by TAAEA), as long as the worker is enrolled in full-time training. TRA beyond these amounts is also possible in some circumstances.

<sup>&</sup>lt;sup>1</sup> TGAAA was originally set to sunset on December 31, 2010. On December 29, 2010, Congress enacted the Omnibus Trade Act of 2010, extending the sunset date until February 12, 2011.

- Waivers. Basic TRA is only payable to workers in full-time training, those who have completed training, or those who received a waiver from the training requirement.
- Alternative Trade Adjustment Assistance for Older Workers (ATAA). Because training may not pay off for older workers who are close to retiring, ATAA allows certain workers aged 50 and older who find new employment to receive a wage supplement of up to 50 percent of the difference between the wage in the worker's new job and the wage at separation. Benefits can be paid for up to two years, up to a maximum payment amount of \$10,000. (ATAA was renamed Reemployment Trade Adjustment Assistance with the TGAAA and TAAEA amendments.)
- Case Management and Reemployment Services. Under the 2002 TAA program, case management, assessment, and other employment services generally could not be provided using TAA funds and thus had to be provided through partner programs in the workforce system. However, under TGAAA and TAAEA, case management and reemployment services became entitlements for eligible workers, and can include a comprehensive assessment of skill levels and service needs, short-term pre-vocational services, and individual career counseling.
- Other Allowances. Job search and relocation allowances provide support to eligible
  workers who conduct out-of-area job searches or relocate to take advantage of out-ofarea job opportunities. Subsistence and travel allowances are also available to workers
  undertaking training out of their local areas.
- Health Coverage Tax Credit (HCTC). Established in the Trade Act of 2002, and amended through TAAEA in 2011, this tax credit is available to trade-affected workers under certain circumstances. It equals 72.5 percent of the cost of health insurance coverage for the individual and qualified family members.

# 2. Research Design and Data Collection

The evaluation included both qualitative and quantitative research components. For the qualitative data collection, research team members carried out multi-day site visits to conduct interviews with state TAA administrators and program staff members in local offices where TAA services were delivered. Waves of site visits occurred at approximately annual intervals over six years, with each wave focused on unique topics. Altogether, 34 states and more than 100 local offices were visited, some more than once, from 2004 through 2011. Early waves of site visits concentrated on learning about the implementation of the Trade Act of 2002, which had been enacted shortly before the evaluation commenced. Middle waves looked at special topics in the operation of the TAA program, including case management, early intervention and rapid response services, and the TAA program's coordination with American Job Center system partners. The final wave occurred just after the enactment of TGAAA and focused on the implementation of these amendments. (Data collection concluded prior to the enactment of TAAEA, so the implementation of these latest amendments could not be examined). During the site visits, field staff conducted interviews with state and local-level administrators, line staff, fiscal staff, and program participants.

The quantitative component of the evaluation involved the collection of both administrative data and survey data. These data were used to describe the operation of the program and the

services that participants received, as well as to estimate the impacts of TAA on employment, earnings, and other outcomes. One type of administrative data, provided by ETA, consisted of lists of petitions filed for TAA; each petition record included an indication as to whether or not the petition was certified and the petition-filer's estimate of the likely number of affected workers. These data were used to randomly select a sample of 26 states for further analysis.

We received administrative data from the 26 states. These data were of the following types:

- Lists of workers covered by certified petitions, which we call *certified worker lists*, that were provided by employers to state workforce officials so that states could notify workers of their potential eligibility for TAA;
- UI and TRA claimant data, used to identify those on the certified worker lists who in fact experienced job loss (the TAA treatment group) and those not on the lists who might be selected for a sample of non-eligibles (the comparison group);
- UI wage data, used to measure employment and earnings for both treatment and comparison group members in the quarters before and after workers' job separations;<sup>2</sup>
- Client-level records maintained by states on TAA participants' characteristics, services, and outcomes, which states use to meet reporting required for the Trade Act Participant Report (TAPR); 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.

Finally, we administered two telephone surveys to a sample of TAA participants and a statistically matched comparison group drawn from each of the 26 states that initially provided the administrative data:

- An initial survey, administered approximately 29 months after each worker's UI claim date;
- A follow-up survey, administered approximately 23 months after the initial survey, which allowed for the measurement of outcomes at least four years after job loss for about 65 percent of the sample and at least three years after job loss for about 95 percent of the sample.

Random assignment, the ideal design for estimating program impacts, was not feasible for the evaluation because TAA functions as an entitlement program and, hence, denying services and benefits to eligible workers, as would be necessary for the random selection of a control group, was

One of the 26 states was not able to provide UI claimant or wage data.

not possible. Consequently, the evaluation used a comparison group design to obtain nationally representative estimates of the impact of TAA on participants' employment, earnings, and other outcomes. Operationally, we first used the lists of petitions certified for TAA to randomly select 26 states, with probabilities proportional to the expected number of TAA participants in the state. Of these states, 25 agreed to participate in the study and provided all data, and together they contained almost 90 percent of all TAA-eligible workers nationwide. We then selected all petitions certified in these states in the one-year period between November 1, 2005, and October 31, 2006, and asked the states to provide the administrative data described above.

Next, we selected treatment group samples from each of those states:

- 1. The "certified worker sample." This sample, which was the one primarily used for the impact analysis, included those on the certified worker lists who also appeared in the UI claimant files as having received a UI payment during the period of eligibility covered by the petition. Because only about one half of workers eligible for TAA services received significant program services, we subdivided the certified worker sample into two groups:
  - TAA participants—those who received significant TAA services, as measured from the TAPR and TRA claims files.
  - TAA nonparticipants—those eligible for TAA who did not receive significant TAA services, but who might have received light-touch TAA services or American Job Center core services provided through WIA or the Employment Services (ES).

Note that TAA participants and TAA nonparticipants were *both* considered treatment groups, and impacts were estimated separately for each group.

2. The "TRA-beneficiary sample." This supplementary sample consisted of workers who received TRA after they exhausted their regular UI benefits. These workers were selected independently from the certified worker sample, but had similar UI claim dates as those in the certified worker sample.

We next selected a separate comparison group for each treatment group sample (the TAAparticipant, TAA-nonparticipant, and TRA-beneficiary samples). Using administrative data and data from the initial survey, we used propensity score matching to select comparison groups that in aggregate were similar to the treatment groups on a host of baseline characteristics, including demographics and other personal attributes (e.g., age, gender, race and ethnicity, highest grade of education completed, marital status, number of children, self-reported health), as well as on work history and characteristics of the jobs from which they were separated (e.g., reason for job loss, expectations of recall, job tenure, occupation from which displaced, hourly earnings, hours worked per week, firm size, union status, average number of jobs in the three years before the UI claim date, total earnings in the year prior to the claim). Comparison group members were also selected so that they were from local areas similar to those of the treatment group members and experienced their job losses in about the same months and years that treatment group members lost their jobs (most of those in both groups lost their jobs in either 2005 or 2006). The distributions of these characteristics for the comparison group samples closely matched the distributions for the treatment group samples in every state and nationally. Though this matching was exhaustive for the observable characteristics, it is still possible there were differences between the treatment and comparison groups on some unobservable characteristics.

# B. WHAT ARE THE IMPACTS AND COSTS AND BENEFITS FOR THE 2002 TAA PROGRAM?

We estimated the impacts of the 2002 TAA program both for those eligible for TAA who received significant TAA services (TAA participants) and for those eligible for TAA for did not receive significant TAA services but might have received lighter-touch services (TAA nonparticipants). Estimated impacts for both groups are described below, followed by a description of findings from a cost-benefit analysis.

## 1. The Impacts of TAA on TAA Participants

The research literature presents a sobering picture of the future job prospects of workers who experience job displacements. Couch and Placzek (2007) report that earnings losses in the quarter following separation exceeded 30 percent for those they studied who were displaced through mass layoff. Moreover, losses remained substantial over the six-year period studied by these authors. Other evidence suggests that earnings losses are particularly large and sustained for older workers, those displaced from manufacturing, those who change industry upon reemployment (Couch et al. 2009), those who have high seniority at the time of job loss (Jacobson et al. 1993a), and those who are displaced during economic downturns (Jacobsen et al. 1993b). The intent of the TAA program is to provide some remedy for trade-affected workers, who are likely to find themselves in many of these categories.

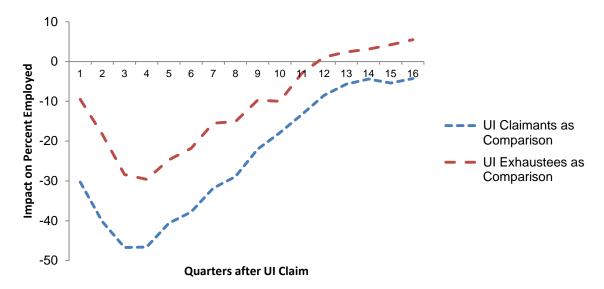
The main impact findings were estimated for TAA participants in the certified worker sample, and, because of the timing of the project's data collection, represent estimated impacts of the TAA program as it operated under the Trade Act of 2002 (that is, before the TGAAA or TAAEA amendments took effect). For these analyses, TAA participants were defined to include those eligible for TAA who received a significant TAA service, including TAA-funded training, TRA, ATAA, HCTC, or allowances other than TRA. This group made up about 50 percent of those eligible for TAA. To test the robustness of the study's conclusions, sensitivity analyses were conducted that varied the specification of the treatment group, the comparison group, and the estimation model. For example, we conducted analyses for the TAA sample just described and then repeated many analyses defining the treatment group as the TRA-beneficiary sample. Among other sensitivity tests, we used only UI exhaustees to define the comparison sample (rather than UI claimants, regardless of whether they exhausted), as well as various methods of restricting the samples, such as excluding those from more rural areas (where it might be harder to find wellmatched comparisons) or those who were recalled to their jobs. Estimated impacts varied somewhat depending on which of these specifications was used, but can generally be summarized as follows:

- TAA participation significantly increased the receipt of reemployment services, such as career planning and job search assistance. According to survey data, more than 94 percent of TAA participants received at least one reemployment service, while 77 percent of comparison group members reported doing so. Overwhelmingly, TAA participants and their comparison-group counterparts used American Job Centers to access these services.
- TAA participation significantly increased the receipt of education and training and the attainment of educational credentials. Nearly 66 percent of TAA participants received training (and about 50 percent received TAA-funded training), compared to 27 percent of comparison

group members. The average TAA participant spent about 8 times as many weeks in education and training as the average comparison group member. Impacts on participation in education and training programs were largest during the first two years of the follow-up period, but persisted in the third and fourth years.

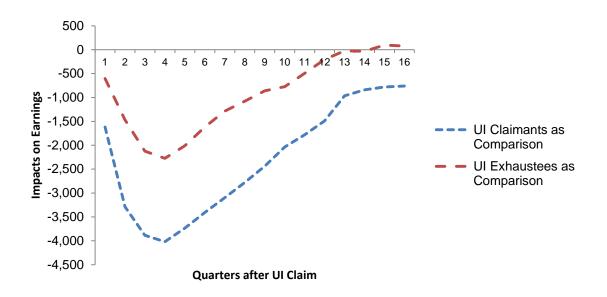
- TAA participants were engaged in a productive activity at about the same rate as the comparisons. To a large degree, TAA participants engaged in training in the period just after job loss, in lieu of seeking and obtaining employment. Thus, impacts on being employed or being in training—that is, engaging in any productive activity—were not statistically significant, except in the first year, when effects were negative but small.
- As we would expect, the labor market outcomes for participants were significantly worse during the first two years after the workers' UI claim dates than they were for the matched comparison group members who were not eligible for TAA. This finding was entirely expected, because, as was noted, TAA participants were much more likely to be in training than comparison group members in the few years after job loss.
- By the end of the four-year observation period, TAA participants had almost entirely closed the gap in employment and earnings, and, by some measures, they had pulled slightly ahead. Depending on the specification of the comparison group, TAA participants were either slightly more or slightly less likely to be employed than comparison group members in the fourth year of follow-up (see Exhibit 1). Depending on the specification, TAA participants on average worked about the same number of weeks as comparison group members or worked about three weeks more. In the fourth-year, their earnings either were about \$3,300 less than the earnings of comparison-group members or were no different (see Exhibit 2). These ranges for impacts on employment rates, weeks worked, and earnings can be thought of as representing lower-bound and upper-bound estimates of the true impacts of TAA.
- Some groups of TAA participants fared better than others. Analyses for various subgroups defined by demographic characteristics and service receipt showed that impacts were most dependent on workers' ages and the TAA services they received. Impacts on employment and earnings were more favorable for participants who received TAA-funded training than for those who received income support without such training. Employment and earnings impacts for the latter group were negative and significant throughout the entire follow-up period.
  - Participants in TAA-funded training were more likely to have caught up to comparison group members in the matched UI-claimant comparison sample on measures of employment and earnings by the fourth year. TAA-funded trainees' employment rates in the last four quarters were similar to that of the full matched comparison group of UI claimants (and, relative to a comparison group of UI exhaustees, the trainees' employment rates during the last three quarters were statistically significant and positive, rising to 11.3 percentage points higher in the 16th and final quarter). TAA-funded trainees' earnings relative to the full comparison group were negative and statistically significant in all quarters (but, compared to the UI-exhaustee sample, there were no statistically significant earnings impacts for trainees during the final four quarters).

Exhibit 1: Impacts on Employment Rates Using Samples of UI Exhaustees versus UI Claimants



Source: TAA Initial and Follow-up Surveys and UI Claims data.

Exhibit 2: Impacts on Earnings Using Samples of UI Exhaustees versus UI Claimants



Source: TAA Initial and Follow-up Surveys and UI Claims data.

- By the end of the follow-up period, younger TAA participants caught up to the comparison-group members, but older participants did not. Younger TAA participants, the group with the largest positive training impacts, had the largest negative employment and earnings impacts during the first two years of the follow-up period, but impacts became statistically insignificant starting by the middle of the third year. By contrast, the employment and earnings impacts for the older age groups remained negative and statistically significant throughout the four-year follow-up period.
- When TAA participants returned to work, they had lower wages and were less likely to have access to
  fringe benefits than the comparison-group members. The gap between participants and
  comparisons in hourly wages and fringe benefit receipt was largest early in the follow-up
  period; by the end of the follow-up period, this gap had decreased but not completely
  closed.
- Among TAA participants who received occupational skills training and were employed in the fourth year of follow-up, 37 percent were employed in the occupations for which they trained. The likelihood that an occupational trainee was employed in his or her training field varied by the occupational focus of the training program, with those who trained as healthcare practitioners or in production or transportation and material moving more likely than others to be employed in their training fields.
- TAA participation had a negative effect on total income overall. Participants collected more in UI payments and were much more likely to exhaust their benefits than comparison-group members, which is as expected given that so many TAA participants entered training. TAA participation also increased income from TRA, because those in the comparison group were not eligible to receive income from this source. However, participation in the 2002 program had a negative impact on total income over the four-year follow-up period, since participants' combined income support payments and earnings were lower than that for the comparison group. Also, despite their lengthy training and additional re-employment services, TAA participants had lower initial pay levels upon reemployment than those in the comparison group.

The findings described above are in some ways puzzling. Given the substantial duration of their program participation, we would expect TAA to delay participants' onset of reemployment, and indeed that was the case. However, the hypothesized rebound in employment and earnings after services ended did not fully materialize. As their participation in training and other TAA services drew to a close, participants began to catch up with comparison-group members, but they were not clearly ahead even four years after job loss, and, by some measures, were still somewhat behind them.

We suggest several reasons why clear positive economic returns to the services TAA participants received did not materialize by the end of the four-year observation period. First, about one half of TAA participants received TRA without undertaking TAA-funded training. As we have noted, impacts were particularly unfavorable for study participants who fell into this group, and

previous evidence on the work disincentive effects of UI suggests why this finding might have occurred (see, for example, Katz and Meyer 1990; Card and Levine 2000).<sup>3</sup> In fact, under the Trade Act of 2002 workers could receive waivers from the training requirement if their retirement was expected, which explicitly acknowledges that some in the TRA-only group were not expected to return to work. (Waivers for retirement were disallowed with the TAAEA amendments.)

Even so, TAA trainees also did not appear to reap clear economic returns from the training they received, at least by the end of the four-year observation period. In studies of workforce investment programs it is quite common for treatment groups to record much lower earnings than comparison groups during an "in-program" period, but then have their earnings rebound and overtake the comparisons' earnings shortly after the period of program participation ends. Findings from the random assignment evaluations of the Job Training Partnership Act (JTPA) and of Job Corps both show this pattern (Bloom et al. 1997; Schochet et al. 2001). Why, then, do impacts for TAA participants not follow suit?

One possible reason is that the onset of the outcome measurement periods in the JTPA and Job Corps evaluations was the point at which program applicants were requesting services, whereas, in our study, it was at the point of job loss, which was often many months before TAA participants began program services (and, in some cases, before they were even eligible for TAA). In fact, the peak participation for TAA participants was not reached until the third quarter of participants' outcome measurement periods. Further, the duration of participation was typically much longer for our sample of TAA participants than it was for the JTPA and Job Corps participant samples. Both the slower onset and longer duration of services, then, can help explain why it might take longer for TAA participants to catch up to their comparisons than it did for JTPA or Job Corps participants.

Further, TAA trainees completed their training and re-entered the labor market when the nation's economy was mired in its worst recession since the Great Depression. About one half of TAA trainees completed their training—and, hence, presumably began their job searches—after the onset of the recession. By contrast, because they spent less time in training, those in the comparison group were more likely to have returned to the labor market before economic conditions deteriorated. Trainees may begin to see positive returns to their training investment when the labor market begins to rebound and they can make better use of the new job skills they have acquired. Only additional data covering a longer follow-up period will tell us for sure.

### 2. The Impacts of TAA on TAA Nonparticipants

About 50 percent of those eligible for TAA did not receive a *significant* TAA service (TAA-funded training, TRA, ATAA, HCTC, or allowances other than TRA). However, these individuals, referred to as TAA nonparticipants, could have received a variety of other services either partly

<sup>&</sup>lt;sup>3</sup> Although a number of studies (including the ones cited here) report a significant effect of UI on the duration of unemployment, the magnitude of the effect is not clear. Decker (1997) reviews the literature and concludes that a one week increase in the potential duration of UI extends unemployment by between 0.1 and 0.5 weeks.

funded by TAA or precipitated by TAA but funded from other sources. For example, these individuals might have received Rapid Response or other early intervention services, which were required by the Trade Act of 2002 to be made available to those covered by a petition when it was filed, regardless of whether the petition was eventually certified. These services could have helped eligible nonparticipants become reemployed quickly, thereby obviating their need for more intensive TAA services. Further, some workers received a waiver from the TAA training requirement and no other TAA service. The issuance of a waiver implies that these individuals had some contact with TAA counselors, and this too could have helped them obtain reemployment.

For these reasons, we count TAA-eligible nonparticipants as a treatment group in its own right and estimate impacts for this group. The TAA nonparticipant sample was selected by identifying those on the certified worker lists who appeared on the states' UI claimant files but who did not receive a significant TAA service. A matched comparison group consisting of UI claimants who were not TAA-eligible was selected using propensity score methods. Members of the comparison group were drawn from the same local areas as those in the treatment group sample and matched the nonparticipants very closely on demographic attributes and pre-layoff job characteristics.

We followed nonparticipants and those in the comparison group for two years after the workers' UI claim dates (in contrast to the four years we followed TAA participants and their comparisons). Key impact findings for the nonparticipant sample are summarized below.

- Nonparticipants were more likely to receive reemployment services than those in the comparison group, but were not more likely to receive education and training services. TAA nonparticipants in our sample were significantly more likely to access reemployment services than their matched comparison-group members. Some of these reemployment services may have been delivered through WIA, since TAA nonparticipants were significantly more likely than comparison workers to be enrolled in WIA. However, nonparticipants did not receive more education and training services.
- Both TAA nonparticipants and comparison workers had similar employment rates and worked an equivalent number of weeks in the follow-up period. The estimated impacts on employment rates and weeks of employment were not statistically significant for any quarter during the two-year follow-up period.
- TAA nonparticipants earned about the same as those in the comparison sample. The pattern of program impacts for earnings was found to be similar to that for employment: there were no significant differences in the quarterly earnings of nonparticipants and comparison workers.

In sum, TAA appeared to moderately increase the receipt of light-touch reemployment services by TAA-eligible nonparticipants relative to what these workers would have received in the absence of TAA. However, these increases in reemployment services did not clearly translate into increases in employment and earnings.

### 3. The Costs and Benefits of the 2002 TAA Program

To analyze the relative costs and benefits of the TAA program, we estimated the program's benefits in dollar terms and compared them to the program's costs. We used 2006 as the base year

for calculating costs, because most program services were received in that year. We converted all future benefits and costs to their present value, using a discount rate of 4 percent, the approximate real rate of return on 30-year Treasury bonds. Subtracting the costs from the benefits provides a measure of the net benefits of TAA. We estimated net benefits per participant from three perspectives: society as a whole, TAA participants, and society exclusive of TAA participants.

We estimated six categories of potential benefits resulting from the TAA program: (a) increased output, measured as the cost to an employer in payments in wages and fringe benefits, after netting out the lost output that occurred while participants were receiving TAA services, (b) reductions in the use of education and training programs not funded by TAA; (c) changes in the use of reemployment services not funded by TAA; (d) changes in the receipt of UI benefits; (e) reductions in the use of other public assistance programs; and (f) other benefits, such as the facilitation of free trade. We then estimated six categories of costs of operating the TAA program: (a) TRA payments to program participants; (b) training costs; (c) allowances to participants other than TRA, including job search, relocation, transportation, and subsistence allowances; (d) ATAA wage supplements; (e) HCTC tax credits paid to cover the costs of health insurance premiums; and (f) TAA administrative costs.

Without considering the benefits of TAA stemming from the possibility that it promotes free trade, the estimated *net benefit to society* of the TAA program as it operated under the 2002 amendments was negative \$53,802 per participant. The main reason for the negative net benefit was that participants had lower income than comparison group members over the study period (due to the long period of time participants were in the program—on average 79.8 weeks—and lower income from employment when most participants returned to work). The best estimate of the *net benefit to TAA participants* was negative \$26,837. Participants incurred losses, since income (from all sources) was lower than what was received by the matched comparison group. Participants' benefits of reduced taxes and greater receipt of income support from UI and TRA were not enough to offset their lower earnings from paid employment, relative to the matched comparison group. Projecting into the future, the 2002 TAA participants would have to earn at least \$2,124 per year more than the full comparison group or \$757 more than the UI-exhaustee comparison group, from year five (after job loss) until retirement for the program to provide positive benefits to them.

The *net benefit to the rest of society* was estimated as around negative \$26,965. Just over half of this amount came from program costs, while the rest was due to negative net benefits including the cost of training and reemployment services for TAA participants.

From society's perspective, the 2002 TAA program was not cost-effective for any of the age or service subgroups examined. As noted earlier, there are several important caveats to these findings, however, since the four-year follow-up period may not be long enough to evaluate the full returns of the TAA program. Further, it should be noted that the calculations do not include the potentially large benefits of the TAA program in making free trade politically feasible. Incorporating estimates of the trade-related benefit of TAA has a substantial effect on the program's net benefits, with the magnitude of the effect depending on the parameters used and, in particular, the extent to which TAA accounts for trade liberalization. However, if TAA made even a relatively modest contribution to the ease of enacting free trade policies, the program's benefits would outweigh its costs.

#### C. HOW DOES TAA OPERATE AND WHAT SERVICES DOES IT PROVIDE?

Using qualitative data from site visits, survey data, and administrative data, the evaluation team extensively documented how the TAA program operated and what services participants received. These findings are presented in this section. We first describe the implementation of the Trade Act of 2002, the legislation that was prevailing during most of the time the evaluation was underway. We next discuss TAA's partnerships with other programs in the American Job Center system, and then describe some novel practices in outreach and case management that we observed. After next describing TAA services, we conclude this section be describing our findings on the implementation of TGAAA, amendments to TAA that were enacted as the evaluation was drawing to a close.

### 1. The Implementation of the Trade Act of 2002

The Trade Act of 2002, and ETA's accompanying guidance, significantly amended TAA, and emphasized several program goals, including expanding access, promoting early intervention services and rapid reemployment, enhancing benefits to assist workers in obtaining suitable new jobs, and promoting collaboration of the TAA program with partners within the workforce investment system.<sup>4</sup> Some of the specific provisions used to advance these goals are shown in Exhibit 3.

The research team conducted site visits in 2004 focused on documenting the implementation of this legislation. We found that many of the legislation's provisions had been well received and were expected to achieve their objectives. For example, respondents were very appreciative of ETA's much faster turnaround on certification decisions (spurred by the legislation's requirement that decisions be made within 40 days), and they reported that this change allowed them to get workers into services more quickly. They were also enthusiastic about the extension of additional TRA by 26 weeks and the provision allowing additional weeks of TRA for workers in remedial training, which they felt held the prospect of supporting workers in their training needs, improving training completion rates, and promoting high-quality long-term employment outcomes.

Other provisions seemed to have little practical effect for one reason or another. For example, the new guidance's emphasis on Rapid Response and coordination with the American Job Center Network, though rated positively, was viewed as supporting developments that were already well underway rather than spurring something new. The expansion of eligibility to secondary worker groups also seemed to have only a very modest effect, as relatively few petitions covering secondary workers were being filed, at least as of the date of the team's data collection on this topic in 2004. State respondents posited several explanations for why more petitions were not being filed on behalf of secondary worker groups: they surmised that few secondary workers were being adversely affected by trade, that eligibility requirements for secondary workers were too strict, that secondary worker groups were hard to identify, and that workers and firms lacked awareness about secondary worker eligibility.

13

<sup>&</sup>lt;sup>4</sup> U.S. Department of Labor, Employment and Training Administration. 2002. Training and Employment Guidance Letter (TEGL) 11-02.

Finally, still other provisions did not appear to work well, or at least not as well as intended. For example, the 8/16 deadlines did not generally appear to have spurred earlier entry into training, because their effect had been almost entirely countermanded by the widespread issuance of training waivers. The expanded use of training waivers, in turn, resulted in a huge new paperwork burden for TAA administrators and line staff.

Other provisions of the Act were viewed favorably, but their implementation encountered obstacles that impeded their full effectiveness. For example, many state respondents described HCTC as one of the most challenging aspects of the Trade Act of 2002. The major problems included a lack of understanding of the program among workforce staff members, coupled with a high volume of inquiries from customers and insufficient resources to administer the new program and establish the necessary reporting systems. Moreover, take-up rates were low. According to local staff, this was partly because the cost of covering 35 percent of health insurance premiums was viewed as still too high to be affordable for most trade-affected workers.

Exhibit 3: Summary of Key Provisions of the Trade Act of 2002, and Accompanying ETA Guidance

Goal	Key Provisions		
Expand eligibility	Eligibility is expanded to include secondary worker groups (that is, those who supply component parts or perform finishing work for directly affected firms that are certified for TAA)		
Promote rapid reemployment	ETA is required to make certification decisions within 40 days of the filing of a complete petition		
	Rapid Response assistance, and appropriate core and intensive services, are to be made available to affected workers whenever a petition is filed (regardless of whether the petition is certified)		
	<ul> <li>Workers lose their eligibility for TRA unless they enroll in training 8 weeks after certification of a petition or 16 weeks after complete separation (referred to as the 8/16 deadlines), whichever occurs later, unless they receive a waiver from the training requirement</li> </ul>		
Promote suitable	Additional TRA is expanded from 26 to 52 weeks		
employment through enhanced services	TRA can be provided for up to an additional 26 weeks for those needing remedial training		
	Reimbursements for job search and relocation allowances are increased		
	HCTC is instituted as a new program benefit, providing a tax credit covering 65 percent of the cost of health insurance premiums		
	ATAA is instituted as a new program benefit for workers aged 50 and over who find new employment within 26 weeks and who are covered by a petition separately certified for ATAA		
Promote system collaboration	The American Job Center network is to be the main point of participant intake		

The implementation of ATAA was also found to be challenging and time consuming, as states struggled with modifying their management information systems and establishing new payment structures. These efforts, program administrators pointed out, constituted a new drain on their already limited TAA administrative funds. They also reported that take-up rates among age-eligible customers were extremely low, which they attributed to a lack of awareness of the program among eligible workers and TAA program staff members, low numbers of petitions certified as being ATAA-eligible, workers' reluctance to forgo training and TRA benefits (under the Trade Act of 2002, workers could not receive ATAA if they had already received training or TRA), and the inability of many who might benefit from the program to become reemployed within the 26-week deadline that the law required.

However, our state and local-level respondents felt that both HCTC and ATAA had the potential to become popular and successful program components once customers and staff became more familiar with them and start-up problems were resolved. In fact, ETA made aggressive efforts to help with implementation problems, such as by providing special funds for states to use in HCTC implementation, and these efforts seemed to help.

#### 2. TAA and Its American Job Center Partners

ETA has aggressively promoted the development of partnerships among program partners in the American Job Center network, and we saw evidence that these partnerships were flourishing during a round of site visits we conducted in 2005-2006 that was focused on this topic. We noted that, at that time, TAA had developed strong and extensive linkages with the ES, UI, and the WIA Dislocated Worker programs. These linkages were in evidence in many states and local American Job Centers and led to service delivery that appeared better coordinated and seemed to improve participants' access to the services and supports they needed. By contrast, linkages were generally weaker with other partners, including Vocational Rehabilitation and veterans' workforce programs, possibly because relatively few TAA participants needed or were eligible for the services these partners provided.

Beyond the extensive guidance that ETA issued promoting the coordination of services, factors that contributed to the TAA program's ability to develop strong linkages with its partners included formal administrative arrangements that brought partners together, state and local-level initiatives that strongly promoted coordination, the co-location of partners, and a consolidated management information system that enabled partners to track participants' progress. Factors that seemed to impede stronger linkages, by contrast, included the TAA program's limited staffing, constraints on the use of TAA funds for program administration, and program rules and requirements that were not aligned across the partners.

# 3. Outreach to Employers and Eligible Workers

Accessing services and benefits in TAA is complicated, involving multiple steps, many actors, and specific deadlines. Workers must be part of a group for whom a petition has been filed and the petition must be certified by ETA as being the result of foreign trade. After a petition is certified, states are required by law to identify workers covered by the petition and notify them of their potential eligibility for TAA. The workers then must meet strict enrollment deadlines in seeking out services, typically at local offices, where they must be determined individually eligible for TAA. As

part of its data collection, the research team conducted a series of site visits focused on states' efforts to help workers navigate through these processes, increase awareness of TAA, and promote the filing of petitions and the take-up of services.

We found that each state took its obligation to conduct outreach very seriously and made diligent efforts to both promote the filing of petitions and notify affected workers of their potential eligibility once a petition was certified. States recognized the important role that Rapid Response could play in these efforts. Demonstrating due diligence, Rapid Response staff members inquired about potential trade impacts when they first contacted employers and unions to set up a Rapid Response event, and encouraged petition filing if trade was even remotely suspected as a cause of the dislocation.

The amount of information provided to workers during Rapid Response events varied depending on whether a certification for TAA had already occurred or, at least, was deemed likely, in which case much more information about TAA was provided than otherwise. In any case, Rapid Response staff members were very diligent about connecting workers to the broader array of services available from the public workforce system, in keeping with the requirement of the Trade Act of 2002 that workers should be given prompt access to core and intensive services.

Furthermore, once certification was in hand, states aggressively reached out to employers to obtain lists of affected workers, and they then mailed notification letters to these workers, inviting the workers to come in for services.

However, as part of specially targeted telephone interviews with state and local TAA staff members that occurred in 2011, we identified some states that were making efforts beyond these. For example, to stimulate the filing of petitions, some states carried out the following activities:

- Mined administrative data to find dislocations. To identify trade-affected workers, several
  states used data sources such as UI claimant and ES mandatory registration files to find
  dislocations that Rapid Response may have missed, with possible TAA petitioning as a
  corollary.
- Conducted outreach using multiple methods. Some states tried to increase awareness of TAA and petition-filing through a variety of means. These included:
  - developing a web site with links to information about TAA,
  - supporting a telephone hotline,
  - developing program brochures,
  - holding regular meetings with partner organizations, such as community colleges, economic development agencies, and local employer and labor organizations,
  - conducting Town Hall meetings with workers and communities, and
  - adding information about TAA to UI seminars for employers.

These more aggressive methods were likely to be particularly important in spurring the filing of petitions to cover worker groups made newly eligible for TAA with the passage of TGAAA. These worker groups and their employers were unlikely to have had any prior exposure to TAA and typically knew little about the program or the requirements for filing for program services.

We found other instances of special efforts that states were making to increase the take-up of TAA services once petitions were certified. These efforts went beyond the typical steps that all states took (e.g., mailing covered workers notification letters), and included the following:

- Collaborating with labor organizations. In some states, unions had a special role in helping to overcome workers' reluctance to seek services.
- Peer counseling. Peer counseling (where co-workers are paid by the workforce system, typically through Rapid Response funds, to reach out to affected workers) created an effective division of labor in which the outreach work was carried out by trusted co-workers, allowing TAA staff members to focus on counseling, deadlines, and other aspects of service delivery.
- Social networking. Social networking updates a very traditional—and often highly
  effective—outreach method: word-of-mouth. The possibility of quick and broad
  information-sharing at a very low cost made social networking an attractive tool in some
  states.
- Enhanced intake processes. Several states developed scripts or checklists to facilitate enrollment and reduce the risk that eligible workers would slip through the cracks or feel overwhelmed by intake requirements. Such strategies seemed particularly important in the case of large dislocations.
- Special assistance to limited-English speakers. Knowledge gaps about TAA were likely to be especially acute among those with limited-English skills. Some states addressed this problem by identifying (during Rapid Response) the special language requirements of affected workers and ensuring that forms and notification letters were provided in the identified languages and that translators were available.

## 4. Case Management in TAA

As part of their participation in TAA and other American Job Center programs, TAA participants often accessed a variety of case management services, including assessment, career guidance, and post-training assistance. The specific services that were provided, and their depth, were affected by which program staff provided them, in which programs in addition to TAA the worker was co-enrolled, and whether the worker had an interest in undertaking training (assessment and career counseling tended to be greatly curtailed for workers not pursuing training).

Data the research team collected during multiple rounds of site visits suggest that, in general, TAA participants co-enrolled in WIA received more in-depth case management services than those not co-enrolled. Prior to the enactment of TGAAA and TAAEA, it seems clear that this should have been the case, because TAA as it operated under the Trade Act of 2002 generally did not permit case management services to be funded under the program.<sup>5</sup> Recognizing this restriction, ETA strongly encouraged the co-enrollment of TAA participants in WIA and other American Job Center partner programs (see TEGL 11-02). As a reflection of this guidance, there was a gradual shift towards higher levels of co-enrollment in WIA in many of the states in this study.

Still, the co-enrollment of TAA participants in WIA was far from widespread, especially for those not enrolled in training. The reasons for limited co-enrollment, and the challenges faced even by those sites that decided to practice widespread co-enrollment, were multiple. For example, some state agencies were reluctant to mandate what co-enrollment practices local workforce areas should follow and there were concerns that widespread co-enrollment would greatly increase WIA front-line workers' caseloads (especially in those local areas with the highest levels of trade activity) or would drag down the WIA program's performance on the common measures.

States demonstrated a variety of ways of overcoming each of these challenges and concerns, and, in a study of practices gleaned from sites nominated for their strong case management practices, undertook other efforts to improve the quality of and access to case management for TAA participants. States' efforts were of four major types. First, some states endeavored to improve the case management skills of TAA caseworkers by providing them with specialized training or by changing hiring practices to include upgraded skill requirements. Training on core case management skills and "person-centered" approaches was provided through mentoring and experiential approaches (role-playing and simulations), delivered in the classroom and through webinars, by a variety of providers (e.g., state training agencies, state and local managers, public institutions, or external consultants) and targeted to both new and veteran staff. By modifying their hiring practices, some states sought to bring in staff with specific skills, credentials, and experience related to delivering effective case management.

A second approach that some of the nominated states took was to improve program coordination and system integration. Some states' efforts were more limited, such as by better aligning policies across programs, while others states embarked on more ambitious system-wide transformations. All these approaches required the development of cross-cutting visions on how services should be delivered and efforts to secure buy-in from staff.

Third, some states rethought case managers' roles and responsibilities and, particularly, how case managers from different programs should work together to serve customers. For example, some states adopted a functional alignment model, in which staff (funded under different programs) were cross-trained to serve TAA (and other) customers. Several states also changed case managers' job titles to emphasize their roles in helping to guide customers through career choices.

18

<sup>&</sup>lt;sup>5</sup> As was noted, TGAAA (2009) and TAAEA (2011) required case management and reemployment services to be offered to TAA eligible workers and authorized the use of TAA funds for this purpose.

Finally, some of the states studied redesigned management information systems and engineered a variety of new intake and customer flow processes. These efforts permitted enrollment information to be shared across programs, decreased points at which customers had to provide data, and allowed common ways of documenting customer activities and progress.

# 5. The Characteristics of Workers Eligible for TAA and the Decision to Participate

Based on information we collected from the initial survey, we learned that, under the Trade Act of 2002, TAA eligible workers tended to be full-time workers who were displaced from relatively high-paying positions (given the workers' levels of education) with generous employment benefits. Contributing to the challenges they faced in finding new employment, these workers had long tenures with their former employers and likely developed a specialized set of non-transferrable skills. They were also older and less educated than other workers looking for employment, and were more likely to live in non-metropolitan areas and areas with lower average earnings.

Using the definition of "TAA participant" established earlier in this paper, about 50 percent of those eligible for TAA became TAA participants. However, the TAA participation rate differed markedly from state to state—in some states, no more than 30 percent of eligibles participated, while in other states more than 80 percent did. TAA participation rates also were higher among females, older workers, and workers with less education.

About 70 percent of persons who became TAA participants cited their interest in training or schooling as a reason for applying to the program. Other reasons, such as an interest in receiving TRA or HCTC, were much less commonly cited. The most common reason that TAA-eligible workers did not apply for TAA services was that they had found a job (36 percent), but lack of information about the program or the application process was another common reason for not applying (38 percent in total).

### 6. Participants' Experiences in TAA

Among TAA participants, about 90 percent received TRA and about one half received TAA-funded training. Receipt of ATAA, HCTC, and allowances for job search, relocation, subsistence, and travel were much less common. However, states differed markedly from each other in the extent to which their participants accessed training. Among participants, women and those who were younger were more likely to undertake training than others.

Once eligible for TAA, workers who became participants tended to access services quickly, with about half doing so within the first six weeks. Their duration of participation—defined as time elapsed between the date of first service and date of last service—was quite variable; participants can be divided into roughly three equal groups, with about one-third participating for up to one year, another third participating for between one and two years, and another third participating for more than two years. The average duration of participation was considerably longer for trainees than it was for those accessing other services, with trainees receiving an average of 89 weeks of service (which includes time in training and time enrolled in the TAA program before and after training).

Because training is such an essential component of the TAA program model, we focused specifically on participants' motivations in seeking training and the types of jobs for which participants trained. Overall, more than 85 percent of TAA training participants pursued training in order to prepare for a new career, while only nine percent aimed to upgrade their skills in their current occupations. Training goals were also related to the age of the TAA participant, with younger trainees more likely to be training for new occupations than trainees who were older.

Of those in TAA-funded training, about 85 percent participated in occupational skills training, while nine percent received only remedial education and the remainder reported enrolling in higher education that was not focused on a particular occupation. Among workers enrolled in occupational skills programs, there were strong gender differences in the types of occupational programs pursued, with females more likely to chose training in health care and office and administrative support, and males training for jobs in installation, maintenance, and repair, transportation and material moving, and production.

Community colleges were the biggest providers of education and occupational skills training, with about 53 percent of TAA-funded trainees reporting having received services at either a community college or a two-year school. Another 21 percent trained at vocational training centers, with smaller numbers attending adult education, four-year colleges, or institutions of other types. TAA participants enrolled in training of relatively long duration, spending an average of about 79 weeks in their programs.

More than 85 percent of training participants who completed a TAA-funded training program said they received a certificate or degree, and this was more common for occupational skills participants.

#### 7. The Outcomes of TAA-Funded Trainees

The impact study findings described earlier suggest that TAA participants who undertook training recorded better employment outcomes than those who received only income support. We conducted exploratory analyses to identify what characteristics of training programs seemed to be associated with better outcomes. These analyses are not causal, but nonetheless provide potentially useful evidence. Using multivariate methods, we found that workers who entered into training more quickly had better employment outcomes than those whose entry was delayed. On average, 32 weeks elapsed between a trainee's UI claim date and his or her enrollment into training, but those who enrolled within 13 weeks worked significantly more weeks in the fourth year of follow-up, and earned more, than workers who entered training a year or more after job loss. One reason why workers were delayed in entering training is that some were not TAA-eligible at the time of their job losses, because the petitions under which they were covered had not yet been certified. Additional influences on the timing of training entry can include the worker's readiness to train, the training approval process, and the availability of openings in the training programs in which participants wanted to enroll.

We found that females who trained in healthcare practitioner and technical occupations, or in office and administrative support, had significantly higher earnings and more weeks of employment in the fourth year of follow-up than females who trained in other fields. However, field of study did not seem to matter among male trainees. Females who trained at two-year colleges worked more in the fourth year than females who trained elsewhere, but training venue was not significantly related

to employment outcomes for males or to earnings for females. Receiving a degree or certificate was associated with more weeks of employment for males and females, but was not related to earnings. Length of the training program did not seem to affect weeks worked or earnings.

About 37 percent of trainees who were employed in the fourth year of follow-up were working in the field in which they trained. However, the rate of training-related placements varied by the training field, with more than 50 percent of those training as healthcare practitioners or in production or transportation and material moving finding a job in their training fields. Those who obtained training-related placements had significantly better employment outcomes than those who obtained a placement in a field different from the one in which they trained—those in the former group worked six or seven weeks more in the fourth year of follow-up and earned \$5,000 to \$6,000 more. Also, trainees who received a career assessment were more likely to obtain training-related job placements, suggesting that assessment and counseling to help participants make informed choices about training options was beneficial.

## 8. The Implementation of TGAAA

The Trade and Globalization Adjustment Assistance Act (TGAAA), enacted in 2009, made significant changes to the TAA program related to program eligibility, TRA benefits and eligibility, case management services, training, ATAA, and HCTC (all briefly summarized in Exhibit 4). Research team members conducted site visits to states and local offices in 2010 to examine the implementation of TGAAA, and found that changed circumstances, caused directly or indirectly by the recession, had a profound effect in how TAA operated, completely apart from TGAAA itself.

For example, there was a dramatic surge in petitions certified after the effective date of TGAAA, with the numbers certified increasing from roughly 350 per quarter in the years prior to TGAAA's effective date to more than 700 per quarter in the quarters just after. However, factors other than TGAAA's expanded eligibility were just as important in accounting for this increase. These factors included the persistence of the economic downturn and the fact that petition filers delayed filing until the more generous provisions of TGAAA took effect. In fact, the filing of petitions for worker groups in the service sector seemed rather modest in light of figures suggesting that potential trade-affected job loss in the nonmanufacturing sector outnumbered the potential loss in the manufacturing sector by three to one (Topoleski 2007). The limited nature of outreach efforts specifically targeted to newly eligible worker groups and their firms, who were for the most part unfamiliar with TAA and the program's services, was perhaps a factor contributing to the modest rate of petition filing on behalf of new groups.

Meanwhile, the surge in petition filing caused delays in ETA's certification determinations. Whereas in the years prior to TGAAA ETA was consistently making determination decisions within the 40 days required by law, the huge influx of petitions filed once TGAAA was enacted caused backlogs for ETA's examiners. ETA took aggressive efforts to reduce response time to near-normal levels within about six quarters, but states noted that, in the interim, delayed certification was causing problems with ensuring workers' timely access to TAA services. In particular, delayed certification made it more difficult for states to obtain certified worker lists from employers, made it more difficult to locate affected workers to advise them of their potential TAA eligibility, and delayed workers' access to TAA benefits and services.

#### **Exhibit 4: Summary of Key Provisions of TGAAA**

#### **Key Provisions**

Eligibility	Eligibility is expanded to include trade-affected workers in the public sector and service sector
TRA benefits and eligibility	TRA can be provided for up to 130 weeks for workers in full-time training (up from 104 weeks) and up to 156 weeks for workers who also receive remedial or prerequisite training (up from 130 weeks)
	<ul> <li>The 8/16 deadlines are revoked, replaced by the requirement that workers must be enrolled in training (or receive a waiver) by 26 weeks after certification or job separation, whichever comes later</li> </ul>
	The eligibility period for TRA begins with the date the petition is certified, (rather than 60 days after petition filing, which was previously the case)
Case management services	Case management services (including assessment, prevocational services, and career counseling) must be made available
	<ul> <li>At least one-third of the program's administrative funds are to be used for this purpose, and an additional \$350,000 per year per state is also made available</li> </ul>
Training	Clarifies that prerequisite training is also an acceptable training type
	Training choices cannot be limited to programs on the WIA eligible training provider list
	Allows pre-layoff and part-time training (although these do not entitle one to receive TRA)
ATAA	ATAA is renamed Reemployment Trade Adjustment Assistance (RTAA)
	Group eligibility requirements are eliminated
	The requirement from the Trade Act of 2002 that new employment be found within 26 weeks of separation is removed
	<ul> <li>Workers can start receiving TRA or training, and then shift to receiving RTAA (under the Trade Act of 2002, this was not allowed)</li> </ul>
HCTC	The amount of the tax credit is increased

Note: TGAAA had a sunset provision, and in any case has been superseded by the Trade Adjustment Assistance Extension Act (TAAEA), enacted in 2011. Thus, some of the provisions noted above no longer apply. Among the changes, TAAEA expanded eligibility to service sector workers (but not workers in the public sector), restricted conditions under which waivers could be granted, curtailed funding (relative to TGAAA) for case management services (but still made case management services an entitlement), and made other important changes. The evaluation's data collection concluded before TAAEA's enactment.

In one of TGAAA's most important changes, states were required to make employment and case management services available to eligible workers, and funding was to be set-aside for this purpose, whereas previously states were admonished merely to make "every reasonable effort" to provide these services and were restricted in their ability to use TAA dollars to fund them (TEGLs 11-02 and 5-00). Furthermore, to ensure "consistency, efficiency, accountability, and transparency" in the way these services were provided, ETA issued guidance that states should carry out TAA-funded administrative activities—including case-management functions—using only state merit staff

personnel, except in states with an exemption from the state merit staffing requirement for the administration of the Wagner-Peyser program (Final Rule 20 CFR Part 618, issued April 2, 2010).

The evaluation team conducted site visits to 14 states to study TGAAA implementation, and all visits occurred before the effective date of the merit staffing requirement. In these 14 states, we found that state merit staff were already typically approving TAA training plans, but that responsibility for direct case management services was more diffuse. Specifically, in some states, state merit staff were the primary providers of case management services to TAA participants and in others WIA staff or cross-trained staff undifferentiated by source of funding were the primary providers. Some states not using merit staff as the primary providers of case management services were exempt from the merit-staffing requirement, but, at the time the site visits occurred, the others were giving thought to changes to staffing arrangements they felt they needed to make to come into compliance. A few of these states were concerned that the merit staffing requirement could weaken the TAA program's linkages with WIA and reduce rates of co-enrollment. Because we found that TAA participants co-enrolled in WIA generally received more comprehensive case management services, declines in co-enrollment could be unfortunate.

Among other infrastructure changes we observed in response to TGAAA's case management requirements, some states increased the training on case management that they provided to line staff, modified hiring practices to increase system capacity, and worked to develop better data systems to allow the sharing of data across programs.

However, most states made relatively few changes to the types of case management services actually provided. Among the few changes we observed, some states expanded the assessments they routinely provided, believing that TGAAA required this; however, in some of these cases, case managers viewed the expansion of routine assessments as leading them to provide unneeded services to some participants. Few other changes in the types of case management occurred, because states believed they were already in compliance with TGAAA's requirements and were confident that they were providing good quality case management to TAA participants. Rather than changing the services per se, however, states commonly increased the care with which they documented the services that were provided and offered. This documentation took place in electronic record-keeping systems and via paper checklists.

TGAAA changed a number of the requirements for accessing services or loosened restrictions on available benefits. These were generally viewed favorably, but mixed sentiments about their desirability or effectiveness were also expressed. For example, states appreciated the additional flexibility afforded by the replacement of the 8/16 deadlines with the 26-week rule, as they felt that this change allowed workers the additional time they often needed to test the labor market, determine whether training was appropriate, and make informed decisions regarding which training program to pursue. However, extended and emergency UI benefits, which went into effect shortly before TGAAA's enactment, caused some workers to lose focus on the training enrollment deadlines, because they did not understand the impact that delaying enrollment would have on their ability to access TRA once their period of UI receipt ended.

TGAAA prohibited restricting training choices to WIA's eligible training provider list (ETPL). States understood that this provision had the desired effect of broadening workers' training choices, but feared that it could make collaboration between TAA and WIA more difficult for workers who were co-enrolled in both programs.

The new legislation authorized pre-separation training and part-time training. This expansion of allowable training types was viewed favorably, but respondents reported that take-up was quite low for each new type of training, for a variety of reasons. For example, respondents noted that offering pre-separation training required states to identify incumbent workers threatened with separation, as opposed to just those who had experienced separation, and therefore represented a significant expansion of the lists of adversely affected workers that most states were accustomed to collecting. Moreover, incumbent workers who were notified and expressed interest often could not find training programs with class times that accommodated their work schedules. Part-time training was also unattractive because workers were not eligible for TRA payments when only in part-time training.

More generally, states noted that it was difficult to oversee two separate sets of TAA program requirements—one set of rules for petitions filed on or after the effective date of TGAAA, and another for petitions filed before that date. Managing the two sets of requirements was particularly difficult when workers from the same firm were covered under two separate petitions, with one petition each under the old and new sets of rules.

Additionally, the changes that TGAAA made were complex, and caused states to reshape program services, design new guidance for their staffs, and develop new orientation materials for eligible workers. Fortunately, ETA's guidance on TGAAA's changes was described by state respondents as clear and comprehensive, leaving state workforce agency staff members feeling well equipped to carry out the legislation's key provisions.

However, a number of larger factors, most of which were external to the TAA program itself, complicated the implementation of TGAAA in significant ways. An overriding factor affecting the implementation of many provisions of TGAAA was the weakened state of the economy. With unemployment rates at stubbornly high levels not seen in the post-World War II period, workers' employment opportunities were greatly curtailed. As a direct effect of this economic environment, states' efforts to secure suitable, long-term employment for workers through TAA were understandably undermined. For example, although under other circumstances the provisions in TGAAA enhancing the attractiveness of RTAA could have been expected to lead to a marked increase in take-up of this program benefit, poor economic opportunities greatly curtailed workers' ability to take advantage of it.

The weakened state of the economy had marked indirect effects on TGAAA implementation as well. The Federal response to the nation's economic distress was to enact the Unemployment Compensation Extension Acts of 2008 and 2010, which, together with other UI benefits, allowed claimants in states with high unemployment rates to collect UI for up to a total of 99 weeks. Although of value in providing an economic cushion to economically distressed families and stimulating the economy, the availability of extended benefits removed an incentive that trade-eligible workers might otherwise have felt to take quick advantage of TAA benefits and services. Thus, as some state and local respondents reported, workers delayed entry into training and sometimes lost eligibility for TRA altogether because of their lack of attentiveness to training enrollment deadlines.

Indirect effects of the poor economy delayed workers' access to training for other reasons as well. With job opportunities relatively bleak, unprecedented numbers of the unemployed and discouraged workers (whether trade eligible or not) were applying for enrollment at two-year

colleges and other training institutions, at precisely a time when state budget deficits were causing many state-funded community colleges to curtail course offerings. As a result, there were often long waiting lists for TAA participants who wanted to take advantage of TAA-funded training, particularly for those who were interested in pursuing careers in the health and medical fields. The waits delayed the onset of workers' training and in some cases jeopardized their ability to maintain the full-time loads necessary to qualify for TRA income support.

Moreover, high caseloads brought about by the dramatic influx of new customers to the public workforce investment system limited case managers' ability to provide the level of attentiveness to individual customers that they might have wanted to. Even though TGAAA dramatically increased funding for the TAA program, and for case management services in particular, states could not ramp up that quickly, particularly in the face of the hiring freezes that were in effect in some states.

Finally, the effective application of TGAAA's new benefits and broadened eligibility rules seemed hampered by some workers' lack of familiarity with them, as well as by states' relatively weak efforts to promote them. Although Rapid Response events and TAA orientation sessions mentioned the array of TAA benefits and services available (and were by all accounts quite thorough), the welter of program services could be confusing to workers coping with the trauma of job loss. Rather than engaging in aggressive outreach (such as to promote incumbent worker training or the enrollment in TAA of workers in newly eligible sectors), states seemed to rely on the strategy of describing the range of program services in orientation sessions and notification letters, and then relying on workers to take the initiative in accessing services. Given that TGAAA's provisions were to sunset in early 2011, states might have been disinclined to aggressively promote program services that they thought might no longer be available in a short while. Moreover, American Job Center staff were overwhelmed by the flood of new UI claimants and job seekers, and aggressive outreach to promote services was the last thing on their minds.

#### REFERENCES

- Bloom, Howard, Larry Orr, Stephen Bell, George Cave, Fred Doolittle, Winston Lin, and Johannes Bos. 1997. "The Benefits and Costs of JTPA Title II-A Programs: Key Findings from the National Job Training Partnership Act Study." *Journal of Human Resources* 32: 549-576.
- Card, David and Phillip B. Levine. 2000. "Extended Benefits and the Duration of UI Spells: Evidence from the New Jersey Extended Benefit Program." *Journal of Public Economics* 78: 107-138.
- Couch, Kenneth and Dana Placzek. 2007. "Earnings Losses of Displaced Workers Revisited." American Economic Review 100: 572-589.
- Couch, Kenneth, Nicholas Jolly, and Dana Placzek. 2009. "Earnings Losses of Older Displaced Workers: A Detailed Analysis with Administrative Data." Research on Aging 31: 17-40.
- Decker, Paul. 1997. "Work Incentives and Disincentives." In *Unemployment Insurance in the United States: Analysis of Policy Issues*, edited by C. O'Leary and S. Wandner, 285-315. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Jacobson, Louis, Robert LaLonde, and Daniel G. Sullivan. 1993a. "Long-term Earnings Losses of High-seniority Displaced Workers." *Economic Perspectives* 17: 2-20
- Jacobson, Louis, Robert LaLonde, and Daniel Sullivan. 1993b. "Earnings Losses of Displaced Workers." *American Economic Review* 83: 685-709.
- Katz, Lawrence, and Bruce D. Meyer. 1990. "The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment." *Journal of Public Economics* 41: 45-72.
- Kletzer, Lori G. 2002. *Imports, Exports, and Jobs: What Does Trade Mean for Employment and Job Loss?* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Schochet, Peter Z., John Burghardt, and Steven Glazerman. 2001. National Job Corps Study: The Impacts of Job Corps on Participants' Employment and Related Outcomes. Princeton, NJ: Mathematica Policy Research, Inc.
- Topoleski, John J. 2007. "Extending Trade Adjustment Assistance (TAA) to Service Workers: How Many Workers." *Congressional Research Service Report for Congress RS22761*.

# APPENDIX A: OTHER REPORTS PREPARED AS PART OF THE EVALUATION

### Impact Study, Benefit-Cost Reports, and Methodological Notes

- Berk, Jillian and Peter Schochet. 2012. Impact Estimates Regarding Nonparticipants in the Trade Adjustment Assistance (TAA) Program Under the 2002 Amendments. Princeton, NJ: Mathematica Policy Research.
- Dolfin, Sarah. 2012. National Evaluation of the Trade Adjustment Assistance Program: The Benefits and Costs of the 2002 TAA Program. Princeton, NJ: Mathematica Policy Research.
- Schochet, Peter, Ronald D'Amico, Jillian Berk, Sarah Dolfin, and Nathan Wozny. 2012. Estimated Impacts for Participants in the Trade Adjustment Assistance (TAA) Program Under the 2002 Amendments. Oakland, CA: Social Policy Research Associates and Mathematica Policy Research.
- Schochet, Peter, Ronald D'Amico, Jillian Berk, and Nathan Wozny. 2012. *Methodological Notes Regarding the Impact Analysis*. Oakland, CA: Social Policy Research Associates and Mathematica Policy Research.

### Reports About Participants' Experiences in TAA

- Berk, Jillian. 2012a. Characteristics of Trainees and Training Programs in the Trade Adjustment Assistance (TAA) Program Under the 2002 Amendments. Princeton, NJ: Mathematica Policy Research.
- Berk, Jillian. 2012b. Understanding the Employment Outcomes of Trainees in the Trade Adjustment Assistance (TAA) Program Under the 2002 Amendments. Princeton, NJ: Mathematica Policy Research.
- Dolfin, Sarah and Jillian Berk. 2010. National Evaluation of the Trade Adjustment Assistance Program: Characteristics of Workers Eligible under the 2002 TAA Program and Their Early Program Experiences. Princeton, NJ: Mathematica Policy Research. Released as ETAOP 2010-16.

## **Implementation Study Reports**

- D'Amico, Ronald, Kate Dunham, Annelies Goger, Melissa Mack, Rebekah Kebede, Johanna Lacoe, Jeffrey Salzman. 2009. *Initial Implementation of the Trade Act of 2002: A Report Prepared as Part of the Evaluation of the Trade Adjustment Assistance Program.* Oakland, CA: Social Policy Research Associates. Released as ETAOP 2009-14.
- D'Amico, Ronald, Christian Geckeler, Deanna Khemani, Deborah Kogan, and Michael Midling. 2012. *The Evaluation of the Implementation of the Trade and Globalization Adjustment Assistance Act.* Oakland, CA: Social Policy Research Associates.
- Dunham, Kate. 2009. Linkages Between TAA, One-Stop Career Center Partners, and Economic Development Agencies: An Occasional Paper Prepared as Part of the Evaluation of the Trade Adjustment Assistance Program. Oakland, CA: Social Policy Research Associates. Released as ETAOP 2009-16.

- Geckeler, Christian. 2012. Practices from the Field for Improving Case Management and Increasing Workforce System Integration in the Trade Adjustment Assistance (TAA) Program. Oakland, CA: Social Policy Research Associates.
- Mack, Melissa. 2009. Assessment, Case Management, and Post-Training Assistance for TAA Participants: An Occasional Paper Prepared as Part of the Evaluation of the Trade Adjustment Assistance Program. Oakland, CA: Social Policy Research Associates. Released as ETAOP 2009-15.
- Salzman, Jeffrey. 2009. Rapid Response and TAA: An Occasional Paper Prepared as Part of the Evaluation of the Trade Adjustment Assistance Program. Oakland, CA: Social Policy Research Associates. Released as ETAOP 2009-17.
- Salzman, Jeffrey. 2012. Practices from the Field in Outreach to Employers and Participants in the Trade Adjustment Assistance (TAA) Program. Oakland, CA: Social Policy Research Associates.

# APPENDIX B: INDEX OF REPORTS BY MAJOR TOPICS IN THE SYNTHESIS REPORT

## **Section of Synthesis**

## **Report Where this Topic is Best Addressed**

Research Design and Data Collection	Schochet, D'Amico, Berk, and Wozny 2012
Impacts on TAA Participants	Schochet, D'Amico, Berk, Dolfin, and Wozny 2012
Impacts on TAA Nonparticipants	Berk and Schochet 2012
Assessing the Costs and Benefits of TAA Participation	• Dolfin 2012
The Implementation of the Trade Act of 2002	D'Amico, Dunham, Goger, Mack, Kebede, Lacoe, and Salzman 2009
TAA and its American Job Center	• Dunham 2009
Partners	Salzman 2009
Outreach to Employers and Eligible Workers	Salzman 2012
Case Management in TAA	Mack 2009
	Geckeler 2012
The Characteristics of Workers Eligible for TAA and the Decision to Participate	Dolfin and Berk 2010
Participants' Experiences in TAA	Berk 2012a
	Berk 2012b
	Schochet, D'Amico, Berk, Dolfin, and Wozny 2012 (Chapter IV)
The Training Outcomes of TAA- Funded Trainees	Berk 2012b
The Implementation of TGAAA	D'Amico, Geckeler, Khemani, Kogan, and Midling 2012